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Built to Serve: State Postsecondary Funding Formulas and Rural Colleges and Universities

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Introduction

Public higher education institutions across the nation are facing an unprecedented set of challenges that are compromising their financial health. The number of high school graduates is projected to decline by approximately 13% nationally by 2041[1], and the share of those graduates who immediately seek to enroll in higher education has proven difficult to increase. Total enrollment has dropped by four percentage points from 2012 to 2022, with enrollment at public two-year colleges dropping 12 percentage points[2]. Institutions have also struggled to serve the approximately 37 million potential students with some credits and no degree[3], many of whom are now adult learners over the age of 25. Re-enrollment rates for students who started but didn't receive a credential are less than 5% for every state [4]. For most institutions, enrollment challenges immediately impact their tuition revenue, a problem made more acute by the fact that net tuition already funds 38% of public higher education, nearly double what it was in 1980[5].

As public institutions have become more reliant on tuition revenue to cover their costs, stagnation or declines in this revenue stream harm the institutions' overall financial position. The

[1] Lane, P., Falkenstern, C., & Bransberger, P. (2024). *Knocking at the college door: Projections of high school graduates.* Western Interstate Commission for Higher Education.

[2] Lane, P., Falkenstern, C., & Bransberger, P. (2024). *Knocking at the college door: Projections of high school graduates.* Western Interstate Commission for Higher Education.

[3] Cohen, J., Causey, J., Randolph, B., Holsapple, M., & Shapiro, D. (2025). *Some College, No Credential: A 2025 Snapshot for the Nation and the States* (6th ed.). National Student Clearinghouse Research Center.

[4] National Student Clearinghouse Research Center. (2025). *Some College, No Credential Student Outcomes Dashboard*.

[5] State Higher Education Executive Officers Association. (2026). *State Higher Education Finance: FY 2025*. Boulder, CO.

pace at which this happens and the degree to which the institution is equipped to prepare for and absorb revenue decreases vary widely. Many factors may be at play in determining an institution's overall preparedness and ability to adapt to shifting financial conditions, such as the effectiveness of the institution's governance structure, the role the state plays in supporting its public institutions, or other factors. In this brief, we examine one possible contributing factor — the institution's geographic location. Specifically, we examine the unique enrollment and financial challenges associated with sustaining public postsecondary institutions in rural areas. State funding formulas and tuition revenue are the primary sources of unrestricted funding for public institutions; therefore, we also examine whether those funding formulas recognize rurality as a meaningful characteristic that should shape how state support flows to public institutions.

In this brief, we provide a national perspective on the enrollment and funding challenges facing public higher education in rural areas. We also provide key findings from a group of applied state technical assistance projects focused on understanding and defining rurality. Additionally, we explore how rurality could influence decision-making regarding the support and resources of public postsecondary institutions located in rural areas through state postsecondary funding formulas. As this work is intended to inform the actions of state leaders invested in the success of public higher education in rural areas, we conclude with recommendations for state policy leaders.

