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Community Colleges: Beyond the Numbers

Community colleges contribute to local and regional workforce development in ways that can be difficult to measure

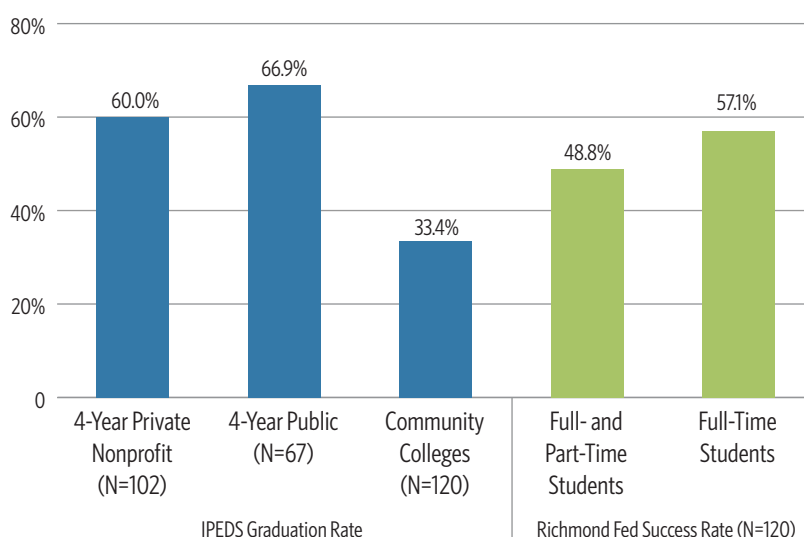
There is enduring demand for post-secondary education that can provide the diverse range of skills, knowledge, and experience required for the jobs of today. For some post-secondary institutions, traditional metrics designed around the four-year degree model (i.e., graduation rates for first-time, full-time, degree-seeking students) are reasonable measures of how successfully they provide that training. For other institutions, such as community colleges, metrics like the Richmond Fed's Survey of Community College Outcomes are designed to more accurately measure what they do and who they serve. Yet despite their strengths, neither of these measures can capture students' ultimate labor market outcomes, and both also fail to capture other aspects of how colleges, and in particular community colleges, serve their regions and the broader labor market.

Each of the 122 community colleges in the Fifth District serves a unique geography. These colleges are mission-driven to meet the needs of their communities — educating their students while ensuring that local employers have the workers necessary to keep their regional economy running. By engaging with community college leaders throughout the Fifth District, the Richmond Fed has not only collected data, but also gained a better understanding of what makes these colleges critical parts of the region's workforce development infrastructure and unique as individual institutions.

A key takeaway is that context matters, and it is important to understand the workforce role community colleges play — both in engaging those who might otherwise remain on the

Redefining Community College Success

Comparing the Richmond Fed success rate and traditional graduation rate



NOTES: N represents number of institutions over which students are aggregated. IPEDS graduation rates include only full-time, first-time, and fall entry students.

SOURCES: 2025 SCCO, NCES 2023-24 IPEDS, and authors' calculations.

sidelines of the labor market and by delivering programming (credit and non-credit) that gives students the skills to find jobs and careers in critical occupations. Combining quantitative and qualitative data provides policymakers with a more robust understanding of the challenges and opportunities faced by community colleges and the important role they play in workforce development.

ALWAYS START WITH THE DATA

Degree-seeking students at community colleges tend to look very different than degree-seeking students at many four-year colleges. In 2024, the Richmond Fed piloted a measure to include a larger share of community

colleges' degree-seeking populations in the Survey of Community College Outcomes. The Richmond Fed's success rate captures outcomes for part-time students as well as students for whom this is not their first time attempting college, for example. In addition to expanding the criteria for inclusion, the success rate broadens the definition of student success to capture common pathways for community college students, like transferring to a four-year institution prior to earning an award at the community college. As an alternative to the traditional graduation rate, an institution's success rate provides a more expansive picture of how it serves its students. (See chart.)

