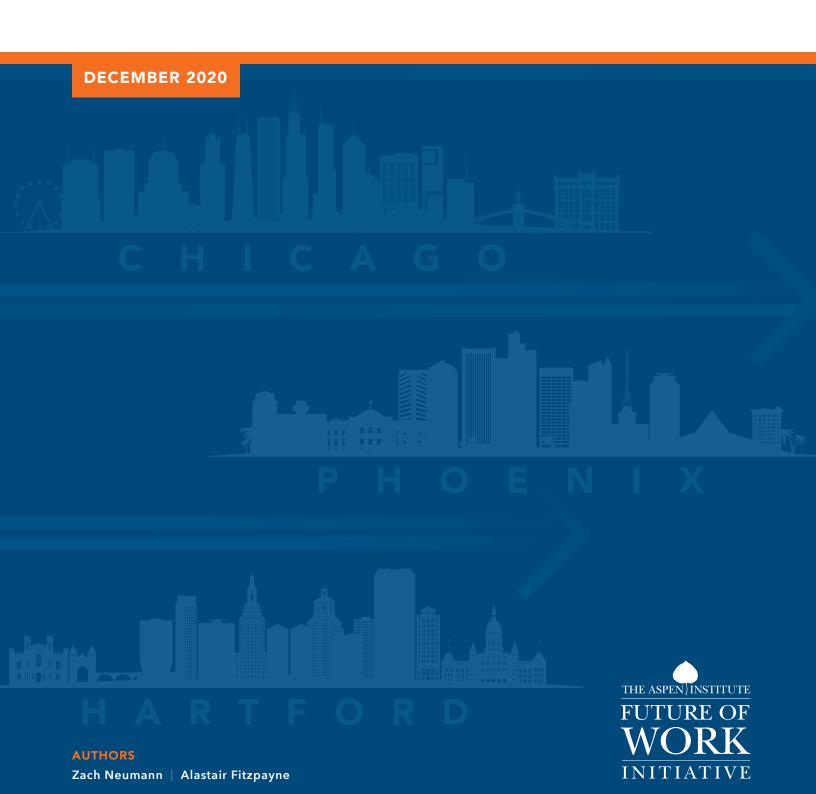
BUILDING A LIFELONG LEARNING SYSTEM

A ROADMAP FOR CITIES



ABOUT THE FUTURE OF WORK INITIATIVE

The Aspen Institute's Future of Work Initiative is a nonpartisan effort to identify concrete ways to address the challenges American workers and businesses face due to the changing nature of work in the 21st century. Several trends are impacting workers and businesses today, and could bring dramatic transformations in the years ahead: the weakening social contract between workers and employers, the increased importance of access to education and skills resulting from new technologies and increased automation, and the pressure to produce short-term profits rather than long-term value. Rather than waiting to react to future disruptions, it is critical to develop solutions that address the changes transforming the U.S. economy. The Initiative focuses on policy ideas at the federal, state, and local level to:

- Improve economic security for both traditional and independent workers
- Expand investment in and access to effective education and training programs
- Reduce pressure on public companies to prioritize short-term profits and encourage investment in long-term value creation

Established in 2015, the Initiative is driven by the leadership of Honorary Co-Chairs Senator Mark R. Warner and Purdue University President and former Governor of Indiana Mitch Daniels, and Co-Chairs John Bridgeland and Bruce Reed. Executive Director Alastair Fitzpayne leads an Aspen Institute staff, based in Washington, DC.

ACKNOWLEDGEMENTS

The authors would like to thank the experts who participated in conversations and provided helpful comments and insights on this topic, including: Rachel Yanof of Achieve60AZ; Daniel Serota of Aon; Kolu Wilson of the Arizona Office of Economic Opportunity; Kristin Ferguson of Arizona State University; Luke Tate of Arizona State University; Josh Wyner of the Aspen Institute College Excellence Program; Maureen Conway and Ranita Jain of the Aspen Institute Economic Opportunities Program; Vicki Gallon-Clark of Blue Hills Civic Association; Joel Simon of Burning Glass Technologies; Amrit Mehra of the Chicago Mayor's Office; Rick Wartzman of the Drucker Institute; Jodi Greenspan of The Hartford; Judy McBride of the Hartford Foundation for Public Giving; Dr. Leslie Torres-Rodriguez of Hartford Public Schools; Peter Kilpatrick of Illinois Institute of Technology; David Sanders of Malcolm X College; Sean Gallagher of Northeastern University; Rob Reiling of Opendoor; Hector Rivera of Our Piece of the Pie; Matt Muench of P33; Dr. Larry Johnson of Phoenix College; and Austan Goolsbee of the University of Chicago Booth School of Business.

The Future of Work Initiative is grateful to the Cognizant U.S. Foundation for providing financial support for this project and publication. The Initiative's work is made possible through the generous philanthropic support of a range of foundations, individuals, and corporate partners. The statements, views, and conclusions expressed in this publication are solely the responsibility of the authors.

Cognizant U.S. Foundation

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BUILDING A LIFELONG LEARNING SYSTEM A ROADMAP FOR CITIES

EXECUTIVE SUMMARY

As the United States grapples with COVID-19, major cities face historic challenges. While public health will continue to take precedence, cities are struggling to reopen schools safely, provide child care for working families, address racial injustice, help displaced workers reenter the workforce, and support people who have not been able to break into the job market. Adding to this list of challenges is that cities must confront these issues with declining resources due to the economic slowdown.

Long before COVID-19, lifelong learning was a critical component of building a competitive workforce. Education and training early in one's life can no longer be relied upon to prepare workers for multiple jobs over the course of their careers. Instead, workers are increasingly faced with the necessity of becoming lifelong learners. But particularly during this unprecedented and uncertain period of change, providing workers with the tools they need to successfully navigate a changing labor market over the course of their careers is an urgent national economic imperative.

Lifelong learning, as described in this report, refers to opportunities for adult workers to continuously develop and improve their knowledge and skills needed for employment. Moreover, the usage of the term is not inclusive of K-12 or two and four-year college experiences for those that use these institutions as an immediate post-secondary option.

As lifelong learning becomes increasingly important in both the short- and long-term, it raises the question of how to build a system that supports it. Increasingly, U.S. cities are recognizing the importance of building equitable, accessible lifelong learning systems to help residents advance their careers. Cities have considerable assets to meet this challenge, from worldrenowned educational institutions and innovative training providers to employers and nonprofit partners. In addition, labor markets are still primarily regional and the mission of education and training institutions that exist in cities is in many cases to serve these local markets.

To examine the opportunities and barriers to building city-based lifelong learning systems, the Aspen Institute Future of Work Initiative, with support from the Cognizant U.S. Foundation, held roundtable discussions in three cities—Chicago, Phoenix, and Hartford—between November 2019 and February 2020 to hear from local cross-sector stakeholders.

Using the specific examples of Chicago, Phoenix, and Hartford, this report describes the lifelong learning ecosystem as it exists, and recommends specific steps that cities can take to develop a lifelong learning system. The cities in this report were chosen based on their different geographic and demographic attributes, and the presence of unique education and training resources to support adult workers.

Specifically, this report shares the following concrete steps mayors and city leaders can take to build integrated and effective lifelong learning systems.

Recommendations



CREATE

DEPUTY MAYOR POSITION AND ESTABLISH AN ADVISORY COUNCIL FOR LIFELONG LEARNING

- Create a Deputy Mayor for Lifelong Learning to Build and Lead a City-level Body to Integrate and Coordinate Resources
- Establish a Lifelong Learning Advisory
 Council
- Leverage Federal and State Resources, and Engage the Philanthropic and Employer Community to Raise Funds to Build a Lifelong Learning System

BUILD

JOBS AND TRAINING DIGITAL PLATFORM AND EXPAND CAREER COUNSELING

- Build a Digital Platform that Connects
 Workers with Training Providers, Employers,
 and Labor Market Information
- Expand Career Counseling

- Identify New Pathways to Training for Workers
- Develop Partnerships that Serve Workers and Employers
- Promote Inclusive Programs

2

SUPPORT

A MORE EQUITABLE EDUCATION AND TRAINING SYSTEM

- Offer Flexible Training Options
- Promote Employer Flexibility

- Expand Access to Technology
- Provide Wraparound Services



INTRODUCTION

Stable careers and secure jobs are less commonplace in the 21st century. Instead, Americans are facing the prospect of a 50-year career that involves dozens of jobs, potentially in different industries and locations, while technology and globalization continue to rapidly change the nature of work. While automation has been frequently raised as a potential disruption, the rapid onset of COVID-19 has created an unexpected and historic shock to the United States labor market. The dramatic changes brought about by the pandemic underscore that workers can no longer rely exclusively on the education they receive in the first two decades of life. Lifelong learning is not the only answer to the challenges facing workers but needs to be a part of a broader effort to help workers adapt to changing workplaces, occupations, industries, and build the interdisciplinary skills and resiliency to withstand unexpected disruptions. The pandemic has brought an urgency to helping workers find new jobs and develop additional skills, placing pressure on the institutions and governments that support education and training to build a system that meets the current challenges but also endures after the pandemic.

As adult learning becomes increasingly important in the short- and long-term, it raises the question of how to build a system that supports it. For young learners, there is a structured education path that helps students move through the K-12 system and aims to build the core competencies needed to pursue post-secondary options. For working adults, there is no prescribed path that helps guide decisions around how and when to obtain additional education and training. Even more importantly, there isn't a public system, like our K-12 system, that provides free schooling or

public programs to offset the potential cost of taking time away from a paying job to pursue these opportunities. Some are fortunate to work for employers that provide tuition benefits and other necessary supports. But many do not. In either case, adult workers face a range of challenges, including the cost and time required, child care, transportation, access to broadband, and the ability to determine the right program that meets their needs. Lowincome workers of color often can face all those challenges and inequitable access to career advancement.

The problem is not a lack of options. There are hundreds of thousands of credentials to choose from and thousands of providers, both brick and mortar and online, vying for the education and training dollars of individuals, employers, and governments. A major challenge is how to help people sort through these options and make the best possible decision about when and how to upskill or reskill. In the past, incumbent workers who spent their career at one employer would rely on that employer for guidance on what additional training they needed. But a decline in employer-provided training represents an additional challenge, as workers are increasingly left to determine what skills they need, and whether the acquisition of such skills will increase their wages and improve their career.

Compounding this challenge, federal and state governments have been reducing their overall investment in programs that support adult training. Despite funding decreases, federal and state governments play significant roles in how adult learners access education and training opportunities. The pandemic, however, is only adding to the funding challenges facing federal, state, and local governments that want to invest in adult education and training.

A promising development in the face of this challenge has been the development of public-private partnerships to meet the workforce needs in cities.

Cities have considerable assets to meet the needs of adult workers. They have worldrenowned universities that are both major employers and education providers. In addition, they have community colleges that provide both liberal arts programs and occupation-specific offerings. Alongside traditional higher education providers, there are nonprofit and for-profit training providers that offer programs that are customized to local markets. Cities have small, medium, and large employers across industries that can serve as partners with education and training providers looking to help meet their specific workforce needs. Employers can also offer an array of tuition benefit programs, enabling employees to upskill or reskill within their existing company. These resources highlight the opportunity that exists in cities. It also reveals that the current ecosystem is one that is decentralized among the many institutions and organizations that make up the education and training infrastructure in cities.

Cities have an opportunity to play a larger role in helping unemployed, underemployed, and incumbent workers better navigate this complex landscape. In so doing, cities can help build an inclusive system that fosters a skilled, competitive, and economically mobile workforce. Most immediately the economic crisis that has resulted from the pandemic highlights the challenges facing those who have lost their jobs. Some will be able to use their existing skills to find new jobs, but some will need to develop new skills in order to begin a new job or career. But even workers fortunate enough to have kept their job will continue to face an

ever-changing workplace that is being impacted by both technology and globalization. Given this new reality, cities will need to help adult workers adjust in order to maintain the dynamism and economic growth that they have enjoyed over the past few decades.

The paper is organized as follows:

- Section 1 reviews the dramatic changes that COVID-19 has brought to the economy and cities specifically;
- **Section 2** presents the education and training infrastructure that exists in cities;
- Section 3 discusses the challenges that workers face in accessing education and training opportunities;
- Section 4 profiles Chicago, Phoenix, and Hartford, and highlights steps that they have taken before and during COVID-19 to build toward a lifelong learning system;
- Section 5 recommends a set of steps that cities can take to develop a lifelong learning system

Cities have an opportunity to play a larger role in helping unemployed, underemployed, and incumbent workers better navigate this complex landscape.

SECTION 1

COVID-19 AND ITS IMPACT ON CITIES

The COVID-19 pandemic has simultaneously created health and economic crises. More than 13 million Americans have tested positive for COVID-19 and over 260,000 have died as of November 2020.1 Black and Latinx people have been disproportionately impacted by the health crisis with greater rates of infection, hospitalization, and death.² The economic toll has been similarly devastating. From February through October 2020, the U.S. has lost approximately 10 million jobs, a total that exceeds the number of jobs lost (8.6 million) during the Great Recession. While the national unemployment rate stands at 6.9 percent,³ unemployment rates for Black and Hispanic workers continue to exceed the national average. As of Fall 2020, nearly one-fifth of workers were either unemployed, underemployed, or had their hours and wages reduced.4 By October 2020, the number of Americans living in poverty had increased by 8 million.⁵ To date, job losses have been concentrated among low-wage workers, people of color, those without post-secondary education and training, young workers, and women.⁶ As of October 24th, 2020, there were more than 25 million people receiving some form of Unemployment Insurance.⁷ For many workers, the loss of a job has been accompanied

by the loss of health insurance,⁸ depletion of savings, use of high-interest debt to pay bills, food insecurity, and increased risk of being evicted.⁹ Alarmingly, the ability to find new work appears extremely challenging as there were only 6.4 million job openings as of September 2020.¹⁰ And, finally, the economic impact of COVID-19 is projected to be long-lasting, as the Congressional Budget Office estimates that the unemployment rate in the U.S. will remain higher than pre-pandemic levels until 2030.¹¹

During the pandemic, many low-wage workers have been deemed "essential" and are being relied upon to perform critical, high-risk roles in transportation and delivery, food services, manufacturing, and patient care, too often without proper personal protective equipment, hazard or overtime pay, access to paid sick days, or child care support. Many of these roles are temporary or part-time and do not offer long-term stability or benefits.

Worse still, the pandemic is resulting in millions of workers in the U.S. permanently losing their jobs. By the end of October 2020, 3.7 million people have permanently lost their jobs. 12 lt is estimated that this number could increase

Johns Hopkins University. "Coronavirus Resource Center." https://coronavirus.jhu.edu.

² Centers for Disease Control and Prevention. "Health Equity Considerations and Racial and Ethnic Minority Groups." U.S. Department of Health & Human Services. Updated July 24, 2020. https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/race-ethnicity.html.

³ Bureau of Labor Statistics. "The Employment Situation." U.S. Department of Labor. https://www.bls.gov/news.release/empsit.nr0.htm. Schwartz, Nelson, and Gillian Friedman. 2020. "Job Growth Slowed in July, Signaling a Loss of Economic Momentum." The New York Times. August 7.

⁴ Zandi, Mark. 2020. "Written Testimony of Mark Zandi, Chief Economist, Moody's Analytics, Before the Congressional Oversight Commission." September 17. https://coc.senate.gov/sites/default/files/2020-09/MLF%20Testimony%20-%20ZANDI.pdf.

