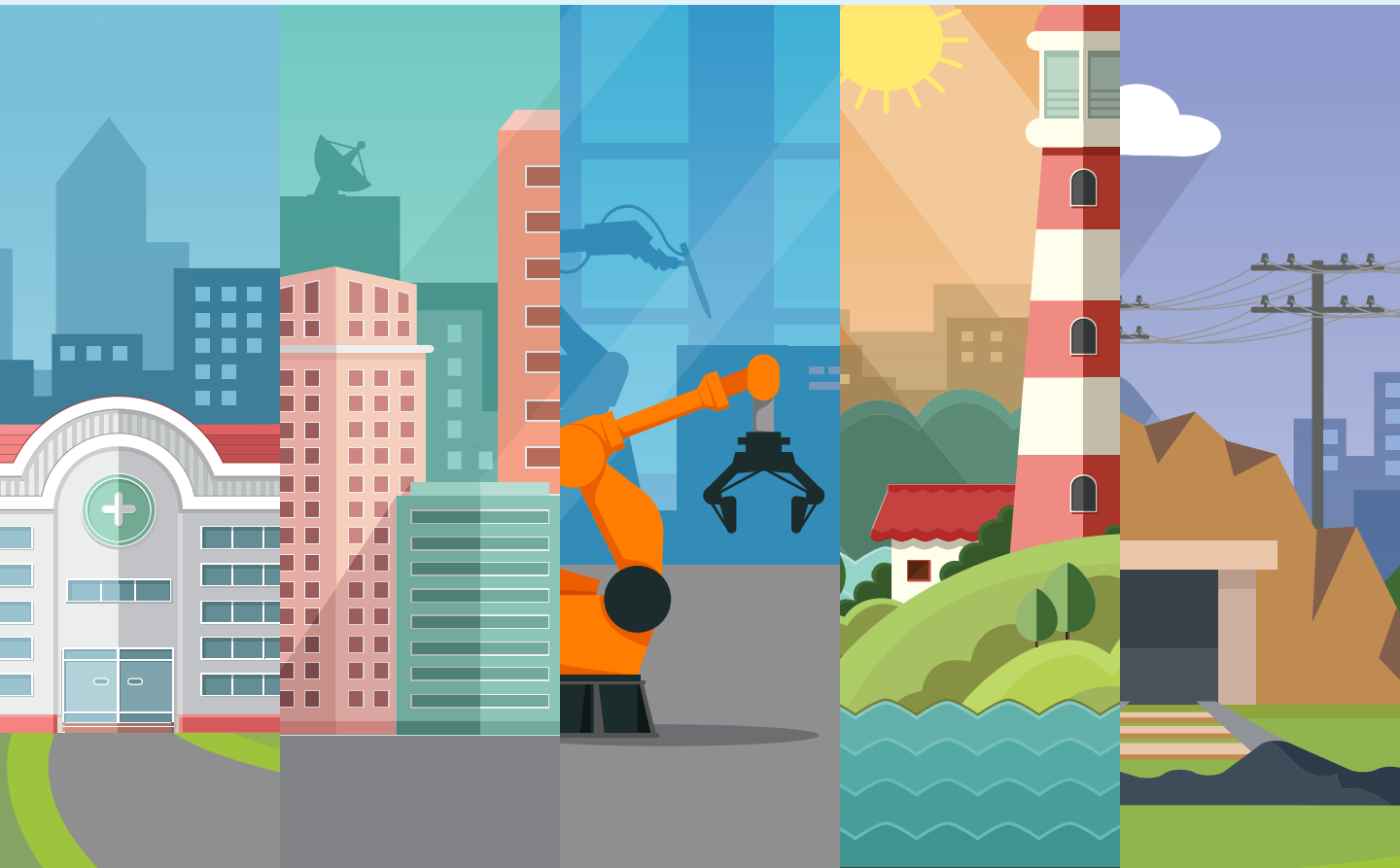


[ CONNECTING EMPLOYERS, EDUCATIONAL INSTITUTIONS, AND WORKERS ]

# Addressing Employment Needs through Sector Partnerships:

*Case studies from across the Federal Reserve's Fourth District*



FEDERAL RESERVE BANK *of* CLEVELAND

# Addressing Employment Needs through Sector Partnerships:

*Case studies from across the Federal Reserve's Fourth District*

## Contents

Acknowledgments – *page 1*  
Foreword – *page 3*



### Case Study 1 – *page 5*

Addressing the Needs of Health Care Employers:  
Tri-County Health Care Industry Partnership



### Case Study 2 – *page 13*

Building a Pipeline of IT Talent in Northeast Ohio:  
Regional Information Technology Engagement (RITE) Board



### Case Study 3 – *page 21*

Preparing for Careers in Advanced Manufacturing:  
West Central Ohio Manufacturing Consortium



### Case Study 4 – *page 31*

Navigating Employer Needs:  
Skills for Life Marine Mechanics Training Program



### Case Study 5 – *page 39*

Transitioning Workers from Coal to Other Careers:  
Hiring Our Miners Everyday (HOME) Program

# Acknowledgments

The Community Development Department at the Cleveland Fed gratefully acknowledges the following individuals for contributing their time, knowledge, and insights to inform the five case studies in this publication.

## TRI-COUNTY HEALTH CARE INDUSTRY PARTNERSHIP

### **Mary Salony**

Director of Planning and Grant Coordination/Equal Opportunity Officer, Tri-County Workforce Investment Board, Inc.

### **Susie Tack Beardsley**

Owner, Quality Life Services; Chair, Butler County Health Care Consortium

### **Kimberly Doms**

Director of LPN Program, Lenape Technical School; Chair, Armstrong County Health Care Consortium

### **Larry S. Garvin**

Vice President, Career T.R.A.C.K., Inc., of Butler County, Pennsylvania

### **Kelly Howells**

Owner, Anew Home Health Agency, Inc.; Co-chair, Indiana County Health Care Careers Consortium

### **Jennifer Pompelia**

Director of Admissions, Kittanning Care Center; Vice Chair, Armstrong County Health Care Consortium

### **Diana Rupert**

Director, LPN Program at Indiana County Technology Center; Co-chair, Indiana County Health Care Careers Consortium

## REGIONAL INFORMATION TECHNOLOGY ENGAGEMENT (RITE) BOARD

### **Courtney DeOreo**

Director, RITE Board; Manager, Sustainability and Special Initiatives, Lorain County Community College (LCCC)

### **William Blausey Jr.**

Senior Vice President and Chief Information Officer, Eaton Corporation; Chair, RITE Board

### **Roy Church**

President, Lorain County Community College (retired)

### **Jodi Tims**

Chair, Computer Science and Mathematics Departments, Baldwin Wallace University; Member, RITE Board

## WEST CENTRAL OHIO MANUFACTURING CONSORTIUM (WCOMC)

### **Doug Durliat**

Director, West Central Ohio Manufacturing Consortium

### **Mary Jane Bacome**

Education Coordinator, Western Ohio Regional Treatment and Habilitation (WORTH) Center

### **Ann Benfield**

Industrial Training Manager, Apollo Career Center

### **Jacqueline Fox**

Chief Executive Officer, Lima Allen Council on Community Affairs (LACCA)

# Acknowledgments *(continued)*

**Marilyn Horstman**

Deputy Director of Social Services, Allen County  
Department of Job and Family Services

**Matthew Kinkley**

Executive Director, Workforce, Economic Development and  
Continuing Education, Rhodes State University (retired)

**Michele Martz**

Human Resources Manager, Dana Holding Corporation

**Amy Sackman Odum**

Community Development Director, City of Lima, Ohio

**Rick Turner**

Director of Adult Programs, Apollo Career Center

## SKILLS FOR LIFE MARINE MECHANICS TRAINING PROGRAM

**Kerrie Carte**

Planning and Development Coordinator, WSOS  
Community Action Commission, Inc.

**Ken Alvy**

President, Lake Erie Marine Trades Association

**Hon. Steven Arndt**

State Representative; former Ottawa County Commissioner

**Tim Fick**

Service Manager, Happy Days Boating

**Rhonda L. Hogrefe**

Adult and Continuing Education Supervisor, Penta  
Career Center

**Greg Sharp**

Program Instructor, Penta Career Center

## HIRING OUR MINERS EVERYDAY (HOME) PROGRAM

**Bridget Back**

Research and Program Effectiveness Director, Eastern  
Kentucky Concentrated Employment Program (EKCEP)

**Jared Arnett**

Executive Director, Shaping Our Appalachian Region, Inc.  
(SOAR)

**Jennifer Bergman**

Director of JobSight Services, Eastern Kentucky  
Concentrated Employment Program (EKCEP)

**Sandi Curd**

Promise Zone Coordinator, Kentucky Highlands  
Investment Corporation

**Owen Grise**

Deputy Director, Eastern Kentucky Concentrated  
Employment Program (EKCEP)

**Jennifer Lindon**

President, Hazard Community and Technical College

**Melissa Quillen**

Regional Program Manager, Commonwealth of Kentucky

**Chuck Sexton**

Chief Executive Officer, One East Kentucky

**Jeff Whitehead**

Executive Director, Eastern Kentucky Concentrated  
Employment Program (EKCEP)

## Foreword

In June 2015, the Federal Reserve Bank of Cleveland's Community Development Department published "Focused on the Workforce. . . but Why?," an article detailing ten reasons the Cleveland Fed is committed to understanding workforce development issues, with four reasons related to education, skills, and wages. Together, these four pointed us in the direction of investigating what is commonly termed the "job-skills mismatch," something we've heard about repeatedly from business contacts and community-based groups alike. Given the community development team's focus on issues facing low- and moderate-income people and communities, we have approached this issue generally from the perspective of the jobseeker. As such, we have conducted research on the prospects of non-college-bound youth that examined patterns of employment, wages, and educational attainment in the Fourth District (which includes all of Ohio, western Pennsylvania, eastern Kentucky, and the panhandle of West Virginia). We also completed an analysis of "opportunity occupations," or occupations that pay a decent wage and are accessible to individuals without a four-year degree.

As we delved further into workforce development issues, it became obvious we needed to broaden our scope from the jobseeker perspective and try to better understand the larger workforce system. In particular, we wanted to learn from the key participants what was working to help address the job-skills mismatch, and why. To that end, we met with many state and local agency officials, employers, grant makers, training-agency staff, and community college administrators to learn about the promising programs and efforts in which they were involved. We heard repeatedly about the successes of sector-based initiatives that meet the needs of employers and jobseekers alike. Sector-based partnerships typically involve a particular industry's employers' collaborating with representatives from local and regional economic development offices, educational institutions, and nonprofits that serve, among others, individuals seeking employment in order to meet the needs of the jobseekers, the industry, and the region's economy. Evaluations of sector-based training programs have identified successful outcomes for both workers and employers in the form of increased wages, reductions in turnover, and increased productivity.

So it was not surprising to us that sector-based initiatives ended up being a large component of the most recent federal

Figure 1



workforce development legislation, the Workforce Innovation and Opportunity Act (WIOA) enacted in 2014 and whose final regulations were made publicly available on June 30, 2016.

With the noted success and potential interest in sector-based training programs, the community development team sought to identify for qualitative review sector-based initiatives within the Fourth District. The focus of our review was to learn about the how and the why these initiatives came about, the lessons that have been learned along the way, and the successes the partnerships have achieved. Our first step was finding multiemployer, sector-based initiatives in order to get a better sense of the challenges each faced, narrowing our focus to those initiatives that have been in existence for at least two years. We eliminated several that had been written about already or, in some cases, evaluated.

Ultimately, we chose to review and write case studies about five distinct initiatives occurring throughout our District (see **Figure 1**): one focused on health care in western Pennsylvania; the second on information technology (IT) in the northeastern Ohio region; the third, advanced manufacturing in central Ohio; the fourth, marine mechanics in northwestern Ohio; and the fifth on a program for retraining coal miners in eastern Kentucky. Four of the five provide direct training to workers, while the IT initiative is focused on increasing and enhancing the pipeline of IT talent through deep employer engagement with post-secondary, secondary, and primary educational institutions.

In each of the case studies, we highlight how the initiative is structured and operated so that it identifies and meets the needs of employers and jobseekers in a given region.

## In all the partnerships, the employers' engagement is active and substantive. Employers go beyond attending meetings; they are also involved in advising on curriculum and have direct engagement and interaction with the students.

---

To understand how these five efforts came about and how they have evolved, we interviewed a number of individuals including employers, training providers, educators, and program administrators. What we learned was that while each of these efforts is structured differently, each is also focused on making and enhancing connections across a number of entities to ensure a well-prepared workforce and a responsive workforce system.

As you read each case study, you will note that sector-based initiatives come in many forms and structures, with each partnership's having its own goals and having evolved in its own way, whether by design or happenstance. Further distinctions abound: One program is geared toward retraining coal miners to transition to other careers; the IT initiative, also not a traditional sector-based program, works across multiple industries to meet IT demands in the region; the health care partnership is focused on incumbent worker training; and the marine mechanics program trains entry-level workers.

Beyond the distinctions among the examples, you'll also note some important similarities across all five initiatives. The first, and probably most important, is robust employer engagement. In all the partnerships, the employers' engagement is active and substantive. Employers go beyond attending meetings; they are also involved in advising on curriculum and have direct engagement and interaction with the students. This active engagement isn't easy, as employer-based staff members have day jobs and must balance their personal involvement in these efforts with their professional responsibilities. That said, given the economic realities apparent in these case studies, most employers are compelled to be involved in these sector partnerships. Further, we learned from our reviews that it's most helpful to engage individuals whose positions allow them to speak on behalf of their employers, at a minimum, if not also on behalf of their industries in general. Employer engagement and leadership are critical components of each initiative, the importance of which cannot be overstated.

Another common essential element of these sector-based initiatives is relationship and trust building among employers and across partners. The creation of trust dispels the concerns of working alongside competitors and yields the highest level of alignment in order to deliver quality training and services. Our case studies also suggest that a strong intermediary can do a lot to promote relationship and trust building. The sustained relationships among the many partners involved allow the initiative to evolve and grow while providing each participant a reason to remain committed to the collective effort.

Finally, each of our five case studies points to the incalculable value of employees' having soft skills in addition to the appropriate technical skills. A jobseeker's lack of soft skills can be a significant barrier to employment despite his or her possessing the technical requirements for a position. Teamwork and conflict resolution in the workplace are as critical for success as are sound mathematical and technical skills. Each case study also has its own set of employment barriers to address before jobseekers can be hired.

While sector-based initiatives have been around for decades, WIOA places a renewed emphasis on these strategies as a means to effectively align education and job training with employer needs. The case studies we present here are examples of sector partnerships that coalesced out of need and that continue because the partners have found a way to accomplish that alignment. While the time commitment and funding constraints can indeed pose challenges, those people we interviewed remain dedicated to improving the connections among employers, educators, and workers in their regions.

