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COMMUNITY DEVELOPMENT STUDIES & EDUCATION

Apprenticeships and Their Potential in the U.S.*

By Keith L. Rolland, Community Development Advisor

Government, foundation, and workforce leaders are displaying keen interest in apprenticeships as a way to give job seekers skills, credentials, and access to careers. This increased interest is also part of the greater attention to workforce development strategies that engage employers. Apprenticeships have a long history with roots in ancient times. The Code of Hammurabi of Babylon, which dates back to the 18th century BCE, required artisans to teach their crafts to the next generation. By the 13th century, a type of apprenticeship emerged in Western Europe in the form of craft guilds.[1] In the colonial U.S., now-famous apprentices included George Washington (surveyor), Benjamin Franklin (printer), and Paul Revere (silversmith).

The modern concept of apprenticeships is a "learn and earn" strategy with "work-based learning." In the U.S., these programs may be categorized as registered apprenticeships (RAs) regulated by the U.S. Department of Labor (DOL), non-RAs, and youth apprenticeships. This article focuses on RAs, including the expansion of RAs to new industry sectors and disadvantaged populations.

Registered Apprenticeships

In 1911, Wisconsin created the first state RA system, and in 1937, Congress enacted the National Apprenticeship Act, which authorized the federal government to oversee the nation's apprenticeship system in cooperation with the states. Registered apprentices get structured on-the-job training (OJT), related training and instruction,[2] wages, industry-recognized credentials, and direct access to jobs and careers. Employers, in turn, obtain highly trained employees and increased productivity and may be able to better retain employees. The number of apprentices in the RA program has fluctuated. Between the 2002 and 2014 fiscal years, it reached a high of 469,238 in 2002 and a low of 357,692 in 2011 and trended upward to 375,425 in 2013, 410,375 in 2014, and 445,900 apprentices as of October 2015, according to the DOL.[3] (See the table for statistics regarding RA activity in 2014 in Pennsylvania, New Jersey, and Delaware.)

Most registered apprentices have been in construction and the skilled trades, such as electricians, plumbers, and carpenters. RA programs are sponsored by an employer or group of employers, labor–management organizations, industry associations, or an intermediary such as a community-based organization or community college. The length of an RA program depends on the complexity of the occupation and whether it is time based (a required number of hours in OJT and related instruction), competency based, or a hybrid of the two. RA programs range from one to six years depending on the occupation.

The present RA system is "bifurcated," explained John V. Ladd, administrator of the Office of Apprenticeship (OA) in the DOL. In 26 states, including Pennsylvania and Delaware, state apprenticeship agencies oversee registration, provide assistance, and monitor regulatory compliance. In the balance of the states, including New Jersey, RAs are regulated by federal DOL staff in the state. There "can be significant variations" in the two branches of the RA system, Ladd said.

Ladd explained that the OA "is trying to reinvent registered apprenticeship and make it a more innovative and flexible model" and that some new RA models are under development. The new models plan to do the following:

- Allow apprentices to receive technical instruction in a more flexible way, such as through classes that begin before the apprentice starts at the worksite or alternating time at work with classes that may be conducive to college-based programs, possibly enabling apprentices to complete an apprenticeship in one year. (Tradition-

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* The views expressed here do not necessarily represent the views of the Federal Reserve Bank of Philadelphia or the Federal Reserve System.
[1] See www.britannica.com/topic/apprenticeship and http://ow.ly/Ulia9.
[2] Related training and instruction are available at community colleges, technical schools, or apprenticeship training schools; through employers; or by accessing resources online.
[3] About 20 percent of all registered apprentices are in the United States Military Apprenticeship Program in the Navy, Marine Corps, and Coast Guard. The program was started in 2008.

Federal Reserve Bank of Philadelphia

Registered Apprenticeship Activity in Pennsylvania, New Jersey, and Delaware in 2014 Fiscal Year				
State	Active Apprentices	Number of Apprentices Who Have Completed Programs	Active Programs	Largest Number of Apprentices
Pennsylvania	10,821	1,882	744	Electricians, carpenters, correction officers, and plumbers
New Jersey	5,322	1,310	867	Electricians, carpenters, plumbers, and construction craft laborers
Delaware	1,069	130	311	Electricians, plumbers, HVAC, and carpenters*

Sources: U.S. Department of Labor, *Delaware Department of Labor

ally, apprentices concurrently received OJT and related technical instruction.) Increasingly, employers are using curricula from community colleges that ultimately will provide college credits to apprentices.

- Increase emphasis on competency-based programs rather than time-based programs.
- Permit community colleges or community-based organizations (CBOs) to sponsor apprenticeships and to provide the administrative functions that labor unions have traditionally done in the construction sector. Ladd cited New Century Careers in Pittsburgh as an example of such a CBO.
- Make it easier for younger people to participate in the RA. (Whereas the average age of RA participants is about 28, the average age of apprentices in Switzerland is about 17, according to the DOL.)

The OA is working to simplify the registration process for employers with the goal that it can be completed largely online. Ladd commented that most employers need a fuller infrastructure to make it easier for them to participate in the RA program and that, until now, the building trades have been one of the only sectors with such an infrastructure. Ladd said that South Carolina's statewide RA program, Apprenticeship Carolina,[4] has created an infrastructure that makes it easier for employers to participate in RAs.

Apprenticeship Carolina is a division of the 16-college South Carolina Technical College System. Regional representatives help employers design RA programs and submit registration paperwork to the DOL. The technical training component of the RA programs is aligned with academic coursework provided by the colleges, enabling apprentices to be eligible for federal student aid. Employers with RA programs are eligible to receive a tax credit of $1,000 for each registered apprentice. Apprenticeship Carolina has served 13,634 apprentices; currently, 6,475 apprentices are enrolled in 761 RA programs in South Carolina, according to program staff.

Ladd added that "we must align workforce and education much better." He observed that the alignment is strong in Switzerland and that apprenticeship there "is embedded in the culture." He noted that apprentices are much older in the U.S. than in other countries. Ladd also pointed out the important role played by guidance counselors in informing young people about the range of career options, which can include apprenticeships.

New Funding

In 2014, the Obama administration called for a doubling of American apprenticeships over the next five years. In September 2015, the DOL awarded $175 million in American Apprenticeship Initiative Grants to expand apprenticeship programs primarily in high-growth sectors, such as information technology, health care, and advanced manufacturing, and to connect apprenticeships more closely with education and career advancement.

The grants are intended to increase access to apprenticeships for underserved populations, including women, young men and women of color, persons with disabilities, low-skilled populations, and veterans. The 46 grantees are committed to train 34,000 apprentices over the next five years.[5] According to the DOL, the grantees include:

- **Philadelphia Works, Inc.** Plans include the creation of a new behavioral health apprenticeship with District 1199C's Training & Upgrading Fund, expansion of an existing computer support specialist and information technology apprenticeship program with a focus on disadvantaged youths and others, and development of a pre-apprenticeship program.
- **West Central Job Partnership.** This partnership, which focuses on the Pittsburgh region and Ohio, plans to increase manufacturing apprenticeships; recruit veterans, unemployed and low-skilled individuals, and foster youths; increase community college capacity to provide related technical instruction; and streamline apprentice recruitment, assessment, and prescreening processes.

The DOL has been making ongoing efforts to build closer connections between the RA program and other federal programs (e.g., Job Corps and YouthBuild) and federal resources (e.g., federal financial aid and veterans' GI Bill benefits). It is also trying to build stronger connections with the public workforce system.

[4] See www.apprenticeshipcarolina.com/about.html.

[5] See www.dol.gov/apprenticeship/grants.htm.

Starting in 2015 under the Workforce Innovation and Opportunity Act (WIOA), all RA programs that request to be on the eligible training provider list will automatically be qualified to receive federal workforce funding as pre-approved training providers for the workforce system. WIOA also allows higher reimbursement to employers for OJT expenses.

Return on Investment

Employers weigh costs and responsibilities before they commit to sponsoring apprentices. According to a Mathematica Policy Research analysis in 2012 of RAs in 10 states,[6] employers incur costs for training, paying apprentices' wages, managing the RA program, and mentoring apprentices. According to the DOL, employer responsibilities also include identifying when wages should be increased according to competency gains, determining the set of competencies that prove an employee has the skills to perform a job independently after an apprenticeship, and developing or using a curriculum to train apprentices.

Robert I. Lerman, professor emeritus in the department of economics at American University and fellow at the Urban Institute, observed that barriers to employer involvement in apprenticeships include limited information, misperceptions that apprenticeships will facilitate unionization, and low government funding levels for community college courses related to apprenticeships.[7] In a paper on Canadian apprenticeships, he noted employer concerns that "apprenticeship training tends to be too specific in an era of rapid advances in technology and uncertainty about occupational demands" and that companies may lose their investment if other firms hire workers who have completed apprenticeships.[8] Another issue is the completion rate of RA participants. The authors of the Mathematica Policy Research study found that about 45 percent of the participants completed their apprenticeships and obtained certificates.

The Mathematica Policy Research study had assessed the effectiveness of the RA program and performed a cost–benefit analysis. The authors concluded that:

- RA participants had substantially higher earnings than did non-RA participants. In the ninth year following program enrollment, RA participants earned an average of $5,839 more than similar non-RA participants. The authors estimated that RA participants who completed their programs would have career earnings that were an average of $240,037 higher than the earnings of similar non-RA participants.
- The benefits of the RA program appear to be much larger than the costs, although the authors said they could not estimate the net social benefits of the government investment as distinct from those of the private investment.