⁵ Parolin, Zachary, et al. 2020. "Monthly poverty rates in the United States during the COVID-19 pandemic." Center on Poverty & Social Policy, School of Social Work, Columbia University. https://static1.squarespace.com/static/5743308460b5e922a25a6dc7/t/5f87c59e4cd0011fabd38973/1602733471158/COVID-Projecting-Poverty-Monthly-CPSP-2020.pdf

⁶ Kochhar, Rakesh. 2020. "Hispanic women, immigrants, young adults, those with less education hit hardest by COVID-19 job losses." Pew Research Center. https://www.pewresearch.org/fact-tank/2020/06/09/hispanic-women-immigrants-young-adults-those-with-less-education-hit-hardest-by-covid-19-job-losses. Markle Foundation. 2020. "Stimulus for American Opportunity: Empowering Workers with Training for the Digital Economy." June. https://www.markle.org/stimulus-american-opportunity.

⁷ Employment and Training Administration. 2020. "Unemployment Insurance Data." U.S. Department of Labor. https://oui.doleta.gov/unemploy/DataDashboard.asp.

⁸ Levitt, Larry. 2020. "COVID-19 and Massive Job Losses Will Test the US Health Insurance Safety Net." JAMA Health Forum. May. https://jamanetwork.com/channels/health-forum/fullarticle/2766729.

Almost 11 percent of U.S. households didn't have enough to eat in the previous seven days, as of July 2020. That number was about 4 percent in 2018, according to an analysis of federal data by Diane Whitmore Schanzenbach, an economist at Northwestern University. About a third of renters reported little or no confidence they could make next month's payment, Census Bureau data from July 2020 shows.

¹⁰ Bureau of Labor Statistics. "Job Openings and Labor Turnover Survey." U.S. Department of Labor. Accessed October 6, 2020. https://www.bls.gov/news.release/jolts.nr0.htm.

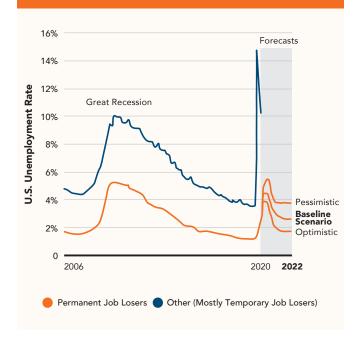
¹¹ U.S. Congressional Budget Office. 2020. "An Update to the Economic Outlook: 2020 to 2030." July. https://www.cbo.gov/system/files/2020-07/56442-CBO-update-economic-outlook.pdf.

¹² Bureau of Labor Statistics. "Table A-11. Unemployed persons by reason for unemployment." U.S. Department of Labor. https://www.bls.gov/news.release/empsit.t11.htm.

to between 6.7 and 8.2 million permanent job losses by the end of 2020.13 A recent survey found that six in ten workers who have lost their jobs during the pandemic do not expect to be able to return to their previous job. 14 Studies conducted this year have projected that the percentage of unemployed workers who could experience permanent job loss varies from approximately twenty to forty percent. 15 Regardless of the exact percentage, numerous studies have shown that extended time away from the workforce can lead to lower future wages and the inability to reenter the workforce at a position comparable to the one held before. 16 Finally, the workplace may evolve as companies increase their investments in automation, ¹⁷ creating opportunities for workers to interact with technology in new ways, but also potentially creating the risk of additional job losses that disproportionately impact people of color and low-wage workers.¹⁸

The pandemic has had widely divergent impacts across industries. The hardest-hit industries have been in the service sector, where 90 percent of the job loss has occurred. In particular, food, travel and hospitality, which employ large numbers of low-wage workers, have been hard-hit. Since October 2019, the leisure and hospitality industry has lost over 3.3 million jobs, while the retail industry has lost 471,000 jobs. ¹⁹ Prior to the onset of COVID-19, eating and drinking establishments employed 12 million workers. ²⁰ After six months of the pandemic, about half of those who lost their jobs in March and April 2020 have been rehired but the employment level is still 3 million below

FIGURE 1. PERMANENT JOB LOSSESMAY HIT GREAT RECESSION LEVELS



Note: "Permanent job losers" include those who completed a temporary job.

Source: Analysis of Labor Department data obtained via IPUMS by Gabriel Chodorow-Reich (Harvard University) and John Coglianese (Federal Reserve). *The Washington Post.* https://www.washingtonpost.com/business/2020/08/25/permanent-economic-damage-piles-up-covid-crisis-is-looking-more-like-great-recession/.

pre-pandemic levels.²¹ The impact has also been acute for the nation's 31.7 million small businesses that employ 60.6 million people, or 47 percent of all private-sector workers.²² In New York City alone, it has been projected that up to a third of the 230,000 small businesses in the city may never reopen.²³

¹³ Van Dam, Andrew. 2020. "As permanent economic damage piles up, the Covid Crisis is looking more like the Great Recession." August 25. https://www.washingtonpost.com/business/2020/08/25/permanent-economic-damage-piles-up-covid-crisis-is-looking-more-like-great-recession/.

¹⁴ Casselman, Ben. 2020. "Most unemployed Americans doubt they will return to their jobs." The New York Times. August 17. https://www.nytimes.com/live/2020/08/17/business/stock-market-today-coronavirus#most-unemployed-americans-doubt-they-will-return-to-their-jobs.

¹⁵ Barrero, Jose Maria, Nick Bloom, and Steven J. Davis. 2020. "COVID-19 Is Also a Reallocation Shock." Becker Friedman Institute for Economics, University of Chicago. https://bfi.uchicago.edu/wp-content/uploads/BFI_WP_202059.pdf. Council of Economic Advisers. 2020. "Evaluating the Effects of the Economic Response to COVID-19." August. https://www.whitehouse.gov/wp-content/uploads/2020/08/Evaluating-the-Effects-of-the-Economic-Response-to-COVID-19.pdf.

Brand, Jennie. 2015. "The Far-Reaching Impact of Job Loss and Unemployment." *Annual Review of Sociology*. https://www.ncbi.nlm.nih.gov/pmc/articles/

¹⁷ Autor, David. 2020. "The Nature of Work of the COVID Crisis: Too Few Low Wage Jobs." The Hamilton Project at the Brookings Institution. July. https://www.brookings.edu/1wp-content/uploads/2020/08/AutorReynolds_LO_FINAL.pdf.

¹⁸ Semuels, Alana. 2020. "Millions of Americans Have Lost Jobs in a Pandemic- And Robots and Al are Replacing Them Faster Than Ever. Time. August 6. https://time.com/5876604/machines-jobs-coronavirus/.

¹⁹ Schwartz, Nelson, and Gillian Friedman. 2020. "Job Growth Slowed in July, Signaling a Loss of Economic Momentum." The New York Times. August 7. https://www.nyt1imes.com/2020/08/07/business/economy/july-jobs-report.html.

Prior to the pandemic, the hotel industry employed 8.3 million workers. Six months into the pandemic, four in ten hotel employees are still not working. American Hotel and Lodging Association. 2020. "State of the hotel industry analysis: COVID-19 Six Months Later." August 31. https://www.ahla.com/sites/default/files/State%20of%20the%20Industry.pdf.

²¹ Ibid

²² U.S. Small Business Administration Office of Advocacy. 2020. "2020 Small Business Profile." https://cdn.advocacy.sba.gov/wp-content/uploads/2020/06/04144224/2020-Small-Business-Economic-Profile-US.pdf.

²³ Partnership for New York City. 2020. "A Call for Action and Collaboration." https://pfnyc.org/wp-content/uploads/2020/07/actionandcollaboration.pdf.

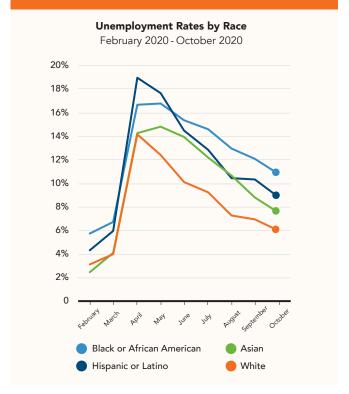
FIGURE 2. IMPACT OF COVID-19 ON THE EMPLOYMENT SITUATION

Change in Employment by Industry February 2020 - October 2020 Mining & Logging Construction Manufacturing Wholesale Trade Retail Trade Transportation Utilities Information **Financial Activities** Professional & **Business Services** Education & Health Services Leisure & Hospitality Other Services Government -25% -20% -15% -10% -5%

Source: U.S. Bureau of Labor Statistics. https://www.bls.gov/charts/employment-situation/employment-levels-by-industry.htm.

The economic impact of COVID-19 has been severe for cities. According to a September 2020 poll by NPR, the Robert Wood Johnson Foundation, and the Harvard T.H. Chan School of Public Health, found that at least half of people living in America's four largest cities said they have experienced the loss of a job or a reduction in wages or work hours in their household since the start of the coronavirus outbreak.²⁴ In New York City, for example, the unemployment rate reached approximately 20 percent by July 2020.²⁵ Population density has contributed to infection rates and increased the breadth and duration of public health policies such as social

FIGURE 3. UNEMPLOYMENT RATE BY RACE



Source: U.S. Bureau of Labor Statistics. https://www.bls.gov/news.release/empsit.t02.htm.

distancing, retail and restaurant closures, and business curfews.²⁶

The impact on cities represents a stark reversal from the benefits that they experienced since the Great Recession. Over the past 12 years, U.S. cities have been driving the country's growth and innovation. Twenty-five urban areas are responsible for two-thirds of job growth over the last decade.²⁷ Economic growth, however, has not been equitably distributed as cities have simultaneously experienced income inequality and wage stagnation among lower-income workers.

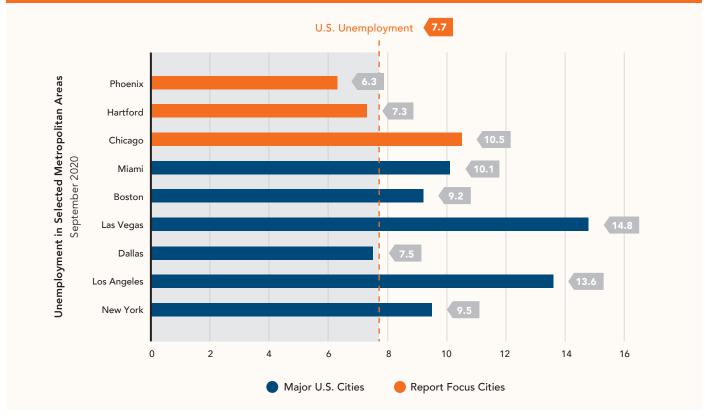
²⁴ Neel, Joe. 2020. "COVID-19's Serious Financial Impact Hits Almost Half Of U.S. Households." NPR. September 9. https://www.npr.org/sections/health-shots/2020/09/09/909669760/npr-poll-financial-pain-from-coronavirus-pandemic-much-much-worse-than-expected.

²⁵ McGeehan, Patrick. 2020. "A Million Jobs Lost: A 'Heart Attack' for the N.Y.C. Economy." The New York Times. July 7. https://www.nytimes.com/2020/07/07/nyregion/nyc-unemployment.html.

²⁶ Yong, Ed. 2020. "America's Patchwork Pandemic Is Fraying Even Further." *The Atlantic*. May 20. https://www.theatlantic.com/health/archive/2020/05/patchwork-pandemic-states-reopening-inequalities/611866/.

²⁷ Lund, Susan, et al. 2019. "The future of work in America: People and places, today and tomorrow." McKinsey Global Institute. July. https://www.mckinsey.com/featured-insights/future-of-work/the-future-of-work-in-america-people-and-places-today-and-tomorrow.

FIGURE 4. METRO AREA UNEMPLOYMENT DURING COVID-19 VS. NATIONAL AVERAGE



Source: U.S. Bureau of Labor Statistics. https://www.bls.gov/web/metro/laummtrk.htm.

The economic damage to urban economies is intensifying the challenges workers face. Long before COVID-19 arrived, urban workers had experienced a gradual, decades-long bifurcation into high- and low-wage jobs.²⁸ This polarization eliminated many middle-income jobs and the COVID-19 health and economic crises is intensifying this dynamic.

U.S. cities are facing these challenges amid declining resources and the resulting necessity to reduce services.²⁹ Cities, on average, expect a 13 percent decline in general fund revenues in the 2020 and 2021 fiscal years, according to a recent survey.³⁰ New York City is facing an \$8

billion revenue gap and the prospect of laying off 22,000 municipal workers,³¹ while Chicago is facing a \$1.2 billion gap in its projected 2021 budget and considering hiring slowdowns and service cuts.³² States are simultaneously facing historic revenue shortfalls, and for this reason won't be able to help cities avert revenue increases or spending cuts.³³

Cities are developing comprehensive strategies to rebuild their economies.³⁴ An important component of those efforts will be helping people find work with their existing skill set or, if necessary, to develop new skills. This will require cities to work with various stakeholders—from

²⁸ Autor, David. 2019. "Work of the Past, Work of the Future." AEA Papers and Proceedings 109. May. https://www.aeaweb.org/articles?id=10.1257/pandp.20191110.

²⁹ Davidson, Kate. 2020. "Coronavirus-Hit State Budgets Create a Drag on U.S. Recovery." The Wall Street Journal. August 12. https://www.wsj.com/articles/coronavirus-hit-state-budgets-create-a-drag-on-u-s-recovery-11597224600.

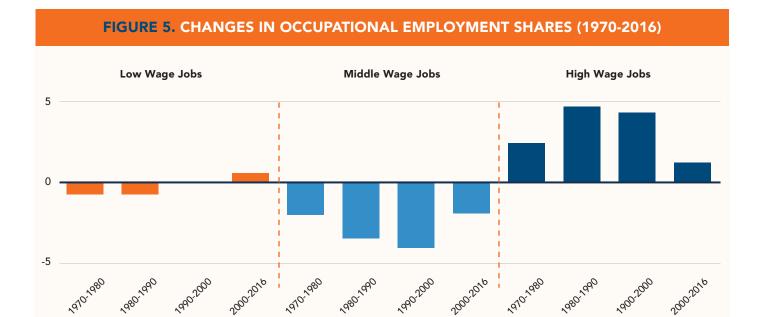
³⁰ Almost 90 percent of the 485 cities surveyed by the National League of Cities expect to be less able to meet their communities' financial needs this year than they were last year. National League of Cities. 2020. "City Fiscal Conditions 2020." August. https://www.nlc.org/resource/city-fiscal-conditions-2020.

³¹ Romm, Tony. 2020. "New York City battled back the coronavirus. Now it's struggling to pay for it." Washington Post. August 28. https://www.washingtonpost.com/business/2020/08/28/new-york-city-budget-coronavirus/

³² Barrett, Joe. 2020. "Chicago Faces a \$1.2 Billion Budget Gap for 2021 Due to Coronavirus Pandemic." August 31. https://www.wsj.com/articles/chicago-faces-a-1-2-billion-budget-gap-for-2021-due-to-coronavirus-pandemic-11598912399.

³³ Gillers, Heather, and Banerji, Gunjan. 2020. "U.S. States Face Biggest Cash Crisis Since the Great Depression. Wall Street Journal. October 28. https://www.wsj.com/articles/u-s-states-face-biggest-cash-crisis-since-the-great-depression-11603910750.

³⁴ City of Chicago. 2020. "Recovery Task Force." https://www.chicago.gov/city/en/sites/covid-19/home/covid-19-recovery-taskforce.html.



Source: Work of the Past, Work of the Future, AEA Papers and Proceedings, 2019

employers to nonprofits as well as traditional educational institutions and training providers. City-level education and training systems are adapting in order to serve new students, given ongoing social distancing requirements and severe economic dislocation, often moving curricula to online delivery formats. The move to virtual service delivery increases the urgency around providing equitable access to the technologies that allow for virtual learning. Meeting the needs of adult workers or those who have been displaced will not be easy. In addition to access to a computer and a broadband connection, the pandemic has also decreased the supply of child care. As these examples suggest, building a system that allows adult workers the time and provides the tools necessary to pursue such learning opportunities will require overcoming multiple obstacles simultaneously. Unlike a single employer or training provider, cities have the ability to provide solutions to these challenges at scale, and do so with a clear sense of how different communities, specifically people of color, are being impacted by COVID-19, and how best to support these communities

in meeting both the health and economic challenges of this moment.