Paul Kaboth  
Vice President *and* Community Development Officer  
Federal Reserve Bank of Cleveland  
August 2016

[ CONNECTING EMPLOYERS, EDUCATIONAL INSTITUTIONS, AND WORKERS ]

# Addressing the Needs of Health Care Employers:



*Tri-County Health Care Industry Partnership*



CASE STUDY 1



# Overview

A critical nursing shortage in western Pennsylvania in 2002 drove the creation of the Tri-County Health Care Industry Partnership, which comprises three employer-led consortia in counties to the north and east of Pittsburgh.<sup>1</sup> Early that year, health care providers in Indiana County grew increasingly concerned about the shortage of health care workers—in particular, nurses—to fill their employment needs. There simply weren't enough trained health care workers to fill all the positions, which led employers, educational institutions, and human service and workforce development agencies from across Indiana County to gather to discuss the shortage of workers and ways to address it. A follow-up meeting with the Tri-County Workforce Investment Board (WIB) led to a partnership that then applied for a Critical Job Training grant from the Pennsylvania Department of Labor and Industry. In September 2002, the Tri-County WIB was awarded \$225,000 on behalf of the Indiana County Health Care Careers Consortium; that funding was used to train 278 registered nurses, licensed practical nurses, and certified nursing assistants in not just Indiana County, but in Butler and Armstrong counties as well. The grant also paid for seminars to provide continuing education units (CEUs) for both direct-care workers and nursing professionals.

<sup>1</sup>Armstrong County Health Care Consortium, Butler County Health Care Consortium, and Indiana County Health Care Careers Consortium.



*While the need for skilled health care workers that initially brought employers together is still crucial today, equally important is the peer-to-peer learning and problem-solving that takes place when members of the partnership can engage with each other in tackling similar issues in the ever-changing health care industry.*

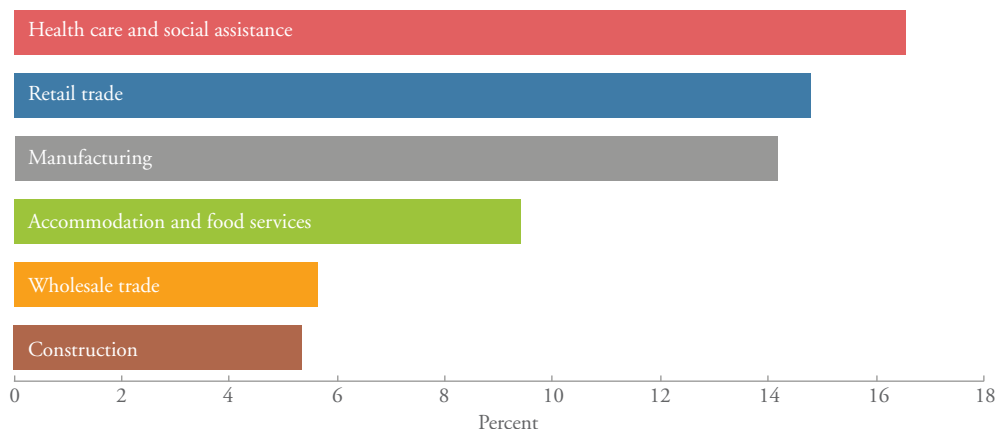


This Critical Job Training grant—which despite being initiated in Indiana County provided resources to health care workers in all three counties—was the impetus for forming the Tri-County Health Care Industry Partnership. In this partnership, the three consortia from Armstrong, Butler, and Indiana Counties work collaboratively to meet the employment and training needs of the health care industry across the region (see **Figure 1**). How? Three ways, primarily: They identify and address common training needs across the region, they engage with school

systems to inform students about jobs in the health care industry, and they focus on efforts to recruit and retain health care workers. And while the need for skilled health care workers that initially brought employers together is still crucial today, equally important according to the six individuals we interviewed is the peer-to-peer learning and problem-solving that takes place when members of the partnership can engage with each other in tackling similar issues in the ever-changing health care industry.

Figure 2

## Employment by industry in the Tri-County Region



Source: Bureau of Labor Statistics, QCEW (2014).

The Tri-County region is home to nearly 350,000 residents, with Butler County the largest at approximately 186,000, followed by Indiana County at 88,000 and Armstrong County at 68,000.<sup>2</sup> As illustrated in the graph above, nearly 17 percent of the region's employment is found in the health care and social assistance industries, followed by retail trade and manufacturing (see **Figure 2**).

### Partnership Structure

The Tri-County Health Care Industry Partnership brings together health care employers, educational institutions, and workforce development agencies to address the employment needs of the health care providers in the region. A steering committee comprised of chairs and co-chairs of each county consortium meets quarterly and coordinates the activities of the three counties (see **Figure 3**).

Employers, who make up about 70 percent of the Tri-County Partnership, take the lead in identifying the training needs of the health care sector within the three-county area. While each county consortium may have a different mix of members, all include employers, educational institutions, the Tri-County WIB, and the county's PA CareerLink. The Tri-County WIB is a critical player in the partnership structure, serving as both the fiscal agent and coordinating body of the three consortia. The WIB also conducts an annual assessment of the employers in the partnership to identify training needs for the coming year.

By design, the funds for training provided through Pennsylvania's Industry Partnership Worker Training Grant can be used for incumbent workers only,

with few exceptions. This stems from the fact that although incumbent workers comprise the majority of the labor force, most of the workforce dollars were geared toward those without jobs. In 2005, Pennsylvania changed its workforce development strategy: That year, the Pennsylvania General Assembly allocated funds to establish employer-led partnerships in key industries throughout the State that would focus mainly on enhancing the skills and advancement opportunities of incumbent workers. Health care is one of these key industries.

Since 2005, the Tri-County WIB has applied annually for Industry Partnership Capacity Building and Training Funds on behalf of the partnership; to date the WIB has received about \$1.8 million and has trained more than 4,100 people. In addition to this funding, health care employers in the Tri-County region have contributed nearly \$1.9 million in both cash and in-kind funds. Employers are required to match dollar for dollar the funds provided to the Industry Partnership.

Driven by a desire to provide better care and create more competitive organizations that are attractive to prospective employees, consortium employers provide training opportunities aimed at increasing and enhancing employees' knowledge and skills, with the goal of improved patient care. All of the workers trained through the industry partnership receive a credential, a certificate, or CEUs.

Although the partnership's training needs vary by year, much of the training dollars are used for certified nursing aides (CNAs) because of high demand.

<sup>2</sup>Source: U.S. Census Bureau, 2010–2014 American Community Survey 5-Year Estimates

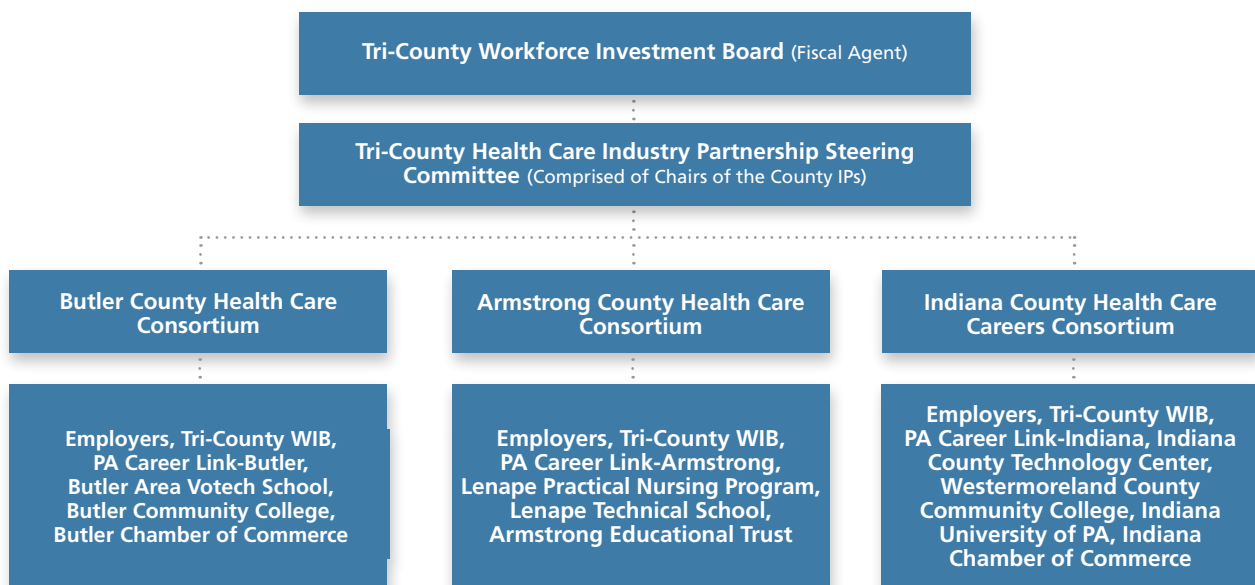
The Industry Partnership grant also allows employers to provide “innovative” training for purposes beyond what is required by state and federal regulations, including employee engagement, leadership and management for nurses, and best practices for employee retention. Employers believe this kind of training leads to improved patient care as well as improved employee retention and satisfaction. If not for the partnership funding, say several of the partnership’s employers, it is unlikely this type of training would take place.

Educational institutions play an important role in the partnership as well. The community colleges and vocational and technical schools in the counties served by the consortia provide training for health care workers, develop curricula to meet employer needs, and engage with school systems to promote health care careers. In addition, several of the partnership members serve on advisory committees of the vocational and technical schools that offer health care-related programs, thus providing direct input about the specific skills and training needed to address industry demands. Advisory committee meetings also provide an opportunity for employers to relay to the educational institutions the value and importance of “soft skills,” such as dressing appropriately and showing up on time for interviews. Working through the Butler County Area Vocational-Technical School, members of the Butler consortium have done mock interviews with students to address issues raised by employers. In addition, members of the consortium will assess a student’s clinical skills to help him or her be better prepared in advance of meeting with prospective employers when ready for employment.

Similarly, consortium members visit local middle and high schools to inform students and guidance counselors about the many career opportunities available in the health care fields. They advise students of the courses that will facilitate success in the health care sector—including biology, chemistry, and algebra—and how these courses are essential not just for entering the field, but for progressing in it as well. They also encourage students to participate in career fairs.

Additional partnership members include county representatives from the PA CareerLink system, who provide services to both employers and jobseekers. Employees from the CareerLink offices in Armstrong, Butler, and Indiana Counties inform members of regional labor market trends, as well as provide information regarding who is looking for work in the health care field and with what skill sets. Through job clubs, the CareerLink offices provide information to jobseekers about job searching techniques, interviewing skills, and workplace etiquette skills, which employers we interviewed indicate are crucial for employment. Job clubs provide a supportive environment in which jobseekers can engage with others looking for work. Given that Industry Partnership funds can be used for incumbent training only, employers can use on-the-job-training dollars to get new hires up to speed, a valuable benefit to the employers. Another tool for employers provided through CareerLink is its Job Gateway online portal that allows employers to post their job openings and jobseekers to post their resumes. Employers can search this portal to locate jobseekers in the area with specific skills; for their part, jobseekers can scan job postings for employment opportunities.

**Figure 3**  
*Organizational structure of the Tri-County Health Care Industry Partnership*



Educational institutions play an important role in the partnership as well. The community colleges and vocational and technical schools in the counties served by the consortia provide training for health care workers, develop curriculum to meet employer needs, and engage with school systems to promote health care careers.

---

## Successes and obstacles

The regional focus of this partnership facilitates interaction among the employers, educational institutions, and workforce development organizations to address the specific needs of the local economy. The partnership structure also allows for economies of scale, according to those we interviewed. For example, engaging with multiple employers allows for more efficient use of training funds and employee time: The more workers that are trained, the lower the per-worker training cost and the greater the likelihood that training can remain local. Staffing, retention, time commitment, and funding are ongoing challenges the consortium members face; however, those we spoke with cited the collaboration, learning, and problem-solving that take place among members as successes.

### STAFFING NEEDS AND RETENTION

Without exception, everyone we interviewed mentioned that filling entry-level positions remains a challenge, specifically for certified nursing assistants (CNAs). Long-term-care facilities, in particular, rely on CNAs to fulfill the needs of their aging patients. Consortium members pointed to several factors contributing to the CNA shortage: significant turnover in the occupation, the physical demands of the job, and the relatively low pay. With state training dollars available only for incumbent workers, some are training for and transitioning to CNA roles from other positions and experiencing wage gains. But with such high demand for CNAs throughout the Tri-County region, training incumbent workers is not sufficient to fill the need. So employers in the partnership provide scholarships both to train those interested in becoming CNAs as well as to fill the demand for other health care workers, including RNs and LPNs.

Scholarships are one way the consortia provide additional training to meet staffing needs for in-demand occupations. Each county within the Tri-County Industry Partnership raises money for scholarships through annual employee recognition events. These events are considered a success for the Tri-County Partnership in a number of ways.

First, the events raise funds for scholarships to train those interested in entering the health care field or moving up the career ladder. Second, publicly recognizing employees for their dedication and commitment to serving the health care needs of the community contributes to employee retention. Third, the events are an opportunity to let the community know about the industry partnership and to engage with other employers interested in being part of the consortium.

The consortium members also leverage each other's expertise to meet training and staffing needs. For example, the co-chair of the Indiana County Health Care Careers Consortium, Diana Rupert, who directs the LPN program at Indiana County Technology Center (ICTC), reported that consortium members' clinical facilities provide sites for student clinicals, offer job shadowing opportunities for her students, and pair students with nurse managers when doing rotations. Both LPNs and RNs receive nurse's aide training during their schooling, which allows them to be employed as CNAs. Students can assist clinical facilities when staffing is an issue and their school schedules permit.

While members of the Tri-County Partnership work together to provide training across the region, each of the three consortia also works within its respective county to address specific health care staffing needs. According to Diana Rupert, when Westmoreland County Community College (WCCC) began offering LPN training at a lower cost than Indiana County Technology Center (ICTC), the latter college stopped producing LPNs. But in 2005, WCCC began focusing on RN training, which left a void for educating in-demand LPNs in the area. With persistence, funding from the Indiana County consortium, and support from Westmoreland, ICTC restarted its LPN program. Health care employers are also providing scholarships for employees to attend Indiana County Tech Center's LPN program. Further, to help facilitate career progression, ICTC's vocational training program for LPNs includes college courses as part of the curriculum. For example, students wanting to pursue an RN degree can complete some of their required courses through ICTC before entering a community college.

### TIME COMMITMENT

Time constraints are an issue for many involved with the Tri-County Partnership. With one exception—Mary Salony, director of planning and grant coordination at the Tri-County WIB, who is paid for the administrative support she provides to the Tri-County Partnership—the business owners, directors of educational programs, and admission directors we interviewed are volunteers. The time they spend attending consortium meetings, reviewing applications for scholarships, assessing training proposals, and planning events is in addition to their full-time day jobs and is all voluntary. Yet everyone we spoke with believes the partnership is well worth their time and effort. They mentioned the ability to engage with others who are struggling with similar employment challenges, discussing ways to adapt to an ever-changing and more complex health care delivery system, and the opportunity to share training resources as benefits to the partnership.

Networking and knowledge sharing among members in particular were cited as key benefits to the partnership. “Health care is getting increasingly complex,” observed Susie Tack Beardsley, chair of the Butler County Health Care Consortium and an owner of several nursing homes. “Just when you think it can't get more complicated, it does, so you can try to deal with issues in a vacuum or work with others in a similar predicament.”

Notably, those in the partnership choose to work together despite in some cases being competitors. Noted Kelly Howells, co-chair of the Indiana Consortium and owner of a home health agency, “We are competitors in the room, but having a forum where we can vet ideas and learn how others addressed issues one of us is now facing is so important.”

