

POPULATION CHANGE AND PRINCIPAL LEADERSHIP BEHAVIORS IN U.S. RURAL
SCHOOLS

By

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ABSTRACT

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This dissertation study seeks to explore the intersection of rurality with educational leadership through the phenomena of population change. The study is comprised of three distinct papers, which explore this intersection in complementary ways: examining broad trends in rural public school student populations; exploring the experiences and perceptions of principals and school leaders in rural schools that have undergone changes in student population; and exploring how principals perceive the influence of state policies and climate, in addition to population change and their rural contexts, as on their leadership behaviors and functions of their schools. The collective findings from these three papers are suggestive of changing leadership behaviors and duties for school leaders as rural schools continue to decline in enrollment across much of the United States. These changes in leadership are further complicated by local contexts and state policies. Even with a majority of the public school districts in the United States located in these rural areas (NCES, n.d.), only a scant corpus of educational research focuses on these schools. Thus, the unique contexts and interests of these schools and communities may not be fully understood, which carries implications for the preparation of leaders for positions in rural schools and the design of educational policy.

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This dissertation is dedicated to Stephanie, Wren, and Ira.
I could not have done it without your love, laughter, and support.

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CHAPTER 1:

INTRODUCTION AND LITERATURE REVIEW

Introduction

About half of all U.S. public schools districts are located in rural locales (NCES, n.d.), yet the corpus of quality research focused on rural education is small (Arnold, Newman, Gaddy, & Dean, 2005; Howley & Howley, 2014). Indeed, this paucity of literature suggests large gaps in knowledge of how rurality intersects with educational leadership. Without this knowledge, the ways in which school leaders are trained and prepared for positions in these schools may not fit the reality of the demands and challenges of these roles. Similarly, the one-size-fits-all state educational policies (i.e. accountability) that dominate the current education climate may prove to be poor fits without the knowledge of how the contexts and needs of rural locales differ from those of urbanized areas.

The narrative of a significant portion, both in terms of number of schools and districts as well as geographic area served, of the nation's schools has largely gone unnoticed. While these schools lack the visibility, economic, and political power of their urban counterparts, the absence of attention from policymakers and education institutes to the educational challenges is just as critical as those in many of their urban counterparts (Longworth, 2009). Namely, many rural settings are undergoing rapid changes in population in terms of numbers and diversity. While these changes have been studied in urban contexts (Evans, 2007), there has been little attention in rural-focused literature. The extent and nature of this change as well as how it influences educational leadership will be explored in the three papers of this dissertation. To this end, the following, overarching questions are asked across all three papers:

- How have the demographics and student population of rural public schools changed over 19 years?
- How do principals in Michigan rural schools that are undergoing demographic and population change perceive that change as influencing their leadership and the functions of their schools and districts?
- How are principals in Michigan rural schools that are undergoing demographic and population change addressing this change?

The dissertation shares a common literature review that will be applicable to all three papers. I then shift into discussion of the way in which school leadership is conceptualized with specific attention to context.

Literature review. The dissertation's literature review presents three sections that apply to all three papers: definition of rural education; challenges of rural education; and leadership in rural education. The definition of rural education section discusses how *rural* is defined and conceptualized by the literature and the salient characteristics of such conceptualizations. It is from the limitations of this definition that emerges in Chapter 2 (Paper 1), which presents a refined definition strategy for quantitative research in rural education. The challenges of rural education section overlaps with the preceding section. Building off salient characteristics presented in the definition section, this section discusses school, policy, and education climate challenges pertinent to rural education. The final section, leadership in rural education, reviews established leadership models and connect them to rural settings as well as features of rural leadership from existing rural literature.

Paper 1 (Chapter 2). Paper 1 primarily addresses the first overarching question by proposing a longitudinal analysis of student demographic and school characteristic data. While overall rural population change is generally understood, how such change looks in schools is unclear. This study employs school, LEA, and state level analyses to explore how these changes have occurred over time (19 years). Using the existing definitions and conceptualizations of *rural* and *rural schools*, Paper 1 will establish a refined definition system that addresses limitations in this existing literature and with current quantitative conceptualizations of *rural*. This section will also outline the proposed analysis strategy and the specific variables of interest for the study.

Paper 2 (Chapter 3). Paper 2 primarily addresses the second and third overarching questions by examining how Michigan principals address population change through leadership behaviors and actions. This study extends the work of Paper 1, while not being dependent upon it. This paper uses the findings from Paper 1 to identify schools that have experienced substantial change primarily in terms of school enrollment, but also secondarily in terms of increases in free and reduced price lunch eligibility. Findings from analysis in Illinois suggest that these changes have occurred in rural schools and that use of these findings to identify schools for this study is appropriate (Kinkley & Yun, 2019). Interviews were conducted with 10 rural secondary principals in Michigan schools that have experienced at or above the state's rural school average for student enrollment decline.

Paper 3 (Chapter 4). Paper 3 primarily addresses the second and third overarching questions by examining how principals perceive state policies interact with population change and their leadership behaviors and actions as well as the functioning of their schools. This study broadens the work of Paper 2 to consider state level contexts and climate. Whereas Paper 2

focuses specifically on the ways in which leadership has perceived to have changed as a result of population change, this study focuses on the degrees to which state policies influence leadership amidst population change and the ways in which policies further complicate or simplify challenges and issues associated with change. This study follows the same methodological approach as Paper 2 and analyzes the same robust data collected for that study.

Each of the papers provides a discussion of the significance of the studies and the intended contributions, which will tie back to the literature presented in the review. A final summary of findings, discussion of the implications of this research, and dialogue regarding further research direction along this focus is provided in Chapter 5.

Review of Literature

Rural communities and schools are highly diverse; however, there are salient characteristics offered by the literature focused on rural schools and rural education issues that help to define their qualities. Understanding the contexts surrounding rural schools will help to illuminate how leadership is influenced and how leaders behave in these settings. This literature review highlights the ways in which rural public schools differ from schools in other locales and how these differences may inform rural school leadership. This review begins with a discussion of the ways in which rural is defined and general characteristics of rural schools. It then discusses the challenges and issues of rural public education in the United States, which is intrinsically linked to the preceding section. The review concludes with a discussion of educational leadership and educational leadership issues in rural education.

Definition of Rural Education

The first challenge of rural research is defining what it means to be *rural*. Defining *rural* is not a simple task, since there is little consensus in rural literature or literature focused in rural

contexts (Arnold, Newman, Gaddy, & Dean, 2005; Howley & Howley, 2014). Because of this inconsistency, it is also difficult to interpret and consider rural research without questioning the inclusion and exclusion of locales. When considering the utility of existing rural research, there is more value in the inclusion of rural research under the assumption that the methodology is sound and the representation of rural is inclusive of broad characteristics that are considered to generally classify rural places. The literature review will discuss how rural research defines and considers *rural*, which will be organized into salient characteristics of both rural places and schools.

Size and remoteness. By definition, rural schools are located in large geographic areas with a sparse population density that is removed from urban areas or cities (U.S. Census Bureau, 2015). As such, the expectation would be that districts and schools should be smaller than those located in these urban areas. Analysis by this author of the Common Core of Data Local Education Agency Universe Survey data collected by the National Center for Education Statistics (NCES) suggests this size difference: for the 2013-2014 school year, traditional public schools enrolling at least 1 student in urbanized areas reported an average enrollment of 623.4 student; while the same type of schools in NCES defined rural areas reported an average enrollment of 360.0 students. As distance increases, these rural school enrollment averages decrease: *fringe* schools (within 5 miles of an urbanized area) have an average of 539.8 students; *distant* schools (between 5 and 25 miles of an urbanized area) have an average of 293.3 students; and *remote* schools (beyond 25 miles of an urbanized area) have an average enrollment of 161.8 students. Additionally, the total number of these rural schools is not small: of the 89,674 schools that meet the criteria of this analysis, 25,207 schools (28.1%) are classified by NCES as rural. Of these 25,207 rural schools: 9,340 are located in the *rural-fringe*; 9,787 are located in the *rural-*

distant; and 6,080 are located in the *rural-remote*. The prevalence and size of these rural schools, especially those in distant and remote locales, are critical features that inform and impact other differences and issues that these schools, districts, and communities face. In fact, each of the following threads within this section will have some connection to either size or remoteness of these schools.

Curriculum and instruction. The curriculum and curricular offerings of rural schools beyond the fringe (arguably, fringe schools have both the size and proximity to urbanized areas to suggest they are more generally akin to these urbanized areas than other schools in the rural classification system) are likely to be considerably different than those of schools in other locales. The source of these differences is twofold: school size and instructional staff. First, while sparse, research examining school size to curriculum comprehensiveness suggests that a relationship exists between the two (Barker, 1985; Monk & Haller, 1993; Howley, 2004). Specifically, small schools (there is an inconsistent definition of ‘small’ among these studies, ranging from 25 ~ 100 students in a grade level) tend to offer a narrow curriculum (meeting basic or minimum state requirements) with few specialized classes (Monk & Haller, 1993). Similarly, these schools have comparatively few advanced and remedial courses (Barker, 1985; Howley, 2004), grouping all students, regardless of ability, in the same classes.

Given what the research suggests about size and curriculum comprehensiveness, it is highly likely that the instructional staff both influences and is influenced by these factors. It would seem likely to expect small schools to employ a proportionately small instructional staff. Thus, the quality of the individual teachers may be critical – as they may be the only teacher in a given content area. For rural schools, attracting highly skilled and qualified teachers is an issue shared with schools in high-poverty urban settings (Reininger, 2012). While both are likely tied

to issues of teacher preference (Boyd, Lankford, Loeb, & Wyckoff, 2005; Reininger, 2012), they may differ in how quality applies to rural settings. Given the small class sizes and narrow curriculum, the quality of rural school teachers may find less value in specialization within a content area and more value in being an everything specialist. In other words, a quality rural teacher may need the skills to not only teach a content area but to also be able to teach it to all of the students in the school (Monk, 2007).

For principals, this presents a challenge of trying to meet the needs of a wide variety of students and interests without having much to work with. With few teachers and minimum requirements to meet, scheduling slots would appear highly competitive and inefficient for anything other than a basic class-level course. In these rural, small schools, principals are likely to shoulder the burden and responsibility (at least initially) of these decisions simply due to a lack of other administrators and curriculum personnel (i.e. coordinators) that large schools are likely to enjoy. Under that assumption, it could be suggested that the ability of the school to expand its curriculum (traditionally or non-traditionally) is linked to the creativity and capacity of the principal. Given the need for teachers who can instruct both a narrow curriculum and a wide range of student abilities (Monk & Haller, 1993; Monk, 2007), principals are also likely constrained in personnel decisions (retention and hiring). This issue may also be compounded by the fact that teacher candidates with specialized training or are from prestigious universities may simply avoid these rural locales (Gibbs, 2000; Monk, 2007) and the lack of resources and incentives necessary to attract these candidates (Monk, 2007).

Fiscal efficiency. Rural schools beyond the fringe are, on the whole, both fiscally inefficient and highly susceptible to changes in revenue (especially shortfalls). The existing financial climate in most states may suggest that this is true for many schools, regardless of

locale: but the remoteness and small size of these rural schools suggest they face different financial pressures and from more sources. Owing to a number of factors including urbanization of industry (Tieken, 2014), outmigration (Kuznets, 1955), and low population density (U.S. Census Bureau, 2015), rural districts are often located in property-poor areas (Monk, 2007). In states that do rely on property wealth to fund public education, rural districts are likely to generate proportionately weak revenues. In states that either subsidize revenue shortfalls (using a foundation level or some other criteria) or do not rely on property wealth for public education funding, operational costs of these districts may still place them in precarious fiscal positions (something that is likely, regardless of state funding structure). These precarious positions exist because these small, rural districts and schools suffer from poor economies of scale (Duncombe & Yinger, 2001; Zimmer, DeBoer, & Hirth, 2009). In other words, as the size of the school decreases, the cost to operate and maintain the school increases per pupil. Similarly, regional differences in costs and comparative operational inefficiencies due to the remoteness of these schools (i.e. transportation, delivery, etc) may also impact these poor economies of scale (Howley, Johnson, & Petrie, 2011). This suggests that operational costs are likely to be high, with a comparatively smaller proportion of funds available for instruction. Thus, these rural schools are more inefficient at providing curriculum and instruction than schools in other locales (and even in the rural fringe). Similarly, any changes in revenues and funds may reduce allocations from instruction disproportionately, since non-instructional operations are necessary to get students to school and keep building doors open.

For principals, this fiscal inefficiency compounds the curriculum and instruction constraints discussed above. With a tight budget, hiring decisions may be limited to teachers with little experience and credentials as well as by whether a candidate can instruct multiple content

areas (for schools with large curricular needs and a small instructional staff). During times of statewide budget crisis or population departure from the district (reducing revenues), the capability and capacity of the principal and district superintendent (and other administrators) to allocate resources and make critical personnel decisions may deeply impact the survivability of the school or district. In these small schools and districts, the pressure on principals and superintendents to enable or avoid district consolidation (a definitive solution to a district failing to thrive) may be significant. Research suggests pressure to consolidate typically occurs in times of economic instability/downturn or as a result of a political agenda (Bard, Gardener, & Wieland, 2006; DeYoung & Howley, 1990; Howley, Johnson, & Petrie, 2011). This is problematic as little empirical evidence exists to support district consolidation as a means of improving efficiency apart from the smallest of districts (Howley, Johnson, & Petrie, 2011). Pressure to avoid consolidation is placed upon these administrators from the local community. Indeed, consolidation is often seen by the community as a threat to its very survival: in these small communities, school districts are often large (if not the largest) employers and intrinsically tied to the identities of these communities (Tieken, 2014). Thus, it would seem rural administrators face tremendous burdens to ensure the doors of their schools and districts remain open in their communities.

Teacher preference and quality. Research and literature focused on principal supply in rural markets is limited at best and provides a gap in knowledge that future research can help to better illuminate: however, teacher preference and supply has been studied within the last decade and may provide a means to suggest what should be expected for principal preference and supply. Research conducted by Boyd, Lankford, Loeb, and Wyckoff (2005) examined the preference of teachers in New York. Specifically, they explored how geography influenced

teachers in the labor market. What they found was that teachers, especially new teachers, preferred to teach in close proximity to where they grew up or to teach in locales contextually similar to where they grew up. Additionally, any shortages of college-bound students and students seeking to become teachers are reflected in teacher shortages of those areas (Boyd, Lankford, Loeb, & Wyckoff, 2005). As such, areas with shortages would have to find ways to attract teachers against their natural preference. The implications of these findings are important for rural schools because it suggests that teachers who seek out positions in rural schools are likely to be from the area or are from other rural locales. Indeed, Reininger (2012) examined a similar thread using national data and found that not only do teachers tend to stay within 20 miles of their respective hometowns, but they do so at a much greater proportion than any other type of college graduate. An implication of Reininger's (2012) findings is that the quality of a given area's teacher labor force is likely tied to the quality of the education available to individuals in that area. Thus, the findings suggest that a perpetual cycle exists for the quality of education tied to geographical areas and locales.