COVID-19 has created an economic and health crisis for cities. The former Mayor of Chicago Rahm Emanuel once stated that we should never let a crisis go to waste. In this moment, cities have the opportunity to reimagine how education and training resources are delivered for adult workers, and what role cities can play in building a system that does so equitably.

Cities have the opportunity to reimagine how education and training resources are delivered for adult workers.

SECTION 2

THE EDUCATION AND TRAINING INFRASTRUCTURE IN CITIES

Major cities have many local education and training providers attempting to serve the diverse needs of learners and doing so in a decentralized environment. Both the education and workforce systems have been intentionally designed to be administered at the local level. In cities, the primary connection point that mayors have to education comes through the role they play in administering the K-12 education system. By contrast, mayors do not have a formal role in administering or overseeing post-secondary education or training. Higher education and training providers operate locally but are largely subject to rules and regulations established by federal and state governments. The main federal programs that support post-secondary schooling-Title IV and Pell Grants-provide funding that goes directly to eligible institutions or students. Similarly, the workforce system is primarily funded by the federal Workforce Innovation and Opportunity Act (WIOA) and the funding provided devolves ultimately to local workforce boards and providers to meet the requirements of the Act. The decentralized approach involves many different funding streams and institutions that have different eligibility requirements and, in some cases, performance metrics. City governments are not major funders of either post-secondary or workforce development programs, and thus have historically played a lesser role in these areas. In partial recognition of the lack of resources provided by cities for this purpose, private funders, including community, family and corporate foundations, have partnered with local and state agencies and other stakeholders to help address the need for post-secondary and workforce development programs.

Despite the lack of control over or investment in these systems, cities have benefited from their ability to attract highly educated workers and major employers. COVID-19 may change this dynamic as more workers seek to work remotely and avoid densely populated work and living arrangements. Regardless of the trends around remote work, COVID-19 has demonstrated the urgent need to develop strategies to help those who have lost work or hours find new opportunities. As cities begin this work, they face a jobs landscape that has advantaged workers with post-secondary degrees and industry-recognized credentials and disadvantaged those without them.

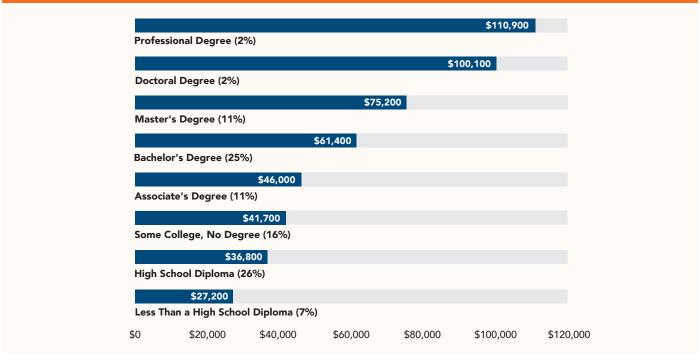
Between 1979 and 2018, workers with a high school diploma experienced a 13 percent decrease in hourly wages whereas workers with a bachelor degree enjoyed a 9 percent increase, and workers with an advanced degree experienced an increase of 24 percent.³⁵ Furthermore, workers with only a high school diploma face higher rates of turnover, fewer opportunities for advancement, and less job satisfaction than workers who have obtained additional education or training. It is for this reason that states across the country have established post-secondary attainment goals. Reflecting the importance of a post-secondary credential, Chicago mandated that public high school graduates in the city develop a postsecondary plan as a condition of graduation.³⁶

These trends appear to be accelerating in the COVID-19 economy, as low-wage workers with a high school diploma or less have suffered a disproportionate amount of job loss relative to the more highly educated workers who typically

³⁵ Congressional Research Service. 2019. "Real Wage Trends, 1979 to 2018." July. https://fas.org/sgp/crs/misc/R45090.pdf.

³⁶ Sanchez, Ray. 2017. "Chicago's new plan for high school students: no plan, no diploma." CNN. July 9. https://www.cnn.com/2017/07/08/us/chicago-high-school-graduation-requirement/index.html.

FIGURE 6. MEDIAN EARNINGS FOR WORKERS AGE 25 AND OLDER BY EDUCATION LEVEL



Source: Census Bureau and PNC Capital Markets. https://www.weforum.org/agenda/2018/07/which-college-degrees-get-the-highest-salaries.

can work remotely.³⁷ While education and training are only a partial solution, cities need to utilize the various resources at their disposal, in particular to help those who have been displaced and may need to find a new job or career path.

While some cities have programs aimed at retraining workers, their primary responsibility is to run K-12 school systems, provide public transportation, and administer other basic services such as trash collection and law enforcement. Without departments dedicated to serving adult workers, the challenge for cities is to be able to aggregate and align employers, education and training providers, and agencies that provide complementary services to meet the needs of workers and help build a more coordinated and coherent system.

The rest of this section reviews the resources within cities and discusses the opportunities and challenges that each has to be a meaningful part of a lifelong learning system.

Employers

Employers are central to the education and training infrastructure within cities and include for-profit, nonprofit, and city governments themselves, which in some cases can be the largest employers in a city. The evolving skills and competencies required by employers influence the services provided by education and training providers. While employers can rely on graduates of high schools, community colleges, or 4-year universities as sources of new talent, they also play an ongoing role in providing formal and informal training to their own employees as they progress in their career. Such training can be financed through employer-sponsored tuition benefit programs, employer-mandated training, apprenticeships, and professional development funds.

While the available but limited data suggests that the percent of workers receiving employer-sponsored training has declined

³⁷ Long, Heather. 2020. "The recession is over for the rich, but the working class is far from recovered." Washington Post. August 13. https://www.washingtonpost.com/business/2020/08/13/recession-is-over-rich-working-class-is-far-recovered/.

over time in the United States,³⁸ employers remain the largest source of funding for worker training, far outpacing public and nonprofit spending.³⁹ There remains, however, important questions around what type of employees receive training, and recent evidence to suggest that low-wage workers without high levels of education, and workers of color, are re ceiving significantly less than other types of workers.⁴⁰ When considering the employer landscape, it is important to note that there are many different types of employers-small, medium, and large-representing many different industries and varying degrees of connection to a specific city. Small employers, for example, have limited ability to work with specific providers to meet their workforce needs given budget constraints.⁴¹ By contrast, large employers have a greater ability to identify their specific needs and work with education and training providers, such as a local community college, to meet those needs. There are also companies, such as Guild Education or Penn Foster, that work as intermediaries and assist employers in delivering education and training to their employees. In a globalized economy, however, large employers can operate in many different cities and countries and thus may look outside a specific city to develop a talent pipeline that best suits its needs.

Despite differences in size and need, employers will continue to play a critical role in defining which skills, competencies, and credentials are desired, funding internal and external training opportunities for employees, and helping workers make decisions about how to advance their careers. This role may expand further in the post-COVID-19 world, where employers may seek to rebuild and reskill their workforces to reflect an economy where automation and digitalization play an increasingly large role.⁴² In addition, coalitions of employers have also come together around hiring commitments. Notably, the New York Jobs CEO Council announced that it will hire 100,000 traditionally underserved New Yorkers by 2030. This goal includes job opportunities and apprenticeships for 25,000 students from the City University of New York.⁴³ Similarly, the Virginia Ready initiative was launched as a response to COVID-19 and involves a publicprivate partnership with many large Virginia employers identifying desired skills and credentials that they value and a willingness to hire people that obtain them.44

Community Colleges

Alongside employers, community colleges are a crucial component of the U.S. education and training infrastructure⁴⁵ and are well positioned to support post-COVID retraining, as well as efforts to develop more lifelong learning opportunities. Since their inception a hundred years ago, community colleges in the U.S. have provided students with an affordable option to obtain skills and credentials that are needed to be successful in the workforce.46 Currently, community colleges are the largest single provider of training in the U.S., with 1,050 institutions educating approximately 12 million students each year (6.8 million are enrolled in credit programs, while 5 million are enrolled in non-credit programs),⁴⁷ or 41 percent of all

³⁸ Council of Economic Advisers. 2015. "Economic Report of the President." February. https://obamawhitehouse.archives.gov/administration/eop/cea/economic-report-of-the-President/2015.

Estimates vary regarding the amount that private employers spend on formal and informal employee training. According to the Georgetown Center on Education and the Workforce, private employers spent \$177 billion on formal training and \$413 billion on informal training in 2013. Carnevale, Anthony, Jeff Strohl, and Artem Gulish. 2015. "College Is Just The Beginning." Georgetown University Center on Education and the Workforce. https://cew.georgetown.edu/cew-reports/college-is-just-the-beginning/.

⁴⁰ Osterman, Paul. 2020. "Skill Training for Adults." MIT Work of the Future. October. https://workofthefuture.mit.edu/research-post/skill-training-for-adults/.

⁴¹ Large firms (500 or more employees) offer training between 10 and 25 percent more often than small firms (50 or fewer employees).

⁴² Recent examples of this include announcements by Verizon that they plan to retrain half of their workforce, and Walmart's announcement to expand its training program for its associates.

⁴³ The City University of New York. 2020. "27 CEOs Launch the New York Jobs CEO Council." August 11. https://www1.cuny.edu/mu/forum/2020/08/11/27-ceos-launch-the-new-york-jobs-ceo-council/.

⁴⁴ Virginia Ready. 2020. https://vaready.org/

⁴⁵ For example, in California, two-thirds of all college students attend a community college.

⁴⁶ The average annual tuition and fees to attend a public community college in 2019-2020 was \$3,730; by comparison, average four-year public schools cost \$10,440 for in-state students. The College Board. 2019. "Trends in College Pricing 2019." https://research.collegeboard.org/trends/college-pricing.

⁴⁷ Ibid.

U.S. undergraduates.⁴⁸ Students in credit courses are predominantly minority, first-generation college, and lower-income.⁴⁹ Notably, 72 percent of part-time community college students work while attending school. For full-time students, 62 percent work while attending school.⁵⁰

Community colleges rely on a mix of revenue sources, including tuition and government support.⁵¹ Government funding represents about 65 percent of community college revenue but over the past twenty years, total funding per full-time student from state, local, and federal sources has not increased.52 Notably, per student expenditure at community colleges is less than half of what four-year schools spend on undergraduates.⁵³ Pell grants are an important source of government funding for community college students but can only be used by those participating in credit courses. Non-credit courses are generally short-term and more directly related to workforce development but can be harder to finance given Pell's restrictions. Similarly, credit courses are subject to accreditation, providing an element of quality control. Non-credit courses do not need accreditor approval, making it easier to create new programs to meet employer demand but also leaving these programs without outside scrutiny. The programs offered typically lead to a degree or certificate, which signals to employers a participant's attainment of certain skills.⁵⁴

The economic returns to community college programs have been shown to be positive. A 2018 analysis of California community college programs found that their career and technical programs raised earnings by 14 percent for certificates of less than 18 units, and 45 percent for associate degrees.⁵⁵ Many community colleges also offer degree pathway programs that can lead to undergraduate degrees at universities. 56 At the same time, community colleges have struggled with low completion rates.⁵⁷ This may, in part, result from community colleges receiving the lowest levels of funding per student of all higher education institutions.⁵⁸ Both housing and food instability are other challenges affecting student retention and completion rates, with 42 percent of community college students reporting food insecurity and 46 percent reporting housing instability.⁵⁹ While the impact of the pandemic on completion is unclear, it has impacted enrollment at community colleges, as there has been a 19 percent enrollment drop in the fall of 2020, larger than four-year public or private institutions are experiencing.60

Community colleges are well positioned to provide immediate retraining as well as broader efforts to create a lifelong learning system. From health care programs to manufacturing skills development to IT training programs, community colleges offer occupational programming that can link to specific job opportunities. In today's economy, where rapid skills development has taken

⁴⁸ National Center for Education Statistics. 2019. "Table 317.20. Degree-granting postsecondary institutions, by control and classification of institution and state or jurisdiction: 2018-19." Digest of Education Statistics. U.S. Department of Education. https://nces.ed.gov/programs/digest/d19/tables/d19/317.20.asp.

⁴⁹ Osterman, Paul. 2020. "Skill Training for Adults." MIT Work of the Future. October. https://workofthefuture.mit.edu/research-post/skill-training-for-adults/.

⁵⁰ American Association of Community Colleges. 2020. "Fast Facts 2020." https://www.aacc.nche.edu/wp-content/uploads/2020/03/AACC_Fast_Facts_2020_Final.pdf.

⁵¹ In 2017-2018, two-year colleges received \$63 billion in revenues from tuition, government and other sources.

⁵² Osterman, Paul. 2020. "Skill Training for Adults." MIT Work of the Future. October. https://workofthefuture.mit.edu/research-post/skill-training-for-adults/.

⁵³ Kahlenberg, Richard, Robert Shireman, Kimberly Quick, and Tariq Habash. 2018. "Policy Strategies for Pursuing Adequate Funding of Community Colleges." The Century Foundation. October. https://tcf.org/content/report/policy-strategies-pursuing-adequate-funding-community-colleges/.

⁵⁴ Bauman, Kevin. 2018. "Improving Skills Through America's Workforce Development System." American Enterprise Institute. September. https://tacc.org/sites/default/files/documents/2018-09/improving-skills-through-americas-workforce-development-system.pdf.

⁵⁵ Stevens, Ann Hu, Michal Kurlaender, and Michel Grosz. 2018. "Career Technical Education and Labor Market Outcomes: Evidence from California Community College Outcomes." https://poverty.ucdavis.edu/sites/main/files/file-attachments/stevens_2018jhr.pdf.

As Josh Wyner et al have noted, community college students face challenges in transferring credits in pursuit of four-year degrees. Davidson, Brittney, et al. 2020. "The Workforce Playbook: A community college guide to delivering excellent career and technical education." The Aspen Institute. https://highered.aspeninstitute.org/wp-content/uploads/2019/06/The-Workforce-Playbook_Final.pdf

⁵⁷ Nationally, 40.8 percent of those who started community college between 2006-2013 completed a credential within six years. By comparison, 67 percent of those who attended public, four-year institutions completed a degree within six years. National Student Clearinghouse Research Center. 2019. "Completing College, 2019 National Report" December. https://nscresearchcenter.org/wp-content/uploads/Completions_Report_2019.pdf

⁵⁸ Melguizo, Tatiana, and Keith Witham. 2018. "Funding Community Colleges for Equity, Efficiency, and Student Success." The Century Foundation. https://tcf.org/content/report/funding-community-colleges-equity-efficiency-student-success-examination-evidence-california/.

⁵⁹ Goldrick-Rab, Sarah, 2018. "Still Homeless and Hungry in College." Wisconsin Hope Lab. https://hope4college.com/wp-content/uploads/2018/09/Wisconsin-HOPE-Lab-Still-Hungry-and-Homeless.pdf.