### FUNDING

Another constraint interviewees mentioned is funding. Noted one, “Funding was not the main priority in the beginning—it was learning about employers' workforce needs. We were able to secure funding [only] after we began working together and could identify these needs.” Given the ongoing demand for skilled health care workers, the partnership is continuing to identify ways to raise additional revenue for training. Two of the three county consortia have nonprofit status, which allows for tax-deductible donations and facilitates grant funding where nonprofit status is a prerequisite. This status, relatively new for the consortia, indicates the partnership is thinking about sustainability, especially with decreases in funding from the state.

### COLLABORATION

The commitment of the Tri-County steering committee to the partnership is evident in the length of service of many of its members. A few have been engaged since 2002; others have been involved for almost ten years. This tenure and continuity in leadership has contributed greatly to the trust, collaboration, and problem solving among the consortium members.

It should be noted that not every employer in the three consortia benefits directly from a given training. Members of the steering committee decide what training is most needed for the employers in the region as a whole; these selections may benefit an individual employer in one year, but not in other years. This impartial approach speaks to the partnership's focus on meeting the workforce needs of the industry, versus those of individual employers.

As Susie Tack Beardsley, the longstanding chair of the Butler County Consortium, noted, “These meetings could become gripe sessions among members, but we keep our focus on getting to solutions.” Beardsley mentioned the importance of having members who are decision makers. “Membership is not about making contacts or marketing services,” she noted. “It *is* about tackling similar regulatory issues and identifying training and staffing needs.”

# Conclusion



---

A collective approach allows the partnership to identify common training needs, allocate limited resources, and provide expertise for the benefit of the health care industry in western Pennsylvania.

While an acute shortage of nurses is no longer the pressing issue it was when the partnership formed, the need for skilled health care workers remains strong in the Tri-County region. Kimberly Doms, co-chair of the Armstrong Consortium and the director of the Licensed Practical Nursing program at Lenape Tech, insisted that demand remains high: “Employers come in to actively recruit from my graduating classes. Nearly half of my students were hired before even graduating [this past] September.”

The critical worker shortage is one that no member of the partnership wants repeated. “By talking with others in the field, we can stay on top of employment needs of the industry now,” stated Doms. With more than ten years behind it, the partnership remains committed to meeting the health care needs of the region through training, education, and increasing interest in the field. Doing this collectively rather than separately has allowed the partnership to identify common training needs, use the limited training resources more efficiently, and provide in-kind staff expertise to each other through mentoring, job shadowing, and teaching.

But time remains a challenge. “We can’t move at lightning speed because we all have full-time jobs,” observed Doms, who then added, “We find the time because what we do matters.” Enhancing employees’ skills through training, securing the funding to do so, and collectively identifying and solving issues impacting health care services in the region are all accomplishments of the partnership. According to the employers we spoke with, having better-trained health care staff positively impacts productivity and increases the quality of patient care. While admittedly difficult to measure, Diana Rupert said, “I truly believe the work of the health care consortia has positively impacted anyone receiving health care services in this region.”

---

Author *Lisa Nelson* is the Community Development Advisor at the Federal Reserve Bank of Cleveland.

[ CONNECTING EMPLOYERS, EDUCATIONAL INSTITUTIONS, AND WORKERS ]

# Building a Pipeline of IT Talent in Northeast Ohio:



*Regional Information Technology Engagement (RITE) Board*



CASE STUDY 2



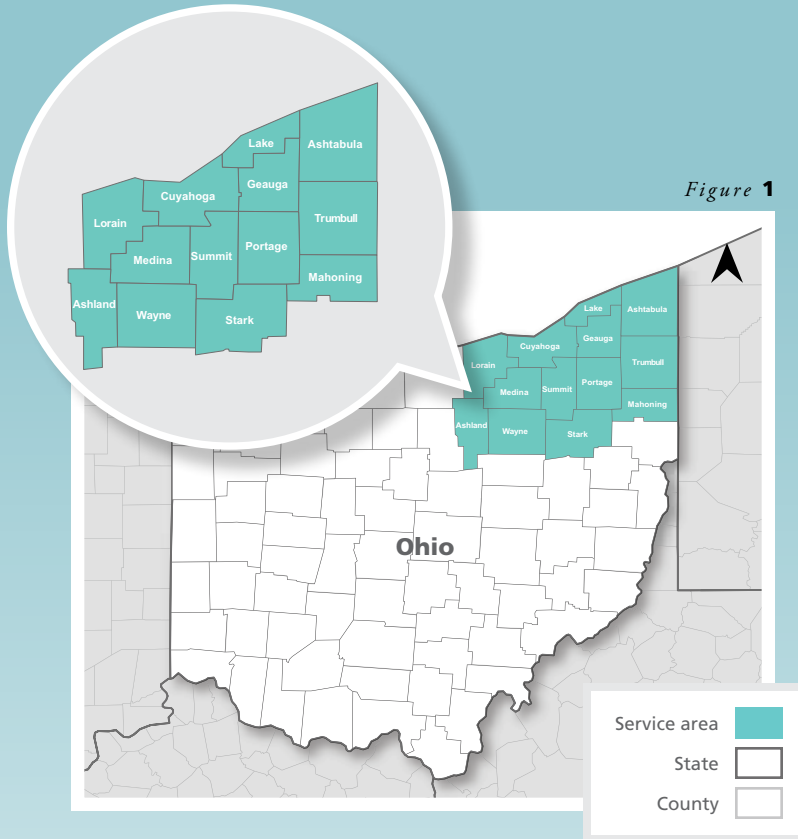
# Overview

In Northeast Ohio, large gaps between the supply of and demand for Information Technology (IT) talent drove the establishment of the Regional Information Technology Engagement (RITE) Board in 2009. A December 2007 report commissioned by NorTech—a Cleveland technology-based economic development organization—found thousands of unfilled IT positions in Northeast Ohio<sup>1</sup> in industries that range from manufacturing and health care to banking and insurance. According to the report, these vacancies were the result not only of an insufficient supply of IT workers, but also of a lack of IT workers with specific skill sets employers were seeking. These challenges in the region’s IT workforce prompted the Ohio Skills Banks (OSB)—an initiative established in 2009 under former Ohio Governor Ted Strickland—to include IT in its efforts to promote regional collaboration among educational institutions and employers.

<sup>1</sup>Northeast Ohio Information Technology Workforce Report. Prepared for NorTech (Elyria, OH: Joint Center for Policy Research Public Services Institute at Lorain County Community College, 2007). Report can be accessed at <https://www.lorainccc.edu/NR/rdonlyres/EF925A35-4DF6-4FD0-822E-8D14DBF04E11/2842/NortheastOhioITWorkforceReport1.pdf>.



*As a regional collaboration, the RITE Board engages with high schools, economic and workforce development entities, and community-based organizations, which serve as conduits for information and programming related to opportunities in IT.*



Under the guidance of the OSB, a series of meetings was held in the summer of 2009. Lorain County Community College (LCCC) brought together regional employers of IT workers to discuss gaps in critical occupations and skill sets and identify ways to respond to these gaps. In the room were executives from Eaton Corporation, Sherwin-Williams, Hyland Software, Progressive Insurance, Cleveland Clinic, and American Greetings, among others. Similarly, institutions of higher education—including Baldwin Wallace University, Cuyahoga Community College, Lakeland Community College, Lorain County Community College, and the University of Akron—met to discuss the content of their IT programs and how the coursework aligned with employers’ needs. The intent of these meetings was to identify more specificity around employers’ IT skills needs and to create a process to better inform educational institutions about these needs.

Following these convenings, an employer-led group agreed it was important to continue working together with a focus on developing solutions to the skills gap, and the RITE Board was established in November 2009. Membership is comprised mainly of employers, with representation from higher education and administrative support provided by LCCC. As a regional collaboration, the RITE Board engages with high schools, economic and workforce development entities, and community-based organizations, which serve as conduits for information and programming related to opportunities in IT. The RITE Board has evolved since its inception, but its purpose remains the same: to develop a pipeline of IT talent that meets the needs of the region’s employers.

## Partnership Structure

The RITE Board membership comprises senior IT executives from 13 companies; one higher education representative; a representative from OHTec, a membership organization of employers of IT talent across the region; and LCCC, which serves as the fiscal agent and coordinator of the Board’s activities. In addition to the community colleges and universities mentioned earlier, Case Western Reserve University, Cleveland State University, and Kent State University are also partners and regularly attend and engage in RITE Board meetings, programs, and initiatives. The work of the RITE Board is accomplished through program action teams and ad hoc committees comprised of employers, educators, and LCCC. The Board provides overall strategic direction for the program and initiatives undertaken by the action teams and committees. With guidance from the executive committee, members of the action teams are responsible for the planning and execution of programs designed to both engage high school students in IT career exploration and connect college students to experiential learning opportunities with the region’s employers. Activities and programs of the RITE Board are funded through membership dues from employers, program sponsorships, some philanthropic dollars for targeted efforts, and significant in-kind support.

Since its inception, the RITE Board has instituted a strategic framework called the “APP”—short for Attract–Prepare–Place—which guides Board members’ efforts to build the pipeline of IT talent in Northeast Ohio. Engagement with

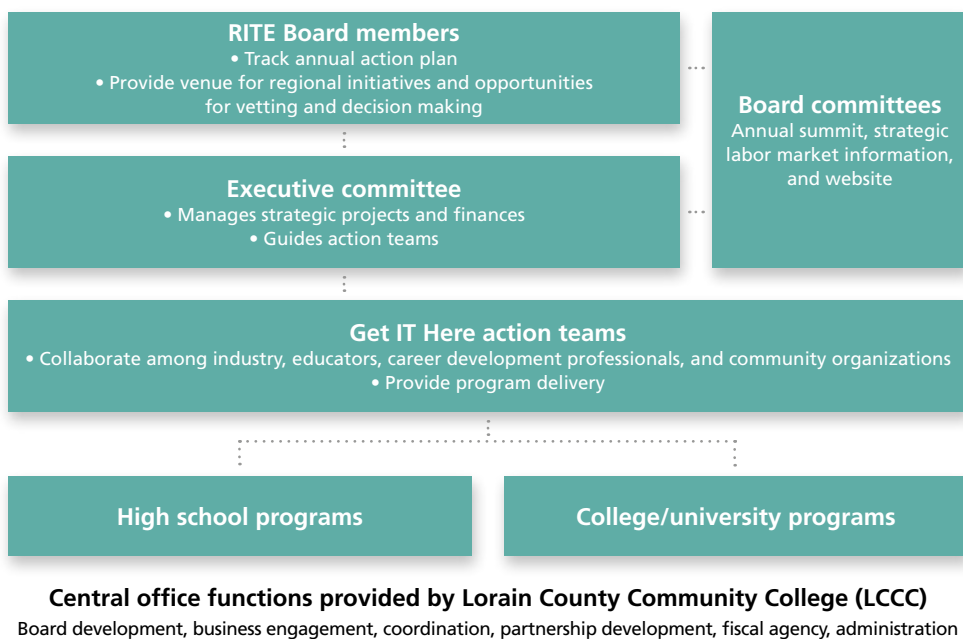
a broad range of IT employers, educational institutions, high schools, economic development organizations, and funders who work with the RITE Board to implement the programs and activities aimed at increasing the supply of IT talent in the region plays an integral role in the success of this framework (see **Figure 2**).

## Attract–Prepare–Place

The “attract” component of the APP strategy is geared toward promoting engagement among high school students, employers, and educators from regional colleges and universities. Programs expose high school students to the many opportunities in the IT field throughout the region and what pathways are available to prepare them for entry into the field. During the annual *Get IT Here* summit, which began in 2013, high school students hear directly from employers about IT career choices, college and university IT-related programs, and IT job prospects. RITE employers also host site visits and go into classrooms to talk about the employment opportunities in their companies and what the jobs entail. In 2015, RITE launched a joint program with TECH CORPS, another effort that exposes high school students to the possibilities in the IT field through summer coding camps.

Similarly, RITE cross-promotes programs organized by other partners that engage with high school students through events aimed at growing interest and excitement in the IT field. For example, Hyland Software hosts an annual Innovation Showdown in which teams of high school students from Northeast Ohio work with an IT

*Figure 2*  
*Regional Information Technology Engagement Board*



professional to develop an original application or product, present it to a panel of judges, and compete for a prize. Similarly, the CoolTech challenge, an OHTec-sponsored event, encourages students from local high schools to develop a web app or website geared toward addressing a specific need or topic; scholarships are awarded to winners.

The “prepare” component of the strategy focuses on ensuring individuals are acquiring the necessary skills to meet demands in the IT field. Critical to this effort is engagement with the institutions of higher learning in the region. To better inform educators about employers’ needs during the formative stages of the Board, employers utilized the Skills Framework for the Information Age (SFIA), a globally recognized framework for identifying the skill sets and competencies necessary for specific IT roles, in developing detailed job profiles. Employers and university faculty then matched information from the job profiles to curriculum and coursework being taught, with the goal of identifying gaps.

These discussions—which provided universities with additional insights into the skills and competencies employers are looking for in their employees—were not simply focused on alignment and reviewing curriculum. Central to the discussion was the fact that *being prepared* encompasses a range of things, according to Courtney DeOreo of LCCC, including “engaged learning, technical skills, 21st century skills, business acumen, applied work-based learning, experience, and informed career decision making.” Dr. Jodi Tims, Chair of the Computer Science and Mathematics Department at Baldwin Wallace and a RITE Board member, explained, “There was no sweeping change around curriculum; employers trust us with the technical skills. But listening to them was instructive—hearing things like, ‘the [graduates] don’t seem to have good communications or teamwork skills,’ so that I can bring some of that into our coursework.”

According to all we spoke with, engagement between employers and educators through university advisory councils is also critical to making sure educators are aware of the needs of industry. All colleges and universities are required through their by-laws to have industry advisory boards, which are designed to gather insights from employers about skill needs in specific fields. While the advisory boards of some Northeast Ohio colleges and universities were focused on the broader requirements of today’s roles, including but not limited to technical training, others were not as engaged or involved in the programs beyond reviewing curriculum.

The RITE Board encouraged a more engaged role for industry partners and recommended having a chief information officer (CIO) from a major IT employer from the regional Board on each advisory council as a way for universities to hear directly about specific IT skills in demand and which programs to leverage.

At LCCC, Tom Lucas, CIO of Sherwin-Williams, has served as such a link to the College’s RITE LCCC Council since its inception in 2012. Beyond advising on curriculum, this council actively works to engage local high school students and their parents in RITE-sponsored programming. IT professionals from companies that serve on the council serve as guest speakers to expose students to opportunities in the IT field. Several employers offer site visits where students can see firsthand IT jobs in action, as seeing rather than hearing about a job tends to be more compelling. The LCCC council has held two successful UpClose IT events that engage Lorain County 10th and 11th graders around IT education and career pathway opportunities. These efforts complement LCCC’s long-standing “Techno Fridays,” a signature program in which middle-school students can get hands-on learning opportunities in a variety of uses of technology across fields.

“Today, due to the strength of our partnerships with staff and faculty from all of our partners institutions, we are able to reach out and engage employers who serve on their boards and councils,” pointed out DeOreo; “All are encouraged to join RITE’s ProCorps, which is a volunteer program for IT professionals that include direct engagement with kids through such programs as the annual Passport to IT Careers. ProCorps thus enables IT leaders to engage their teams in more professional, community engagement work.”