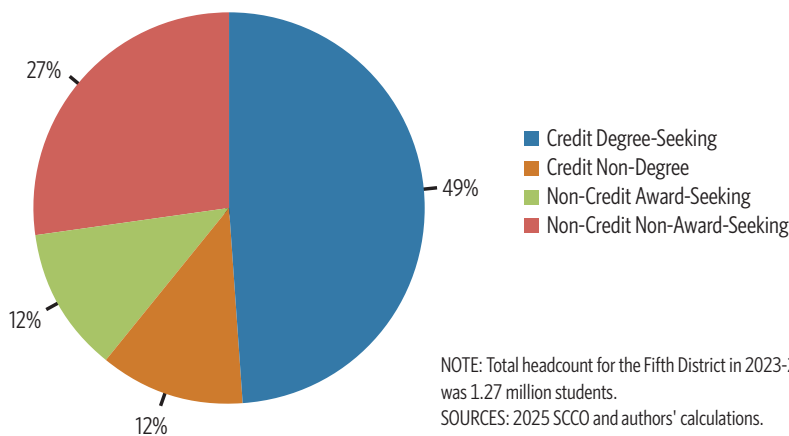
While more representative of what community colleges do, the Richmond Fed success rate has limitations. Like a graduation rate, an institution's success rate is a static, aggregated measure of short-term student success that does not capture program-specific outcomes or longer-term outcomes like individual employment and earnings. In addition, unlike most four-year institutions, which primarily (often exclusively) serve students seeking degrees, community colleges offer options designed to support students along each step of their workforce pathway. In the Fifth District, only 49 percent of the 1.27 million students enrolled in community colleges in the 2023-2024 academic year were in degree programs. And this varies widely even among community colleges: At Spartanburg Community College in South Carolina, 82 percent of students were in credit-bearing degree programs, but at Allegany College of Maryland, the share was only 23.5 percent. Measuring a community college solely by the success of degree-seeking students would miss most of the students that many community colleges serve. (See chart.)

Who are the non-degree-seeking students that community colleges serve? First, there are credit non-degree-seeking students, who include high school students dually enrolled in community colleges and earning college credits or students enrolled in four-year colleges who choose to take a class at a community college and transfer the credits. Second, there are non-credit students, such as those seeking a General Educational Development credential, or GED, or those enrolled in a language course or a short-term workforce-oriented program. These programs are an important part of the role community colleges play across states.

But even if the success rate captured these non-degree-seeking students, there are still aspects of the work community colleges do that would be difficult

Most Community College Students Are Not Degree-Seeking

2023-2024 student headcount enrollment distribution for Fifth District community colleges



to quantify. These include programs in key industries, training specific to the needs of a local economy, and education and training for students who would not otherwise have access to postsecondary education.

EVERGREEN OCCUPATIONS IN EVERYDAY INDUSTRIES

Community colleges provide training programs for critical occupations in industries that are important to everyday life in every community. In some cases, students earn traditional credentials such as certificates and associate degrees. In other cases, training is provided through short-term programs that offer hands-on instruction and connections to local employers through work-based learning opportunities. Regardless of credential type, community colleges often provide the primary pipeline — and sometimes the only public, low-cost pipeline — of workers into these occupations.

For example, most community colleges offer traditional programs in skilled building trades — such as welding, construction, and installation and repair of HVAC, electrical, and plumbing systems. Cape Fear Community College and Guilford Technical Community College in North Carolina, for example, are among the 16 North

Carolina community colleges that partner with the Carolinas Associated General Contractors to offer construction boot camp programs that prepare students for entry-level construction work with hands-on training and nationally recognized credentials in just a few months. The length of the program is not unique. To accommodate students seeking a quicker path to the workforce and to help employers fill critical roles, many community colleges offer short-term intensive programs that provide stackable credentials and industry-ready training. Given that HVAC, electrical, and plumbing systems are critical to any functional building, just about every industry and every company needs the workers that community colleges are training.