Cesar Reza was in a YouthBuild program in Denver, CO, when he earned his GED, was exposed to career fields, and decided to pursue an electrical apprenticeship. He attends construction classes on Tuesday evenings and works 40 hours a week as an apprentice. His career goal is to become a journeyman electrician. Photo Credit: U.S. Department of Labor

Employers and state agencies are interested in the return on investment (ROI) of their participation in RA programs. As a result, economists at Case Western Reserve University and the U.S. Department of Commerce are conducting a study on the ROI to U.S. employers that participate in RAs.[9] The state of Washington conducts a detailed analysis of the costs and benefits of RA programs and other workforce development programs in that state.[10]

The DOL's Ladd commented that "ROI is a challenge in the U.S. In Germany, the federal or state governments pay for education-sector investments related to apprenticeships, enabling employers to have a good ROI on apprenticeships. The United States does not fund RA programs to support such things as tuition or costs to a company of operating an RA program. The system is voluntary. A national tax credit

[6] See Debbie Reed, Albert Yung-Hsu Liu, Rebecca Kleinman, et al., *An Effectiveness Assessment and Cost-Benefit Analysis of Registered Apprenticeship in 10 States*, Mathematica Policy Research, July 25, 2012, available at http://ow.ly/Ulwxm. The 10 states include New Jersey and Pennsylvania.
[7] See Robert I. Lerman, "Proposal 7: Expanding Apprenticeship Opportunities in the United States," The Hamilton Project, Brookings Institution, 2014, available at http://ow.ly/UlDmN. Also see the American Institute for Innovative Apprenticeship, available at http://ow.ly/UTEMG.
[8] See Robert I. Lerman, *Expanding Apprenticeship Training in Canada: Perspectives from International Experience*, Canadian Council of Chief Executives, 2014, available at http://ow.ly/UlDHF.
[9] See Department of Commerce, "Joyce Foundation, JPMorgan Chase, and the Annie E. Casey Foundation Support Apprenticeship Return on Investment Study," September 8, 2015, available at http://ow.ly/UlIGp. The apprenticeship ROI study is funded by the Joyce Foundation, JPMorgan Chase, and the Annie E. Casey Foundation.
[10] See Workforce Training and Education Coordinating Board, "2015 Workforce Training Results," 2015, available at http://wtb.wa.gov/Documents/Apprenticeship2015.pdf.

for employers would go a long way in expanding apprenticeships in the U.S."[11]

Lessons from Other Countries

There is growing interest in learning from successful apprenticeship programs in other countries. This past summer, the U.S. Departments of Commerce, Education, and Labor signed declarations of intent with their counterparts in Germany and Switzerland for cooperation, information sharing, and fact-finding visits on career and technical education and apprenticeships. Also, the German Embassy has started a Skills Initiative to share information about best practices in sustainable workforce development in cooperation with German companies that are implementing apprenticeship programs in their U.S. manufacturing facilities.[12]

In November 2014, 40 U.S. business, civic, and government leaders traveled to Munich and Nuremberg, Germany, to learn about the German model for manufacturing competitiveness and German apprenticeships as part of the Global Cities Initiative led by JPMorgan Chase and the Brookings Institution. A report on the trip highlighted the importance of regional collaboration among public, private, and civic actors; targeted institutional intermediaries that address market and coordination failures; and incentive-based investments to support small and medium-sized businesses.[13]

In October 2015, the Urban Institute convened British training providers in Washington, D.C., for an event titled "How Did England Generate Two Million Apprenticeships?" The event was organized in part by Lerman, who pointed out that apprentices constitute only 0.2 percent of the U.S. labor force compared with 2.2 percent in Canada, 2.7 percent in Great Britain, and 3.7 percent in Australia and Germany.[14] Lerman also reported that apprenticeships involve 55 to 70 percent of the young adult population in Austria, Germany, and Switzerland — countries where youth unemployment rates are very low.[15] Apprenticeships and secondary schools are closely linked in those countries, he observed, but in most other countries, apprenticeships begin after secondary school.

Pre-apprenticeship Programs

Pre-apprenticeship programs are seen as important for disadvantaged populations in RAs. Such programs, which prepare individuals to enter and succeed in RAs, ideally should link closely with RAs and can provide career exposure and development of literacy and math skills.

Laura Ginsburg, special assistant, national industry promotion and strategic partnerships in the OA, explained that pre-apprenticeship programs provide important supportive services and remedial skills. She said, "The DOL has developed a quality framework for pre-apprenticeship that we urge all organizations to use. There are too many training organizations that train individuals with no job at the end of that experience. We want to ensure that pre-apprenticeship programs are linked to registered apprenticeships and a career." The OA does not approve pre-apprenticeship programs but has issued a document on the subject[16] and plans to develop a toolkit on these programs.

Conclusion

RAs, authorized under 78-year-old federal legislation, are getting more attention in recognition of the critical importance of engaging private-sector employers in addressing the workforce needs of unemployed and underemployed people. RAs, with a combination of structured OTJ training and related training and instruction, hold the promise of industry-recognized credentials and career access. RAs have been used primarily in the skilled trades and construction, but recent DOL grants are intended to catalyze their use by new populations in high-growth industries with new program models.

As private-sector employers weigh the costs and benefits of apprenticeships, intermediaries can assist employers to design programs, recruit participants, and register RA programs. The intermediaries range from state programs such as Apprenticeship Carolina, nonprofits such as Vermont Healthcare and Information Technology Education Center (HITEC), and joint labor–management programs.[17]

The declarations of intent signed this summer between the U.S. Departments of Commerce, Education, and Labor and their counterparts in Germany and Switzerland reflect a growing desire to learn from countries where apprenticeships are successfully embedded in educational and employment systems. The inherent challenge will be to apply and implement successful practices in the U.S. despite differences in educational systems and employment practices.

For further information, contact John V. Ladd at ladd.john@dol.gov, Laura Ginsburg at ginsburg.laura@dol.gov, or Robert I. Lerman at blerman@urban.org.

[11] Two bills have been introduced that would provide a national tax credit to employers that have RA programs. U.S. Senators Cory Booker of New Jersey and Tim Scott of South Carolina have introduced the Leveraging and Energizing America's Apprenticeship Programs (LEAP) Act. U.S. Senators Maria Cantwell and Susan Collins have introduced the Apprenticeship and Jobs Training Act of 2015.

[12] About 55 percent of high school graduates in Germany participate in a "dual system" of vocational education and training, according to the initiative. See www.germany.info/skillsinitiative.

[13] See Joseph Parilla, Jesus Leal Trujillo, and Alan Berube, *Skills and Innovation Strategies to Strengthen Manufacturing: Lessons from Germany*, Brookings Institution, 2015, available at http://ow.ly/UlMZ0.

[14] See Lerman, "Proposal 7," 2014.

[15] See Lerman, *Expanding Apprenticeship Training in Canada*, 2014.

[16] See http://ow.ly/UlOY3. Another useful resource on the subject is http://ow.ly/UlP2U.

[17] See http://ow.ly/UR0xV.

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Building Opportunities and Skills for a Growing Digital Workforce*

By Sydney Diavua, Community Engagement Associate

Information Technology (IT) is a sector with a high demand for skilled workers to fill jobs in U.S., regional, and local economies, according to the Bureau of Labor Statistics.[1] Although most of the employment opportunities in this sector have been advanced-skills jobs in start-ups, software and application development, and wearable technologies, there are many IT opportunities that do not fall into these categories. The need for skilled IT employees has increased across many industries. Recent initiatives and reports recognize these opportunities as a means to move entry-level workers into technology-related jobs and to create pathways to the middle class. The technology sector has potential for workers who are disadvantaged or lack bachelor's degrees but retain an aptitude for gaining skills.

Employment in the Technology and Digital Skills Sector

A report from Capital One and Burning Glass Technologies — *Crunched by the Numbers: The Digital Skills Gap in the Workforce* — details the need for today's workers to have digital skills. According to the report, "Digitally intensive jobs have grown 2.5 times more rapidly than middle-skill jobs that do not require spreadsheets, word processing, or other digital skills …" Considering occupations that require advanced digital skills, such as client management software, coding, and health technologies, the report further notes that "employers pay a premium for this knowledge. Occupations that call for one or more advanced digital skills pay an hourly wage 38 percent higher on average than non-digital middle-skill occupations …"[2]

As of March 2015, there were more than half a million job openings in IT fields.[3] Most of these openings were not in IT-specific industries. Non-IT industries currently employ two-thirds of the private-sector IT workers, with manufacturing, retail, and health-care industries topping the list.[4] The need to fill these vacancies has piqued the interest of a variety of sectors, resulting in new approaches to fill these roles. The White House's TechHire Initiative,[5] IT Works, and the Urban Technology Project are a few examples of how government, private, and nonprofit sectors are building strategies to train workers and fill jobs. Through partnerships with workforce training programs, employers, and government leaders, these initiatives strive to create better policy and build career pathways for IT workers.

