An Anchor for the Region: Examining a Regional Comprehensive University's Efforts to Serve its Rural, Appalachian Community

Cecilia M. Orphan
University of Denver

Kevin R. McClure
University of North Carolina Wilmington

Recent media reporting and research suggest that regional comprehensive universities (RCUs) and other postsecondary institutions may play an integral role in the welfare of rural regions, yet empirical research on the regional service of rural postsecondary institutions is limited. The purpose of this study was to examine how a single RCU serves its rural, Appalachian region. Guided by case study methods, this study used a theoretical framework consisting of community capitals theory and the anchor institution framework. After analysis of interview, documentary, governmental, and observational data, the case study resulted in a rich description of the RCU's regional service. Our findings demonstrate the RCU's role as an anchor institution as it expended resources to grow, invest in, and leverage rural community capitals. The university's most significant focus as an anchor institution was on leveraging and increasing human capital through investing in education, workforce development, and public health. These findings point to several implications and policy recommendations to better support the anchor institution role RCUs play in rural regions.

Downtown in a rural, Appalachian town stands Rural State University,[1] a regional comprehensive university (RCU) founded in the 1980s to facilitate college access and strengthen the economy. As the university and region evolved, Rural State responded to the call of the American Association of State Colleges and Universities (AASCU), to be a "steward of place" (AASCU, 2002, p. 5). AASCU underscored that RCUs are rooted in place and, by design and charter, are intricately connected to their regions. The report encouraged RCUs to embody their historic tripartite mission of promoting postsecondary access, student-centeredness and success, and regional wellbeing (AASCU, 2002; Henderson, 2007; Orphan, 2018).

The 430 RCUs in the United States are publicly supported institutions that are geographically dispersed to facilitate postsecondary access, often for predefined service areas (AASCU, 2018; Orphan, 2018). RCUs educate 20% of all U.S. undergraduate students, including large shares of underrepresented racial minority (URM), immigrant, veteran, adult, low-income, and first-generation students (AASCU, 2018). In addition, evidence suggests that RCUs foster greater upward mobility than any other postsecondary sector (de Alva, 2019). According to the Integrated Postsecondary Education Data System, 32% of RCUs are located outside metropolitan areas (National Center for Education Statistics, 2018), and some RCUs were explicitly established to prepare rural teachers (Ogren, 2003). Research has shown that rural college opportunity depends upon accessible, affordable institutions like RCUs, ideally within commuting distance (Hillman, 2016; Kinney, 2018). Many RCUs are also their region's largest employer, making them vital economic drivers (McClure, 2018). The mission of RCUs has led scholars to characterize them as the "people's universities" (Henderson, 2007).

Although prior research has uncovered the importance of RCUs to rural college opportunity and regional economies, research examining RCUs' service to rural regions is scarce. The purpose of this study was to examine the role of an RCU in fulfilling the historic RCU mission in a rural region. We used case study methods (Yin, 2014) to examine Rural State University's efforts to serve its region.

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[1]Rural State University is a pseudonym selected to protect the identity of the university under study.

All correspondence should be directed to Cecilia Orphan, 1999 E. Evans Avenue, Suite 354, Denver, CO 80210 (cecilia.orphan@du.edu).

Taking care not to conflate "rural" with "Appalachian" (Denham, 2016; Obermiller & Maloney, 2016), we explored Rural State's relationship with a region that is both rural and Appalachian. Our case study was guided by two research questions:

1. How does Rural State University serve its region?

2. How does Rural State's regional service contribute to rural community development?

To explore the first question, we examined the complexity of Rural State's regional service. The second question guided our inquiry into how Rural State's regional service improved the sustainability of its rural community. To analyze the relationship between Rural State and its region, we drew on community capitals theory which defines community assets (Flora, Flora, & Gasteyer, 2015), and the anchor institution framework, which describes how organizations rooted in particular places improve their communities (Harris & Holley, 2016).

Examining the role of RCUs in rural regions is significant for several reasons. Research demonstrates that rural regions have struggled to recover from the Great Recession and have employment, education, income, and health disparities when compared to urban areas (Byun, Irvin, & Meece, 2015 Denham, 2016; U.S. Department of Agriculture [USDA], 2017). These challenges suggest that rural regions may depend more heavily on public institutions such as universities. Indeed, recent reporting (e.g., Brown & Fischer, 2017) and research (e.g., McClure, 2018) suggests that RCUs play an integral role in promoting rural college access, public health, and economic development.

Our study exposes how postsecondary institutions might support rural and Appalachian regions by acting as anchor institutions and leveraging community capitals. Our research also indicates that rural RCUs may embody their "stewardship of place" mission differently than RCUs in urban or suburban areas. RCUs that serve rural regions may also need special considerations from policy makers, such as enhanced resources and differentiated accountability measures. Moreover, these institutions may require unique leaders and creative management to address their region's specific needs. The findings can inform institutional and public policy by highlighting the contributions of RCUs as rural anchor institutions. As Howley (1997) asserted, rural contexts and educational institutions require study that attends to the inherent uniqueness of rural communities. Our examination of a rural RCU thus contributes to the anchor institutions literature, which has largely focused on urban anchor institutions (e.g., Fulbright-Anderson, Auspos, & Anderson, 2001; Goddard, Coombes, Kempton, & Vallance, 2014; Harris & Holley, 2016).

Literature Review

Recent media reports have highlighted the challenges that people in rural regions face when seeking access to higher education (Pappano, 2017; Smith, 2017) and the implications for public health and economic development that such barriers create (Brown & Fischer, 2017; Smith, 2018). Media coverage of Appalachia, while less frequent than that of other rural regions, tends to focus narrowly on Appalachia's experiences with the opioid crisis (Borter, 2019), poverty (Picchi, 2018), and coal-producing areas' difficulty in diversifying from a coal-driven economy (McGowan, 2019), ignoring Appalachian assets. There has also been reporting about how universities equip students with degrees that may encourage them to leave their regions to find work (Anderson, 2017; Ruggles, 2019), and how inadequate broadband access within Appalachia restricts college access (Seltzer, 2018). To contextualize our study, we reviewed three literatures exploring (1) rural and Appalachian communities and students, (2) rural schools and community colleges, and (3) RCUs. Throughout, we describe the commonalities and distinctions among rural and Appalachian students and institutions.