Both the research conducted by Boyd, Lankford, Loeb, and Wyckoff (2005); and Reininger (2012) hold the concept of teacher quality as a constant across all geographic areas. For rural schools, this may be a problematic assumption. Specifically, the nature and context of rural schools may contrast sufficiently from urbanized areas that the teachers best suited for those positions are ones trained within a different definition of quality. In other words, the issue of teacher supply may be as much an issue of the quality of the demand as it is an issue of the quality of the supply. For example, the small enrollment sizes of rural schools typically correlate to a small, broadly focused curriculum (Barker, 1985; Monk & Haller, 1993). Instead of a department of teachers for a given content area, these small schools may only be able to employ

a single teacher as the expert of the same content area. Thus, the quality of the content-specific teacher is redefined: whereas a large school may seek teachers who are trained as specialists in a subsection of a content area or a specific ability range, these small, rural schools likely seek teachers who are not only broadly trained in a content area but can also instruct the entire ability range within the school or even K-12 district (Monk & Haller, 1993; Monk, 2007). Similarly, tying the prestige of the university responsible for teacher preparation to the definition of teacher quality may not be reflective of the quality demand in rural areas. Gibbs (2000) suggests that rural educators are half as likely to have graduated from a top-ranked program as their peers in urban and suburban locales. While Gibbs's treatment of his statistical finding is critical (the focus of the paper is translating comparable National Assessment for Educational Progress [NAEP] scores for rural students into increased college attendance and graduation), it may in fact be indicative of a quality definition mismatch for teachers. Large, research institutions are often located in large cities and other urban areas. Anecdotally, a greater level of prestige is attached to these university programs than those of smaller institutions that may be located in small towns and in closer proximity to rural locales. It is possible that these smaller, less prestigious institutions are preparing teacher candidates as the broadly trained educator that reflects the needs of the area rather than the more specialist oriented preparation at universities far removed from rural locales. Thus, the definition of quality may be confounded by these smaller universities appropriately preparing teachers for their preferred labor market. In relation to the discussion of this section, teachers expressing preference may be responding to matches in training (supply and demand) as they are to personal comfort/familiarity and social ties. The implied linkage to principal supply relies largely on an assumption that principals express the same preference as teachers. Currently, this assumption has little research to support the

claim: however, there is at least the potential for principals to express a similar preference to that of teachers. Specifically, principals in rural public schools often have teaching experience prior to their administrative positions. Indeed, NCES reported findings from the 2011-2012 Schools and Staffing Survey [SASS] show that the average rural public school principal reported having 12.7 years of teaching experience (Snyder, de Brey, & Dillow, 2016). Given that the average principal has reported teaching for more than a decade, it is possible to imply that principals may potentially express the same preference for schools, context, and geographic locale as they did when they were teachers: however, this cannot be reliably suggested without empirical evidence to support the claim. Thus, this area may provide fertile grounds for future research.

Rural locale and teacher supply. To this point, discussion of principal supply has focused on teacher supply and the potential linkage between the two. The general characteristics of rural locales and principals should also provide some illumination as to both principal supply and labor market. First, the number of rural public schools and districts comprise a large portion (of the four locale classifications) of the total public schools and districts in the United States. During the 2012-2013 academic schools year, 27,457 of the 98,454 total of U.S. public schools were located in rural locales (Snyder, de Brey, & Dillow, 2016). In the year prior, NCES findings from the Schools and Staffing Survey (SASS) included in the same report indicate that 29,170 principals held positions within these schools. Of these principals, only 78.3% reported (in the SASS survey and follow-up survey) to have remained in the same school from the 2011-2012 to 2012-2013 academic schools years. Additionally, only approximately 5.9% of the principals who left their schools reported taking another principal position (Snyder, de Brey, and Dillow, 2016). This suggests that approximately 5,958 principal positions opened up between academic school years in rural locales and a likely 4,000~4,500 positions (a very rough, non-

significant estimation) not being filled by principals changing jobs within the rural locale. Thus, the demand for principals would appear to be relatively robust given an estimated turnover of around 21.7% from the SASS survey data. What is unclear with this mobility and turnover is the motivation to do so. For rural principals, little research explores this issue to a depth necessary to navigate the large variations in the rural context to provide meaningful findings. While undoubtedly some of the departing principals are due to retirement, it is likely that other reasons for leaving exist and, therefore, provides an opportunity for further exploration.

Finally, existing financial compensation for rural school principals may not be enough to adequately incentivize principal candidates into seeking positions in rural areas. It should be noted that little research exists that examines this topic specifically within the rural locale and what has been explored is difficult to tease out from other reasons for rural aversion (Monk, 2007). However, rural principals are likely compensated less when compared to other locales and especially given the nature of their duties. According to NCES reports from the 2011-2012 SASS, rural principals reported an average salary of \$82,830 (Snyder, de Brey, & Dillow, 2016). During the same year, principals in urban settings reported an average salary of \$98,900 and principals in suburban settings reported an average salary of \$104,910. While these differences have not been tested for statistical significance, it is likely that some differences do exist simply due to cost of living differences. It is also possible that the low property wealth that comprise many rural districts also leads to lower salaries as a result of low revenues, high operational costs (relative to larger schools), and few state subsidies to offset these differences (Monk, 2007). Given the size of many rural schools, it is likely that the principal is the only certified administrator in the building and quite possibly even the district other than the superintendent. Combined with what appears to be a generally lower salary, it would seem plausible to suggest

that principal candidates that lack some connection or ties to rural would not be drawn to these schools – especially when compared to positions that likely pay more and are not the sole source of leadership for a school more commonly found in suburban and urban settings. Similarly, the remote and distant nature of rural schools would likely necessitate living near or within rural communities at some distance from urban centers. These suggestions are mostly speculative based on related literature threads, since little empirical evidence exists to support them.

Challenges of Rural Education

Policymaking. State education policies are intended to create some form of change or improvement in schools within that state. These policies range from mundane to wide-sweeping reforms. For many of these policies, rural schools do not figure prominently in the design and implementation mechanisms of these policies. This lack of consideration creates an interaction between state policy and rural schools that may result in poor policy fit or undesired effects of faithful implementation. Given the overarching focus of this dissertation, an understanding of how rural schools fit within the broader education policy context is critical. The ways in which rural interests are represented in the policymaking process informs how potential changes are acknowledged and considered. As this section suggests, the needs of rural schools appear to be assumed rather than truly understood because of the nature of the policymaking process. As the discussion on the significance of Chapters 2, 3, and 4 will suggest, there is a need to understand what is changing in these rural schools and why these changes are occurring to inform education policy. Otherwise, the needs of these communities and students may be largely overlooked by a process that is largely structured to do so. This section will discuss: interactions between state policy design and rural contexts; policy implementation research and rural contexts; how rural

schools and principals navigate these state policies; and the advantages of policy implementation that these contexts provide.

The “problem” of being rural in policymaking. Since the beginning of public education in the United States, tensions have existed between local and state levels over the governance of these districts and schools. Over nearly the same period of time, but especially during the 1960s to the present, this governance has gradually (and sometimes rapidly) shifted away from the local level towards the state level. The result of which is an existing climate of both a strong handed state government (through sweeping accountability policies and policy control) and federal influence (through programs designed to incentivize the adoption of federally supported policies). For rural districts and communities, this may be highly problematic. In fact, rural communities may be faced with a crisis of representation under the current climate. Specifically, rural communities, by their very definition, are sparsely populated and are spread out over large geographical spaces. Overall rural populations are relatively small: 59.5 million people live in rural locales while more than 249.2 million people live in urban locales (U.S. Census Bureau, 2015). This not only limits the number of elected rural representatives at the state and federal level, but also means that a single representative likely represents a large, geographical area.

Rural issues may also lack the perception of severity necessary to attract attention and priority on the policy setting agenda (Portz, 1996). Limited representation within an elected body (a result of being in the minority in many states) is one direct factor, but other factors also contribute to this lack of visibility. Rural issues may not fit within a common perception of severe or in need of priority status. Policymakers set an agenda that these issues and interests are competing for: however, it is also highly likely that past agendas influence the formation of the

current one. For example, rural student achievement scores on National Assessment for Education Progress tests have been relatively comparable to students in suburban and urban areas (Gibbs, 2000). Since student achievement is currently a major focal point for education policy, other rural education issues may be ignored or dismissed as not being a priority simply because something appears to be working in these schools. Similarly, rural issues may not gain media coverage beyond local mediums. Mass media outlets would seem more likely to focus on issues and coverage that would appeal to a large audience/market than issues affecting a small community – especially if the problems are not perceived to relate to the broader population. Finally, education research has largely not focused on rural settings. Prestigious research universities and institutions are largely located in urban areas. The remoteness of rural communities and their distance from these institutions likely make them [communities] inconvenient and undesirable for conducting research that is not explicitly tied to locale or place. Similarly, researchers may not be aware of the issues facing these rural communities for much of the same reason as policymakers and media outlets: without an explicit interest in rural, attention is largely focused on urban locales.

Policy implementation research. Evaluation of policy implementation and effectiveness is critical towards informing future policy design. Surprisingly, the effectiveness of implemented education policies has only been a focus of research for a relatively short period of time. Indeed, research focused on education policy implementation largely began during the 1960s as a result of an increased state and federal involvement in public education through landmark events, court rulings, and policy initiatives (Odden, 1991). Since then, the way research has focused on policy implementation have evolved over time. Honig (2006) categorized these changes into three chronological waves and a current state of policy research. Within the first three waves, research

has progressed from examining simply whether or not a policy was implemented effectively to understanding how the context of the policy design, what Honig (2006) calls the goals, targets, and tools, impacts how these policies are implemented. While policy effectiveness has factored into each of these waves, only recently (1990s through 2000s) has the interaction between locale context (people and places) and policy context (goals, target, and tools) been considered as an important focal point of this implementation research. Because of this, it would seem reasonable to expect that policy implementation in rural schools has largely not been considered as a focal point in implementation research, especially without these locales being an explicit feature of policy design. The question of how rural contexts interact with state and federal policies is one that has largely not been thoroughly explored beyond the fringes of special rural interest groups and researchers. Thus, it is at least plausible that critical observations of policy implementation are missing from such research, suggesting that future policy design may not be appropriately informed and a cycle of failing to acknowledge these contexts is perpetuated.

Navigating state policies in rural schools. Statewide education policy implementation presents challenges for rural principals in ways that many policy designs fail to consider. The above discussion highlights this failure within the design process and implementation research processes. This section will discuss ways in which one-size-fits-all policies create challenges for rural districts (particularly principals) and communities. Professional development and training are typically key features of a policy design, since they can help assure fidelity of implementation. For rural schools, traditional (face-to-face) training opportunities may be limited or largely inaccessible due to distance between site and school. In a study of principal perceptions of a teacher evaluation policy implementation in Georgia, Eady and Zepeda (2007) found that principals largely lacked local options for professional development and training

related to the new policy. Instead, these principals and teachers were burdened with driving long distances for these opportunities. Similarly, these rural schools may lack the necessary resources to allocate for professional development and training costs at considerable distances from the school or district (Renihan & Noonan, 2012). Given the relatively small size of these schools, it also seems difficult to expect these districts to maintain professional development staff or instructional coaches. Instead, it is likely the principal who assumes the burden and the creativity necessary to provide professional development and training in these schools.

Overly detailed or specific policy designs may also be problematic in rural schools. The use of student test scores as an indicator of education quality (teacher and school) is one such example. Within a large school, enough students exist within a grade level that a normal distribution of scores can be expected. Thus, a reliable measure can be confidently determined. For rural schools, especially those far removed from urban areas, this may not be the case. With few students, and even fewer in a single grade level, the likely variation in student scores may not provide a normal distribution or a reliable finding. Similarly, assigning a quality standard to these scores may make both interpretation and prediction difficult. Eady and Zepeda (2007) suggest just as much: when faced with a single measure of assessment, principals are likely to select an assessment that is both easy and best mitigates the unpredictability of a small sample size – suggesting a path that fails to demonstrate accountability or quality of the school. In this sense, principals navigate and implement accountability policies without fully realizing the intent of their design not because they [principals] are ineffective but because the policy does not fit appropriately.

Finally, the values defined by the policy may be in direct conflict with the values of the community. For principals, this presents a challenge to not only perform their expected duties but

to also maintain the trust and connection with the community. State accountability policies, again, highlight this point. For many states, accountability quality measurement involves testing students on a set of standards – typically mathematics and reading. The choice of these standards for testing assumes that all schools instruct these content areas. This assumption most likely holds, since most (if not all) states include mathematics and reading as basic state requirements for graduation. What is problematic for rural schools and principals is the significance and weight attached to these tests – namely the incentives or consequences for failing to meet the established criteria. With the risk to job security and the possibility of school sanctions, it would seem reasonable to expect districts and schools to allocate additional resources to reduce the risk of low test scores and failure. Given the small size of these schools and their proportionally small and somewhat basic curricular offerings (Barker, 1985; Monk & Haller, 1993), the reallocation of resources to address tested content areas and standards may come at the cost of reducing or eliminating other content areas or programs. While speculative, this presents a space for direct conflict between state values and community values. Programs tied to the identity and values of the community (i.e. agriculture) may be replaced by those needed to address state policies designed with large, urban and suburban schools in mind. Principals are then placed in the position of trying to maintain the community valued curriculum while trying to simultaneously address state expectations in just a few content areas.

Advantages of being small. While the discussion of policy design and implementation to this point has highlighted tensions and burdens for rural principals to navigate, there are common features of rural communities and districts that do provide advantages for policy implementation. On the whole, rural schools are generally smaller than schools found in other locale types. This is particularly true the farther a school is located away from an urban area: analysis completed by

this author using the Common Core of Data estimates the average school enrollment size for a rural-remote (a school located beyond 25 miles of an urban area) to be 168.1 students during the 2013-2014 school year (NCES 2015). As such, it should be expected that these schools contain a proportionally small instructional staff. While this may in some ways be disadvantageous from a distribution of leadership perspective, a small instructional staff may provide the opportunity for a strong social network (reaching and encompassing all individuals) within the building (Renihan & Noonan, 2012). Similar to student involvement, a small instructional staff means fewer ways to avoid involvement and participation (Howley, 2000). From a policy implementation perspective, this is critical. As Honig's (2006) waves demonstrate, policy implementation and effectiveness is poorly understood simply from a top-down perspective. In fact, policy sense-making and assimilation occurs at the individual, or teacher, level (Spillane, Reiser, & Reimer, 2002): however, this also suggests that interpretation also occurs at the individual level, creating a space in which multiple definitions of the policy may exist. Thus, interactions between individuals and networks allows for collective sensemaking, which are critical for ensuring policy implementation fidelity (Coburn, 2001; Coburn, Mata, & Choi, 2013). Principals in rural schools may be in an opportune setting to create spaces for sensemaking and provide sustained and meaningful interactions with staff to ensure policy implementation fidelity and prevent resisting staff from avoiding implementation. There is one notable challenge for collective sensemaking in small schools: a small instructional staff may limit the possibility of interactions among like content area or grade level instructors.

The advantages of a strong social network can also extend to the district board and community. While rural principals face potential challenges of navigating and bridging tensions between district/community and state, they may also have more individual autonomy and

capacity to do so in these rural settings. The small nature of many rural schools implies only a few principals (if not a single principal) in a district. Compared to suburban and urban districts with dozens of principals and administrators, it is clearly probable that principals in rural school enjoy much greater access to both the district board and community leaders. While a small cadre of administrators limits collective sensemaking among themselves, it may provide a chance for deeper interactions with the community and an opportunity to develop cohesion and engagement among community members (Putnam, 1993). Of course, such cohesion may also create the opposite effect: strong community resistance to policies being implemented, especially those perceived to harm the community or the district (i.e. school consolidation). Mediating this interaction between principal and district board/community is trust. With few principals in a district, it would seem at least plausible that trust is essential for navigating state policies. Specifically, a principal (especially in the absence of other administrator) may act as the link between instruction (teachers) and community. Without an established trust, this connection may be tenuous or not exist: resulting in failure to implement policy, resistance and hostility from the community, or even reduced capacity or termination of the principal.

Population change. As with any other area in the United States, rural locales have experienced change. These changes influence and impact the way communities and districts act in relation to the education of their children. For rural public schools, more than any other, the size and relatively homogenous (historically speaking) nature of many of these schools make them particular susceptible to the effects of any changes in characteristics. Although rural areas are generally difficult to uniformly characterize, common threads exist between many of these areas: their historical relationship with industrialization in the United States and the rapid changes within their schools over the last decade. Discussion on changes in rural schools will

focus on three threads: the historical and long term changes in rural schools and populations; recent trends and changes in rural schools and populations; and the impact of these changes, especially more recent trends, on school leadership.