Health care is another industry where community colleges play an outsized workforce development role. Nurses are critical across all health care specialties and settings. While a bachelor's degree in nursing is an increasingly common pathway into entry-level nursing jobs, a student who successfully completes an associate degree program in nursing from a state-approved program is qualified to apply for a registered nurse (RN) license from their State Board of Nursing and sit for the National Council Licensure Examination for

Registered Nurses exam. In 2024, nearly half of registered nurses reported that a postsecondary credential less than a bachelor's degree qualified them for their initial RN license. Community colleges may also help students stack credentials through certificates and gain valuable experience in health care fields as they prepare to complete a degree program for a more advanced role. Students may stack certificates within the field of nursing, moving from certified nursing assistant to licensed practical nurse before completing an associate degree. This also includes students who begin a career as a paramedic or a respiratory therapist, for example, and then leverage their skills and training to transition to a nursing pathway.

There are other health care roles that rely on community colleges, such as phlebotomists, dental hygienists, surgical technicians, radiology technicians, and emergency medical technicians. In many cases, training programs for these jobs are designed with input from local hospitals and health care providers that view community colleges as workforce development partners. For example, when health care leaders in rural southwest Virginia identified a need for diagnostic sonographers, Southwest Virginia Community College worked with the local hospital system (Ballad Health) to set up a program to develop a local workforce pipeline. With resources provided by Ballad and additional funding from Clinch Valley Health and the Virginia Tobacco Region Revitalization Commission, Southwest Virginia Community College launched a program in 2022. Strong industry partnerships often facilitate access to top-of-the-line equipment and high-quality instructors, who are otherwise difficult to recruit due to the wage gap between teaching and working in the field.

Another key industry that relies on community college programming is transportation. Many community colleges offer commercial driver's license and truck driver training

programs, which are critical for communities across the country that rely on the work of truckers and the diesel mechanics who keep the vehicles running. Aviation maintenance training facilities at Pierpont Community and Technical College in West Virginia and Blue Ridge Community College in Virginia produce technicians who are qualified for Federal Aviation Administration certification and who work on aircraft both locally and across the country.

Many critical occupations do not require bachelor's degrees but do require hands-on training. Community colleges are well suited to understand and adapt to industry demands and facilitate student success while providing the workers that local industries need.

POWERING LOCAL AND REGIONAL INDUSTRY CLUSTERS

In addition to training students for evergreen occupations such as construction, transportation, or health care, community colleges try to prepare students for roles that are important to local and regional industries.

In some communities, geographic characteristics and natural amenities drive workforce demand. For example, the waterways, mountains, and oceans across the Fifth District draw substantial tourist populations, and communities near those amenities often rely on community colleges to train and educate workers in tourist industries. Carteret Community College in Morehead City, N.C., and Horry-Georgetown Technical College in coastal South Carolina have robust culinary programs that provide a pipeline of skilled service industry workers and other hospitality professionals for the many restaurants and hotels in their respective regions. In Western Maryland, Garrett College offers programs in outdoor leadership and adventure education and marine technology to support the outdoor recreation industry around Deep Creek

Lake and the Appalachian Highlands.

Community colleges are often prime partners for manufacturing companies eager to develop a strong workforce pipeline as well. A February 2025 report from the Education Design Lab, a nonprofit focused on education-to-workforce models, emphasized the importance of the relationship between community colleges and employers in providing the hands-on, relevant training that can lead to positive workforce outcomes. In particular, the report highlighted meaningful employer relationships that provide “feedback loops to ensure alignment between education offerings and workforce needs” as well as “create opportunities for co-developing curricula and providing work-based learning experiences.”

