Investing in America's Workforce:

Report on Workforce Development Needs and Opportunities

2017 Federal Reserve System

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EXECUTIVE SUMMARY

In order to continue to excel as a country, Americans must be able to successfully participate in the labor force, and employers must be able to access the type of talent they need for their work to thrive. Successful workforce development efforts increase a population's employability and can change the economic trajectory of low-income or less-educated workers and their families by fostering economic mobility. This mobility contributes to increased consumer purchasing power. Furthermore, when employers' needs are met with a qualified, skilled workforce, business productivity improves. In these ways, workforce development efforts can be viewed as investments that contribute to economic growth in local communities, their broader regions, and the nation as a whole.

To gain insights into the regional aspects of improving workforce outcomes and investments, the community development departments at each of the Federal Reserve Banks organized listening sessions across the country during the first half of 2017. Key workforce leaders representing training providers, regional industry employers, financial institutions, philanthropy, policymakers, and academic institutions were invited to each meeting. A total of 52 listening sessions were held across 32 states and Puerto Rico, and a total of 983 leaders participated by sharing their experiences and insights. Rigorous qualitative research methods were used to synthesize and analyze the information shared during these regional meetings.

At these listening sessions, participants first identified the current challenges facing both employers and potential job seekers. Those discussions illuminated the fact that a gap exists between the skills possessed by the local labor force and those demanded by employers. This skills gap was attributed to a variety of factors, including low levels of educational attainment and a stigma associated with alternative training and career paths. Non-skills barriers to employment were also discussed. These barriers include insufficient transportation, childcare, housing, and health services as well as drug addiction and former incarceration, among others. Participants also expressed concern regarding the fact that technological advancement and automation are contributing to both job loss and rapid changes in employer demands, placing additional strain on the limited capacity of training providers. Finally, participants noted that in many communities, the poor quality of the available jobs, both in terms of pay and other factors, is impeding opportunities for economic mobility.

Though the challenges discussed are vast, several promising strategies were identified for expanding and diversifying the pipeline of skilled workers and connecting these workers with employers. These strategies include:

- **Better Alignment of Workforce Development and Economic Development Efforts Using Sector Strategies:** "Sector strategies" are regional approaches to workforce and economic development that focus resources on the needs of a defined industry important to the local economy. Sector partnerships include various stakeholders from local and regional employers, academic institutions, and training providers coming together to analyze an industry's current and future skill requirements. These types of economic development strategies take a systemic rather than a transactional view and have the potential to yield a trained workforce that not only supports business attraction and retention but also creates local opportunities for unemployed and underemployed residents.

- **Apprenticeships and Other Work-Based Training Models:** These programs allow trainees to support themselves and their families while earning a license or industry credential through on-the-job training. In addition to offering a solution for more mature job seekers, apprenticeship can be a model for young people who can gain on the job experience while in

high school. Partnerships between employers, high schools, and post-secondary institutions that support internships, apprenticeships, co-ops, and career and technical education help students develop important skills that can improve labor market outcomes.

- **Increased Employer Training for Incumbent Workers to Foster Career Pathways and Create Access to Entry-Level Jobs:** A career pathway identifies a series of steps by which an employee can progress through jobs requiring higher levels of skills and paying higher wages. Aside from the services and programs offered by training providers and educational institutions, employers have a role to play by encouraging and supporting incumbent workers to advance along a clearly defined career pathway. Training and advancing workers along a career pathway also improves job access for local job seekers by creating vacancies in entry-level positions. This strategy, known as "upskilling and backfilling," not only creates new employment opportunities for job seekers but might also increase the productivity of staff and improve retention and employee satisfaction.

- **Increased Coordination Among Service Providers and With Funders:** Working together to successfully move job seekers into stable employment can prove challenging due to resource constraints, a competitive funding environment, and differences in organizational cultures and operating models. Nevertheless, the need for coordination and collaboration, both among service providers and with funders, is essential to successfully achieving shared goals.

- **Changes in Employer Behavior That Improve Job Access and Quality:** The adoption of skills-based hiring as an alternative to hiring based on educational attainment can remove what, in some cases, may be an artificial barrier to livable wage employment. Additionally, in order to increase workers' chances for economic mobility, employers should be encouraged to improve job quality, especially for entry-level positions.

In light of the labor market challenges identified and the promising strategies discussed, participants were asked to explore specific opportunities for investing in America's workforce. The following investment themes were identified as areas in which additional financial capital could improve outcomes.

- **Invest in Core Programs That Prepare Workers for Jobs:** Research has found that when faced with reduced public funding, workforce training providers are forced to "serve fewer workers, adjust the mix of services participants receive, or alter the methods of service provision to ones that may not be as effective."[1] Investing in workforce training providers, including community colleges and educational institutions offering career and technical education, would allow more workers to receive in-demand skills training.

- **Invest in Workforce Intermediaries That Connect Workers to Jobs:** Workforce intermediaries that connect employers with a supply of skilled labor from training providers take a dual customer approach, meeting the needs of both workers and employers. Investing in these entities is essential because they are able to develop business relationships in a way that may be difficult for training providers focused on meeting the needs of job seekers. Workforce intermediaries can also serve to educate training providers about the skills demanded by local employers.

- **Invest in Early Childhood Education:** High-quality early childhood education not only seeks to lay the foundation for a productive future workforce, but it also can allow the current workforce (i.e., the parents) to maintain employment, knowing that their children are adequately cared for while learning skills needed to thrive in the future.

- **Invest in Community Infrastructure Including Transportation Systems and Affordable Housing:** A successful workforce investment strategy requires not only investments in workers themselves but also in the places they live. In addition to investing in human capital, participants stressed the need to adopt a new strategy that also invests in the built environment, with the goal of increasing the supply of affordable housing, accessible transportation, and high-quality childcare options.

- **Invest in Comprehensive Supportive Services:** Funding sources rarely cover the services needed to address issues — unrelated to skills — that prevent workers from participating fully in the labor market. In addition to providing funding to access the infrastructure investments described above, additional investments in comprehensive supportive services targeting those dealing with addiction or transitioning from jail or prison, for example, are essential for ensuring client success in any workforce program.

- **Invest in Efforts to Increase Job Access and Quality:** Fostering entrepreneurship and small business development in low- and moderate-income areas can expand access to work for those seeking employment in those areas. Additionally, investments in social enterprises and organizations that support social enterprises, can create work opportunities for those facing barriers to employment. Innovative financial products can incentivize behaviors that increase access to jobs or improve the quality of available jobs.

One of the main goals of the Investing in America's Workforce Initiative is to re-envision workforce solutions as investments in our national economy, not as social services. To help create this vision, listening session participants were asked for ideas to make workforce development more investable, and the resulting discussions yielded the following insights:

- **Classify Workers as Assets Not Expenses:** Reclassifying employees as assets to be invested in, as opposed to a line item labor cost to be reduced, offers a shift in perspective that may encourage employers to improve job quality and make direct investments in skills training and professional development.

- **Maximize Efficiency of Existing Funding Streams While Exploring Potential New Resources:** Several innovations for maximizing efficiency of public funding sources were identified, including using private sector leverage strategies to make public tax payer dollars go further. Recent regulatory updates have created the potential to attract new funding from foundations, pension funds, and Community Reinvestment Act-motivated bank capital.

- **Offer Financial Products That Allow Organizations to Increase Capacity and Scale:** Many of the organizations that are best positioned to develop human capital lack the financial resources to deliver effective services at scale. Additionally, some sources of capital are too restrictive to allow organizations the flexibility they need to meet various program goals. Better access to and use of flexible debt financing could help suitable nonprofits more effectively manage working capital and serve more clients.

- **Address Funding Needs Using Outcomes-Based Funding Models:** The emerging field of outcomes-based funding allows for the monetization of social impact, thereby creating investment opportunities. One positive aspect of outcomes-based financing is that the funder is essentially purchasing outcomes, which improves accountability while leaving the process required to achieve those outcomes in the hands of the provider. This allows organizations to build upon lessons learned and change strategic direction over time without the fear of losing funding.

- **Use Philanthropic Capital to Promote Innovation, Collaboration, and Capacity Building:** Innovation grants and seed funding can support promising strategies and lend credibility to new programs or interventions. Financial capital should be combined with capacity building to foster collaboration and local leadership. At a systemic level, workforce solutions are a fairly untapped opportunity for investment and would likely need funding from philanthropy for capacity and field building in order to reach scale.

- **Create Financial Intermediaries:** Developing local and regional intermediaries to attract and deploy capital could increase the involvement of a broader range of potential investor types that may be unable or unwilling to invest directly into workforce enterprises. A financial intermediary could blend public, private, and philanthropic capital in creative ways in order to meet the risk-adjusted return appetites of each stakeholder group.

Finally, best practices in impact measurement and evaluation were explored. Participants stressed the need to measure both short-term and long-term results, to coordinate data and standardize metrics across entities, and to rethink return on investment.

This report seeks to identify successful interventions for improving labor market outcomes and explores ways to sustainably fund them, so that organizations are able to meet the demand for services from both employers and job seekers alike. Addressing these labor market challenges provides an investment opportunity that is essential to support the long-term prospects of the U.S. economy.

INTRODUCTION

Why Invest in Workforce Development?

The dual mandate of the Federal Reserve is to foster economic conditions that achieve both stable prices and maximum employment. In April 2017, the U.S. Department of Labor reported six million job openings, the highest recorded level since DOL started tracking in 2000. Yet, the share of Americans participating in the labor force is trending near a four decade low.[2] Furthermore, a significant share of companies report difficulties filling job openings.[3] These labor market challenges negatively impact workers, employers, and the broader economy as a whole. In a recent speech, Federal Reserve Chair Janet Yellen stated that "significant job market changes in recent years, brought about by global competition and technological advances — and the new shifting skills these changes demand — make workforce development more important than ever."[4]

The U.S. can only reach its economic potential through strong alignment between employer needs and a skilled workforce. Despite an improving economy and numerous programs, significant labor market challenges persist for both workers and employers. Reframing and reimagining workforce development efforts as investments — not just social services — can lead to larger scale solutions and more accountable outcomes. Investing in workforce development can yield exponential returns because a stronger workforce supports a stronger economy.