Another “prepare” as well as a “place” component of the RITE Board strategy involves expanding and improving opportunities for experiential learning, such as through internships, for students and jobseekers. Some of the soft skills IT employers are seeking—for example, effective communication and project management—may be better learned through work-based learning than in the classroom. RITE Board Chair and Eaton Corp. CIO Bill Blausey pointed to increases in internships and co-ops since the RITE Board began. In fact, internships among RITE employers increased from 117 in 2009 to 194 in 2013. “Employers find benefits in having a connection to the pipeline of IT talent through our engagement with universities,” he stated.

Employers also benefit from the increased interaction with educators. Having a connection to the pipeline of talent in the region’s higher-education institutions is essential for them to be able to fill jobs.

### Successes and obstacles

Developing strategies to address the IT talent shortage requires relationship and trust building among employers, educators, and other key stakeholders in the region. The Attract–Prepare–Place framework facilitates this interaction and guides the RITE Board’s strategic direction. The sustained commitment and continued engagement of high-level professionals, who volunteer their time, is considered a successful element of this effort. The programming that has been developed to engage high school students is considered an achievement by both employers and educators alike. Challenges include the time commitment for Board members and funding.

### HIGH SCHOOL PROGRAMMING

Board members see engagement with high school students as critically important to growing the number of students interested in IT in the region. According to those we interviewed, the increased number of high schools and students participating in both RITE Board-sponsored and partner-sponsored events points to the success of this component of the program. The focus on high school

and even middle school students grew out of the realization that there appeared to be a lack of awareness about the myriad roles in the IT field, growing demand, and opportunity across all industry sectors, not just the technology sector. To get students excited about the IT field, the RITE Board focuses on providing opportunities for students to hear directly from employers about the many career options and job prospects.

Figure 3  
High-growth, High-wage IT Occupations in Northeast Ohio

	High-growth 2012–22	High-wage	
Computer and Information Systems Managers	12.1 %	\$ 53.00	
Computer Network Architects	12.9 %	\$ 47.29	
Computer Occupations, Other	2.6 %	\$ 37.98	
Computer Programmers	6.4 %	\$ 29.99	
Computer Systems Analysts	25.8 %	\$ 36.09	
Computer User Support Specialists	18.8 %	\$ 20.14	
Database Administrators	13.0 %	\$ 32.83	
Software Developers, Applications	21.2 %	\$ 35.33	
Software Developers, Systems Software	4.6 %	\$ 41.82	
Web Developers	14.7 %	\$ 27.85	
Network and Computer Systems Administrators	7.5 %	\$ 32.24	

**High-growth occupations** are those with annual statewide job growth ≥ 104 new job openings, or with annual total jobs openings (both growth and replacement) ≥ 264

**High-wage occupations** are those with annual earnings ≥ \$26,083 or hourly earnings of \$12.54 and up

Exceeds 104 annual job openings and annual new job openings exceeds replacement in Northeast Ohio

Sources: Ohio Department of Job and Family Services (August 2015); Economic Development and Employer Planning System (EDEPS), <http://www.edeps.org>.

Employers play an essential role in career exploration and recruitment. “It’s one thing if the president of LCCC tries to extol the values of career choices in IT, but it’s a very different message—and it’s received very differently—if Hyland Software does it,” noted Dr. Roy Church, president of LCCC. “As the users of IT talent, companies can help recruit people into these careers much better than higher education can.” According to those we spoke with, the enrollment in institutions of higher education is simply not enough to fill the demand for workers in IT. By working with the local school systems, the RITE Board is generating interest in IT jobs, with the ultimate goal of filling the pipeline of workers in the region in the longer term. This is an area where Board members believe they are getting some traction. They continue to engage with both schools and employers to expand their reach.

### RELATIONSHIP AND TRUST BUILDING

Relationships developed between employers and educational institutions through the regional board in entities like the RITE LCCC Council and the higher education advisory boards and committees are considered essential to enhancing the IT skills pipeline. One of the key benefits of this structure, according to Dr. Church, is that it “portends a long-term relationship between employers and educators.” Educators will change if they believe the change is warranted or necessary, he stated. “They want their students to succeed, but they need to hear from the users of IT talent [employers] on a regular, ongoing basis.”

Such relationship building does not happen overnight. Dr. Jodi Tims, from Baldwin Wallace University, described it this way: “Education [from a university standpoint] is not just about training someone for a job, but rather it’s about educating them for life and to be leaders.” Developing relationships with more employers in the region and understanding their needs and perspectives, she continued, “allowed us to devise ways to incorporate their needs [into the curriculum] while keeping with our mission.”

Employers also benefit from the increased interaction with educators. Having a connection to the pipeline of talent in the region’s higher-education institutions is essential for them to be able to fill jobs. “We need strong talent in the region,” Bill Blausey stated, “and we would like to hire locally and keep our graduates here. To do this there must be a strong connection between employers and educators in terms of understanding the skills needs in the field.” While there has been an increase in internships and experiential learning opportunities for college students, more are needed. However, these relationships have also

resulted in additional recruitment opportunities for employers looking to hire.

### TIME AND FUNDING

The time commitment was mentioned as a challenge for everyone involved. The RITE Board comprises senior-level executives in companies and universities across the region, and the work they do on behalf of the Board is voluntary. According to those we interviewed, RITE Board members are decision makers for a number of reasons: They oversee hiring and are aware of skill needs; they have access to resources; and they have relationships across the industry that can be leveraged to further the Board’s mission. Given members’ level of responsibility within their respective organizations, finding time to commit is an issue. Despite this challenge, the Board members we spoke with were clear that this work is important and they are seeing successes, particularly with high school students. DeOreo of LCCC—who is lauded by employers as the “glue” keeping the RITE Board on track—provides the backbone support to the effort, including administration, partnership development, coordination, and fiscal oversight. But she too has limited time given her other responsibilities at LCCC. To this point, everyone we interviewed believes it is important to move toward establishing an organization with dedicated staff.

Funding is an issue for this effort, too. Interviewees mentioned the need for increasing and diversifying the funding sources. Currently, the funding comes from employer member dues, some sponsorships, and occasional grants. Notably, the RITE Board’s success in engaging employers has led to additional opportunities for funding. The Board was named the IT lead for a federally funded sector partnership grant administered by the Cleveland–Cuyahoga County Workforce Investment Board (WIB). This job training grant will connect workers to businesses in the IT fields, furthering the RITE Board’s mission to help increase the skills of IT talent. With funding from the Fund for our Economic Future, the RITE Board has also taken a leadership role in implementing Talent NEO, a skills-based hiring pilot—which uses scores from an aptitude test rather than traditional educational credentials—to assess jobseekers’ skills. The RITE Board is engaging with some IT employers to determine whether the skills-based scoring can serve as a proxy for the more traditional education. Through this effort, employers may find additional IT talent. Engaging additional employers and developing partnerships were mentioned as opportunities to increase funding and the reach of the RITE Board’s programs.

# Conclusion



Robust employer participation in the RITE Board is helping this partnership increase the region's pipeline of IT talent.

What brought employers and educators together in 2009 was a critical shortage of IT talent coupled with an insufficient number of college students majoring in and graduating with degrees suited for employment in the high-demand IT field. What keeps them together today is the continued need for IT talent in the region and the recognition that progress has been made toward addressing this shortage through collective action and engaged interactions among all the stakeholders. Collaboration among many of the region's institutions of higher learning and employers has been strengthened through the RITE Board's efforts. The increase in high school students participating in the annual *Get IT Here* summit, the RITE Board's programs, and partner-sponsored events signals growing interest in the field.

Engaging with high school students is seen as critically important, with employers playing an instrumental role in sharing career possibilities. Most of the major employers of IT talent in the region are involved with the RITE Board. Eaton CIO Bill Blausey points to the passion among these employers. "There is tremendous demand for IT talent in the region—just look at the job boards—so spending time on increasing the pipeline and generating more capable students coming out of school is something we can all rally around," he noted. "But we must marshal our resources in a sensible way and focus on those skills most required by companies and organizations in the area."

The RITE Board's efforts require time and funding, both of which were mentioned as challenges. Nevertheless, Board members are committed to the sustainability of this initiative. Looking ahead, members hope to create an organization with dedicated staff that can focus on growing and scaling their efforts. As Dr. Roy Church, LCCC president, said, "Getting people to choose IT careers should start in middle school. We are not going to turn around the supply chain in a short period of time; this is a 10-year proposition." He credited employers with the progress that is underway: "The commitment and energy of IT leaders on this Board is exactly what's needed to accomplish this goal of increasing the supply chain."

Author *Lisa Nelson* is the Community Development Advisor at the Federal Reserve Bank of Cleveland.

[ CONNECTING EMPLOYERS, EDUCATIONAL INSTITUTIONS, AND WORKERS ]

# Preparing for Careers in Advanced Manufacturing:

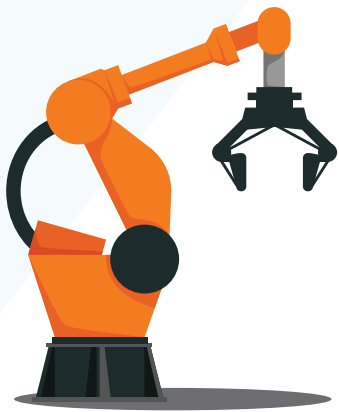
*West Central Ohio Manufacturing Consortium*



CASE STUDY 3

# Overview

Manufacturing has a long history in Lima, Ohio, a city of just over 38,000 in the northwestern region of the state. A confluence of rail lines combined with an oil boom in the late 1800s caused the city's population to rapidly expand.<sup>1</sup> Factories supplying the oil industry as well as a host of other manufactured products moved to the region. The local economy became tied to manufacturing. By the 1930s the oil boom in Ohio faded,<sup>2</sup> yet manufacturing remained one of the largest employers in Allen County (Lima's home), as well as in the surrounding region (see **Figure 1**). During the decades between the late 1800s and the present day, the industry underwent major changes. Gone were the dark, dirty, and dangerous factories of the past. Factories became well-lit, spotless, and, beginning in the 1980s, increasingly reliant on computer-controlled devices. "This is not your grandfather's manufacturing," commented Amy Odum, the City of Lima's community development director. "This really is clean, fast-paced, challenging, and very rewarding work."



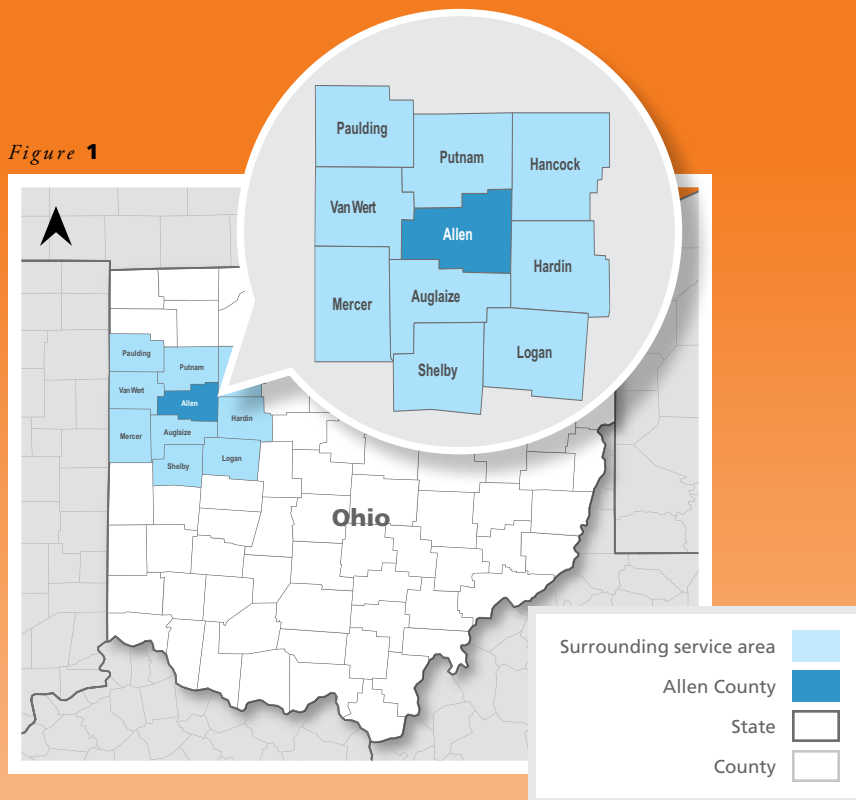
<sup>1</sup>[http://www.ohiohistorycentral.org/w/Lima,\\_Ohio](http://www.ohiohistorycentral.org/w/Lima,_Ohio)

<sup>2</sup><http://www.toledoblade.com/local/2011/04/25/Experts-explore-possibilities-of-drilling-for-oil-in-NW-Ohio-again.html>



*“The most effective marketing tool is word of mouth—  
a successful experience is a powerful way to attract more students  
interested in careers in advanced manufacturing.”*

– Rick Turner, director of adult programs, Apollo Career Center



As the workplace environment changed, so did the skill set employers needed. Much of the growth in manufacturing was in positions requiring a higher level of technical skills, and firms complained that job applicants had the wrong skill set. Rhodes State, the local community college, had been hearing about these concerns for some time and, buoyed by grant money, met with local employers and a collection of concerned organizations to survey the region’s workforce challenges. The findings from this survey conducted in 2004 and additional conversations with local employers and the City of Lima led to the development of the West Central Ohio Manufacturing Consortium (WCOMC) and its career pathways program in 2005. The WCOMC developed two broad goals: to make the region’s manufacturing industry more stable

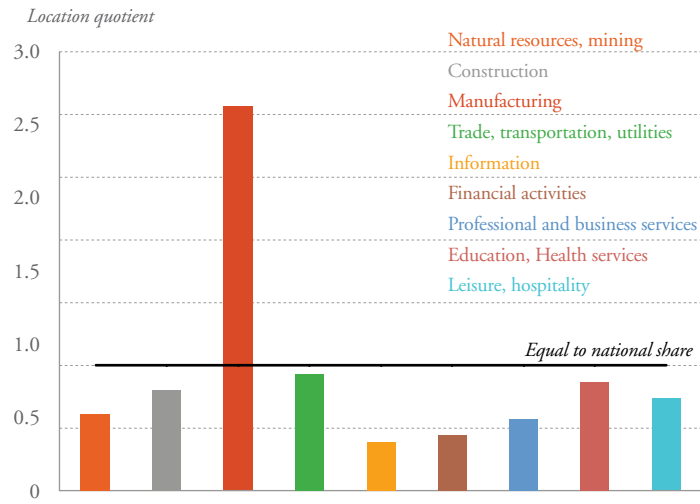
and to remain competitive in order to attract and retain companies.

Following the Great Recession, a new, counterintuitive challenge faced the region. Allen County’s unemployment rate at 4.1 percent in September 2015 was lower than both the state’s and the nation’s (4.5 percent and 5.1 percent respectively<sup>3</sup>), very positive news for the local economy. Yet, the low unemployment rate also meant a reduced labor pool for job openings. To make matters more difficult, a substantial portion of that pool lacked basic skills, had a spotty employment history, or could not pass a drug test. Building on its strong, long-term relationships among many of its key partners, the WCOMC began working to address that challenge.