Historical and long term changes in rural schools. The historical changes in rural schools and locales are intrinsically tied to the long term trend of urbanization and industrialization in the United States (Tieken, 2014). Industrialization and growth of U.S. cities have attracted much of the skilled and professional labor markets to these areas. Similarly, mechanization and the continually improving efficiency of the agriculture sector have gradually reduced the need for associated labor in rural areas (Tieken, 2014). Thus, rural areas have seen a long term population change: the loss of skilled and professional labor in response to urbanized labor markets; and the limited labor choices for those who wish to remain in these communities. While the rural population has had modest growth, it is being far outpaced by its urban counterpart. Additionally, a class divide exists between those who stay and those who leave: individuals and families with high levels of educational attainment and socio-economic status (college educated, professionals, etc) leave to follow these labor markets; while working class and less skilled individuals tend to stay (Carr & Kefalas, 2009). Thus, an underlying tension exists within these communities between community ties and job aspirations (Howley & Hambrick, 2014).

Migration as framework and phenomenon. As the discussion above suggests, population migration in and out of rural places is nothing new. While much of the rural education literature considers population outmigration a given assumption, longitudinal examination of population change as an ongoing phenomenon remains sparse. This dissertation seeks to contribute to public education research by exploring this very topic. As such, a

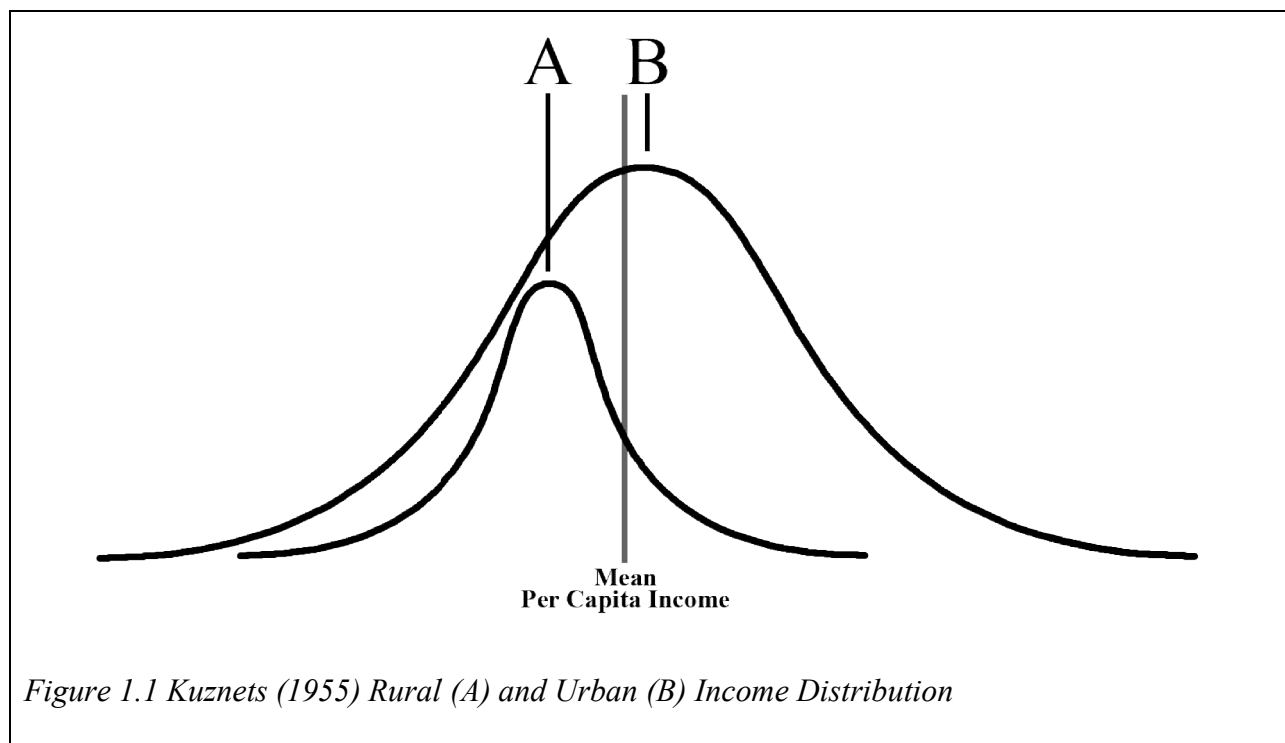
conceptualization of population change (via migration) is needed to frame its research component. All three papers will draw on the concepts discussed in this section to frame and guide their purpose and methodological approach.

Outmigration. In the literature reviewed above, the most frequent discussion related to population change is the concept of outmigration. This concept simply refers to the departure of individuals from an originating locale to a destination locale. Carr & Kefalas (2009) explore this form of change, what they call *brain drain*, in terms of how rural public education is preparing students for a labor market that primarily does not exist in rural locales. In other words, they argue that the best and brightest students attend universities for post-secondary education, which, in turn, prepares them for professional careers that are often situated in urban areas.

Outmigration is a significant piece of the challenges facing rural public schools, but it only explains part of the population change occurring in these places. Instead, this dissertation proposes a frame that considers both outmigration and in-migration, one that will additionally aid in characterizing those individuals participating in the migration process.

Economic theory. An early conceptualization of the mechanisms for population change that considers both rural and urban markets is proposed by Kuznets (1955). The dilemma that framed his piece was the inability to explain why income inequality appeared to be narrowing at the national level during the 1950s; however, the historical data available at the time suggested that income inequality persisted in certain markets (namely agriculturally-based rural markets). Kuznets (1955) argues that rural markets, relying heavily on agriculture, are, at best, stable and have a relatively low labor cap. As Tieken (2014) also observed, improved mechanization and efficiency in agriculture over time has reduced the need for labor. Urban markets, on the other hand, have much larger labor caps due to the rapid expansion of technology and

industrialization (Kuznets, 1955). As such, labor has rapidly expanded in these urban settings during periods of economic boom, while rural markets remain unchanged or declined. In terms of per capita income, Kuznets (1955) suggests that these differences in markets are indicative of a rural distribution that is narrower in range and a much larger urban distribution that is both wider in range and has a greater per capita mean. This also suggests that rural markets may be more resilient to economic downturns, especially given necessity of agricultural goods and services, when compared to the less stable urban markets. This conceptualization is illustrated by Figure 1.



Distribution A in Figure 1 represents the per capita income distribution of rural residents and labor in the United States. Distribution B represents the same, but for urban residents and labor. The overall mean sits somewhere between the distribution mean for A and B; however, this

mean should be closer to B because of the larger population size of the distribution (Figure 1 provides an inaccurate visualization of this population difference, since distribution B is likely much larger). For Kuznets's (1955) purpose, the characteristics of these distributions help to evidence why income inequality could narrow amidst a stable or declining rural and agricultural industries: either the narrowing of the urban (B) distribution's left tail or the overall increase in per capita income may shift the entire urban (B) distribution to the right (albeit, with the tails expanding outward as growth occurs). In both instances, the nationwide gap would appear to narrow, even though the disparity between rural (A) and urban (B) distributions would, in fact, increase. Indeed, more recent research found that 244 of the poorest 250 counties in the United States are rural counties (Mathis, 2003). Kuznets (1955) speculates that this phenomenon would explain the perceived narrowing of the income inequality gap during a period of rapid urbanization and economic boom while accounting for historical economic trends that otherwise, in his argument, could not be explained satisfactorily; however the widening of the tails would suggest that the observed narrowing of the income inequality gap would begin to reverse as growth continues.

Kuznets's (1955) conceptualization of the two distributions and income inequality serve to frame this research in two ways: the shifts in distributions in response to economic and labor change provide a foundational theory behind why migration occurs in and out of rural spaces; and the nature of these distributions characterize the participants in these migration phenomena. In terms of outmigration, we can make several claims as to why this is occurring when examining Figure 1. First, the size of the distribution A, in addition to the definition of rural places as sparsely populated, suggests a much smaller overall market, limiting the number of available jobs available for highly skilled labor. In contrast, distribution B is considerably larger,

owing to the much larger proportion of the U.S. population in these areas. Similarly, the mean per capita income is higher in distribution B. As such, highly skilled, professional labor should be more incentivized to exist in distribution B. As already discussed, the rural literature on rural outmigration, as well as similarly focused economic literature (Weber, 2007), suggests that this is the case.

There is also evidence to suggest that rural populations are also in decline due to low birth rates and an aging of the population (Johnson, 2006). In this case, there is still demand for labor amidst the decline as the market is relatively stable (or in slight decline). This necessitates the in-migration of labor to fill demand in the rural markets. Examination of Figure 1 also suggests that the much wider income distribution in urban markets (distribution B) is much more unequal than the comparatively narrower rural distribution (distribution A). As the disparity between high-skill income levels incentivizes workers to move to urban markets, a similar disparity between low-skill income levels may incentivize workers to move to rural markets. Over the last fifty years, this has been manifested in the increase in immigrant populations in rural communities (Parrado & Kandel, 2010). The migration of immigrant populations to rural communities appears to fill this labor demand. Parrado and Kandel (2010) found that, while Hispanic populations increased dramatically in southeast and southwest rural areas, their effect on income inequality was nonexistent. Instead, they suggest that markets that experience growth experience widening income inequality. This supports the second possibility in distribution changes that Kuznets (1955) presented: the stagnant or slightly declining rural distribution remains relatively narrow and stable, whereas the more dynamic urban distribution experiences a widening of the tails as the distribution grows. To this end, this dissertation frames the ongoing population change in rural schools in terms of the migration theory presented above.

Specifically, this frame will be used to characterize and inform the change in student population within rural schools.

Leadership in Rural Education

The leadership role of rural principals is largely assumed, rather than understood. This is a wide-sweeping claim, yet one that is supported by the lack of research of educational leadership, specifically leadership models and organizational theory, in rural settings. While it is likely that generally accepted roles of principals will have overlap with those of the rural principal, it is also at least plausible that some differences exist. To consider this possibility, existing models and concepts that define a principal's leadership role must be examined in these settings. This section will discuss and evaluate how conceptualizations and models of instructional leadership, transformational leadership, and trust may address the roles of rural school principals.

Instructional Leadership. As the name would imply, instructional leadership conceptualizes and focuses the role of the principal around student achievement and instruction (Hallinger, 2005). While there is little or no direct effect between leadership and student learning (Hallinger & Heck, 1996), the model suggests that the principal, acting as instructional leader, will have an indirect, or mediated, effect on student achievement. Hallinger and Murphy (1985) conceptualized three dimensions of instructional leadership: define[s] the mission; manage[s] instructional program; and promote[s] school climate. Over time, trends in education policy have changed some of these dimensions (direct control over the curriculum is less likely with the rise of state standards and accountability); however, the model has remained largely intact (Hallinger, 2005). The instructional leadership model has not existed without criticism. Indeed, much of this criticism stems from the argument that principals are rarely the sole source of leadership within a

building (Hallinger, 2005; Marks & Printy, 2003). Similarly, research on instructional leadership has primarily been set in low socioeconomic urban schools, reducing the ability to generalize the significance of the effects of the model to other locales and contexts (Leitner, 1994): however, rural schools may be ideal locations to explore the instructional leadership role of principals. First, rural schools are small. With few students, a proportionately small administration and instructional staff should be expected. While this claim will be supported later in this paper, it is suggestive of the burdens of leadership may be shouldered by one or few leaders in a school – countering the criticism of principal instructional leadership as being untenable by one leader. Second, state accountability policies and standardized testing remain a significant part of the political climate surrounding education. The persisting focus on quantified student outcomes (test performance, academic achievement, and behavior outcomes) also suggests that principal actions and roles that affect these outcomes should still be relevant. Given both of these reasons and the lack of research examining principal roles in rural settings, there appears to be both a fertile ground and large knowledge gap for future research to illuminate the instructional leadership role of principals in rural schools.

Transformational Leadership. Like instructional leadership, the conceptual model of transformational leadership also lacks a research foundation or support in rural settings. For much of the same reasons outlined above, this conceptualization of the leadership role of principals is likely to be important in these rural locales. Before continuing the discussion of why, it is important to understand what the model is and how it is distinguished from instructional leadership. First, transformational leadership conceptualizes the role of the principal as building the capacity of the instructional staff. In this way, teacher capacity is considered the primary outcome of leadership and student achievement is simply an outcome of this capacity

development (Hallinger, 2005). Specifically, the model is conceptualized as having the following dimensions: hold[s] high expectations; provide[s] intellectual stimulation; model[s] organizational values; provide[s] individual support; build[s] collaborative culture; strengthen[s] school culture; develop[s] a shared vision; create[s] structure for participation in decisions and leadership; and build[s] consensus about school goals (Leithwood, Jantzi, & Steinbach, 1999; Marks & Printy, 2003). The development of this model relatively paralleled that of instructional leadership: however, its use in leadership research has been comparatively less because of its lack of direct focus on student achievement and the difficulty of measuring somewhat vague constructs like capacity (Robinson, Lloyd, & Rowe, 2008). This has changed recently, though, as a growing body of research has suggested the importance of collective sensemaking and social interactions in education policy implementation and teacher development (Coburn, Mata, & Choi, 2013; Louis, 2006; Spillane, Reiser, & Reimer, 2002). In fact, the two conceptualizations are not mutually exclusive. Marks and Printy (2003) suggest an integrated model of leadership using elements of both instructional and transformational models to conceptualize a system of shared instructional leadership through building capacity.

Returning to the discussion of relevance in rural settings, the principal's role as transformational leader may be critical in a small, rural school. General characteristics of teacher quality and school size (discussed in more depth later in this paper) suggest a small, narrowly trained (narrow is used in the sense of being able to teach all ability levels in general or basic courses in a content area) instructional staff. For rural principals, this may require a transformational role to develop these few staff members to fit within the organizational needs of the school. Similarly, a small staff size may provide rural principals with an opportunity to have strong social networks and meaningful, structured interactions with all members of the teaching

staff – something that may not be possible within a large school building. Yet, just as with instructional leadership, there is little research exploring transformational leadership in these settings. Thus, the potential for relevance is largely speculative and necessitates further exploration.

Trust. Trust within the organization and with the surrounding community may play a critical role in how rural school principals are able to operate and lead within their schools. Within the school, trust is a key ingredient for establishing strong relationships between principal and teachers, which creates the space for learning, sensemaking, and capacity building (Louis, 2006). Within the community, trust between community members (including school board) and principal creates access to resources, support, and expands the space and/or constraint within which the principal operates (Bryk & Schneider, 2003). Small, rural communities are generally tight-knit with strong, encompassing social networks and connections (Tieken, 2014). Indeed, with few administrators, rural principals are likely to have frequent interactions with the district board and community leaders. Similarly, small teaching staffs also may suggest the presence of similarly tight-knit networks. For rural principals, the ability to build relational trust may be one of the most critical aspects of their jobs. Without such trust, it would seem likely that such a leader may not fit within the organization and have little capacity to act as a leader. Thus, it would seem plausible that trust may be a critical aspect of leadership, especially in these settings: however, this is predominantly speculative, since little empirical evidence exists to support this claim. As with both leadership models, the exploration of trust within a rural school and community may greatly illuminate how principals operate in rural locales.

Conceptual Model of Leadership

Conceptualizing the rural principalship is difficult because there is not one, singular conceptualization of what it means to be rural. Rural spaces include large swaths of geographic areas in the United States. It should then be expected that large variations between these spaces exist and that the contexts within which these principals act are similarly varied.

