# Introducing Our Nation's Rural-Serving Postsecondary Institutions

## Moving Toward Greater Visibility and Appreciation

**Report Prepared by the**
**Alliance for Research on Regional Colleges**
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## ABOUT THE ALLIANCE FOR RESEARCH ON REGIONAL COLLEGES

The Alliance for Research on Regional Colleges (ARRC) is a research collaborative and resource hub with the mission of increasing appreciation for and understanding of regional colleges and their contributions to opportunity and community well-being. The multi-year initiative aims to build research infrastructure, produce data-driven analysis, and disseminate accessible knowledge for a range of audiences.

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## LEARN MORE

Additional information about ARRC, full project documentation, and an interactive map related to this project can be found at RegionalColleges.org.

## ACKNOWLEDGMENTS

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# EXECUTIVE SUMMARY

Rural communities have gained greater attention in policymaking, journalism, and public discourse after years of relative obscurity. Regarding postsecondary education, it has become increasingly clear that rural-serving institutions (RSIs) play vital roles in supporting educational opportunity, social development, and well-being of rural communities. A challenge in advancing understanding about RSIs has been the lack of a formal framework for identifying them. This project developed an evidence-based metric for identifying RSIs that serve rural students and communities.

# KEY FINDINGS

KEY FINDING 1

**RSIs span postsecondary types.** The report identifies 1,087 RSIs including 33% of all private, four-year institutions, 46% of all public, four-year institutions, and more than half of all public, two-year colleges. Roughly one-third of Historically Black Colleges and Universities are RSIs, as are 18% of High Hispanic-enrolling institutions, 93% of Tribal Colleges and Universities, and 94% of High Native-enrolling (nontribal) institutions.

KEY FINDING 2

**RSIs serve communities facing socioeconomic disparities.** Of the postsecondary institutions located in low employment counties, 83% are RSIs. More than two-thirds of the institutions located in persistent poverty counties are RSIs, as are 53% of institutions in persistent child-poverty counties.

KEY FINDING 3

**Enrollments at RSIs are smaller but diverse.** RSIs have smaller average enrollments in terms of headcount and full-time equivalent students, and they tend to focus on undergraduate education. RSIs enroll a greater share of low-income students who receive Pell Grants, as well as a higher percentage of Native American/Alaska Native students.

KEY FINDING 4

**RSIs are reliant on state appropriations.** Public RSIs receive a greater share of their revenues from state appropriations than non-RSIs. With the exception of private, four-year institutions, endowment assets per student are higher at RSIs

# APPLICATIONS FOR THE FIELD

APPLICATION 1

**Applications for Research.** Scholars can use the metric to conduct qualitative and quantitative research about RSIs and the students and communities they serve.

APPLICATION 2

**Applications for Policy.** As we gain better knowledge about RSIs, it will also become important to develop policies and funding models that are supportive of these institutions. The current project provides policymakers with data and tools to identify RSIs and legislate for them.

APPLICATION 3

**Applications for Practice.** RSI leaders may use the metric to create true institutional peer groups for the purposes of benchmarking, strategic planning, and continuous improvement.

APPLICATION 4

**Applications for Philanthropy.** The ability to identify RSIs can help inform donations and grantmakers interested in supporting RSIs and the students and communities they serve.

# CONCLUSION

RSIs are irreplaceable rural infrastructure whose existence directly or indirectly affects millions of people. Their importance has been underscored through the COVID-19 pandemic, when these institutions worked to continue educating students remotely in spite of inequality in broadband internet access. Equipped with an evidence-based framework for identifying RSIs, the responsibility for their well-being, and that of the communities they serve, falls to all of us.

## INTRODUCTION

In recent years, the issues facing rural communities and people have gained greater attention in policy-making, journalism, and public discourse, after many years of often being treated as an afterthought. This attention came before the start of the COVID-19 global pandemic, but intensified as the virus wreaked havoc on rural communities, schools, hospitals, businesses, and colleges. Postsecondary institutions had to find ways to serve rural students in the face of illness, economic uncertainty, and limited broadband internet access, and the result was seeing the essential role rural-serving institutions (RSIs) play in supporting educational opportunity, social development, and the overall well-being of rural communities.

However, RSIs have not been a primary focus of researchers or policymakers, which has constrained their ability to provide the greatest possible benefits to their students and communities. In the absence of comprehensive research on RSIs, public policy, organizational decision-making, and media coverage about these institutions have often relied upon stereotypes and anecdotes, rather than empirical evidence. One of the challenges in advancing evidenced-based storytelling, policymaking, and professional practice has been the lack of a formal framework for identifying RSIs. Too often, rural institutions have been identified solely based on their location and whether that place is classified as rural under a given government agency's locale definition. As a result, some institutions are simply left out of consequential discussions because there are numerous definitions of rurality. Institutions outside of rural areas that still engage in important service to these communities and their students are too often ignored.

This research project addresses these challenges by developing an evidence-based metric for identifying RSIs in a manner that was inclusive of the broad collection of postsecondary institutions that work in service to rural students and communities. The motivation for this project came from our team's expertise in rural higher education and regional colleges (many of which are RSIs), conversations with institutional leaders and other stakeholders, and previous research that has advocated for the creation of a designation to identify RSIs for the purposes of better research, policymaking, institutional benchmarking, and philanthropy.[1]

## WHAT WE KNOW ABOUT RURAL INSTITUTIONS

In the body of research at the intersection of rurality and postsecondary education, scholars have largely focused on rural students–their experiences and their outcomes. Work that investigates the institutions that enroll and educate rural students has been sparse. Because the current research project is the first to develop an evidence-based metric to identify RSIs, our ability to explore previous research on these institutions was limited given that they have not been closely examined. That said, there is a small, but growing, body of research on rural-located colleges that informed our efforts to more systematically identify RSIs.

Rural-located institutions have a particular importance to the regions in which they are located because many rural places have few postsecondary institutions nearby.[2] As a result, the institutions that do operate in these communities are vital players in human infrastructure and community well-being. Of the institutions that exist in rural areas, many are community colleges or regional colleges and universities that focus on undergraduate education and use open admissions policies or admit the overwhelming majority of applicants.[3] Less prevalent are doctoral/research universities and institutions with highly exclusionary admissions policies.[4]

Rural-located institutions employ an outsized share of their region's workforce compared to non-rural institutions, which makes their existence important not just for educational opportunity but also employment opportunity.[5] Additionally, rural

institutions serve as important cultural hubs, with a number of these campuses hosting the only museum in their counties[6], as well as organizing festivals, musical performances, and other cultural events[7]. Unfortunately, rural-located institutions often must carry out their mission in spite of a resource disparity when compared to non-rural institutions. Research has shown that rural institutions bring in less tuition and fee revenue, state appropriations, grants and contracts, and philanthropic contributions compared to institutions located outside of rural areas.[8]