Businesses, government, nonprofit, and philanthropic organizations have an opportunity to partner and rethink policy and investments, attract new resources, and improve economic mobility for workers. Investing in workforce development can bolster the efficient use of resources. It can lead to better outcomes for individuals as well as more competitive businesses and regional economic growth. And it can help us unlock the potential of America's workforce.

About Investing in America's Workforce: Improving Outcomes for Workers and Employers

"Investing in America's Workforce: Improving Outcomes for Workers and Employers" is a Federal Reserve System initiative in collaboration with the John J. Heldrich Center for Workforce Development at Rutgers University, the Ray Marshall Center for the Study of Human Resources at the University of Texas at Austin, and the W.E. Upjohn Institute for Employment Research. Led by the community development function of the Federal Reserve System,[5] this initiative aims to:

- Explore regional aspects of improving workforce outcomes and investments through a series of regional forums to gather information and ideas from people working at the intersection of training, recruitment, and finance. The findings from these forums are presented herein.
- Present and discuss promising approaches at a national conference in Austin, Texas, in October 2017.
- Share an analysis of what is learned in a forthcoming book to be published in 2018.
- Create and implement a training curriculum for Community Reinvestment Act bank examiners regarding qualifying workforce investments under new Interagency Q&A clarifications of the regulation.[6]

The Investing in America's Workforce initiative ultimately seeks to create a foundation from which a new era of investment in America's workforce can grow.

METHODOLOGY

Regional Listening Sessions

To gain insights into the regional aspects of improving workforce outcomes and investments, the community development departments at each of the Federal Reserve Banks organized listening sessions during the first half of 2017. Through these regional listening sessions, Federal Reserve staff aimed to identify new approaches, opportunities, and challenges in investing and evaluating outcomes in workforce development across the country. Key workforce leaders from their respective regions were invited to each meeting. Participants represented training providers, regional industry employers, financial institutions, philanthropy, policymakers, and academic institutions. A total of 52 listening sessions were held across 32 states and Puerto Rico and a total of 983 leaders participated by sharing their experience and insights. The two key questions asked of participants at the meetings were:

What opportunities for investment in workforce development exist and what would make workforce development more investable?

How can workforce development efforts be better evaluated?

Analysis

Twenty-nine of the regional listening sessions were recorded, transcribed verbatim, and entered into MaxQDA qualitative data analysis software. Notes from an additional 23 listening sessions were also entered.[7] Using the software, transcripts and notes were coded to identify themes that emerged regarding the challenges and opportunities for improving workforce investments and outcomes.[8]

A priori codes were developed to correspond with questions posed at the meetings. Additional codes were developed after the initial transcripts and notes were reviewed. This process allowed for the analysis and synthesis of a large amount of qualitative data that otherwise would have been difficult to manage.

Map of regional listening session locations

Ten of the 52 transcripts were coded independently by two members of the study team and checked for intercoder reliability. This rigorous and collaborative qualitative approach allowed the analysis to move beyond anecdotal insights. Code analysis through full and repeated immersion in the data led to the identification of several meaningful themes, which are explored herein. **The views expressed in this report are the perceptions and opinions of the key informants who participated in the listening sessions, as summarized by the author, and do not necessarily represent the views of the author or empirically supported facts. Direct quotes from participants are shared when they help to support and illustrate summary statements, and, where appropriate, referrals to relevant resources are provided in an endnote**.

CURRENT CHALLENGES

Surveys indicate that difficulties filling vacant positions are common across industries and up and down the skills spectrum.[9] Additionally, low labor market participation is a challenge that, without intervention, will continue to hamper economic growth. By 2014, more than 16% of U.S. men between the ages of 25 and 54 with a high school education or less had dropped out of the workforce completely.[10] Listening session participants, in order to frame a conversation around promising solutions and opportunities for investing in America's workforce, first described some of the current challenges contributing to these trends.

Skills Gap

A gap between the skills possessed by the local labor force and those demanded by local employers was a theme that emerged in every listening session held. Various potential causes of this skills gap were explored, including a lack of traditional educational attainment as well as a stigma attached to alternative educational paths such as career and technical education. There was a shared sentiment that outdated perspectives regarding opportunities in certain industries need to be revised in order to encourage more young people to pursue careers in fields with promising prospects.

> *"Well, what's going on is all students are going to college, but they're not understanding some of the career opportunities that we need to fill middle-skill jobs. We have people that don't understand the gap — that don't understand that these are good career options that move people into the middle class.*

> *"So we talk about plumbers. Plumbers in Wisconsin make $68,000 a year on average. PhDs make $66,000. We don't get that message to parents and to teachers. And we need to get the facts in front of them so that they understand and can make better decisions."*

Some participants felt that a poor K–12 educational infrastructure is responsible for the skills gap. Inadequate services offered by guidance counselors and a focus on Advanced Placement (or AP) classes rather than technical classes were examples that were cited of ways that some high schools push most students toward four year degrees without exploring other options that may be more suitable to their personal interests and goals. Some participants noted that schools are trying to promote career exploration but either do not have adequate funding or have insufficient time because they must "teach to the test." Some expressed a need for career counseling in high school to inform career choices, which could help students with career aspirations that do not require a college degree avoid student loan debt. Participants lamented the apparent disconnect between the way our K–12 educational system prepares students for careers and the needs of the broader economy.

> *"I taught in the apprenticeship program for 10 years, and a good percentage of the people coming in had gone to college for two to four years, gotten a degree, gotten a job, and said this isn't what I want to be. I want to do something with my hands. There's a*

percentage of the population that that's what they're built for. That's what they want to do. And the flip side of that, we need those people. When you flip the switch, the light should come on. You should be warm. You should be cool. It's not magic. There's work behind all of this that is noble work, and it's good work."

The quality of K–12 basic education was another commonly cited cause when discussing the perceived skills gap. High levels of illiteracy, low math skills, and a lack of soft skills were frequently mentioned hindrances. Additionally, participants relayed that many immigrants struggle to obtain work, in part, because they are in need of English as a Second Language training. Lastly, it was noted that while training programs exist to support people in securing stable employment, awareness of these opportunities is limited. Participants stated that people seem to be aware of how to obtain unemployment benefits but not how to access training to return to the workforce.

Non-Skills Barriers to Employment

While job-related skills training is critical, listening session participants pointed out many non-skills barriers that contribute to unemployment and low labor market participation for some populations. It was also noted that for those who are able to successfully access training programs, life factors, external to the training or education program, can get in the way of successful program completion or obtaining stable employment thereafter. Examples of these barriers that were cited include insufficient childcare, limited disposable income to weather unexpected shocks, and unstable housing or transportation situations.

"We need staff to manage the barriers that participants experience so that they can continue on with the program. Often times there are instances that come up that prevent their ability to focus on the program itself. It could be that their utilities were shut off that morning and it's difficult to focus in an eight-hour training that day."

"But the recognition that life happens is so important to particularly vulnerable populations because they may be the only one in their environment who's going to work every day. And it is a struggle. When your children are sick, it's a struggle for us who have support systems. So you couple that with you are new on the job, you have children, you have a car that may or may not start. People need that long-term follow-up."

Participants in several listening sessions mentioned deeply ingrained mindsets resulting from intergenerational poverty and limiting beliefs that are perpetuated in communities that have experienced generations of limited opportunities. The lack of role models, mentors, or supportive figures instilling a sense of confidence in oneself and one's ability were frequently mentioned barriers. Some job seekers are experiencing homelessness, recovering from addiction, or transitioning back from jail or prison. Participants relayed that these issues present barriers to employment when application processes request a home address, drug testing, or a background check to screen out those with past convictions. They also noted that some veterans struggle with post-traumatic stress disorder or other behavioral health issues, which can become a barrier to work if not adequately treated. Participants stated that these issues can lead individuals to drop out of the labor force and further perpetuate intergenerational poverty in some communities.

"It's not only that they don't have the skills. It may be all the other barriers that people have in certain kinds of communities. So we have tons of truck driver positions open. That's fairly easy to get into a truck driving position if you take the right courses and you pass them. You get the license, right? Should be a simple fit. It's not, because they have convictions or past driving records or they can't pass a drug test — and these are the things that are stopping people from getting the jobs. I'm not saying it's right or wrong. I'm just saying those are the things that you start to face when you're trying to take a labor force and match them with a

job. It's not just give them a skill and go to work, and everyone's happy. It doesn't quite work that way."

Technological Advancement and Automation's Impact on Employer Demands

Automation's potential impact on the number of middle-skills jobs was a common theme across listening sessions. For the jobs that remain, the changing nature of work and the skills required to keep pace with technological advancements was a frequently cited concern among participants.[11] For example, one listening session concluded that 21st century literacy requires tech savviness. This was described as meaning that a skill such as memorization, often still stressed in K–12 education, is becoming less important than the ability to research, synthesize, and process information. Participants stated that educational institutions and training programs will need to keep up with these changing skill requirements in order for the labor force to meet the demands of employers and remain competitive globally.

"The whole economy has shifted in ways that we need to be thinking about. How will employment change in the years to come? One of the ways is that some jobs are becoming obsolete because of the technology and robotics and so forth. Many of these are good paying jobs. So how do we anticipate that and try to address that kind of issue and still prepare enough people to hold onto good jobs?"

Quality of Available Jobs Impeding Opportunities for Economic Mobility

While job growth in recent years has been robust, listening session participants observed that new jobs today either require a high level of skill or offer workers stagnant incomes, volatile schedules, and few benefits. They stated that lower paid jobs tend to be in the service sector, such as home health aides and food service positions. It was relayed that while these jobs are not at immediate risk of being lost to automation, their quality in terms of pay, benefits, and flexibility to accommodate competing priorities, such as family obligations, make economic mobility difficult even for those working multiple full-time positions. Participants explained that as job creation occurs at both ends of the employment spectrum, income stagnation for lower-income workers is exacerbating inequality and perpetuating the non-skills barriers to work described earlier.[12]

Additionally, many sessions included conversations about government benefits programs that often reduce or eliminate benefits when income rises, causing a net decrease in household income. Many participants referred to this "benefits cliff" as a disincentive to work. In rural listening sessions specifically, participants shared that a lack of quality jobs has led to a dramatic increase in disability claims.[13] The perception was that some workers choose to continue to receive government benefits rather than see their income reduced by taking a low-wage job.

