Since the Great Recession, rural economies have been in crisis. While urban areas were largely able to recover and grow, much of rural America has lagged. By 2019, metro employment was 10% higher than it was in 2007; rural employment remained 4% lower than its 2007 rate.¹

A major driver of this growing urban-rural divide has been the rise of the digital economy and its concentration in metro areas. From 2006 to 2018, the digital economy grew at an annual rate of 6.8%, compared with just 1.7% for the economy as a whole.² However, this digital revolution was not evenly distributed. Over nearly the same time period, 90% of all innovation sector job growth occurred in just five coastal metros, and while rural Americans accounted for 15% of the country’s overall workforce, they only held 5% of all the country’s computer and mathematics jobs.³

These diverging types of economies have significant implications for workforce development. As the overall economy continues to digitize, with technology employment best poised for consistent growth, ensuring all Americans have the digital skills needed to hold these occupations should be a national imperative.

However, rural Americans currently face unique barriers to gaining and wielding these skills. Our current dominant models for workforce development discourage investment in effective rural approaches; because much of workforce development funding is tied to local industries, rural places that have been left out of the tech boom will not have access to programs preparing their residents for the careers most likely to be high-paying and resilient.

While outcomes-based workforce development models have shown promise as a way of unlocking new resources to support skills development, our experience has shown that rural communities have largely been left out of these opportunities because the programs are not designed with the rural context in mind.

With automation continuing to accelerate the dominance of the digital economy, and with COVID-19 both increasing technology adoption and causing an intense economic crisis, there is incredible urgency to address these barriers to rural workforce development. At the Center on Rural Innovation (CORI), a national nonprofit action tank empowering small towns to build digital economy ecosystems, we have seen innovative approaches to creating rural technology opportunity in the communities we work with across the country. Communities in our Rural Innovation Network (a nationwide group of committed change agents working to advance the economic future of small-town America) have identified promising pathways to solving broadband, skilling, and career placement challenges. We believe harnessing approaches such as these can provide other rural communities with a model for outcomes-based workforce development programming that expands local opportunity while enhancing the country’s geographic equity.

While outcomes-based workforce development models have shown promise as a way of unlocking new resources to support skills development, our experience has shown that rural communities have largely been left out of these opportunities because the programs are not designed with the rural context in mind. In the following section, we identify the primary challenges facing current outcomes-based approaches to rural workforce development and propose potential solutions that offer innovative paths toward more resilient rural economies.

BARRIERS AND PROMISING SOLUTIONS

BARRIER:
Mismatch between traditional outcomes-based metrics and rural economies

Federal Workforce Innovation and Opportunity Act (WIOA) funding is designed to be demand-driven, and workforce development programs that rely on this funding align programs with available jobs in a local area. This is generally a sensible way to let local labor market demand drive funding of workforce development programs. However, for rural places with declining economies, this traditional setup presents a predicament. When programs target dominant rural industries, they frequently focus on jobs that are disappearing or not future-proof—an inefficient and unsustainable funding path. Likewise, training programs are unlikely to focus on training rural workers in digital skills of the future because local demand is seen as too limited to justify funding.

Moreover, most outcomes-based financing requires a significant number of program participants to mitigate financial risk and justify transaction costs. To ensure there is sufficient return to justify upfront investments, workforce programs often depend on a wide initial funnel of workers, learners, or program participants. This setup disadvantages rural communities, which often have small (and shrinking) populations, diminished local tax bases, and low population density. These barriers prevent traditional investment
programs from reaching the communities that could benefit greatly from a more place-based approach that sees return on investment defined in community terms. Performance-based contracts are built to favor population-dense and tech-heavy urban areas.