National Perspective

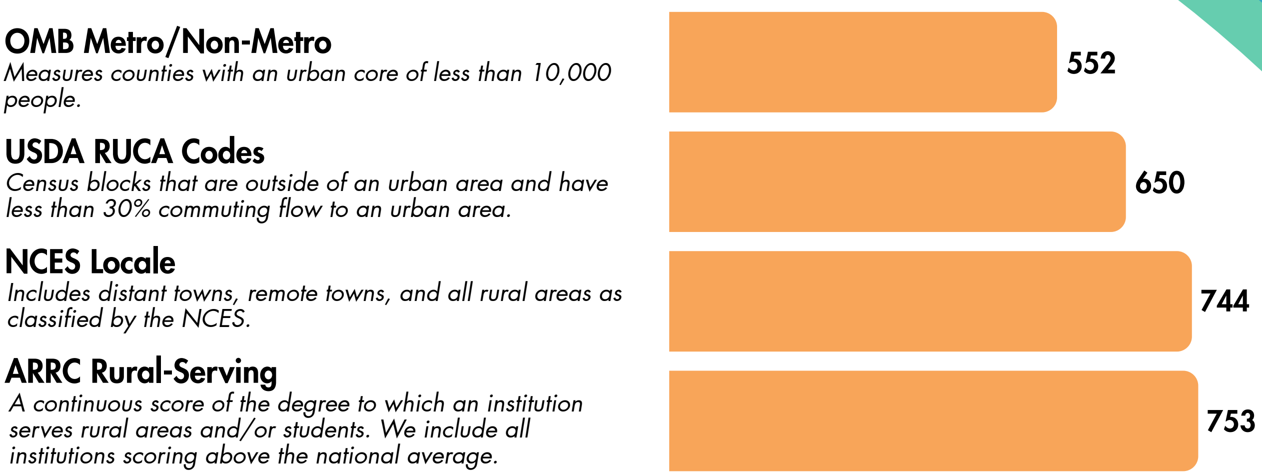
Defining which postsecondary institutions are rural — and which are not — is a deceptively simple task. Indeed, NCHEMS' earlier work in this area uncovered dozens of different definitions of rurality that could be used to classify institutions[6]. What's more, these definitions are all based on the geographic location of the institution itself and may or may not also indicate whether the institution serves students originating from rural areas. Either method for defining rurality — by campus location or by the student population served — is valid, and, in many cases, could very well overlap. Even so, it is possible to imagine cases where institutions in urban areas serve rural students, and institutions in rural areas draw students from predominantly urban areas.

According to some of the most commonly used definitions of rurality, there are anywhere from about 550 to 750 public institutions in rural areas or that are rural-serving across the nation. The figure below provides a brief explanation of four different definitions of rurality and the total number of institutions that fall within each definition.

Four of the most common definitions of rurality overlap 90% of the time.

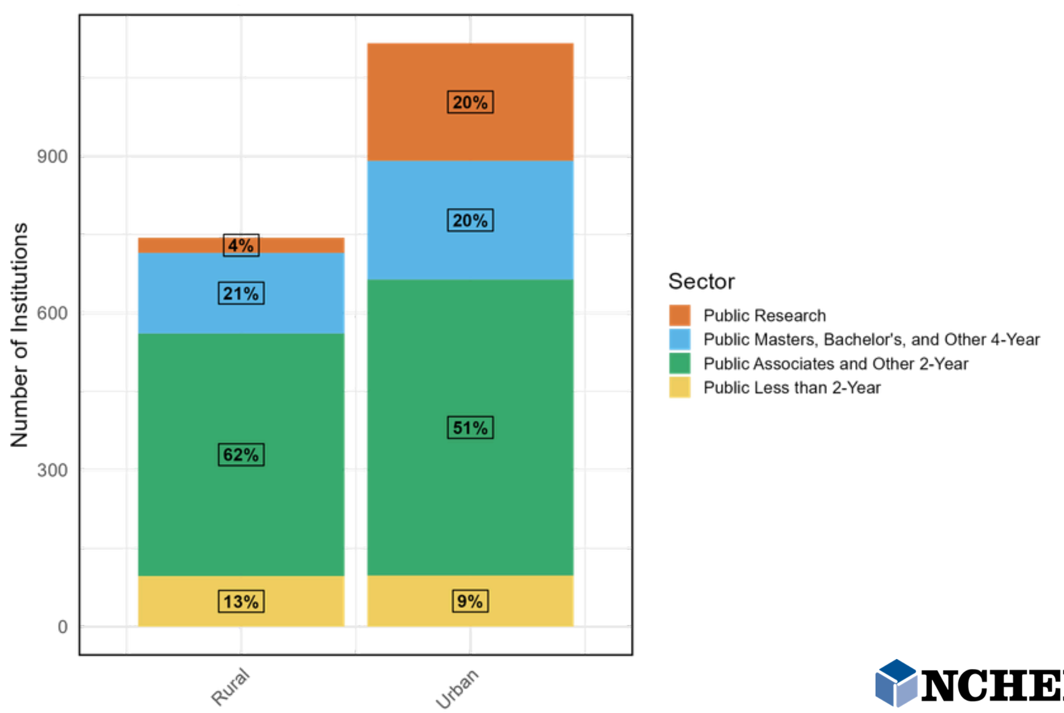
[6] Collins, Jasmine D. "Rural Classifications & Definitions Guide." National Center for Higher Education Management Systems, June 18, 2025.