The role of context in shaping and influencing educational leadership, particularly in quantitative research, is a relatively new consideration by researchers – one that has increased in focus since the 1990s. In terms of quantitative research, this (and other leadership concepts including transformative models) is largely the result of advancements in technology (computing power and advanced statistical modeling) that can navigate the messiness of leadership, interactions, and abstract constructs (Marks & Printy, 2003). Prior to this, context was “often glossed over in extrapolating the findings for policy and training purposes” (Hallinger, 2005, p. 231) or largely ignored in analyses (Hallinger, Bickman, & Davis, 1996). The inclusion of context in the analysis of leadership models revealed that it [context] has an influence on principal leadership (Hallinger, Bickman, & Davis, 1996; Hallinger & Heck, 1996). Conceptually, however, these analyses tend to treat context as static antecedent variables (Hallinger, Bickman, & Davis, 1996), or things through which leadership is mediated. One of the key findings from this line of research has been that school principals have an indirect effect on student achievement and outcomes (Hallinger, 2005; Hallinger & Heck, 1996; Hallinger & Leithwood, 1994). This effect is mediated through teachers and school contexts (such as climate), of which the principal (as leader) has influence. In this sense, principals engage and interact with their contexts to influence student outcomes. Yet, there is little research that treats

context as fluid (or changing), instead prior research has generally considered context as a snapshot of the school at the time of data collection.

In terms of qualitative research, context has played a more prominent role, yet the ways in which it shapes theory and practice has been similar to quantitative research (Hallinger, 2005). This is likely due to the challenges of generalizing the context-rich, yet context-dependent nature of qualitative research (Guba, 1981) and the dependence upon quantitatively measurable outcomes and effects as a result of the rise of standards-based assessment, accountability, and other such state and federal policies, which led to an intense focus on quantitatively assessed models like instructional leadership (Hallinger & Heck, 1996). Within the last several decades, qualitative researchers have begun to explore the ways in which educational leaders engage with the context surrounding them in order to lead. In particular, work on community-engaged leaders (Flessa, 2009; Johnson, 2006; Khalifa, 2012) and culturally responsive leadership (Khalifa, 2012; Khalifa, 2018; Madhlangobe & Gordon, 2012) have situated the school leader as one who not only is influenced by context but also engages, interacts, and influences context. This study's conceptualization of context follows in this vein: that context is changing and tangible. Leaders are influenced by context (like in the traditions of quantitative research), but they must also navigate and interact with context.

This study conceptualizes and positions school leadership as being at the center of three interacting spheres of influence: *individual*, *theoretical*, and *contextual*. In this sense, leadership is not viewed as a singular model of behaviors and actions, but as interactions between each of three spheres (see Figure 1.2).

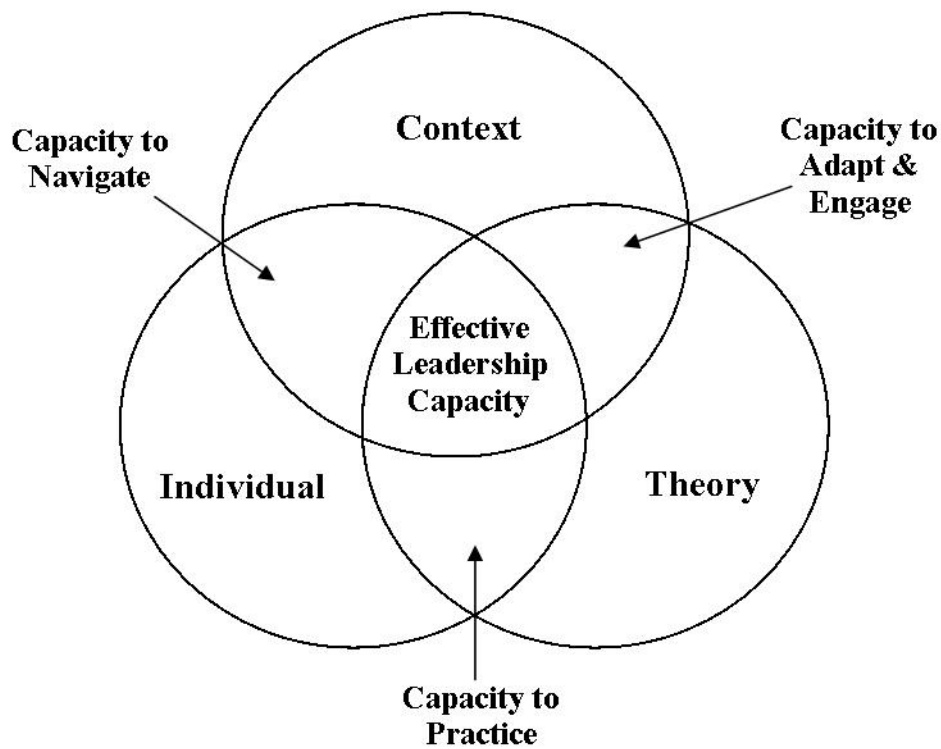


Figure 1.2 Conceptual Model of Leadership

Each of the three spheres is conceptualized as fluid, recognizing changes in context, individual growth and development, and the ever growing knowledge and understanding of educational leadership in terms of theory and practice. Where each of the spheres overlaps is an interaction that exists between two spheres. These are defined as follows: *theory-individual* is termed as *capacity to practice*; *individual-context* is termed *capacity to navigate*; *context-theory* is termed as *capacity to adapt & engage*. The overlapping of all three spheres represents the *effective leadership capacity* that exists given all three components. This is not defined by the quality (good or bad) of the interactions, but as the leadership behaviors, actions, and decisions that can and have occurred given the interactions of the three spheres.

Individual. The *individual* sphere represents the lived experiences, opportunities, beliefs, values, and skills that the leader (individual) possesses that are detached from the other spheres. The lived experiences and opportunities of the individual include his or her personal history, or how the individual has arrived at a given point in time and what opportunities were taken, not take, presented, or not presented to also arrive at that point. Beliefs and values represent those espoused by the individual at a given point in time. These may be less concrete as defining lived experiences and may also become more nuanced as the individual navigates personal and professional values and beliefs. Skills represent two different concepts. First, skills conceptually include abilities and capabilities of the individual to perform tasks. Second, skills include the abstract constructs referred to as soft skills (Heckman & Kautz, 2012) or non-cognitive skills (Heckman & Rubinstein, 2001) such as perseverance and curiosity (Heckman & Kautz, 2012).

The fluid nature of this sphere reflects the traditions of human cognitive development (Piaget, 1964; Sawyer, 2006; Vygotsky, 1978) and the conceptualization of the human mind to develop and grow (Dweck, 2000). Thus, the individual grows, develops, and changes over time and, additionally, as the individual interacts with the other spheres (in terms of the model). As the description of the sphere suggests, the conceptualization of the individual is broad. It encompasses multiple aspects ascribed to individuals – both abstract constructs and concrete (directly measurable and/or observable). This is the nature of each of these spheres and their interactions. The conceptual model attempts to capture leadership broadly, as the culmination and interaction between broad spheres of influence.

Theory. The *theoretical* sphere represents the theories that drive educational leadership, which represent both the abstract and understood of what leadership conceptually should look like. This constitutes the consensus of understanding and the existing knowledge based on

empirical research of educational leadership practice. In essence, it is the present paradigm (Kuhn, 2012) of educational leadership in which policy is created, leaders are trained, research is conducted, and practice is understood when acted. This includes the full corpus of current theories and models that drive the field of educational leadership and contribute to the understanding to its best practice (i.e. the duties, responsibilities, behaviors, and actions of a school leader).

The *theoretical* sphere is distinct from the *individual* sphere (notably separated from the experiences, opportunities, and skills components where it might otherwise be included) because while the individual's engagement theory may shape personal experiences and build skills, the theoretical concept of best practice can change irrespective of the individual as a result of a paradigm shift (Kuhn, 2012) and/or new knowledge. Similarly, an individual may engage with these changes (and sphere, which is explained below) through professional learning and development, which would otherwise be unexplained if treated as simply a component of the individual/self.

The fluid nature of this sphere reflects the gaps in knowledge that exist and are continually being explored. As methods and tools of inquiry become more sophisticated – and so long as researchers continue to conduct research – the understanding of the field of educational leadership will continue to evolve and change.

Context. The *contextual* sphere represents the contexts and environment surrounding and involving the leader, from local to national contexts and environs. Context is complex and, thusly, the sphere is conceptualized as both broad and consisting highly intricate layers. Locally, contexts are conceptualized as encompassing the school and community. Within the school there are the bureaucratic organizations (i.e. school board and leadership structure), the people (i.e.

staff, students, and characteristics of people), the school climate, expectations (for leadership and the school from the board, leaders, teachers, students, etc), mission, vision, goals, values (collective and individual), history, and social networks/interactions (relationships and trust). The community contains much that is similar to schools but also includes identity, local economy, political values, culture, social norms, access to goods and services (location and size), and proximity to other communities (geographic remoteness). Beyond the local level are the state and national contexts. In terms of the state there are policies (i.e. funding, educational, non-educational), economics (the economy and labor), expectations (for the leader and school), history, and interactions (between the local and state). The national context is similar to the state level but at an even broader scope. These lists are not exhaustive, but highlight the very complex nature in which the *contextual* sphere is conceptualized.

The fluid nature of this sphere reflects changes to the context: a new policy to be implemented; declines in labor demands; an increase in student discipline problems; or the outmigration of a community's population are examples of such changes in context. It is this sphere (and its interactions with the other two) that this study is particularly interested in. How do changes in context (i.e. student population change) interact with *theory* and the *individual*? In this sense, the conceptual model presented in this study is different from previous research in educational leadership, especially quantitative research. Instead of treating context as antecedents with which a leader must work through, this study treats context as a part of a system of interactions. An educational leader negotiates and navigates context while at the same time is influenced by context.

Capacity to practice. *Capacity to practice* represents the interaction between theoretical and individual. Conceptually, this includes professional preparation, content knowledge,

professional skills, and professional experiences. Professional preparation includes the sum total of formal and informal training in education and educational leadership. This training also includes continuing development, such as professional development and professional learning opportunities and experiences. Content knowledge includes the individual's understanding and knowledge of content related to education and related professional fields/areas. This knowledge also represents the leader's understanding of his or her role in terms of theory (such as instructional leadership, transformational leadership, etc) through formal and informal training. Professional skills are similar to content knowledge in that it represents the leader's understanding of skills related to leadership whether it is technological (i.e. computer software and data analysis), social (i.e. communication), or pedagogical (i.e. planning and organization) among others. Professional experiences include those that are formative in defining the individual as leader and, particularly, related to the individual as leader. These are conceptualized as a subset of the lived experiences defined in the *individual* sphere discussion and, thus, overlap.

The interaction, like each of the two-sphere interactions, is defined as a capacity because the degree to which the two spheres overlap is dependent on the nature of the interaction. Thus, a strong capacity to practice – from a strong interaction between *individual* and *theoretical* spheres – is suggestive of a leader who possesses strong leadership skills, training as an educational leader (and/or in education in general), and knowledge of professional practice (i.e. content knowledge, management duties, etc). Conversely, a weak capacity to practice is suggestive of a leader whose individual capabilities (whether it is intelligence, skills, or values) fail align with the necessary training and professional skills informed by the theoretical. As with the spheres, this interaction is not conceptualized as being static, instead it changes over time. Indeed,

continued (or sustained) professional learning and development is seen as one such way in which a leader's capacity to practice is strengthened – as he or she continued to grow and develop. Likewise, the continual accumulation of lived experiences would also change the nature of the interaction from the *individual* sphere.

Capacity to navigate. *Capacity to navigate* weds the individual to the context. This includes how the leader navigates context given individual qualities. Concepts such as fit, trust, relationships, expectations, social networks, and sense-making of local politics and contexts fall into this overlap. Fit is defined by Duke and Iwanicki (1992) as deriving from “the continuing interaction that takes place between the leader, followers, and the culture in which they exist” (p. 27). In essence, it is relationship of mutual influence (Duke, 1986). Without this fit, the leader's ability to lead is limited as “general agreement must exist on the meanings attributed to various aspects of the culture, including its guiding values” (Duke, 1986, p. 18). In the same vein, trust and relationships act as a conduit for which this mutual influence can exist. With strong trust and relationships, leaders are able to lead, enact change, and create a clear, mutual vision and mission for the school with the community, teachers, and students (Bryk & Schneider, 2003). In rural schools and communities, this is particularly critical as the smaller population signifies a small number of possible relationships and social networks. Social networks include school and community members. Social networks, particularly in rural communities, play a pivotal role in gaining support for school initiatives and leadership actions (Bauch, 2001; Bryk & Schneider, 2003) as well as allowing the leader to become established in and a part of the community (Peshkin, 1978). Sense-making of local politics and contexts includes the leader's ability to understand community and school dynamics, history, culture, values, and identity. In a sense, this represents the leader's broader perceptions and understandings from which the other

concepts in this interaction stem. Literature on education labor markets suggests teachers seek out schools that they are comfortable with – ones with similar contexts (Boyd, Lankford, Loeb, & Wyckoff, 2005; Reininger, 2012).

In addition to the concepts described above, this interaction includes the expectations of the leader in the school and community. These expectations can be formal (i.e. contractual) or informal (i.e. non-contractual but understood) and can come from multiple sources including the school (student, teachers, administrators, and board members) and community (parents and community members). As context changes, it is expected that this interaction will change to some degree, which represents a key focus of this study. In terms of expectations, changes in student population may bring about changes in how the principal is expected to lead and act. It is also possible that the change in student population may also change the ways in which the principal is able to navigate context in terms of social networks and fit. The introduction of new students through in-migration may present new values and a different vision for education. As the economic literature and rural literature suggests, parts of the United States are undergoing rapid change in population in terms of demographics (particularly income and race). In this way, the change could challenge the comfort and ability of the principal to navigate the school and community.

Capacity to adapt and engage. *Capacity to adapt and engage* wedges the context to the theories of leadership, which includes how research informs the ways in which leaders should act given context. As discussed above, recent qualitative work has informed theory in the need for contextual awareness and engagement. Culturally responsive leadership is one such example of conceptualizing the leader as someone who engages with the community and for whom context is an essential element for how he or she leads and acts (Khalifa, 2018). This also includes the

leader's recognition and perception of the ways in which leadership can and should change to address context. This is a slight distinction, since it relies on individual awareness and not just theory, but also falls within what theories like culturally responsive leadership suggest how the leader should be aware and act. This is distinct from the *capacity to navigate* because of its focus specific to leadership actions and behaviors instead of the focus on individual fit and ability to navigate; however, there is also conceptually overlap between the two (between leadership theories and individual fit) with regards to context and how both require interaction and engagement (or lack thereof).

The fluidity of the capacity to adapt and engage exists because of context, through changes in context or perceptions of context, and through the continued development and refinement of the ways in which leaders should navigate and engage with context. As with the *capacity to navigate* this interaction, conceptually, is a key focus for this study. The ways in which the leader interprets/perceives and adapts to changes in context is critical towards understanding how student population change has influence over educational leadership in rural schools.

Effective leadership capacity. The final (and central) overlap represents the *effective leadership capacity* of the principal given the influence and interaction of the three spheres. This is not a conceptualization of the quality of leadership in terms of good or bad. Instead, it is the effective, both realized and potential, capacity of the principal to lead. In this sense, the spheres interact to create a system of influences within which leadership occurs. Each of the three spheres details a core aspect of leadership that is necessary for educational leadership. Without these interactions, the model would not be functional and leadership, as conceptualized, will not fit. The absence of context suggests that the system lacks a setting and a place to occur. Without

context, the leader lacks any coherent means or medium to interact and engage. The absence of the individual suggests that the system is bereft of a source or a direction. Without experiences and values, there is no capability for complex decision making. Without skills there is no capability to act in a relevant or responsive way. The absence of theory suggests that the system lacks a clear idea of what educational leadership entails. Without theory, leadership may still exist but it is unable to be articulated or understood. It is simply transactions and interactions that exist but would otherwise remain a mystery. Thus, the *effective leadership capacity* represents a complete system as it occurs within a given individual, context, and guided by theory.