Rural-located institutions enroll a greater share of white students than their non-rural peers. However, these institutions educate a considerably larger share of Native American students compared to non-rural institutions, and the majority of Tribal Colleges and Universities (TCUs), as well as Native American-Serving Nontribal Institutions (NASNTIs), are located in rural areas.[9] Although rural-located institutions enroll a smaller share of students who identify as Black, Hispanic, or Asian/Pacific Islander than institutions located in cities and suburbs, a number of rural institutions are also classified as Historically Black Colleges and Universities (HBCUs) and Hispanic-Serving Institutions (HSIs). Furthermore, rural public colleges enroll a larger percentage of adult students, as well as students enrolled exclusively in online programs, especially at the graduate level.[10] Public colleges located in rural areas enroll an above-average share of low-income students receiving Pell grants[11], and among rural-located, four-year colleges as a whole, students receive a higher level of support from Pell Grants and institutional aid, despite a slightly smaller percentage of these students receiving aid from these sources overall.[12]

Through this overview of prior research about rural-located institutions, one thing becomes abundantly clear–these institutions are important educational access points for student populations who are often excluded by other postsecondary institutions. Additionally, these colleges are critical engines of workforce development and support the overall well-being of their communities, and are often expected to carry out their mission on constrained budgets. By creating an evidence-based metric for identifying RSIs, it becomes possible to expand research beyond rural-located colleges to significantly enhance our understanding of these critical anchor institutions.

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# RURAL-LOCATED VS. RURAL-SERVING

An important premise of this project is that there is a meaningful difference between rural-located and rural-serving institutions in that examining the former excludes a number of institutions that also engage in meaningful service to rural communities. Existing data schema allow for the identification of rural-located institutions, which, as the name implies, are colleges and universities located in places officially designated as rural under some state or federal classification. The Carnegie Classification of Institutions of Higher Education (Carnegie Classification) had accounted for locale in its classification of Associate's Colleges in the 2005 and 2010 editions[13], which made it possible to identify rural-located colleges in that category, but locale was never included for other categories and was removed altogether beginning with the 2015 edition.

Although rural-located is the prevailing method used when referring to rural postsecondary institutions,it has some shortcomings. First, with a multitude of definitions of rurality used by states and the federal government (e.g., the U.S. Department of Education, the U.S. Census, the U.S. Department of Agriculture, and each state all have different metrics for rurality), no one definition is all-encompassing, and this variability across definitions certainly omits some institutions that ought to be included in related conversations. Furthermore, by focusing only on where the institution is located, this approach ignores institutions that serve rural communities and students but are not located in places formally classified as rural. Perhaps the clearest example of this is land-grant universities, institutions specifically founded to provide training in the rural-relevant fields of agriculture and mechanical arts, but which have, over time, grown so expansive and complex that they have an urbanizing effect on their surrounding communities. As such, many of these institutions would not be classified as rural-located, though their service to rural communities remains robust.

This project uses a novel approach to identify RSIs as a means to address these shortcomings. To do so, multiple measures are used to describe the region in which an institution is located, so as to avoid the pitfall of relying on a singular definition of rurality. Additionally, by looking at factors beyond institutional location, it was possible to include institutions not located in a place classified as rural but that provide important service to rural populations and places, such as large land-grant universities and regional colleges that exist on the suburban fringe of more urbanized areas. To be certain, the vast majority of rural-located institutions are also RSIs under our metric, but the result of this work is a more inclusive consideration of the constellation of institutions upon which rural communities rely.

## OUR APPROACH

We used an iterative approach to develop a quantitative metric to identify RSIs. The approach involved examining extant research, developing assumptions from that research and our expertise on rural-located institutions, and the use of state and federal datasets to test and confirm these foundational assumptions. Ultimately, we conducted a factor analysis using five variables that resulted in an index score.[14] This method was used because, unlike a strict definitional process that would require an institution to meet predefined criteria identified in a vacuum, an index score considers the five factors and then compares institutions to each other. The result assigns an RSI score to an institution relative to all other institutions in the set, with no one factor disqualifying an institution from being an RSI.

Of the five factors included in the analysis, four describe the larger region in which the institutions are located. Two variables, taken from data from the Census Bureau, account for the percentage of an institution's home county population classified as rural, as well as the average rural population percentage of all adjacent counties. Additionally, we derived an ordinal measure of the home county's population size and a dichotomous measure of its adjacency to a metropolitan area from the Rural-Urban Continuum Codes published by the U.S. Department of Agriculture's Economic Research Service.[15] By using four measures of place instead of one, our analysis was able to incorporate a more nuanced way of accounting for the rurality of the region in which an institution resides.

Prior descriptions and analyses of the locations of postsecondary institutions often used counties as the unit of analysis, with the institution's home county being the sole consideration. However, this can lead to the aforementioned problem of excluding RSIs located outside of counties or locales classified as rural, and which ignores the fact that colleges often serve student populations well beyond the boundaries of their home county. With that in mind, we created county clusters inclusive of an institution's home county and all adjacent counties using data from the Census Bureau.

The final variable, the percentage of an institution's awarded credentials in fields of unique rural importance (i.e., Agriculture, Natural Resources, and Parks and Recreation), was identified to operationalize the serving aspect of what it means to be an RSI. Table 1 contains a list of the factor variables and sources.

**TABLE 1.**

**List of RSI Metric Variables & Data Sources**

| VARIABLE | VALUES | SOURCE |
|---|---|---|
| Percent of institution's home county population classified as rural | 0–100% | United States Census Bureau (2010) |
| Average percent of adjacent counties' population classified as rural | 0–100% | United States Census Bureau (2010) |
| Population size of institution's home county | 1. Metro area, 1,000,000+<br>2. Metro area, 250,000–1,000,000<br>3. Metro area, Less than 250,000<br>4. Urban population, 20,000+<br>5. Urban population, 2,500–19,999<br>6. Rural population, less than 2,500 | USDA-ERS (2013/2020) |
| Institution's home county adjacency to a metro area | Yes / No | USDA-ERS (2013/2020) |
| Percent of institution's total awards conferred in Agriculture, Natural Resources, and Parks & Recreation | 0–100% | IPEDS (2020) |

We applied this analysis to a set of 2,525 institutions that includes all public and private, not-for-profit institutions that confer at least an associate's degree and do not have a special-focus mission (e.g., seminaries, health science schools, etc.). After rescaling from the initial score that included negative values, the RSI score ranges from 0 to 4. A full detailing of our analytical approach is available on the project website (regionalcolleges.org/project/ruralserving).

Table 2 contains examples of how the factor variables and resultant scores compare for three pairs of institutions.