Despite these challenges, participants discussed several promising strategies to connect job seekers with well-paying jobs that provide opportunities for career advancement.

PROMISING STRATEGIES

While educational systems lay the foundation for skills development, and educational attainment is an important factor in employability, the promising strategies identified in this research focus on current workers and job seekers rather than the future workforce (i.e., today's students). Although it is not included in this analysis, it goes without saying that a strong general education system is among the most important long-term workforce development strategies.[14]

Participants in the regional listening sessions emphasized that in order to make meaningful progress on solving current labor market challenges, it is important to identify not only opportunities for financial capital investment

but also opportunities for investment in social capital. They stated that the following promising strategies require the collective will to alter current behaviors in the workforce development ecosystem, more than they require additional funding. It was noted that best practices should be both scalable and replicable, if possible, though consideration should go into the replicability of promising strategies across geographies.

Better Alignment of Workforce Development and Economic Development Efforts Using Sector Strategies

Listening session participants stated that economic and workforce development strategies need to be more closely aligned so that training providers can understand employers' current needs and anticipate changes that will alter those needs over time. Many regions shared that the main focus of economic development efforts is on business attraction and retention. In some regions, however, jobs are being created, but the local labor force does not have the skills to adequately fill those jobs. It was stated that without addressing these labor market challenges, localities run the risk of losing both the available jobs and the companies creating them.

> *"Any time workforce representatives are sitting at the table with economic development, it's a win. Because we're in on the front side of that business expansion or the business moving to our state and we get an opportunity to sit with them in a planning cycle and prepare their workforce."*

Through this lens, investing in a region's workforce has the potential to be a powerful economic development strategy that is "stickier" than the incentives often offered to attract and retain businesses, since even greater incentives can be extended by competing localities.[15] It may also have a higher return on investment because the benefits of improved economic mobility can lead to increased consumer purchasing power and potential neighborhood revitalization, as well as cost savings from reduced utilization of and demand for certain social services and public benefits programs.

> *"From a business point of view, workforce is always one of the first questions. So getting the business to relocate to an area, there's an adage now that businesses are going to where the workers are. Twenty years ago, workers would graduate from school and move to wherever the business that they wanted to work for was. It's changed. The dynamic is different. You'll see businesses that are relocating to urban areas or moving back into downtowns or moving to areas where there's a perception that the talent is available even if they have to pay a higher cost to be there because that's what they need. So from a municipality's point of view like ours, the first question we get from a business that's looking to locate is what is the status of our workforce? Do those workers exist today?"*

Listening session participants stressed that training providers should engage with employers to understand their hiring needs and to receive feedback on program design. The Workforce Innovation and Opportunity Act (WIOA), which was passed in 2014, requires the formation of boards led by private sector stakeholders to inform local workforce needs and craft partnerships across sectors. Workforce development boards actively set goals and develop strategies at both the state and local levels and manage comprehensive one-stop centers that provide a variety of WIOA-mandated services.[16] Despite this progress, several participants shared that local employers are often unaware of the programs and training services available in their area. It was stated that better marketing for workforce training providers and strategic connections between employers and organizations serving job seekers, including the public workforce system, should be encouraged.

> *"I think a lot of times in the public workforce arena, we begin assuming we know what*

the business needs for training. And we use our best knowledge that we can to develop that training, and then we oftentimes create a mismatch with the business community in terms of value."

Additionally, some voiced the need to move beyond partnerships between a single educational or training provider and a single employer to more systemic collaboration that could benefit a much broader group of employers and job seekers. Participants mentioned the use of "sector strategies," which are regional approaches to workforce and economic development that focus resources on the needs of a defined industry important to the local economy. Sector partnerships include various stakeholders — from local and regional employers to academic institutions and training providers — coming together to analyze an industry's current and future skill requirements. Essential skills can be compared with the skills available in the local labor market in order to identify skills gaps and inform a plan to close those gaps. Strategies often include the creation or promotion of industry-accepted credentials, building career pathways to higher-skilled jobs within the industry, and creating or informing program training.[17] Participants noted that these types of economic development strategies take a systemic rather than transactional view and have the potential to yield a trained workforce that not only supports business attraction and retention but also creates local opportunities for unemployed and underemployed residents.

Apprenticeships and Other Work-Based Training Models

Many listening session participants stressed that since vulnerable populations face significant financial strain, people need to be compensated for their time in training programs. Apprenticeships and other types of work-based learning models that allow people to both "earn and learn" were encouraged in nearly every listening session. These programs allow trainees to support themselves and their families while earning a license or industry credential through on the job-training. They also allow employers to provide customized training for positions that may be difficult to fill or may soon be vacated by a growing number of retiring workers.[18]

"Many of our resources in the public workforce system are dedicated to classroom training and not on-the-job training or apprenticeships. However, with this group of individuals at the very bottom of the rung, classroom training is not an option for them. They're looking to pay the rent this month to have a place to live next month and looking to pay a car payment this week in order to keep their car. So when we have our resources so focused on classroom training, it's not an option for those folks. They can't afford to go to training and not work. And so much of the classroom training isn't flexible to where they could adjust their hours to accommodate their work."

The apprenticeship model can be adapted for young people who can benefit from having on the job experience while in high school. Many listening session participants agreed that partnerships between employers, high schools, and post-secondary institutions that support internships, apprenticeships, co-ops, and career and technical education should be encouraged so that students gain important skills that will inform their career choices and lead to more success in the labor market.

"So the idea of not getting a degree, not going to college is just absolutely not what we talk about at the table. But we have to do a better job to get people to understand that in the 21st Century, it is really about skill as well, and that the skills that people need can be received — can actually be delivered in a different form, in a different way, both on the job and in traditional settings."

Increased Employer Training for Incumbent Workers to Foster Career Pathways and Create Access to Entry-Level Jobs

Several participants expressed the view that the private sector has increasingly come to rely on nonprofit or public agencies for training needs. Participants shared the concern that employer training tends to predominantly focus on employees with higher skills and levels of educational attainment.[19] However, it was noted that some employers are making a concerted effort to train more incumbent workers, allowing progression within a career while improving job access for local job seekers by creating vacancies in entry-level positions. According to listening session participants, this strategy, known as "upskilling and backfilling," has the potential to not only create new opportunities for job seekers but also increase the productivity of existing staff.[20]

> *"Companies figuring out how they can reinvest in their employees is promising. Many of the companies in our area are investing in their incumbent workers. We do a great deal of incumbent worker training, but it's still not nearly enough. And I think companies have to look at it from building their own workforce from within too."*

Listening session participants frequently mentioned the need to foster career pathways or programs that "offer a clear sequence, or pathway, of education coursework and/or training credentials aligned with employer-validated work readiness standards and competencies," [21] with the expectation that such training will lead to higher-skilled job opportunities and higher wages. Participants shared that this strategy requires collaboration and cooperation between employers and training providers. Assistance with resume writing and interview skills may enable job seekers to gain initial employment, whereas mentorship can advance career mobility. Stackable credentials may be obtained to show that an individual possesses the skills necessary to advance in the field. Aside from the services and programs offered by training providers and educational institutions, employers can support career pathways by providing opportunities for in-house training and promotion.

> *"We don't disparage those low skill jobs. We need a lot of them. I think our strategy is not to get rid of them but to make sure that they're not the only job that somebody has. So our strategy is to try to facilitate pathways from those entry-level low paying jobs into something that represents a living wage. And what's interesting, it's not that businesses don't want to do this. They've just got so much competitive pressure and so we want to make sure that they can remain cost-effective in their growth. It's understanding what allows those businesses to be competitive and still invest in their workforce."*

Increased Coordination Among Service Providers and With Funders

Working together to successfully move job seekers into stable employment can prove challenging due to resource constraints, a competitive funding environment, and differences in organizational cultures and operating models. Nevertheless, the need for coordination and collaboration was a theme that emerged in nearly every listening session and is supported by recent industry research. Among the three most challenging areas of activity for workforce development organizations, Jain et al. (2017) includes "developing and maintaining strategic partnerships with other organizations."[22]

Coordination among service providers is essential for client success. Increased awareness of programs offered by other service providers allows for appropriate referrals to be made. Strong alignment also decreases the chances for duplication of efforts (for example, constantly surveying the same sets of businesses).[23] Listening session participants cited collective impact models,[24] data sharing, and centralized intake processes

with a single point of entry as strategies to foster this collaboration.

Shared vision, mission, and expectations between training providers and their funders was also cited by participants as being essential. It was stated that overly restrictive funding streams can, in some cases, prevent training providers from successfully meeting the demands of both job seekers and employers. Participants mentioned that unrestricted funding is critical in order for organizations to deliver the outcomes that both their clients and their funders expect. Additionally, it was shared that overly rigid reporting requirements can distort what is measured and prioritized, so these indicators should be developed in partnership with the direct service providers.

> *"How can we send this person with resources to that partner to make sure that they get the certificate or the additional training that they need so that all of our work kind of becomes exponentially powerful by really coordinating together on what happens next and making sure that we don't just check our individual box and then have the person fall off the bridge on the next part of their journey? So that investment in collaboration and connectivity, in getting us to truly become partners and not just referral sources to each other, but really strategic partners, is key to us reaching a whole different level of effectiveness."*

Changes in Employer Behavior That Improve Job Access and Quality

Listening session participants expressed that when assessing candidates for open positions, most employers focus on educational attainment or personal connections, which puts low-income job seekers at a disadvantage. A promising strategy that emerged from the listening sessions is the adoption of skills-based hiring by employers to remove what, in some cases, may be an artificial barrier to employment.[25] Further, it was noted that alternative forms of training and credentialing, such as boot camps and digital badging, are being developed that reflect competencies rather than more traditional education and degree attainment. These credentials directly tell employers what a potential employee is capable of, whereas listening session participants felt that a college degree might serve as a signal or proxy for soft skills, such as work ethic, rather than as an indicator of actual ability.[26] Whether through industry-accepted credentials, certificates, or proven work experience, participants encouraged employers to give more weight to competencies than to traditional educational attainment, which could level the playing field for those from lower-income backgrounds. Additionally, they stated that hiring from reputable training providers can offset not only direct training costs for employers but also recruiting and screening costs as well.