Rural and Appalachian Communities and Students

Although rural communities are often portrayed as peripheral to power centers, the U.S. Census Bureau (2017) estimated that rural communities constituted 97% of land area and were home to 20% of the U.S. population. Rural communities are frequently depicted using stereotypes that fail to recognize their strengths and diversity (Denham, 2016; Flora et al., 2015). In reality, "rural areas embrace ski slopes, mines, manufacturing, farms, retirement communities, [and] Native American reservations" (Flora et al., 2015, p. 7). Although recent reporting often treats "rural" and "White" as coterminous (Kozhimannil & Henning-Smith, 2019), most population growth in rural areas is from Latinx in-migration (Housing Assistance Council, 2012), and one in four rural students is a URM (Showalter, Klein, Johnson, & Hartman, 2017).

No set of characteristics defines Appalachian communities, and debate exists over whether there is such a thing as "Appalachian culture." Indeed, Appalachia encompasses rural, urban, and suburban communities around the Appalachian Mountains in Alabama, Georgia, Kentucky, Maryland, Mississippi, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, West Virginia and Virginia. Ten percent of the U.S. populace resides in Appalachia (Pollard & Jacobsen, 2017). While Appalachia has experienced outward migration due to economic, unemployment, and public health issues, it enjoys tight-knit communities, artistic traditions, and resiliency (Denham,

2016). Scholars have advocated for researchers to use conceptions of shared identity or experience to understand Appalachia (Denham, 2016; Obermiller & Maloney, 2016) while generalizing about the region (Obermiller & Maloney, 2016).

While rural postsecondary institutions have been underexamined, scholars have uncovered the college aspirations of rural (Wells, Manly, Kommers, & Kimball, 2016) and Appalachian students (Kinney, 2018). Research demonstrates that most rural students aspire to attend college (Meece et al., 2013), although they report lower collegiate aspirations than non-rural students (Haller & Virkler, 1993). Most research on Appalachian students uses an ecological theoretical framework that examines how family and community characteristics influence success (Bryan & Simmons, 2009; Kinney, 2018), a framing that may reinforce deficit-based portrayals of Appalachian communities. Among Appalachian youth, community and parental education levels and poverty are associated with collegiate aspirations (Brown, Copeland, Costello, Erkanli, & Worthman, 2009). Rural, African American students often faced limited regional postsecondary opportunities, however students either did not want to move outside the region to attend college or did not have sufficient assistance to navigate a full range of college options (Means, Clayton, Conzelmann, Baynes, & Umbach, 2016). Additionally, many rural schools are unable to offer college-preparatory coursework, which may constrain college choice for rural students (Ardoin, 2018).

Thirty percent of individuals from rural areas earned a bachelor's degree or higher in 2011 (Byun et al., 2012), compared to 40% of people from suburban areas, 43% from urban areas, and 22.6% from Appalachia in 2015 (Pollard & Jacobsen, 2017). While it is important not to conflate the characteristics of rural and Appalachian college students, both groups have commonalities. First, college enrollment of rural (Byun, Meece, & Irwin, 2012; Wells et al., 2016) and Appalachian (Pollard & Jacobsen, 2017) students is lower than the national average. Second, rural (Byun et al., 2015) and Appalachian (U.S. Department of Education, 2011) students are more likely to delay attending college and be first-generation students than urban students. First-generation students receive less information from family and school officials about college and financial aid and are less likely to take college entrance exams which may constrain their choices in postsecondary institutions (Kinney, 2018; Vargas, 2004). Third, many rural (McDonough, 1997) and Appalachian (Bryan & Simmons, 2009) students are attached to place and desire to remain close to family, which conflicts with the perception that attending college necessitates leaving home (Flora et al., 2015; Kinney, 2018). Most students choose a college based on its proximity to home (Kinney, 2018; Hillman, 2016; Turley, 2009), but rural or Appalachian students do not always have colleges nearby. Hillman (2016) identifies areas with limited postsecondary options and asserts that broad-access institutions, such as RCUs, are often the only option. Fourth, a lack of culturally responsive curricula and campuses contribute to Appalachian (Bryan & Simmons, 2010; Kinney, 2018) and rural (Ardoin, 2018) student attrition as such pedagogical approaches encourage student retention and completion.

While most research about rural and Appalachian students has tended to focus on barriers they face, other research suggests that Appalachian students enjoy community resources, including schools, families, and churches, strong identities, and sense of belonging (Kinney, 2018). To support rural students, Alleman and Holly (2013) encouraged colleges, businesses, civic organizations, and churches to partner. Moreover, rural and Appalachian students' desire to remain close to home may reflect "legitimate and conscious commitments to rural lifeways" (Howley, 2006, p. 63).

Rural Schools and Community Colleges

The literature on rural postsecondary institutions is sparse, yet some scholars have explored rural K-12 schools and community colleges. We could not find any studies examining Appalachian postsecondary institutions. The Rural School and Community Trust estimated that 25% of U.S. K-12 schools are rural, and 8.9 million students attend these schools (Showalter et al., 2017). Rural schools promote cultural pride and provide important economic, social, and civic resources (Ardoin, 2018; Schafft, 2016; Teiken, 2014), yet they face teacher shortages due to low salaries and limited housing options (Ardoin, 2018). High poverty in rural areas also results in lower tax revenues for education. Moreover, declining populations have led to school district consolidations (Means, 2018).

Some research has explored how rural community colleges serve their regions. Miller and Tuttle (2007) studied three rural community colleges and found that the community was dependent on these institutions playing multifaceted civic, social, and economic roles. Moreover, growing up near a college led people in rural communities to "have a fundamentally different outlook" (Miller & Tuttle, p. 120). Lastly, the authors found that being a college town was a defining feature for communities. Notably, other research has found that community college activities are closely scrutinized by people in rural areas (Miller & Kissinger, 2007).

Regional Comprehensive Universities

There is a small but growing body of literature on the histories, missions, finances, and challenges of RCUs. Several studies (Finnegan, 1991; Henderson, 2007; Ogren,

2003, 2005; Schneider & Deane, 2015) detail the evolution of RCUs as they added degrees in response to regional needs. Among the first graduate degrees offered by RCUs were education and nursing doctorates to train education and health personnel (Harcleroad & Ostar, 1987). While some research posits that RCUs have ill-defined missions (Henderson, 2009; Kinkead & Katsinas, 2011; Schneider & Deane, 2015), other research exposes a unique tripartite mission for RCUs of promoting educational access, regional service, and student-centeredness (Orphan, 2018).