In the Fifth District, community colleges often partner directly with employers to develop training programs. In some cases, they also play a role in regional economic development partnerships designed to build and sustain momentum around locally important industry clusters. AdvanceNC is a collaborative effort between community colleges, universities, workforce development boards, and employers in central North Carolina to ensure the continued growth of the region's advanced manufacturing workforce pipeline. AdvanceNC supports collaboration, rather than competition, among the 12 participating community colleges, which represent counties with a diverse mix of manufacturing employers with unique workforce needs.

In Johnston County, N.C., the Workforce Development Center is focused on the pipeline for the local life sciences and biopharmaceutical industries. The result of a unique public-private partnership, the center is operated by Johnston Community College in partnership with the local economic development authority and the local school district. Through partnerships with key employers like Grifols and Novo Nordisk, Johnston Community College works to develop

and deliver programs for secondary and postsecondary students in high-demand fields.

SERVING A BROADER REGION AT SCALE

While community colleges tend to prioritize serving the students and employers in their home region, some have unique offerings that draw in students from a broader geography. In some cases, these specialized workforce programs involve partnerships with other institutions. For example, Danville Community College in Virginia partners with the Institute for Advanced Learning and Research and others to support the Accelerated Training in Defense Manufacturing program to train adult learners for careers in the defense industrial base. Students travel to Danville from across the country for a 16-week intensive training in fields like additive manufacturing, computer numerical code machining, and welding using top-of-the-line equipment in programs designed with guidance from the Department of Defense. Tuition, housing, and transportation are fully covered for students in the program, which helps attract students who plan to train in Danville and work in other locations.

Some occupations require training on costly equipment or other infrastructure. In these cases, multiple regions might rely on a community college for workforce training. At Fayetteville Tech's Regional Fire and Rescue Training Center in North Carolina, first responders from across the region train for complex rescue scenarios that involve navigating fast-moving water at the swift water rescue facility. The facility was developed after Hurricane Matthew hit eastern North Carolina and is designed to help communities prepare for the unique challenges that arise when storms cause waters to rise. With a 140,000-gallon water tank and technology to simulate a range of challenging conditions, this is an expensive operation to run, and not every college

can (or should) build one. Rather, first responders across multiple states can train at Fayetteville Tech's facility and apply the training in their communities.

Certified electrical power line technicians are needed anywhere there are power lines, but the physical infrastructure required to train these workers is prohibitive for many community colleges. Community colleges in rural settings, such as Wytheville Community College in southwest Virginia and Cleveland Community College in south central North Carolina, often have the necessary space to build out the structures needed for hands-on training. As a result, these programs draw students from far outside their service areas who relocate for intensive 10- to 14-week programs and earn multiple industry certifications. In many cases, these students will then return to their home locations.

PROVIDING ON RAMPES FOR NONTRADITIONAL STUDENTS

As open-access institutions, community colleges serve students who span educational and socioeconomic backgrounds. For many students, attending a community college reduces the financial barriers to higher education. Tuition and fees are often lower than at four-year institutions, and low-cost dual enrollment and transfer courses allow community college students to make incremental progress toward degrees and credentials.

The relationship between community colleges and economic mobility is complicated. There is evidence that community colleges offer significant value for students who could not otherwise access higher education. For example, a 2022 *American Economic Review* article by Jack Mountjoy of the University of Chicago links education and earnings registries and finds significant value added for two-year entrants who otherwise would not have attended college. Importantly, cost of attendance is not the only obstacle for some students. To serve less-traditional

students, community colleges develop pathways and support to help navigate significant life challenges, thus enabling more students to succeed and add value to the labor force.

For example, students with learning challenges or intellectual disabilities may require support systems and guidance in a setting close to home. Community colleges in the Fifth District have established programs designed to recognize and address the barriers these students face while building on their interests and abilities. Institutions take different approaches to training students with intellectual disabilities for placement in local industry jobs. For example, the Brunswick Interagency Program at Brunswick Community College in North Carolina is a cross-sector partnership designed to support local students with intellectual and developmental disabilities as they transition into the workforce and into adulthood. At the state level, the T-STEP Program in North Carolina is designed to help students with autism gain employment.

