New Directions for Higher Education

Jillian L. Kinzie Editor Regional Public Universities:
Addressing
Misconceptions and Analyzing
Contributions

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Regional public universities play a critical role in providing postsecondary education access in rural communities. This chapter explores that role by considering the distribution of these institutions across geographic areas and how that shapes the postsecondary options available to rural students. Federal data are used to demonstrate disparities in revenue sources between rural institutions and those in cities and suburbs, and a recent survey of individuals leading state higher education agencies and systems highlights the most pressing issues rural-serving institutions face today. Policy recommendations in this chapter include the expansion of rural broadband access and increased expenditures on instructional activities. The chapter concludes with a call for additional research on rural students' retention and completion outcomes, in-college experiences of rural students, and the specific financial challenges facing rural-serving institutions.

Doing the Same (or More) With Less: The Challenges Regional Public Universities Face in Serving Rural Populations

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Rurality and Spatial Availability of Colleges

According to the 2010 U.S. Census, nearly 60 million Americans live in rural places, which represents approximately one-fifth of the total national population (United States Census Bureau, 2015). These communities are home to unique cultures, and they are the lifeblood of critical infrastructures that provide food, energy, and transit for the rest of the country. Despite playing an essential role in national prosperity, rural communities have faced persistent social and economic challenges. Postsecondary education is a central issue for rural communities, especially given the connection between educational attainment and economic opportunity, yet this is a topic that remains understudied. This chapter highlights existing research on rural students' college choices, as well as how living in an education desert, defined below, impacts postsecondary options and outcomes. Next, federal data are used to demonstrate disparities in the types of institutions

present in rural communities and the funding disparities facing these institutions, which often serve students needing greater support to be successful. Results of a survey of state higher education executive officers offers insight into the challenges facing rural-serving postsecondary institutions before concluding with recommendations for policy and future research.

The educational and economic challenges facing rural postsecondary education have been gaining greater attention in recent years. A growing body of literature has come to explore the college attendance and choice decisions of rural students (Byun, Irvin, & Meece, 2015; Byun, Meece, & Agger, 2017; Koricich, Chen, & Hughes, 2018), but far less is known about the postsecondary institutions that serve rural students and communities. This is particularly true for regional public universities (RPUs) that are prevalent in these areas, though some recent work has begun to emerge (Orphan & McClure, 2019). Hughes, Kimball, and Koricich (2019) advanced a new college choice model that, in part, details how model components uniquely shape the postsecondary choices of rural students. They emphasize that "place" is an inherent part of rurality, and place dictates which institutions are viable options for students, as well as how far students must travel to reach these institutions. For example, in more than one-third of Pennsylvania's rural counties, the most common institution type was a 2-year, for-profit college, and 14 rural counties (29%) do not have even one postsecondary option (Prins & Kassab, 2017), which necessarily shapes college-going in those rural communities.

The term *education desert* is gaining popularity in describing geographic areas that have extremely limited college options, though different scholars use slightly different definitions. Hillman and Weichman (2016) defined education deserts as places with either "zero colleges or universities located nearby" or "one community college is the only public broadaccess institution nearby" (p. 4). The authors found that education deserts occur more frequently in rural locales, with greater concentrations in the Midwest and Great Plains states. Koricich and Gaikwad (2019) examined how living in an education desert impacted eventual degree-completion and found that, overall, rural students have a greater likelihood of completing any postsecondary credential, but a lower likelihood of completing a bachelor's degree, specifically. This effect is further exacerbated for rural students living in an education desert. In this case, reduced postsecondary options function as a structural barrier to rural students completing degrees beyond the associate degree.

To this point, Table 4.1 illustrates how public, 4-year institutions are spread across locale types by 2018 Carnegie Classification, using data from the Integrated Postsecondary Education Data System (IPEDS). Small towns and rural areas, which are conceptually similar, are most served by baccalaureate and master's institutions that are likely to have a regional-focused mission, whereas doctoral institutions are almost entirely located in cities and suburbs. There are certainly other classifications that could be used to

Table 4.1. Distribution of Public, 4-Year Institutions by Carnegie Classification and Locale

Carnegie Classification (2018)	Locale			
	City	Suburb	Town	Rural
Baccalaureate colleges	75	47	56	28
Master's colleges & universities	98	49	90	11
Doctoral universities	142	37	27	1
Total $(N = 661)$	315	133	173	40

Note: Locale definitions are taken from the National Center for Education Statistics.

illustrate this point, particularly those that reconcile service mission and locale, but this classification demonstrates how, even at the 4-year level, rural communities are often served by teaching-focused, regional institutions with access-oriented missions.