Several studies have examined RCU finances, showing that RCUs are highly efficient (Titus, Vamosiu & McClure, 2016). Orphan's (2018) qualitative examination of four RCUs grappling with their regional service missions within a state policy context shaped by neoliberal ideology and funding cuts found that RCUs compromised their civic missions to appease policy maker demands for greater economic engagement. Despite their contributions to place, RCUs face challenges created by precipitous funding cuts, proposed institutional mergers, and policy maker demands to contribute to economic growth (Goldman, Karam, Stalczynski, & Giglio 2018; Laderman, Weeden, & Carlson, 2019; Schneider & Deane, 2015).

Despite growing interest in rural college access, research on the regional service of rural postsecondary institutions is sparse, as is research on Appalachian postsecondary institutions. We also know little about how RCUs support rural and Appalachian college opportunity and communities. Such gaps in our understanding are important to address because the sustainability of rural regions may depend on public institutions like RCUs serving their communities (Goddard et al., 2014). Our study sought to address these knowledge needs.

Theoretical Propositions

Consistent with case study methods (Yin, 2014), we developed theoretical propositions to guide our research design drawn from two frameworks. The first elaborates on community capitals (Flora et al., 2015), and the second explores anchor institutions (Harris & Holley, 2016).

Community Capitals

Given that many descriptions of rural and Appalachian communities focus on their challenges (Carr & Kefalas, 2010), we sought a framework that highlighted strengths. The community capitals framework was designed to strengthen communities by positing that all communities have assets that when neglected deteriorate, but when invested in become forms of capital (Flora et al., 2015). Flora et al. (2015) identified seven community capitals in rural communities: natural, cultural, human, social, political,

financial, and built (See Table 1). Natural capital includes natural resources. Cultural capital is rituals, stories, and language celebrated through art, museums, and festivals. Human capital entails education and physical health, which translates to knowledge, economic productivity and interpersonal, civic, and leadership skills. Social capital consists of ties between community members, organizations, and outside stakeholders, and entails two activities (Emery & Flora, 2006; Flora et al., 2015): "bonding" connects family, friends, neighbors, and colleagues; and weaker "bridging" connects individuals and organizations. Political capital entails influence over the distribution of public and private resources, and access to power brokers. Financial capital funds programs (Beaulieu, 2014). Lastly, built capital is infrastructure promoting public health and the economy.

Emery, Fey and Flora (2006) described how investments in community capitals build on one another while sustaining communities through creating intergenerational human capital and "upward spiral" (p. 22). That said, community capitals can be used unwisely. For example, communities may expend financial and political capitals to construct an industrial park that sits empty. Periods in which community capitals decline are "spiral-downs" (Emergy & Flora, 2006, p. 22). Our first theoretical proposition is that purposeful investment by public institutions such as RCUs in community capitals can strengthen rural communities.

Anchor Institutions

We used the anchor institutions framework to understand how an RCU might contribute to community capitals. Anchor institutions are "locally embedded institutions, typically non-governmental public sector, cultural or other civic organizations, that are of significant importance to the economy and the wider community" (Goddard et al., 2014, p. 307). Unlike for-profit corporations, which may relocate to optimize profits, anchor institutions are immobile and invested in a place and are often health institutions, universities, and nonprofits (Fulbright-Anderson et al., 2001; Serang, Thompson, & Howard, 2013). Anchor institutions are also often their region's largest employers and research often focuses on their economic contributions to workforce, real estate, and infrastructure (Harris & Holley, 2016). Harkavy and associates (2009) argued that anchor institutions should exhibit values of democracy, equity, and social justice. Public institutions do not universally accept their anchor institutions roles, however, meaning their contributions are not automatic and they may fail to invest in community capitals. As such, not all postsecondary institutions are anchor institutions. That said, the anchor institution framework is closely aligned with AASCU's conception of RCUs as regional stewards

Table 1

Forms of Community Capital

Form of capital	Description
Natural	Assets that abide in a location, including naturally-occurring resources, amenities and beauty.
Cultural	Rituals, stories, symbols and language.
Human	Community member skills, education, health and self-esteem; ability to access resources and knowledge.
Social	Connections between people and organizations. (Bridging and bonding activities.)
Political	Access to power and power brokers.
Financial	Financial resources available to invest in capacity building.
Built	Infrastructure including telecommunications, industrial parks, main streets, water and sewer systems, and roads.

of place (2002). Where AASCU's stewardship of place statement is conceptual and describes how RCUs' should serve their regions, the anchor institution literature provides a framework for analysis of how RCUs might actually do so.

When public universities serve as anchor institutions, they deliberately leverage community capitals (Chatterton, 2000; Hodges & Dubb, 2012). Although research about anchor institutions has largely examined urban institutions, we applied this concept to understand how an RCU serves its rural region. Our second theoretical proposition, then, is that RCUs acting as rural anchor institutions intentionally leverage and strengthen community capitals.

Research Design

Obermiller and Maloney (2016) recommended the use of case studies to examine Appalachian areas to surface their uniqueness. We thus used an explanatory, holistic case study design (Goddard et al., 2014; Yin, 2014). Holistic case studies allow for in-depth examination of a single case such as an RCU and its region, and explanatory case studies contribute explanations for observed phenomena. Because explanatory case studies allow for pursuit of "how"

questions, and our research questions asked how Rural State served its rural, Appalachian region and contributed to community development, we selected this design. As researchers, we were both unfamiliar with the site and had no prior affiliation with it. As such, we were able to enter data collection with a goal to uncover "essential elements of the research story" (Saldaña, 2013, p. 8).

Case Study Boundaries and Site Selection

Case study design requires boundaries be placed on a phenomenon to delineate the case (Yin, 2014). The boundaries we used were geographic and organizational. Our focus on one RCU located in a rural, Appalachian region constituted the organizational boundary. The geographic boundary was the university's service area (which we also refer to as its region), a county surrounding Rural State identified in the statute that established the university.