Of particular focus for this study, conceptually, is the instability of the *contextual* sphere created by relatively rapid population decline and enrollment changes. The two corresponding overlaps, *capacity to navigate* and *capacity to adapt and engage* are also of particular interest in exploring how rural principals behave during and in response to such periods of change. It is important to note, however, that while these three components are of particular interest, they are not the sole focus of the paper. Indeed, addressing issues related to these components involve changes in the way leaders are trained (represented in the *capacity to practice* interaction) and leadership is understood (represented in the *theoretical* sphere).

CHAPTER 2:

EXPLORING RURAL PUBLIC SCHOOL STUDENT POPULATION CHANGE AND ITS INFLUENCE ON EDUCATIONAL LEADERSHIP

Introduction

The history of public education in the United States is one of continual change. This change occurs in many forms and similarly affects a variety of facets. Of interest in this paper are the changes that have occurred in terms of the student population in these public schools – namely, rural schools. Why student population? And, why rural schools? To the former: as the discussion of literature at the beginning of this dissertation and in this paper describe, the population in rural areas in the United States is changing. It then follows that the student population in the schools that serve these communities should likewise be changing. Yet there is little research that has looked longitudinally at these changes and the degree to which these changes are occurring in terms of rapidity and scale. Rural schools, as well as their surrounding communities, have traditionally been viewed as homogenous in terms of politics, culture, and race (Howley, Rhodes, & Ball, 2009); although, arguably, this is not the case for all rural places – owing much the large, geographic expanses that these places occupy and the individual histories and contexts that have shaped them. Similarly, research in suburban schools suggests that student population change presents leadership and instructional challenges to principals and school leaders (Evans, 2007). How, then, do these communities, schools, and leaders adapt, learn, and change along with the student population (or even at all) is, on-the-whole, largely unexplored by educational researchers.

To the latter: the discussion provided in the dissertation's review of literature should make the impetus for the need for a focus on rural schools clear. In summary, there has been both a very limited quantity of research focused on rural education issues (as only two peer-reviewed journals published by large-scale publishers demonstrates this point) and an even more limited body of quality research that has been published (Arnold, Newman, Gaddy, & Dean, 2005; Howley & Howley, 2014). A surprisingly scant offering, given the majority of Local Education Agencies (LEAs) are located in rural locales (Snyder, de Brey, & Dillow, 2018). In terms of leadership, the nature of rural schools – generally small – means that the average rural school is likely to have a single principal or administrator (Snyder, de Brey, & Dillow, 2018). As the discussion in the introduction of this dissertation suggests, the lone nature of the rural school leader deviates from how school leadership is conceptualized and studied – the degree to which this role deviates is mostly unknown (a gap in knowledge tied to the limited body of published research on rural educational leadership). What has been explored by researchers is discussed in the first section of this dissertation and will be summarized below in the paper's review of literature.

The purpose of this paper is to address these gaps in knowledge: to explore the population change occurring (if it is) in rural communities via their schools and to link the existing literature on leadership and rural education to its [paper's] findings. In doing so, the paper also serves as a foundation for the other two papers in this dissertation.

Summary of Literature

As an exploration of population change and educational leadership, it is appropriate, then, that the discussion of existing knowledge includes literature from both topics. A more extensive presentation of this literature is provided in Chapter 1; however, a summary of this literature is

included to establish the foundation from which this paper is directly working from. Thus, this summary of literature will review relevant literature presented in Chapter 1 and present new discussion that pertains specifically to this paper.

Population migration. As with densely populated areas, rural places experience the ebb and flow of residents. This ebb and flow is referred to as out-migration and in-migration and is the phenomenon of focus for this paper. The terms are straightforward: out-migration is the departure of residents from the community to another community (or place); in-migration is the arrival of new residents to the community. The causes of out-migration and in-migration can vary; however for rural locales, these causes are generally attributed to economic and labor markets (Carr & Kefalas, 2009; Kuznets, 1955; Longworth, 2009; Tieken, 2014).

An early theoretical case for rural and urban labor patterns was posited by Kuznets (1955). While Kuznets's theory was focused on explaining changes in income inequality, it also provided an explanation for migration patterns tied to labor. Indeed, Kuznets (1955) argued that urban markets possess industries that carry a high potential for growth and incentives (income, etc), particularly for high-skilled labor. On the other hand, rural markets possess a much more limited growth potential and incentives; however, the income inequality between low-skilled and high-skilled labor is much narrower in these rural markets. Thus, high-skilled labor is more incentivized to migrate to urban markets while low-skilled labor (to a point, since Kuznets also argues that rural industries are at or near saturation in terms of demand) is incentivized to rural markets (Kuznets, 1955).

Both economic and rural focused literature has supported this explanation for out-migration and in-migration phenomena in rural places. In terms of out-migration, there are three key findings that highlight Kuznets's theory. First, the advancement of agricultural technology

has, over time, improved efficiency and lowered the demand for labor in the predominant industry of most rural places (Tieken, 2014). This supports the argument that existing rural industries are generally saturated or declining (in terms of labor demand). Second, national and global economic trends (including demands) have changed over time, causing non-agricultural industries in rural communities and small towns to dwindle or close (Longworth, 2009). Third, the lack of demand for high-skilled, professional labor in rural places and the highly incentivized urban markets have attracted high school graduates away from these communities – a term commonly referred to as *the rural brain drain* (Carr & Kefalas, 2009). Indeed, the United States Department of Agriculture reports a comparatively larger income incentive in urban markets for high-skilled and professional labor (USDA, 2016).

In terms of in-migration, the literature also suggests three key findings that support Kuznets's theory. First, the established population is naturally declining. Families are getting smaller as fewer babies are being born and the death rate is out-pacing the birth rate (Johnson, 2006). For industries, like agriculture, that are generally stable, this creates a demand for labor – as there is a natural attrition in the existing labor force and graduates who would otherwise replace this exiting labor are out-migrating. Second, there has been an influx (approximately 45% between 2000 and 2010) in Latino immigrants into rural places (Parrado & Kandel, 2010; USDA 2017). This observed migration provides evidence of the in-migration phenomenon. Similarly, patterns of population change between rural and urban markets have generally followed periods of economic expansion and contraction in the United States (Fuguitt, 1995). Finally, the migration of Latino workers and families into these rural communities neither increases income inequality nor does it threaten the economic outlook of the communities (Parrado & Kandel, 2010). Thus, this new population is meeting labor demands and supports the

argument that the income inequality is comparatively narrower in rural locales – to not be affected by this increase in immigrants.

Rural school leadership. There is an abundance of research literature focused on educational leadership; however, of this expansive body of work, there is little that is specific to rural settings when compared to urban and suburban settings. As mentioned above, this owes in large part to the few peer-reviewed academic journals focused on rural issues and the general convenience of university research in nearby schools that are predominantly urban and suburban (Gibbs, 2000). Thus, gaps in knowledge exist in both understanding rural school leadership and rural issues (and how those two focal points interact/intersect). Yet a broad understanding of rural leadership does exist – the result of a small body of literature and researchers focused on rural issues – and will be summarized below.

There are few administrators in the typical rural school and LEA. In the typical school, a principal is likely to be the only formal administrator and the LEA is likely to have a superintendent as the lone central office administrator (Snyder, de Brey, & Dillow, 2016). This does of course vary from school to school and LEA to LEA; however, the small enrollment sizes of schools (fewer than 200 students in the more remote rural schools) and LEAs make employing more than a single administrator in the typical rural school inefficient. The lone nature of the rural school principal is that the leader shoulders the sole burden and responsibility of leadership (Canales, Tejeda-Delgado, & Slate, 2008; Preston, Jakubiec, & Kooymans, 2013). Thus, the rural school principal is likely to enjoy a greater access to the superintendent and school board when compared to a much larger district with dozens of principals. A similar access and relationship[s] is expected with the community, due to the small size of rural communities and their existing tight-knit social networks (Peshkin, 1978). However, the leadership capacity of the

building (in terms of distributed leadership, leadership style, etc) is dependent upon the capacity of the sole principal. Similarly, the rural school leader assumes both formal and informal duties that go beyond the general expectations of a single school leader (Canales, Tejeda-Delgado, & Slate, 2008).

The isolation of the rural school leader is not limited to within the school or LEA. The distance that separates sparsely population communities and is a key feature in how “rural” is defined also creates barriers to access for professional development, networking, and collaboration (Preston, Jakubiec, & Kooymans, 2013; Stewart & Matthews, 2015). Travel is not impossible nor is access to technology, but the distance between schools serves as an obstacle when compared to the proximity afforded to principals in suburban and urban schools and LEAs. Instead, rural school leaders travel much greater distances to attend and participate in formal professional development and learning (Stewart & Matthews, 2015).

Research Questions

As the first paper in the three-article dissertation, the purpose of this paper is to explore the ways in which the student population in U.S. rural schools has changed. In doing so, this paper will establish a contextual backdrop (or narrative[s]) for the remaining two papers and provide indicators of what the existing literature on rural education and leadership suggests in terms of what to expect for leadership challenges and behaviors. Thus, this paper seeks to explore the first overarching research question of the dissertation: *how have the demographics and student population of rural public schools changed over 19 years?* Within this overarching research question are sub-questions that ask not only about these changes but how such changes, if any, link to educational leadership in these rural schools. These questions are:

- How has the student demographic composition of rural public schools changed in the United States? Where are these changes most pronounced?
- Based on existing education leadership research literature, what are the possible implications of population change for rural public school leaders?

Methods

Sample. To address the research questions, this study conducts secondary analyses of survey data from the Common Core of Data (CCD) collected by the National Center for Educational Statistics (NCES). More specifically, this includes data collected by NCES from the Public Elementary/Secondary School Universe Survey Data and Local Education Agency (LEA) Universe Survey Data spanning a range from academic years 1997-98 to 2015-16. As secondary data, these survey datasets are appropriate for use in answering the research questions for two primary reasons. First, the data includes student demographic characteristic variables (free-reduced price eligibility, race, etc) and school/LEA characteristic variables (locale, identifier, etc) have been consistently defined and reliably collected over the span of several decades with only modest change over time that might present limitations for longitudinal use. Second, both the Public Elementary/Secondary School data and LEA data are collected from universe surveys. In other words, these datasets contain responses from all entities in the U.S. public school and district (LEA) populations for each year collected. Thus, this data represents an ideal set of information for addressing both research questions.

The schools of interest for this study are traditional public schools in the United States. These include regular, “Type I” defined schools - which can also include publicly operated charter schools, so long as these entities are classified as “Type I” or regular – that report enrolling at least one student in the observed year. Similarly, only public schools located within

states were examined. Schools located in territories or other U.S. sovereign areas were excluded from analysis. This was determined using the Federal Information Processing Standard (FIPS) codes assigned to states and territories.

Variable selection. Variables selected for analysis come from both the Public Elementary/Secondary School Universe Survey Data and the LEA Universe Survey Data. School characteristic variables were primarily selected from the school-level data and includes identification variables (unique school identification number, FIPS state identifies, LEA identification number, LEA name, and school name), locale variables (NCES assigned classifications, mailing address, county name, and latitude and longitude coordinates), status variables (school type classification, charter school flag, magnet school flag, and operational status), and the full-time equivalent (FTE) variable. Student characteristic variables were also selected from the school-level data (as the LEA-level survey data does not report at the same detail as the school-level data) and includes student enrollment count variables (total enrollment, enrollment by race, and enrollment by grade level) student poverty variable (free and reduced-price lunch eligibility counts). Of the available race categories, only the three largest were of particular focus for this study (Black, Latino, and White racial categories) because of their relevance to the economic and rural literature. The NCES assigned locale classification variable was selected from the LEA-level survey data, which was used to represent all schools within the LEA. The rationale for this decision will be discussed below.

Student poverty. The use of free and reduced-price lunch (FRPL) eligibility as a proxy for characterizing student poverty levels is a common practice in education research, partly because it is one of few poverty or income-related variables collected by NCES (Snyder & Musu-Gillette, 2015). A relatively recent change in policy regarding the federal program and the way in which

FRPL eligibility is reported should be noted, however, since it does affect the reported data used in this study. In 2010, the U.S. federal government enacted the Community Eligibility Provision (CEP) as a part of the Healthy, Hunger Free Kids Act of 2010. As a part of the Act, CEP allows schools and/or LEAs with student FRPL eligibility at or above 40% to serve free breakfast and lunch for all students in the school and/or LEA (United State Department of Agriculture, 2015). The implementation of the policy was staggered over multiple years, with designated states as early adopters. While this may confound some of the specific FRPL findings in the data analysis, it should still be safe to assume that schools electing to participate in CEP are those that already have a high share of FRPL eligible students. However, it may of interest for future research to examine the rate at which schools and LEAs in different contexts and locales elect to participate and the rationale by which they chose to do so.

Data preparation. Prior to merging the survey data, several steps were taken to ensure that all retained variables matched consistently over the 19 year period. First, variables were renamed to a consistent variable name if the original name did not align across the survey years. This was the case for most of the variables included in the school level survey data. Second, variables that included non-identification related numeric data were converted to from string characters to numeric values using the STATA statistical software package (some years included numeric data that was encoded as string data instead of a numerical value, which prevents computational/quantitative analysis). This included some student member counts and data, especially from early data sets. Third, any changes in data collection and variable definition over the 19 year period were adjusted for consistency and alignment across data sets. The most notable of these changes is the locale classification assignment used by NCES, which is critical for the purposes of this study. In response to changes in the urban-rural definitions used by the

U.S. Census Bureau, NCES implemented the new locale classification definitions during the 2006-2007 CCD survey year (Phan & Glander, 2008). Thus, school observations in the early data sets use a system of 8 locale types while more recent data sets use the new system of 12 locale types (see Table 2.1).

Table 2.1

Comparison of NCES Metro-Centric and Urban-Centric Locale Codes

<u>Locale Type</u>	Metro-Centric Locale Codes	Urban Centric Locale Codes
	<u>Pre 2006-07</u>	<u>Post 2006-07</u>
<i>Urban/City</i>	1 – Large City 2 – Midsize City	11 – Large City 12 – Midsize City 13 – Small City
<i>Suburb</i>	3 – Urban Fringe of Large City 4 – Urban Fringe of Midsize City	21 – Large Suburb 22 – Midsize Suburb 23 – Small Suburb
<i>Town</i>	5 – Large Town 6 – Small Town	31 – Town, Fringe 32 – Town, Distant 33 – Town, Remote
<i>Rural</i>	7 – Outside Metropolitan Statistical Area (MSA) 8 – Inside MSA	41 – Rural, Fringe 42 – Rural, Distant 43 – Rural, Remote

Source: Phan, T. & Glander, M. (2008). Documentation to the NCES Common Core of Data public elementary/secondary school locale code file: school year 2005-06 (NCES 2008-332). Washington DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.

To remedy this issue, both classifications were retained until the all data sets were merged. After the data was merged using school and LEA identifiers, the most recent locale classification assignments for LEAs (from the 2015-2016 survey year) were retroactively applied to the same LEA and school observations in previous survey years. Locale classifications were determined at the LEA level because LEAs can contain schools with multiple locale assignments – potentially confounding longitudinal trends. Not only did this resolve issues with reconciling differences in locale definitions for the same school observations, it also applied a consistent

locale assignment for a school longitudinally as schools may change locale type because of population change and outward spread of urban areas. For schools that were either missing locale classification assignment or were no longer in operation from the FY 2015 – 2016 survey, the same process was applied using the next most recent survey data year (i.e. FY 2013 – 2014) and so on. Similarly, schools that were either missing or were no longer in operation and their LEAs were either missing or were no longer in operation after the definition change lack the current locale classification assignment were kept within their original, more general locale assignment (urban, suburban, town, and rural). Exclusion of these schools from analysis due to lacking a current locale classification assignment clearly would confound population trends, especially in urban locales that have experienced high turnover or instability with regards to school operations.