⁶⁰ National Student Clearinghouse Research Center. "Stay Informed with the Latest Enrollment Information." Accessed November 12, 2020. http://nscresearchcenter.org/stay-informed/.

on added importance, community colleges will play a central role in providing effective, affordable education and training that helps upskill or retrain workers. As a recognition of the important role that community colleges play in training the workforce, 16 states have programs that make community college tuition-free.⁶¹

Four-Year Colleges and Universities

Increasingly over time, obtaining a four-year college or university degree has been viewed as the necessary next step in the educational pathway for high school graduates in the United States. Moreover, a college degree has been viewed as an important tool to securing a good job that affords upward economic mobility. Reflecting these perceptions, the percentage of the American workforce that now holds a bachelor's degree has increased from 27 percent to 41 percent over the past 30 years. 62 Over the past 50 years, the number of students attending four-year schools has increased from just over 6 million to approximately 14 million in 2019 (71 percent attend full-time, while 29 percent attend parttime), only slightly more than the number of students attending community college. 63 To meet the demand, there are currently over 2,700 four-year public, private nonprofit, and private for-profit institutions.⁶⁴ Finally, the cost of attending a four-year institution has increased dramatically, making this option more difficult for low-income students and resulting in record amounts of student debt.65

The value of a college degree continues to be a debated and evolving topic. While U.S.

Bureau of Labor Statistics data show that those with college degrees earn more and experience lower rates of unemployment than those with high school degrees (otherwise referred to as the "college premium"),66 others note that the value of a college degree does not appear to be increasing as wages for college graduates appear to be stagnating.⁶⁷ Moreover, there are organizations-such as Opportunity@Work—that note that employers over-emphasize the four-year credential in making hiring decisions at the expense of the nearly two-thirds of the workforce who do not have a college degree. While not as dramatic as the completion challenges that community colleges face, four-year institutions also struggle with ensuring that students complete degree programs.⁶⁸ Presently, only 67 percent of public four-year students complete their programs within six years.69

Four-year institutions can be found in urban, suburban, and rural areas. In cities, there can be a diversity of four-year schools, from those that attract students from all over the world to those that predominantly serve students who live in the city or region. Despite their importance, universities are not as flexible as community colleges in their ability to help displaced workers quickly reenter the labor force given the typical program length and accreditation process, among other factors. Further, many 4-year institutions do not offer short-term programs or certificates aimed at providing specific skill updates that employers are seeking. While some universities are developing affordable, credit-based options for workers attempting to learn new skills, these offerings are the exception rather than the rule.

⁶¹ Farrington, Robert. 2020. "These States Offer Tuition Free Community College." Forbes. March 25. https://www.forbes.com/sites/robertfarrington/2020/03/25/these-states-offer-tuition-free-community-college/#68c099a014cf.

⁶² U.S. Bureau of Labor Statistics. "Labor Force Statistics from the Current Population Survey." U.S. Department of Labor. Accessed November 13, 2020. https://www.bls.gov/web/empsit/cpseea05.htm.

⁶³ National Center for Education Statistics. 2019. "Table 303.30. Total fall enrollment in degree-granting postsecondary institutions, by level and control of institution, attendance status, and sex of student: Selected years, 1970 through 2029." Digest of Education Statistics. U.S. Department of Education. https://nces.ed.gov/programs/digest/d19/tables/dt19_303.30.asp.

⁶⁴ National Center for Education Statistics. 2019. "Table 317.10. Degree-granting postsecondary institutions, by control and level of institution: Selected years, 1949-50 through 2018-19." Digest of Education Statistics. U.S. Department of Education. https://nces.ed.gov/programs/digest/d19/tables/d19_317.10.asp.

⁶⁵ Over the past thirty years, the cost of attending a public university has more than doubled.

⁶⁶ Bureau of Labor Statistics. "Educational Attainment of the Labor Force." https://www.bls.gov/spotlight/2017/educational-attainment-of-the-labor-force/home.htm.

⁶⁷ Gould, Elise. 2016. "Wage Inequality Continues its 35 Year Rise in 2015." Economic Policy Institute. March. https://www.epi.org/publication/wage-inequality-continued-its-35-year-rise-in-2015/.

⁶⁸ Nadworny, Elissa. 2019. "College completion rates are up, but the numbers will still surprise you." NPR. March 13. https://www.npr. org/2019/03/13/681621047/college-completion-rates-are-up-but-the-numbers-will-still-surprise-you.

⁶⁹ Shapiro, Doug, et al. 2019. "Completing College 2019 National Report (Signature Report 18)." National Student Clearinghouse Research Center. December. https://nscresearchcenter.org/wp-content/uploads/Completions_Report_2019.pdf

Nonprofit Organizations

Local nonprofit training providers play an important role in a city's education and training ecosystem. Similar to employers, nonprofits can vary in size and geographic reach. Goodwill Industries, for example, is the largest nonprofit training provider in the United States, providing workforce services across small and large cities. There are nonprofits, like YearUp and Merit America, that offer programs in select cities across the United States. And, finally, there are nonprofits, such as Project Quest, that operate in one specific city, in this case, San Antonio, Texas.

The most successful nonprofits combine training with support services, such as coaching, transportation, and child care. The aforementioned Project Quest and Jewish Vocational Services in Boston, are two well-known examples. The success of these programs also derives from the close relationships that they have developed with local employers that hire program participants. Other areas of support that training nonprofits can provide can include food support, housing counseling and services, and access to technology that support learner retention and completion. For many learners, especially those from disadvantaged backgrounds, the wraparound services that nonprofits provide are critical.

There are also nonprofits that do not provide training but instead convene and coordinate action between institutions to achieve important training and investment objectives. Organizations, like P33 in Chicago and Achieve60AZ in Phoenix, work to set the broader city or regional agenda on specific learning and training issues, advocate for greater investment from the public and private sectors, and informally coordinate various stakeholders to develop new strategies.

While programs vary, nonprofit trainers often benefit from greater flexibility, allowing the

The most successful nonprofits combine training with support services, such as coaching, transportation, and child care.

organization to tailor offerings to a specific industry, employer, or subgroup of workers, pilot new strategies, provide services to underserved groups, and address equity challenges.⁷⁰ Although smaller budgets and staff limit the scale of activities these organizations can undertake,71 proximity to the communities they serve can drive innovative training approaches that can be taken to scale by larger organizations. Many nonprofit training providers receive funding as eligible training providers as determined by the requirements of WIOA. Federal funding for WIOA has been roughly cut by 40 percent over the past twenty years, increasing the fiscal challenges that many nonprofits face in their efforts to deliver high-quality services, and creating the need for some nonprofits to seek philanthropic support.⁷²

For-Profit Providers

The for-profit education and training industry runs the gamut from small non-degree granting entities to large degree-granting for-profit colleges. In the 1990's and 2000's, for-profit colleges were the fastest growing sector of the higher education industry. Since 2010, enrollment in for-profit colleges and the number of degree-granting for-profit institutions has declined. Another indicator that provides context on the size of the forprofit industry relative to public and private non-profits is total revenues. For-profit total revenues were \$15.8 billion in 2016-2017, relative to \$390 and \$243 billion for public and private non-profit degree granting institutions respectively.

⁷⁰ Bernstein, Hamutual. 2017. "Changing workforce systems: A framework for describing and measuring systems change." The Urban Institute. February. https://www.urban.org/sites/default/files/publication/88301/changing_workforce_systems2_1.pdf.

⁷¹ Mikelson, Kelly. 2018. "Public Funding for Job Training at the State and Local Level." The Urban Institute. June. https://www.urban.org/sites/default/files/publication/98625/public_funding_for_job_training_at_the_state_and_local_level_1_0.pdf.

⁷² Spiker, Katie. 2020. "Budget Analysis: 2021 request has important skills proposals but big cuts to Labor and Safety Net programs." National Skills Coalition. February. https://www.nationalskillscoalition.org/news/blog/budget-analysis-2021-request-has-important-skills-proposals-but-big-cuts-to-labor-and-safety-net-programs.

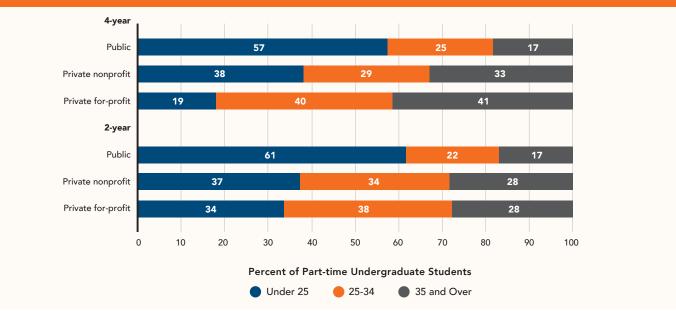
For-profit schools serve a disproportionate share of minority students. Relative to their public and private non-profit counterparts in both the 4-year and 2-year space, for-profits serve larger shares of Black, Hispanic, and Asian students.⁷³ In addition, for-profits attract a larger share of older students than their public and private non-profit counterparts. For example, based on 2018 data, 81 percent of attendees at 4-year for-profit institutions were over the age of 25. By comparison, 42 percent of students at public 4-year institutions are over the age of 25. Given the degree to which for-profit providers are serving adults, they are an important piece of the lifelong learning ecosystem.

Relative to public and private non-profits, for-profits rely heavily on online models of service delivery. While the pandemic has forced all education providers to move online, the for-profit industry was doing so before the pandemic. In 2017, 84 percent of post-baccalaureate students at degree-

granting for-profits relied exclusively on distance learning, relative to 22 percent at public degree-granting institutions.

For-profit education providers deliver mixed results. While some offer short, highly targeted programs that teach job-specific skills, others deliver low-quality training and credentials that do not increase participant wages. Similar to community colleges, forprofit colleges struggle with completion rates. In 2018, the 6-year graduation rate was 25 percent at private for-profit institutions. By comparison, the 6-year graduation rate is 61 and 67 percent at public and private nonprofit institutions respectively.74 In 2017, students who attended for-profit colleges filed 98 percent of all requests for student loan forgiveness alleging fraud.⁷⁵ On average, graduates from for-profit college leave school with \$34,000 in student debt.⁷⁶ This debt burden particularly impacts Black and Latinx learners, who constitute the majority of students attending for-profit institutions.⁷⁴

FIGURE 7. PERCENTAGE DISTRIBUTION OF PART-TIME UNDERGRADUATE ENROLLMENT IN DEGREE-GRANTING POSTSECONDARY INSTITUTIONS, BY LEVEL AND CONTROL OF INSTITUTION AND AGE OF STUDENT: FALL 2017



Source: National Center for Education Statistics. Digest of Education Statistics 2019. https://nces.ed.gov/programs/digest/d19/tables/dt19_303.50.asp.

⁷³ National Center for Education Statistics. 2019. "Table 306.50. Total fall enrollment in degree-granting postsecondary institutions, by control and classification of institution, level of enrollment, and race/ethnicity of student: 2018." U.S. Department of Education. https://nces.ed.gov/programs/digest/d19/tables/dt19_306.50.asp.

⁷⁴ National Center for Education Statistics. 2020. "Graduation rate." https://nces.ed.gov/fastfacts/display.asp?id=40.

⁷⁵ CBS News. 2017. "For-profit colleges linked to almost all loan fraud claims." November 9. https://www.cbsnews.com/news/study-most-student-loan-fraud-claims-involve-for-profits/.

⁷⁶ Butrymowicz, Sarah. 2020. "For-Profit Colleges, Long Troubled, See Surge Amid Pandemic." The New York Times. June 17. https://www.nytimes.com/2020/06/17/business/coronavirus-for-profit-colleges.html

In the last decade, coding boot camps have received a large amount of attention in the for-profit training space. While growing rapidly, the latest projections show that only 23,000 students graduated from coding boot camps in 2019.⁷⁸ Examples of coding boot camps include organizations like Galvanize and General Assembly that help workers develop new technical skills in programs that can be as short as two weeks. These programs often include career counseling and job placement to help students transition to new jobs. Coding boot camps, like many other for-

profit training providers, are non-accredited and thus their students can't qualify for Title IV financial aid or Pell Grants. Without access to federal financial aid, the composition of participants is generally wealthier, more highly educated, and less diverse than the participants in accredited nonprofit or for-profit training programs. Similarly, online platforms like Coursera provide students with access to career preparation programs, industry credentials, skills development, and general learning opportunities.

The education and training infrastructure in cities includes many different types of providers. These organizations have different missions, but in the aggregate serve a diverse population of students and workers. While many of these institutions work together, and local workforce boards can help coordinate the activities of these actors, the ecosystem in cities is best understood as one that is decentralized and siloed. In order to help working adults that will need to access education and training opportunities throughout their careers, cities should take a more proactive role and work with the various institutions to improve transparency around the different programs that are offered and develop solutions to the multiple challenges that adults face in trying to become lifelong learners.

⁷⁷ Libassi, CJ. 2018. "The Neglected College Race Gap: Racial Disparities Among College Completers." Center for American Progress. May. https://www.americanprogress.org/issues/education-postsecondary/reports/2018/05/23/451186/neglected-college-race-gap-racial-disparities-among-college-completers/

⁷⁸ Eggleston, Liz. 2019. "The Growth of Coding Bootcamps." Course Report. August 1. https://www.coursereport.com/reports/coding-bootcamp-market-size-research-2019.

SECTION 3 CHALLENGES

Cities have many resources that employers and workers can use to build on existing skills and competencies. However, cities need to confront the institutional and systemic obstacles that their residents face in being able to do this successfully and equitably. The key challenges facing workers pursuing lifelong learning include: 1) access to reliable information; 2) financing education and training; 3) promoting equity and addressing systemic racism; and 4) increasing coordination across the education and training landscape.

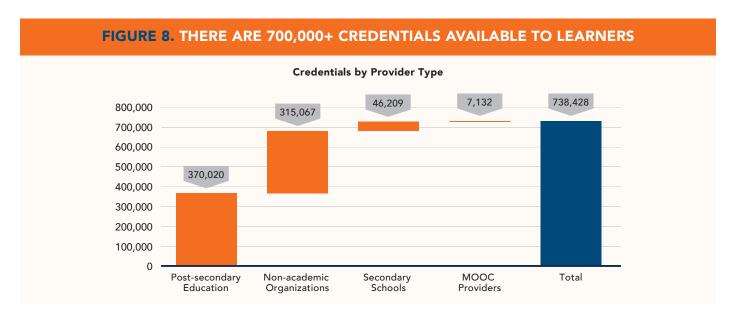


Challenge 1: Access to Reliable Information

Today, there is a dizzying array of education and training options. The nonprofit Credential Engine counted 730,000 different credentials in the U.S.⁷⁹ For cities that have both four-year universities and community colleges, there are often hundreds of degree and non-degree programs. Additionally, there are nonprofit and for-profit training providers offering programs that are typically shorter and more specialized than what traditional higher education offers. Another option is apprenticeships, with different programs being offered through public-private partnerships among employers, educational institutions, state Departments of Labor, and labor unions. Finally, for incumbent workers, employers may offer in-house or externally supported training.

The nonprofit Credential Engine counted 730,000 different credentials in the U.S.

These programs have different costs, curricula, schedules, and time commitments. Some may be online, while others involve classroom learning or a hybrid approach. To the extent that information is available, programs will have varying employment outcomes, expected wage gains, and completion rates.



⁷⁹ Credential Engine. 2019. "Counting U.S. Postsecondary and Secondary Credentials - A 2019 Report." https://credentialengine.org/counting-credentials-2019-report/.

Depending on the outcome measure used, there are varying degrees of program effectiveness. For example, while there is compelling data around wages and employment outcomes to support the decision to attend college, there is significant variation depending on the school or program that someone selects. As the Markle Foundation has noted, "the bottom 25 percent of earners with a BA do not earn more than the top 25 percent of high school graduates and... even among programs that are effective overall, outcomes vary widely across populations."⁸⁰

In addition to immediate questions around whether a program will result in a better-paying job, there are also longer-term questions where information can be incomplete or non-existent. For instance, it can be difficult to assess whether a program or credential is part of a career pathway and if so what additional training is needed to progress on that pathway. Obtaining accurate information can be even more challenging as there have been examples of education and training programs that provide false information about the quality of their credentials, creating broader trust and verification issues.⁸¹

Similarly, worker advocates report that online and written program descriptions can be incomplete, difficult to navigate, and widely dispersed. Available data also may not include critical information such as expected time commitment, pace of program, in-person requirements, and other factors related to balancing work and training. In the absence of reliable information, an alternative source of information can be informal guidance from social networks. While this can be helpful at times, information gathered from social networks may be incorrect, out of date, or subject to various access and equity factors.