Figure 1: Count of Rural/Rural-Serving Public Institutions by Commonly Used Definitions



Using the NCES Locale definition, about 40% of the nation's public postsecondary institutions are located in rural areas. These institutions differ significantly from their urban counterparts; they are more likely to be two-year institutions or four-year comprehensive institutions and less likely to be research institutions, as illustrated in the figure below.

Figure 2: Public Institutions by NCES Locale Classifications and Sector



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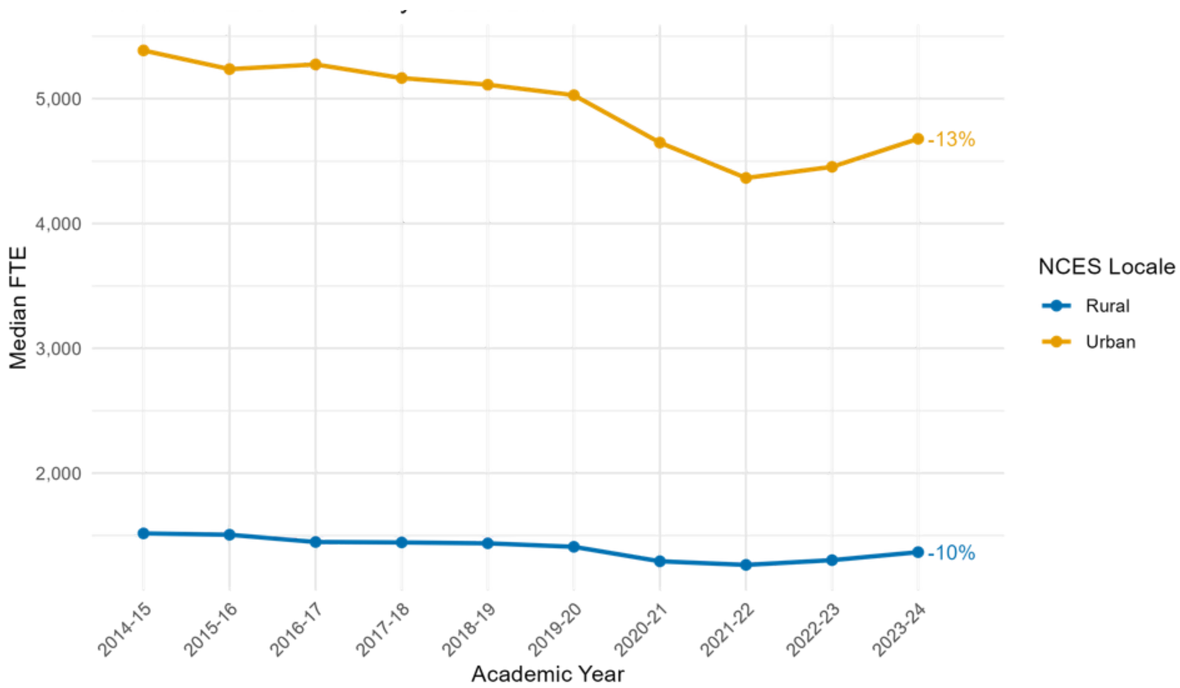
Across public sectors, rural institutions are typically smaller than urban institutions. Small institutions face a unique set of financial challenges: fixed costs such as administrative costs and facilities expenses are spread over fewer students, making it more challenging for rural institutions to achieve the economies of scale available to larger urban campuses. Many signs also point to rural institutions remaining small, and, perhaps, to continued enrollment struggles. Since 2013-14, undergraduate enrollment in public research institutions has expanded in 36 states, while only six states saw increases in the public four-year comprehensive sector — institutions that are disproportionately located in rural areas[7]. Figure 4 illustrates the enrollment trend across urban and rural institutions over time, reflecting an enrollment rebound in urban institutions that has not been apparent across rural institutions.