Online education is commonly advanced as a solution for providing greater postsecondary education opportunity in rural communities and other places where few or no options are present. However, rural communities often lack affordable and reliable broadband internet service, and if high-speed internet is not available or affordable in these communities, access to high-quality, online postsecondary options can still be limited (Chen & Koricich, 2014). This is a situation that became increasingly apparent on a national scale during the COVID-19 pandemic in 2020, as K-12 schools and postsecondary institutions made a rapid transition to online delivery that created obstacles for students in areas lacking affordable broadband access. Rosenboom and Blagg (2018) expanded the definition of education deserts to also include online education deserts and "complete education deserts" (p. 2), which lack access to physical postsecondary institutions, as well as to internet speeds fast enough to participate in robust online education. Their analysis uncovered that more than 3 million adults in the United States live in these complete education deserts—1.3% of the total population. However, the authors believe that this is a conservative estimate, with the numbers possibly being closer to 6-7%, or more than 14 million people. People living in complete education deserts also lag in college enrollment by 16% points and in college completion by 18 points (Rosenboom & Blagg, 2018). When coupled with the finding that rural areas are home to 82% of all adults living in complete education deserts, it is clear that there are broader distance issues regarding rural postsecondary education that cannot be solved by online education alone.

Student Outcomes and Financial Resources

Educational attainment in rural areas continues to lag behind non-rural areas, with 20% of the population in rural areas having a bachelor's degree

or higher compared to 34% in urban areas (United States Department of Agriculture Economic Research Service, 2019). These gaps are driven by disparities throughout the postsecondary process. Koricich et al. (2018) found that rural students were only about 85% as likely to attend any postsecondary institution for any period of time compared to non-rural students. This is confirmed when examining the high school class of 2018. The National Student Clearinghouse Research Center ([NSCRC], 2019) indicates that students from rural and urban high schools are 5% points less likely to enroll directly in college. Focusing on student persistence and completion, the same NSCRC report indicates that 84% of rural students returned for their second year of college, which is equal to the retention rate of urban students, but slightly lower than that of suburban students (88%). Interestingly, rural students make gains in terms of 6-year completion rates compared to urban students (41% and 35%, respectively), but both groups still lag behind suburban students (47%). Over the last several years, rural completion rates have remained stable while those for urban and suburban students experienced a slight uptick. These numbers are complicated by the finding from Koricich and Gaikwad (2019) that rural students are more likely to complete a postsecondary credential when including subbaccalaureate credentials, which would suggest that rural students' lower rate of bachelor's degree-completion may be driven in large part by institutional availability.

Any discussion about rural students' postsecondary outcomes must consider the capacity of rural institutions to serve students from these communities from recruitment through graduation. Fluharty and Scaggs (2007) noted the rural resource differential that exists within the community college sector, but there is little work that explores the resource disparities in depth, particularly related to RPUs. In a perfect world, RPUs will graduate students at rates equal to flagship-like institutions and will be equally competitive in labor markets, but the reality is that differences in revenue streams and expenses, particularly regarding rural RPUs, complicates an institution's ability to turn the ideal into reality. In the absence of research on rural-urban resource disparities, policymakers, institutional leaders, and the public may continue to have misconceptions and focus on deficits, instead of looking at what rural RPUs can add to the local community and state. They may fail to see how supporting rural communities and rural RPUs can have a positive impact in their regions.