**TABLE 2.**

**RSI Score & Component Comparisons**

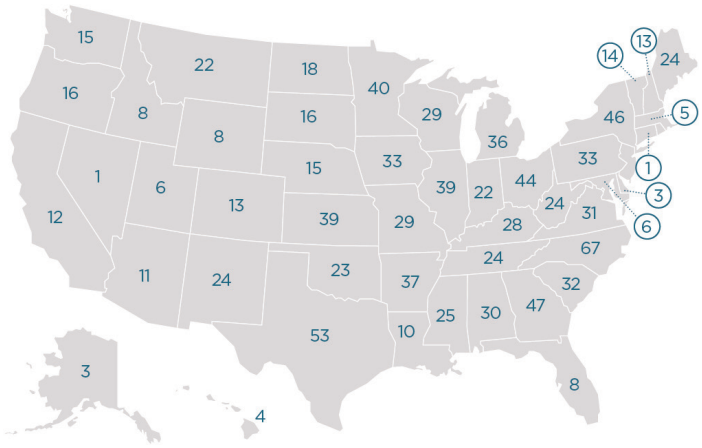
| | 4-YEAR, PUBLIC | | 2-YEAR, PUBLIC | | 4-YEAR, PRIVATE | |
|---|---|---|---|---|---|---|
| **Variable** | **Appalachian State University** (RSI) | **University of North Carolina Wilmington** (Non-RSI) | **Luna Community College** (RSI) | **Central New Mexico Community College** (Non-RSI) | **University of Pikeville** (RSI) | **Asbury University** (Non-RSI) |
| % Rural in home county | 55.44% Watauga | 2.21% New Hanover | 46.9% San Miguel | 4.2% Bernalillo | 87.8% Pike | 25.9% Jessamine |
| Average % rural in adjacent counties | 70.25% | 37.98% | 65.21% | 36.21% | 90.9% | 40.11% |
| Population size | 4 (of 6) | 2 | 5 | 2 | 5 | 2 |
| Adjacent to metro area | No | Yes | No | Yes | No | Yes |
| % Awards in Ag, Nat'l Res, and Park & Rec | 9.04% | 6.03% | 0% | 0.39% | 0% | 6.74% |
| RSI Score | 2.549 | 0.736 | 2.478 | 0.718 | 3.416 | 1.044 |

## RESULTS

For the purposes of this project, the research team deemed any institution with an RSI score above the average of 1.175 to be an RSI. These 1,087 institutions constitute 43% of the institutional set and enroll 26.7% of students. While notably higher than the number of rural-located institutions, this figure highlights how many institutions that are not rural-located are engaged in important service to rural communities and reflects our approach to use county clusters as a means to identify institutions that are serving regions that are more rural. Additionally, we would expect a higher number of RSIs when considering that 97% of the land area in the United States is classified as rural.[16] These numbers reflect the historical development of postsecondary education in which many institutions were founded in rural places, which includes land-grant colleges, denominational colleges, and normal schools.[17] Figure 1 shows the number of RSIs in each state.

**FIGURE 1.**

**RSI Counts by State**




In addition to identifying RSIs as those institutions whose score was above the average, we have also identified RSIs whose score was particularly high, in this case, greater than one standard deviation (0.965) above the average. These 505 "High RSIs" illustrate that rural-serving institutions are not a homogenous group, but rather a collection of institutions that vary on a number of important characteristics. RSIs and High RSIs exist across sectors of higher education, though they are not distributed evenly across groups.

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## SECTOR, INSTITUTIONAL DESIGNATIONS & COUNTY TRAITS

As can be seen in Table 3, RSIs as a whole are most concentrated among public, two-year institutions, with more than half of this sector designated as an RSI under our approach, and more than one-quarter designated as High RSIs. Comparatively, about 46% of public, four-year institutions are RSIs and 18% are High RSIs. These differences may be driven, in part, by intentional actions taken by state governments to establish community colleges in a manner that affords access to populations across the state and because, overall, there is a larger number of public, two-year colleges than public, four-year colleges. This also confirms past research that highlighted how rural communities can have more limited access to certain types of four-year institutions.[18] Nearly one-third of private, four-year institutions are RSIs, which emphasizes the important role that these institutions also play in serving rural communities and students.

**TABLE 3.**

**RSI Counts by Institutional Sector**

| SECTOR | RSIs (%) | HIGH RSIs (%) |
|---|---|---|
| 2-year, public | 444 / 841 (52.8%) | 238 / 841 (28.3%) |
| 2-year, private | 8 / 22 (36.4%) | 4 / 22 (18.2%) |
| 4-year, public | 325 / 711 (45.7%) | 129 / 711 (18.1%) |
| 4-year, private | 310 / 951 (32.6%) | 134 / 951 (14.1%) |
| **Total** | **1,087 / 2,525 (43.0%)** | **504 / 2,525 (20.0%)** |

RSIs span a range of federal institutional designations used to signify higher enrollments of students from minoritized racial identities. It should be noted that we opted to categorize institutions as High Hispanic-enrolling, High Black-enrolling, High Native-enrolling, and High Asian/Pacific Islander-enrolling, instead of Hispanic-Serving Institution,Predominantly Black Institution, Native American-Serving Nontribal Institution, or Asian American and Native American Pacific Islander-Serving Institution, because the latter categories denote approved recipients of specific federal grant programs. Because eligibility for these programs can include numerous criteria beyond minimum enrollment levels for each racial group, and application to these grant programs can be difficult for underfunded institutions,[19] we instead used the undergraduate enrollment thresholds alone for our indicators as a means to illustrate RSIs enrolling substantial percentages of these populations.

***Nearly one-third of private, four-year institutions are RSIs, which emphasizes the important role that these institutions also play in serving rural communities and students.***

As can be seen in Table 4, roughly 62% of land-grant institutions are categorized as RSIs, and 29% are High RSIs. This is unsurprising given the origins of these institutions and highlights the important role they still play even though many have grown larger and had an urbanizing effect on their immediate communities. Nearly one-third of HBCUs are RSIs, as are almost 37% of High Black-enrolling institutions, which indicates 40% or more of an institution's undergraduate population identifies as Black.[20] Interestingly,a quarter of High Black-enrolling institutions are also High RSIs, which highlights the important role that RSIs play in serving Black students. RSIs also have smaller, but meaningful, representation among High Hispanic-enrolling institutions (at least 25% of undergraduates identifying as Hispanic)[21] and High Asian and Pacific Islander-enrolling institutions (at least 10% of undergraduates identifying as Asian or Pacific Islander).[22] While no official list exists of regional public universities (RPUs), it is likely that most non-land-grant public RSIs are RPUs.

**TABLE 4.**

**RSI Counts by Institutional Designation**

| DESIGNATION | RSIs (%) | HIGH RSIs (%) |
|---|---|---|
| Land-grant institution | 70 / 113 (61.9%) | 33 / 113 (29.2%) |
| Historically Black Colleges & Universities | 30 / 93 (32.3%) | 11 / 93 (11.8%) |
| Tribal Colleges & Universities | 32 / 34 (94.1%) | 26 / 34 (76.5%) |
| High Native-enrolling (non-TCU) | 28 / 30 (93.3%) | 18 / 30 (60.0%) |
| High Hispanic-enrolling | 83 / 466 (17.8%) | 41 / 466 (8.8%) |
| High Black-enrolling (non-HBCU) | 32 / 87 (36.8%) | 22 / 87 (25.3%) |
| High Asian / Pacific Islander-enrolling | 24 / 306 (7.8%) | 3 / 306 (1.0%) |

Perhaps the most striking among these designations relates to TCUs and High Native-enrolling, nontribal institutions (at least 10% of undergraduates identifying as Native American or Alaska Native).[23] All but two TCUs (94.1%) are designated as RSIs and three-quarters are High RSIs. Furthermore, 93% of High Native-enrolling, nontribal institutions are RSIs, with 60% being High RSIs. Taken together, these results emphasize the critical importance of RSIs in serving Indigenous communities across the country and underscore the need to craft state and federal policies that are supportive of these institutions and the oppressed communities they serve.