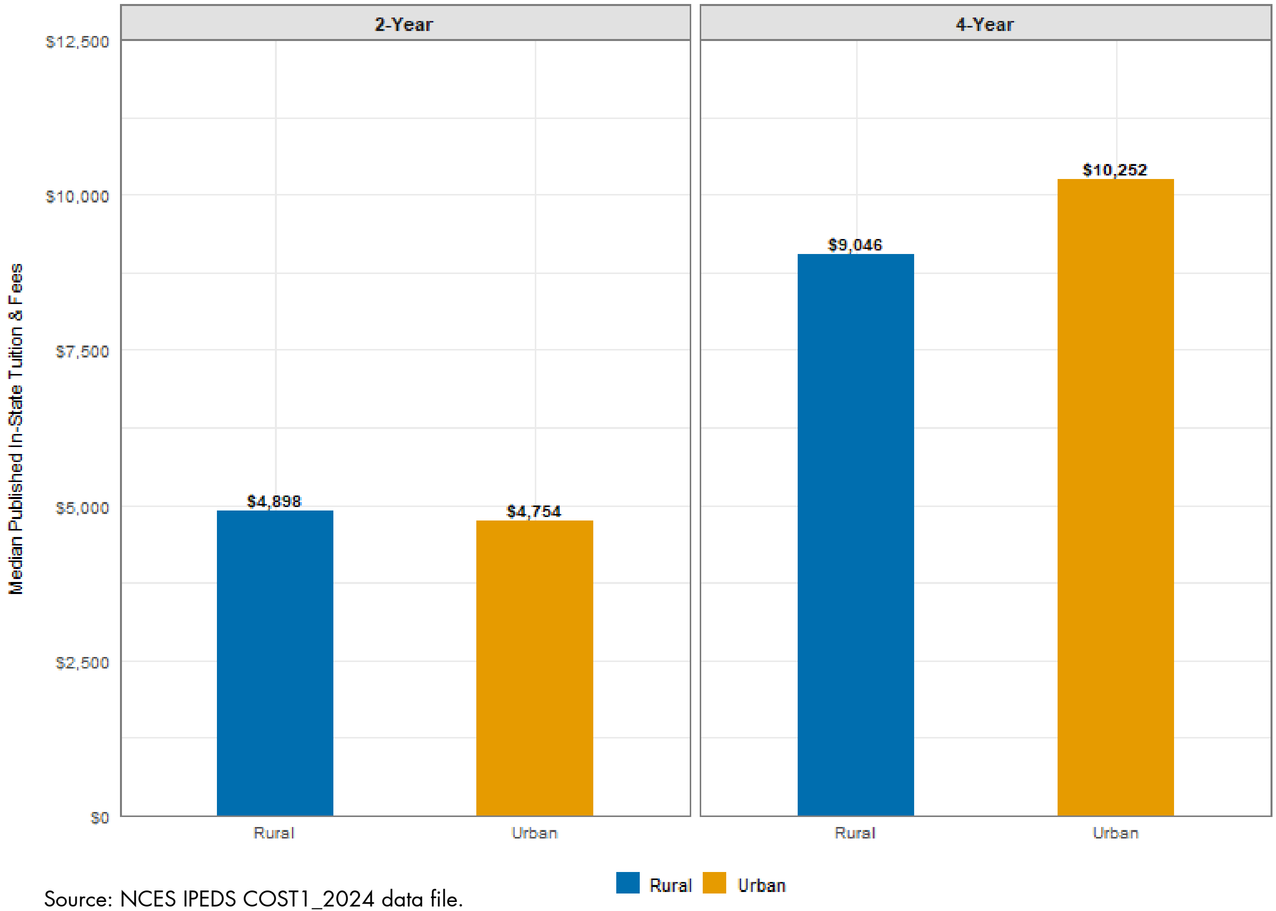
Figure 3: Median Annual FTE by NCES Locale



In addition to being smaller, the institutional types (public two-year and four-year comprehensive) that are disproportionately located in rural areas can be more affordable for students than their urban counterparts. This is especially true in the four-year sector, where the median in-state tuition and fee rate is more than $1,000 per year lower than at institutions located in urban areas, as illustrated in Figure 4. This risks putting these institutions in a financial bind; not only do they generally serve smaller student populations, but they also charge those students less in tuition.