Rural State was created in the 1980s from a merger of a community college and a research university branch, owing its existence to a state House Representative who lobbied for its creation to improve the county. In 2015, the university enrolled 7,000 continuing education, 4,000 undergraduate, and 320 graduate students (see Table 2 for

student characteristics). Rural State offers 50 bachelor's, 20 associate's, and four master's degrees, and is composed of three colleges: A University College offering remedial education, a Vocational College with associates degrees, and a Liberal Arts College. Eighty percent of Rural State students are first-generation, and some are first in their families to graduate from high school. Eighty-nine percent of students are from the county. Rural State was the state's most affordable four-year institution despite being the least well-funded, and the Great Recession exacerbated its funding challenges.

We followed Coladarci's (2007) recommendation to determine the region's "inherently rural" (p. 3) nature by using governmental and cultural indicators. The first governmental source was the National Center for Education Statistics (NCES) which designated all school districts in Rural State's region as "rural fringe" (defined as less than five miles from an urban center) or "rural distant" (defined as five-25 miles from an urban center). The second governmental source we consulted was the United States Department of Agriculture's (USDA) nine code rural-urban continuum. Counties coded four through nine are rural; Rural State's county is a four, meaning its population is more than 20,000 and it is adjacent to an urban area. Interestingly, governmental sources disagree about what constitutes a rural region. The U.S. Census designates rural areas as having less than 2,500 people. Because the town in which Rural State is located has 20,000 people and the county has 79,000, the U.S. Census does not consider it rural yet the USDA and NCES do. To reconcile this tension, we examined cultural indicators to assess rurality. We determined that the county was Appalachian by consulting the Appalachian Regional Commission (n.d.-b). While not all Appalachian regions are rural (Pollard & Jacobsen, 2017), we found that the region's rurality was tied to it being Appalachian.

Data Collection

Data collection adhered to case study design and included observational, documentary, governmental, and interview data (Yin, 2014). Data were collected during a site visit in 2015, during which 17 interviews with administrators, staff and faculty members, and a community leader were conducted. Table 3 lists the participants. Participant recruitment occurred in three phases. First, the campus President was interviewed to determine her regional service commitment. Following this interview and analysis of the university website, we determined that Rural State had a regional service mission aligned with the historic tripartite RCU mission, and we received the President's permission to study the campus. The President identified administrators and staff who could speak to the campus's regional service. Second, we invited these individuals and other participants

(staff, faculty, administrators, and a community leader) purposefully identified using university and community websites who could describe the campus's regional service (Patton, 2002). Third, interview participants identified other individuals who could speak to Rural State's rural service or the region's Appalachian and rural nature. Participants identified the Institutional Finance Director, Chamber of Commerce President, and Liberal Arts Dean.

Case study methods recommend open-ended, conversational interviews (Yin, 2014). We used this interview style which allowed participants to explore a range of topics related to the campus's regional service. Administrators were asked to reflect on how they served the region. Faculty members were questioned about how they viewed the campus's regional service and if their teaching and research served the region. Staff members were asked to describe how they advanced the campus's regional access mission and campus/community partnerships. The community leader was asked to describe Rural State's regional service.

During fieldwork, observations were recorded about the campus and region (Yin, 2014), including fliers advertising student and community services, the campus's location within the region, and the presence of community organizations adjacent to or on campus. Over 200 documents about the region and campus were collected. The town's newspaper was mined for evidence of regional community capitals including civic events, job postings, and new businesses. Mentions of Rural State and the region were also collected from community forums and local media. University documents included budgets, strategic plans, memorandums of understanding with regional organizations, factbooks, admissions materials, and economic impact studies. Additionally, we collected regional data from the U.S. Census, NCES, and USDA. As per case study guidelines, data collection proceeded until we had confirmatory evidence of emergent findings from multiple sources (e.g., participants shared observations echoed in documentary, governmental or observational data) (Yin, 2014).

Data Analysis

Our analysis was guided by our efforts to test our theoretical propositions and involved coding (Saldaña, 2013; Yin, 2014). To ensure intercoder reliability, we analyzed the same interview separately using emergent coding related to our theoretical propositions and compared our codes. A sample of the codes and corresponding data are included in Table 4. We subsequently developed themes using our theoretical propositions and codes (see Table 5). After theming our data, we identified two categories: "Regional Service," and "Regional Influence

Table 2

Student traits

Student traits	Proportion of student body
Post-traditional (over age 25)	20%
Part-time	17%
From region	89%
First-generation	80%
Zero expected family contribution	37%
Requiring remediation	66%
White	85%
International	1%
Native or indigenous	1%
Latino	1%
Black or African American	5%
Asian American	1%
Native or Indigenous Race/ethnicity unknown	4%
Two or more races	2%

Note. 4,000 undergraduate students and 320 graduate students were enrolled at Rural State University at the time of data collection (2014-2015 academic year).

over the Institution." At this stage, we were informed by two case study analytic methods that support explanatory case studies: pattern matching, in which we compared our theoretical propositions to patterns in the data, and explanation building, in which we created explanations for what we observed (Yin, 2014). The themes we identified informed our case description and findings (Yin, 2014). We developed explanations for our research questions through writing the case description.

Case Study Quality and Limitations

Case study quality is determined by the following four criteria (Yin, 2014). Construct validity requires relying on multiple evidence sources during data collection and analysis. We ensured construct validity by collecting multiple evidence sources. To create internal validity during analysis, we used pattern matching and explanation building and entertained rival hypotheses. This requirement echoes Coladarci's (2007) recommendation to make "earnest attempts to disconfirm, refute or falsify" (p. 7) analysis in rural-focused research. Reliability occurs when researchers maintain a chain of evidence so that subsequent researchers can follow these procedures and discover

similar findings. We ensured reliability through creating a case study database with our research questions, theoretical propositions, methods, and data.

Although we took diligent steps to conduct a high-quality case study, we must disclose three limitations. First, the interview data are primarily from campus personnel. Including more community members or students would have provided additional insights into Rural State's regional service. Second, beyond the campus's economic impact studies, we did not measure the tangible benefits of Rural State's service realized by the region. Instead, we relied on perceptions of campus stakeholders and a community member. In recognition of these limitations, we analyzed documentary evidence reflecting regional assessments of Rural State's service. Third, as researchers from urban areas, we needed to gain participant trust. We built rapport through demonstrating our knowledge of the region's history and rurality as well as listening intently to how participants described the campus's regional service and region (Patton, 2002).