One additional lens for understanding the populations that RSIs serve comes from the county typologies developed by the USDA-ERS.[24] This agency classifies all counties nationally on a number of economic and demographic conditions that can have a notable impact on community vitality. The data contained in Table 5 highlight the number of RSIs whose home counties are classified as low education, low employment, population loss, persistent poverty, persistent child-poverty, or retirement destination.

**TABLE 5.**

**RSI Counts by USDA County Traits**

| USDA COUNTY TRAITS | RSIs (%) | HIGH RSIs (%) |
|---|---|---|
| Low education | 95 / 245 (38.8%) | 64 / 245 (26.1%) |
| Low employment | 260 / 314 (82.8%) | 169 / 314 (53.8%) |
| Population loss | 144 / 230 (62.6%) | 82 / 161 (50.9%) |
| Persistent poverty | 109 / 161 (67.7%) | 81 / 504 (16.1%) |
| Persistent child-poverty | 223 / 422 (52.8%) | 155 / 422 (36.7%) |
| Retirement destination | 113 / 244 (46.3%) | 45 / 244 (18.4%) |

What becomes evident is that a number of RSIs are located in, and are serving, communities that are experiencing various economic and demographic challenges. The data for low-employment counties, those in which more than 35% of residents between the ages of 25-64 were unemployed, are particularly striking, as roughly 83% of postsecondary institutions in low-employment counties are RSIs and 54% are High RSIs. Because these institutions are often the largest, or one of the largest, employers in their rural regions, they are critical contributors to the regional labor market. In the absence of the local RSI, many of these communities would see unemployment rates that are even higher, and more counties would be classified as low employment, which underscores the role these campuses play as anchor institutions in their communities.[25]

The figures for population loss align with the broader narrative of rural depopulation that has emerged from early analyses of data from the 2020 decennial census.[26] More than half of postsecondary institutions in population-loss counties are High RSIs. But the traits that may be most impactful on RSIs, and illustrate their value to their communities the most, relate to persistent poverty and persistent child-poverty. A county is designated as having persistent poverty, or persistent child-poverty, if 20% or more of the county's residents, or 20% of children under the age of 18, were in poverty over a period of 30 years. More than two-thirds of institutions in persistent poverty counties are RSIs, as are more than half of institutions in persistent child-poverty counties. Not only does this mean that RSIs are a critical educational provider in under-resourced rural communities, but it means that the education and other services they provide may be particularly important to lifting youth out of poverty.

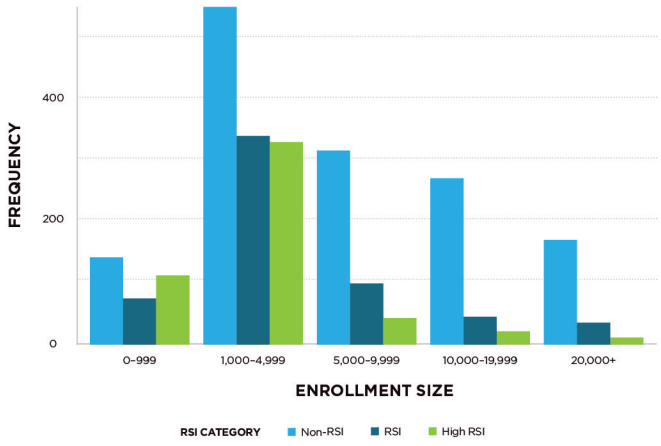
Taken together, these analyses demonstrate the variation in the missions of RSIs, as well as in the student and regional populations they serve. Their work is critical in serving populations and regions that must lean heavily on these institutions for racial equity, in providing educational and economic opportunity, and in combating poverty. However, there are other important aspects of RSIs worth exploring, from their enrollments and student demographics to their financial profiles.

## ENROLLMENT

With regard to campus enrollments, RSIs tend to be smaller than non-RSIs, but their enrollment figures vary considerably. Because of this, averages do not always highlight this variation in a meaningful way. Therefore, Figure 2 illustrates a tabulation of institutions for five enrollment categories. Most RSIs and High RSIs enroll fewer than 5,000 students, while the majority of non-RSIs enroll more than 5,000 students. There are a small number of RSIs with larger enrollments, including some that enroll more than 20,000 students.

**FIGURE 2.**

**Headcount Enrollment for RSIs, High RSIs, and Non-RSIs**

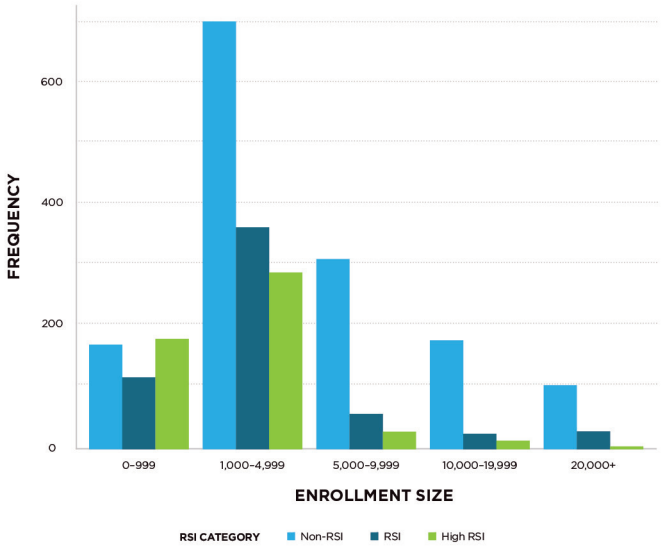



***More than two-thirds of institutions in persistent poverty counties are RSIs, as are more than half of institutions in persistent child-poverty counties.***

When looking at full-time equivalent (FTE) enrollment, similar patterns in the enrollment counts emerge. Using the same categorical ranges as above, Figure 3 presents the distribution of institutions based on FTE enrollment. Expectedly, the distribution of institutions shifts because most institutions have a lower FTE enrollment due to part-time students, but the amount of change is driven by the degree to which institutions serve part-time, versus full-time, students. In particular, the number of RSIs and High RSIs in the lowest enrollment category (0-999) increases, which suggests that their enrollment is composed of a larger share of part-time enrollees. By providing access to part-time students, RSIs are supporting the educational needs of students who are balancing other life priorities while attending college.