<sup>3</sup>Bureau of Labor and Statistics

Figure 2

## Understanding a Region’s Specialization Using Location Quotients (2014)



Source: Bureau of Labor Statistics.

Note: Values higher than one indicate an industry specialization.

### Manufacturing location quotients

County	Location quotient
Allen	1.84
Augalize	4.05
Hancock	2.83
Hardin	2.73
Logan	2.82
Mercer	3.62
Paulding	3.59
Putnam	3.38
Shelby	4.65
Van Wert	3.08

## Structure

The WCOMC operates primarily in Allen County, but some of the participating employers are located in surrounding counties. A brief look at the data makes two things about the region clear:

- The region is rural. While Lima has a population density of 2,820 people per square mile, the remainder of Allen County has only 172 people per square mile.<sup>4</sup> The surrounding counties average fewer than 100 people per square mile.<sup>5</sup> In contrast, the state’s average is 283 people per square mile.
- Manufacturing is a significant piece of the regional economy. **Figure 2** illustrates this by using location quotients, a common way to measure industry specialization. Location quotients compare the share of an industry in one region against a larger geographic area, usually the United States. A number greater than 1.0 indicates industry specialization. When looking at manufacturing exclusively, Allen and the surrounding counties all have manufacturing location quotients greater than 1.0. In fact, Shelby County has

a location quotient of 4.65, indicating its share of manufacturing employment is over four times greater than that of the U.S. When looking at location quotients in each major employment sector for the region, manufacturing is the only sector in which shares are greater than the national average.

Prior to the WCOMC’s inception, a collection of organizations and institutions began a conversation around the importance of maintaining a stable manufacturing economy and cultivating a competitive regional workforce. They received a grant to survey local manufacturing employers about their long-range growth plans, skill set requirements and gaps, and hiring and retention issues. Results from this survey and further conversations with employers led to a career pathway designed to accomplish three things:

1. Provide a clear pathway for both incumbent and entry-level workers to increase their skill levels in order to advance within their companies or enter the job market with acceptable job skills.

<sup>4</sup>2014 population estimates, US Census Bureau [http://quickfacts.census.gov/qfd/meta/long\\_LND110210.htm](http://quickfacts.census.gov/qfd/meta/long_LND110210.htm)

<sup>5</sup>Ninety-two people per square mile (2014)

2. Ensure a qualified workforce can replace the retiring baby boomers who nationally retire at a rate of roughly 10,000 per day.<sup>6</sup>
3. Cultivate a workforce boasting strong skills that can be attractive for companies interested in relocating to or remaining in the region.

The career pathway consists of earnable credentials and certifications related to advanced manufacturing, with multiple entry points depending on the student's level of expertise. The foundational step is the Basic Pathway, a free, 40-hour course designed to give graduates basic knowledge of the manufacturing process, as well as communication, safety, and general workplace skills. The entry-level Basic Pathway course is intended as a way for low-skilled individuals with spotty employment histories to be able to add a foundational credential to their resumes. Since 2005, close to 600 students have earned the Basic Pathway certification.

The WCOMC is made up of a community college, a vocational school, several community organizations, and a collection of employers. **Figure 3** (see following page) shows a simplified model of the WCOMC's structure. Rhodes State College houses the WCOMC and provides the Basic Pathway class, 2-year associate degrees, a variety of intermediate and advanced certificates, and customized training courses requested by employers. Apollo Career Center is a vocational school serving both high school students and adults and offers intermediate certificates in a variety of advanced manufacturing-related fields. The community organizations are a conduit for students into the Basic Pathway course. Many of their clients are unemployed or lack the skills necessary to attain a job paying a living wage. The final piece is the employers; nearly 30 participate in the WCOMC in a variety of ways. They can provide feedback on the curriculum and make suggestions as their needs change. Employers can also send their workers to Rhodes State and Apollo Career Center to complete additional training to move up the career ladder. Membership dues give the workers access to training, other services, and equipment at Rhodes State College at reduced or no cost.

Engagement with both the community and participating employers is a key activity for the WCOMC. In conjunction with Rhodes State College and Apollo Career Center,

the WCOMC works with high schools that have technical programs to inform students of careers in advanced manufacturing. During October, designated as "Manufacturing Month," the WCOMC partners with local employers to arrange factory tours to help dispel stereotypes parents and students may hold of factories being dangerous and career-limiting places to work. The community organizations promote the Basic Pathway course to clients who show interest in advanced manufacturing. Apollo Career Center also promotes its course offerings via print mailings and advertising on social media, radio, and television.

Funding comes from a few sources. The City of Lima provides a portion via Community Development Block Grants (CDBGs). However, one stipulation of using CDBG funds is the money can only be spent on Lima residents who are classified as low- or moderate-income.<sup>7</sup> Rhodes State matches the city's input through in-kind labor, while additional funding sources support students who live outside of Lima.<sup>8</sup>

One example of how a community-based organization works within the WCOMC is the WORTH Center, a treatment and habilitation center located in Allen County. The WORTH Center houses roughly 100 men and women up to 180 days as an alternative to prison. Many of the residents' offenses relate to drugs or alcohol; in addition, many have spotty work histories and require remedial math and reading classes. The WORTH Center employs a two-stage process. All residents first undergo a 30-day probation period where their needs ranging from physical and emotional to educational are evaluated. During this period they cannot leave the facility. Following that is the transitional period during which they can begin working toward a GED (if necessary), begin the Basic Pathway program (if they show an interest in advanced manufacturing), and become eligible for work release. Basic Pathway courses are taught on-site at the WORTH Center by Rhodes State College staff. Matt Kinkley, executive director of workforce, economic development, and continuing education at Rhodes State College, pointed to a "community activism" element of the community-based organizations' conduit role. "Industry sets the expectations of what they want, and then we're trying through the community-based organizations to help those individuals make that next step."

<sup>6</sup><https://www.washingtonpost.com/news/fact-checker/wp/2014/07/24/do-10000-baby-boomers-retire-every-day/>

<sup>7</sup>[http://portal.hud.gov/hudportal/HUD?src=/program\\_offices/comm\\_planning/communitydevelopment/programs](http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs)

<sup>8</sup>For example, the Manufacturing Extension Partnership partially funds WCOMC operations.

**Figure 3**  
*A simplified model of the WCOMC's structure.*

# WCOMC

*West Central Ohio Manufacturing Consortium*

## 1 Funding & Promotion

### City of Lima, Ohio

- Provides portion of funding for the 40-hour Basic Pathway program via Community Development Block Grants (CDBG)
- Promotes the career pathway program
- Benefits from increased income tax collection as students complete the Basic Pathway program and enter the advanced manufacturing workforce

## 2 Education

### Rhodes State College (founding partner)

is a community college that houses WCOMC

### Apollo Career Center (founding partner)

is a joint vocational school district that serves both high school and adult students

## 3 Students

Many students in the Basic Pathway program come from community-based organizations such as:

- **Lima Allen Council on Community Affairs**
- **Western Ohio Regional Treatment and Habilitation (WORTH) Center**
- **Allen County Department of Job and Family Services**

## 4 Employers

- More than 30 employers take part in the consortium, with 10 participating regularly in WCOMC meetings
- Provide survey input every four years to help WCOMC assess needs and determine whether career pathway adjustments are called for
- Recognize that Basic Pathway graduates are qualified for entry-level positions

Prompted by input from employers, Rhodes State College and Apollo Career Center developed a shorter 9- to 12-month program in areas such as CNC machinist and programmer and welding and production associate that allows workers to fill open positions and satisfy industry needs faster.

---

## Successes and obstacles

Over its 10-year history, the WCOMC has dealt with a variety of challenges and enjoyed numerous successes. The following section will highlight some of each.

### PARTNERSHIP & ENGAGEMENT

#### **The WCOMC lacks a regional transportation voice.**

This was brought up during one of the interviews in response to a question of whether any group was missing from the consortium. The region is rural, and while public transportation is available, it is not always a viable option, particularly when shiftwork is involved.

#### **It can be difficult to recruit and retain students.**


As the economy improves, the pool of potential students shrinks, and it becomes increasingly difficult to decide how best to attract new students and meet the needs of employers. The WCOMC, Rhodes State College, and Apollo Career Center have used a variety of ways to attract students: mailings, radio ads, social media, and outreach visits to high schools. However, according to Rick Turner, the director of adult programs at the Apollo Career Center, the most effective marketing tool is word of mouth—giving students the opportunity to hear about a successful experience is a powerful way to attract more of them to investigate careers in advanced manufacturing. In addition to attracting new students, WCOMC recognizes the need to engage them once they complete the Basic Pathway course. Starting approximately five years ago, the WCOMC began sending students weekly job postings in the two years after they achieved certification as a way of maintaining contact. Apollo Career Center is required to contact students for the first year out. According to Ann Benfield, the industrial training manager at Apollo Career Center, “I like to know where they’re employed and how much they make, because then I know where to send prospective students.”

#### **Employer feedback is important to improve curriculum and coursework offerings.**

Two examples came up during the interviews pointing to the value of having employers engaged in the consortium. A typical intermediate-level certificate takes 12 to 15 months to complete. Prompted by input from employers, Rhodes State College and Apollo Career Center developed a shorter 9- to 12-month program in areas such as CNC machinist and programmer and welding and production associate that allows workers to fill open positions and satisfy industry needs faster. Once employed, workers can take the remaining classes to attain full certification. Another local employer expressed an interest in leadership training courses for supervisors, and worked with Rhodes State to develop a program with 25 topic areas to choose from. This enables advanced manufacturing companies to save on travel costs by not having to send employees to classes outside the region. An added benefit is that the course is open to other employers.

#### **Regular communication among partners and the periodic survey of employers ensure the career pathway remains relevant and allows the WCOMC to adjust its strategy.**

Each of the community organizations we interviewed mentioned the great value in receiving regular updates, job postings, and minutes from WCOMC meetings—which many reported they are unable to attend regularly in person. Even though virtual, this regular contact keeps WCOMC members engaged and up to date with the program. Another key piece to the WCOMC is the survey of its manufacturing partners conducted every three to four years. Results from the survey allow the WCOMC to reassess its focus and ensure the consortium continues to meet the employers’ needs.



**Broad, long-running consortium ensures a strong regional commitment.** The WCOMC, in existence for ten years and under development for several years before that, has led to many long-term relationships among a broad coalition of stakeholders representing education, employers, and community organizations. This investment of time creates momentum to carry the program further. According to Doug Durliat, director of the WCOMC, the consortium has played a critical role in ensuring that Rhodes State College remains engaged with the advanced manufacturing industry.

#### **LOCAL ISSUES**

**The cyclical nature of manufacturing creates varied demand for labor and can lead to negative feelings about the industry.** In the years leading up to the Great Recession (2001–2007), the region’s manufacturing employment declined by about 1 percent per year.<sup>9</sup> During the Great Recession (2007–2009), that decline increased to 9 percent per year, greater than the national rate of 7 percent. However, since the end of the Great Recession (2009–2014), the region’s manufacturing employment has rebounded substantially faster than the nation’s, growing nearly 3 percent per year instead of 0.4 percent per year for the nation (roughly 6 times greater). This up-and-down cycle manifested in similar patterns of interest (and disinterest) in manufacturing jobs. As Rick Turner from Apollo Career Center noted, “From 1990 through the Great Recession, we struggled with enrollment in manufacturing [programs] because parents said to their kids, ‘Oh no, don’t do that, go do something else, you’ll get laid off, you’ll get displaced, they’ll move your company out of the country.’” Now, with the post-Great Recession resurgence in manufacturing employment and Apollo’s classes at capacity, the center is embarking on a \$53 million expansion of its facilities.

<sup>9</sup>Allen, Auglaize, Hancock, Hardin, Logan, Mercer, Paulding, Putnam, Shelby, and Van Wert Counties

Matt Kinkley, executive director of workforce,  
economic development, and continuing education at Rhodes State College,

*pointed to a “community activism” element of the community-based organizations’ conduit role: “Industry sets the expectations of what they want, and then we’re trying through the community-based organizations to help those individuals make that next step.”*

### **Local workforce presents a variety of challenges.**

Nearly everyone we interviewed mentioned difficulties in the regional workforce. Most new hires for manufacturing employment must pass a drug test, for instance; but such a test is a barrier many cannot overcome. Others have no work history or a spotty one that makes crafting a resume difficult. Some lack basic reading and math skills, which are increasingly important in advanced manufacturing positions. Prospective employees have to spend time remediating these skills or risk not qualifying for a position. Felony records are another red flag. Many of the interviewees mentioned the stigma attached to employment candidates’ having a criminal history. For example, the WORTH Center finds many companies are instantly turned off by felons, whether because of preconceived notions or because one bad experience has made them step back. Soft skills, which point to abilities in and awareness of things such as communication, personal habits, and interpersonal skills, pose yet another challenge among the workforce. Showing up late to work without calling, not showing up at all, and dressing inappropriately are some manifestations of lacking or poor soft skills, and are a turn-off to employers. Every organization we interviewed mentioned soft skills as a major problem for employers—and a skill set that is particularly difficult to teach. Among those offering them, Jacqueline Fox, the chief executive officer at the Lima Allen Council on Community Affairs, has an in-house sewing program designed to teach soft skills. For practice, students can advance to working in the Head Start classrooms and then on to maintenance and reception duties in the office. At the WORTH Center, students watch videos, take personality tests, and discuss what they learn. But “trying to drive motivation where it doesn’t always exist” can be difficult, noted Matt Kinkley from Rhodes State College.

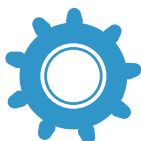
### **BOTTOM LINE**

**The program gets people back to work.** What have been the biggest successes for this program? “Getting people back to work so they can provide for their families,” said Rick Turner of Apollo Career Center. Nearly everyone interviewed had a similar response to this question. According to Marilyn Horstman, the deputy director of social services at the Allen County Department of Job and Family Services, another benefit is that people need fewer social services once they become employed. And these are good jobs. According to the Bureau of Labor Statistics, the region’s manufacturing wage is substantially higher than the region’s average annual wage. In Allen County and the surrounding counties, the average annual wage for manufacturing in 2014 was \$54,211, which is 1.5 times greater than the average wage of all other industries.<sup>10</sup>

**Employees want something that is relatively quick to attain and portable between firms, while employers want to get qualified employees.** As Amy Odum from the City of Lima said, “The new understanding is that it has to be flexible, it has to be fast, and it has to be portable.”

<sup>10</sup>Excludes manufacturing

# Conclusion



Longstanding partnerships with employees and educational institutions are key to the WCOMC's helping prepare a trained workforce for the region's advanced manufacturing industry.

“Our goal is very simple yet very, very difficult to achieve,” stated Rick Turner from the Apollo Career Center, “and that is to get people who are unemployed or underemployed reskilled, and get them good jobs that serve business and industry in the region.” For ten years the WCOMC, a broad-based collection of entities that recognizes the importance of advanced manufacturing to this rural, northwestern Ohio region, has been working toward that goal. Its success is likely a result of a combination of the people involved, the organizations that take part, and the length of time during which relationships have been strengthened. Two educational institutions provide the certifications and classes, a collection of community-based organizations helps funnel students into the program from the most at-risk segments of the population, and the employers act both as hirers and as a “reality check” to ensure that what is being taught in the classroom is of use on the job. Periodic surveys of employers help to ensure the WCOMC continues to adapt to changes in the manufacturing industry.