> *"Employers need to look at how they're contributing to the shortage in the workforce, if you will, from the perspective of how they define what skills and what experience and education they need for the positions that they have. Employers don't tend to go back and re-evaluate that. We hire certain positions, and we've always identified those as requiring a four year college degree. Well, really, do they?"*

Participants also stressed that in order to increase workers' chances for economic mobility, employers should be encouraged to improve job quality, especially for entry-level positions. Job quality is not only measured in terms of wages, but also by practices such as consistent and predictable scheduling, the availability of basic benefits such as retirement accounts, parental leave, and paid sick time, and career and wealth building opportunities. These practices may also contribute to business productivity through a more stable work environment.[27] Participants noted that the efforts by "high-road employers" to "raise the floor" recognize that while skill development is important, it is not sufficient to ensure economic security.[28]

OPPORTUNITIES FOR INVESTMENT

In light of the labor market challenges identified and the promising strategies discussed, listening session participants were asked to explore specific opportunities for investing in America's workforce. The following investment themes were identified as areas in which additional financial capital could improve outcomes. Participants offered that these investments could contribute to both preparing workers for and connecting them to stable, quality employment.

Invest in Core Programs and Services That Prepare Workers for Jobs

Participants shared that although numerous basic and technical skills training programs exist, these programs often address the needs of some job seekers but cannot fully meet demand. Furthermore, research has found that when faced with reduced public funding, workforce training providers are forced to "reduce the number of workers served, change the mix of services participants receive, or alter the methods of service provision to ones that may not be as effective."[29] Participants also noted that investing in workforce training providers, including community colleges and educational institutions offering career and technical education, would allow more workers to receive in-demand skills training.

Listening session discussions revealed that additional funding and financing is also needed to deliver relevant job training in fast-changing industries. Training providers and career and technical education institutions are tasked with preparing workers with the skills that they need today and will need tomorrow, and in order to do that successfully, the latest technology is required. Funding or affordably and flexibly financing the latest equipment and technology is an opportunity for investment that listening session participants voiced is necessary for training providers to adequately meet the labor demands of employers.

> *"If you are chasing technical profession workforce training in high demand industries, equipment is very expensive because we provide industry mirroring classrooms, which means that we have to use equipment that we aren't turning a profit on. The reason that industry can afford it is because they can calculate mathematically how long that machine needs to operate. They will get all of that money back. And we can't do that because it's a training environment and so it's just a little bit different ballgame and I think on behalf of our technical colleges for sure, because that's all we do, the investment in equipment is a major need. It's very challenging for us to keep up with."*

Participants conveyed the importance of unrestricted capital from funders. They stated that the ability to adapt and refine operational strategies in response to organizational learnings and environmental changes allows workforce organizations to effectively meet the needs of both job seekers and employers.

> *"I feel like there's not an understanding of what it takes to do this work. And that means the cost associated with it, the time associated with it, realistic outcomes associated with that. So it's just like hurry up and do really well, and do with large numbers. There's just not an understanding of the reality of that. And organizations are severely under-resourced to do what should be done for young people, for adults."*

Invest in Workforce Intermediaries That Connect Workers to Jobs

Workforce intermediaries that connect employers with a supply of skilled labor from training providers take a dual customer approach, meeting the needs of both workers and employers. Participants expressed that investing in these entities is essential because they are able to "speak the language" of businesses and develop relationships in a way that may be difficult for training providers focused on holistically meeting the needs of job

seekers. Workforce intermediaries can also serve to educate training providers about the skills demanded by local employers.

> *"I think their goal is really to try to broker agreements between employers and job seekers. And it is really tough on both sides I think to navigate that system. But I also don't know if they frankly have the resources to do that. And so, investment in intermediary is best — a lot of people don't want to invest in that because it's not direct service. But in order to have people navigate the system on both sides, I think we need that."*

Participants in several listening sessions explained that workforce development agency efforts and programs were largely designed for midsized and large employers. Yet, the vast majority of employment in their areas is by small businesses. They further suggested that small employers are more impacted by not being able to find the right skills mix or to influence the design and development of local and regional workforce efforts, often due to the need to focus on their business rather than engage in lengthy meetings with workforce development service providers. They also identified difficulty in navigating the various workforce development provider services. Several participants mentioned that workforce intermediaries could address the challenges small businesses face in meeting their talent needs.

> *"If there could be an investment in some kind of intermediary entity that could assist to aggregate many of these small businesses and medium-sized businesses into the industries that match up to these programs to help them access and inform the available services, that would be important."*

Invest in Early Childhood Education

Though this research did not focus on education per se, early childhood education was identified by participants as an effective two-generation approach. Participants noted that investments in quality early childhood education centers can yield both short- and long-term impacts. High-quality early childhood education not only seeks to lay the foundation for a productive future workforce, but it also can allow the current workforce (i.e., the parents) to maintain employment, knowing that their children are adequately cared for while learning skills needed to thrive in the future. A lack of affordable, accessible childcare options was a frequently cited barrier to employment in the listening sessions. Participants stated that by addressing the needs of both parent and child, improved outcomes can be achieved for the family as a whole, contributing to economic mobility and reducing the likelihood of intergenerational poverty.

> *"And the other thing I see about workforce development — it really starts at the pre-K level."*

> *"We frequently in our world talk about executive function skills and social and emotional skills. And those are developed frequently in early ed, okay. And that's where the window is."*

> *"We can't manage childcare. So in states where employment and training has been really successful, the states have funded childcare services fully through until someone completes 90 days of employment, so all the way through every transition — stable childcare. It's the biggest predictor of success."*

Invest in Community Infrastructure Including Transportation Systems and Affordable Housing

In listening sessions hosted in rural areas, it was noted that access to transportation is crucial because many rural residents may have to travel long distances for work and training programs. Even in more urbanized areas, insufficient access to public transportation was cited as a common employment barrier. Participants stated that lack of affordable, accessible housing options is a challenge

because housing instability decreases the likelihood that a worker will retain employment. It was additionally noted that shortages in affordable housing may hinder economic development efforts to attract and retain businesses. Participants stated that without sufficient housing options for their workforce, businesses may choose a competing locality to locate or expand, thereby reducing the availability of jobs for job seekers in that market. Though these investments are more place-based in nature, it was noted that they are important to foster a holistic strategy for developing and deploying human capital. Participants stressed the need to adopt a new strategy that invests not only in human capital but also in the built environment, with the goal of increasing the supply of affordable housing, accessible transportation, community facilities, and high-quality childcare options.

> *"No matter what the program is, it has to be a holistic approach. You have to worry about not just getting the skills, but the education. You have to worry about transportation. You have to worry about the day care. Otherwise they're not going to be successful. And housing is a big issue, and first time loans for individuals and tenants that want to improve and move ahead. Some people are living in places where they should not be living because they can't get that first loan and their kids are growing up in areas where they shouldn't be housed. And so they can't even get to the point where they want to get their skills because their basic needs aren't met, and that's a huge issue."*

Invest in Comprehensive Supportive Services

As was discussed in regard to current challenges, there are many non-skills barriers to employment. Participants in nearly every listening session mentioned that investments in comprehensive supportive services are essential for ensuring client success in any workforce program. Recent research confirmed this sentiment, "By providing support services such as counseling, case management, and connections to public benefits such as transportation, childcare, and medical and housing assistance … grantees helped their participants succeed in and beyond training programs. However, finding funds to pay for supportive services in the resources typically available for workforce programming is challenging because much of the funding that is available cannot be used to provide the types of comprehensive and ongoing support necessary to help participants achieve stable, long-term employment."[30] Whereas the preceding investment opportunity focuses on improvements in the physical infrastructure of a community (e.g., public transit system or affordable housing stock), participants expressed that investments in supportive services would provide the resources for those connected to the workforce system to access this infrastructure investment and to benefit from other essential services targeting those dealing with addiction or transitioning from jail or prison, for example. Post-employment support services are equally important, allowing clients to not only obtain but maintain employment.

> *"Our biggest challenge is that we do coordinate with a lot of other agencies on funding, but there are huge gaps that we cannot fill with the funding we get. We cannot provide the support that people need to transition from employment services into jobs, from the first job and stabilization to the next. There is no support for that. We have huge gaps in the funding that we're struggling with to really move. We can't move the needle on equity and poverty if we don't change the way we support people in getting where they need to go."*

Invest in Efforts to Increase Job Access and Quality

Self-employment can be a viable option for some trying to enter the workforce, though entrepreneurship has been on the decline and the failure rate among startup businesses is high.[31] If successful, however, entrepreneurs

who operate small businesses in low- and moderate-income communities are a source of job creation in those communities and tend to hire locally. Some participants identified entrepreneurial support services for residents of low-income areas or those facing barriers to employment as an opportunity for investment. Others expressed a need for investing in small business capacity building,[32] including engaging businesses around job quality efforts and using innovative financial products to incentivize behaviors that increase access to jobs for those facing employment barriers. For example, several participants mentioned that reduced interest rates on small business loan products could be used to incentivize businesses to adopt these behaviors.

Social enterprises, which are organizations that address a basic unmet need or solve a social problem through a market-driven approach, were also identified as an opportunity for investing in workforce development.[33] Social enterprises generate their own revenue as they address a societal problem, which reduces or eliminates the need for traditional fundraising. By providing on the job experience and training, for-profit and nonprofit social enterprises can use private sector business models for the social purpose of expanding employment opportunities and outcomes for traditionally difficult-to-employ populations. The most well-known example may be Goodwill, which has not only become a household name but also in 2016 helped more than 313,000 individuals "train for careers in industries such as banking, IT, and health care, to name a few — and get the supporting services they needed to be successful — such as English language training, additional education, or access to transportation and child care."[34] In addition to investing directly in social enterprises, several participants mentioned that there are opportunities to invest in incubators and accelerators that support social enterprises focused on job access and quality.