Rural definition strategy. As discussed in the literature review, there is no consensus on what defines a rural place or space. This is problematic, as a lack of consensus confounds the utility of rural research and its existing body of literature (Arnold, Newman, Gaddy, & Dean, 2005). Indeed, the U.S. Census Bureau simply defines rural spaces as sparsely populated areas removed from urban, high population density areas (U.S. Census Bureau, 2015). Such a sterile definition, while serving to provide objective delineation of space, fails to consider other more humanistic characteristics such as demographics, values, etc. The difficulty of such humanistic consideration is that the geographical vastness of these spaces would undoubtedly lead towards many differing and, even, conflicting conceptualizations of rural. Indeed, this creates a clear issue on how to represent rural as both a place and as a lifestyle that serves a reliable and valid purpose in academic research. Strict reliance on the U.S. Census Bureau and, by extension, NCES may be highly problematic for addressing the research questions.

As shown in Table 2.1, the urban-centric definition system used by the U.S. Census Bureau and NCES starting in 2006-07 classifies *rural* and *town* schools based on proximity to *cities* and *suburbs* (termed *urbanized areas*). The full description of these definitions is provided in Table 2.2.

Table 2.2

NCES Urban-Centric Locale Classification Definitions

<u>Code</u>	<u>Name</u>	<u>Description Summary</u>
11	City, Large	Principal city within an urbanized area with a population greater than 250,000
12	City, Midsize	Principal city within an urbanized area with a population between 250,000 and 100,000
13	City, Small	Principal city within an urbanized area with a population fewer than 100,000
21	Suburb, Large	Territory within an urbanized area with a population greater than 250,000
22	Suburb, Midsize	Territory within an urbanized area with a population between 250,000 and 100,000
23	Suburb, Small	Territory city within an urbanized area with a population fewer than 100,000
31	Town, Fringe	Territory within an urban cluster less than or equal to 10 miles from an urbanized area
32	Town, Distant	Territory within an urban cluster between 10 and 35 miles from an urbanized area
33	Town, Remote	Territory within an urban cluster less at or beyond 35 miles of an urbanized area
41	Rural, Fringe	Rural territory less than or equal to within 5 miles of an urbanized area, or less than or equal to within 2.5 miles of an urban cluster
42	Rural, Distant	Rural territory between 5 and 25 miles of an urbanized area, or between 2.5 and 10 miles of an urban cluster
43	Rural, Remote	Rural territory beyond 25 miles of an urbanized area, or beyond 10 miles of an urban cluster

Source: Phan, T. & Glander, M. (2008). Documentation to the NCES Common Core of Data public elementary/secondary school locale code file: school year 2005-06 (NCES 2008-332). Washington DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.

While distance is the primary delineating criteria for the town and rural categories, a population size component is still present. Urban clusters (towns) are defined as having a population

between 2,500 and 50,000 residents (Phan & Glander, 2008). While a town of 49,999 residents may reflect an urban area of 50,000 (as far as access to amenities, demographic characteristics, etc), a town of 2,500 residents would seem likely to be similar to that of a rural area with 2,499 residents. Indeed, 41.7% of urban clusters have 5,000 or fewer residents and 70.3% of urban clusters have 10,000 or fewer residents as of the 2010 U.S. Decennial Census (U.S. Census Bureau, n.d.). Given that the towns of interest are located at least 10 miles from an urban area, it would seem plausible to suggest that there is more benefit to their inclusion within a rural grouping than retaining them as an urban one as these towns may have considerable overlap with rural-designated spaces. This is especially true given the nature of this analysis, examining demographic changes particularly related to in-migration and out-migration and the disparity in national population counts that exist in these areas during the 2010 Decennial Census: the U.S. has 3,087 urban clusters (towns) with a population of 29.33 million residents and 486 urban areas (suburbs and cities) with a population of 219.92 million residents (U.S. Census Bureau, 2015). Similarly, *town-distant* and *town-remote* share a distance quality with their *rural-distant* and *rural-remote* counterparts: access to goods, services, and resources. Thus, distance from urban serves as a unifying link – one that likely suggests other commonalities. Additionally, schools assigned a *rural-fringe* classification may share characteristics of both rural and suburban locale types. Schools located in the *rural-fringe* are within 5 miles of an urbanized area (city or suburb). As noted in the discussion of literature, these *rural-fringe* locales have considerable in-migration from both more (remote) rural residents and suburban residents (Johnson, 2006). The proximity of these *rural-fringe* locales to urban areas may make them desirable for commuters and those escaping urban sprawl. These locales may also be susceptible

to outward urban expansion and may potentially be transitioning to urban status. Evidence of this confounding is presented in Table 2.3.

Table 2.3

Select Statistics Comparing School Averages by Locale for 2015-16 School Year

<u>Locale Type</u>	<u>Mean Enrollment</u>	Mean % Share	Mean % Share	<u>Mean FTE</u>
		<u>Non-White</u>	<u>FRPL Eligible</u>	
Suburb, Large	710.5	50.6	44.5	42.7
Suburb, Midsize	619.6	38.9	48.8	37.4
Suburb, Small	571.3	34.4	50.0	33.7
Rural, Fringe	565.3	30.7	47.2	35.2
Rural, Distant	292.9	20.0	52.9	20.4
Rural, Remote	168.8	25.9	55.1	13.4

Examination of Table 2.3 suggests that schools in the *rural-fringe* do, in fact, appear to have much in common with suburban schools (arguably, suburban schools would be the closest in proximity to *rural-fringe* schools with the exception of cities with no suburbs). Thus, the inclusion of the *rural-fringe* would likely confound school level analysis – especially given the considerably larger size of these *rural-fringe* populations compared to any of the other four locale classifications.

Refined definition. The refined definition used by this analysis, given the reviewed literature and preliminary data, will consider *rural* to include schools in LEAs classified by NCES as *rural-distant* and *rural-remote*. Similarly, small towns should be conceptually and contextually similar to these rural schools for the rationale outlined above. Thus, this study considers *town-rural* to include *town-distant* and *town-remote* LEAs. For *town-fringe* schools, there is both size and proximity to urban centers (cities and suburbs), which suggests that these locales are blurred in terms of culture, characteristics, and urbanicity (or absence of rurality). Similarly, the definition of *town-fringe* only situates these locales in proximity to urbanized areas, which leaves little ambiguity as to where these schools are located. Conversely, *rural-*

fringe LEAs can be situated in two possible ways: in close proximity to urbanized areas (cities and suburbs); or, in close proximity to urban clusters (towns). Since there is a case for *rural-fringe* LEAs to be defined as such because of their close proximity to *town-distant* and *town-remote* locales, *rural-fringe* LEAs cannot be excluded whole-cloth. Instead, the inclusion of these *rural-fringe* LEAs as *rural* will rely on the composition of the LEA in terms of student population and locale classification of the individual schools within the LEA.

School data was aggregated to the LEA level retaining both the locale code classifications for the individual schools and LEAs. *Rural-fringe* LEAs with schools in suburb or city locales were classified based on the largest urban definition (in order of size: city, suburb, and then town). For LEAs entirely comprised of *rural-fringe* schools, the *rural* classification was retained because there is insufficient data to suggest that these schools are anything other than *rural*. *Town-fringe* LEAs were treated as suburban locales, thus they were reassigned to the suburb category. The final classification scheme resulted in four categories: *city*, *suburb*, *town-rural*, and *rural*.

Findings

The first cut of the data focused on the national trends in rural schools and student populations. These findings are reported in the first section below. The second cut of the data focused on state trends. Unsurprisingly, changes in student populations were not even across all 50 states. Instead, these changes appear to be more commonly shared among states in the same geographical region, suggesting the presence of differing narratives in rural areas across the United States. Thus, the findings from this cut are organized into the four Census Bureau defined geographical regions (*Midwest*, *Northeast*, *South*, and *West*).

National trends. The first trends of interest at the national level are school and LEA counts. NCES data reports suggest an overall decline in public LEAs in the United States over decades (Snyder, de Brey, & Dillow, 2018). The findings from this analysis are reported in Table 2.4.

Table 2.4

Select Public LEA Statistical Trends by Locale from 1997-98 to 2015-16 School Years

	<u>1997-98</u>	<u>2003-04</u>	<u>2009-10</u>	<u>2015-16</u>	<u>% Change</u>
<i>City</i>					
Total LEAs	966	1604	2024	2586	167.7
Total Schools	20603	22500	23571	24483	18.8
Mean Schools	21.3	14.0	11.6	9.5	-
Std. Dev. Schools	49.0	42.0	32.0	29.8	-
<i>Suburb</i>					
Total LEAs	4166	4380	4528	4694	12.7
Total Schools	31530	33085	35818	36530	15.9
Mean Schools	7.6	7.7	7.9	7.8	-
Std. Dev. Schools	12.8	13.8	15.4	16.0	-
<i>Town-Rural</i>					
Total LEAs	2433	2453	2509	2519	3.5
Total Schools	13257	13244	12942	12836	-3.2
Mean Schools	5.4	5.4	5.3	5.1	-
Std. Dev. Schools	3.9	3.9	3.9	3.9	-
<i>Rural</i>					
Total LEAs	7071	6969	6473	6360	-10.1
Total Schools	16584	16388	15387	14788	-10.8
Mean Schools	2.3	2.4	2.4	2.3	-
Std. Dev. Schools	1.6	1.5	1.4	1.4	-

As the data in the table demonstrates, there are differences between the overall trends reported by NCES and the trends reported by this analysis. The difference largely appears to be caused by the increase in *city* LEAs. Indeed, this is likely due to the inclusion of independent charter schools that are both public schools and Type I (traditional schools), meeting the two established criteria for analysis. Similarly, the proliferation of charter schools in urban areas in the last two decades aligns with this rapid increase in *city* LEAs and schools.

Of the locales reported in Table 2.4, *rural* is the only locale that shows a loss in both total LEAs (-10.1%) and total schools (-10.8%) over the 19 year period. While *town-rural* also showed a loss in total schools (-3.2%), this loss is not as steep and the marginal increase in LEAs (3.2%) also suggests some growth. Both *cities* and *suburban* locales show large gains in both LEAs and schools, with *cities* LEAs having a marked increase (167.7%) likely due to the proliferation of public charter schools and entities over the time range. Similarly, the decrease in the mean school statistic for *cities* locales (from 21.3 to 9.5) may reflect the reorganization of buildings, closures, and other changes that are also likely to occur as these cities have changed over time.

Examining the mean school statistic for all locale types also highlights the differences between locales on how these LEAs are organized. While the *city* LEA has changed over time, the remaining three locales have remained fairly stable in terms of the mean statistics. The rapid decrease in the standard deviation statistic for *city* LEAs may also suggest that the largest LEAs in the United States (large city-spanning LEAs that contain hundreds of individual schools) may be reorganizing into smaller units. The increase in total LEAs and schools in *suburban* locales combined with a marginally growing mean statistic suggests either the presence of new LEAs with sizeable school organization or a similar proliferation of independent public charter entities and the expansion of schools within existing LEAs. Similarly, the decrease in *town-rural* school counts with the increase in LEAs may reflect the addition of independent public charters amidst the decline in existing LEAs and schools (through consolidation or reorganization).

For *rural* LEAs, the stability of the mean schools statistic suggests two things. First, the decline in total LEAs and schools is indicative of LEA closure and consolidation. The rapid decline (greater than -10% in 19 years) in both LEAs and schools suggests the presence of

underlying causes such as population decline and funding. Second, the reorganization of schools and consolidation of LEAs is not creating larger districts in terms of building counts, but is remaining the same. The average *rural* LEA contains two schools: an elementary and secondary school. This deviates from the likely composition of the other three locales; each of these other locales indicates their average LEA to contain multiple elementary schools, multiple middle schools, and at least one high school. In terms of choice within the LEA, the average *rural* LEA would appear to have little.

After examination of the LEA total and school total statistics suggested a relatively rapid decline in *rural* LEA and school counts, population trends were examined. The findings from this analysis are reported in Table 2.5.

Table 2.5

Select Public School Enrollment Trends by Locale from 1997-98 to 2015-16 School Years

	<u>1997-98</u>	<u>2003-04</u>	<u>2009-10</u>	<u>2015-16</u>	<u>% Change</u>
<i>City</i>					
Total Enrolled	14211081	14794054	14755509	15381084	8.2
White	5962482	5389465	4922510	4650597	-22.0
Black	3935268	3803070	3640854	3425335	-13.0
Latino	3337385	4228445	4837661	5574608	67.0
FRPL Eligible	5429483	6849305	7853209	9341351	-
<i>Suburb</i>					
Total Enrolled ¹	20462387	22547635	23669216	24399740	19.2
White	14486353	14366251	13851972	12899057	-11.0
Black	2520396	2984408	3279772	3225983	28.0
Latino	2393250	3528333	4581102	5795885	142.2
FRPL Eligible ¹	4191185	6457280	9112567	10446419	-
<i>Town-Rural</i>					
Total Enrolled	6039105	5872524	5803660	5707017	-5.5
White	4464789	4025346	3956726	3671391	-17.8
Black	790621	743979	721319	654319	-17.2
Latino	504716	659677	823219	1004799	99.1
FRPL Eligible ¹	1849758	2454234	3155904	3408662	-
<i>Rural</i>					
Total Enrolled	4327655	4128990	3893278	3743988	-13.5
White	3675685	3423660	3190814	2963312	-19.4
Black	284394	267049	239328	205161	-27.9
Latino	173245	215659	263634	335124	93.4
FRPL Eligible ¹	1145666	1469702	1816367	1841042	-

¹States not reporting FRPL by year: 1997-98 - Arizona, Illinois, Massachusetts, New Mexico, Pennsylvania, Tennessee, and Washington; 2003-04 – Kentucky, New York, and Tennessee; 2009-10 – no states unreported; 2015-16 - Massachusetts. FRPL change over time not reported in the findings because of this inconsistency.

The table shows a clear divide between the urban and non-urban locales. Both *city* and *suburb* enrollment trends show general increases in overall student enrollment with decreases in White student enrollment. *City* schools also report a decline in Black student enrollment, while *suburb* schools report a similar increase in Black student enrollment. These findings are not surprising given the proliferation of and access to public and private choice options in these more population dense areas over the 19 year period. Both locales also report marked increases in Latino student enrollment, with the most notable increase being in the *suburbs*.

Town-rural and *rural* enrollment counts trend downward over the 19 year period, with *rural* locales experiencing overall enrollment decline by more than -13%. These trends appear relatively consistent over the 19 year period, suggesting that national declines in *town-rural* and *rural* enrollment counts are not markedly accelerated during periods of economic turmoil or other such events during this time range. In fact, *rural* student enrollment counts appear to decline at a fairly consistent pace over the 19 years: at about 150,000~200,000 students per 6 years. Similarly, *town-rural* schools have appeared to lose students at a rate of about 100,000 students per 6 years. Notably in each case is the mitigating effect of the gains in Latino student population in each of these locales; although, it is most apparent in the *town-rural* schools. In both locales, Latino student enrollment nearly doubled over the 19 years. In the case of *town-rural* schools, this appears to have offset much of the overall population declines caused by White and Black student enrollment drops. While not as large, the increase in Latino student enrollment in *rural* schools has offset the loss in Black student enrollment and part of White student enrollment. Of course, the national counts do not consider where these changes are occurring and, as such, fail to indicate how these population changes look in individual LEAs.