TechHire, for example, was launched in November 2014 in six local and state areas and continues to add new sites. There are now 31 participating areas, with eight more in the works. The participating regions, which collectively account for more than 120,000 technology-related jobs, will use TechHire as a partnership strategy to enable workers to qualify and obtain these jobs. Successful TechHire partnerships use data and innovative hiring practices, expand training models that prepare students in months rather than years, and connect people to jobs through "on-ramp" programs.[6]

TechHire Initiatives in the Third District

In the Third Federal Reserve District, the city of Philadelphia and the state of Delaware are designated TechHire regions. In Philadelphia, for example, 12,000 IT job opportunities went unfilled because of a lack of skilled, available talent.[7] In terms of skills, the greatest need was for developers proficient in Java and .NET.[8]

Delaware TechHire

To address the skills gap in technology jobs in Delaware, Governor Jack Markell, in conjunction with Delaware TechHire, convened a number of private employers, financial institutions, workforce and economic development organizations, and community partners. As a result, Delaware TechHire launched Zip Code Wilmington in June 2015. Zip Code Wilmington is an accelerated coding school that combines training courses and apprenticeships to fast-track interested workers into jobs in the coding and software development field.[9] Some Delaware employers have committed to hiring graduates of the coding school into paid apprenticeships and eventually into full-time positions.

Philly TechHire

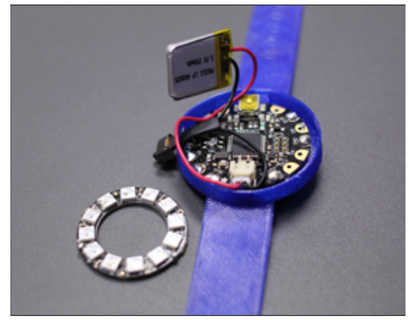
Philly TechHire is a coordinated partnership among several entities, including the city of Philadelphia; Philadelphia's Office of Innovation and Technology (OIT); Philadelphia Works, Inc.; PNC Financial Services Group; Comcast; Ranstad Technologies; EventUpon; Technical.ly Philly; PACT; and Seed Philly. The program seeks to identify employer needs and design appropriate and innovative responses. According to Meg Shope Koppel, chief research officer at Philadelphia Works, Inc., Philly TechHire also works with start-up, training, and academic organizations, such as Creating IT Futures, NY Code + Design Academy in Philadelphia, Code for Philly, Tech Impact, Development Bootcamp, Peirce College, and the Community College of Philadelphia. These entities work together to create a community of resources and to expand information on opportunities in IT for candidates and employers. For example, in October 2015, nontraditional IT candidates had the opportunity to use problem-solving and presentation skills in a contest, with the goal of developing a proposal to solve a tech-related issue for the Free Library of Philadelphia.[10] Philly TechHire partners also use internships and apprenticeships to help candidates obtain jobs. With the aid of a $56,000 state grant, for example, Philly TechHire provided internships to 20 adults and 13 youths. In addition, Philly TechHire provided training to 14 workers who received advanced IT certifications and job offers.

As part of the Philly TechHire initiative, the Philadelphia OIT is using existing assets, such as KEYSPOT computing centers, to promote IT jobs and training. Andrew Buss, director of the innovation management group at OIT, notes that "our motive to participate in TechHire is addressing a shortage of technology workers that can fill positions for the growing number of companies in Philadelphia. For this, OIT has turned its focus to training the next generation of workers, youth as young as middle school for this work, and in complementary science, technology, engineering, and math (STEM) fields. The goal is to create a pipeline of skilled workers that have begun to develop the skills and career interest in technology to fill continuing work training pipelines to employment."

Other Approaches and Strategies

Several other organizations are also working with employers to create career pathways that will enable disconnected youths[11] to obtain computer technology positions. The organizations incorporate holistic approaches that include apprenticeships or internships, professional mentoring, accelerated IT training, certifications, and direct engagement with local employers. One such organization is Tech Impact.[12] This organization, with branches in both Philadelphia and Wilmington, DE, provides hands-on technology support to nonprofits as well as manages workforce development programs. One of the programs, IT Works, is a 16-week immersive program for young adults between the ages of 18 and 26 who do not have bachelor's degrees. The program, which includes 11 weeks of classroom training and a minimum of five weeks at an internship, gives students practical hands-on experience, professional development, and comprehensive soft skills training. Students also can earn several different types of certification (e.g., Cisco IT Essentials Certification, CompTIA A+ Certification). Since 2011, more than 200 students graduated from the program, 70 percent of whom found jobs in the IT sector within six months of graduating. Patrick Callihan, executive director of Tech Impact, notes that students who complete the program earn incomes up to two times more than they did before entering the program.

A second initiative is Creative Tech Works Design Studio (CTW)[13] in Philadelphia, which provides a "makerspace" and apprenticeships for advanced students in engineering and computer science. CTW students build a "stickiness" in STEM fields that extends beyond immediate skills gained. Dr. Jamie Bracey, founder of CTW and director of STEM education, outreach, and research at Temple University's College of Engineering, said that this stickiness increases skill flexibility and future mobility within the tech industry. Young people participate in a 16-week immersion studio with training in product design, programming, engineering, and micromanufacturing. Examples of CTW products include City Street, a civic engagement race competition using wearable technologies, and Fashion Hack, a showcase of apprentice-designed wearable technologies. Program participants have also been involved in consulting projects for the U.S. Navy, DroneCast, and Coders4Africa, and most students matriculate at area colleges.



This digital tracker watch was created for City Streets participants by Stephen Pettus, a Temple University student who participates in the Creative Tech Works Design Studio (CTW) program in Philadelphia. Pettus says that the CTW program "taught me how to run a business. Because of it, my partner and I decided to start our own LLC for our tech consulting work." Pettus said that he earns $35 to $40 per hour on consulting projects and has purchased an equity stake in a client's organization.
Photo Credit: Jacqueline Quidort

A third initiative is the Urban Technology Project (UTP), a public–private partnership between Communities In Schools of Philadelphia, Inc., the local affiliate of a national nonprofit that works with underserved students, and the School District of Philadelphia. UTP's goal is to help urban youth explore and enter IT work pathways that lead to the middle class. UTP provides a continuum of service-learning and school-to-work experiences that begins in middle school, continues through high school, and extends into post–high school opportunities. Recent graduates of Philadelphia public high schools can join the Digital Service Fellows, a leading AmeriCorps program. Fellows serve one year in a pre-apprenticeship providing technical support to Philadelphia schools under the mentoring of IT professionals. Upon completion of the program, fellows can apply for the Computer Support Specialist (CSS) Program, a registered apprenticeship. The program, now in its 10th year of accreditation, is the only program of its kind in the state of Pennsylvania. UTP's CSS program is a participant in a $2.9 million apprenticeship initiative grant application submitted by Philadelphia Works, Inc. and approved by the U.S. Department of Labor.

Edison Freire, director and cofounder of UTP, notes that UTP apprentices, even though they don't have a four-year degree, are attractive job candidates because they have up to 5,000 hours of hands-on training and can earn up to three industry standard certifications. UTP apprentices become lifelong learners, acquire problem-solving skills, and develop teamwork and collaboration skills. Freire also says that UTP plans to transition from a single-employer model to a multi-employer model to provide UTP apprentices with a greater number of permanent IT opportunities with private companies.

Engaging Employers

The workforce pathways described previously depend heavily on partnership with employers and flexibility. Success depends on deep engagement from local employers to review and modify hiring and recruitment processes and required credentials to take into account candidates' current skills and future aptitude versus current degrees. At Philly TechHire, employer engagement has been critical to the success of the initiative. Because of the number of current vacancies, Philly TechHire employers are interested in recruiting highly skilled nontraditional workers. Accelerated IT skills training programs can increase the work-ready population with minimal cost to the employers. Employer partners in PhillyTech Hire have seen the value of project-based training and of the opportunity to observe candidates using critical thinking and problem-solving skills. This recruitment strategy also has provided employers with the opportunity to recruit more women and minorities to develop a more diverse workforce.

Employer engagement comes from strategic relationship building between skills training programs and employers. Many of the partners mentioned encourage agencies to build personal relationships and to have significant "face time" with employers as a means of building confidence in their systems and to showcase candidate skills. As part of the recruitment for its internship program, IT Works engages closely with employers to determine the day-one skills needed for entry-level workers and matches the IT Works training program and certifications for these skills. One of the employers is Barclays Bank Delaware.

Future Challenges

Although there has been much success in this field, a number of challenges and barriers remain. Automated human resource processes filter out strong candidates who are skilled but lack the necessary educational credentials. Formal work experience also can be a barrier in the IT field, and apprenticeships can counter this lack of on-the-job IT experience. Philadelphia Works' Shope Koppel emphasizes the need for greater investment from private sources to create relationships between employers and training programs. Since initiatives such as Philly TechHire are being led by the current federal and city administrations, shifts in government leadership may slow momentum on these projects. Employers and program directors must identify ways to make strategic investments to accelerate these initiatives and make them sustainable. As these partnerships and programs mature, it will be important to increase opportunities for young workers to obtain industry-recognized credentials outside of traditional academic settings.

Information Technology Programs Outside the Third Federal Reserve District

There are a number of programs nationwide that are similar to the featured models from the Third Federal Reserve District. Here are some examples.