Case Study Findings

The regions in which RCUs are located often shape campus life and regional service efforts. As such, we first present findings describing the region to illuminate its

Table 3

Study Participants

Position type	Participants	#
Administrators	President	1
	Provost	1
	Chief financial officer (CFO)	1
	Vice president, enrollment management	1
	Vice president, student affairs	1
	College dean	2
	Executive director, development foundation	1
Faculty	Professor	1
	Associate professor	2
	Assistant professor	1
Staff	Director, institutional finance	1
	Director, student career services	1
	Director, international education	1
	Director, admissions	1
Community leader	President, chamber of commerce	1
TOTAL		17

Table 4

Sample codes and corresponding data

Sample codes	Data (sample quotes)
Rural Educational Oasis (OASIS)	"I think the rural setting has had an impact on the kind of students that come here. We get a lot of first generation students who are the first from their families to come to school."
Serve as Cultural Hub (CULTARLHUB)	"One of things that's very popular I've noticed is performances here in the [performing arts center] gets a lot of community participation"
Efforts to Improve K-12 Schools (K-12)	"There's a lot of faculty and others who work directly with school systems. A lot of us have had children that go through the schools."
Efforts to Improve Civic Life (CIVIC)	"There were students here working all across the county. They did clean-up projects. They do the homeless shelters. We have students doing a tremendous amount of volunteer work."
Efforts to Improve Health (HEALTH)	"We provide the workforce for the local healthcare industry, quite frankly, nurses and radiology technicians and respiratory therapists."

Table 5

Analysis themes

Rural State's regional service	Regional influence on Rural State
Rural-specific service	Tension with town
Faculty/staff/administrator commitment to region	Depopulation of region
Tight-knit campus community	Challenges related to regional economy
Rural economic development	Regional suspicion about higher education
Educational access point	Appalachia influences campus culture
Cultural programming	Regional support for campus

uniqueness beyond broad descriptors like "rural" and "Appalachian." We then present findings related to Rural State's efforts to promote postsecondary access; student-centeredness; and regional economic, cultural, civic life and public health.

Rural State's Region

Riverton[2], the town in which Rural State is located, sits at the confluence of two rivers. Rural State's service area is bounded by a county encompassing 610 square miles situated around Riverton. The Appalachian Regional Commission considers the county "distressed," meaning it has high unemployment and poverty (n.d.-a). Two historical events shaped the county. The first was the diminishment of the textile industry, and the second was a flood that occurred in the mid-1930s that caused significant hardship. In describing Riverton, the Provost said, "It was a big manufacturing textile river town. [T]he economy changed and floods and all that, you see a lot of empty lots. You see a lot of dilapidated buildings. The economy hasn't transitioned."

The region is predominantly White and aging. In 2015, 79,000 people lived in the county, and 20,000 lived in Riverton. Ninety-five percent of residents identify as White and five percent as URMs (2.7% African American, .5% Native American, .3% Asian, .3% race other than White, and 1.2% multi-racial). The median age is 38.8 years. Just

[2]Riverton is a pseudonym that we assigned to the town.

6.7% of adults hold a bachelor's degree or higher (24.2% below the national average). Forty percent of people live 200% below the federal poverty line. The median household income is $38,000 ($17,000 below the national average), and some residents lack running water. Twenty-one percent of residents have disabilities (nine percent higher than the national average). The town also struggles with opioid addiction. These challenges are compounded by geographic isolation residents experience due to insufficient public transportation. Out-migration between 2011-2015 led to a 1.5% population loss. Census and county records attributed out-migration to lack of economic opportunity.

The region's Appalachian identity is celebrated through music, art, and cultural events. The county fair hosts bluegrass and washboard music competitions. The region is tight-knit with local policy makers celebrating kinship, neighbors helping each other, and community members volunteering to beautify the downtown. The region's rivers inform its identity, with fish catches reported in the newspaper and an annual festival that commemorates the historic flood. Area churches offer free professional attire, adult basic education, and folk, Appalachian medicine. Although manufacturing has largely relocated, there remains regional demand for government, education, and healthcare professionals, and a number of family businesses tout their longevity. Riverton was also once an instrumental riverport. Residents expressed hope in community forums that the region would reclaim its status as a transportation and manufacturing hub.

Promoting Postsecondary Access

The first dimension of Rural State's regional service connects to its founding purpose of facilitating college access. The University College Dean couched the access mission as integral for place-bound residents, which entails serving as both a university and a community college:

I had a colleague say, "Well, we just don't accept [students] and they go to the community college." I'm like, "In my area [if] they go to a community college, they would have to go two hours away." I don't think people understand the geographic isolation and social isolation of our residents.

The President frequently calls Rural State "a university of opportunity," and fulfilling the access mission requires providing remedial and developmental education, as the CFO described:

[Students] just haven't had the opportunities, they are not ready. They can't write, a lot of them. These students are marked for life. They're going to be unable to get jobs. That's our mission is that population—is to help them understand you can raise your intellectual, your educational level, and you can qualify for more than what you think. And get them out of poverty and out of the welfare mindset that permeates a poverty-driven area.

This quote portrays the negative perceptions some university stakeholders hold of individuals from the region, which may hinder the access mission's efficacy. That said, as this quote and the following one from the Development Foundation's President demonstrate, Rural State's access mission is intended to promote upward mobility: "For us, our access to education is, truly transformative. We have more of an impact on changing a family's ability to earn a living and have some social mobility as a result of paycheck and career." Rural State also supports the K-12 school system by partnering with school leaders to improve schools as the President shared, "We had a number of grants to help more particularly [with] math and science in the schools."

Rural State once housed a Postsecondary Access Center designed to address Appalachia's unique needs, examine barriers facing prospective students, and allocate grants to address these challenges. Analysis of the Center's archival documents revealed that it facilitated college advising for 28,000 Appalachian residents throughout the state. Despite garnering national attention for its work, the state ended the Center's funding and it closed in 2014.