Of particular note in Table 2.5 is the size of the *suburb* total enrollment in comparison to other locale types. Because of how the locale classifications were adjusted, the *suburb* locale encompasses a much larger share of students than what unadjusted NCES locales will report (Snyder, de Brey, & Dillow, 2018). As Table 2.6 reports, urban locales comprise more than three-quarters of the students enrolled in U.S. public schools. By 2015-16, this share increase to nearly 80% of all public school students.

Table 2.6

Share of Public School Population by Locale from 1997-98 to 2015-16 School Years

	<u>1997-98</u>	<u>2003-04</u>	<u>2009-10</u>	<u>2015-16</u>
Total	100.0	100.0	100.0	100.0
City	31.6	31.2	30.6	31.2
Suburb	45.4	47.6	49.2	49.6
Town-Rural	13.4	12.4	12.1	11.6
Rural	9.6	8.7	8.1	7.6

Notes. Total enrollment by year: 1997-98=45,040,228; 2003-04=47,343,203; 2009-10=48,121,663; 2015-16=49,231,829.

Additionally, Table 2.6 shows the robust expansion of *suburb* student enrollment: by 2015-16, nearly half of all public school students were enrolled in *suburb* schools. Similarly, the steady decline in *rural* and *town-rural* enrollment counts are reflected in the ever-decreasing shares of students over the 19 year period. Still, more than 54% of LEAs and 31% of schools are located in *rural* and *town-rural* locales during the 2015-16, even with only 19.2% of the total student population.

In terms of what the average school in each locale looks like, mean statistics were calculated for enrollment size, full-time equivalent positions (teaching positions), share of free and reduced-price eligibility, and share of non-White students. These findings are reported in Table 2.7.

Table 2.7

Select Public School Statistical Trends by Locale from 1997-98 to 2015-16 School Years

	<u>1997-98</u>	<u>2003-04</u>	<u>2009-10</u>	<u>2015-16</u>
<i>City</i>				
Mean Size	686.7	658.4	624.1	628.2
Mean FTE	38.4	38.4	37.9	36.6
Mean Share FRPL ¹	0.48	0.55	0.61	0.65
Mean Share Non-White Students	0.56	0.62	0.67	0.70
<i>Suburb</i>				
Mean Size	650.8	668.2	662.5	667.9
Mean FTE	37.0	39.9	40.5	40.6
Mean Share FRPL ¹	0.26	0.33	0.41	0.46
Mean Share Non-White Students	0.27	0.33	0.40	0.45
<i>Town-Rural</i>				
Mean Size	458.1	444.4	437.7	444.6
Mean FTE	27.6	28.3	28.7	28.6
Mean Share FRPL ¹	0.37	0.49	0.55	0.59
Mean Share Non-White Students	0.24	0.28	0.31	0.34
<i>Rural</i>				
Mean Size	260.0	253.4	252.2	253.2
Mean FTE	17.0	17.4	18.6	18.4
Mean Share FRPL ¹	0.31	0.42	0.48	0.50
Mean Share Non-White Students	0.14	0.16	0.19	0.21
¹ States not reporting FRPL by year: 1997-98 - Arizona, Illinois, Massachusetts, New Mexico, Pennsylvania, Tennessee, and Washington; 2003-04 – Kentucky, New York, and Tennessee; 2009-10 – no states unreported; 2015-16 - Massachusetts.				

Mean enrollment size follows the same general trend as total enrollment counts: locales experiencing declines in enrollment also have a decline in mean school size over the 19 year period. *City* schools represent the exception to this pattern; although, the marked increase in schools may contribute to this number declining amidst an overall enrollment increase. In conjunction with the findings reported in Table 2.4, it is clear that the decrease in *rural* LEAs and schools has not increased the size of the average school in the locale. In fact, even with the

declines in LEA and school counts, *rural* schools continue to remain small – with the mean statistic just above 250 students for the 2015-16 school year.

The average school's FTE count increased for every locale except *city*. With the average *city* school decreasing in size by nearly 60 students, this is not surprising. For each of the other three locales, the increase was modest over the 19 year period. At the macro level, it is difficult to assign a cause to these increases, particularly when both *town-rural* and *rural* locales saw drops in enrollment, LEA, and school counts without any major change in mean size; however, it is possible that state and federal mandates since 1997-98 may have created a need to increase FTE without a corresponding increase in enrollment. Similarly, already small FTE size of the average *rural* school (between 17 and 18 FTE) may be close to a floor in terms of the minimal staff required to provide instruction in a small elementary or secondary school.

In terms of poverty, all locales experienced large increases in average share over the 19 year period. The average *rural* school saw an increase in its FRPL population from about one-third FRPL eligible to half being FRPL eligible. The average *Town-rural* saw a similar increase, with three-fifths of all students in the school being FRPL eligible by 2015-16. As with enrollment, the increase in FRPL does not appear to coincide with economic downturns. The Great Recession, which started roughly around the 2008-09 school year, does not appear to increase the mean FRPL share to the degree that the 1997-98 to 2003-04 period did. Of course, this should be interpreted with caution, since FRPL eligibility reporting was inconsistent (at the state level) over the 19 year period.

Finally, the share of non-White students enrolled in the average school increased in each of the four locales. This represents a continued diversification of students throughout the United States. While the average *rural* school started with the lowest share of non-white students (14%),

the increase to a 21% share represents a sizeable increase in non-white students in each school – especially if these communities were, in fact, fairly homogenous to being with. What is difficult to interpret with this statistic, though, is whether this increase is experienced evenly across *rural* schools in the United States. This is likely not the case, which is a similar argument for each of the statistics provided in these national trends. Thus, the second cut at the data focuses on U.S. regions to better illuminate how these changes are occurring. Figure 2.1 shows the organization of states by region as defined by the U.S. Census Bureau (U.S. Census Bureau, n.d. b).

Midwest	Northeast	South	West
Illinois	Connecticut	Alabama	Alaska
Indiana	Maine	Arkansas	Arizona
Iowa	Massachusetts	Delaware	California
Kansas	New Hampshire	Florida	Colorado
Michigan	New Jersey	Georgia	Hawaii
Minnesota	New York	Kentucky	Idaho
Missouri	Pennsylvania	Louisiana	Montana
Nebraska	Rhode Island	Maryland	Nevada
North Dakota	Vermont	Mississippi	New Mexico
Ohio		North Carolina	Oregon
South Dakota		Oklahoma	Washington
Wisconsin		South Carolina	Wyoming
		Tennessee	
		Texas	
		Virginia	
		West Virginia	

Figure 2.1. U.S. Census Bureau Geographical Regions

Midwest. Examination of the Midwest region reveals a narrative of student population decline and increased poverty. As Table 2.8 shows, Midwestern states generally trended towards greater enrollment losses than the national average of -8.8% for combined *rural* and *town-rural* enrollment counts. Generally, these population declines appear to be gradual over the 19 year period with a few exceptions.

Table 2.8

Midwest Region Student Rural and Town Public School Enrollment Trends from 1997-98 to 2015-16 School Years

	<u>1997-98</u>	<u>2003-04</u>	<u>2009-10</u>	<u>2015-16</u>	<u>% Change</u>
Illinois	358397	333097	319366	298503	-16.7
Indiana	331124	323806	317288	301485	-9.0
Iowa	289523	268742	255994	255866	-11.6
Kansas	227234	214971	201181	198422	-12.7
Michigan	395171	388446	342913	307611	-22.2
Minnesota	304451	278368	268410	267057	-12.3
Missouri	355241	350910	345143	337227	-5.1
Nebraska	150853	137287	130282	132909	-11.9
North Dakota	77898	63561	56242	63712	-18.2
Ohio	527541	511364	474527	448806	-14.9
South Dakota	103044	84629	80023	83634	-18.8
Wisconsin	316027	297076	288874	278693	-11.8

In particular, Michigan experienced a large drop around the start of the Great Recession (around the 2007-08 school year). Indeed, the enrollment tallies reported in Table 2.8 show Michigan losing about 40,000 students in each of the last two reported years (2009-10 and 2015-16 respectively). Other Midwestern states, like Ohio, also show similar drops in enrollment; however, not to the same extent in terms of overall share of *rural* and *town-rural* students. These declines are not surprising given the economic narratives and contexts of the Midwest: that of declining industry and less labor demand (Longworth, 2009).

In terms of Michigan's student enrollment decline, dwindling enrollment in *rural* and *town-rural* locales appears to be evenly distributed across the state (Figure 2.2). While Michigan has experienced the largest decline in student enrollment, it is not the exception. Examination of Midwestern states, with the possible exception of Missouri, reveal similar declines that are evenly distributed across each state.

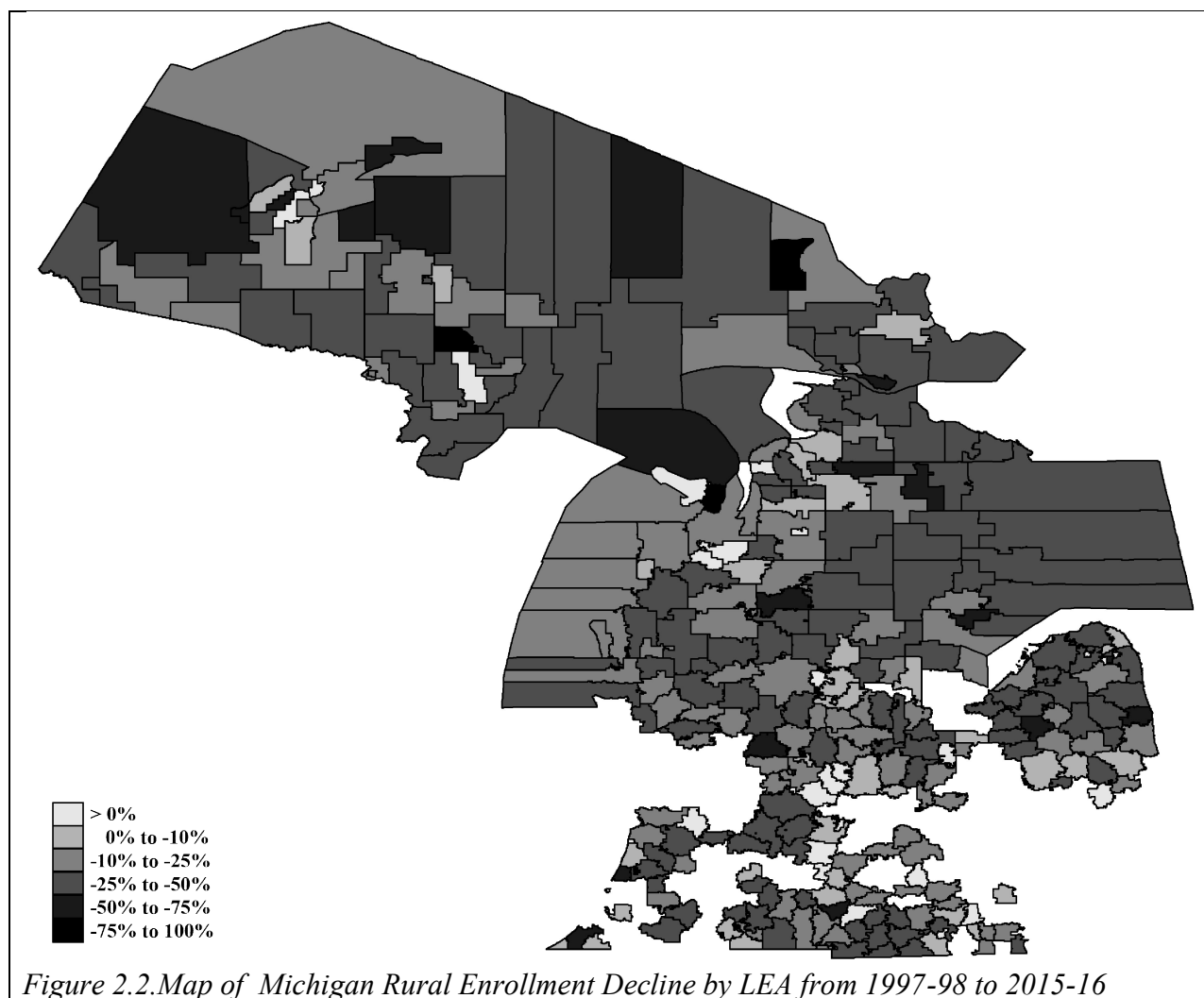


Figure 2.2. Map of Michigan Rural Enrollment Decline by LEA from 1997-98 to 2015-16

With the robust declines in student enrollment, it was anticipated that there would be a similar decline in LEAs and schools as a result of decreased efficiency and inability to maintain operations with a reduced revenues. As Table 2.9 shows, this was generally not the case for Midwestern states. Five of the twelve states experienced large drops in LEAs. Nebraska in particular saw a -62.3% decline over the 19 year period; however, that was largely due to changes in state policy, which forced the consolidation and reorganization of its LEAs (Blauwkamp, Longo, & Anderson, 2011). This general stability in the Midwest is likely due to the geographic distribution of these LEAs. Returning to Figure 2.2, it is clear that LEAs, particularly in the Upper Peninsula of Michigan, are quite expansive. So, even with rapid

population loss, consolidation of these LEAs may not be practical or desirable. Other states, like Illinois, contain fewer expansive LEAs and more single-community LEAs. Thus, consolidation of LEAs in that state may be more practical.

Table 2.9

Midwest Region Rural and Town LEA Counts from 1997-98 to 2015-16 School Years

	<u>1997-98</u>	<u>2003-04</u>	<u>2009-10</u>	<u>2015-16</u>	<u>% Change</u>
Illinois	469	456	441	422	-10.0
Indiana	183	183	186	186	1.6
Iowa	335	327	320	294	-12.2
Kansas	267	264	257	250	-6.4
Michigan	343	353	354	348	1.4
Minnesota	286	293	306	300	4.9
Missouri	440	442	440	437	-0.7
Nebraska	610 ¹	483 ¹	239	230	-62.3
North Dakota	229	207	177	171	-25.3
Ohio	334	328	346	348	4.2
South Dakota	187	165	150	144	-23.0
Wisconsin	295	294	294	293	-0.7

¹Nebraska implemented new school consolidation and organization policies, which resulted in the comparatively large change in LEAs over this time range (Blauwkamp, Longo, & Anderson, 2011).

School counts present a different story. While LEAs remained generally intact (with the exception of those five states), most Midwestern states experienced large declines in their *rural* and *town-rural* school counts (Table 2.10). This is less surprising, since declining enrollments and the impracticality or undesirability of consolidation may result in more reorganization and, thus, decline in schools. As with the LEAs, the data in Table 2.9 for Nebraska is a bit confounded. Thus, the actual decline in schools in the state is much less striking when examining all locale types (Nebraska saw a drop in school counts by about 200 overall).

Table 2.10

Midwest Region Rural and Town School Counts from 1997-98 to 2015-16 School Years

	<u>1997-98</u>	<u>2003-04</u>	<u>2009-10</u>	<u>2015-16</u>	<u>% Change</u>
Illinois	1262	1194	1147	1056	-16.3
Indiana	742	730	719	690	-7.0
Iowa	1091	1027	981	900	-17.5
Kansas	948	903	870	790	-16.7
Michigan	1083	1042	1004	880	-18.7
Minnesota	812	794	789	781	-3.8
Missouri	1127	1140	1141	1133	0.5
Nebraska	1029 ¹	903 ¹	710	672	-34.7
North Dakota	476	437	393	388	-18.5
Ohio	1336	1290	1248	1128	-15.6
South Dakota	720	631	592	566	-21.4
Wisconsin	993	945	976	999	0.6

¹Nebraska implemented new school consolidation and organization policies, which resulted in the comparatively large change in school counts over this time range (Blauwkamp, Longo, & Anderson, 2011).

Student poverty, as indicated by free and reduced-price lunch eligibility (FRPL), increased during the 19 year period – doubling or nearly doubling in many of Midwestern states. This rapid increase in student poverty comes at the same time as the rapid declines in student enrollment observed in Table 2.8. As a result, the share of students who are FRPL eligible have approached nearly half of all *rural* and *town-rural* students by the 2015-16 school year in all but a few of the states in the Midwest (see Table 2.11).