**SOLUTION:**
Harness workforce development dollars to build for the future

All too often, training providers consider only current job openings. In doing so, they may fail to prepare individuals for opportunities of the future that could be forecast using labor market data. By analyzing what industries are the most future-proof and have the potential to grow either locally or through remote work, training programs can connect rural residents with more resilient skill sets and careers. While training programs should still provide opportunity for low-wage jobs available in the rural economy, they should also seek to build digital skills to prepare trainees for higher-paying, resilient jobs of the future. Workers trained in digital skills in traditional rural sectors such as manufacturing, health care, and retail earn more and experience greater advancement than workers without these skills. Along with job acquisition and retention, trainers should consider the extent to which rural trainees apply digital skills in their jobs as a success outcome to leverage workforce development dollars to build the digital skill base of rural areas.4

**BARRIER:**
Broadband inequality and the digital divide

Many rural Americans lack two vital components necessary to access digital skilling programs and technology jobs: high-speed broadband and devices to access it. According to the Federal Communications Commission, roughly 23% of rural Americans lack access to both fixed terrestrial services at 25 Mbps/3 Mbps and mobile Long Term Evolution at 5 Mbps/1 Mbps, compared with 1.5% of urban Americans without access to connections at those speeds.5 Even many of the rural Americans who live in “connected” areas remain unable to access the internet for tasks such as remote education due to overestimates in data and the inadequacy of 25 Mbps/3 Mbps for videoconferencing and large file uploads.6 In 2019, 69% of Americans living in nonmetro areas owned a desktop or laptop computer, and just 56% had a broadband subscription delivered by cable, fiber, or digital subscriber line—devices and services that are generally prerequisites for remote work and online learning.7

This gap between those who have access to broadband and the tools to use it and those who do not is often referred to as the digital divide, and it is particularly rampant in rural

---


areas, along with low-income areas and communities of color. This divide reduces the value proposition of workforce development in rural places. Without this infrastructural prerequisite for digital work, programs are unlikely to devote significant resources to areas where residents will have to go elsewhere for resilient employment.

**SOLUTION:**
Community-based solutions for both broadband access and usage

Without adequate broadband, tech-oriented rural workforce development solutions will not succeed. As workforce programs plan for the future, those in rural areas need to incorporate plans for ensuring widespread broadband access—and making sure it is affordable. The most future-proof solution, though it requires long-term investment, is to plan for a fiber to the home network. More immediate solutions can involve the subsidized provision of laptops or other devices, setting up public Wi-Fi hotspots for cohorts of trainees, and providing grants to pay for broadband bills for those engaging in digital skills training.

**BARRIER:**
Scarcity of digital training and education opportunities

Effective workforce development programs often work through higher education institutions or independent skilling providers. In rural areas, both face barriers to success. A 2018 study by the Urban Institute found that 82% of Americans living in “education deserts” are in rural areas.\(^8\) Without nearby in-person higher education opportunities and without the broadband to connect to these programs in a remote way, these rural Americans lack an accessible chance to gain 21st century skills.

Outside of traditional higher education, we have recently seen an increase in national online providers delivering skills training, massive open online courses (MOOCS), boot camps, and certifications. However, despite nominally being national, many of these providers focus their resources almost exclusively on urban areas. And when rural students do enroll in these programs, they frequently lack access to the in-person support and wraparound services that enhance educational outcomes and participant retention, including connections to other students, connections to local employers, local mentorship, and child care. Without intentional rural and community-based programming, access to these otherwise promising digital skilling opportunities is destined to be ineffective.

**SOLUTION:**
Embrace alternative educational models while providing additional supports

In an era where digital skills are becoming necessary, industry certifications or online boot camps can play an important role in preparing rural residents for today’s careers. Many such credentials may be strong candidates for Career Impact Bonds (e.g., General Assembly) or for other types of outcomes-based funding that align incentives across stakeholders (e.g., FastForward).
For programs that offer skilling services online and are expanding into rural areas, a best practice is to engage a cohort model, which can take one or both of two forms: a student-based cohort, where groups of students in a rural area jointly work through the program and benefit from shared wraparound services and cocurricular activities, and a community-based cohort, where a service is introduced in a select group of rural communities that are able to work together on marketing and outreach and collectively troubleshoot issues as they arise.

In 2020, CORI piloted a community-based cohort model that provides logistical support to a cohort of communities all offering a common set of digital skilling programs at the same time. This approach is showing initial success, with completion rates exceeding program goals and communities affirming the value in collaborating and supporting each other’s progress.

Successful programs should also address the lack of support that in-person courses usually provide. For example, students may need wraparound services such as child care, transportation, financial counseling, income support, and health care support to fully engage in the training, prepare for new job opportunities, and succeed in a new job. Having a dedicated coach or counselor who can work with rural communities to connect students with these supports can drastically increase the accessibility of the programs. In Springfield, Vermont, for example, CORI deployed two AmeriCorps VISTA members to engage in inclusive outreach for economically disadvantaged individuals enrolling in our previously mentioned digital skilling program. We found that building capacity for local trainers to provide or connect students with such wraparound supports helps to remove a key barrier to entry.