[7] Prescott, Brian T., and Sarah Pingel. From Drift to Direction: Mission Differentiation in an Era of Demographic Change. National Center for Higher Education Management Systems, July 9, 2026.

Figure 4: Median Published In-State Tuition & Fees at Public Institutions by Sector and NCES Locale Urban/Rural Designation, 2024-25



Source: NCES IPEDS COST1_2024 data file.

The confluence of these challenges calls on rural institutions and the states that support them to identify strategies to strengthen their financial resiliency. It is often the case that rural two-year and four-year comprehensive institutions serve as key college access points in parts of the state where demand for postsecondary education exists. Still, students may be unwilling or unable to leave their communities to seek it out. This points to the key role these small-scale, high-impact institutions will play in statewide attainment agendas. In addition, the institutions themselves are often an integral part of their communities, serving as a major economic engine for the community and region through employment opportunities, research, and service. The public service mission and role of rural institutions strengthen their case for dedicated state support. However, in our research, we found that only a small number of states explicitly mention an institution's rural location as a determining factor within state funding policies. To better understand how state funding formulas impact rural institutions, NCHEMS studied four state environments in particular — Colorado, Missouri, New Mexico, and Oregon — to learn more about how rural students and institutions are defined and how the state's funding environment may impact them. In the section that follows, we provide an overview of the key findings across these four diverse state environments.

Key Findings

Our work at NCHEMS touches all 50 states, and we commonly hear concerns from state leaders about the particular challenges facing public postsecondary institutions located in rural areas. By digging deeper into four state contexts, NCHEMS learned more about state actions to support these institutions through their funding models. While only a small number of states explicitly mention the rural or urban location of an institution, we found that all state funding models affect rural institutions in unique, indirect ways.

Definitional Challenges

First, we found that many states struggle with defining rurality. While many definitions exist, we learned that both state and institutional leaders struggled with aligning on a definition. To support states through this challenge, NCHEMS prepared an in-depth analysis of how public institutions within states would be classified according to some of the most common definitions of rurality. We found that four of the most common definitions (Rural-Urban Commuting, Frontier and Remote Area, Metro/Non-Metro, and Locale codes) overlap 90 percent of the time[8]. This finding suggests that any definition a state could select may not be significantly different from other definitions in terms of how institutions would be classified, and may help to build consensus around definitions.

We also found that flexibility in definitions is key. Across state contexts, we learned that people were more likely to agree with definitions that aligned with their lived experience with the institution(s) and region(s) in question. While people found value in externally established categories, such as definitions from the OMB, USDA, ED, or other agencies, tension rose when these definitions were not perceived to align with on-the-ground realities. Across the state projects, we learned that preserving flexibility to make situational and contextually relevant decisions around determining the rural status of an institution is key. In some of the state projects, this looked like starting with an established definition of rurality and then maintaining authority for state agencies to add additional institutions as needed. Some definitions with detailed subcategories or continuous scales that capture regional nuances proved helpful in providing flexibility as well.

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[8] Cardenas, Artemio, Jasmine D. Collins, Louisa Hunkerstorm, and Sarah Pingel. "Building a Rural Focus in State Higher Education Funding Approaches." National Center for Higher Education Management Systems, June 18, 2025.

Understanding the Unique Needs of Rural Students

Research demonstrates that rural residents are more likely than their non-rural counterparts to face barriers to college access and success, including higher poverty rates, lower-resourced high schools[9], and greater distances from universities[10], among others. Despite increasing over time, educational attainment levels are persistently lower in the nation's rural areas compared to its non-rural ones[11].