LaunchCode, based in St. Louis, is dedicated to making pathways to mobility through apprenticeships and placement in technology jobs. Since 2013, LaunchCode's staff has expanded from four to 24, and the organization now has project locations in southern Florida and Kansas City. LaunchCode has also placed candidates remotely in a number of additional cities. Ninety percent of LaunchCode participants had no coding experience before entering the program, and 42 percent of the participants do not have a college degree. LaunchCode reports that, on average, participants increase their salaries from about $21,000 before the program to about $50,000 after the program.

The Chicago program i.c.stars provides low-income young people with a 16-week paid internship immersed in the technology sector. Participants go on to attend community college and are placed with corporate partners, or they join the staff of the i.c.stars social enterprise, which delivers social media management to clients. Eighty percent of i.c.stars participants complete the internship portion, resulting in an average increase in income of $9,000 to $31,000 and a job placement rate of 95 percent.[a]

Capital One's Future Edge initiative will provide $150 million for community grants and initiatives over the next five years to better prepare citizens for success in a changing digital economy. Part of this process is the recognition of the need for digital skills training for middle-skills jobs. In partnership with educational institution General Assembly, Capital One will create the Capital One Opportunity Fund, a fellowship program that will provide training for individuals looking to gain the advanced digital skills needed to secure high-skilled occupations.[b]

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a See Martha Ross, Carolyn Gatz, Richard Kazis, et al., *Unemployment Among Young Adults: Exploring Employer- Led Solutions,* Metropolitan Policy Program at Brookings, July 2015, available at http://ow.ly/VlwB5.

b Visit http://ow.ly/Vocsw for more information.

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* The views expressed here do not necessarily represent the views of the Federal Reserve Bank of Philadelphia or the Federal Reserve System.

1 See C. Brett Lockard and Michael Wolf, "Employment Outlook: 2010–2020 — Occupational Employment Projections to 2020," *Monthly Labor Review,* January 2012, pp. 3–20.

2 For more information about this report or to download the report, see http://ow.ly/VlhR3.

3 See TechHire Initiative, available at http://ow.ly/VllVg.

4 See *Ready to Work: Job-Driven Training and American Opportunity,* White House, July 2014, available at http://ow.ly/VkuOJ.

5 See TechHire Initiative.

6 See TechHire Initiative.

7 This information was obtained from CEB TalentNeuron's research and analysis, crawling of public profiles, skill predictor algorithms, CEB TalentNeuron Skill Taxonomy, and SME Interviews, unpublished, 2013. This figure is as of 2013.

8 See *Ready to Work,* 2014.

9 See www.zipcodewilmington.com to learn more about the program.

10 See www.phillytechhire.com.

11 A disconnected youth is defined as a young adult between the ages of 16 and 24 who is neither in school nor employed.

12 See www.techimpact.org.

13 See www.creativetechworks.org.

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Annie E. Casey Foundation Initiative Combines Employer Engagement and Positive Youth Development Strategies*

Allison Gerber, Senior Associate, Annie E. Casey Foundation

The Annie E. Casey Foundation is a private philanthropy that creates a brighter future for the nation's children by developing solutions to strengthen families; build paths to economic opportunity; and transform struggling communities into safer and healthier places to live, work, and grow. To these ends, the foundation awards grants and forges partnerships to help increase opportunities for low-income families, reduce the number of children growing up in poverty, and ensure that parents and their children are on a path to financial stability.

Allison Gerber, a senior associate at the foundation, oversees employment-related investments that promote collaborative approaches to improving job opportunities for low-income families. In the following Cascade *interview, she answered several questions about "learn and earn" and "demand-driven" strategies.*

1. Please describe the Annie E. Casey Foundation's funding and other activity on "learn and earn" strategies, such as apprenticeships and on-the-job training (OJT). To what extent do these strategies engage young people between the ages of 16 and 24?

We believe learn and earn strategies, including apprenticeships, and demand-driven strategies are effective for *all* youth and young adults. Although we focus on increasing opportunities for youth and young adults in low-income families or with limited access to employment, we need to develop multiple pathways for young people to get jobs and build careers using a combination of education, training, and supportive services. To thrive, all young people should have a network to tap into, including strong relationships with supportive adults and connections with jobs and employers.

For more than 20 years, the foundation has supported employer-led, or demand-driven, strategies, which involve forming partnerships with businesses to identify employment opportunities and help people of all ages obtain the knowledge and skills necessary to get and keep good jobs in their regional economies. Many of these strategies incorporate OJT opportunities. We promote demand-driven approaches through the National Fund for Workforce Solutions, which supports regional collaboratives made up of employers and local workforce development providers, and through employer-led initiatives in health care and other investments in Baltimore and throughout the country. Young people who are 18 and older have certainly been included but were not the sole focus.

Recent efforts to tailor existing demand-driven workforce development strategies to serve young adults, as well as other investments in employment and training programs targeted toward youth who are not in school or working, have taught us that industry partnerships can be effective in helping young adults find jobs. These strategies differ from many existing youth employment approaches, which have limited knowledge about how to connect with employers, meet their needs, and develop strategies that connect with young people. However, we've also learned that much of the existing demand-driven programming isn't well equipped to provide the more intensive support services that young adults may need as they transition to work.

Given these challenges, the foundation has launched a new young adult employment initiative, Generation Work,[1] which will support local partnerships that promote combining demand-side strategies with positive youth development support services, such as mentoring and work-based learning. Through this eight-year initiative, we seek to scale these strategies in four sites by helping workforce systems and practitioners build stronger connections to employers and serve as networks for young people seeking employment. The foundation recently invited a small group of local partnerships to submit proposals for this initiative and will make selections later this year.

2. What strategies is the Annie E. Casey Foundation exploring in the apprenticeship field?

Over the past year, we have been asking several questions: What would it take to see more uptake of apprenticeship in the United States? And what might be the role of foundations, including the Annie E. Casey Foundation, in promoting apprenticeship? Central to these questions are what employers see as some of the opportunities and challenges around apprenticeship and how we can build a field of practice that addresses some of these challenges.

We are not the only ones asking these questions. There have been increasing interest and investment in apprenticeships in the past year, including a $175 million national funding competition and a White House call to double the number of apprentices. However, we have also seen relatively modest growth in apprenticeship following the Great Recession.

We have identified four strategies to further explore and employ to better support apprenticeship: (1) building the case for employer participation, (2) connecting youth and young adults with apprenticeship programs, (3) better aligning state and local workforce development and apprenticeship programs, and (4) documenting and disseminating best practices to promote uptake of apprenticeship.

Through recent investments, we've sought answers to these questions to better understand why employers may be hesitant to develop or expand apprenticeship opportunities within their companies. Some examples include the following:

- Skills for America's Future,[2] part of the Aspen Institute's Economic Opportunity Program, is researching the obstacles that businesses experience when implementing or participating in apprenticeship. This research will result in a set of recommendations for promoting and growing the apprenticeship field, particularly in areas where philanthropic investment can strengthen access to such opportunities for low-income and marginalized individuals and communities.

- Business Leaders United,[3] an initiative of the National Skills Coalition, is surveying more than 500 businesses in its policy network to learn more about which types of employers are most interested in apprenticeships and other work-based, or hands-on, learning strategies and their reasons for, or barriers to, incorporating these strategies in their firms. The survey results will help inform a set of policy proposals around apprenticeship and work-based learning that its membership network can use to engage state and local leaders.
- With support from JPMorgan Chase, the Joyce Foundation, and the Annie E. Casey Foundation, Case Western Reserve University is investigating[4] the return on investment to U.S. employers using apprenticeships in different sectors in conjunction with the U.S. Department of Commerce. The study will examine the costs and benefits of apprenticeships for employers and collect data on the investments associated with such programs, as well as apprentices' performance and productivity. We expect results by late summer 2016.

We believe these investments could build knowledge of and evidence for the power of approaches that encourage and increase employer participation in apprenticeships and connect low-income individuals and families to such opportunities. In addition, they are helping to inform the ways in which the foundation can support increased use of and access to apprenticeships.

Based on some of the early research that's been done, common barriers for employers seem to include a lack of knowledge about how to develop or deliver an apprenticeship, the cost of creating and running an apprenticeship, and concerns about bureaucracy associated with registering an apprenticeship with the state or federal government.

3. What are the benefits to employers in apprenticeships, including those for young people? How can employers be persuaded to offer such apprenticeships? What kind of assistance do employers need to make apprenticeships attractive and viable?

Despite some of the challenges, we are hearing that employers value work experience, even for entry-level positions. Research on the return on investment to European firms shows that apprenticeship can help employers reduce costs related to recruitment, retention, productivity, and safety. According to one study,[5] because apprentices are productive employees during their training periods, companies frequently recoup training costs during apprenticeships or soon thereafter. Still, the results vary considerably, and we have limited evidence on the return on investment for apprentices in the U.S. Having such evidence would help make a stronger case to U.S. businesses to consider adding apprenticeships, especially businesses outside the skilled trades, which currently offer the vast majority of apprenticeships. Apprenticeships may also help businesses diversify their entry-level candidate pool and develop an internal process for succession planning.

The state of today's labor market may offer new opportunities to engage employers in developing apprenticeship and other learn and earn programs. Employers say they still struggle to find workers with the right set of skills, but they may not see it as their role to work with traditional education systems to help students develop the skills needed to succeed in the labor market. Apprenticeship provides a path forward that combines work with structured learning opportunities.