**FIGURE 3.**

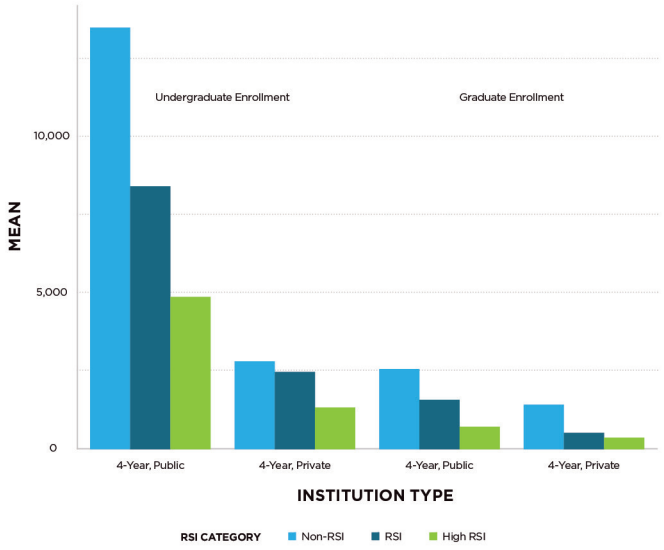
**Full-Time Equivalent Enrollment for RSIs, High RSIs, and Non-RSIs**




Looking at total institutional enrollment highlights important differences between RSIs and non-RSIs; however, there are also important differences that emerge when examining the mix of undergraduate and graduate students. Figure 4 contains average undergraduate and graduate headcount enrollments for four-year institutions. In the public sector, non-RSIs enroll a significantly larger number of undergraduates than do RSIs and High RSIs, but this gap closes considerably when looking at graduate student enrollments. Meanwhile, the opposite pattern emerges among private institutions, where private RSIs and non-RSIs have a nearly identical average undergraduate enrollment but greater differences at the graduate level. These differences are likely driven primarily by the missions of institutions that are RSIs and High RSIs. Previous research has uncovered stark differences with regard to the presence of doctoral/research universities in rural and non-rural settings, with these institutions being greatly underrepresented in rural places.[27] In light of that work, the findings herein are unsurprising, though they do represent an additional structural barrier for rural students who wish to pursue graduate education without having to migrate to cities or suburbs to do so.

**FIGURE 4.**

**Average Undergraduate and Graduate Headcount Enrollment for RSIs and Non-RSIs**



## STUDENT BODY CHARACTERISTICS

Beyond institutional enrollments, important findings emerged with regard to the composition of the student body at RSIs. First, when considering the racial identities of students, Figure 5 shows that the student bodies at RSIs include a larger share of students who identify as white, and smaller shares of students identifying as Black, Hispanic, and Asian/Native Hawaiian/Pacific Islander. However, when considering Black students, the differences between RSIs and non-RSIs are not as pronounced as might be expected given prevailing stereotypes about rural places being exclusively white, and this is particularly true at public, two-year colleges (11.2% and 14.9%, respectively) and private, four-year colleges (12.7% and 14.7%, respectively). These findings make sense considering the share of HBCUs and High Black-enrolling institutions that are also RSIs. The percentage of students who identify as being of two or more races is mostly consistent between RSIs and non-RSIs across sectors. Importantly, students identifying as Native American/Alaska Native are represented in greater shares at RSIs than at non-RSIs, which is true across public and private sectors, with the largest difference emerging among private, two-year colleges. This is driven, at least in part, by the fact that there are not many private, two-year colleges, two of which are TCUs.

***Importantly, students identifying as Native American/Alaska Native are represented in greater shares at RSIs than at non-RSIs, which is true across public and private sectors, with the largest difference emerging among private, two-year colleges.***

**FIGURE 5.**

**Average Enrollment Percentage by Racial Identity for RSIs and Non-RSIs by Sector**

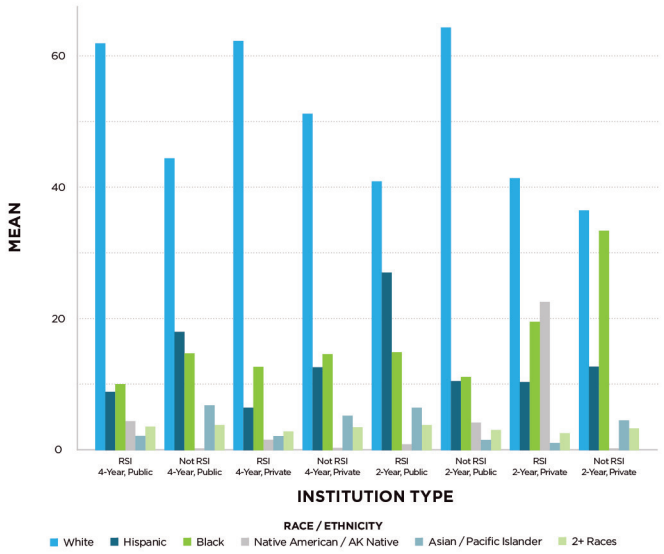
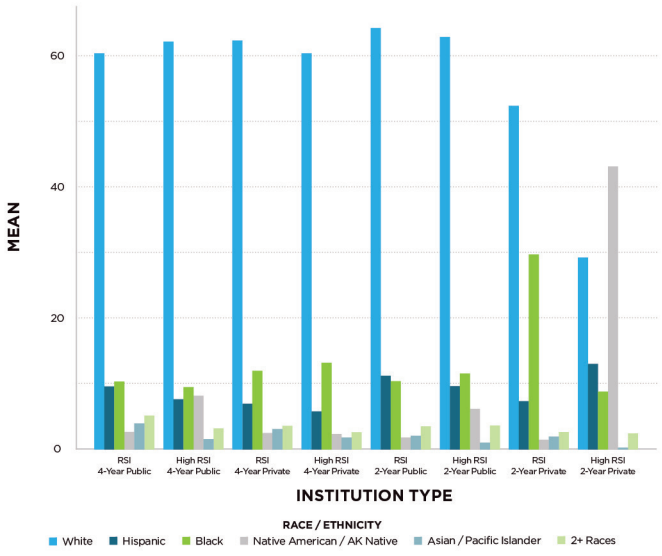


Figure 6 contains these comparisons for RSIs and High RSIs. In most sectors, High RSIs have a greater share of students identifying as white than at RSIs generally, but these differences are smaller than those that emerged when comparing RSIs as a whole to non-RSIs. As a result, the differences for other race categories between RSIs and High RSIs are also smaller. In almost every sector, 35% or more of the student body at RSIs and High RSIs is composed of students of color, which emphasizes the important role these institutions play in providing access to these populations. Underscoring the important work RSIs do to educate Indigenous students, in particular, the share of Native American/Alaska Native students is greater at High RSIs than at RSIs generally.