As a starting point, data from IPEDS can be used to highlight these differences. Table 4.2 contains a number of financial indicators for public, 4-year universities from the 2018 fiscal year broken down as a dollar amount per full-time equivalent (FTE) student. These data indicate that, in general, institutions located in more populous areas have greater per-student revenues and expenditures than institutions in towns and rural areas, sometimes by a considerable amount. Public, 4-year institutions located in cities received \$14,617 per student in state appropriations, compared to \$5,802

Table 4.2. Comparison of Public, 4-Year University Per-FTE Student Financial Indicators by Locale (FY 2018)

	Locale			
Financial Indicators	City	Suburb	Town	Rural
Tuition & fee revenue	\$8,427	\$7,752	\$6,466	\$4,997
State appropriations revenue	\$14,617	\$7,304	\$7,192	\$5,802
Government grant & contract revenue	\$11,809	\$4,816	\$4,373	\$7,961
Private gifts, grants, & contract revenue	\$5,711	\$1,348	\$896	\$696
Instruction expenses	\$16,881	\$9,810	\$9,240	\$8,447
Academic support expenses	\$4,591	\$2,696	\$2,322	\$2,590
Student service expenses	\$2,165	\$2,659	\$2,328	\$2,932
Endowment assets	\$25,815	\$9,996	\$8,529	\$8,135

for institutions in rural areas. The disparities are similarly striking for private gifts, grants, and contracts. Some of this is explained by the distribution of institutional types as demonstrated in Table 4.1, which suggests that RPUs are the primary 4-year institutions in rural areas. Though it is not uncommon for research-focused institutions to receive higher per-student funding than teaching-focused institutions, it is still concerning that the institutions in less-populated areas are more likely to have a regional, access-oriented mission that will bring students needing greater supports in order to be successful. The long-term problem with letting this disparity go unstudied and unchecked is two-fold. First, rural-serving RPUs will be limited in their ability to build the capacity needed to improve the structures and services that allow for better support of, and outreach to, rural students and communities. Second, such disparities can inhibit smaller institutions from realizing the economies of scale that allow larger institutions to make every dollar go farther. The bottom line is that the public expects rural RPUs to achieve comparable outcomes with less money, despite serving a population that often needs additional supports.

One of the most noteworthy aspects of Table 4.2 relates to instruction expenses, where 4-year, public institutions in cities are spending nearly *twice* the amount on instruction as rural institutions. Past research focusing on institutional factors that influence retention rates of students at rural community colleges may be instructive. Studies of full-time (Koricich & Free, 2018) and part-time (Koricich & Gilbert, 2019) students found that the most impactful financial indicator for improving institutional retention rates was the amount spent on instruction. Although those studies focused on 2-year institutions, the work of Gansemer-Topf and Schuh (2006) uncovered similar relationships at baccalaureate colleges, with increased per-student spending on instruction and academic support leading to increases in retention rates, as well as graduation rates. With this in mind, legislators and institutional leaders should consider ways to

Table 4.3. Mean Rating of Concern Regarding How the Following Issues Impact Rural Institutions, Ranked From Most Concern to Least Concern

Issue	N	Mean	σ
Retention/completion	46	4.196	0.957
Rural teacher shortages, retention, and recruitment	46	4.178	1.029
Enrollment decline from high school	45	4.174	0.996
Rural perceptions of higher education	46	3.739	1.021
Postgraduate employment	46	3.652	1.178
Affordability	46	3.578	1.177
Digital access	45	3.326	1.283
Physical access	46	2.978	1.291
Access to dual enrollment and pre-college programs	45	2.911	1.221
Rural leadership training	43	2.907	1.288
Lack of support at rural TCUs, HBCUs, HSIs, and AANAPISIs	38	2.395	1.264

enable rural RPUs to increase instructional expenditures through actions such as smaller class sizes and offering extra sections to meet the needs of non-traditional students. For example, legislators could increase appropriations for instructional activities that are disconnected from enrollment metrics with the goal of using these funds to hire additional instructional staff to teach the same number of students in smaller course sections. Institutional leaders can proactively collect data from students to determine how extra sections outside of business hours would be most beneficial to non-traditional students.

Perspectives of State System and Agency Leaders

As part of a related project, the authors administered a survey to the 61 members of the State Higher Education Executive Officers Association (SHEEO), with 46 (73%) of those responding. This survey asked respondents to rate their level of concern, and their level of state activity, around various issues that impact rural students and institutions, as well as to prioritize issues that they believe warrant more attention in their state. Additional survey questions sought to ascertain the degree of political consensus among elected state officials regarding the importance of rural postsecondary education issues and the solutions to those challenges.