Promoting Student-Centeredness

Another dimension of Rural State's regional service is to be student-centered and culturally responsive for Appalachian and rural students. Classes are small, which stakeholders believe reflects the region's close-knit, Appalachian identity, as this Professor asserted, "We have more individual interaction with the students with smaller class sizes than maybe what can be offered at a larger university. The faculty are very accessible." In interviews, faculty, staff, and administrators demonstrated awareness of how the region's rural and Appalachian identity shapes students, as the Provost described:

I think the rural setting has had an impact on the kind of students that come here. We get a lot of first-generation students who are the first from their families to come to school. That definitely is part of the culture. Some of them have never really been far from home.

Campus-wide awareness of student needs was evident in several institutional features. First, River State provides comprehensive health services to students. Second, the university establishes relationships with students' families to honor the region's family-centeredness, as this Professor shared, "Appalachian people tend to be very family-oriented. Family is involved in what they do, so they like to be a part of what's going on with [their students]." Third, the CFO described how Rural State's remedial offerings reflect its student-centeredness:

Students come in, they are unable to produce a product that gets them in someplace else. They're probably a 16 or a 15 ACT, maybe lower. They need that intensive push to figure out how to think, to figure out how to study, to figure out how to express themselves.

Finally, university officials support students and families in navigating university bureaucracies as the President described:

We have some people on financial aid office that sit with families … They treat them like they're their own members of the family to help them really understand what they're considering [financially] … "Have you thought about this?" I think we do more of that kind of thing because these kids have no models.

Other participants described treating students like family, underscoring student-centeredness.

Promoting Regional Economic Life

Rural State plays a vital role in economic development as the region's largest employer. The Provost shared, "The two big economic anchors here are [Rural State] and the two medical centers. If it wasn't for that, this just would be really a shell." Rural State aligns degree offerings with regional needs, including its first master's in occupational therapy added in 2006 to serve residents with disabilities. The Vice President of Student Affairs connected this degree to the university's mission to "provide the workforce for the local healthcare industry." Later, Rural State created two education master's degrees to address teacher shortages. As the President shared, "We help with the preparation [and] development of teachers." We found that a majority of business leaders, health care professionals, and school staff were Rural State alums.

While Rural State is primarily a teaching institution, some research occurs that is largely to support the region's health and education sectors. Rural State also supports area businesses through business incubation and consultations. The Chamber of Commerce President shared her perceptions of River State's economic contributions, saying:

> Everybody in our area would pretty much agree: if we didn't have [Rural State] we wouldn't have much of a downtown. I think everybody recognizes that, embraces it, and we try to partner with them in everything we can. To have that connection, being the educational institution that they are, being one of our major employers—it's important.

Economic impact studies corroborated this perception; Rural State's annual economic impact was $165 million, and during the school year there was a 20% increase in regional economic activity. The university indirectly created 2,600 jobs while directly employing 579 people. Rural State also closed a downtown street to create a bounded campus which initially frustrated residents but eventually encouraged business development.

To respond to state demands for increased economic contributions, Rural State expanded its efforts. The university now surveys alumni to determine their employment, given that many remain in the region. The university also created 15 modules for students to specialize in professional skills needed in the region. River State's President established a Workforce Advisory Committee to address area business needs. The Career Center Director shared:

> There are so many companies that contact us on a regular basis saying, 'Hey, we're looking for graduates with this degree because we're hiring so many folks in these positions. Please help us get the word out or send us some resumes or let students know.'

These findings demonstrate that Rural State worked to stimulate economic activity, sustain businesses, and provide a trained workforce within its region.

Promoting Regional Civic Life and Public Health

The university's regional civic engagement suffered from lack of financial and human resources and state support, as the Institutional Finance Director shared, "Our active role in terms of community development has been less than I'm seeing in other university communities. Perhaps because we have limited resources, perhaps we don't have the same expertise." In 2010, the President submitted a proposal to the state to fund a Center for Applied Research which would have created degree and research programs to promote economic development, public health, documentation of Appalachian history, and social revitalization. Policy makers rejected the proposal, funding an identical center at the state's flagship located outside of Appalachia. The President shared that the proposed center "suffered from the lack of funding but quite frankly, if [state policy makers] had pushed that, there would have been some funding." In response to a state mandate for workforce development, administrators dismantled the Community Service Center and reassigned the Director to lead a new Student Career Center. Previously, the Community Service Center supported the university's community partnerships; after its closure, no campus stakeholder was responsible for liaising with community partners.

Despite lack of infrastructure, many students are civically engaged and the general education requirements include an "Engaged Citizenry" class. The Institutional Research Director observed "[T]his generation wants that component to their education. I think there's great opportunity to find that match with the community that has great need and students who are anxious to help." Student civic engagement reflects the region's close-knit, Appalachian identity, as students worked to alleviate poverty and health disparities. Additionally, many of the region's elected officials are Rural State alums, indicating that some graduates become civic leaders.

Rural State's medical science programs are involved in the local community, as was described by a Professor, "As part of the objective of courses you want to have a community presence and teach the students about various

community things." Because residents have challenges accessing health care, Rural State operates an affordable dental clinic offering five-dollar teeth cleanings, and partners with a hospital to operate a mobile health clinic to serve place-bound residents. Students also perform medical screenings, offer counseling services, and intern at hospitals. To respond to the region's addiction challenges, another Professor shared:

> There are several rehabilitation houses around here for drug rehabilitation where people might go and they have their children living with them and they want to provide something for their children. We've had students collecting them and we donate twice a year.

In sum, Rural State plays an important role in improving public health, although its civic engagement efforts have diminished due to resource constraints and lack of policy maker support.

Promoting Regional Cultural Life

Rural State also expends resources to reflect and celebrate the Appalachian region. The Sociology Department's works to disrupt Appalachian stereotypes reflected in the media and academic research. Additionally, general education requirements include instruction about Appalachian history, which affirms Rural State's student-centeredness mission as it represents culturally responsive curricula. Faculty research also documents and records the region's Appalachian identity and history. Rural State's performing arts center supports regional cultural life as the Development Foundation Director expressed, "A lot of the soft elements that provide community enrichment, can really flow from the university. The easiest thing to go to is arts." The performing arts center offers events, many of which honor the region's Appalachian identity. The university also provides cultural diversity to the region, as the University College Dean explained, "The area we're in, we don't have a lot of diversity, but with this being a college campus we bring in professors from around the world. We bring in international students." Rural State attracts students and faculty that enrich the region's cultural diversity.