**FIGURE 6.**

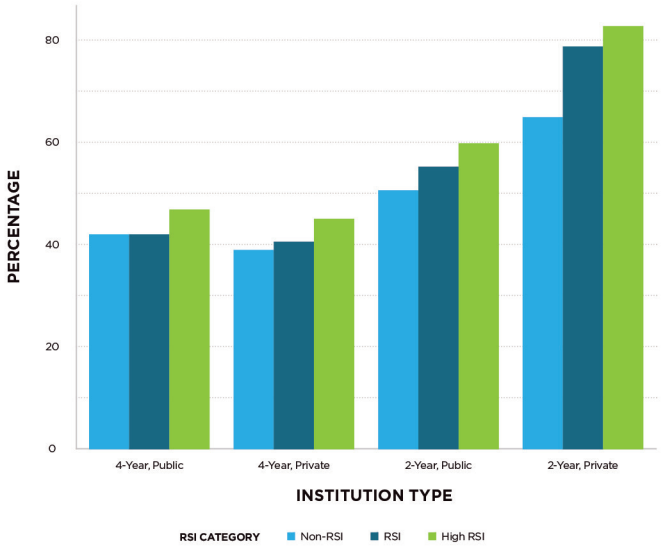
**Average Enrollment Percentage by Racial Identity for RSIs and High RSIs by Sector**




As a demonstration of the critical role RSIs play in serving students of lower socioeconomic backgrounds, the percentage of students receiving a Pell Grant is higher at RSIs than at non-RSIs for all institutional sectors. As can be seen in Figure 7, this difference is smallest among four-year institutions and is larger among two-year colleges, public and private. Across sectors, High RSIs enroll the greatest share of students receiving Pell Grants, and this may have some connection to the earlier finding related to the share of institutions in persistent poverty and persistent child-poverty counties that are RSIs and High RSIs. Although highlighting this pattern should not be interpreted as equating rurality with being poor, it does emphasize the importance of RSIs in providing educational access and opportunity to individuals from lower socioeconomic backgrounds.

**FIGURE 7.**

**Average Pell Grant Percentage for RSIs and Non-RSIs by Sector**

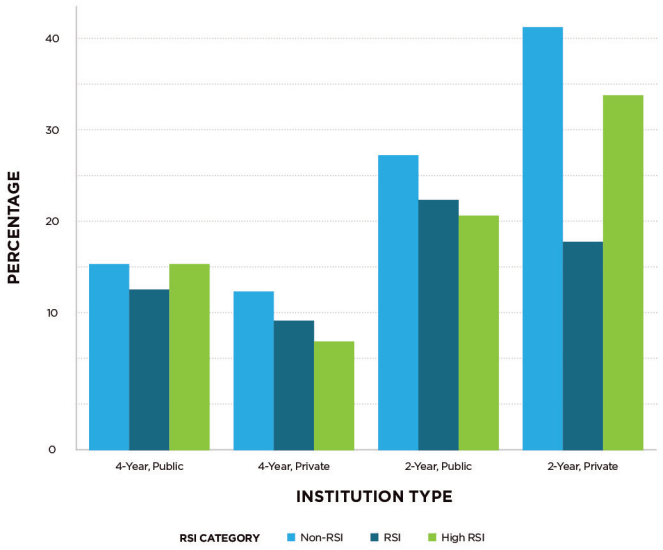


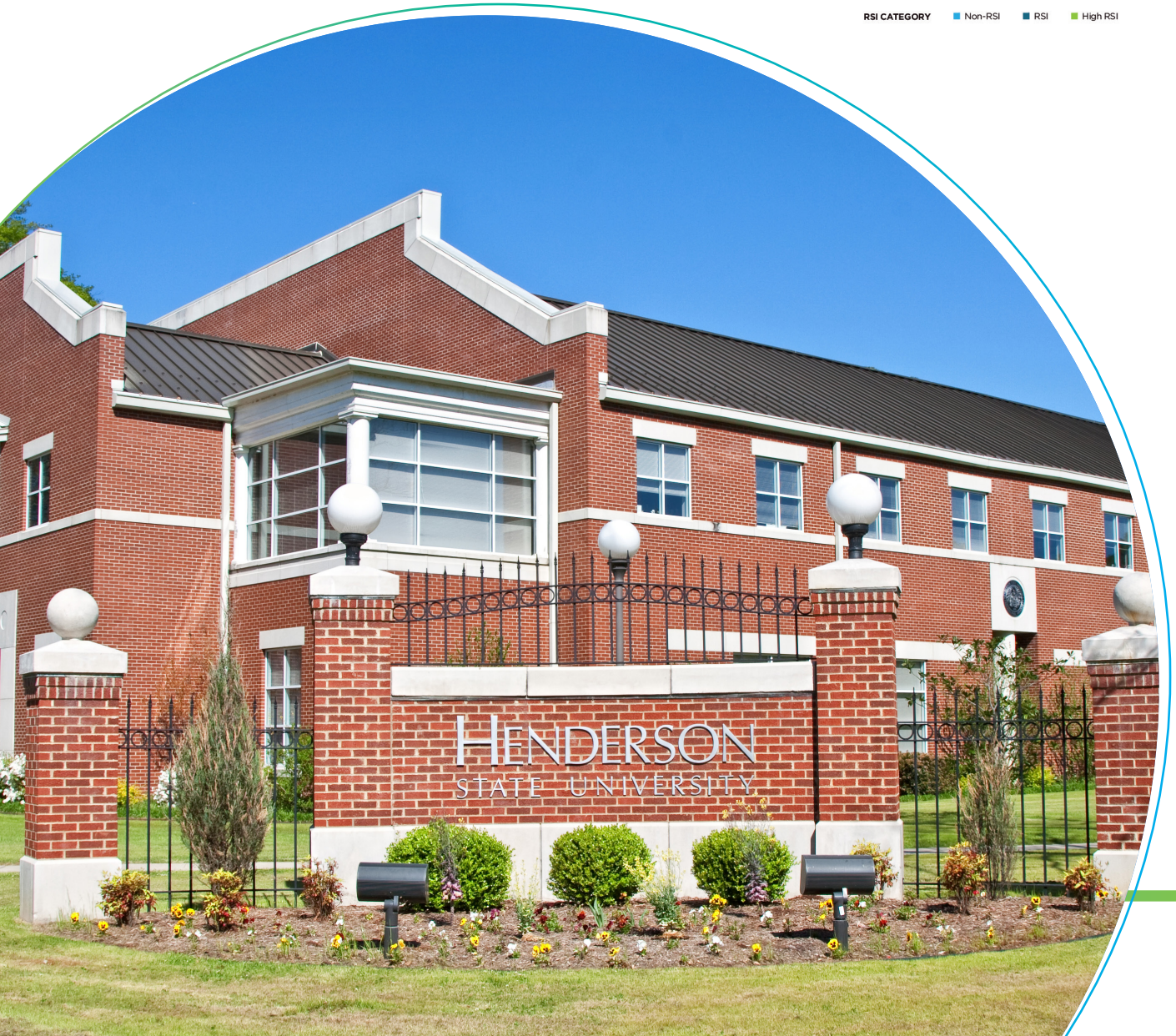

***...the percentage of students receiving a Pell Grant is higher at RSIs than at non-RSIs for all institutional sectors.***

Figure 8 highlights differences in the average percentage of the student body who are adult students, defined as age 25 and older. When looking at each sector as a whole, two-year colleges are enrolling a higher share of adult students than four-year institutions, inclusive of RSIs, High RSIs and non-RSIs. Across sectors, non-RSIs enroll a higher percentage of adult students than RSIs and High RSIs. Although it is possible that this trend is due, in part, to population size and demographic differences between rural and non-rural places, this is a finding that future research should investigate further.