There are over 40,000 online job boards and company websites that list job postings.

Relatedly, employers report similar struggles in disseminating information related to hiring needs in a way that is centralized and accessible to a broad and diverse population. As Peter Blair and David Deming note, there are over 40,000 online job boards and company websites that list job postings.84 In the absence of a single, clear channel where employers can report their hiring needs to a large worker population, they are instead forced to use segmented online platforms, work with "feeder schools" or other known partners, or attempt to advertise through other channels. This impacts both employers and workers. For employers, it limits the size and diversity of the pool of prospective workers to those who are affiliated with a known institution or online channels. For workers, it raises the difficulty of crossing social and economic barriers to apply for new career opportunities.

The lack of reliable information about training programs and job opportunities increases the difficulty around selecting an appropriate program, and in some cases may prevent additional training.⁸⁵ It is difficult to assess the return on investment of different programs, leading in some cases to suboptimal program selection that does not lead to higher wages or career advancement. Absent better information, the decision around what education and training options to pursue as an adult learner will continue to be difficult.

⁸⁰ Markle Foundation. 2020. "Stimulus for American Opportunity: Empowering Workers with Training for the Digital Economy." June. https://www.markle.org/stimulus-american-opportunity.

⁸¹ Lewin, Tamar. 2012. "Senate Committee Report on For-Profit Colleges Condemns Costs and Practices. *The New York Times*. May 29. https://www.nytimes.com/2012/07/30/education/harkin-report-condemns-for-profit-colleges.html.

⁸² Based on the author's discussions during the course of research for the paper.

⁸³ Davidson, Brittney, et al. 2019. "The Workforce Playbook: A Community College Guide to Delivering Excellent Career and Technical Education." Aspen Institute College Excellence Program. June. https://highered.aspeninstitute.org/wp-content/uploads/2019/06/The-Workforce-Playbook_Final.pdf.

⁸⁴ Blair, Peter, and David Deming. 2020. "Structural Increases in Demand for Skill after the Great Recession." AEA Papers and Proceedings. https://scholar. harvard.edu/files/ddeming/files/pandp.20201064.pdf.

⁸⁵ Aspen Institute Future of Work Initiative Convening, Phoenix, Arizona. December, 2019.



Challenge 2: Financing Education and Training

Paying for post-secondary education and training is often a challenge and is made more difficult by the simultaneous rising cost of education and stagnating incomes for many households. Over the past thirty years, the cost of attending a public university has more than doubled.86 Since 1980, the real wages of U.S. workers have held steady as the income of top earners has skyrocketed.87 Over the past ten years, student debt has doubled and now exceeds \$1.6 trillion.88 Given the disparate impacts that COVID-19 has had on low and highwage workers, wage stagnation and income inequality could be getting worse, making affordability an even larger obstacle for people considering going back to school or investing in a short-term training program.

While employers can subsidize or cover the cost of training, available data suggest that the long-term trend has been a reduction in employer-provided training. Between 1996 and 2008, the percentage of workers who received employer supported training dropped from 42 to 36 percent, a trend that was observed across industries and occupations.⁸⁹ A 2020 survey by MIT's Paul Osterman found that over 50 percent of the respondents received formal training from their employer in the year prior to the survey. 90 Available data also suggests that employerprovided tuition assistance has been declining.91 Union-based training is another option but is limited to the 10.3 percent of wage and salary workers who are represented by unions. 92

Available federal funding for workforce training and higher education provides additional support. In 2020, U.S. Department of Labor funding for WIOA and related programs approached \$8.4 billion along with an additional \$1.9 billion from the Department of Education for career and adult education. 93 WIOA funding is spread across six separate programs and the number of people who actually receive training through WIOA remains quite small. In Fiscal Year 2017, the Department of Labor estimated that more than 23 million Americans accessed WIOA training and employment services such as job search, labor exchange, or other career services. The core WIOA adult, dislocated worker, and youth funding programs served about 1.2 million of these workers annually. Among those workers, just 11 percent of adults and 14 percent of dislocated workers receive training through the workforce system. 94 Relative to other OECD countries, U.S. government investment in workforce training is limited. Federal and state support for the living expenses of workers undertaking training is also limited with the Supplemental Nutrition Assistance Program (SNAP), Temporary Assistance for Needy Families (TANF), and other programs not providing assistance for education and training.95

The amount spent by the federal government on public workforce programs is dwarfed by Title IV funding for students attending universities and community colleges, which now exceeds \$100

⁸⁶ National Center for Education Statistics. 2019. "Tuition costs of colleges and universities." Digest of Education Statistics, 2018. U.S. Department of Education. https://nces.ed.gov/fastfacts/display.asp?id=76.

⁸⁷ Saez, Emmanuel, and Thomas Piketty. 2003 "Income Inequality in the United States, 1913-1998." Quarterly Journal of Economics 118(1), 1-39. Updated October 2019

⁸⁸ U.S. News & World Report. 2019. "Student Debt Explained: Breaking Down the \$1.6T in Loans." November 1. https://www.usnews.com/news/elections/articles/2019-11-01/student-debt-explained-breaking-down-the-16t-in-loans.

⁸⁹ Council of Economic Advisers. 2015. "Economic Report of the President." https://obamawhitehouse.archives.gov/sites/default/files/docs/cea_2015_erp_complete.pdf.

⁹⁰ Osterman, Paul. 2020. "Skill Training for Adults." MIT Work of the Future. October. https://workofthefuture.mit.edu/research-post/skill-training-for-adults/.

⁹¹ Fitzpayne, Alastair, Anna Fife, Hilary Greenberg, and Ethan Pollack. 2020. "Modernizing Tax Incentives for Employer-Provided Educational Assistance: Can Section 127 Help Prepare Workers for the Future of Work?" Aspen Institute Future of Work Initiative. June. https://www.aspeninstitute.org/publications/modernizing-tax-incentives-for-employer-provided-educational-assistance-june-2020/.

⁹² Bureau of Labor Statistics. 2020. "Union Members - 2019." U.S. Department of Labor. https://www.bls.gov/news.release/pdf/union2.pdf.

⁹³ Spiker, Katie. 2019. "Fiscal Year 2020 Appropriations provide moderate - but important - boost to workforce and education programs." National Skills Coalition. December. https://www.nationalskillscoalition.org/news/blog/fiscal-year-2020-appropriations-provide-moderate-but-important-boost-to-workforce-and-education-programs.

⁹⁴ Hanks, Angela, and David Madland. 2018. "Better Training and Better Jobs: A New Partnership for Sectoral Training." Center for American Progress. https://www.americanprogress.org/issues/economy/reports/2018/02/22/447115/better-training-better-jobs/

⁹⁵ Markle Foundation. 2020. "Stimulus for American Opportunity: Empowering Workers with Training for the Digital Economy." June. https://www.markle.org/stimulus-american-opportunity.

billion per year. ⁹⁶ In addition, Pell Grants provide an additional \$30 billion per year in support for eligible students, ⁹⁷ the majority of which supports post-secondary training for 18-30 year olds. ⁹⁸

Local funding for training is limited and may be even more constrained in the post-COVID-19 world. Prior to the pandemic, cities and states had already experienced a multi-decade drop in public funding for post-secondary education. Revenue declines and resulting spending cuts may exacerbate this trend, reducing overall support for education and training opportunities and increasing the share of costs borne by participants.

Due to the confluence of declining employer-provided training and the scarcity of funding for public programs, adult workers will likely continue to experience difficulties affording education and training opportunities. In response to the Great Recession, there was an increased reliance on federal and private loans but given the overall level of indebtedness in America today, and the economic shock that many are experiencing due to COVID-19, there may be less willingness and ability to take on additional debt.



Challenge 3: Promoting Equity and Addressing Systemic Racism

In the wake of the murder of George Floyd and the forced reckoning of racial injustices across the country, cities are also grappling with how best to promote equity across the services they provide. While these vary by city, they will require city-level stakeholders to examine how previous actions and inactions may have exacerbated inequalities, acutely in urban areas, and take action to support people of color.

The ongoing impact of systemic racism on education and training is visible at all levels. Over generations, people of color have experienced lack of funding for schools to widening gaps in the safety net. Coupled with the disparate economic and health impacts of COVID-19 on Black, Native, and Latinx Americans, actions are needed to help support these workers.¹⁰⁰ As an example, Chicago's Recovery Task Force acknowledged that the city will require "a strategic economic and social response that addresses the unique challenges presented by COVID-19– many of which underscore the challenges the city faces in the form of structural inequities." Their recommendations released in July 2020 focus first on addressing old and new traumas, alongside investments in communities to reduce inequities and expand relief for Black and Latinx residents. 101

An equity strategy must address both barriers to participation and completion in education and training programs. For example, the language in which a program is advertised and taught limits access. Training programs conducted in English can make it difficult for non-English speakers to participate. This problem can be especially difficult for recent immigrants and learners who have not mastered academic or professional English.

The cost of a program and access to loans is another area that disadvantages lower-income city residents. Even when a program may be affordable, participation may be impossible if it requires missing work hours or reduced wages. Similarly, for workers with limited savings, emergencies such as a damaged vehicle or an unplanned healthcare bill, may suddenly require additional work hours or a reallocation of resources, affecting their ability to continue training.

Scheduling can present obstacles as well. A constantly changing work schedule, a common phenomenon in low-wage jobs, ⁹⁹ may prevent workers from committing to a training program with consistent class or meeting times. Some worker advocates report that even when work

⁹⁶ McCarthy, Mary Alice. 2014. "Beyond the Skills Gap: Making Education Work for Students, Employers, and Communities." New America. October. https://d1y8sb8igg2f8e.cloudfront.net/documents/beyond-the-skills-gap.pdf.

⁹⁷ Protopsaltis, Spiros. 2017. "Pell Grants- a Key Tool for Expanding College Access and Economic Opportunity- Need Strengthening, Not Cuts." Center on Budget and Policy Priorities. July. https://www.cbpp.org/research/federal-budget/pell-grants-a-key-tool-for-expanding-college-access-and-economic-opportunity.

⁹⁸ U.S. Department of Education. 2020. "Federal Pell Grant Program Annual Data Reports." https://www2.ed.gov/finaid/prof/resources/data/pell-data.html.

⁹⁹ Mitchell, Michael, Michael Leachman, and Matt Saenz. 2019. "State Higher Education Funding Cuts Have Pushed Costs to Students, Worsened Inequality." Center on Budget and Policy Priorities. October. https://www.cbpp.org/research/state-budget-and-tax/state-higher-education-funding-cuts-have-pushed-costs-to-students.

¹⁰⁰ Steward, Shelly. 2020. "Imagining a Workplace Safety Net Rooted in Equity." Aspen Institute Future of Work Initiative. June. https://www.aspeninstitute.org/blog-posts/imagining-a-workplace-safety-net-rooted-in-equity/.

¹⁰¹ City of Chicago. 2020. "Recovery Task Force." https://www.chicago.gov/city/en/sites/covid-19/home/covid-19-recovery-taskforce.html.

schedules are fixed, overtime or unexpected work responsibilities may keep workers from full participation¹⁰³.

As the pandemic has shown, access to technology is more critical than ever, but is not distributed equitably. In Chicago, a recent study found that in some areas of the city almost half of children under the age of 18 lack access to broadband at home, 104 which can have impacts for adult learners as well. Limited internet access, lacking a required device, or being unfamiliar with a specific technological medium may prevent workers from participating in an education or training program. General comfort with technology and online platforms may also be an obstacle for workers and learners without prior access or exposure.

Similarly, for in-person programs, transportation may present challenges based on where the training is located and what travel options exist. Prior to the pandemic, companies like Amazon recognized this challenge and located their Career Choice program at work sites. For those who must travel to participate, another constraint that the pandemic has created is the public health risk of taking public transportation, and

in some cases, the reduced frequency at which trains and buses are operating.

Family care obligations may also affect a worker's capacity to participate in a training program. Caring for an aging parent, a school-age child, or other family members may limit the time and capacity available to pursue training. Moreover, care obligations can also disrupt the ability to have a predictable schedule, increasing the likelihood of missed classes or meetings. These concerns are only more pronounced in the wake of COVID-19, as seen in the results of the shift to remote work policies and as workers may have sick family members to support or fear exposing others to the virus.

The pandemic also has challenged workforce development programs serving populations with persistent barriers to employment. Programs serving citizens who are returning from incarceration, homeless, or immigrant and other populations often had to suspend services during the quarantine period. ¹⁰⁵ Like other training efforts, many have shifted to virtual offerings, but the challenges these residents face in the pandemic exacerbate efforts to meet their training and support needs.



Challenge 4: Increasing Coordination Across the Education and Training Landscape

In addition to information, financing, and equity, a final challenge involves the ability of education and training stakeholders to coordinate their activity and provide a single access point for information about what programs and opportunities are available.

City governments do not play a coordinating role in organizing the various education and training providers that operate in cities. Generally, employers are left to determine their own workforce needs and can elect to work with a provider of their choice to meet that need. Similarly, community colleges seek to be responsive to local employer needs, especially as it relates to their workforce development offerings. But at the local level, community

colleges may increasingly compete with fouryear and for-profit institutions to offer job-specific programs. This could lead to an oversupply of courses that exceeds the job demand. Through their economic development efforts, cities have experience working with employers and crafting workforce strategies. Cities could play a larger role that extends beyond economic development and looks across the provider landscape and works with employers to determine how best to meet their workforce needs.

In light of the challenges highlighted in this section, Section 4 provides an overview of the efforts of three cities—Chicago, Phoenix, and Hartford—to develop innovative solutions to help form a lifelong learning system.

¹⁰² Perez, Cesar. 2019. "How US Workers Just in Time Schedules Perpetuate Racial and Ethnic Inequality." Washington Center for Equitable Growth. October. https://equitablegrowth.org/how-u-s-workers-just-in-time-schedules-perpetuate-racial-and-ethnic-inequality/.

¹⁰³ Aspen Institute Future of Work Initiative Convening, Phoenix, Arizona. December, 2019.

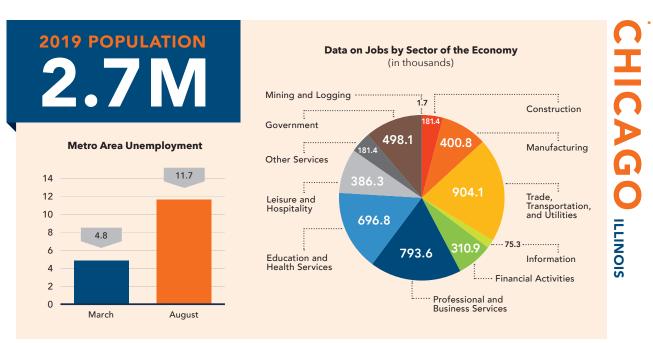
¹⁰⁴ Karp, Sarah. 2020. "In Some Chicago Neighborhoods, Up to Half of the Kids Can't Get Online." NPR. April 24. https://www.npr.org/local/309/2020/04/24/844015491/in-some-chicago-neighborhoods-up-to-half-of-the-kids-can-t-get-online.

¹⁰⁵ Herzenberg, Michael. 2020. "Non-profit organizations squeezed: more demand, less funding." Spectrum News NY 1. August 26. https://www.ny1.com/nyc/all-boroughs/coronavirus-blog/2020/08/27/more-depend-on-non-profit-services---less-funding.