Analysis of Rural State University's Regional Service

Our research questions asked how Rural State's regional service contributed to rural community development. We proposed that purposeful investment by RCUs in community capitals strengthens rural communities, and that when RCUs expend resources to develop rural community capitals, they serve as rural anchor institutions. Our propositions were affirmed by our findings which demonstrated that Rural

State cultivates community capitals and, consequently, acts as an anchor institution. In the following section, we analyze how Rural State expended institutional resources to grow, invest in, and leverage cultural, political, financial, social, built, natural, and human capitals. Although universities have capacity to improve natural capital through offering environmental science degrees, sustainable campus design, and mitigating environmental impacts, notably, we did not uncover robust efforts by Rural State to invest in natural capital. Table 6 lists Rural State's efforts to improve community capitals.

Human Capital

Rural State made significant contributions to the region's human capital through investing in education, workforce development, and public health (Flora et al., 2015). As the only postsecondary institution in a 50-mile radius, Rural State was a vital college access point for place-bound people. The region's educational disparities caused Rural State to emphasize remediation and affordable educational offerings. River State's emphasis on maintaining an affordable tuition may also support the development of financial capital among residents as they gain training needed to launch businesses. Additionally, the university served a community college function for those seeking vocational or associate's degrees. Given the region's cultural homogeneity, Rural State's international and URM students and staff provided diverse talent.

Rural State stakeholders understood the region's challenges and strengths and saw the university as revitalizing the economy through workforce development and being the region's largest employer. The university educated the region's civic and education leaders and aligned degree offerings with regional economic needs while promoting business development. Stakeholders also supported intergenerational upward mobility by promoting familial college-going which strengthened bonding social capital. The K-12 school system benefited as Rural State educates teachers and administrators and partners with schools on improvement projects. Rural State's connections with area schools may also strengthen social capital as multiple public institutions collaborate to improve educational outcomes for the region.

Rural State also worked to improve public health. The university engaged with myriad public health activities including providing affordable mobile health clinic, dental, and addiction services. Reflecting the anchor institution literature (Harris & Holley, 2016), Rural State benefited from healthcare organizations, which sustained and inspired new academic programs while training healthcare workers. Relationships between campus and health care leaders may also support the development of bridging social capital. The significant healthcare concerns common to rural areas (Eisenhauer & Meit, 2016), and Rural State's

Table 6

Rural State University's contributions to community capitals

Community Capitals	Rural State's contributions
Cultural	Performing arts center
	Faculty research documenting Appalachian culture
	Exposure to diverse students and staff
Political	Relationships with elected officials
	Attempts to lobby elected officials for resources to support anchor institution mission
Financial	Purchase goods and services
	Improve financial literacy of students and
	Direct economic impact
	Support to local businesses
Social	Students remain close to family
	Family-orientation of staff
	Ties to community organizations
Built	Footprint in downtown
	Construction of student housing
Human	Support area schools
	Support healthcare industry
	Workforce development
	Community college mission
	Health services
	Largest employer
Natural	None observed

region in particular, underscore the importance of these services. Rural State's efforts to increase the knowledge, skills, health, and productivity of the community make it an important human capital developer.

Cultural and Social Capital

Cultural capital is developed through museums, cultural customs, and events (Flora et al., 2015). The region's Appalachian identity is important. Rural State strengthened Appalachian cultural capital through faculty research examining the Appalachian experience. Additionally, the campus embodied Appalachian values through its emphasis on family and kinship, and reshaping student services and

curricula. Rural State's region is far from cities that provide cultural offerings. Rural State provides cultural offerings to residents through its performing arts center. Although Rural State is a Predominantly White Institution, it also attracts international and URM staff and students, which stakeholders perceived as contributing to regional cultural capital. These investments in cultural capital signify that Rural State plays an important role in preserving, celebrating, and communicating the region's culture and Appalachian identity.

Social capital is crucial to reversing community decline (Flora et al., 2015). Rural State recognized the centrality of these ties and worked to strengthen them. Understanding the region's Appalachian identity, Rural State involves families

in the education of students, reinforcing bonding capital. Moreover, Rural State allows community members to pursue postsecondary education without needing to leave the region or sever family ties. University stakeholders acknowledged existing regional social relations and cultural practices that support community development to improve bridging social capital and cultural capital. The students supported bridging social capital through their civic engagement efforts. Rural State also invested in bridging social capital by maintaining close ties with regional schools, hospitals, drug treatment facilities, and the chamber of commerce. These investments point to Rural State operating as a regional hub, maintaining existing social connections while developing new ties.

Political, Financial, and Built Capital

Rural State leveraged political capital through maintaining relationships with power brokers that advocate for the region, including the House Representative who lobbied for its creation. Political capital also involves influence over resource distribution (Flora et al., 2015), and the university has advocated, often unsuccessfully, for increased financial resources from the state legislature to support its regional service. While Rural State has attempted to strengthen political capital, it has limited capacity to do so, as was reflected in the challenges it faced in procuring funding for the two Appalachian-focused centers. Nevertheless, because Rural State has a permanent presence in the region, its advocacy for resources could pay dividends in the future, as the university created a justification for public resources to flow to the region and opportunities to connect with state-level government officials.

Rural State also contributes to the region's financial capital through students, faculty, and staff economic activity. The university increases student financial literacy through individualized counseling by financial aid staff. Finally, the university has direct regional economic impact that supported local businesses. These investments literally result in money in consumers' pockets that keep local businesses operating, thereby supporting the economic livelihoods of more than just Rural State's employees.

Rural State and its campus grounds represented an important source of infrastructure in the region. The campus and performing arts center are a focal point of downtown. The closure of the downtown street to create a bounded campus, while initially frustrating some residents and potentially harming social capital, also contributes to the feeling of Riverton being a college town with amenities that accompany such a designation, including residence halls and campus buildings. The creation of a bounded campus feeling also inspired new businesses catering to students and faculty which supported financial capital. By providing gathering places and health and cultural facilities, Rural State's efforts to improve built capital strengthens social capital.