**FIGURE 8.**

**Average Adult Student Percentage for RSIs and Non-RSIs**



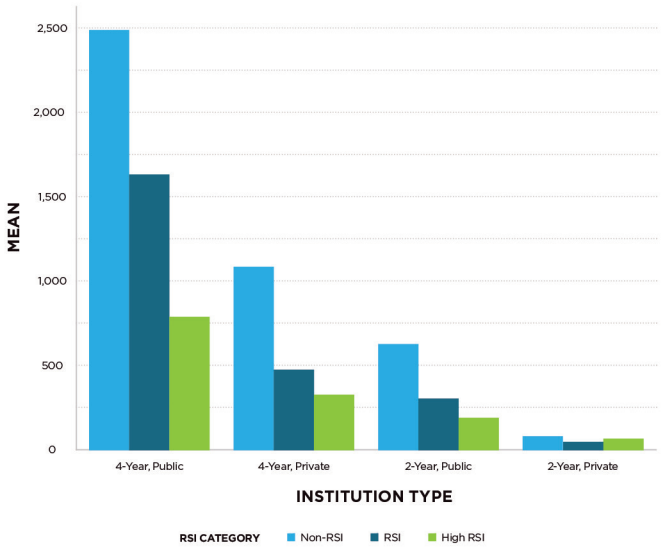
## STAFFING & FINANCIALS

The final set of analyses covers institutional staffing and financial metrics. When considering the number of people employed by institutions, the results contained in Figure 9 show that non-RSIs employ a larger number of people than RSIs, which is not entirely surprising given the earlier analyses indicating that non-RSIs enroll a larger number of students which leads to greater staffing needs. However, when looking at the ratio of headcount enrollment to FTE staff, an interesting finding emerges. Across sectors, RSIs have a lower student-to-employee ratio than at non-RSIs. At public, two-year colleges, RSIs and High RSIs have ratios of 11.7 and 11 students per FTE employee, respectively, compared to 16.8 at non-RSIs. This difference is smaller at public, four-year institutions, with RSIs and High RSIs having 8.5 and 8.1 students per FTE employee, respectively, versus 10 at non-RSIs. The difference in average staffing is smallest among private, four-year institutions. RSIs and High RSIs have the same relative staffing of 5.6 students per FTE employee, and non-RSIs have 6 students per FTE employee. Collectively, these results indicate that, in relative terms, RSIs are staffed at higher levels (i.e., lower student-to-employee ratios). This may reflect that there is simply a minimum number of employees needed to run a college of any enrollment size and that staffing levels do not have a perfectly linear relationship with enrollments, or it may indicate that RSIs have greater relative staffing in order to provide the academic and student services that support student bodies composed of larger shares of low-income students. It's also possible that these figures are connected to declining enrollments on some campuses.

***...these results indicate that, in relative terms, RSIs are staffed at higher levels...***

**FIGURE 9.**

**Average Full-Time Equivalent Staff for RSIs and Non-RSIs by Sector**

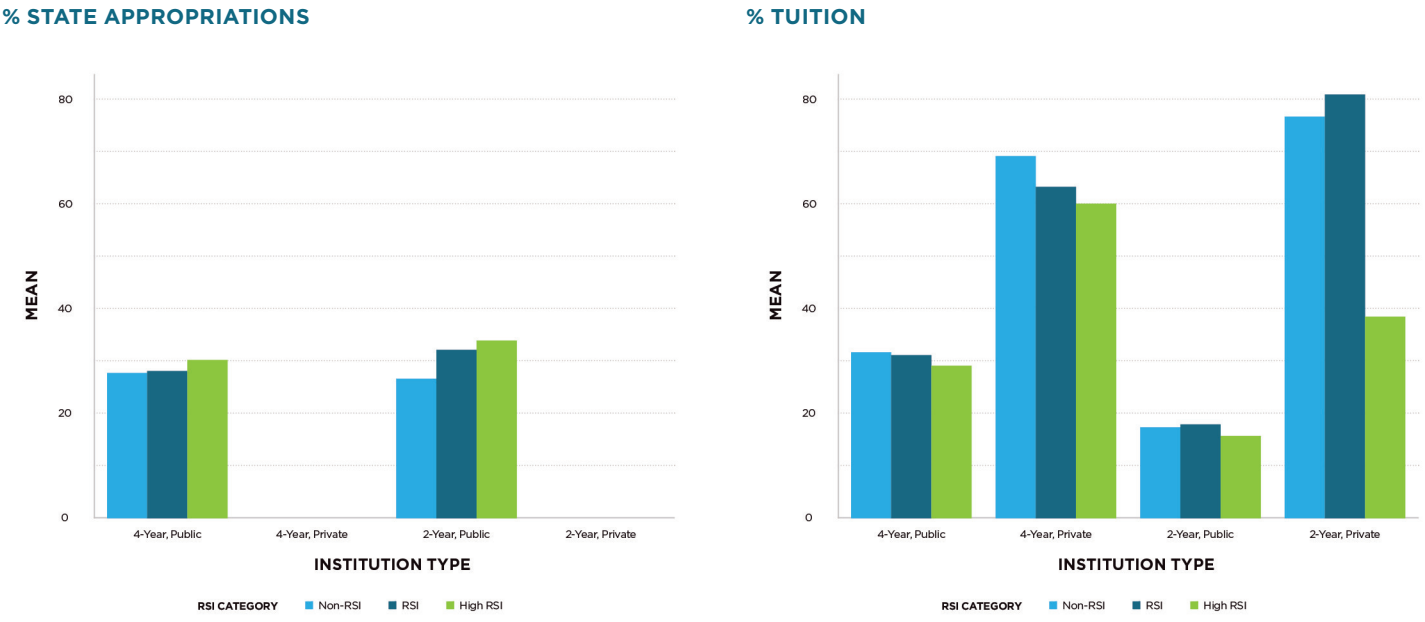



Next, we consider revenue sources at these institutions. For most institutions, the two primary sources of revenue are state appropriations (for public institutions) and the tuition and fees paid by students and families. Figure 10 contains a comparison between RSIs, High RSIs, and non-RSIs across sectors. At public, four-year institutions, the percentages of revenue generated by state appropriations and tuition are relatively similar, with tuition representing a slightly larger percentage than state appropriations at non-RSIs and RSIs, generally, but a smaller percentage than appropriations at High RSIs. Expectedly, at private institutions, state appropriations is zero, although, individually, some institutions do receive a small amount of appropriations from their respective states under unique circumstances. Therefore,at those institutions, tuition and fees constitute the overwhelming majority of revenues.