Persistent challenges the consortium faces include the lack of a transportation voice at the table, WCOMC's ongoing search for ways to attract new students to the program, and overcoming negative perceptions of the manufacturing industry. The longstanding consortium will continue to draw on its strengths—among them the relationships forged among members over time, the continued communication among partnering organizations, and the vital feedback employers provide to help refine and adapt the program curriculum itself—in its continuing efforts to achieve its goal of successfully preparing students for careers in advanced manufacturing and ultimately strengthening the region's economy.

Author *Matt Klesta* is a Policy Analyst with the Community Development Department at the Federal Reserve Bank of Cleveland.



[ CONNECTING EMPLOYERS, EDUCATIONAL INSTITUTIONS, AND WORKERS ]

# Navigating Employer Needs:

*Skills for Life Marine Mechanics Training Program*



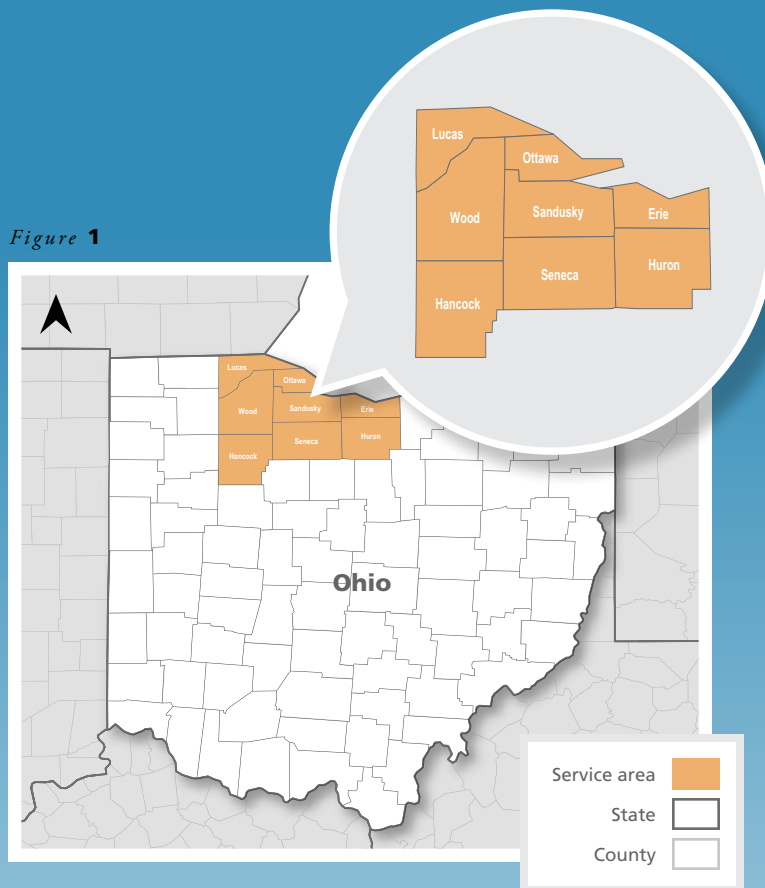
CASE STUDY 4

# Overview

In Northwest Ohio, businesses in the counties hugging the southern shoreline of Lake Erie rely heavily on tourism dollars associated with recreational boating in order to fuel local economies. Anything that impacts the ability of that industry to flourish impacts local economic conditions. So it was greatly concerning when, in early 2000, staff from the Wood, Sandusky, Ottawa, and Seneca (WSOS) Community Action Commission first heard that marinas throughout the Lake Erie Islands area experienced difficulty finding qualified entry-level marine mechanics. According to the Bureau of Labor Statistics, a marine mechanic or motorboat mechanic is one who “repairs and adjusts electrical and mechanical equipment of inboard or inboard/outboard boat engines.” Marine mechanics provide an essential function of maintenance and repair in the recreational boating industry. A shortage of entry-level mechanics increases the costs associated with owning and operating a boat in the area.



*The other role the business advisory board fills, of course, is as a pool of employers that serves as a source of on-the-job training opportunities and eventual job placements for graduating students.*



According to the Ottawa County Improvement Corporation (OCIC), a local economic development agency, marina owners reported that they began experiencing this problem once a training program offered through a career-technical education school had been dissolved in the late 1990s. In order to find qualified mechanics to meet business demands, marinas were stealing workers away from each other by offering slightly higher wages. It took one owner three months to find a single qualified applicant. This was clearly not a sustainable situation, and it needed to be addressed immediately, given the importance of recreational boating to the local economy.

Overall, the recreational boating industry in Ohio accounts for \$3.6 billion of annual economic activity and 28,921 jobs, according to a 2012 National Marine Manufacturers Association study.<sup>1</sup> While it is difficult to estimate accurately the economic impact of recreational boating to a specific local area, the Lake Erie Islands area accounts for roughly 40 percent of the recreational boating industry businesses in Ohio, according to the same study.<sup>2</sup> The industry demand for marine mechanics, along with the importance of recreational boating to the local area, provided the impetus for creating a sector-based training program for entry-level marine mechanics.

<sup>1</sup>National Marine Manufacturers Association, 2012 Recreational Boating Economic Study. Available at [http://www.nmma.org/assets/cabinets/Cabinet432/NMMA\\_ecoimpact\\_booklet\\_optimized.pdf](http://www.nmma.org/assets/cabinets/Cabinet432/NMMA_ecoimpact_booklet_optimized.pdf).

<sup>2</sup>The National Marine Manufacturers Association study includes economic breakouts by Congressional districts; this statistic reflects an aggregation of data for Congressional districts 4, 5 and 9.

## Volvo Penta of the Americas and Yamaha donated marine engines, engine simulators, and other technical equipment worth more than \$1 million to the program because they understand the value of entry-level training to the recreational boating industry.

### Partnership & Program Structure

In the early 2000s, the Skills for Life Marine Mechanics Training program was formed as a collaborative partnership for the betterment of the region and its people. The organizing groups recognized the economic importance of the local recreational boating industry and marine mechanics within that industry.

In addition to WSOS and OCIC, key members of the Skills for Life partnership include a business advisory board made up of local marine dealers and marina owners, the Penta Career Center, and industry manufacturers Volvo Penta of the Americas and Yamaha. WSOS and OCIC share day-to-day management of the program, but each also has its own unique role within the partnership.

WSOS serves as the convener of the partnership as well as the administrative entity for certain funding sources.

*Figure 2*  
*Skills for Life Marine Mechanics Training Program*



In addition, WSOS’s expertise in case management helps address personal barriers to employment. WSOS staff members bring a depth of knowledge about the gamut of “wrap-around” supportive services available to those students in need. They work with students to ensure that any barriers to employment have been addressed prior to completion of the program. WSOS staff members also contributed to the initial grant writing and logistics (curriculum creation, training space research, admissions) involved in the creation of the training program.

OCIC maintains the training space at the Ottawa County Resource Center, built in 2003 after the county commissioners decided to build a dedicated state-of-the-art training space to accommodate the needs of the program. OCIC also recruited Volvo Penta of the Americas to relocate its own advanced training programs to the facilities at the Ottawa County Resource Center—a huge bonus for the local community, as these advanced training programs, which promote a career-path approach to jobs training, had typically been available only outside the region.

The marine dealers and marina business advisory board have a dual role within this partnership. First, the business advisory board provided much-needed guidance and recommendations to the group responsible for creating the training program. They not only provided input on initial curriculum content, but also recommended additions (on boating safety, CPR, forklift driving, etc.) to the curriculum as the program matured. The advisory board noted the importance of having an instructor from the field who was familiar with the day-to-day demands of a marine mechanic. They also recommended looking at other examples of marine mechanic-training facilities in advance of building the Ottawa County Resource Center. Additionally, the business advisory board recommended that, since the equipment needed to properly conduct a training class was not within the initial budget for

the program, the partnership solicit equipment donations from manufacturers. The other role the business advisory board fills, of course, is as a pool of employers that serves as a source of on-the-job training opportunities and eventual job placements for graduating students.

The training institution involved with the partnership is the Penta Career Center, a public vocational high school and adult education administrator in Northwest Ohio. Staff at the Penta Career Center help with curriculum development for the program, along with contracting the instructor for the training. In addition, the Penta Career Center conducts the WorkKeys student assessment portion of the program. Industry-recognized program certificates are also issued by Penta Career Center upon students' completion of the program.

Another essential component of the sector-based partnership is buy-in or support from the industry. Industry buy-in came in the form of equipment donated by two manufacturers of marine motors. Volvo Penta of the Americas and Yamaha donated marine engines, engine simulators, and other technical equipment worth more than \$1 million to the program because they understand the value of entry-level training to the recreational boating industry. In addition, Volvo Penta of the Americas houses its national training program classes in the same building as the Skills for Life program.

Becoming a basic marine mechanic requires completion of a 300-hour program conducted over a single 12- to 16-week span (weather permitting) during Ohio's recreational boating offseason (usually December through March). Hiring typically occurs the following spring. Students initially go through an intake and assessment phase to determine job readiness, skill levels, and any barriers to employment that may affect job readiness. Those in need of supportive services work with WSOS staff to find the appropriate service provider prior to moving forward with training.

The course includes hands-on training with marine engines on topics such as preventative maintenance; mechanical, electrical, and instrumentation repairs of motor systems, fuel systems, cooling and exhaust systems, and propellers; and techniques of boat handling, safety, and boat repairs.

## Major Competency Areas of the Marine Mechanics Program

### Safety

- Demonstrates safe work practices at the job site

### Tools and Equipment

- Demonstrates knowledge of marine terms and components as well as proper use of hand tools, power tools, and diagnostic equipment

### Outboard Motors

- Demonstrates ability to diagnose, repair or replace, and test outboard motor components, including gear case, electrical and ignition systems, hydraulic systems, mechanical systems, propellers, fuel systems, corroded elements, cooling and exhaust systems, etc.

### Stern Drive (Inboard/Outboard) Motors

- Demonstrates ability to diagnose, repair or replace, and test stern-drive motor components, including drive units, electrical and ignition systems, transom assemblies, hydraulic systems, mechanical and fuel systems, etc.

### Seasonal Maintenance & Repair Practices

- Demonstrates proper use of sealers, lubricants, and antifreeze products on marine equipment; proper shrink-wrap and fogging techniques; and proper mooring and blocking procedures

### Water Safety

- Identifies and uses appropriate marine safety equipment
- Demonstrates proper marine navigation, docking, and trailering techniques

### Applied Literacy

- Demonstrates proficiency in reading and interpreting blueprints and technical diagrams

### Customer Service/Employability Skills

- Demonstrates appropriate written and oral communication skills, as well as knowledge of appropriate technical resources and suppliers

Figure 3 lists the major competency areas of the marine mechanics program. Upon completion, students receive the following certifications:

- Penta Career Center Adult Education Basic Marine Mechanic
- Ohio Boating Laws and Boating Safety
- First Aid/CPR
- Work Ethics

A typical class consists of 15 to 20 students who meet with an instructor Monday through Thursday from 5:30 pm to 9:30 pm to accommodate those students working during the day. Student participation in the program costs approximately \$3,300.

*It is a major success and a testament to the innovative staff that the Skills for Life program is able to continue operating year after year without a dedicated funding stream.*

## Successes and obstacles

For all parties involved in the Skills for Life training program, including enrollees, overcoming the obstacles encountered along the way are often the ultimate and greatest successes. Obstacles and subsequent successes are evident in the partnership's funding situation, student outcomes, and participating employers and partners.

### FUNDING

Funding is both a major success and an ongoing obstacle to the Skills for Life Marine Mechanics program. Initial funding for the program came from the Department of Labor's Sectoral Employment Demonstration program, which offered grants to "test the feasibility of the workforce development system to plan and undertake local [and] regional initiatives involving a particular industry sector in order to increase access to employment for targeted groups and to strengthen the economic competitiveness and performance of the sector's firms."<sup>3</sup> Unfortunately, as with most startup funding, the initial grant of \$150,000 ran out quickly, though it did illustrate the value of such a training program to those involved. Feedback from the business advisory group and other employers indicated that the program was successful and should be continued. Fortunately, partnership staff was knowledgeable about other potential funding streams that often led to blended funding streams as the program matured.

"We learned that you don't have to have a single funding stream to continue a project if you have a broad group of dedicated stakeholders committed to meeting the needs of business," noted Kerrie Carte, WSOS planning and development coordinator. "We certainly haven't had a single funding stream and we've been able to continue our program." Some students receive full or partial funding through local Job and Family Services departments, the WSOS Fatherhood Center for Hope, and marina employers. Other students pay their own way. It is a major success and a testament to the innovative staff that the Skills for Life program is able to continue operating year after year without a dedicated funding stream.

And program staffers continue to find ways around the lack of a dedicated funding stream. Several we interviewed stated they are working to secure funding by partnering with a local community college. Because a marine mechanic is not considered an "in-demand job" by the state of Ohio, the program is largely left out of state funding. To qualify as an in-demand job in Ohio, the job must have a median wage above \$12.90 an hour, annual growth in the number of jobs that is greater than the statewide average of 70, and have annual job openings greater than the statewide average of 250. A job may also be considered in-demand following a review by the in-demand review committee.<sup>4</sup> According to 2015 data from the Bureau of Labor Statistics, a marine mechanic in Ohio earns a median hourly wage of \$17.24, so it would meet the first criterion for an in-demand job, but it comes short on the growth and openings criteria. However, given some of the economic impact statistics cited earlier in this case study, a case might be made to the in-demand review committee that a marine mechanic is an in-demand occupation.

### STUDENTS

For students, the program is successful at addressing barriers to employment, training them for marine mechanic roles, and placing graduating students in jobs. Across 13 different classes, 159 students have enrolled, 134 (84 percent) have completed the program, and 96 (71 percent of completers) were employed within 90 days after graduation. Students are work-ready when they complete the program. Students also receive a set of tools upon completion of the program. Instructor Gregg Sharp stated that he often reminds his students of the benefits of a career as a marine mechanic. He noted that a fully

<sup>3</sup>Department of Labor, 2001 Sectoral Employment Demonstration Grant. Available at <https://www.doleta.gov/grants/sga/01-104sga.cfm>.

<sup>4</sup>Governor's Office of Workforce Transformation, An Introduction to Ohio's In-demand Jobs Report, 2015. Available at <http://jfs.ohio.gov/owd/OMJResources/InDemandBooklet.stm>.

trained marine mechanic can make a good living just about anywhere in the country that is near water. The average annual salary of marine mechanics is \$36,890, and the United States has thousands of miles of saltwater and freshwater coastline, along with tens of thousands of lakes. Moreover, impending retirements among employees from the baby boomer generation will create many opportunities for advancement in the industry.

Despite the program's successful outcomes in terms of employment and wages achieved by the graduates, obstacles do exist for students both at home and in the workplace. Program staff has successfully helped students address financial, healthcare, childcare, and transportation barriers to employment. That said, Mr. Sharp pointed out that marine mechanics is a physically demanding occupation that often requires working in tight spaces. As a result, the recruitment and enrollment of students into the program can be challenging. Retention is another obstacle, as some students realize during the program that a career as a marine mechanic is simply not for them.