Rural students may also feel less of an incentive to earn a college degree than urban and suburban students. Higher levels of education are associated with higher wages everywhere, but the earnings premium from education is not as great in rural areas as in urban ones[12]. Additionally, in some rural communities, higher education is seen as contributing to community decline because of a perception that young people leave for college and seldom return[13]. However, this perception is not consistently true. Since the COVID-19 pandemic, the notion of "rural flight" has been less prevalent, with Census data revealing slowing outmigration from rural communities and increases in in-migration[14]. With the changes in remote work, more people are able to access good jobs from a variety of locations.

Despite these challenges, we learned that real demand for higher education exists among people living in rural areas, and that this demand is not consistently met. For example, in one state project, we found that, after adjusting for population size, people living in rural areas who did not already have college credentials and were under the age of 30, demonstrated the same or higher intent to

[9] Stephany Dunstan et al., "Defining Rural: The Impact of Rural Definitions on College Student Success Outcomes," Theory & Practice in Rural Education 11, no. 1 (2021).

[10] Nicholas Hillman and Taylor Weichman, "Education Deserts: The Continued Significance of 'Place' in the Twenty-First Century," American Council on Education, 2016.

[11] "Employment & Education - Rural Education," USDA Economic Research Service, accessed May 8, 2026.

[12]Anthony P. Carnevale et al., "Small Towns, Big Opportunities: Many Workers in Rural Areas Have Good Jobs, but These Areas Need Greater Investment in Education, Training, and Career Counseling," Georgetown University Center on Education and the Workforce, 2024.

[13] Dan Berrett, "Rural America, Growth Area?," The Chronicle of Higher Education, December 4, 2025.

[14] Pingel, S., & Cardenas, A. (2025). Rural Communities Are Changing: So Too Must Land Grant Universities and Cooperative Extension Services. Change: The Magazine of Higher Learning, 57(3), 33–39.

enroll in postsecondary education in the next two years as people living in non-rural areas of the state. We also observed similar intent patterns when analyzing data grouped by other categories, such as income levels and ethnicities. This points to distinct and unique needs for higher education across different regions and demographics that are often overlooked.

Across the applied projects, we learned that state leaders, as well as agency and institutional staff, are increasing their awareness of these realities. More decision-makers recognize that students from rural areas have unique needs that may sufficiently justify adjustments to the state's institutional funding approach. As states face aging populations and declining birth rates, serving students attending rural, regional comprehensive institutions can also mean serving students who are more likely to live and work in the state for the long term, making sustained economic contributions in their communities. Translating these realities into funding formula adjustments, however, proved a more difficult path to forge. Part of the reason for this may be a lack of clarity and alignment on the problems that leaders are trying to solve. Should access to higher education for students in rural areas be enhanced? Should success be incentivized? And to accomplish this goal, should dollars flow to rural institutions through appropriations, or directly to students through financial aid?

Across the projects, state and institutional leaders expressed a keen desire to understand the unique needs of rural students better. Questions surrounding how to best support enrollment and success for rural students, in particular, surfaced frequently. At the same time, many state data systems are ill-equipped to answer these questions. According to recent work by SHEEO, 87% of state higher education agencies lack formal definitions for rural learners, rural institutions, or rural-serving institutions[15]. Without a definition, defining a population of rural students and reviewing their trajectories against those of their urban peers is challenging. These data limitations can complicate effective case-making for the unique needs of rural students and rural institutions.

State Funding Formula Impacts

Whether or not the state funding formula explicitly mentioned rurality, each state's funding approach for public postsecondary institutions impacted rural institutions. This was most often due to the unique student populations that are served by institutions located in rural areas. Most notably, in some states, rural institutions serve disproportionately large shares of students with low incomes and students who may attend part-time. States with incentives embedded in funding formulas to enroll and complete students with low incomes stood to potentially benefit rural institutions. At the same time, state funding formulas do not often weight part-time students at adequate levels relative to the institutions' costs to serve them well.

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[15] Stephen Mayfield, Jessica Colorado, and Rachel Burns, Strong Foundations 2025: Insights into State Postsecondary Rural Data (SHEEO, 2026).