SECTION 4 CITY OVERVIEW

U.S. cities are recognizing the importance of providing lifelong learning opportunities to help residents advance their careers. To examine how cities are meeting this need, and could play a larger role in creating a coordinated and transparent lifelong learning system, the Aspen Institute Future of Work Initiative held roundtable discussions in three cities—Chicago, Phoenix, and Hartford—between November 2019 and February 2020 to hear from local cross-sector stakeholders what steps could be taken to design a city-based lifelong learning system. Since that time, these cities have been forced to grapple with a health and economic crisis, and confront with urgency the challenge around reemploying those who have permanently lost work due to the pandemic. Education and training providers are responding to this challenge, but the specific role that cities will play in helping people find new jobs and develop new skills, is still unfolding. This section shares findings from convenings and subsequent follow-up interviews, in addition to actions announced publicly by the cities in response to the pandemic.



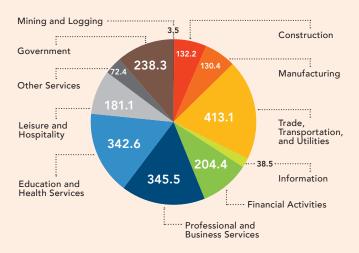
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2019 POPULATION



Data on Jobs by Sector of the Economy

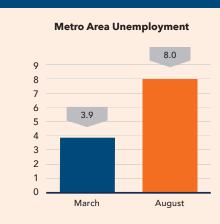
(in thousands)



HOENIX ARIZONA

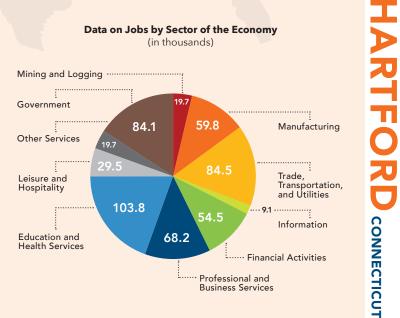
Source: U.S. Bureau of Labor Statistics. https://www.bls.gov/eag/eag.az_phoenix_msa.htm.





Data on Jobs by Sector of the Economy

(in thousands)



Source: U.S. Bureau of Labor Statistics. https://www.bls.gov/regions/new-england/ct_hartford_mn.htm.





Chicago, Illinois

Chicago is the third largest city in America with a population of almost 2.7 million people. Like other major American cities, it has a diverse mix of employers, including in the transportation and logistics, health care, finance, and the leisure and hospitality industries. It serves as the corporate headquarters for over 35 U.S. companies, as well as the home to many small businesses and start-ups.

Career-focused post-secondary training in Chicago is connected with employers through the community college system. One of the largest in the nation, the City Colleges of Chicago comprises seven colleges, each with a focus on a growing industry field, and serves nearly 77,000 students annually. 106 At Malcolm X College, part of the City Colleges of Chicago that specializes in training for health care professionals, institutional leadership seeks to engage employer partners, create connections between students and good jobs, and improve graduation rates. As President David Sanders shared, Malcolm X College is working to "engage employers, understand their needs, and translate it into learner outcomes; at the same time [they] give employers five ways to engage with the school across curriculum, programs, internships, apprenticeships, and jobs, and at the end employers receive quality students."107

Beyond the community college system, Chicago is also home to the University of Illinois at Chicago, the University of Chicago, the Illinois Institute of Technology, and a range of independent and employer-supported training programs that address skill needs in the local economy. Further, community organizations across the city are helping to build stronger connections among workers and learners, employers, and education and training providers. Noteworthy examples of such organizations include P33, which seeks to catalyze Chicago's tech economy and drive inclusive growth; Skills for Chicagoland Future, which works with local employers to identify their hiring needs and match them with qualified unemployed job seekers in Chicago and Cook County; and Women Employed, which pursues equity for women in the workforce by effecting policy change, expanding access to educational opportunities, and advocating for fair and inclusive workplaces.

In addition, Chicago has been a leader in expanding apprenticeship offerings through the development of the Chicago Apprentice Network (CAN). CAN was designed and launched in 2017 by Aon and Accenture to provide talent to employers across the Chicago metropolitan area. Bridget Gainer, Vice President for Global Affairs at Aon, reported that the program has grown rapidly, reaching "720 apprentices with 40 employers in 3 years with expectation of further growth as employers recognize what it means and that it is a high quality program." 109

¹⁰⁶ City Colleges of Chicago. "City Colleges of Chicago At a Glance." Accessed July 13, 2020. http://www.ccc.edu/menu/Pages/City-Colleges-of-Chicago-Fact-Sheet-aspx.

¹⁰⁷ Aspen Institute Future of Work Initiative Convening, Chicago, Illinois. November, 2019.

¹⁰⁸ Bertagnoli, Lisa. 2017. "Not just for trades: Aon wants other white-collar firms to adopt its apprenticeship program." *Chicago Business Journal*. September 18. https://www.chicagobusiness.com/article/20170918/NEWS01/170919906/aon-launches-apprentice-network-for-chicago-white-collar-employers.

¹⁰⁹ Aspen Institute Future of Work Initiative Convening, Chicago, Illinois. November, 2019.

Despite an abundance of high-quality education and training providers and advocates, there was a recognition that the mayor's office could play a larger role in coordinating assets and aligning programs. Under the leadership of former Mayor Rahm Emanuel, and with funding support from the Pritzker Traubert Foundation, a new position— Director of Workforce Innovation –was created. The Director of Workforce Innovation is tasked with setting the vision for Chicago's lifelong learning system, convening stakeholders, and coordinating resources and institutions to build a more integrated post-secondary training system. This position has been maintained in Mayor Lightfoot's Administration. The coordinating task is not easy as the position lacks budget authority or staff, and relies upon the entrepreneurial skills of the person that holds the job. While Chicago has numerous training resources and city leaders committed to expanding lifelong learning opportunities, challenges remain.

Adults seeking education and training opportunities in Chicago face many of the same challenges that residents of other cities face. Selecting the right program and understanding the admission requirements, including financial aid, course selection, the potential sequencing of stackable credentials, and possible career paths, are challenges. Once admitted, Chicagoans may struggle to arrange reliable transportation, obtain child or family care, or access written and digital learning materials. Amrit Mehra, a senior advisor in the Office of Mayor Lori Lightfoot, noted that a lack of basic and equitable access to the internet, to digital tools, and to digital literacy resources can often limit workers' ability to develop new skills. City Colleges of Chicago, the City of Chicago, and nonprofits are responding to reduce these barriers. For example, the City Colleges of Chicago maintains a laptop loan program, which allows students to borrow a laptop free of charge. 110 In addition, the Chicago Public Library offers internet access with a device and hotspot lending program. 111 Similarly, Women Employed, in partnership with the City

Colleges of Chicago and other nonprofits, offers the Career Foundation program, providing navigation and placement services for workers seeking to develop new skills through educational programs in the Chicago metro area.¹¹²

Those who have completed training and are reentering the workforce also face obstacles. Employers seeking to hire workers may not fully appreciate the skills and training that workers from various paths possess. Joel Simon, Managing Director of Workforce Strategies at Burning Glass Technologies, noted that employers in Chicago often seek four-year degree candidates for roles that may be suited to people with a variety of different training and work experiences.

COVID-19 Impacts

In response to the pandemic, Mayor Lightfoot established a COVID-19 Recovery Task Force Committee, charged with providing recommendations to support an economic and social recovery. Released in July 2020, the Task Force Report cites the need to "reimagine the region's workforce infrastructure and create a plan to invest in displaced and young workers" by creating a coordinated regional workforce strategy, increasing engagement and inclusivity of workforce training programs and pipelines, and developing and improving integrated workforce and education data systems. Importantly, the Report seeks to address recovery recommendations in the context of structural racial and economic inequities.¹¹³

In June 2020, Mayor Lightfoot and the Chicago Department of Public Health awarded a \$56 million grant to the Chicago Cook Workforce Partnership, in conjunction with the University of Illinois at Chicago, University of Chicago, and Malcolm X College, to train and hire 600 community health workers to engage in COVID-19 contact tracing. 114 The creation of these jobs is part of a national trend to develop

¹¹⁰ City Colleges of Chicago. "Borrow a Laptop (Students)." Accessed July 13, 2020. https://www.ccc.edu/colleges/malcolm-x/services/Pages/Request-a-Loaner-Laptop.aspx.

¹¹¹ Chicago Public Library. "Borrow a WiFi Hotspot from Chicago Public Library." Updated July 8, 2016. https://www.chipublib.org/news/borrow-a-wifi-hotspot-from-chicago-public-library/

¹¹² Women Employed. "Bridge Programs & Career Foundations." Accessed July 13, 2020. https://womenemployed.org/bridge-programs-and-career-foundations/.

¹¹³ Office of the Mayor of Chicago. 2020. "Recovery Task Force Releases Advisory Report to Guide City's Planning Efforts to Recover from Covid-19." July 9. https://www.chicago.gov/city/en/depts/cdph/provdrs/health_protection_and_response/news/2020/july/recovery-task-force-releases-advisory-report-to-quide-city-s-pla html

¹¹⁴ Office of the Mayor of Chicago. 2020. "Mayor Lightfoot and CDPH Announce \$56m Grant to Chicago Cook Workforce Partnership and Partners to Bolster Contact Tracing Efforts for Covid-19 Cases in Chicago." July 9. https://www.chicago.gov/city/en/depts/mayor/press_room/press_releases/2020/june/GrantChicagoCookWorkforcePartnership.html.

health workers who can respond to challenges presented by COVID-19, as well as support future community health issues.¹¹⁵

In addition to investing in new jobs and training that support pandemic response, Chicago has worked to expand training opportunities for displaced workers. Through a partnership with Coursera, Chicago and the State of Illinois are offering residents access to certificate and non-certificate training programs that would improve skills, expand career opportunities, and potentially create new pathways back into the workforce. While learners without digital access will struggle to access these opportunities, many who have lost their jobs or experienced a reduction in hours during the crisis may benefit.

Chicago is also working to provide direct financial support to students and trainees who have experienced economic loss due to the spread of COVID-19. In May 2020, the City Colleges of Chicago provided nearly \$13 million in direct financial support to students experiencing homelessness, housing insecurity, and food insecurity. In addition, in July 2020, Mayor Lightfoot and the City Colleges of Chicago announced the Fresh Start program, a college debt forgiveness program aimed at helping provide more than 21,000 former students the opportunity to return to college and finish their certificate or degree.¹¹⁷

As Chicago contends with challenges at the intersection of lifelong learning and COVID-19, leaders will need to emphasize creative responses to equity concerns, foster further integration between employer needs and the programs being offered by education and training providers, and address the ongoing financial needs of students and employers. Given the resources the city has to draw upon, these solutions will shape the lifelong learning response to COVID-19 in the months and years ahead.



Phoenix, Arizona

Phoenix is one of the fastest growing cities in America. Over the last ten years, the city's population has increased by nearly 15 percent to a population of 1.68 million. While Phoenix attracts workers from across the U.S. to support employers, such as Intel, Banner Health, Qwick, and Nikola Motor Company, education attainment levels of the Phoenix workforce are also lower than national averages. 119

Similar to Chicago, Phoenix's education and training system is evolving to meet a wide range of learner needs across a diverse population. In addition to developing baseline academic skills among post-K-12 learners, Phoenix's educators and trainers are providing professional and soft skills, digital literacy, industry-specific technical skills (e.g., computer programming or nursing), and a system of credentials that

¹¹⁵ Neumann, Zach. 2020. "How Digital Training Can Help States and Cities Build Their Public Health Workforce." Aspen Institute Future of Work Initiative. May. https://www.aspeninstitute.org/blog-posts/community-health-workers-digital-training/.

¹¹⁶ Office of the Governor of Illinois. 2020. "Gov. Pritzker and Coursera Launch New Workforce Recovery Initiative Offering Virtual Career Training for Unemployed Illinois Residents." June 5. https://www2.illinois.gov/dceo/Media/PressReleases/Pages/PR20200605-4.aspx.

¹¹⁷ City Colleges of Chicago. 2020. "Mayor Lightfoot and City Colleges of Chicago Launch Fresh Start: A Debt-Forgiveness Program Welcoming Students Back to College." July 14. https://news.ccc.edu/2020/07/14/mayor-lightfoot-and-city-colleges-of-chicago-launch-fresh-start-a-debt-forgiveness-program-welcoming-students-back-to-college/.

¹¹⁸ U.S. Census Bureau Quick Facts. 2020. "Quick Facts Phoenix City, Arizona." https://www.census.gov/quickfacts/phoenixcityarizona.

¹¹⁹ Kinder, Molly. 2018. "Automation Potential for Jobs in Phoenix: An Economic Analysis of the Phoenix Metropolitan Area." New America. April. https://www.newamerica.org/work-workers-technology/reports/automation-potential-jobs-phoenix/overview-how-vulnerable-are-phoenix-jobs-to-automation.

reflects the breadth and variety of this training. To meet these needs, employers, Career and Technical Education Districts (CTED),¹²⁰ training providers, and the higher education system have developed many different programs and offerings.¹²¹

Arizona State University (ASU), the state's public research university, serves over 120,000 degree and non-degree learners across four campuses, including a major campus in Phoenix, and multiple online programs. 122 Institutional leadership has prioritized the development of diverse pathways through the university, with opportunities for online bachelor's degrees, remedial programs for students seeking to begin a degree program, the use of skills translation to help students identify training and career paths, and non-degree skills development programs. Luke Tate, Managing Director of the Office of Applied Innovation at ASU, sees the development of diverse learning options as a means of providing greater opportunity to students and believes that "most working learners don't have access to good information about what they could learn that builds on the knowledge and skills they've already attained."

In addition to ASU, the Maricopa County Community College District (MCCCD) system, comprised of 10 accredited colleges that serve over 200,000 learners each year, offers academic programs, technical skills development, and professional programs. Like many cities in the U.S., Phoenix's community college system plays a critical role in providing a wide and flexible range of degree and non-degree offerings to learners at different stages of their career while also responding to changing employer talent needs.

For-profit training providers are also present in Phoenix. General Assembly and Galvanize, for example, have recently offered short-term programs aimed at those seeking to develop technology skills or seek a job in the tech industry. 124 While these programs can be significantly more expensive than community college programs, private training providers may be able to offer more flexibility, develop just-in-time training, and rapidly partner with employers. Phoenix is also home to major forprofit colleges, such as Phoenix University and Grand Canyon University, but these institutions are primarily online providers so their direct connection to Phoenix and its residents is not well known. Unions and community organizations in Phoenix also provide training opportunities. Union programming across Arizona offers paid apprenticeships with regular wage increases, relevant certifications, and employer matching at the end of the training program. While programs vary, the Ironworkers Local 75 apprenticeship, 125 Carpenters Training Center, 126 and the International Union of Operating Engineers apprenticeship, 127 all offer a mix of paid work, on-the-job training, and classroom instruction.

At the same time, Phoenix nonprofits are working to expand access and respond to ongoing equity challenges. YearUp, a national organization whose mission is to empower young adults to reach their potential through careers and higher education, offers training and work experience during a year-long program that prepares learners to take jobs with employers in the Phoenix metro area. 128 Relatedly, Phoenix's public library system offers counseling, access to information on training and higher education programs, and opportunities to pursue GEDs and other important academic credentials. 129 Similarly, the City's Parks and Recreation department offers training and counseling opportunities to support workers seeking to build skills or move into a new role.

Despite the presence of a strong learning infrastructure, Phoenix's education and training system still faces challenges. Leaders across the city point to the underfunded K-12 education and workforce systems, limiting the breadth and

¹²⁰ Arizona Department of Education. "Career and Technical Education District." https://www.azed.gov/cte/cted/.