> *"And so we ended up starting a pilot to create an opportunity for investment across multiple layers of outcomes. So we started a construction company that would hire people who had barriers to employment, usually a criminal record in the case of our pilot, to do rehab and lead remediation work for the city. There are currently only two for-profit subcontractors who are even interested in being on the lead remediation list for the city. Because we're a nonprofit, we don't need to make money off of this. We need to pay these men a living wage so we can afford to compete and make that something that's sustainable."*

HOW TO MAKE WORKFORCE DEVELOPMENT MORE INVESTABLE

One of the main goals of the Investing in America's Workforce Initiative is to re-envision workforce solutions as investments in the national economy, not as social services. Once the previously discussed opportunities for investment were identified, participants reflected on ways to drive more capital to those opportunities. Listening session participants were asked for ideas to make workforce development more investable, which led to the following insights.

Classify Workers as Assets Not Expenses

Several listening sessions referenced the work of Zeynep Ton of MIT, who has done considerable research on the reclassification of employees as assets to be invested in as opposed to a line item labor cost to be reduced. This shift in perspective may encourage employers to improve job quality and make direct investments in skills training and professional development. It also has been empirically shown (in retail settings) to increase productivity and business performance, yielding a high return on investment for workers and employers alike.[35]

From this perspective, third party investors may also be interested in investing in the

asset of human capital, which has led to the emergence of Income Share Agreements (ISAs). ISAs are a financial product through which a student receives capital to cover education or training expenses in exchange for an agreement to pay a percentage of their future income for a set period of time. Though ISA proponents typically discuss this financial innovation as a way to limit student loan debt associated with traditional higher education expenses, ISAs have also been used to fund the education of community college students and trainees attending short-term career boot camps. Participants said that while ISAs bring innovation in education and training finance, further experience and research are needed to determine their efficacy for students and workers.[36]

Maximize Efficiency of Existing Funding Streams While Exploring Potential New Resources

Though the public workforce system is an essential component of a successful workforce development strategy, federal support for workforce development programs has declined more than 20 percent since 2010.[37] Participants expressed that existing federal and state funding streams that support workforce training programs, including the Workforce Innovation and Opportunity Act (WIOA), Supplemental Nutrition Assistance Program (SNAP), Employment and Training, and Temporary Assistance for Needy Families (TANF) should be at least maintained, if not expanded. Accessing dormant public accounts for impact investing purposes, such as using forfeiture funds to cover the cost of reentry programs, was also mentioned.[38] Additionally, a few participants noted that requiring increased transparency regarding job quality standards by public companies in SEC disclosures could arm shareholders with information needed to drive capital to employers offering quality jobs and investing in their workers.

> *"And so one of the things that I've been pushing is to allow us to tap into forfeiture funds as a way to fund reentry programs to put people into employment. There's millions of dollars in the federal forfeits funds just sitting there and we're not accessing that for programs."*

Government investments in workforce development initiatives could also take the shape of tax credits or subsidies explicitly intended to encourage employer behavior change, such as the adoption of an apprenticeship program.

As noted above, however, federal support for workforce development has been steadily declining. Perhaps unsurprisingly, participants relayed that employers represent the most important stakeholder group when it comes to investing in America's workforce. It was also mentioned that aside from investing in in-house training, when serving as a purchaser of training programs and services, employers become an important source of earned revenue for workforce organizations, decreasing the need for public investment.

> *"Private sector investment is going to be critical. Because the federal government is putting less and less money into workforce development. We're seeing less funding year in, year out. So it is going to be critical. Either the federal government is going to have to start looking at the importance of workforce development and putting that investment back in it or we're going to have to look for other sources of funding."*

Several participants suggested that private sector leverage strategies should be utilized to make public tax payer dollars go further. Local, state, and federal governments can use small amounts of public capital to leverage large amounts of private investment. Since foundations are often called upon to make up for shortfalls in public funding, philanthropy may want to consider financial tools that allow for leveraging private capital. While grants can yield significant impact, some foundations are also exploring the use of other forms of capital such as investments out of endowments as well as credit enhancements in the form of guarantees or loan loss reserves.[39]

Recent guidance on the CRA, which requires lenders to meet the credit needs of low- and moderate-income communities and people in their service areas, clarified that "economic development initiatives" eligible for CRA credit "include provisions for creating or improving access by low- or moderate-income persons to jobs or to job training or workforce development programs."[40] It was noted that this clarification provides an opportunity to deepen engagement with financial institutions around opportunities for investing in workforce development efforts. Participants also mentioned pension funds as a potential new source of capital for investments in workforce development efforts.

Offer Financial Products That Allow Organizations to Increase Capacity and Scale

Listening session participants stated that many of the organizations that are best positioned to develop human capital lack the financial resources to deliver effective services at scale. Additionally, some sources of capital are too restrictive to allow organizations the flexibility they need to meet various program goals. It was emphasized that as organizations are faced with potential cuts in government spending, innovative uses of private capital should be explored. They cautioned, however, that financing should not be confused with funding. Though there will always be a great need for traditional philanthropic grants and public subsidy, better access to and use of flexible debt financing could help suitable nonprofits more effectively manage working capital and serve more clients.[41] Participants said that there are opportunities to support organizational growth by providing working capital, bridge loans, facility financing, or equipment loans that are more flexible, longer-term, more risk-tolerant, or more affordable than what is currently available.

> *"But there is a big barrier there because of lack of capital, so they have resorted to going to private lenders who are earning on a weekly basis more than what four or five jobs would require in pay — much more than that. I mean it's 10 times — 10 jobs could've been funded with the interest that they're paying on this loan."*

Address Funding Needs Using Outcomes-Based Funding Models

While some organizations generate earned revenue that would allow them to take on below-market-rate debt or other forms of loans or investment to support growth, other programs, interventions, and organizations may require pure grant funding. Several listening session participants mentioned the emerging field of outcomes-based funding that allows for the monetization of social impact, thereby creating investment opportunities. In a typical outcomes-based funding model, such as a social impact bond, a back-end payer, typically a government entity, agrees to pay a specific price for an intended outcome, while an investor or group of investors provides the upfront capital to the service provider.[42] Because the capital is provided at the outset and the investor is repaid only if the agreed-upon outcomes are achieved, this model provides funding that operates like a grant for the recipient and an investment for the source of capital.

> *"There are social impact bonds and other instruments that are now coming to the fore to allow us to make investments in these kinds of issues."*

Participants stressed the need for flexibility from their funders to be able to adapt over time and employ processes that best meet the holistic needs of the clients they serve. Oftentimes, the prescriptive nature of funding streams prevents organizations from making strategic decisions about how best to serve their clients. One positive aspect of outcomes-based financing is that the funder is essentially purchasing outcomes, which improves accountability while leaving the process required to achieve those outcomes in the hands of the provider. This allows organizations to build upon lessons learned and change

strategic direction over time without the fear of losing funding.

Use Philanthropic Capital to Promote Innovation, Collaboration, and Capacity Building

Research shows that between 2008 and 2014, grants made by the largest U.S. foundations to support workforce development totaled roughly $2.6 billion, or about $370 million annually.[43] This represented an average of less than 2 percent of total grant making annually over the study period.[44] Participants expressed that since foundation grants represent the most flexible source of funding, philanthropic capital should be used strategically to foster innovation, collaboration, and field building among multiple stakeholders.

Innovation grants and seed funding can support promising strategies that either do not have the potential for revenue generation and thus cannot attract return-seeking capital, or that first need proof of concept to become investable. Several participants noted that often the main constraint is not one of capital but of risk tolerance. They stated that foundation support can lend credibility to new programs or interventions.

> *"There is a need for risk capital of pilot programs, the value of bringing people together to run pilots to try things differently. Because that risk capital pilot program then de-risks the change eventually. And it takes a while. As this project moves forward, the information needs to be brought forward to philanthropy, to government, in order to pool resources to run pilots. I love pilots. Because you know what? Fast failure then. Doesn't work, kill it. If it works, let's build it out and it'll help people see success."*

Many listening session discussions also focused on the need to combine capital with capacity building to foster collaboration and local leadership. As one example of the ways in which foundations can promote collaboration, the Bridgespan Group recommends that philanthropy "fund and facilitate deep regional partnerships between high schools, higher education institutions, employers, and other community partners to align public education systems with pathways to careers, including market-aligned curricula and work-based learning opportunities."[45] This sentiment was reiterated in many of the listening sessions.

At a systemic level, workforce solutions are a fairly untapped opportunity for investment and would likely need funding from philanthropy for capacity and field building in order to reach scale. As previously mentioned, the field of human capital investment has already been taking shape with the emergence of social impact bonds and other outcomes-based financing models that track outcomes (i.e., human capital improvements) rather than outputs (i.e., number of people served). Participants said that grants to support future field building work could prove to make workforce solutions more investable over time.

Create Financial Intermediaries

Many participants relayed that developing local and regional intermediaries to attract and deploy capital could increase the involvement of a broader range of potential investor types that may be unable or unwilling to invest directly in workforce enterprises. A financial intermediary can blend public, private, and philanthropic capital in creative ways in order to meet the risk-adjusted return appetites of each stakeholder group. Intermediaries also serve to reduce transaction costs for investors by offering customized underwriting to assess risks that may be unfamiliar to those investors. Additionally, with regard to the size and duration of the investment, intermediaries can provide capital on terms suitable to the recipient but in short supply today.[46] Participants in the listening sessions noted that regional intermediaries focused on raising and disbursing capital could allow staff at organizations to focus more on program delivery and less on navigating the often complicated landscape of potential funding sources. It should be noted, however, that the

intermediary's expenses would need to be weighed against the efficiencies achieved.

> *"On the investment side, it's the investment in some of the CDFIs. We have partnered with CDFIs, where we basically participate in a loan or two with them. When they can't quite do it on their own, we come in with the other piece of it. So we're participating with your CDFIs on some of the lending, but also investing in their capital, so that they can go out and lend in the community."*

IMPACT MEASUREMENT AND EVALUATION

Reframing workforce development efforts as investments requires a reexamination of how success is evaluated. In other words, how is return on investment in workforce development efforts being measured? What outcomes are prioritized over others? Are there conflicts between short-term and long-term goals? How does the choice of indicators alter incentives and behaviors of training providers, participants, and funders?

As these questions were posed and pondered, many listening session participants noted that while impact measurement is required of their organization, funders (both public and philanthropic) may not appreciate the cost of this requirement in terms of systems, time, and staff capacity needed. In spite of this frustration and the challenges inherent in impact measurement generally, several best practices were identified.