Some states worked around this issue by developing alternative funding streams or approaches specifically targeted to rural institutions. These approaches included flat, set-aside funds for rural institutions or specific performance criteria based on student outcomes designed to benefit institutions in rural areas. We found that these specific policy call-outs could open or re-open previously established decisions around how to define and collect data on rurality, which could compromise the long-term durability of the workarounds that were developed and in place. This often placed institutions that were eligible for the funding in a defensive position, protecting the funding stream each year — especially in years when funding could be restricted or cut.

The Relationship Between State Funding and Financial Strength

While our work in these particular state contexts did not dig deep into the financial position of rural institutions, the enrollment trends explored in the opening to this paper provide adequate evidence to believe that many of these institutions may be facing financial challenges. Financial challenges, once believed to exclusively impact the proprietary and private sectors, are beginning to impact public institutions, revealing the potential for states to play a different role in how they support their higher education assets broadly.

Across the four state projects, however, we did not find evidence that state funding formulas on their own will solve the challenges that some rural institutions face. Indeed, state spending capacity can only increase if state revenues increase in turn, and this is not expected in the short- or medium-term for many states. This does not mean that the state does not have a role to play in examining its postsecondary funding levels and mechanisms, but it does call on rural institutions, in particular, to continue to be creative, nimble, and proactive when it comes to managing their finances.

There may, however, be a broader set of state policy actions that would further support rural institutions in their quest for financial resiliency. These include more focused attention on understanding and leveraging the unique missions across all of a state's higher education assets[16].

[16] Prescott, Brian T., and Sarah Pingel. From Drift to Direction: Mission Differentiation in an Era of Demographic Change. National Center for Higher Education Management Systems, July 9, 2026.

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Recommendations

NCHEMS' exploration of rural institutions and their treatment in state postsecondary funding formulas revealed key findings on the challenges of definition, case-making for unique student and institutional supports, and the state's role in supporting rural institutions. Based on this learning, we advance the following recommendations for state leaders interested in deepening their understanding about the intersection of rurality and state funding approaches for postsecondary education. These recommendations focus on the importance of definition, measurement, and impact.

Definitions

Getting stuck in the definitional quagmire — determining which institutions are rural and which are not — can rapidly halt progress. Based on our work across these four state contexts, NCHEMS recommends that state higher education agencies lead the selection of a definition and that they maintain authority to categorize additional institutions as rural based on their specific contexts. These categories are unlikely to change significantly from year-to-year, but they should be revisited periodically to ensure ongoing accuracy and alignment across institutional leadership. When asked to justify their selections, state higher education agencies should rely on the overlap across a variety of definitions of rurality, focusing in on the institutions that are most consistently defined as rural, regardless of the definition selected.

Measurement

Without a definition, states cannot diagnose the challenges rural students face, design policies to address them, or measure whether those policies are working. With a definition established, state higher education agencies should integrate the measurement of students from rural areas within their longitudinal data systems. They should also proactively monitor funding levels for institutions that are defined as rural. Those findings should inform ongoing reflection on whether the formula's effects on rural institutions are consistent with the state's policy goals. These determinations should ideally be made in light of statewide planning for higher education, together with identified needs from employers in the geographic area of each institution.

Impact

Many state higher education agencies review their funding approaches on a regular cadence, generally every 2-5 years. These reviews are generally focused on technical changes and on ensuring that the funding approach in place is meeting its intended objectives. Based on our learning across these four state projects, NCHEMS recommends that state agencies pursue specific strategies to assess the impact of their funding model on rural institutions. These strategies may include specific engagement with rural institutional leaders to understand their perspectives, or quantitative analysis that examines which factors within the funding model (dis)advantage rural institutions. With this evidence, state agency staff should determine whether any gaps exist that could be addressed through the funding model's technical or policy review process.

Conclusion

Public postsecondary institutions are not immune to the funding challenges facing higher education broadly, and these challenges may be particularly acute in institutions located in rural areas. Understanding how to define which institutions are rural can pose a challenge for states. Still, this challenge should not preclude state agencies from taking steps to better understand and assess the impacts that their adopted funding models may have on rural institutions. Given that these institutions provide affordable access for students who may not otherwise pursue higher education, they serve a unique and necessary role in supporting states in reaching the educational attainment levels required for a vibrant, competitive workforce.