Beyond state appropriations and revenue from tuition and fees, endowments represent another important source of revenue for postsecondary institutions, though not all institutions benefit equally from these funds. As can be seen in Figure 11, which contains endowment assets per FTE student, there is no singular pattern that emerges across sectors. The most stark finding here is that private, four-year institutions have average endowment assets per FTE student that are multiples larger than all other sectors, and this is true regardless of whether an institution is an RSI or not. Although High RSIs have the lowest average in this sector, these institutions still hold an average of $73,658 in endowment assets per FTE student. When looking at the other three sectors, a pattern emerges wherein RSIs, as a whole, have higher average endowment assets per FTE student than do non-RSIs and High RSIs. The difference is largest among

**FIGURE 10.**

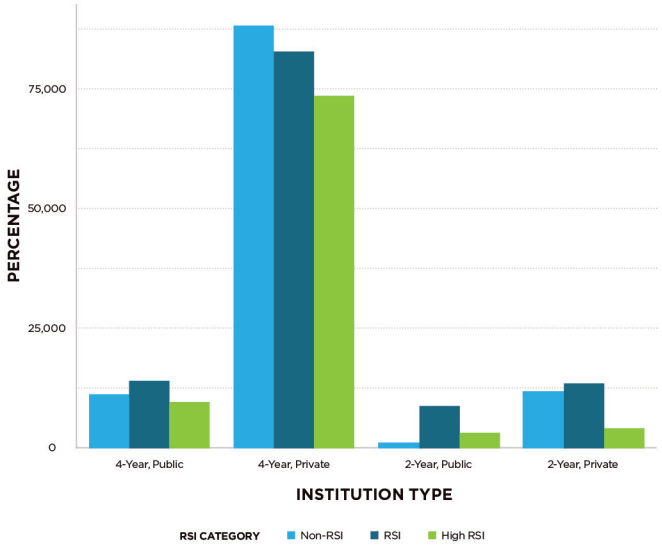
**Average Percent of Revenue from State Appropriations and Tuition for RSIs and Non-RSIs by Sector**



public, two-year colleges where RSIs have an average of $5,650 in endowment assets per FTE student, compared to $3,126 at High RSIs and $1,010 at non-RSIs. While the impulse may be to interpret this as meaning that RSIs in these sectors are wealthier than High RSIs and non-RSIs, at least part of these differences is driven by institutions that have smaller FTE enrollments and modest endowments. Furthermore, these comparisons underscore that public, two-year colleges, in particular, are in dire need of greater philanthropic investment.

**FIGURE 11.**

**Average Endowment Assets Per FTE Student for RSIs and Non-RSIs by Sector**




## APPLICATIONS FOR THE FIELD

The above analyses provide important information about RSIs with the aim of motivating others to learn more about these critical institutions. However, the primary goal of this project was not to assert a comprehensive understanding of RSIs but rather to build a previously nonexistent data infrastructure for identifying RSIs. Ultimately, we believe that providing various stakeholders with the tools and information to find these institutions will advance the interests of RSIs through better funding, policy, and action.

## APPLICATIONS FOR RESEARCH

Beyond the ability to identify RSIs, one of the key research areas that needs further study in support of these institutions is an expanded understanding of these institutions, their students, their employees, and the communities they serve. Currently, the academic literature on RSIs is extremely limited and focuses only on rural-located institutions (and primarily on rural community colleges). As a result, we are left with an incomplete understanding of the constellation of institutions that serve rural students and communities, and especially those institutions that are not located in places formally classified as rural. However, one of the barriers for expanding the body of work on RSIs has been the significant amount of time and resources needed to engage in the work of developing an evidence-based approach to identifying these institutions. The data infrastructure created through this project streamlines the process researchers go through to select RSI campuses for recruiting study participants and compiling quantitative data. Our hope is that by eliminating these methodological hurdles, more scholars will be encouraged to enhance our understanding of these institutions, and especially deeper dives into what it means to be rural-serving, through quantitative and qualitative research.

## APPLICATIONS FOR POLICYMAKING

As we gain better knowledge about RSIs, it will also become important to develop policies and funding models that are supportive of these institutions. In the absence of a formal approach to identifying RSIs, especially those in non-rural areas, it is difficult for policymakers and governmental agency staff to accurately identify RSIs. This, in turn, complicates efforts to assess how funding and public policy uniquely impact RSIs as compared to other institutional types. Although legislators in and from a given state may know which are the rural-located institutions in their state, not all legislators do, nor has there been an easy way for them to identify

the full slate of institutions providing important service to rural communities. One salient example of this relates to Part Q of the Higher Education Act, which is a provision for "Rural Development Grants for Rural-Serving Colleges and Universities" but does not include a definition or set of criteria for determining what constitutes a rural-serving college or university. The current project offers a potential solution for this omission and provides policymakers with data and tools to identify these institutions. Additionally, as the research base on RSIs continues to grow, so, too, will our understanding about these institutions, which can inform policies that support these institutions' ability to serve rural students and communities.

## APPLICATIONS FOR PRACTICE

There are also important applications for practitioners at, and leaders of, RSIs. For both groups, the ability to identify peer institutions that are also RSIs can afford opportunities for networking and collaborative learning. Additionally, our metric and the attendant map allows campus leaders and institutional researchers to create more accurate peer groups for the purposes of benchmarking, strategic planning, and continuous improvement. Current frameworks in which institutions are classified, such as institutional sector or Carnegie Classification, do not account for locale or rurality, which are substantive determinants of the types of students an institution serves and how it understands its mission. Our metric to identify RSIs can be overlaid with sector and Carnegie Classification to allow institutions to better determine which are their true institutional peers in their region and beyond.

## APPLICATIONS FOR PHILANTHROPY

The final application we note, though there are certainly others, relates to philanthropy. RSIs typically have smaller endowments than non-RSIs; though as earlier results demonstrated, the story is a bit more nuanced than that when considering assets per FTE student. However, because RSIs tend to be considerably smaller than non-RSIs, they're not able to realize the same economies of scale that can lead to lower costs of goods and services. As a result, even RSIs with a higher level of endowment assets per FTE student can have lower purchasing power than non-RSIs with a lower level of endowment assets per FTE student. Additionally, when news stories are published about wealthy philanthropists making large donations to institutions, these gifts seem to more often be directed to institutions that are not rural-serving. As a result, RSIs are less able to build operational capacities to better serve their students and surrounding communities. For individual donors and philanthropic foundations, the ability to identify RSIs can inform donations, as well as grantmaking to RSIs and to scholars studying RSIs, and is made easier with this new metric than was previously possible.

## CONCLUSION

Rural-serving institutions are a critical component of rural infrastructure. RSIs offer educational opportunities to students and communities that often face limited options, and in the absence of the nearby RSI, may have no options at all. Additionally, RSIs are critical contributors to regional workforce and economic development by employing significant numbers of people, preparing students for participation in the regional labor market, and exercising purchasing power as consumers of considerable goods and services. The health of these RSIs often tracks with the vitality and well-being of the regions they serve, and their ties to the community are robust.

Therefore, it is absolutely essential that we gain a better understanding of RSIs through increased research on the sector. With increased research, RSIs will receive more attention in public discourse. Better understanding about RSIs may also encourage legislators to craft more favorable funding policies and philanthropists to view RSIs as worthy

of investment. RSIs must be protected and supported, as they are irreplaceable anchor institutions whose existence directly or indirectly affects millions of people. Their importance has been underscored through the COVID-19 pandemic, when these institutions worked to continue educating students remotely in spite of inequality in broadband internet access and served as important public health partners for testing clinics and vaccine distribution. Equipped with an evidence-based framework for identifying RSIs, the responsibility for their well-being, and that of the communities they serve, falls to all of us.

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