Measure both Short-Term and Long-Term Results

Participants stressed the need to measure both short-term outputs and long-term outcomes rather than prioritizing the former over the latter. They stated that a short-term indicator such as job placement should be complemented by longer-term indicators such as job retention and wage growth, while a longer time horizon requires patience and additional resources dedicated to evaluation efforts. Participants mentioned that administrative data, wage data, and data from the Bureau of Labor Statistics can be utilized and shared across entities to track program participants' outcomes longitudinally. Intermediate outcomes can also be shared to encourage continuous momentum around a program or service.

> *"So really looking at what career placement means, because to me, success and outcomes would be on retention and a career pathway that leads to financial stability, which means they can afford a house and childcare. We're talking basic needs here. But just to get someone a job and put them in a low-wage job – that doesn't benefit them in the long-term."*

> *"We have to ask the right questions and be patient in our outcomes. I've had many training studies where after a year-and-a-half there was nothing going on. It looked like the programs were showing no outcomes whatsoever. And at year two, even year three and four, we started to see the impact from those seeds that were sown. So we have to be very patient and set up your theory of change so that you can measure milestones along the way. Get them early successes like increasing training completion. That's a big one right there. It's hard for people to balance work and family and complete training, etc.; so, set up those, what we call intermediate outcomes, but be patient. The funding community and government has to understand that these programs take three to four years to really show their yield in so many cases. So we'd stress the need to be patient and also ask the right questions."*

Coordinate Data and Standardize Metrics Across Entities

Listening session participants stressed the need for data sharing and called on funders to agree on a uniform set of metrics where impact evaluations are concerned. Regarding the

former, some participants mentioned that local efforts to house public assistance services and workforce programs under one roof in one-stop centers have allowed for beneficiaries' needs to be addressed holistically. They noted that data sharing among co-located program staff could create an opportunity to analyze how the workforce development system affected the receipt of public assistance. Participants also shared that workforce development agencies and intermediaries have an opportunity to better use local and regional labor market data to inform their work, including matching their efforts to local current and future demand from employers. Additionally, participants mentioned that coordination is needed on the part of funders so that organizations are not overly burdened by different reporting requirements for each source of funds.

> *"So it's become critical that we share data — that we look at it in more of a three-dimensional way. We're really looking at more short-, medium-, and long-term outcomes for the people we serve, and being able to follow them over a longer arch to show we didn't just place them in a job — that they persisted and they stayed in that job for this many years and that turned into a career. And so the inner connectivity of our data would allow us to continue to help each other to track those long-term successes and what that generates in revenue for our communities and saves our communities in terms of tax dollars being used for social support and other things."*

The Workforce Data Quality Campaign, a project of the National Skills Coalition, calls for "longitudinal data systems that connect workforce training and other postsecondary education data with employment and social services data" to more effectively measure and evaluate impact as people move through and utilize a variety of programs and services.[47] Many participants felt that these systems could be used to inform better decision-making, but cautioned that such systems require extensive collaboration and the identification of mutual interests and goals among various stakeholders willing to share data. Coordinated data systems also require significant effort to develop and funding to sustain.[48] Some listening session participants noted, however, that aggregating disparate data among actors such as local chambers of commerce, community and vocational colleges, universities, workforce training providers, and others will allow a community to more comprehensively view their local labor market issues and appropriately assess demand.

Rethink Return on Investment

While some participants believed that the ability to scale and offer services to more people was essential, others thought that the focus should be on the quality of service as measured by the outcome achieved. Some expressed that shifting the focus to the cost of achieving outcomes, rather than the cost of delivering services, could equip organizations with the investments needed to achieve their goals while improving accountability to funders and investors.

> *"One of the things that funders want is volume. And as a nonprofit, volume is great, but I'm not always positive that volume leads to long-term impact. So we had a big success last year. We got four people hired and that cost us about $11,000 per person. And I'm really proud of it because they have jobs, hopefully, for life. As a nonprofit, I always hear you have to serve people, you have to serve more people. And you know what? I'll serve more people, but they'll be looking for a job in 90 days. So I just think a little bit more pragmatism around how financial institutions fund to realize that one person needs a lot of work to get a job for life."*

Some participants felt that the focus of an impact evaluation should be on the value that a given program adds to a participant's outcomes in the labor market as compared with the outcomes if the client had not received any services. This slight nuance of measuring added value from a specific intervention takes into account the heterogeneity of clients and

their skills and abilities when they begin their training. Similar to extending the time frame for evaluation in longitudinal methodologies, increasing evaluation sophistication to account for the diversity of client populations will inevitably add time and cost in addition to increased rigor. For example, participants mentioned that the most sophisticated impact evaluations use randomized controlled trials, but this is also the most costly and time-consuming methodology.

> *"There's lots of ways of measuring what works, but the way we look at what works is by looking at value-added over what would have happened. And how do we know that? We know that by creating some kind of comparison first. We try to always do that in all of our studies because we know from the past that outcomes are really unreliable as a way of measuring, just looking at outcomes alone. A lot of our studies have shown that those who come into programs with lower outcomes have larger impacts. So we always want to know, what would have happened had this program not operated."*

Several participants mentioned that measuring business satisfaction might also be a useful indicator of success for workforce training providers.

> *"I think another way that I know we're struggling to quantify our efforts is the return on investment to employers when we're partnering with them. So do they have lower recruitment costs? Do they have lower costs around turnover, or higher productivity of workers who come through some of our training programs?"*

Participants noted that not all outcomes of a program are quantifiable. For example, any improvements that an initiative brings to the broader workforce system are often missing from the typical evaluation. "Progress in this work can be challenging to measure and is not always quantifiable. Typical performance measures used to assess progress focus on training completion, certifications earned, job placement, wage rates, and short-term employment retention. While these indicators certainly point to important participant milestones, they fail to document the ongoing work of relationship building and employer engagement that is required to design and deliver effective workforce development services."[49] Several listening session participants expressed that process improvements should be included in the assessment of return on investment, although their inclusion would likely have to be qualitative rather than quantitative.

CONCLUSIONS

Listening session participants frequently spoke to the industry-accepted need for broad systems change. "We often believe that one new part — one more proven 'best practice' or policy change — will generate improved results unattended. The law is passed, the randomized control trial completed, and it is onto the next challenge. We consistently forget that these are only the first steps in initiating true systems change."[50] Similarly, convening, researching, and sharing potential solutions are important steps, but in order to make meaningful progress on the challenges identified, a broad shift will need to occur. This shift requires stakeholders from across the public, private, nonprofit, and philanthropic sectors to view workforce solutions as long-term investments in our nation's economic potential. But how can these opportunities for investment be actualized?

This collaborative research, which includes insights from nearly 1,000 experts from across the country, points to the current challenges and promising strategies for improving the human capital of America's labor force. It also outlines strategies for making these opportunities more investable by attracting new sources of capital and using existing sources more efficiently. Insights from the listening sessions point to the fact that these challenges cannot be solved by the public or nonprofit

sector alone. Challenges of this magnitude require public-private partnership and the collaboration of various stakeholder groups.

Albert Einstein famously made the claim that problems cannot be solved with the same level of thinking that created them. Though the challenges are vast, promising solutions call for the ability to see not only the market failures that have resulted from disinvestment over time, but also the market opportunities latent in this country's vast store of human capital. This requires a paradigm shift in which those involved begin to think like investors. Unlike lenders who must rely on healthy skepticism in order to avoid taking unnecessary risk, investors tend to be optimistic and future-oriented profit maximizers. Investors are not simply interested in the ability of a borrower to repay but are interested in the overall success of the investee. Just as investors succeed when the companies they invest in succeed, the U.S. economy will strengthen when investments in its workforce allow people to move out of poverty and into stable, family-sustaining employment.

Financial systems tend to focus on and incentivize quarterly earnings, but wealth building requires thinking in long-term investment horizons. Similarly, investments in America's workforce should be considered both for their initial outcomes for those struggling to obtain work now and for their long-term effects on economic mobility, neighborhood revitalization, and economic growth. Workforce investments have the potential to increase labor market participation, business productivity, and consumer spending — while at the same time, lowering costs associated with unemployment, disinvestment, and intergenerational poverty. Maximizing the potential of the U.S. workforce is an opportunity with high potential return on investment for workers, employers, and the national economy.

1 Wandner, S. A., 2015. The Future of the Public Workforce System in a Time of Dwindling Resources. In: F. R. B. o. Atlanta, ed. Transforming U.S. Workforce Development Policies. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, pp. 129-163.

2 Author's analysis of labor force participation rate data from the U.S. Bureau of Labor Statistics, Current Population Survey, Series LNS11300000, (Accessed 4 August 2017).

3 ManpowerGroup, 2016. U.S. Talent Shortage Survey, Milwaukee, WI: ManPowerGroup.; Society for Human Resources Management, 2016. The New Talent Landscape: Recruiting Difficulty and Skills Shortages, Alexandria, VA: Society for Human Resources Management.

4 Yellen, J. L., 2017. Addressing Workforce Development Challenges in Low-Income Communities. [Online] Available at: https://www.federalreserve.gov/newsevents/speech/yellen20170328a.htm (Accessed 17 June 2017).

5 For information on the Community Development function of the Federal Reserve System, visit www.fedcommunities.org.

6 The Interagency Questions and Answers Regarding Community Reinvestment (Questions and Answers) can be found here: https://www.gpo.gov/fdsys/pkg/FR-2016-07-25/pdf/2016-16693.pdf.

7 These listening sessions were not transcribed either because the host Reserve Bank chose not to record the session or because the sound quality of the recording was poor. See appendix for a list of the listening sessions and details regarding which were recorded and which were summarized via notes.

8 The codebook containing the list of themes is available in the appendix.

9 Society for Human Resources Management, 2016. The New Talent Landscape: Recruiting Difficulty and Skills Shortages, Alexandria, VA: Society for Human Resources Management.; ManpowerGroup, 2016. U.S. Talent Shortage Survey, Milwaukee, WI: ManPowerGroup.

10 White House, 2016. The Long Term Decline in Prime-Age Male Labor Force Participation, Washington, D.C.: The White House.

11 For a discussion of automation's effects on employment, see (Autor, 2015) (Manyika, et al., 2017).

12 See (Autor, 2010) for more on this subject.

13 For a discussion of the interrelationship between disability claims and employment, see McCoy (2017) and Autor et al. (2013).