In summation, Rural State's regional service helped to grow, invest in, and leverage rural community capitals. Additionally, Rural State's investments in community capitals often built upon one another, creating upward spiral in a region that would likely experience decline in the absence of such investments. Rural State's purposeful cultivation of community capitals provides evidence that it is an anchor institution. Rural State is also an inherently *rural and Appalachian* anchor institution, with services aligning with the region's unique culture, identity and history. By purposefully investing in community capitals and embodying their historic tripartite mission, RCUs like Rural State constitute critically important rural anchor institutions.

As is best practice for case studies, we entertained rival hypotheses (Coladarci, 2007; Yin, 2014). One rival hypothesis is that university stakeholders may see the university as dependent on the region and, as such, are focused on extracting community capitals to ensure its survival. As such, the region may anchor Rural State instead of Rural State anchoring the region. With this hypothesis, Rural State is focused on its own survival rather than that of its region. The tension the university experienced when closing the street supports this hypothesis, as does Miller and Kissinger's (2007) findings that rural community colleges do not always strengthen communities. It is also possible that an interdependent relationship exists between the region and Rural State in which community capitals are exchanged for mutual benefit. Orphan (2018) found that instead of embodying an "ivory tower" ideal, RCUs are often porous and supported by their regions even as they support their regions. It is therefore possible for Rural State to serve as an anchor even as the region anchors Rural State's existence. If this is true, a mutually dependent arrangement would further underscore Rural State's anchor institution role given that such institutions are inherently rooted to and connected with place (Harris & Holley, 2016).

Implications and Recommendations

Several implications for public policy and research arise from our study. For postsecondary policy, the findings underscore the place-bound nature of college-going for people in this rural and Appalachian region. Participants indicated that the lack of an accessible college would significantly reduce college access. In recent years, some states have considered closing or merging campuses to save money (Goldman et al., 2017). Our findings suggest that RCUs can serve as anchor institutions and sources of community capitals. Closing rural RCUs could mean diminished employment opportunities, businesses, in-

migration, cultural events, health facilities, and workforce development, all of which may exacerbate existing challenges. Thus, closing or merging rural RCUs could create new expenses for states and initiate "spiral down" due to periods in which community capitals decline (Emery & Flora, 2006, p. 22).

Our first recommendation is for policy makers to consider the role of geography in college opportunity and ensure that postsecondary options for rural residents exist within commuting distance. The Brookings Institution advocated for place-based policies to address rural inequities (Shambaugh & Nunn, 2018). Place-based policies include funding institutions serving geographically remote areas that, due to out-migration and economic hardship, have small enrollments. Policy makers also tend to overemphasize the economic contributions of postsecondary institutions, which may cause them to de-emphasize other vital contributions they make to community capitals (Orphan, 2018), as was evident when Rural State stakeholders decided to close the Community Service Center to refocus on career development. We are not arguing that economic development is unimportant – given the economic circumstances in many rural regions, clearly this work is critical. That said, communities are sustained and thrive when all forms of community capital are activated and create upward spiral—not just financial capital (Shambaugh & Nunn, 2018). Ultimately, the ability of rural RCUs to serve as anchor institutions will depend on policy maker willingness to support *and fund* these institutions.

Our second recommendation follows Johnson and Howley's (2015) advisement that federal policy be tailored to serve rural communities. A first way to differentiate policy would be for the federal government to create rural development grants for rural RCUs, an idea that AASCU (2018) has supported. Currently the USDA offers two rural development grants for postsecondary institutions: one for Tribal Colleges and Universities (TCUs), and one for rural cooperatives of businesses and nonprofits (Programs & Services, n.d.). RCUs are eligible for the rural cooperative grants; however, they require a 25% match from the institution, which is cost prohibitive for many rural RCUs (Laderman et al., 2019; Orphan, 2018). The USDA or Department of Education could establish grants for rural postsecondary institutions that require less institutional match. The USDA only requires a five percent match of land-grant institutions and TCUs; a similar match should be considered for RCUs (Office of Postsecondary Education, 2018). Such grants could provide multitudinous benefits, given our findings that RCUs contribute to various capitals and spiraling up (Emery & Flora, 2006). One such benefit relates to public health, which is a critical component of human capital (Flora et al., 2015). If government invests in rural anchor institutions like Rural State, it has the potential to invest in rural public health. Our final policy recommendation is to establish a federal designation for Rural Serving Institutions for which grants would be available to incentivize campuses to serve as rural anchor institutions and facilitate rural college access.

We also recommend that rural RCU leaders embrace their anchor institution mission and convey their multifaceted role and contributions to policy makers. Literature on anchor institutions notes that public institutions do not universally accept their anchor institution roles (Harkavy et al., 2009). The survival of rural RCUs may hinge upon their ability to lean into their missions of promoting postsecondary access, student-centeredness, and regional wellbeing (AASCU, 2002). Conveying their investments in rural communities may be difficult because, as this study demonstrates, some rural RCUs lack the political capital to advocate for resources to support their anchor institution role. Organizations like AASCU and nonprofits dedicated to rural community development could support rural RCUs by partnering for advocacy purposes and communicating the importance of these institutions to policy makers.

To date, research has largely focused on rural students. As such, we conclude by describing future areas of research examining the role postsecondary institutions play in promoting rural community development. Given the importance of geographical proximity to college access (Hillman, 2016), it behooves researchers to examine rural four-year institutions. Additionally, the connection between rural postsecondary and public health institutions warrants attention. Future research should document the combined contributions and collective impact created by rural institutions using the community capitals framework (Kania & Kramer, 2011). Additional research could also explore how state funding and policy affect rural postsecondary institutions. Rural State attempts to address regional poverty through promoting intergenerational upward mobility and economic growth. A few community colleges have gained national media attention for improving graduation rates through poverty alleviation (Smith, 2018); research examining how rural RCUs alleviate regional poverty is needed. Whether the cultural diversity attracted by rural RCUs is embraced or tokenized in rural regions should also be researched. We also encourage the use of different research methods, including surveys and quantitative measures, to measure the contributions of RCUs to rural communities. Such research should examine whether reciprocity exists between rural communities and postsecondary institutions. Orphan, Solodukhin, and Romero's (2018) research examining how RCUs assessed contributions to regional civic health and equity and their collective impact with other public institutions might be a starting point. We hope fellow scholars pursue these lines of research.

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