Respondents were asked to rate their level of concern from 1 (Not Concerned) to 5 (Very Concerned) regarding how various issues will impact rural institutions in their state. The ranked mean scores can be found in Table 4.3. Not surprisingly, "retention/completion" was the issue of most concern with a mean rating of 4.196. "Rural perceptions of higher education," which refers to the general perceptions rural communities hold about higher education, ranked as the fourth-highest issue (3.739). This high

ranking has implications for rural higher education institutions because misconceptions of rural RPUs can lead to enrollment challenges and state disinvestment, thus leaving rural communities and rural RPUs in a vicious cycle. "Digital access" did not rate as one of the top issues for rural institutions (3.326), but respondents did rate it as a top-three issue impacting rural *students* (3.822), and it is likely that these ratings would change in light of the challenges faced during the COVID-19 pandemic in 2020. In reality, broadband accessibility for students is also an issue for institutions, as RPUs could have the most sophisticated technology to reach rural communities that is of little use if their audience cannot access the necessary technology to participate. It is promising to see that respondents reported considerable activity currently happening in their states around this issue, with a mean rating of 3.372, but it still underscores that online delivery cannot be approached as the one-size-fits-all solution to improve the provision of higher education in rural communities.

In addition to issue ranking, survey respondents were asked whether their state funding formula includes specific provisions for rural institutions, and only eight (20.5%) indicated that their state did. In fact, respondents rated this issue as the one getting the least attention from policymakers in their state. However, five respondents shared a belief that specific funding for rural institutions should be the highest-priority issue for state policymakers to address. Although there was a moderately strong rating regarding the political consensus in their respective state regarding the importance of rural postsecondary education issues (3.489), there seems to be notably less consensus on exactly how to better serve these students and communities (2.600).

Implications for Institutions

From an institutional perspective, the data presented here show that rural RPUs may be limited in their ability to simply create new revenue streams or better leverage existing ones. However, institutional leaders do have discretion about how to spend the funds they have. With the executive officers of state systems and agencies highlighting the importance of improving retention and completion at rural-serving institutions, it is important to understand what practices, structures, and policies are most impactful. Unfortunately, there is little academic research highlighting strategies to retain and graduate rural students, but the retention studies focused on rural community colleges (Koricich & Free, 2018; Koricich & Gilbert, 2019) can be instructive to a degree. With regard to retention of both full-time and part-time students, these studies found that increasing institutional spending on instruction was the most-impactful factor in increasing a college's first-to-second-year retention rate, even more so than increases in endowment assets or state appropriations alone. That said, even when a campus has identified impactful programming, there can be limitations to an institution's capacity to implement the programming at scale, particularly in the absence of increased revenue.

Beyond the internal reallocation of resources, institutions can continue to engage in relationship-building as a critical aspect of improving the contemporary public perceptions of higher education. In recent years, there has been a greater societal question about the value and relevance of higher education, with divisions existing by political ideology (Pew Research Center, 2017). Rural people are cast as being strongly suspicious of higher education, which is not altogether inaccurate, but the reality is more complicated. For example, in the predominantly rural state of Montana, residents have voted every 10 years since 1948 on whether to raise their property taxes in order to fund the state's public higher education institutions. The measure has passed each time, but some were concerned that the measure would not pass in 2018 due to four decades of shrinking margins of passage (Harris, 2018). However, in the 2018 election, 62% of Montanans voted in favor of the tax increase, representing the largest margin in 40 years. With Montana being a largely rural state, failure to pass the increase would have been seen as an indicator of things to come. Instead, it demonstrated that the state's voters still saw value and relevance in their public institutions.

Institutional leaders should also consider solutions that sit at the nexus of resource reallocation and relationship-building in the region, which can include identifying opportunities to support local businesses and food producers, provide assistive services to vulnerable populations in the community, and support substantive engagements in local schools. Then, there are opportunities to publicly share these contributions in more passive ways. For example, Appalachian State University implemented a billboard campaign that highlights the many ways the institution supports the rural region where it is located. Billboards highlight the amount of locally sourced food purchased, the amount of waste diverted from local landfills due to recycling and composting programs, and the number of volunteer hours students, faculty, and staff contribute to the community each year (Koricich & Everts, 2019).