## EMPLOYERS

For employers, the program is a success in that it supplies them with a pool of trained talent from which to hire. Employers know that program graduates will have the skill sets and major competencies employers need, saving them valuable training dollars. Employers also benefit from being able to gain additional information about potential hires from the instructor to ensure that a potential employee is a good fit for their businesses. During the 300 required program hours, Mr. Sharp gets to know each student, and reports that he regularly fields calls from employers asking questions about the quality of students' soft skills. This human resources function of the program helps to create better employer–employee matches and saves the employers money when hiring.

Another major success has been the program's ongoing engagement with and guidance from employers, which has led to many improvements to the program. For example, employers provided initial guidance on curriculum and program development, input that would not have been possible without regularly and actively engaging employers via the business advisory group. Other program improvements attributed to employer engagement include moving the timing of training to the recreational boating offseason,

adding the case-management component to the program to address employment barriers that employers were unwilling or unable to handle, and continuing to make adjustments to the program curriculum as employer needs and marine technology changes.

Given that employers all have their own businesses to run, engagement with the group can be a challenge. The partnership's ability to be flexible with times and meeting places has helped to keep employers engaged during the life of the program.

## PARTNERS

The successes of the partnership are the main reasons for the training program's overall success and longevity. First, one of the key partners, WSOS, stepped up to fulfill the convener role. The convener is responsible for keeping the group together and moving forward. Having a group or entity actively filling this role is vital to the success of any sector-based training program. Next, engaging both economic and workforce development entities was another major success of the partnership that ultimately helped influence the program. Both groups bring knowledge and information that the other needs, and through the partnership they were able to work together in a new way to address industry needs. Finally, to have U.S. Senator Sherrod Brown champion the program's model is a huge success. The Skills for Life Marine Mechanics program provided an example for Senator Brown's Strengthening Employment Clusters to Organize Regional Success (SECTORS) bill<sup>5</sup> that eventually was incorporated into the Workforce Innovation and Opportunity Act.<sup>6</sup>

Along with funding, turnover in staff at the partner organizations was one of the main obstacles the partners faced. Staff turnover required a constant need for educating new staff on the value of the program as well as helping to keep employers engaged. The seasonal nature of the recreational boating industry in Ohio is another obstacle. Because the boating season in Ohio is relatively short, employers place a high value on employees who are capable of doing more than strictly marine mechanics. Conversely, the seasonal nature of work can also act as a deterrent to those students looking to enter into the program. To address this dual challenge, employers stressed the need to broaden the curriculum to include more off-season competencies.

<sup>5</sup>The WSOS' Press, "WSOS's Carte's input vital to Ohio Senator's economic development bill," Fall 2008. Available at <http://www.wsos.org/uploads/wsospress/AugSep08%20NL.pdf>.

<sup>6</sup>"Senate Passes Workforce Investment Act Which Includes Provisions Modeled After Brown's Bipartisan Bill to Help Companies Address Skills Gap in Emerging Industries," June 25, 2014. Available at <http://www.brown.senate.gov/newsroom/press/release/senate-passes-workforce-investment-act-which-includes-provisions-modeled-after-browns-bipartisan-bill-to-help-companies-address-skills-gap-in-emerging-industries>.

# Conclusion



A business advisory group is one reason for the success of the partnership in navigating the marine and recreational-boating industry's employment needs in Ohio.

Over the past decade, the Skills for Life Marine Mechanics program has effectively filled a specific employer need for entry-level marine mechanics in Ohio's recreational boating industry despite encountering obstacles along the way. The strong relationship and consistent engagement with the business advisory board allowed recommendations for program design and improvements to be quickly implemented, ensuring that the program continues to meet employer needs. Innovative partners also worked together to devise solutions that would allow the program to continue in the face of funding challenges. The value and success of the program are evident in the multiple best practice awards (OACAA Best Practice, 2003; National Association of Workforce Board forum, 2003; Excellence in Workforce Development Innovation Award from the Ohio Economic Development Association, 2011) earned by the Skills for Life Marine Mechanics program.

Currently, funding remains a top priority for the training program because the need for entry-level marine mechanics is just as high today as it was when the program was created. Marina owners along Lake Erie noted in a recent industry report that "workforce, particularly the availability and stability of needed workforce, remains one of the larger issues facing employers." Marine trade skills training was among the six skills that businesses felt potential employees needed, according to Ohio's Lake Erie Marina Industry Business Retention and Expansion program 2015 final report.<sup>7</sup> Secure funding for this program would allow the partnership to continue to address the workforce needs of the recreational boating and marina industry in Northwest Ohio.

---

Author *Kyle Fee* is a Regional Community Development Advisor at the Federal Reserve Bank of Cleveland.

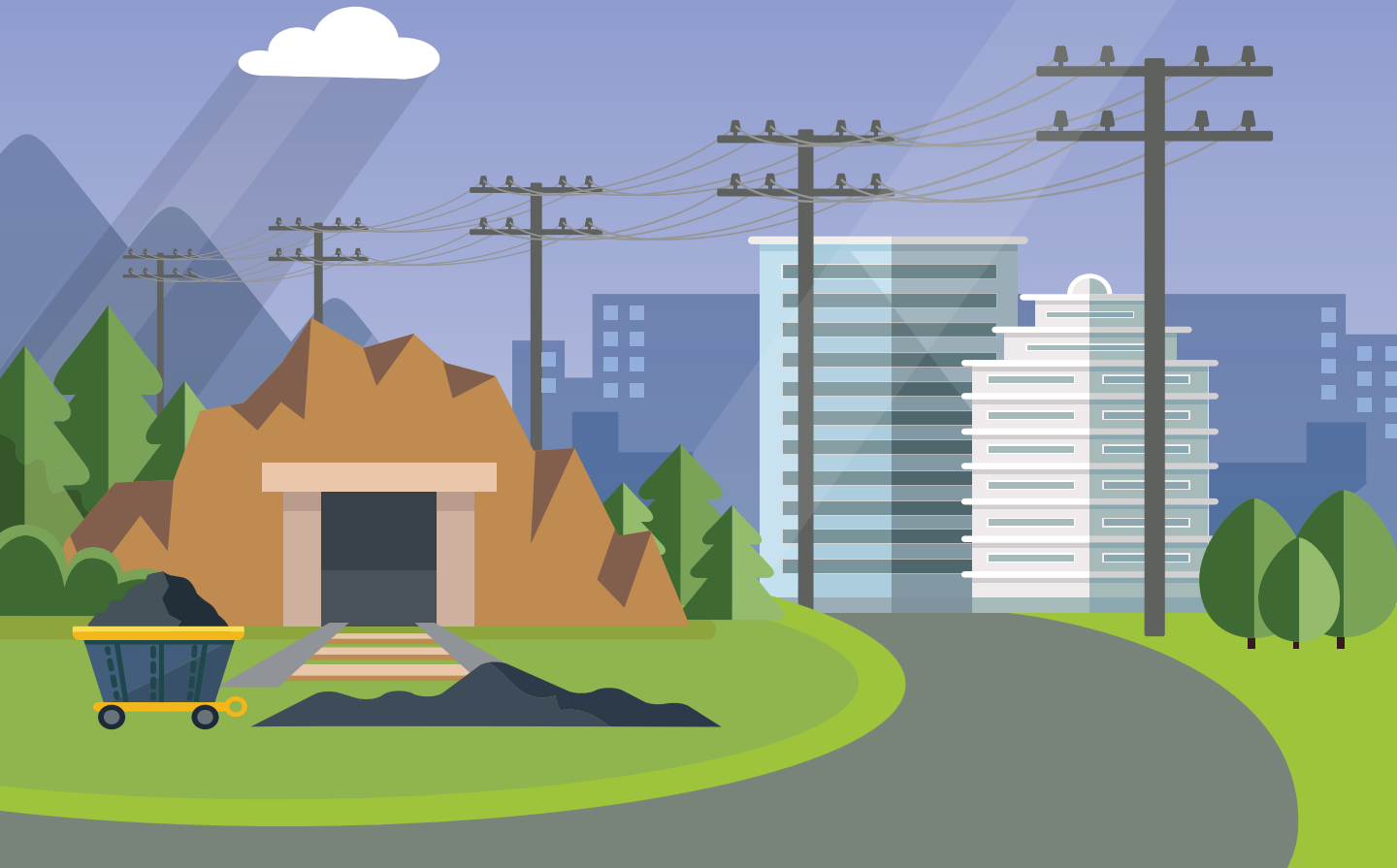
<sup>7</sup>Joe Lucente and Sarah Orlando. Ohio's Lake Erie Marina Industry Business Retention and Expansion Program 2015 final report. Available at [http://comdev.osu.edu/sites/comdev/files/imce/FINAL\\_APRIL%2015\\_LAKE\\_ERIE\\_MARINA\\_FINAL\\_BRE\\_REPORT.pdf](http://comdev.osu.edu/sites/comdev/files/imce/FINAL_APRIL%2015_LAKE_ERIE_MARINA_FINAL_BRE_REPORT.pdf).



[ CONNECTING EMPLOYERS, EDUCATIONAL INSTITUTIONS, AND WORKERS ]

# Transitioning Workers from Coal to Other Careers:

*Hiring Our Miners Everyday (HOME) Program*



CASE STUDY 5

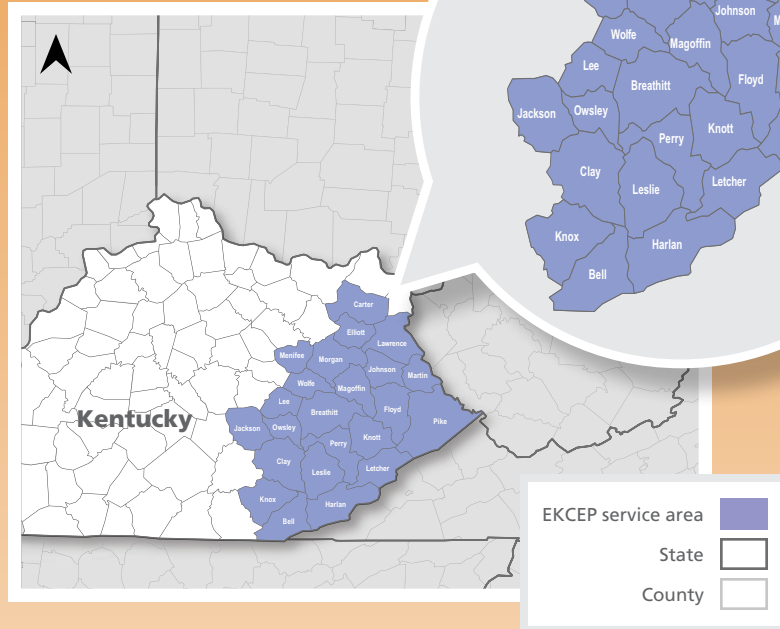
# Overview

Despite a long-term decline in coal mining employment, eastern Kentucky has found recent job losses especially troublesome to a region that historically has relied on the coal industry as an economic engine. According to the Kentucky Energy Database, coal mining employment in eastern Kentucky fell from approximately 67,000 workers in 1950 to about 15,000 workers in 2000, when it appeared to stabilize until 2011 (see **Figure 2**). Then another steep decline hit. Over the next three years, one out of every two coal miners lost his or her job as coal miner employment fell to roughly 7,000 workers in 2014. The economic loss to the region over those few years is staggering. A very rough estimate—8,000 jobs lost at \$72,000 a year—is \$576 million, or more than half a billion dollars of potential local spending and taxable income lost in an already economically depressed region.



*Unlike the other workforce development programs we examined, HOME is a retraining program that helps direct workers out of a specific industry rather than into one.*

Figure 1



The cyclical nature of employment levels in the coal industry is as old as the industry itself and has become part of being a coal miner. Unfortunately, it appears that this time is different and mining employment will not bounce back as it has in the past. Industry and policy reports<sup>1,2</sup> indicate that these coal jobs will not return because of the pending closing of older coal-fired power plants that have become too costly to operate, along with moves at the federal and state levels to diversify energy portfolios. Increasing concerns around climate change also present a challenge for coal miners looking to return to the mines. These economic realities warranted significant action to find ways to retrain and re-employ former coal miners in the region.

One effort to help address the decline of coal mining employment in eastern Kentucky was funding the Hiring Our Miners Everyday (HOME) program. In 2013, the U.S. Department of Labor awarded an initial \$5.1 million National Emergency Grant to the Eastern Kentucky Concentrated Employment Program, Inc. (EKCEP) to fund its HOME program, an effort aimed at helping workers and their spouses affected by the coal industry downturn. Unlike the other workforce development programs we examined, HOME is a retraining program that helps direct workers out of a specific industry rather than into one. According to EKCEP, which administers

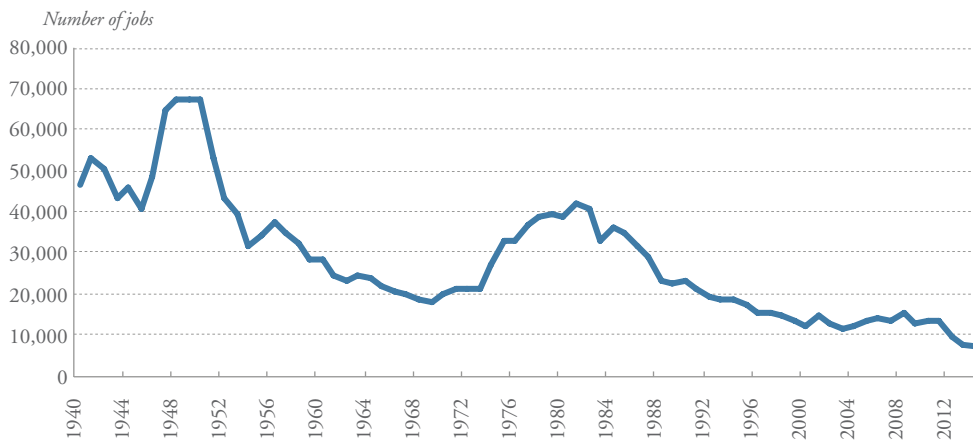
<sup>1</sup>Jason Bailey, "Sharp Decline in Coal Severance Tax Revenue Underscores Need for Economic Plan." Kentucky Center for Economic Policy, April 18, 2013. Available at <http://www.kypolicy.us/sites/kcep/files/Coal%20Sev%20Revenue%20Brief.pdf>.

<sup>2</sup>Kentucky Coal Facts, 2015.

Available at <http://energy.ky.gov/Coal%20Facts%20Library/Kentucky%20Coal%20Facts%20-%202015th%20Edition%20-%20282015%29.pdf>.

Figure 2

## Eastern Kentucky coal employment



Source: Kentucky Energy Database.

the program, HOME helps coal mining workers “discover their skills, determine new career options, covers costs for them to enter classroom training, and helps place them into subsidized on-the-job training positions with area employers.” Since the Labor Department’s initial grant, an additional \$8.9 million has been directed to the program as employment losses in the coal industry continued.

While the HOME program is not a conventional sector-based training program, it features many elements similar to traditional industry partnerships, including strong relationships with local institutions. In a way, HOME functions as a training program for the eastern Kentucky region itself, transitioning workers from a declining industry into roles that contribute to making the region more productive for future industries. Insights from EKCEP’s HOME program are informative to economic and workforce development professionals looking to partner with diverse groups for the betterment of a local economy and its people.