¹²¹ Aspen Institute Future of Work Initiative Convening, Phoenix, Arizona. December, 2019.

¹²² Arizona State University. 2020. "Enrollment Trends by Campus of Major." https://www..asu.edu/facts/#/facts/enrollment/campus-major.

¹²³ Maricopa Community Colleges. 2020. "Our Colleges." https://www.maricopa.edu/colleges.

¹²⁴ Galvanize has successfully worked with USAA to transition claims agents and business operations staff into technical roles via a multi-week training program hosted online.

¹²⁵ Ironworkers Local 75. "Apprenticeship Advantages." http://www.ironworkers75.org/members/apprenticeship-training/.

¹²⁶ United Brotherhood of Carpenters and Joiners of America. "Arizona." https://www.carpenters.org/training_centers/az/.

¹²⁷ International Union of Operating Engineers Local 428. "Earn while you Learn." https://www.iuoe428.com/index.php/earn-while-you-learn/.

¹²⁸ Aspen Institute Future of Work Initiative Convening, Phoenix, Arizona. December, 2019.

¹²⁹ City of Phoenix, Library Department. "Workforce Centers & Community Organizations." https://www.phoenixpubliclibrary.org/phoenixworks/local-workforce-help.

quality of public education options. 130 In addition to funding challenges, Phoenix's education and training system struggles to disseminate information to learners. Many residents who would benefit from training or education programs are unaware of the options that exist in Phoenix. Others struggle to assess the return on investment of various offerings or are hesitant to apply because of misinformation they've received in the past. While these challenges affect everyone, they are especially pronounced in West Phoenix and among prospective learners with limited English skills. As Rachel Yanof, from Achieve60AZ argued, "informational challenges keep a really meaningful share of the population from even being able to make decisions about training. There's too much or too little and people give up."

Challenges related to time, space, and access also impact learners in Phoenix. For many workers hoping to develop new skills, the responsibilities of caring for a child, an aging parent, or another family member make it difficult to undertake a new training opportunity. Common but profoundly important challenges related to transportation, digital access, and housing and food stability are also present, limiting access to training for some. Larry Johnson, President of Phoenix College, a Maricopa Community College, argued that these challenges can often be a barrier to completing a training program at his institution. The inability to train, or retrain, due to outside constraints often means that students "are inadvertently put in low-wage jobs."

Phoenix employers have attempted to address this by offering child care options, creating flexible training opportunities that workers can pursue from home or the office, and making work computers and phones available for training and educational purposes. As Rob Reiling, West General Manager at Opendoor shared, employees of their organization are provided with a training budget, encouraged to use company IT for training and learning, and can take paid time off and other flex time opportunities to seek new skills while maintaining a role at the company.

COVID-19 Impacts

The spread of COVID-19 in the Phoenix metropolitan area has intensified challenges related to learner access, employer investment in training, and the placement of students in training programs that lead to good-paying jobs.

COVID-19 has made learner access to various training programs more difficult. Due to the presence of the virus, programs that were previously accessible in person have been shut down or moved online. At Maricopa Community College campuses, a growing number of courses are moving online, while others are being temporarily eliminated due to falling registration and attendance.¹³¹ To help support the shift to online learning, the State of Arizona partnered with Coursera to offer access to 3,800 online courses at no cost through the end of 2020.¹³² The State of Arizona has also been active in identifying open jobs and supporting training programs to fill those positions.

Workers and worker advocates report that the shift to online learning, while an important response to the virus, has negatively impacted those without reliable digital access, who are housing unstable, or who are unable to work from home. It has also sharpened economic challenges for adult learners who rely on an educational program to provide loans, access to health insurance, or other critical services.¹³³

As is the case in many cities, Phoenix employers, who are already experiencing financial stress from shutdowns and distancing requirements, may soon begin reducing their investment in worker recruitment and training. The State of Arizona is working to address this problem through programs like the Rapid Employment Job Training Grant, which reimburses employers for costs associated with training substantial numbers of new employees quickly. ¹³⁴ By providing employers with the funds for training, the state aspires to maintain employer investment in workers through the duration of the COVID-19 crisis.

¹³⁰ Aspen Institute Future of Work Initiative Convening, Phoenix, Arizona. December, 2019.

¹³¹ Reagan, Kevin. 2020. "Amid enrollment dip, CGCC shifts to more online classes." SanTan Sun News. June 25. https://santansun.com/2020/06/25/amid-enrollment-dip-cgcc-shifts-to-more-online-classes/

¹³² Arizona Commerce Authority. 2020. "Return Stronger." https://www.azcommerce.com/returnstronger/

¹³³ Aspen Institute Future of Work Initiative Convening, Hartford, Connecticut.2020.

¹³⁴ Rapid Employment Training Grant, Arizona Department of Commerce. https://www.azcommerce.com/incentives/rapid-employment-job-training-grant/

COVID-19 also has created uncertainty about viable career paths, making it more difficult to counsel workers who have been displaced by the virus. While some roles in healthcare, food preparation and delivery, and manufacturing may experience a short-term increase in demand across the Phoenix metro area, 135 the long-term viability of these career paths is unknown. As such, it is difficult for counselors and employers to effectively direct workers to training programs that may lead to stable and secure work.

In the face of these challenges, educators, employers, and the public sector in Phoenix are finding ways to support workers displaced by COVID-19. Through the City of Phoenix, organizations like ASU, Goodwill, Career Connectors, Pipeline AZ, and others are offering workers the opportunity to connect with new

employment opportunities and, in some cases, training during the pandemic. At the same time, the City is providing direct support in the form of food and economic assistance to those displaced by the crisis. In May, Phoenix's City Council approved \$5 million in direct food aid for populations impacted by the disease. ¹³⁶ They have also provided diversionary services for evictions, provided support to displaced workers facing utility cuts, and attempted to keep workers financially stable through the spring and summer.

It is unclear whether these efforts will be enough to protect workers while also providing a pathway back into the workforce. While Phoenix is committing extensive resources to supporting displaced workers, the breadth of infection and the length of the crisis, may impact the ability of workers to recover following the crisis.



Hartford, Connecticut

Unlike Chicago and Phoenix, Hartford is a smaller city, with a population of 120,000 that has declined gradually since the mid-90s. Part of a broader urban area, Hartford is home to a number of different employers, including Travelers Insurance, The Hartford, Pratt & Whitney, and other employers in the financial, manufacturing, and health care sectors. A small but growing start-up scene is present in Hartford, with special emphasis on fintech and insurance. Hartford has been supported by a network of community, corporate, and other foundations that have helped to fill gaps in workforce development services by complementing state and local resources.

Hartford has an education and training infrastructure that supports workers at various stages of their lives and careers. This begins in Hartford's K-12 public education system, where educators are focused on the relevance of skills learned in school and how those connect with the needs of the workplace and employer demand. Educators place early emphasis on the economic future of students, combined with wraparound services to support learners in an effort to deliver more equitable outcomes.

At the post-secondary level, Capital Community College (CCC) provides degree and non-degree programs across job-training programs and skill-specific courses. Students at CCC are supported by their Equity, Diversity and Inclusion Center, which is designed to alleviate non-academic stress. Interventions range from housing counseling, helping students navigate SNAP and other government benefits, and providing guidance on financial aid and workstudy options. ¹³⁸ As CCC is learning, providing a campus resource that can creatively respond to student needs increases enrollment, retention and graduation rates, and improves the experience of students.

Hartford employers are also supporting new and creative models of providing training. At The Hartford, a leader in property and casualty insurance, group benefits and mutual funds, new pathways into the company are being built for members of the local community. The Hartford is training incoming claims professionals through an apprenticeship program that combines paid work, on-the-job training, and classroomlearning. Operating at the insurer's offices in Connecticut, Florida, Arizona and Illinois, the

¹³⁵ Santos, JJ. 2020. "How to find a job when so many are looking." Cronkite News. May 1. https://cronkitenews.azpbs.org/2020/05/01/job-hunting-covid19/

¹³⁶ Estes, Christina. 2020. "COVID-19 Money Talk 'Concerning' and 'Offensive." KJZZ. May 18. https://kjzz.org/content/1570696/phoenix-councilmembers-covid-19-money-talk-concerning-and-offensive

¹³⁷ Aspen Institute Future of Work Initiative Convening, Hartford, Connecticut. February, 2020.

¹³⁸ Capital Community College. "Integrating Equity, Diversity and Inclusion at Capital Community College." https://www.capitalcc.edu/equity/.



apprentice program is complemented by an employee benefit that pays student loans, ongoing learning and training opportunities, and other measures designed to support employees. As they do in Phoenix, YearUp Connecticut supports young adults trying to build a career path with six months of training and six months of work-based learning that culminates in job placement with a participating employer.

Unions also provide opportunities for workers to develop new skills. Union-managed Taft-Hartley funds provide financial support to members for both basic skills training and specific transitional opportunities. These are adjacent to various union training academies operating in Connecticut, like the Finishing Trades Institute of Southern New England, which offer students the ability to enter new professions through multiyear, on-the-job training programs.

A diversity of nonprofit training programs are providing services to low-income populations. The United Way, the Hartford Foundation, bank and other corporate investors have supported Workforce Solutions Collaborative of Metro Hartford that takes an employer-led approach to address training needs and employ job seekers interested in careers in healthcare, advanced manufacturing, and other in-demand sectors. Organizations like Community Partners in Action, working with a network of nonprofits providing case management, health and other services, offer justice-involved individuals with counseling and training to help them reconnect to the workforce.

Similar to Chicago and Phoenix, adults seeking education and training face challenges. City leaders in Hartford report ongoing concerns with system integration and the need for clearer pathways between K-12, post-secondary education and training providers, and employers. The absence of a clear "map" of the system means that learners can fall through the cracks, get lost during transitions, or feel unsure about how to advance their career across various institutions and employers.

Funding is also an impediment for adult workers seeking additional education and training. Although foundations and other private funders support workforce development, meeting the extraordinary need will require additional publicprivate collaboration to strategically address gaps in services and critical resource needs. While Hartford leaders continue to flag resource scarcity, a related issue is helping residents learn about and apply for available programs. This includes programs like financial aid, SNAP benefits, and other forms of government assistance. According to a roundtable participant, providing navigation resources, or making these programs easier to access, would support learners attempting to finance education and training options while also addressing the equity challenges many students face when pursuing post-secondary training.

COVID-19 Impacts

COVID-19 has created new challenges for educators, employers, and workers in Hartford. Similar to Chicago and Phoenix, the emergence of the virus paused training and job placement programs. Educators in Hartford also worry that COVID-19 may dramatically change the jobs landscape that workers and students are preparing for, making counseling and program selection difficult. Even before COVID-19, educators were concerned about matching education and training with quality jobs.

Hartford is responding to COVID-19 by implementing programs that address common concerns among employers, educators, and learners. At Capital Community College, credit and non-credit offerings are being offered online, with limited in-person and hybrid contexts to help learners progress. At the same time, the Hartford Foundation has partnered with Capital Workforce Partners, Workforce Solutions Collaborative of Metro Hartford, and local nonprofits to continue to support training

for job seekers impacted by the pandemic. The Hartford Mayor's Office has also supported these efforts, coordinating stakeholders and working to address equity challenges both within and outside the city's learning and training systems. To further expand access to online resources, Mayor Luke Bronin announced a new initiative in July 2020 to provide a free, city-wide WiFi network accessible to all residents through a public-private partnership with the Hartford Foundation and Dalio Philanthropies. 139

The experiences of cities before and during COVID-19 speak to the urgency around creating a lifelong learning system and connecting the various resources that cities have that are meeting the challenges and opportunities that exist to help their residents manage through the economic crisis and beyond. The next section of this outlines strategies for building city-level lifelong learning systems that connect workers, educators, and employers for better outcomes.

¹³⁹ City of Hartford. 2020. "Hartford to Provide Free, Citywide WiFi to Residents." July 29. https://www.hartfordct.gov/Government/Departments/Mayors-Office/Mayor-News/Free-WiFi.

SECTION 5 THE PATH FORWARD

Cities are well positioned to build lifelong learning systems that can help workers pursue education and training throughout their careers. As Section 2 and the city profiles illustrate, cities have a broad set of education and training resources that residents can utilize. With the power to convene and connect stakeholders, including employers and training providers, highlight skill and job needs, and conduct evaluations of existing programs, city governments can address many of the challenges outlined in this report. To date, however, cities have not played a prominent role in helping adult residents access or understand what education and training options are available. This section lays out concrete steps mayors and city leaders can take to build integrated and effective lifelong learning systems.

CREATE

DEPUTY MAYOR POSITION AND ESTABLISH AN ADVISORY COUNCIL FOR LIFELONG LEARNING



For cities to move from simply having a set of disparate assets to building a lifelong learning system, mayors must take ownership and lead. As outlined previously in this report, city-level education and training systems are decentralized and responsive to varying mandates from federal, state, local, and philanthropic funders. To develop a more coherent system will require ongoing coordination, the commitment of time and financial resources, and the sustained engagement of employers, educators, labor unions, and workers.

Create a Deputy Mayor for Lifelong Learning to Build and Lead a City-level Body to Integrate and Coordinate Resources

To start, mayors seeking to promote lifelong learning should create a new position—Deputy Mayor for Lifelong Learning—within their offices that can lead the effort to coordinate among the key stakeholders of the city's lifelong learning system. Educators and employers in Chicago, Phoenix, and Hartford have indicated that guidance from the Mayor's office is critical to building an integrated, city-level learning system. Importantly, this position would create a single point of contact in city government and a mandate to build a system that better serves adult learners.

The Deputy Mayor for Lifelong Learning would be responsible for better connecting the post-secondary education and workforce system with the needs of the city's employer community, convening these stakeholders on a regular basis, developing tools for employers and workers that support broader awareness and connectivity across the system, and responding to equity challenges. This Office should have experience in education and workforce development,

Cities are well positioned to build lifelong learning systems that can help workers pursue education and training throughout their careers.

as well as relationships across the city's postsecondary training system, including the forprofit and nonprofit sectors.

As an example of this type of role, the City of Chicago established a Director of Workforce Innovation position under Mayor Rahm Emanuel to convene and align stakeholders and programs. The role involves connecting employers, trainers, and educators to strengthen post-secondary learning opportunities. Due to budget constraints, this position was funded through support from local philanthropy. Without control over resources, the Director has to rely on the influence of the mayor's office to impact policy and effect change. Additional formal support, in the form of direct-reports, program management capacity, and control over city-level training resources could increase the effectiveness of the Director to create a systemic approach to providing education and training to adult learners in Chicago.

Establish a Lifelong Learning Advisory Council

Along with the appointment of a Deputy Mayor for Lifelong Learning, Mayors should establish a city-wide Lifelong Learning Advisory Council that is convened by the Deputy Mayor on a monthly or quarterly basis. This Council would include representatives from the city's government institutions (including the public school and library system), organizations representing large and small employers, worker advocates, workforce boards, education and training providers (four-year universities, community colleges, private and non-profit training providers), and other local nonprofits and philanthropic organizations that provide funding, services, or train adult workers.

The Council would be tasked with guiding and supporting the integration of the city's education and training systems with employers. This may include designing cross-institutional pathways (e.g. improving connections between two and four-year colleges), developing a city-level digital platform that helps residents identify employment opportunities and understand the experience or skills necessary to perform the

job, conduct research and program evaluation, and promote equity. While the membership and focus of the Advisory Council will evolve, its mission should remain constant.