14 Yellen, J. L., 2017. Addressing Workforce Development Challenges in Low-Income Communities. [Online] Available at: https://www.federalreserve.gov/newsevents/speech/yellen20170328a.htm (Accessed 17 June 2017).

15 For a discussion of economic development that includes workforce development, see (Liu, 2016).

16 An overview of the Workforce Innovation and Opportunity Act is available here: https://www.doleta.gov/wioa/Overview.cfm.

17 National Skills Coalition, 2017. National Skills Coalition. [Online] Available at: http://www.nationalskillscoalition.org/resources/publications/file/Why-Congress-should-invest-in-workforce-education-and-training-programs.pdf (Accessed 28 July 2017).

18 For more information on apprenticeships, see https://www.philadelphiafed.org/community-development/publications/special-reports/apprenticeship-guide.

19 For research on this topic, see (Lerman, et al., 2004).

20 Findings from a survey of employers that pursued grant-funded upskill/backfill strategies can be found in (Shanbacker & Woolsey, 2014).

21 U.S. Department of Labor, Employment and Training Administration (DOLETA), 2016. Career Pathways Toolkit: A Guide for System Development, Washington, DC: U.S. Department of Labor, Employment, and Training Administration, pp. 3.

22 Jain, R., Newman, A. & Montes, M., 2017. Investing in Workforce Program Innovation: A Formative Evaluation of Five Workforce Organizations' Experiences During the Human Capital Innovation Fund Initiative, s.l.: The Aspen Institute. pp. 3.

23 For case studies of successful regional workforce development models, see (Andreason & Carpenter, 2015).

24 For more on collective impact, visit www.collectiveimpactforum.org.

25 More information on skills-based hiring can be found in (Ross, et al., 2016) (Canner, et al., 2015) and (Bilvin & Wallerstein, 2016).

26 (Fuller, et al., 2014) Discuss employers' use of a college degree as a proxy for soft skills during the hiring process.

27 Brett, D. & Woelfel, T., 2016. Moving Beyond Job Creation: Defining and Measuring the Creation of Quality Jobs, s.l.: Pacific Community Ventures.

28 For case studies of this strategy, see the Hitachi Foundation's Pioneer Employers Initiative at www.hitachifoundation.org/our-work/good-companies-at-work/pioneer-employers.

29 Wandner, S. A., 2015. The Future of the Public Workforce System in a Time of Dwindling Resources. In: F. R. B. o. Atlanta, ed. Transforming U.S. Workforce Development Policies. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, pp. 129-163.

30 Jain, R., Newman, A. & Montes, M., 2017. Investing in Workforce Program Innovation: A Formative Evaluation of Five Workforce Organizations' Experiences During the Human Capital Innovation Fund Initiative, s.l.: The Aspen Institute.

31 Haltiwanger, J., 2015. Top Ten Signs of Declining Business Dynamism and Entrepreneurship in the U.S., s.l.: University of Maryland and NBER.; Griffith, E., 2014. Why Startups Fail, According to their Founders. Fortune, 25 September.

32 For more information on the credit needs of small employer firms, see The Small Business Credit Survey, a national collaboration of the Federal Reserve System available at https://www.newyorkfed.org/smallbusiness/smallbusiness.

33 This is the definition provided by the Social Enterprise Alliance. To learn more, visit https://socialenterprise.us/about/social-enterprise/.

34 For more information on Goodwill Industries International, visit http://www.goodwill.org/about-us/.

35 Read more about Zeynep Ton's "good jobs strategy" here: https://hbr.org/2012/01/why-good-jobs-are-good-for-retailers.

36 For more on income share agreements, see "Capital for Communities: Financing Human Capital through Income Share Agreements," https://www.philadelphiafed.org/community-development/publications/cascade/92/03_capital-for-communities.

37 National Skills Coalition, 2017. Building America's Infrastructure Workforce: Partnering with Industry to Meet the Demand for Skilled Workers, s.l.: National Skills Coalition.

38 For more on the U.S. Federal Forfeiture Fund, see https://www.justice.gov/afp/fund. In the U.K., Big Society Capital has also used dormant federal accounts for impact investing purposes. For more information see https://www.bigsocietycapital.com/latest/type/news/%C2%A331-million-dormant-bank-accounts-invested-big-society-projects.

39 Schiff , H. & Dithrich, H., 2017. Scaling the Use of Guarantees in U.S. Community Investing, New York: Global Impact Investing Network.

40 Sobel Blum , E. & Shepelwich, S., 2017. Engaging Workforce Development: A Framework for Meeting CRA Obligations, s.l.: Federal Reserve Banks of Dallas and Kansas City.

41 Avivar Capital, 2016. Driving Postsecondary Success with Impact Investing, s.l.: s.n.

42 For more on outcomes-based financing, see www.investinresults.org.

43 This is a conservative calculation as the dataset used in this research includes only grants of at least $10,000 made by the largest U.S. foundations.

44 Wardrip, K. & de Zeeuw, M., forthcoming. "Nimble Capital for an Agile Workforce". In: Investing in America's Workforce: Improving Outcomes for Workers and Employers. s.l.: Federal Reserve System.

45 Ross, M., Kiernan, R., Murphy, D. & Bielak, D., 2016. "Billion Dollar Bets" to Establish Pathways to Careers: Creating an Economic Opportunity for Every American, s.l.: s.n.

46 Next Street, 2016. Bridging the Gap: Impact Investing Supply and Demand in the Chicago Region, Chicago: s.n.

47 For more information on the Workforce Data Quality Campaign, see http://www.workforcedqc.org/sites/default/files/images/WDQC-Tapestry-Brief.pdf.

48 Pena, C., 2017. From Patchwork to Tapestry: Collaborating to Maximize Data Utility, Washington DC: National Skills Coalition.

49 Jain, R., Newman, A. & Montes, M., 2017. Investing in Workforce Program Innovation: A Formative Evaluation of Five Workforce Organizations' Experiences During the Human Capital Innovation Fund Initiative, s.l.: The Aspen Institute.

50 Dawson, S. L., 2016. Targeting Workforce Dollars: You Don't Get What You Don't Pay For. The Pinkerton Papers, Volume 3.

Works Cited

Andreason, S. & Carpenter, A., 2015. ***Fragmentation in Workforce Development Efforts to Coordinate Regional Workforce Development Systems,*** Atlanta: Federal Reserve Bank of Atlanta.

Autor, D. H., 2010. ***The Polarization of Job Opportunities in the U.S. Labor Market: Implications for Employment and Earnings,*** Washington, DC: Center for American Progress and The Hamilton Project.

Autor, D. H., 2015. Why Are There Still So Many Jobs? The History and Future of Workplace Automation. ***Journal of Economic Perspectives,*** 29(3), pp. 3-30.

Autor, D. H., Dorn, D. & Hanson, G. H., 2013. The China Syndrome: Local Labor Market Effects of Import Competition in the United States. ***American Economic Review,*** 103(6), pp. 2121-2168.

Avivar Capital, 2016. ***Driving Postsecondary Success with Impact Investing,*** s.l.: s.n.

Bilvin, J. & Wallerstein, B., 2016. ***Shift Happens: The Entrepreneurs, Wonks, and Investors Revolutionizing the Learning-to-Employment Landscape,*** Santa Fe, NM, Washington, DC: Innovate+Educate, Whiteboard Advisors.

Board of Governors of the Federal Reserve System, 2012. ***A Perspective from Main Street: Long-Term Unemployment and Workforce Development,*** 2012: Board of Governors of the Federal Reserve System.

Breloff, P., 2017. ***Next Billion.*** [Online] Available at: http://nextbillion.net/the-other-capital-in-impact-investing-why-talent-may-matter-more-than-money-and-what-investors-can-do-about-it/ (Accessed 30 June 2017).

Brett, D. & Woelfel, T., 2016. ***Moving Beyond Job Creation: Defining and Measuring the Creation of Quality Jobs,*** s.l.: Pacific Community Ventures.

Canner, N., Carlton, A., Halfteck, G. & Irons, J., 2015. ***Impact Hiring: How Data Will Transform Youth Employment,*** New York, NY, San Francisco, CA: Rockefeller Foundation, Incandescent, Knack.

Carroll, R. R., 2017. ***"Policy Initiatives to Unlock Private Capital for Social Good", Opportunity Finance Network.*** [Online] Available at: http://ofn.org/articles/policy-initiatives-unlock-private-capital-social-good (Accessed 25 June 2017).

Chetty, R. N. H. a. L. K., 2016. The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Project. ***American Economic Review,*** Volume 106.

Dawson, S. L., 2016. Targeting Workforce Dollars: You Don't Get What You Don't Pay For. ***The Pinkerton Papers,*** Volume 3.

Edelman Intelligence, 2017. ***The State of Entry-Level Employment in the U.S.,*** s.l.: Rockefeller Foundation.

Frey, C. B. & Osborne, M. A., 2013. ***The Future of Employment: How Susceptible Are Jobs to Computerization,*** Oxford: Oxford University.

Fuller, J. B. et al., 2014. ***Bridge the Gap: Rebuilding America's Middle Skills,*** s.l.: U.S. Competitiveness Project, Accenture, Burning Glass Technologies, Harvard Business School.

Griffith, E., 2014. Why Startups Fail, According to their Founders. ***Fortune***, 25 September.

Haltiwanger, J., 2015. ***Top Ten Signs of Declining Business Dynamism and Entrepreneurship in the U.S.,*** s.l.: University of Maryland and NBER.

Jain, R., Newman, A. & Montes, M., 2017. ***Investing in Workforce Program Innovation: A Formative Evaluation of Five Workforce Organizations' Experiences During the Human Capital Innovation Fund Initiative,*** s.l.: The Aspen Institute.

Lerman, R. I., McKernan, S.-M. & Reigg, S., 2004. "The Scope of Employer Provided Training in the United States: Who, What, Where, and How Much?". In: ***Job Training Policy in the United States.*** Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, pp. 211-244.

Liu, A., 2016. ***Remaking Economic Development: The Markets and Civics of Continuous Growth and Prosperity,*** Washington, DC: The Brookings Institution, Metropolitan Policy Program.