Implications for States

For state legislators and agencies, these are challenges that require additional resources to overcome. The disparity in per-FTE state appropriations for rural universities underscores the need for states to add special funding provisions for their rural RPUs. As mentioned earlier, only about one-fifth of the surveyed system and agency leaders indicated that their state has specific funding provisions for their rural institutions. Such a provision can serve as a mechanism to offset unrealizable economies of scale for smaller institutions, increase instructional expenditures to ensure smaller class sizes, enhance the student support services that are needed to help lesser-prepared students reach their potential, and serve as an infusion of resources

to the surrounding communities, many of which need economic development. States have a major role in addressing these challenges because students in states that experience large tuition increases are less likely to attend highly selective public universities, with students possibly opting instead for less-selective or open-access public institutions (Hemelt & Marcotte, 2016). As such, relying on tuition increases to address budgetary shortfalls may ultimately exacerbate impending enrollment challenges at RPUs, particularly those serving rural communities, meaning the prosperity of these institutions is heavily reliant on support from their respective states.

Another issue that will likely require significant financial investment on the part of states is expanding rural broadband access. State higher education executives still rated this as an issue needing greater attention at the state level, despite it already getting some attention in many states. These connectivity disparities were laid bare by the COVID-19 pandemic in 2020 that caused institutions to rapidly shift to online instruction, creating an additional hurdle for many rural students. Simply put, in the twenty-first century, broadband internet access has become an essential utility for participating in modern life, making the expansion of rural broadband as critical as the rural electrification projects that began in 1935, when only 10% of rural households had electricity (and 90% of farms had none), compared to 90% of urban households. Over the period of a decade, 25% of rural households and 90% of farms gained access to electricity (Roosevelt Institute, 2011). Currently, there are 36 active state commissions, task forces, or other collectives working on broadband issues, though all 50 states have had such a group at some point or another (National Conference of State Legislatures, 2019). The Pew Charitable Trusts (2019) compiled a list of the different agencies, offices, task forces, plans, etc. that states are undertaking to improve rural broadband access, and their Broadband Explorer allows for the examination of specific actions and legislation (The Pew Charitable Trusts, 2020). These resources highlight the importance for states and communities to implement broadband solutions that are tailored to their specific context and needs.

Directions for Future Research

One challenge associated with studying rural higher education issues is that there is a relatively small, but growing, body of scholarly literature on the subject. Perhaps the greatest area for additional inquiry is around retention and completion of rural students at different types of institutions. For decades, the conversation had been primarily about access and opportunity, leaving far less known about how rural students fare after enrolling. Researchers should study the type of academic and student support services that students receive, student participation in extracurriculars, and how students fare academically. Additionally, researchers can study fields in which rural students enroll and graduate, successful practices for serving

rural students, and how these answers differ for rural and non-rural students. These are just a few of the many areas of inquiry that can lead to a better understanding of rural students' retention and completion patterns and the factors that shape them.

Additionally, there is a great need for research on the funding and resourcing of rural institutions. Table 4.2 presents financial disparities by locale for a number of financial indicators, both revenues and expenditures, but much greater depth is needed to examine where RPUs get their money and how they are spending it. This is particularly true with regard to understanding differences in state appropriations, as well as the degree to which philanthropy metrics are tied to athletics. It is also necessary to understand how those decisions impact student success, and answering these questions will further elucidate the degree to which rural RPUs are tasked with accomplishing as much as non-rural institutions (or more) but with less money. In the absence of good information, it is difficult to make a compelling case to legislators, donors, and nonprofit organizations that there is a need to more purposefully provide resources to these institutions that serve a large number of low-income and first-generation college students. Therefore, it is imperative that we contribute to this greater collective understanding.

Conclusion

This chapter squarely focuses on structural issues that impact rural post-secondary opportunities and success, while also integrating the perspective of leaders of public higher education systems and state higher education agencies about these issues. Their responses confirm some of what is known about postsecondary education and rural communities, but new insights also emerged. Ultimately, each state must look to their specific context, circumstances, and needs to understand how to best serve these communities, while also looking to other states for examples. Rural institutions, communities, and people are critically important to our national prosperity, and we must look to invest in these places accordingly.

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