Community colleges also make postsecondary education possible for adult students who have significant nonacademic responsibilities. In some cases, students may have previously started but not finished a degree program. The NC Reconnect program is a targeted effort in North Carolina to engage students between the ages of 25 and 64 who have some credits toward a postsecondary credential. Community colleges will often serve students who are working full-time or otherwise unable to be on campus every day by offering courses at a range of times or in different formats.

College students who are parenting minor children may require a unique set of supports beyond flexible course offerings. Some community colleges have on-site child care facilities for students with young children. At Carroll Community College in Maryland, the Littlest Learners Child Development Center offers discounted child care for students with children between

the ages of 2 and 5. To be sure, offering on-campus child care for students is not feasible for many schools.

Financial and regulatory concerns are frequently cited by community college leaders as barriers to providing child care on campus, and many communities already face persistent challenges meeting existing demand for child care.

Caregiving responsibilities can prevent individuals from completing — or even enrolling in — postsecondary programs to increase their income or grow their career. In response, some community colleges have found creative ways to support parenting students through family-friendly campus spaces and resources to help navigate local child care options. For example, Laurel Ridge Community College in Virginia designed the Parent Scholars Program to provide targeted support for students balancing caregiving and education. They also created the Cub House, a lounge on campus with a children's play area where parenting students can study while their children are occupied.

Recognizing the value of engaging parents in the workforce, the Virginia Foundation for Community College Education launched the College Attainment for Parent Students (CAPS) initiative to provide wrap-around support services for low-income parents of young children at five pilot schools in 2023. Program participants

receive financial and academic coaching, career navigation, peer support, and direct financial support to defray the costs of child care, technology, and other expenses. The goal of the CAPS program is not just to improve labor market outcomes for a parent. It is also designed to ensure quality child care that can help a family emerge from generational poverty.

Completing further education and training can also be difficult for veterans transitioning to civilian life. Veterans separating from the military have valuable skills and expertise but may need support navigating higher education and the civilian labor market. The Fifth District is home to large military installations, and many community colleges are near bases, such as Fayetteville Tech (Fort Bragg), Coastal Carolina (Camp Lejeune), Frederick (Fort Detrick), and Tidewater (Naval Station Norfolk). Community colleges support veterans as they navigate financial aid programs and provide spaces on campus designed to support and build community for student veterans. Community colleges can participate in the SkillBridge Program, designed by the Department of Defense to “bridge the gap” between the military and post-military life. Students are paired with industry partners to receive hands-on training during their last 180 days of military service (while still getting military compensation) at

no cost to the employer. In addition to serving individuals separating from the military, some community colleges have programs to serve the families of service members who may be navigating changes in school or work after moving to a new location.

EVOLVING THE WORKFORCE DEVELOPMENT LANDSCAPE

Each institution of higher education plays a role in developing the workforce. Measuring that role and its efficacy is both important and difficult. Developing a workforce is much more than providing courses and certificates. Workforce development is about offering access for everyone and ensuring that the skills and training provided are relevant to the current local, regional, and national economy.

Community colleges play a unique role in the nation's workforce development system. Accurately quantifying this role at an institutional and individual level ensures that everyone from potential students to policymakers to funders understands the costs and long-term benefits of postsecondary programming. Recognizing the programming that community colleges provide and the students they serve is important both for enabling more accurate data collection and ensuring that local, regional, and workforce development needs and opportunities are well understood. **EF**



2025 Survey of Community College Outcomes Is Live

Community colleges play a critical role in workforce development, but existing data collected across states do not fully describe the range of positive outcomes achieved by these students.

In 2021, the Richmond Fed launched the Survey of Community Outcomes as a pilot study with 10 schools.

It has expanded each year since, and in 2025, the team collected data on 189 community and technical colleges, including 121 schools in the Fifth District.



Scan here for the results from the 2025 SCCO