**BARRIER:**
**Dearth of rural employers hiring local tech**

The unavoidable fact is rural communities have lower employer density than their urban counterparts. Additionally, the employers located in rural areas are often less involved in the tech industry. As mentioned prior, just 5% of all computer and math employment is based in rural areas (and just 1% of rural employment is in computer and math jobs).\(^9\) Even when we broaden the definition of tech jobs, rural areas still lag, for example, in employment in information and communications technology and tech-enabled industries.\(^10\)

This local gap makes it more difficult to engage sustainable workforce development programs, simply since there are fewer local employers in resilient industries. With fewer employers come fewer opportunities for partnerships in work-based learning or hands-on training, and furthermore, fewer local jobs for graduates of workforce development programs.

It is true that many rural communities have a significant number of businesses and organizations (such as banks, hospitals, and educational institutions) that need and use a lot of technology, yet they outsource much of those services and support. Because of this outsourcing, even when local institutions could anchor tech employers they often do not, which diminishes opportunities for local employment—and diminishes opportunities for local workforce development programs tailored to these needs.

---


SOLUTION 1: Facilitate remote work

A recent forecast from Global Workplace Analytics estimates that 56% of U.S. jobs are compatible with remote work (up from 40% in 2011). The forecast suggests full-time remote work could increase as much as 30%, making one-third of jobs fully remote. Rural workforce development should tap into this trend, which will require an intentional approach since remote work opportunities do not automatically mean that employers will be more willing to hire or more adept at hiring rural workers.

One promising approach is Colorado’s Location Neutral Employment (LONE) program, a performance-based incentive that provides tax credits for each remote worker a company employs in an eligible rural county as part of its expansion.

SOLUTION 2: Build and leverage coworking spaces for ecosystem density

We see tremendous promise in experimenting with building rural coworking spaces as remote working hubs. These spaces would be designed to serve employees from multiple organizations and would offer high-speed internet access, intensive courses, and individualized coaching services. Coworking spaces can address the problem of low population and employment density in rural areas by centralizing the tech workforce and tech trainees. This model allows employers to lease office spaces in rural communities at a fraction of the cost of office space in a downtown metropolitan area, and provide services proven to cultivate the workforces employers require.

Throughout our Rural Innovation Network, we work with over a dozen rural communities with active coworking spaces that have become centerpieces of the local tech economy. For example, in Traverse City, Michigan, the coworking space and technology incubator 20Fathoms provides office space, access to professional services, events, and mentoring, and has a full-time staff member dedicated to talent acquisition at local and remote tech companies. Spaces such as these can enhance a region’s tech ecosystem, inspire future innovations, build a culture of entrepreneurship, and facilitate mentorship between tech employees and trainees.

SOLUTION 3: Engage local employers in new ways to stimulate tech employment

Workforce development leaders in rural communities have the opportunity to deepen their relationships with local employers by engaging them in new ways of digital employment. Instead of only relying on job postings to

---

determine demand, rural workforce development leaders should engage employers like hospitals, banks, and colleges to understand how they can fulfill more of their demand for tech products and services with local talent. Approaches are needed that aim to both stimulate the demand for local tech employment and deliver the training needed to meet the demand.

SEIZING THE MOMENT FOR RURAL INNOVATION

Rural communities do face real challenges in designing outcomes-based workforce development programs that equip local residents with the skills and training needed to participate in a local digital economy. However, these challenges are far from insurmountable. With a more creative series of approaches for conceptualizing, executing, and evaluating workforce development programs, rural communities can tap into their existing talent in a way that builds more sustainable economies.

Solving this challenge in rural America’s workforce development is critical for the communities and trainees themselves—and for the country, which is facing a widening geographic divide that is exacerbating inequality and stifling widespread innovation. By supporting and scaling effective programs such as those suggested here, we can move rural economies forward and develop a resilient rural workforce of the future.

This chapter came from the book Workforce Realigned: How New Partnerships are Advancing Economic Mobility. Learn more at workforcerealigned.org.