The companies that have successfully implemented apprenticeships share a few common factors, including reliance on intermediaries that streamlined the design and registration processes, availability of an existing curriculum and instructional resources, and exposure to peers also using apprenticeship programs.

4. When are pre-apprenticeship programs advisable? Which entity is responsible for organizing such programs? What are the best or most promising practices — and research — on pre-apprenticeships?

Pre-apprenticeship programs are typically pre-employment training opportunities that prepare job seekers for employment in a particular industry. They seem to be most common in the construction sector. The objective of these programs is to prepare individuals for entry into apprenticeships, although they often place people in a range of other employment opportunities as well.

Pre-apprenticeship programs can vary widely in terms of the job seekers they serve, the structure of the programming provided, and the institutional home. In different regional labor markets, community-based organizations, community and technical colleges, high schools, and chambers of commerce have organized such programs. The quality of these programs in terms of preparing job seekers for apprenticeships also varies considerably.

However, pre-apprenticeships can provide potential apprentices, including youth and young adults, with structured career exposure opportunities, including hands-on learning; help for the development of literacy, numeracy, and industry-specific skills; and access to an apprenticeship that might not otherwise be available.

From 2009 to 2012, the foundation supported the Aspen Institute's research[6] on the role pre-apprenticeship programs play in preparing low-income, disadvantaged adults for careers in construction. The publications resulting from this work are good resources for learning more about pre-apprenticeship.

For further information, contact Allison Gerber at agerber@aecf.org or visit www.aecf.org/.

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* The views expressed here do not necessarily represent the views of the Federal Reserve Bank of Philadelphia or the Federal Reserve System.

1 The Annie E. Casey Foundation, "Two New Casey Initiatives to Focus on Education and Employment for Youth, Young Adults," September 8, 2015, available at http://ow.ly/UT9re.

2 See http://ow.ly/UTmjv.

3 See http://ow.ly/UTn1n.

4 Department of Commerce, "Joyce Foundation, JPMorgan Chase, and the Annie E. Casey Foundation Support Apprenticeship Return on Investment Study," September 8, 2015, available at http://ow.ly/UTnhi.

5 Robert Lerman, "Do Firms Benefit from Apprenticeship Investments? Why Spending on Occupational Skills Can Yield Economic Returns to Employers," *IZA World of Labor*, May 2014, available at http://ow.ly/UTnNM.

6 Workforce Strategies Initiative at the Aspen Institute, "Our Work: Research & Evaluation," 2015, available at www.aspenwsi.org/our-work/research-evaluation.

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Measuring the Quality, Not Quantity, of Job Creation*

By Noelle S. Baldini, Community Engagement Associate

Job creation has long been seen as a worthy goal that supports economic growth while providing opportunities for the local workforce. Increasingly, however, stakeholders are beginning to ask whether success should be measured purely by the *quantity* of jobs created without regard for the *quality* of those jobs. This article explores various efforts that are underway to encourage the creation, dissemination, and integration of job quality standards into investment, philanthropic, and economic development efforts aimed at job creation.

The Case for Quality Jobs

Currently, most investors, foundations, banks, and government entities are "counting jobs in specific [low- and moderate-income] zip codes without paying attention to the quality of these jobs," said Andrea Armeni, cofounder and executive director of Transform Finance, a San Francisco–based nonprofit organization.[1] Transform Finance's mission includes bridging finance and social justice, and quality job creation is one area through which the organization seeks to achieve that goal.

Transform Finance recently received funding from the Ford Foundation and Surdna Foundation to develop implementable job quality standards that can be used by impact investors, foundations, labor organizations, and government "to ensure that jobs created aid in breaking the cycle of poverty versus perpetuating it," said Armeni. Often, job creation leaves many workers dependent on government services because wages are too low to allow for self-sufficiency. Furthermore, Morgan Simon, cofounder and chair of Transform Finance, notes that job creation is a "slippery" metric.[2] The only factors that truly create new jobs are market demand and innovation, so the goal of mission-driven funders and investors, Transform Finance believes, should not be to increase the quantity but rather the quality of those jobs.

Helen Neuborne, director of Quality Employment at the Ford Foundation, agreed. "We no longer live in a country where someone can simply 'pull themselves up by their bootstraps.' Growing inequality is not a result of a lack of willingness to work but the result of a lack of quality jobs," said Neuborne. The work of Neuborne's team has expanded since the program's start in 2003, as the foundation deepened its commitment to addressing inequality. The Quality Employment unit makes grants in three programmatic areas to improve economic opportunity for low-wage families. The first supports effective strategies for workforce development to improve access to quality training and jobs for low-wage and disadvantaged workers, especially immigrants; the second seeks to improve the quality of jobs held by low-wage workers by ensuring paid sick days and paid leave, expanding unemployment insurance, and raising the minimum wage; and the third is working with states to expand the availability of and access to work supports (e.g., the Supplemental Nutrition Assistance Program [SNAP], child care, and health care) that promote greater job stability.

In 2009, the New Hampshire Community Loan Fund invested in VXi, a Dover, NH–based maker of corded and wireless telephone headsets. This investment allowed VXi to more than double in size, reach record profitability, and institute an employee bonus plan. When the owners sold the company three years later, each employee received a share of the proceeds, and the new owners were so impressed with the staff that they kept it intact. Photo Credit: Geoff Forrester Photography, Courtesy of NH Community Loan Fund

The Ford Foundation believes that the lack of quality jobs is not only bad for workers but also for businesses and the broader economy. "Businesses will not thrive in an environment where people do not make enough money to consume. With the middle class hollowing out, demand from consumers for products and services is decreasing," said Neuborne. Low wages are an obvious element of poor-quality jobs, but a shift to part-time and subcontractor jobs with no benefits and volatile schedules is also a concern. To have a strong economy, Neuborne and the Ford Foundation believe more attention should be placed on building a solid workforce, and they have supported this belief with roughly $100 million in grants toward quality employment.

Zeynep Ton, an adjunct associate professor in the operations management group at MIT Sloan School of Management, also believes that investing in the workforce can have a positive economic impact. Ton's book, *The Good Jobs Strategy*, examines operational strategies that businesses can use to improve *employee* satisfaction, leading to increased productivity, operational efficiency, and *customer* satisfaction. Ton's research also explores "the presumed trade-off between investment in employees and low prices"; she argues that both can be simultaneously achieved by "a combination of investment in workforce and operational practices that benefit employees, customers, and the company."[3]

Ton explains that most companies see labor as a cost instead of as an asset to be invested in. Retailers such as Costco, Trader Joe's, QuikTrip, and Mercadona take the opposite approach by prioritizing investments in their workforces. These companies have documented effects such as decreased employee turnover and increased employee satisfaction while keeping prices low through strategies such as offering fewer product varieties and cross-training employees to cover a variety of responsibilities.[4] Although Ton's research has primarily focused on retailers, she believes that these principles can be applied across industries.

Ton's research is important for funders such as Shawn Escoffery, program director for the Strong Local Economies Program at the Surdna Foundation. The foundation's Strong Local Economies Program aims to encourage collaboration geared toward improving the quality of jobs in the lower wage sectors of the economy while creating access to career pathways to good jobs in emerging industries. Escoffery believes that the presence of a sustainable business model is key to successfully improving job quality. "If the business cannot survive and grow, there will be little to no job creation, so we are also looking for ways to strengthen and support small businesses in their efforts to put workers first," said Escoffery.

Supporting and Measuring Quality Job Creation

Escoffery explained that "tying strings to capital" is one effective way to encourage this behavior change. Emerging best practices for investors promoting job quality include a "floor-and-ladder" approach,[5] which was designed by Transform Finance for the California-based mezzanine fund HCAP Partners.[6] This approach assesses where a business currently is in a number of categories and provides action steps that will allow the company to climb the quality "ladder" over time. Lenders, such as Fund Good Jobs[7] and Social Capital Partners,[8] have offered reduced interest rates for businesses that meet certain job quality standards or commit to hiring employees from underserved areas.

Growth Opportunity Partners,[9] or "Growth Opps," is a nonprofit organization based in Cleveland that was founded in January 2015 by JumpStart,[10] a nonprofit organization that provides equity capital and technical assistance to early-stage ventures in Ohio. Since its founding earlier this year, Growth Opps has approved six loans and anticipates the average loan to its clients to be approximately $275,000. The organization plans to become a community development financial institution (CDFI). "Job quality is central to our mission and is much more than simply checking a box," shared Michael Jeans, president of Growth Opps.

Jeans explained that Growth Opps' approach involves creating a mechanism that supports employee skill building and puts employees on a path to obtaining a living wage (or beyond). Growth Opps calls this mechanism the Milestone Funding Process (MFP) and uses it to keep its clients focused on the creation of "meaningful wage jobs" and opportunities. If given the proper training, each employee can be on a path to obtaining a "meaningful wage" within 12 months, said Jeans. Growth Opps defines a meaningful wage as one that is at or above the federal living wage and that provides wealth-building opportunities such as retirement planning. The MFP requires business owners to reach agreed upon financial performance metrics and job quality outcomes — milestones that allow them to access the next layer of financing from Growth Opps. The intended use of the loan proceeds is written into the loan agreements, which Jeans explained not only holds the client accountable but also ensures that the business can afford the increased cost. "We are working with the employer to benefit both the company and the employee," Jeans said. He believes that this strategy will decrease turnover that occurs when lower wage employees seek new jobs to obtain nominal pay raises, sometimes as low as 25 to 50 cents per hour. Growth Opps sees this strategy not as a "benevolent exercise" but as one that will result in a more engaged, stable, and productive workforce, which should translate to increased profitability for the company.