Leverage Federal and State Resources, and Engage the Philanthropic and Employer Community to Raise Funds to Build Lifelong Learning System

Cities seeking to better coordinate and integrate existing education and training opportunities will need additional resources. At a moment when COVID-19 is reducing local revenues and the capabilities of cities to meet their basic needs, cities will need to be creative in the pursuit of additional resources. As discussed, local organizations that provide education and training rely on both federal and state funds for operational expenses. With new federal and state legislation aimed at addressing the employment crisis, cities should make sure to leverage additional federal and state resources where possible. For example, in 2009, the Trade Adjustment Assistance Community College and Career Training (TAACCCT) competitive grant program was created. This program authorized \$1.9 billion in grants and made grants to 630 community colleges and 99 four-year colleges nationwide. 140 More recently, the CARES Act provided \$345 million in dislocated worker grants to states and localities throughout the U.S.¹⁴¹

In addition to leveraging existing and new government programs, another important source of new funding is a city's employer and philanthropic community. Already there are employer-led efforts to help displaced and frontline workers find employment. 142 Various philanthropies are also partnering with employers and education and training providers to develop additional public-private partnerships to address the economic crisis that workers are facing. 143 Cities should encourage these partnerships and ensure that the Mayor's office is connected to these efforts.

New funds could be used to develop and maintain a jobs and training digital platform, evaluate education and training programs, provide funding to the Office of the Deputy

¹⁴⁰ Katz, Bruce. 2020. "Skilling the Post-COVID Economy." The New Localism. May 7. https://www.thenewlocalism.com/newsletter/skilling-the-post-covid-19-economy/.

¹⁴¹ U.S. Department of Labor. 2020. "U.S. Department of Labor Awards More than \$131 Million in Dislocated Worker Grants in Response to Coronavirus Public Health Emergency." April 15. https://www.dol.gov/newsroom/releases/eta/eta20200415-0

¹⁴² See the launch the New York Jobs CEO Council cited previously

¹⁴³ Virginia Ready. 2020. https://vaready.org/

Mayor for Lifelong Learning, and develop an equity strategy for the city's education and training programs. Because early integration work will be challenging and require flexibility, these funds should be unrestricted and their deployment at the discretion of the Deputy

Mayor. While local workforce boards play a leading role in the distribution of WIOA funding to local training providers, mayors and city councils should explore the feasibility of providing dedicated funding to support building a lifelong learning system.

BUILD

JOBS AND TRAINING DIGITAL PLATFORM AND EXPAND CAREER COUNSELING

2

To build an effective lifelong learning system, cities will need to increase transparency across the city's employment and training system. This effort should include the development of a jobs and training digital platform to guide job seekers, employers, and education and training providers; the creation of new pathways and partnerships; the provision of counseling services to workers and students; and new, more equitable approaches to engaging adult learners and workers.

Build a Digital Platform that Connects Workers with Training Providers, Employers, and Labor Market Information

The Deputy Mayor should collaborate with the Advisory Council to build a city-level digital platform that connects job-seekers and workers with information related to learning, training, and future employment prospects. Rather than searching on dozens of online job boards, this platform would provide a one-stop site that would allow workers to search for job opportunities throughout the city. The platform would identify specific jobs and specify the experience, skills, and training needed to apply for a position. Ideally, the platform could help users better understand the time and cost of seeking further education and training, while providing program outcomes where data is available.

Once operational, all city residents would be able to create an account and view available job opportunities, training options, and information about employers that operate in the city. In addition, they could post their resumes on the platform in order to allow employers in the city to identify possible job candidates. At the same time, education and training providers would be able to share information about the various credentials or programs they offer, what jobs they lead to, and the cost and duration of these programs. Similarly, employers could use the platform to post job opportunities, search for job candidates, and connect current employees with further training opportunities.

Some cities have already developed online platforms for workers and learners. The city of South Bend, Indiana worked with the Drucker Institute to develop Bendable, a digital platform that allows residents to access education and training opportunities and current labor market information.¹⁴⁴ In Phoenix, Arizona, Pipeline AZ was developed with input from businesses, educators, and workforce organizations to deliver a local solution for job seekers and students. Pipeline AZ is a workforce digital platform helping individuals assess their skills and talents and identify industries and positions in which such skills and talents are desired. 145 Similarly, Singapore has rolled out an online tool, MyCareersFuture.sg portal, that builds stronger connections between workers, training providers, and employers. 146

¹⁴⁴ Zaner, Sarah, and Rick Wartzman. 2020. "The Learning Program that Aims to Make American Cities More Economically Resilient." *Ideo*. January. https://www.ideo.com/journal/the-learning-app-that-aims-to-make-american-cities-more-economically-resilient.

¹⁴⁵ Pipeline Arizona. 2020. https://pipelineaz.com/

¹⁴⁶ Seow, Joanna. 2020. "Singapore embarks on 'epic challenge' to help job seekers." Straits Times. June 5. https://www.straitstimes.com/singapore/singapore-embarks-on-epic-challenge-to-help-job-seekers.

For the Deputy Mayor for Lifelong Learning, the creation of this digital platform will help address challenges adult workers face understanding what jobs are available and the training needed to apply for those jobs. In addition, the site could describe career paths, and help create a more equitable education and training ecosystem. However, a digital platform will need to be supported by committed partners, strong community input and dialogue, and an organization that continually evolves to respond to new challenges. As Rick Wartzman of the Drucker Institute has noted, "Lifelong learning won't happen with the click of a button. And successful learning programs won't be powered by an algorithm. They will be powered by community."

Expand Career Counseling

In light of the blizzard of different credentials, programs, and job boards, adult learners would benefit from easier access to career navigation services. Career counselors link job seekers or lifelong learners with experts that can help with complex decisions around what training options to pursue and how they can connect to specific opportunities. As organizations like Skillful have shown, access to career counselors can lead to better, more informed decisions about training and career options. 147 Counselors can help workers evaluate a training program's potential return on investment, and better assess the potential career path that would result from education and training. Cities should pursue state and federal resources, in addition to philanthropic opportunities, to expand the number of counselors available.

In some parts of the U.S., expanded counseling is already connecting workers with job opportunities. In Phoenix and across the state of Arizona, ARIZONA@WORK provides free career counseling and placement services to job seekers. The program also covers the cost of accredited, approved training options that are tied to labor market demand. In Hartford, Capital Workforce Partners, the regional workforce board, in conjunction with the local American Jobs Centers, provides career and training guidance, resume review, interview prep, and job placement services, and with funding

from the Hartford Foundation, job retention supports for workers new to the workforce. The use of career counselors is also being utilized by employers and intermediaries—like Guild Education—that invest in providing counseling services for the entire duration that employees are participating in training programs.¹⁴⁸

Based on research and survey work, workers and labor organizations report that career counseling can return displaced workers to the workforce more rapidly, improve wages, and reduce anxiety. Research conducted on related counseling programs suggests that workers with access to counselors' experience face less indecision, higher career satisfaction, and faster job transitions. A lifelong learning system needs to include strong support systems, including assistance from a counselor or coach, that are designed to help workers complete education and training programs.

Identify New Pathways to Training for Workers

Workers pursuing post-secondary education and training can encounter barriers to entering a new course or program, including a required prior educational credential or a lengthy application process. For example, some post-secondary programs require either a high school degree or a GED. The Deputy Mayor for Lifelong Learning, along with other key stakeholders, should evaluate whether these types of requirements are always necessary.

In order to break down the barriers workers face, such as with guidance from school administrators and admissions officers as well as worker advocates, the Deputy Mayor should work to ensure that applications for education and training programs are easy to understand and complete, applicants are only asked to demonstrate skills that are necessary to participate in the program and can demonstrate required skills in different ways, and are not charged excessive fees. Further, education and training providers should develop alternative pathways, including skills remediation programs for learners who do not meet entrance requirements, and effective outreach and application guidance to underserved populations.

¹⁴⁷ Skillful. 2020. "Career Coaches." The Markle Foundation. https://www.skillful.com/career-coaches

¹⁴⁸ Guild Education. "How It Works." https://www.guildeducation.com/why-guild/how-it-works/.

¹⁴⁹ Perdix, Sophie. 2012. "Effectiveness of Career Counseling: A One Year Follow Up." Journal of Vocational Behavior. April. https://www.sciencedirect.com/science/article/abs/pii/S0001879111001187.

Develop Partnerships that Serve Workers and Employers

A successful lifelong learning system will depend upon the ability of employers and a range of education and training providers to develop effective partnerships. A priority for the Deputy Mayor of Lifelong Learning will be to help develop additional partnerships between employers and education and training providers, improving outcomes across the city's workforce system. There are examples of sector-based strategies that have shown positive results and involve training for jobs across employers that should be pursued where possible.¹⁵⁰

There are also examples of cities benefiting from expanded public-private training partnerships where community colleges, universities, and other training providers work with local companies to design programs that lead directly to high-demand jobs. Participating workers may pay some share of the cost of training, or this may be offset by employer contributions for those who complete the program. In Connecticut, financial services companies have paired with state workforce organizations and the community college system to offer pathways into high-demand roles.¹⁵¹

Promote Inclusive Programs

The ability to create a city-wide lifelong learning system depends upon whether the residents of the city are aware of the opportunities that are available, and have the ability to participate in them in a way that fits their everyday life. The creation of a digital platform should make it easier to access relevant information about jobs and training opportunities. However, cities will need to take additional steps to increase awareness of these new resources. One example, mentioned previously, is the City of South Bend, Indiana that has branded itself as the "City of Lifelong Learning" and anchored efforts around its library system to raise awareness. While outreach should be targeted broadly, there should be specific efforts to ensure that populations that have historically been underserved by post-secondary training opportunities, low-wage workers, and those who have been displaced from their jobs are reached.

In some cities, these campaigns have been run through existing employers; in others, through community organizations that provide services and support to underserved populations. Though there is no single template or method for disseminating information and counseling related to training, it is important that cities take steps to build awareness of these opportunities.

SUPPORT

A MORE EQUITABLE EDUCATION AND TRAINING SYSTEM



The job market in cities is always evolving, and thus the skills necessary to secure a job are similarly changing. In moving from a siloed set of education and training providers to a more connected system, it will be important to invest in evaluating the effectiveness of programs. Efforts like The Workforce Data Quality Initiative

at the U.S. Department of Labor supports the development of state-level administrative databases that integrate workforce and education data. The Hartford Data Collaborative, convened by Capital Workforce Partners, is also building a system of data sharing across youth-serving nonprofits that support workforce

¹⁵⁰ Conway, Maureen. 2014. "Connecting people to work: workforce intermediaries and sector strategies." *The American Assembly*. July 25. https://americanassembly.org/publications-blog/connecting-people-to-work-workforce-intermediaries-and-sector-strategies.

¹⁵¹ Singer, Stephen. 2020. "Eager for Workers, Financial Services pluck apprenticeships from manufacturer's toolkits." *Hartford Courant*. May 28. https://www.courant.com/business/hc-biz-financial-services-apprenticeships-20190528-zwc5odmgwvceregvnuyuscfw5u-story.html.

¹⁵² Employment and Training Administration. "Workforce Data Quality Initiative." U.S. Department of Labor. https://www.dol.gov/agencies/eta/performance/wdgi.

development and other needs of opportunity youth with support from the Hartford Foundation and Annie E. Casey Foundation.¹⁵³

Part of ensuring effectiveness of these programs will require cities that seek to build inclusive lifelong learning systems to take steps to address the ongoing equity challenges that exist in post-secondary education and training. In particular, to address racism and ensure equitable access to programs, there is a need for more fully assessing the extent to which programs are effective in reaching low-income Black and Latinx residents and others with systemic barriers to employment and providing the services necessary to make participation and completion possible. While strategies must constantly evolve, there are several clear areas where immediate engagement is needed.

Offer Flexible Training Options

The first is working with institutional partners from across the city to develop flexible training options that are responsive to different schedules, learning styles, and ability to access in-person vs. digital training options. An example of flexibility in training options can include stackable credentials, which can allow learners to start and stop training on their own terms. ¹⁵⁴ As post-secondary institutions around the country have discovered, diversifying options beyond standard, in-person, business hours training makes learning accessible to a broader group of students with a diversity of backgrounds.

Promote Employer Flexibility

Employer flexibility is also important. Even when students are able to attend classes, they frequently need support from their current employer. This could be a new or different work schedule, access to company IT to complete assignments or attend classes, and at times, the ability to take a leave of absence to focus on training without losing one's job or income. While mayors' offices cannot mandate that employers become more flexible, they can encourage a move in this direction through outreach and engagement.

Expand Access to Technology

Providing access to learning tools can also benefit workers pursuing post-secondary training. As the Chicago Public Library has shown, expanding internet access, loaning hotspots for home use, and providing laptops and other devices gives people the opportunity to undertake training and education opportunities. The Deputy Mayor for Lifelong Learning can direct city resources, or work with the philanthropic community, to support broader digital access, either through the public library system, the parks and recreation department, or another city agency.

Provide Wraparound Services

Providing access to wraparound services, like child care, transportation, stable and secure housing, food assistance, mental health services, and sufficient income while training, is critical to ensuring that workers without savings or family support can complete training programs. In some cases, this can be as simple as a free bus or metro pass from the city. In others, it will require building formal connections between existing health and welfare service providers and various parts of the city's training apparatus. In San Antonio, Project Quest has built a community training model that provides in-class training along with intensive support services tied to immediate learner needs "to help participants overcome financial and personal barriers to skill acquisition."155 Unfortunately, these models are not easy to replicate and require additional public-private funding strategies given the resources necessary to provide this type of support.

Evaluating the outcomes of specific programs can be expensive and time-consuming but data on program completion, job outcomes, and wage increases are essential to helping those who might participate in programs determine whether the investment of resources and time is worthwhile, and that programs are inclusive. An example of local workforce development efforts being informed by program evaluations can be found in Hartford where the Hartford Foundation has funded evaluations as part its Career Pathways Initiative.

¹⁵³ Capital Workforce Partners. 2018. "Capital Workforce Partners Receives Grant from Hartford Generation Work." https://capitalworkforce.org/capital-workforce-partners-receives-grant-from-hartford-generation-work/.

¹⁵⁴ Bailey, Thomas, and Clive Belfield. 2017. "Stackable Credentials: Do They Have Labor Market Value?" Community College Research Center. November. https://ccrc.tc.columbia.edu/media/k2/attachments/stackable-credentials-do-they-have-labor-market-value.pdf.

¹⁵⁵ Project QUEST. 2020. "Our Mission." https://questsa.org/history/.

CONCLUSION

The pandemic is the latest in a long line of shocks to the labor market. Globalization, the rapid pace of technological development, including automation and artificial intelligence, and changing business practices have been changing the nature of work for decades. These factors will continue to impact the jobs that are available and the education and training needed to secure a job. Careers will increasingly involve dozens of jobs across multiple industries. Education received in the first two decades of life will no longer suffice, as lifelong learning becomes the norm. Cities will need to play a larger role in helping workers through these transitions. While online work is increasing, labor markets will continue to be local, and the purpose for many of the education and training providers in cities is to serve these local markets. Cities have a wide range of resources that exist at the local level, from a diversity of employers, to two and four year schools, and a range of training providers. There is more that can be done to connect these various stakeholders and help create more transparency around how jobs and training connect to each other, and where opportunities to access this system exist. City leaders are well positioned to convene employers, educational institutions, and training providers, and support the development of new tools and structures to accomplish this goal. As they build this lifelong learning system, city leaders should focus on increasing access to information, developing new partnerships, and enabling a more seamless path for people to move from work to training and back again.

Through their ongoing efforts to develop new approaches in the lifelong learning space, cities like Chicago, Phoenix, and Hartford offer important examples for other cities to consider. These cities have demonstrated their commitment to a resilient workforce - both before the pandemic, and in the wake of the resulting economic crisis. Steps taken to build lifelong learning systems in cities need to emphasize greater coordination amongst institutions, diverse entry points and pathways for learners, and deeper emphasis on equity and access. This work will not be easy. And yet, it is critical.