ManpowerGroup, 2016. ***U.S. Talent Shortage Survey,*** Milwaukee, WI: ManPowerGroup.

Manyika, J. et al., 2017. ***A Future that Works: Automation, Employment, and Productivity,*** s.l.: McKinsey & Company, McKinsey Global Institute.

McAfee, A., 2017. ***Why "How many jobs will be killed by AI?" is the wrong question.*** [Online] Available at: https://www.linkedin.com/pulse/why-how-many-jobs-killed-ai-wrong-question-andrew-mcafee (Accessed 24 June 2017).

McCoy, T., 2017. Disabled, or Just Desparate? Rural Americans Turn to Disability as Jobs Dry Up. ***Washington Post***, 30 March, pp. accessed August 4, 2017 at http://www.washingtonpost.com/sf/local/2017/03/30/disabled-or-just-desperate/?utm_term=.1b2d6433ffd7.

Morath, E., 2017. Trump to Expand Apprenticeship Program. ***Wall Street Journal***, 13 June.

Mourshed, M., Farrell, D. & Barton, D., 2012. ***Education to Employment: Designing a System that Works,*** s.l.: McKinsey Center for Government.

National Skills Coalition, 2017. ***Building America's Infrastructure Workforce: Partnering with Industry to Meet the Demand for Skilled Workers,*** s.l.: National Skills Coalition.

National Skills Coalition, 2017. ***Building America's Infrastructure Workforce: Partnering with Industry to Meet the Demand for Skilled Workers,*** Washington D.C.: National Skills Coalition.

National Skills Coalition, 2017. ***National Skills Coalition.*** [Online] Available at: http://www.nationalskillscoalition.org/resources/publications/file/Why-Congress-should-invest-in-workforce-education-and-training-programs.pdf (Accessed 28 July 2017).

Next Street, 2016. ***Bridging the Gap: Impact Investing Supply and Demand in the Chicago Region,*** Chicago: s.n.

Pena, C., 2017. ***From Patchwork to Tapestry: Collaborating to Maximize Data Utility,*** Washington DC: National Skills Coalition.

Price, D., 2015. How Etsy's IPO Could Spark Investor Interest in B Corps. ***Entrepreneur***, 10 March.

Ross, M., Kiernan, R., Murphy, D. & Bielak, D., 2016. ***"Billion Dollar Bets" to Establish Pathways to Careers: Creating an Economic Opportunity for Every American,*** s.l.: s.n.

Schiff , H. & Dithrich, H., 2017. ***Scaling the Use of Guarantees in U.S. Community Investing,*** New York: Global Impact Investing Network.

Shanbacker, E. & Woolsey, L., 2014. ***Upskill/Backfill Strategies: Advancing Incumbent Workers and Opening Opportunities for Job Seekers,*** Washington, DC: National Governors Association.

Sobel Blum , E. & Shepelwich, S., 2017. ***Engaging Workforce Development: A Framework for Meeting CRA Obligations ,*** s.l.: Federal Reserve Banks of Dallas and Kansas City.

Society for Human Resources Management, 2016. ***The New Talent Landscape: Recruiting Difficulty and Skills Shortages,*** Alexandria, VA: Society for Human Resources Management.

St.Clair, N., 2017. ***A Qualitative Exploration of "Following the Money: An Analysis of Foundation Grantmaking for Community and Economic Development,"*** Philadelphia: Federal Reserve Bank of Philadelphia.

U.S. Department of Labor, Employment and Training Administration (DOLETA), 2016. ***Career Pathways Toolkit: A Guide for System Development,*** Washington, DC: U.S. Department of Labor, Employment, and Training Administration.

Wandner, S. A., 2015. The Future of the Public Workforce System in a Time of Dwindling Resources. In: F. R. B. o. Atlanta, ed. ***Transforming U.S. Workforce Development Policies.*** Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, pp. 129-163.

Wardrip, K., Andreason, S. & De Zeeuw, M., 2017. ***Uneven Opportunity: Exploring Employers' Educational Preferences for Middle-Skills Jobs,*** Philadelphia: Federal Reserve Bank of Philadelphia.

Wardrip, K. & de Zeeuw, M., forthcoming. "Nimble Capital for an Agile Workforce". In: ***Investing in America's Workforce: Improving Outcomes for Workers and Employers.*** s.l.: Federal Reserve System.

Wardrip, K., Fee, K., Nelson, L. & Andreason, S., 2015. ***Identifying Opportunity in the Nation's Largest Metropolitan Economies,*** Philadelphia: Federal Reserve Bank of Philadelphia.

White House, 2016. ***The Long Term Decline in Prime-Age Male Labor Force Participation,*** Washington, D.C.: The White House.

Yellen, J. L., 2017. ***Addressing Workforce Development Challenges in Low-Income Communities.*** [Online]
Available at: https://www.federalreserve.gov/newsevents/speech/yellen20170328a.htm
(Accessed 17 June 2017).

APPENDIX

Codebook

- Current Challenges
  - stigma/lack of awareness of alternative career paths
  - job loss due to automation
  - job quality
  - lack of coordination/fragmentation
  - funding restrictions/requirements
  - resource constraints
  - skills gap
    - soft skills
  - best practices mobility
  - non skill-related barriers to work
    - housing
    - drug screen/background check
    - benefit cliff/mindset
    - family relations
    - transportation
    - childcare
- Outcome Measurement/Evaluation
  - longitudinal study/ retention rates
  - coordinate data
  - standardize metrics
  - process vs. outcome vs. impact
  - qualitative data
  - ROI
  - value added
  - RCT
  - learn from past work
  - intermediate outcomes
  - story telling/marketing
  - quick cheap evaluation
- Strategies
  - entrepreneurship/small business development
  - social enterprises
  - connect workforce and econ dev
    - research on needs
  - education
    - higher ed
      - bachelors
      - associates
    - financial education
    - vocational education/CTE
    - youth education
      - academic and career planning
      - early childhood education
  - employer offered training for incumbent workers
  - work-based learning
  - retraining
  - credentialing/certification
  - career pathways
  - collaboration and communication
  - Scale/replicate models
- Opportunity for Investment
  - intermediation
- Entities/Players
  - policy makers/government
  - elementary and high schools
  - colleges/universities
  - community colleges
  - CDFIs
  - CDCs/CBOs
  - financial institutions
  - workforce system
  - employers/corporations
- Funding Sources
  - public
    - local
    - state
    - federal
  - private
    - social impact bonds
    - CRA
    - philanthropy
- Client Subpopulations
  - people in poverty or experiencing homelessness
  - immigrants
  - older workers
  - veterans
  - people with disabilities
  - opportunity youth and millennials
  - formerly incarcerated

Regional Listening Session Locations and Dates

Reserve Bank	Location	Date	Recorded and Transcribed	Summary Notes Provided
Atlanta	Atlanta, Ga.	10-April	X	
	Melbourne, Fla.	11-April	X	
	Jacksonville, Fla.	28-April	X	
	Starkville, Miss. (w/ St. Louis)	28-Feb.		X
	Valdosta, Ga.	27-April	X	
	Miami, Fla.	28-March		X
	Nashville, Tenn.	24-March		X
	New Orleans, La.	13-April		X
Boston	Boston, Mass.	11-April	X	X
	Hartford, Conn.	12-April	X	X
Chicago	Springfield, Ill. (2)	9-March	X	
	Milwaukee, Wis.	17-March	X	
	Des Moines, Iowa	28-March	X	
	Fort Wayne, Ind.	13-April	X	
Cleveland	Cleveland, Ohio	15-March		X
	Cincinnati, Ohio	24-April		X
	McHenry, Md. - *partnered with Richmond Fed*	9-March		X
Dallas	Houston, Texas	21-Feb.	X	
	El Paso, Texas	16-March	X	
	Dallas, Texas	1-March		X
	San Antonio, Texas	25-April	X	
Kansas City	Kansas City, Mo.	20-April		X
	Denver, Colo.	21-March		X
	Kearney, Neb.	22-March		X
	Omaha, Neb.	23-March		X
	Albuquerque, N.M.	4-April		X
	Tahlequah, Okla.	26-April		X
	Oklahoma City, Okla.	27-April		X
Minneapolis	Minneapolis, Minn.	18-Apr		X
	Minneapolis, Minn.	17-May	X	X

Regional Listening Session Locations and Dates

New York	New York, N.Y.	2-Feb.	X	
	San Juan, Puerto Rico	3-March	X	X
	Buffalo, N.Y.	27-March	X	
	Newark, N.J.	3-May	X	
Philadelphia	Philadelphia, Pa.	15-Feb.	X	
	Vineland, N.J.	1-March	X	
	Lancaster, Pa.	24-March	X	
Richmond	Baltimore, Md.	2-March		X
	McHenry, Md. – *partnered with Cleveland Fed*	9-March		X
	Raleigh, N.C.	31-May		X
	Columbia, S.C.	14-June		X
	Richmond, Va.	29-Sep.		X
San Francisco	Yakima, Wash.	16-March	X	X
	Tacoma, Wash.	28-March	X	X
	Spokane, Wash.	30-March	X	X
	Los Angeles, Calif.	3-May		X
	Salt Lake City, Utah	4-May	X	X
	Las Vegas, Nev.	18-May	X	X
	Bend, Ore.	1-June	X	
	Lincoln City, Ore.	2-June	X	
	Vancouver, Wash.	10-April	X	X
St. Louis	St. Louis, Mo.	7-April	X	
	Starkville, Miss. (w/ Atlanta)	28-Feb.		X

Additional Resources

Engaging Workforce Development A Framework for Meeting CRA Obligations provides banks — and organizations interested in partnering with them — information and tools to engage in workforce development activities to support their community involvement goals and their obligations under the CRA.

Models for Labor Market Intermediaries explores the role of community and economic development organizations in workforce development and the importance of fostering and facilitating partnerships to address local workforce challenges.

Transforming U.S. Workforce Development Policies for the 21st Century features 65 leading scholars and practitioners who outline the issues and introduce new policies and practices to meet the changing needs of workers, businesses, and their communities.

Human Capital Compendium is a hub for Federal Reserve research, speeches, podcasts, and more on topics of employment, unemployment, and workforce development.

Fedcommunities.org offers an array of practical resources from across the Federal Reserve that support community development.