Rustic Crust, located in Pittsfield, NH, was on a fast-growth track. With its all-natural pizza crusts being sold in grocery stores across the country, the company needed additional working capital and some new equipment to increase productivity. Rustic Crust's management team was experienced and had managed the company for strong profits and good jobs. The New Hampshire Community Loan Fund's investments from 2009 to 2014 allowed Rustic Crust to triple in size, add more than 80 jobs, and acquire a new product line.
Photo Credit: Cheryl Senter, Courtesy of NH Community Loan Fund

In contrast to the approach of Growth Opps, Daniel Brett, manager of InSight at Pacific Community Ventures, finds a "lack of evidence of many CDFIs actively promoting and measuring job quality." Pacific Community Ventures (PCV)[11] is a CDFI based in San Francisco whose services include technical assistance and capital for small businesses, as well as impact evaluation, research, and strategic consulting for CDFIs, foundations, and other capital providers within the impact investing space. PCV's recent research aims to highlight best practices, recommendations, and insights from CDFIs currently engaged in measuring and supporting job quality. Brett believes that the lack of CDFI engagement on this topic can be attributed to uncertainty regarding the definition of a quality job and to the fact that CDFIs' sources of capital — namely, government, foundations, and banks — do not require this measurement. PCV's research will highlight several job quality categories that it hopes will be incorporated into CDFI underwriting and reporting requirements in the future. Categories include:

- **Living wage:** Does the job provide sufficient income to afford a basic standard of living or at a minimum offer financial remuneration closer to a living wage than the employer's competitors?
- **Benefits:** Does the employer offer health insurance, paid sick leave, and maternity and paternity leave?
- **Career-building opportunities:** Do employers offer training, mentorship, and opportunities for advancement within the company?
- **Opportunities to build wealth:** Are employees given retirement plans with company match, ownership options, merit-based bonuses, or financial literacy training?
- **Employee-focused work environment:** Are staff members at all levels treated with respect and dignity? Are employees empowered and engaged? Are there strong relationships between management and staff? Are employees given advance notice of their schedules and flexibility to take care of family emergencies without fear of being fired?

PCV believes that although ongoing measurement is key, providing potential CDFI borrowers with a "checklist" of job quality categories to be considered during underwriting could become a promising strategy.

Considerations and Potential Challenges with Job Quality Measurement

Some CDFIs, however, are cautious about incorporating job quality standards into underwriting because they feel these standards could become a barrier to accessing capital. Joan Brodhead, executive vice president and chief operating officer at Community First Fund, a CDFI based in Lancaster, PA, believes that job quality standards should not inhibit access to capital but rather should be tracked over time to gauge progress. John Hamilton, vice president of Economic Opportunity at New Hampshire Community Loan Fund (Community Loan Fund), a CDFI that offers both royalty financing and loans to businesses with one to 75 employees in New Hampshire, agrees that as long as a business is "willing and coachable," his team can work with the business to improve job quality standards over time. "Although a loan to a business that already has an 80 percent job quality rating may look more impactful," said Hamilton, "we believe working with a business that begins at 30 percent and improves to 80 percent over the course of our involvement with them will have a much greater impact." Although promoting job quality is central to the mission of the Community Loan Fund's small business lending, Hamilton explained that it is also a way to mitigate risk. "When businesses rely on one smart person making all the decisions … that's risky," said Hamilton. By investing in employees, small businesses are developing talent at all levels, often improving their bottom line in the process.

Although job quality is a major focus for the Community Loan Fund, Hamilton shared what he views as challenges with creating job quality standards. For example, it is difficult to measure job quality and engagement quantitatively. The Community Loan Fund plans to increase its work with portfolio businesses to conduct employee surveys to measure factors such as engagement and satisfaction as well as to ask employees what matters most to them. This may better define quality from the eyes of the job holder, thereby customizing job quality measurements according to the unique culture, industry, size, or age of a business and the employees who make up that business. Hamilton is mindful of not “holding businesses to job quality standards that don’t make sense for them and create a lot of additional paperwork.” He also shared that the Community Loan Fund must overcome businesses’ skepticism that as a nonprofit, mission-driven lender, it may bring an agenda that is not rooted in strong business practices or may not be an investor that is able to add value to the businesses’ bottom line. The Community Loan Fund is able to create strong relationships with businesses throughout the state by limiting the reporting requirements of portfolio companies and working with businesses to create customized strategies for improving both job quality and business performance. Additionally, the Community Loan Fund provides financial incentives to portfolio companies that are able to achieve customized job quality goals.

Conclusion

Several efforts are underway to develop job quality standards that could be incorporated into investing and philanthropic decision-making. Improvements in job quality would be beneficial not only for workers but also for businesses and the broader economy. Focus will need to be placed on ensuring that these standards will be in line with what is possible for businesses, understanding that if a business is not sustainable, neither will be the jobs that it offers. It is also important to ensure that efforts to improve job quality do not reduce job access for difficult-to-employ populations.

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* The views expressed here do not necessarily represent the views of the Federal Reserve Bank of Philadelphia or the Federal Reserve System.

1 See www.transformfinance.org.

2 Morgan Simon, “Managing vs. Measuring Impact Investment,” *Stanford Social Innovation Review*, March 20, 2015, available at http://ow.ly/UiN5o.

3 Zeynep Ton, “Why ‘Good Jobs’ Are Good for Retailers,” Harvard Business Review, January–February 2012, available at http://ow.ly/UiMYI.

4 See Zeynep Ton’s Harvard Business Review article for a more thorough explanation.

5 See Keith L. Rolland and Noelle S. Baldini’s “Investing to Create Good Jobs” article in the Fall 2015 issue of Cascade for a full description of the floor-and-ladder approach, available at www.philadelphiafed.org/community-development/publications/cascade/89/02_investing-to-create.

6 See www.hcapllc.com/hcap-partners.

7 See www.fundgoodjobs.com.

8 See http://socialcapitalpartners.ca.

9 See http://growthopps.org/#page.

10 See www.jumpstartinc.org/about/what-we-do/.

11 See www.pacificcommunityventures.org/about.

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Spotlight on Research: Making a Difference in the Lives of Young Men of Color*

By Marvin M. Smith, Ph.D., Senior Community Development Economic Advisor

The plight of young men of color, whether it is in education, the labor market, or involvement in the criminal justice system, has been and remains a challenge. The difficulties in the various areas of these young men's lives have been well documented over time. The problems of young men of color have also engendered numerous responses. Policy initiatives at the federal, state, and local levels as well as endeavors by foundations have been undertaken to address these dilemmas.

Unfortunately, the efforts to assist young men of color have waxed and waned over the years, and valuable lessons have not been learned from previous interventions to shape improved policies and programs. Christopher Wimer and Dan Bloom attempt to rectify the situation by documenting statistically sound successful strategies and promising interventions.[1] The following is a summary of their findings.

Background

Marvin M. Smith, Ph.D.

The statistics on the difficulties experienced by young men in general and young men of color in particular have been well chronicled. Some of the highlights from the report include the following: "The employment rate of male teens aged 16 to 19, for example, has plummeted over the past 35 years. In 1978, the employment rate for this group stood at 51.8 percent. In 2009, it was 28.1 percent, falling by nearly half. For teenage males of color, these rates are even lower. Hispanic male teens had an employment rate of 24 percent in 2009, and the rate for black male teens was even lower at just 14 percent." Although the low employment rates of teens are alarming, the dismal employment experiences of teens of color follow them into their 20s and 30s. Not too surprisingly, the earnings of young men of color have also waned over the decades.

The labor market troubles of young men of color are exacerbated by their involvement in the criminal justice system. "In 2010, black men were more than six times as likely as white men to be incarcerated in prison or jail, while Hispanic men were more than two-and-a-half times more likely to be incarcerated."[2] Incarceration can have ancillary effects on young men of color as well. Their job possibilities tend to be adversely affected by their criminal records. Moreover, incarceration can interfere with their educational attainment or the accumulation of work experience. Wilmer and Bloom point out that, although the school enrollment of young men of color has been increasing, only a small percentage enroll in and graduate from postsecondary education. Unfortunately for some young men of color, today's economy places a premium on educational attainment as a precursor for success.