## Structure

Prior to implementing HOME in 2013, EKCEP had in place many of the relationships necessary for the program’s success. EKCEP was formed in 1968 under the federal Manpower Development and Training Act to address the job training needs of the chronically unemployed and those living in severe poverty. In its 23-county service area (see **Figure 1**) in rural, mountainous eastern Kentucky, EKCEP offices house the local JobSight career center at which job seekers can access state and federal programs for training assistance. With almost 50 years of operation, EKCEP and its traditional partners in the workforce development system (including the Office of Employment and Training, the Office of Adult Education, and the Office of Vocational Rehabilitation), social services (including local community action groups), and local community college system provided a solid foundation from which to operate the HOME program.

EKCEP also works with local employers to address their workforce needs. Its in-house employer services team provides a multitude of services—from recruiting and screening of candidates, hosting job fairs, and providing labor market information to facilitating contact with state and federal workforce programs, working with training providers to customize curriculum, and delivering soft-skills training—to help regional employers meet their workforce needs.

# HOME functions as a training program for the eastern Kentucky region itself, transitioning workers from a declining industry into roles that contribute to making the region more productive for future industries.

Despite longstanding relationships with employers, EKCEP found it a difficult prospect to help re-employ coal miners given the limited employment opportunities in the region. In order to increase opportunities, EKCEP partnered with other organizations on new efforts promoting economic development activities in the eastern Kentucky region. The Shaping Our Appalachian Region (SOAR) initiative was formed in 2013 to promote and support job creation, innovation, opportunity, and quality of life in eastern Kentucky. As a result of early and frequent interactions with this group, Jeff Whitehead, executive director at EKCEP, was asked by Kentucky’s then-Governor Steve Beshear to serve as the chair for the Education and Retraining Committee of SOAR. This role elevated EKCEP’s status in the region as well as the plight of the coal miners, while helping to align the political capital to move the region forward.

More recently EKCEP has formed relationships with those involved with One East Kentucky, a strategy implemented by the Southeast Kentucky Chamber of Commerce and local businesses to create 2,500 jobs that meet or exceed

the state’s average annual wage (\$42,000) while generating \$30 million in capital investment in the region. From the perspective of those involved with One East Kentucky, supporting and collaborating with local workforce development partners is necessary because the quality of an area’s workforce helps attract and retain businesses. From EKCEP’s perspective, its agency’s support of and collaboration with economic developers is needed in order to find avenues to re-employment. Chuck Sexton, chief executive officer of One East Kentucky, noted in interviews for this case study that this “symbiotic relationship” is already beginning to bear fruit in the form of a commissioned study to document the diverse skill sets present across the region.

HOME participants are eligible for a comprehensive array of workforce development services in addition to receiving education and training funds. Kentucky’s career center networks utilize the same career advising approach for helping ex-coal miners gain employment that is used for regular job seekers. Their customizable approach to the job search helps to identify, target, and find jobs that align with a job seeker’s skill set.

Figure 3 HOME Program



**Figure 4** lists many of the career and training services available to job seekers through the HOME program. While most of these are standard services offered in workforce development centers across the country, EKCEP singled out job clubs as one of the most important services it offers. With weekly group meetings, the job clubs operate not only as an informal entry into the HOME program, but also as a support group and network for job seekers. The group meetings let people know they are not the only ones looking for a job, while creating an environment for career advisors to get to know each job seeker a little better.

The HOME program also helps cover costs associated with upgrading skills. Once participants are accepted into a training program at a local community college,

HOME covers tuition along with supplies and tools needed to complete the program. The HOME program also incentivizes local employers in the region to hire former coal miners by paying a significant portion of on-the-job training wages for qualified workers.

Laid-off coal miners and their spouses are eligible for these services as well as others included in the HOME program. In many households, two adults need to work to earn the equivalent of one paycheck from a coal industry position. In 2014, the average annual wage for a coal miner in Kentucky was \$72,000, compared to \$42,000 for all other workers in the state, according to the Quarterly Census for Employment and Wages.

*Figure 4*

Career Services	Training Service
Generic resume assistance	Career advising
Job search	Case management
Job matching and referral	Individualized Plan for Employment (IPE)
Access to labor market information	Individualized Education Program (IEP)
In-depth skills assessment	Targeted resume/cover letter
Basic skills instruction	Interview coaching
Remediation	Job coaching
Job clubs	Job retention skills
Workshops	National career readiness certificate
Veterans assistance	Short-term, long-term, and on-the-job training
	Paid internships and work experience

*EKCEP singled out job clubs as one of the most important services it offers. With weekly group meetings, the job clubs operate not only as an informal entry into the HOME program, but also as a support group and network for job seekers.*

## **Successes and obstacles**

With most of the pieces in place to retrain and subsequently re-employ laid-off coal miners, the HOME program appears to have little that is standing in the way of its success. This may be a result in part of EKCEP's overcoming several major obstacles it encountered in developing the program—obstacles that, interestingly, have become influential to the HOME program's success.

### **FUNDING**

The HOME program had to overcome at least one substantial obstacle to obtain Department of Labor grants. The funding protocol required the grant seeker to specify prior to receiving the funds the companies from which workers had been laid off. According to EKCEP staff, the model for the Labor Department grants is based on closings in urban areas where the employers of soon-to-be-laid-off workers are known beforehand and can be listed on the grant application. While this model generally works well for a traditional plant or factory closing, it applies poorly to the situation in eastern Kentucky because little to no notification was given by coal companies prior to the latest round of layoffs. EKCEP staff noted that it was challenging to contact laid-off workers; when notified of the impending layoffs, many employees simply left the workplace and did not return. This quirk of the coal industry in rural eastern Kentucky required EKCEP staff to be flexible in order to overcome this funding obstacle.

### **PERSISTENT REGIONAL CHALLENGES**

The major challenge to putting ex-coal miners back to work is the region's slow-growing economy. According to EKCEP staff, economic development in the region was tough even before the latest coal downturn.

In addition to the loss of coal-mining jobs, the region suffered substantial indirect job loss with the industry downturn; according to EKCEP staff an estimated three additional jobs are lost for every one coal job that is eliminated. There simply are not enough jobs for everyone. Not only does the lack of jobs present an economic challenge, but balancing the expectations of long-term projects and uncertainty with the short-term needs of the local people can also be a challenge.

Another challenge is the sense of parochialism that historically has been an obstacle to the implementation of programs in the region. However, with the creation of SOAR and One East Kentucky, it appears that local governments have begun to understand that because markets do not recognize boundaries, they must work together for the greater good of the region. Chuck Sexton, chief executive officer of One East Kentucky, stated that one way to continue addressing parochialism in the region is “making sure that we can put together some comprehensive local incentive packages” that do not pit one part of the region against another. This ability to think more regionally about the future has also helped to draw the interest of the region's younger population. According to Jeff Whitehead, this demographic's involvement is important because “this generation is quite talented and full of new ideas to help move the region forward.”

## PROGRAM PARTICIPANTS

One of the biggest obstacles encountered in the HOME program was the coal miner mindset, which in turn may actually be the workers' greatest asset in HOME's efforts to getting them re-employed. The coal miner mindset refers to how the job of a coal miner is much more than just a job: It's an identity. Director Whitehead explains the coal miner mindset:

*"I'm a coal miner. I define myself as a coal miner. That's who I am, that's what I do, this is my way of life. My father was a coal miner, my grandfather was a coal miner, my great-grandfather was a coal miner. I get up in the morning before daylight. I work. This is what I do. Now all of a sudden you are telling me I am not a coal miner anymore. It's a way of life more than just what I do to make money. I have been through this before. I've been laid off before. This is part of my identity. You get laid off; you weather the storm. You do it again. Layoffs are part of my business."*

Addressing this mindset required getting coal miners to see that this downturn is permanent; unlike previous down cycles, the jobs are not returning. This was not a simple task. Acceptance of this fact was even more difficult for the former coal miners because of the relatively higher wages paid by the coal industry versus the pay of employment options in other industries.

Once former coal miners accept this fate, EKCEP's career services team helps them to identify skills they have that are transferrable. Jeff Whitehead describes the HOME program as "reinventing who we are, without losing who we are." According to EKCEP staff we interviewed, former coal workers have attributes from having worked in the mines—they are dependable, safety-conscious team members, for one—that make them highly attractive to potential employers. "Many have a very good work ethic and very good mechanical and technical skills," added Dr. Jennifer Lindon, the current president of Hazard Community and Technical College and its former dean of Occupational Technologies and Workforce Solutions. "We just have to retrain them."

It appears to be working. As of March 2016, the HOME program has enrolled more than 3,000 laid-off coal miners and their spouses. Of those enrolled, 1,449 have received support while training for new careers. More than 1,100 have obtained new employment, while 90 participated in internships through the HOME program. Feedback from employers who are hiring workers who have been through the HOME program has been positive, too; EKCEP staff have heard "universally rave reviews about coal industry workers."



According to EKCEP staff we interviewed, former coal workers have attributes from having worked in the mines—they are dependable, safety-conscious team members, for one—that make them highly attractive to potential employers.

---

The former coal workers are finding roles in a range of industries new to them. The electrical lineman program with Hazard Community and Technical College, for example, has been one of the most successful at retraining coal miners. The fall 2015 program was the fifth class to include HOME participants. Thus far through five cohorts, 124 laid-off coal miners have gone through the program, earning portable industry-recognized credentials (CDL class A, CPR, OSHA) and gaining 10 weeks of industry-based lineman instruction. An additional fiber-optic certification is also offered through the program in anticipation of a state-wide broadband installation program. The lineman program job-placement rate is 91 percent; however, not all of those placements are in the region. Many graduates travel outside the region for work during the week and return on the weekends. Demand for the electrical lineman program is high (there is a two-semester waiting list) because students exiting the program earn, on average, \$20 per hour.

Bit Source is another example of the HOME program's success in partnering with employers to retrain and find new employment for former coal miners. Bit Source is a unique entrepreneurial for-profit technology company helping the eastern Kentucky region transition from coal exports to computer code exports. Recognizing that contemporary coal-mining operations require high-skilled workers to operate some of the largest and most complex machines in the world, Bit Source approached EKCEP with a plan to set up a pilot training program to take the workforce "from coal to code." Initial demand suggests there is potential for this program; almost 900 people applied for the ten initial training slots, according to EKCEP staff, with nine of the slots going to former coal industry workers.

## PARTNERS

In order to increase the amount of potential employment opportunities for HOME participants, EKCEP needed to reach out to new partners in the economic development community. In describing how EKCEP has worked to develop these new relationships, Jeff Whitehead said, "You develop relationships by saying yes to a lot of people and being willing to travel. That's part of how we've changed. We are physically going to meetings so much more." The face-to-face contact in meetings has been essential to EKCEP's ability to develop relationships and ultimately build trust. "You move at the speed of trust," observed Whitehead. "Trust has to be built."

# Conclusion



---

A unique program to retain and retrain former coal workers, the HOME program is helping position workers and the eastern Kentucky region for success in other industries.

Despite the depressed economic conditions of the eastern Kentucky region, there are reasons to be optimistic about the future. Sources of optimism include the manner in which the community responded to the crisis, the early successes of the HOME program, and the potential for economic development in the region. Early evidence suggests that EKCEP and its many partners are using the HOME program to lay the groundwork for future economic growth.

Though devastating and painful, the recent layoffs in eastern Kentucky's coal industry prompted community actions that have helped to position the region for future growth. The creation of SOAR and One East Kentucky, for example, provides a lot of complementary momentum in the region. The alignment of goals and strategic decision making across the region signal that the tendency for parochialism in the region is waning.

On a broad level, the early successes of the HOME program illustrate the collaboration and coordination necessary to successfully implement major workforce development programs. More specifically, the HOME program is showing how coal industry workers can be retrained to work in new industries.

---

Author *Kyle Fee* is a Regional Community Development Advisor at the Federal Reserve Bank of Cleveland.

Authors: Kyle Fee, Matthew Klesta, and Lisa Nelson,  
Federal Reserve Bank of Cleveland

Published by the Federal Reserve Bank of Cleveland's Community  
Development Department.

The views expressed in this publication are those of the authors;  
these views do not necessarily reflect those of the Federal Reserve  
Bank of Cleveland, the Federal Reserve Board of Governors,  
or the Federal Reserve System. Reprinting allowed with permission;  
contact Managing Editor [Anne O'Shaughnessy](mailto:Anne.O'Shaughnessy@clev.frb.org) at  
[Anne.oshaughnessy@clev.frb.org](mailto:Anne.oshaughnessy@clev.frb.org).

Members of the Cleveland Fed Community Development Department  
include

CLEVELAND

[Paul Kaboth](mailto:Paul.kaboth@clev.frb.org)  
Vice President &  
Community Development Officer  
216.579.2951  
[Paul.kaboth@clev.frb.org](mailto:Paul.kaboth@clev.frb.org)

[Mary Helen Petrus](mailto:Mary.h.petrus@clev.frb.org)  
Assistant Vice President  
216.579.2443  
[Mary.h.petrus@clev.frb.org](mailto:Mary.h.petrus@clev.frb.org)

[Brett Barkley](mailto:Brett.barkley@clev.frb.org)  
Research Analyst  
216.206.3658  
[Brett.barkley@clev.frb.org](mailto:Brett.barkley@clev.frb.org)

[Kyle Fee](mailto:Kyle.d.fee@clev.frb.org)  
Regional Community  
Development Advisor  
216.579.2029  
[Kyle.d.fee@clev.frb.org](mailto:Kyle.d.fee@clev.frb.org)

[Matthew Klesta](mailto:Matthew.klesta@clev.frb.org)  
Policy Analyst  
216.579.3166  
[Matthew.klesta@clev.frb.org](mailto:Matthew.klesta@clev.frb.org)

[Hal Martin](mailto:Hal.martin@clev.frb.org)  
Policy Economist  
216.774.2526  
[Hal.martin@clev.frb.org](mailto:Hal.martin@clev.frb.org)

[Lisa Nelson](mailto:Lisa.a.nelson@clev.frb.org)  
Community Development Advisor  
216.579.2903  
[Lisa.a.nelson@clev.frb.org](mailto:Lisa.a.nelson@clev.frb.org)

[Anne O'Shaughnessy](mailto:Anne.oshaughnessy@clev.frb.org)  
Communications Advisor  
216.579.2233  
[Anne.oshaughnessy@clev.frb.org](mailto:Anne.oshaughnessy@clev.frb.org)

[Ann Marie Wiersch](mailto:Annmarie.wiersch@clev.frb.org)  
Senior Policy Analyst  
216.579.2423  
[Annmarie.wiersch@clev.frb.org](mailto:Annmarie.wiersch@clev.frb.org)

PITTSBURGH

[Joseph Ott](mailto:Joseph.c.ott@clev.frb.org)  
Regional Community  
Development Advisor  
412.261.7947  
[Joseph.c.ott@clev.frb.org](mailto:Joseph.c.ott@clev.frb.org)

CINCINNATI

[Bonnie Blankenship](mailto:Bonnie.blankenship@clev.frb.org)  
Regional Community  
Development Advisor  
513.455.4281  
[Bonnie.blankenship@clev.frb.org](mailto:Bonnie.blankenship@clev.frb.org)

CONNECT WITH THE CLEVELAND FED



@CleveFed\_ComDev





This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/). This paper and its data are subject to revision; please visit [clevelandfed.org](https://clevelandfed.org) for updates.