Programs That Work

In reflecting on the quandaries faced by young men of color, the authors observed that "a growing number of young men of color have become disconnected from the positive systems, institutions, and pathways designed to help people achieve success — high school diplomas, enrollment in and completion of postsecondary education or training, and ultimately career ladders leading to well-paying jobs." Fortunately, some interventions have made a difference. The authors note, however, that despite the disparaging statistics concerning young men, not all young men of color are at a total disadvantage. Some are faring rather well, and some need only a little assistance to succeed. Yet others require a great deal of support in order to thrive. As mentioned previously, a number of programs have been implemented to contend with the dilemmas facing young men of color. In reviewing the efforts that have been undertaken, the authors considered only interventions that have been successful or show a great deal of promise.[3] They further narrowed their focus to programs that were evaluated by high-quality, randomized controlled trials (RCTs). The programs that the authors review are divided into two categories: (1) *proactive approaches*, which include "preventive interventions aimed at youth who are still connected to positive systems (like schools or community colleges) that seek to enhance their success in moving through those systems and on to productive careers in the labor market," and (2) *reconnection approaches*, which involve "interventions targeting those who have disconnected from positive systems, who have dropped out of school or the labor market, or who have been sent to jail or prison and are relying upon the second-chance system to help reintegrate into their communities."

Proactive Approaches

Two types of programs are considered under this approach. The first type of program covers interventions for young men of color who are of high school age and serve to assist their preparation for postsecondary education or provide them with skills that will be beneficial early in their labor market experiences. The second type of program focuses on youth and young adults who are currently involved in postsecondary or job training settings and is designed to assist them in improving their outcomes in the labor market.

High School–Focused Programs. The authors identified a few programs that were successful in addressing the unsettling fact that "young men of color are less likely than their peers to graduate from high school and go on to enroll in postsecondary education or find a job." One of the most effective interventions is *Career Academies*. This program targeted low-income youth and encouraged them to remain engaged in school by offering them instruction in small learning communities while also providing them with valuable information to facilitate the transition to either college or employment. Career Academies are assisted in this task with the aid of local employers who "provide concrete work-based learning opportunities." The efficacy of Career Academies was evaluated by a random assignment study conducted by MDRC (a nonprofit research organization).[4] The study included both young men and women, and around 85 percent of the study's participants were Hispanic or African American. The results of the study were especially noteworthy for young men. According to the MDRC report, Wimer and Bloom noted that "in comparison with a control group, earnings for young men participating in Career Academies were nearly $30,000 higher over the eight years following scheduled graduation from high school."[5] Moreover, the participants were more likely to live independently of their parents and live with a spouse or partner and their children.

Another program that focused on at-risk high school students — including many young men of color — and yielded some success was New York City's Small Schools of Choice. The results of an RCT assessment of the program[6] found that the participating schools raised the students' graduation rates by nearly 10 percentage points and improved the students' readiness for college by increasing the passing rate for the English Regents Examination.[7]

Postsecondary Programs. Several programs were recognized as being effective in assisting the progress of young men of color through postsecondary education and training. One intervention noted by Wimer and Bloom was a "performance-based scholarship program" at a community college in Arizona. Students in the treatment group were given $4,500 in scholarships contingent on their meeting a number of benchmarks. The findings from a random assignment study indicated that, compared with the control group, participants were more likely to increase net financial aid (less reliance on loans), enroll full-time, stay in college for a second semester, and earn more college credits.

However, not all youth desire or have the ability to succeed in college. But they still could benefit from the acquisition of marketable skills to help them succeed in the labor market. Examples of an effective intervention to achieve this task are the Sectoral Employment Training programs. These programs tailor the job training to meet the needs of local industries and employers and afterward connect trainees with the opportunities offered by employers. A randomized evaluation of one of these programs found that, relative to the control subjects, participants were more likely to earn (29 percent) more, work more consistently in higher-wage jobs, and work in jobs with better benefits.[8,9]

Reconnection Approaches

The authors found a number of interventions that reconnect young people to education and training. The most visible of these interventions is the federal Job Corps program. This program "provides intensive, (mostly) residential and job training services to disadvantaged youth aged 16 to 24." An evaluation of a randomized study of the program found that participants increased the completion of General Educational Development (GED) and vocational certificates, increased short-term earnings, and reduced criminal activity.[10]

Another noteworthy intervention is the Center for Employment Opportunities transitional jobs program. The program in New York City "offers former inmates, who are predominately men of color, temporary, paid work in addition to other services (for instance, fatherhood or parenting skills classes) to help them avoid recidivism." This program yielded a reduced reincarceration rate, a reduced probability of arrest, and a temporary increased employment rate.

Concluding Note

Only a few of the programs that the authors have found to be effective in improving the livelihood of young men of color are discussed here. For more on these programs and the findings on the efficacy of programs not covered here, see Wimer and Bloom's report. According to the authors, knowledge of the successful programs and their interworkings is critical in the planning of future interventions.

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* The views expressed here do not necessarily represent the views of the Federal Reserve Bank of Philadelphia or the Federal Reserve System.

1 Christopher Wimer and Dan Bloom, *Boosting the Life Chances of Young Men of Color: Evidence from Promising Programs*, New York: MDRC, 2014, available at http://ow.ly/VFpkR.

2 Information obtained from Bruce Drake, *Incarceration Gap Widens Between Whites and Blacks*, Washington, D.C.: Pew Research Center, 2013.

3 Only some of the former will be considered here. Also, it should be pointed out that "while some of the interventions discussed [here] focus exclusively or predominately on young men of color, others are more broadly focused but have either consistently or especially positive outcomes for this group."

4 James J. Kemple, *Career Academies: Long-Term Impacts on Work, Education, and Transitions to Adulthood,* New York: MDRC, 2008, available at http://ow.ly/VLZBv.

5 See Kemple, 2008.

6 Howard S. Bloom and Rebecca Unterman, *Sustained Progress: New Findings About the Effectiveness and Operation of Small Public High Schools of Choice in New York City*, New York: MDRC, 2013, available at http://ow.ly/VLXbC.

7 Passage of this examination exempts incoming students at the City University of New York from remedial English courses.

8 Sheila Maguire, Joshua Freely, Carol Clymer, et al., *Tuning in to Local Labor Markets: Findings from the Sectoral Employment Study*, Philadelphia: Public/Private Ventures, 2010, available at http://ow.ly/VLXEW.

9 Although this program did not focus solely on young men of color, African Americans and Latinos made up 81 percent of the participants, and about half were young adults 18 to 26 years of age.

10 Peter Z. Schochet, John Burghardt, and Sheena McConnell, "Does Job Corps Work? Impact Findings from the National Job Corps Study." *American Economic Review* 98:5, pp. 1864–86

MAPPING OUR COMMUNITY

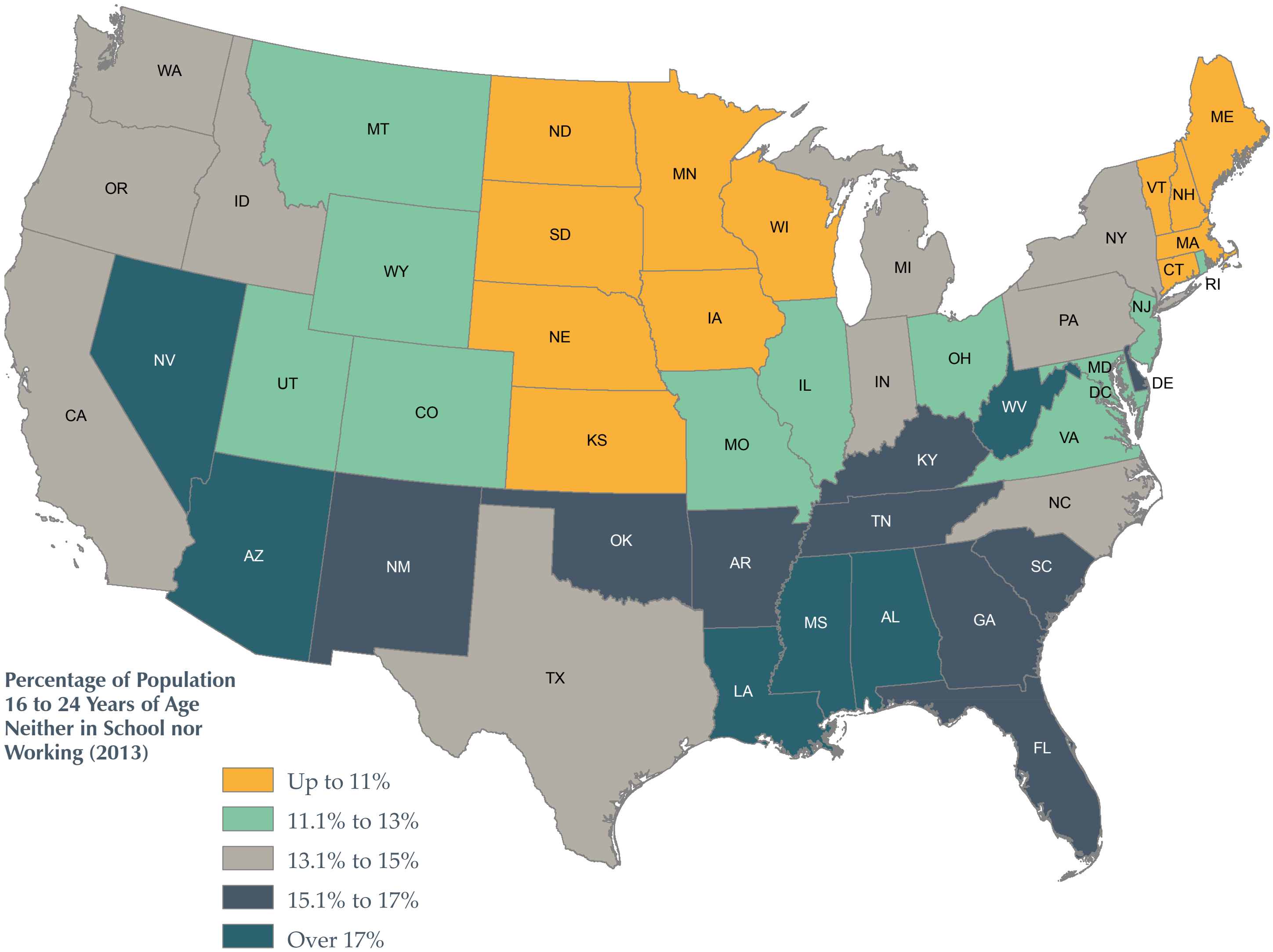
Third Federal Reserve District

KEITH WARDRIP, COMMUNITY DEVELOPMENT RESEARCH MANAGER

Youth, Education, and the Labor Force*

Some workforce development programs specifically target people 16 to 24 years of age who are neither in school nor successfully participating in the labor market. Efforts to reengage youth in either school or work could yield long-term dividends for the individuals as well as for their communities.

A recent report by Measure of America estimates that in the U.S., roughly 13.8 percent of those in this age range were not in school and were either unemployed or had dropped out of the labor force in 2013. Referred to as "disconnected youth" in this report and "opportunity youth" in other quarters, this definition includes about 5.5 million youths nationally and describes more than 19 percent of those in this age range in West Virginia and Louisiana, but well under half that level in Nebraska, North Dakota, and a number of other states. As for the states covered by the Third Federal Reserve District, the percentage of youths meeting this definition was near the national average in Pennsylvania (13.3 percent) but was substantially higher in Delaware (15.4 percent) and lower in New Jersey (12.1 percent).



Percentage of Population 16 to 24 Years of Age Neither in School nor Working (2013)

*The views expressed here do not necessarily represent the views of the Federal Reserve Bank of Philadelphia or the Federal Reserve System.

Note: Not shown on the map, the estimates for Alaska and Hawaii were 14.2 percent and 11.5 percent, respectively.

Data source: Estimates are provided in *Zeroing In on Place and Race: Youth Disconnection in America's Cities*, written by Kristen Lewis and Sarah Burd-Sharps and published in 2015 by Measure of America, a project of the Social Science Research Council. The Lewis and Burd-Sharps report is available at https://www.measureofamerica.org/youth-disconnection-2015/. The estimates are based on an analysis of the U.S. Census Bureau's 2013 American Community Survey Public Use Microdata Sample file and were replicated by the author.

Map sources: U.S. Census Bureau; Esri, derived from Tele Atlas

COMMUNITY DEVELOPMENT STUDIES & EDUCATION

Recommended Reading - Cascade: No. 90, Winter 2016

By Nathaniel Borek, Outreach and Administrative Analyst

Recommended Reading

Workforce Development

Leung, Loh-Sze, and Margaret Miley. "Integrating Financial Stability Strategies into Workforce Development Programs: An Implementation Pilot in Boston," SkillWorks and the Midas Collaborative, December 2013.
This report presents qualitative and quantitative findings of a successful pilot intervention that combines financial education and counseling with workforce development.

Organisation for Economic Co-operation and Development. *Time for the U.S. to Reskill? What the Survey of Adult Skills Says*, Paris, OECD Publishing, 2013.
This report presents findings for the United States, relative to other countries surveyed, from the OECD Survey of Adult Skills and makes policy recommendations based on these findings.

"What Works in Job Training: A Synthesis of the Evidence," U.S. Departments of Labor, Commerce, Education, and Health and Human Services, July 2014.
This report assesses a wide array of workforce development programs, policies, and studies to determine best practices and to inform continued innovation and policy implementation.

Youth and Young Adult Programs

Benus, Jacob, Terry Johnson, Michael P. Kirsch, et al. "Job Corps Process Study: Final Report," U.S. Department of Labor and IMPAQ International, June 2014.
This report assesses the effectiveness of the Jobs Corps program and of particular program policies, such as the payment of stipends, guidance from mentors, and continued services after the primary program ends.

Bloom, Dan. "Programs and Policies to Assist High School Dropouts in the Transition to Adulthood," *Future of Children*, 20 (Spring 2010), pp. 89–108.
This report reviews evaluated programs for high school dropouts and concludes with recommendations on strengthening current programs, innovating to create new programs, and engaging with youths who have the most need for training and education services.

Curnan, Susan P., Andrew B. Hahn, Lawrence N. Bailis, et al. *Innovating Under Pressure: The Story of the 2009 Recovery Act Summer Youth Employment Initiative: Chicago, Detroit, Indianapolis & Marion County, Phoenix & Maricopa County*, The Center for Youth and Communities, Heller School of Social Policy and Management, Brandeis University, June 2010.
This report takes an institutional perspective on summer youth workforce development and presents case studies focused on public and private partnerships and implementation of best practices.

Deschenes, Sarah N., Amy Arbreton, Priscilla M. Little, et al. "Engaging Older Youth: Program and City-Level Strategies to Support Sustained Participation in Out-of-School Time," Harvard Family Research Project, Public/Private Ventures, and the Wallace Foundation, April 2010.
For this report, the authors studied programs with high participation and retention to determine what factors help foster engagement with older youths and how institutions and governmental agencies can encourage policies that lead to high participation.

Heinrich, Carolyn J., and Harry J. Holzer. "Improving Education and Employment for Disadvantaged Young Men: Proven and Promising Strategies," Urban Institute Research Report, May 2010.
Programs for improving employment outcomes of different groups of disadvantaged youths are identified in this report that emphasizes process, results, and thorough evaluation.

Hossain, Farhana, and Dan Bloom. "Toward a Better Future: Evidence on Improving Employment Outcomes for Disadvantaged Youth in the United States," MDRC, February 2015.
This paper presents factors that affect youth unemployment, provides evidence on programs that target different groups of youths, and emphasizes the importance of engaging and partnering with private employers.

Kemple, James J., and Cynthia J. Willner. "Career Academies: Long-Term Impacts on Labor Market Outcomes, Educational Attainment, and Transitions to Adulthood," MDRC, June 2008.
This report presents findings from an in-depth study of Career Academies, a program that combines academics and career development opportunities for youths. The study used an experimental methodology that found significant differences in labor market outcomes between treatment and control groups.

Ross, Martha, Carolyn Gatz, Richard Kazis, et al. "Unemployment Among Young Adults: Exploring Employer-Led Solutions," Metropolitan Policy Program at Brookings, July 2015.
This report analyzes youth unemployment through the lens of both supply and demand within the labor market and concludes that stakeholders from a diverse group of institutions must work together to address issues on both sides of the market.

"Youth and Work: Restoring Teen and Young Adult Connections to Opportunity," The Annie E. Casey Foundation Policy Report, Kids Count, March 2012.
This report offers comprehensive national and historical perspectives on youth employment issues and concludes with a case study and recommendations for addressing these issues.

Federal Reserve Bank of Philadelphia

CASCADE: NO. 90, WINTER 2016

Message from the Community Affairs Officer

By Theresa Y. Singleton, Ph.D., Interim Senior Vice President of Corporate Affairs and Community Affairs Officer

The Community Development Studies & Education (CDS&E) Department has focused on a range of issues related to workforce development in recent years. Through our initiatives, we have put a particular emphasis on the workforce development needs of young people. We recognize the importance of making investments in human capital and how these investments will result in long-term individual success and regional economic growth.

Theresa Y. Singleton, Ph.D., Interim Senior Vice President of Corporate Affairs and Community Affairs Officer

Earlier this month, in partnership with the Cleveland Fed and the Annie E. Casey Foundation, we hosted Bridging the Gap: Promising Approaches and Emerging Practices for Addressing Youth Unemployment. The event, which highlighted apprenticeships and other employer-led strategies, is available for viewing.

This edition of *Cascade* features some of the latest government, foundation, and nonprofit initiatives to respond to the vast workforce development needs of young people from 16 to 24 years of age, particularly “opportunity youth” — those who are neither working nor in school. Many of these initiatives seek greater involvement from the private sector to provide meaningful pathways to jobs and careers.

Apprenticeships, which combine on-the-job training and other related training and instruction, are highlighted in this issue as an important model to address youth unemployment. Registered apprenticeships (RAs), authorized under federal legislation enacted in 1937, have traditionally been used in construction and the skilled trades, but RAs are now being expanded to high-growth industries such as information technology (IT), health care, and advanced manufacturing. There is also much to learn from emerging approaches being implemented overseas. Just this past summer, the U.S. Departments of Labor, Commerce, and Education signed agreements with their counterpart agencies in Germany and Switzerland to work together and share information on apprenticeships and career and technical education.

Other articles in this issue focus on the importance of job quality, reflect on other employer-led strategies to address youth unemployment, and provide a comprehensive overview of opportunities to bridge workforce partnerships in IT. We also highlight research on efforts to assist disadvantaged young men of color, many of whom who have experienced high unemployment rates.

As we look toward 2016, CDS&E is considering new ways to engage in initiatives that address the workforce development challenges facing young people throughout the Third Federal Reserve District and nationwide. Please contact our team if you have opportunities to partner in this area.

I wish you a happy holiday season and look forward to connecting in the new year.

Theresa Y. Singleton