Table 2.11

Midwest Region Rural and Town Public School Free and Reduced-Price Lunch Student Eligibility Trends from 1997-98 to 2015-16 School Years

	<u>1997-98</u>	<u>2003-04</u>	<u>2009-10</u>	<u>2015-16</u>	<u>2015-16 % Share</u>
Illinois	-	104192	127214	140462	47.1
Indiana	59009	100050	138366	142287	47.2
Iowa	57617	79556	94860	103760	40.6
Kansas	78651	87563	101190	106891	53.9
Michigan	90513	134646	164605	149323	48.5
Minnesota	61548	88338	103117	104808	39.2
Missouri	109415	153289	173024	190502	56.5
Nebraska	30854	48291	53050	57088	43.0
North Dakota	19549	21020	20655	21289	33.4
Ohio	90166	133824	194295	197454	44.0
South Dakota	36324	28441	30840	34496	41.2
Wisconsin	49260	75401	104598	112732	40.5

Notes. Illinois did not report FRPL during the 1997-98 school year.

Thus with the increase in FRPL eligibility, it is simply not the poor students remaining while the wealthier students depart. Instead, there appears to be clear jumps in FRPL eligibility surrounding economic events like the Great Recession. In this sense, remote and isolated schools are likely not insulated from such economic downturns.

Northeast. The Northeast region has a similar narrative to the Midwest in terms of trends in student enrollment, the difference between the two largely being one of scale. The Northeast contains a smaller *rural* population than the Midwest. In terms of student population, Table 2.12 shows generally the same declines in student enrollment as the Midwestern states, particularly with the three largest states in terms of *rural* and *town-rural* enrollment: Maine, New York, and Pennsylvania.

Table 2.12

Northeast Region Student Rural and Town Public School Enrollment Trends from 1997-98 to 2015-16 School Years

	<u>1997-98</u>	<u>2003-04</u>	<u>2009-10</u>	<u>2015-16</u>	<u>% Change</u>
Connecticut	33822	36619	35647	32638	-3.5
Maine	136700	126803	110819	103697	-24.1
Massachusetts	43614	43287	41127	36653	-16.0
New Hampshire	81919	82281	77070	70069	-14.5
New Jersey	37719	41650	40675	35740	-5.2
New York	430430	399814	354259	315657	-26.7
Pennsylvania	346327	325220	299098	268710	-22.4
Rhode Island	5364	5577	4746	4460	-16.9
Vermont	87095	78623	69561	66301	-31.4

Indeed, all nine states in the region experienced declines in enrollment over the 19 year period; although, both Connecticut and New Jersey declined very slightly when compared to the other states. For the most part, these declines appear less gradual and steady over the time range when compared to the Midwest. In fact, the largest drops seem to occur after the start of the Great Recession, with the exception to the states with the largest drops (Maine, New York, Pennsylvania, and Vermont reflect trends similar to the Midwest and less like the other Northeast region states).

The differentiation in Northeast states also carries into FRPL eligibility. As Table 2.13 reveals, Maine, New York, Pennsylvania, and Vermont also differ strikingly from the other states in the region. In terms of percent share of *rural* and *town-rural* students who are FRPL eligible, these four states look more like Midwestern states in that they are approaching (or have approached) half of their students being FRPL eligible. The remaining states contain low FRPL shares and enrollment tallies. It is possible that given the small *rural* and *town-rural* student enrollments and the generally small size of the states, that these communities may be less isolated than those in more expansive states and may serve as sleeper communities for larger,

urban centers. Or, these communities may not be as susceptible to economic downturns like the larger states in the region and the Midwest.

Table 2.13

Northeast Region Student Rural and Town Public School FRPL Eligible Student Enrollment Trends from 1997-98 to 2015-16 School Years

	<u>1997-98</u>	<u>2003-04</u>	<u>2009-10</u>	<u>2015-16</u>	<u>2015-16 % Share</u>
Connecticut	1448	2357	3530	5089	15.6
Maine	35980	44413	52314	53477	51.6
Massachusetts	-	6686	8371	-	-
New Hampshire	10654	15113	19686	20772	29.6
New Jersey	4435	5898	7381	8184	22.9
New York	101427	-	140321	147313	46.7
Pennsylvania	-	98199	118409	126069	46.9
Rhode Island	397	576	614	711	15.9
Vermont	19684	23069	24932	27225	41.1

Notes. States with missing counts did not report FRPL eligibility during those given years.

In terms of student diversity, Table 2.14 suggests that the Northeast is still predominantly White. While all nine states experienced an increasingly diversified student population in terms of race, these changes are relatively small.

Table 2.14

Northeast Region Student Rural and Town Public School Percent Share of Non-White Students from 1997-98 to 2015-16 School Years

	<u>1997-98</u>	<u>2003-04</u>	<u>2009-10</u>	<u>2015-16</u>
Connecticut	3.5	4.7	7.2	12.3
Maine	2.1	2.7	4.0	5.9
Massachusetts	3.8	5.4	9.1	13.5
New Hampshire	1.8	2.7	5.1	7.0
New Jersey	9.2	10.7	14.9	19.0
New York	5.3	6.8	9.5	11.9
Pennsylvania	2.8	4.4	6.4	8.3
Rhode Island	1.7	3.3	4.1	6.7
Vermont	2.3	3.6	5.0	6.6

Indeed, all of the states increased by fewer than ten percentage points over the 19 year period. Of note, though, is that these states were all comprised of at least 90% White students in *rural* and *town-rural* locales during the 1997-98 school year. Thus, these increases suggest that schools are not only likely to experience a growing population of non-White students but that they may also have started with few if any non-White students less than two decades ago.

South. Upon examination of the South region, it is clear that there are notable differences between the states in the region and both the Midwest and Northeast. The first difference is how states in the region trended over the 19 year period in terms of student enrollment counts. As Table 2.15 shows, state trends are mixed. While states like Louisiana, Mississippi, and West Virginia saw losses similar to the Midwest, the remaining states either had more modest declines or experienced growth. In fact, the four largest states in the region during the 2015-16 school year (Texas, Kentucky, Georgia, and Oklahoma) all experienced enrollment growth over the period.

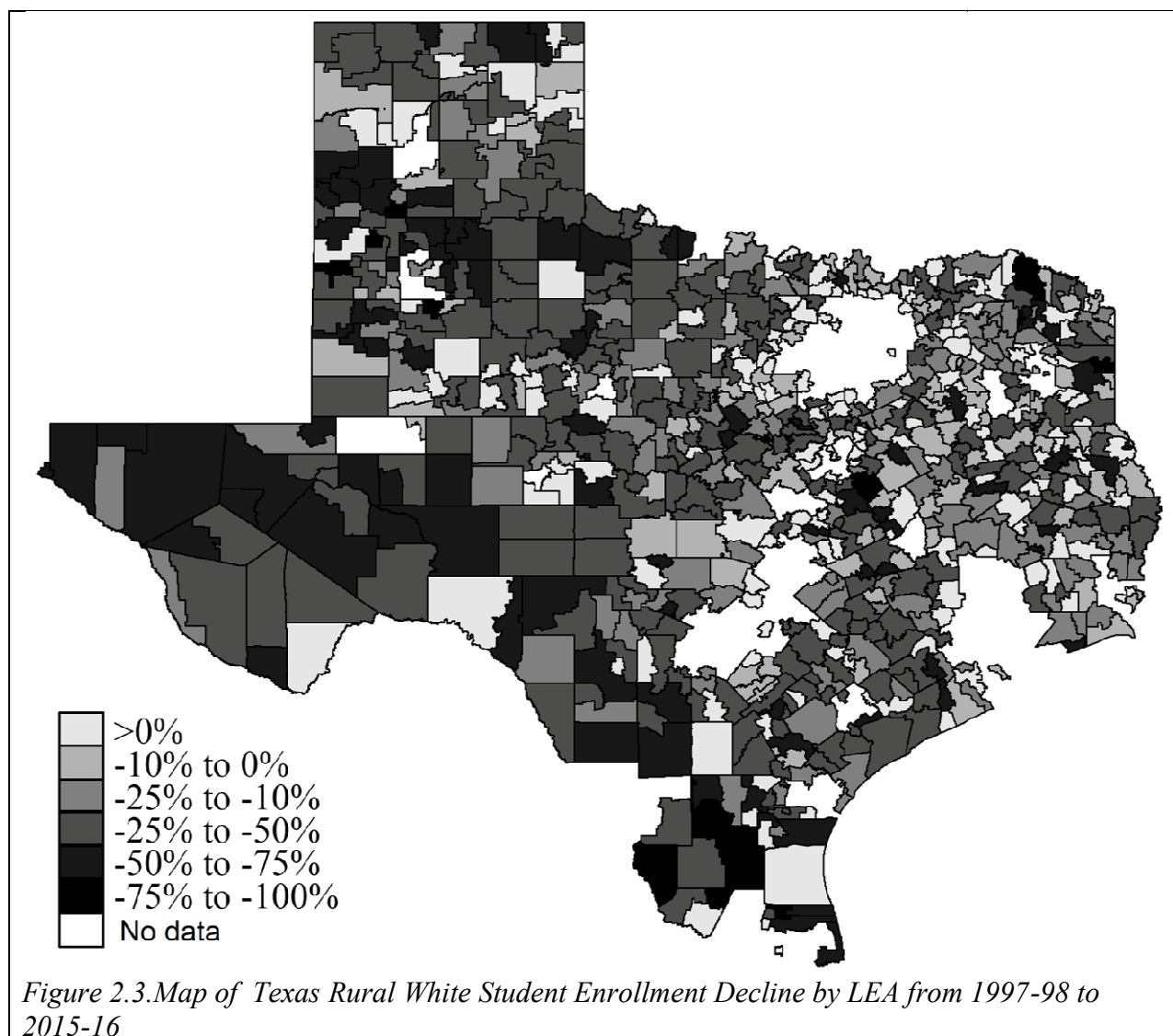
Table 2.15

South Region Student Rural and Town Public School Enrollment Trends from 1997-98 to 2015-16 School Years

	<u>1997-98</u>	<u>2003-04</u>	<u>2009-10</u>	<u>2015-16</u>	<u>% Change</u>
Alabama	250379	240717	238236	228343	-8.8
Arkansas	264099	248138	245358	237685	-10.0
Delaware	13065	14146	15618	16515	26.4
Florida	123323	121736	117116	115354	-6.5
Georgia	363290	363490	363494	365921	0.7
Kentucky	356335	345527	362796	357666	0.4
Louisiana	184659	167439	157224	155902	-15.6
Maryland	26825	25268	25124	24762	-7.7
Mississippi	340424	317679	307954	294729	-13.4
North Carolina	307027	312078	302263	298798	-2.7
Oklahoma	329322	325539	332059	334873	1.7
South Carolina	175456	177759	162039	153107	-12.7
Tennessee	265350	266919	281519	275919	4.0
Texas	798117	805785	813711	835266	4.7
Virginia	227865	223949	227639	218272	-4.2
West Virginia	151206	138880	135798	128912	-14.7

Delaware also had a marked increase in student enrollment; however, the state's initial *rural* and *town-rural* population is small, making any gains appear large in terms of growth percentages.

The growth in student enrollment does not reflect an equal growth when considering student characteristics. While Texas has experienced a 4.7% enrollment increase over 19 years, the growth is not even. In fact, this growth masks a decline in White student population in *rural* and *town-rural* locales. Figure 2.3 illuminates this decline by showing the percent decline in White student enrollment counts in every *rural* and *town-rural* LEA. The figure suggests that the decline is a statewide phenomenon, with the largest LEA percent declines occurring in the northern and southwestern portions of the state. Notably, these LEAs appear to be the largest in terms of area coverage and are furthest from the urban centers in the state.



The decline in White student enrollment over time, as is the case in Texas, suggests that rapid population increases must be occurring in other student racial groups at a fairly large scale in order to still experience a sizeable, overall increase or mitigate the overall decline in student enrollment in these *rural* and *town-rural* LEAs. In the South region, this appears to be predominantly the result of increases in Latino student enrollment. Indeed, Table 2.16 suggests that most southern states have not only had rapid and large increases in enrollment, but that these students are largely offsetting the decline in White student enrollment.

Table 2.16

South Region Student Rural and Town Public School Latino Student Enrollment Trends from 1997-98 to 2015-16 School Years

	<u>1997-98</u>	<u>2003-04</u>	<u>2009-10</u>	<u>2015-16</u>	<u>% Change</u>
Alabama	2386	6433	12331	18476	674.4
Arkansas	4558	9013	15606	20691	353.9
Delaware	546	1245	2327	3703	578.2
Florida	11040	14888	17578	22747	106.0
Georgia	6411	14438	24943	34810	443.0
Kentucky	1207	3226	7917	13908	1052.3
Louisiana	1558	1973	3103	5278	238.8
Maryland	199	497	1101	1910	859.8
Mississippi	1146	2925	5442	8319	625.9
North Carolina	7460	17676	28495	41790	460.2
Oklahoma	11903	17339	24529	36665	208.0
South Carolina	1120	4349	6403	9159	717.8
Tennessee	1831	-	9753	14789	707.7
Texas	246607	281728	322059	371077	50.5
Virginia	2021	4549	8454	13017	544.1
West Virginia	367	399	737	1087	196.2

Notes. Tennessee did not report Latino student enrollment during the 2003-14 school year.

In the case of Texas, the state experienced an increase of nearly 125,000 Latino students, which appears to be partly responsible for the more than 35,000 student increase over the 19 year period. Of all the states, this is the most dramatic, but the story appears to be similar for states like North Carolina and Oklahoma. This narrative contrasts that of the Midwest and Northeast. While these northern states have experienced rapid increases in Latino student enrollment (particularly in terms of share, where *rural* and *town-rural* schools went from virtually 0% share to 7~10% share in Latino students), their overall population declines are not as clearly offset by the declines in overall student enrollment primarily caused by the decline in White student counts.

Unlike states in the northern regions, southern states report large shares of non-White students in *rural* and *town-rural* locales. In fact as Table 2.17 shows, two out of every five

students in most states are not White – a clear contrast from the Midwest and Northeast, where the ratio is more like one out of every ten students.

Table 2.17

South Region Student Rural and Town Public School Percent Share of Non-White Students from 1997-98 to 2015-16 School Years

	<u>1997-98</u>	<u>2003-04</u>	<u>2009-10</u>	<u>2015-16</u>
Alabama	36.0	36.6	36.2	38.3
Arkansas	23.0	23.9	25.9	27.5
Delaware	28.6	30.9	36.1	42.9
Florida	30.5	32.5	36.1	40.9
Georgia	40.0	40.0	42.2	44.4
Kentucky	5.7	6.0	8.6	11.3
Louisiana	45.5	45.9	46.3	48.0
Maryland	25.9	25.7	30.1	37.1
Mississippi	56.6	56.5	56.1	56.2
North Carolina	41.0	43.7	44.8	47.4
Oklahoma	31.2	37.1	41.2	46.0
South Carolina	59.0	60.1	59.0	59.4
Tennessee	10.5	-	13.1	16.2
Texas	41.4	45.2	49.4	54.5
Virginia	28.5	29.1	29.6	32.5
West Virginia	2.9	3.2	4.0	5.1

Notes. Tennessee did not report enrollment by race during the 2003-04 school year.

Indeed, southern states have historically had large Black student populations in *rural* and *town-rural* schools (as also indicated in Table 2.17); however, and much like White student enrollment (in the South as well as the Midwest and Northeast), Black student enrollment has also declined.

Table 2.18 shows this change with the increase in the percent share of Latino students over the 19 year period (much like the rapid increase in Latino student enrollment counts).

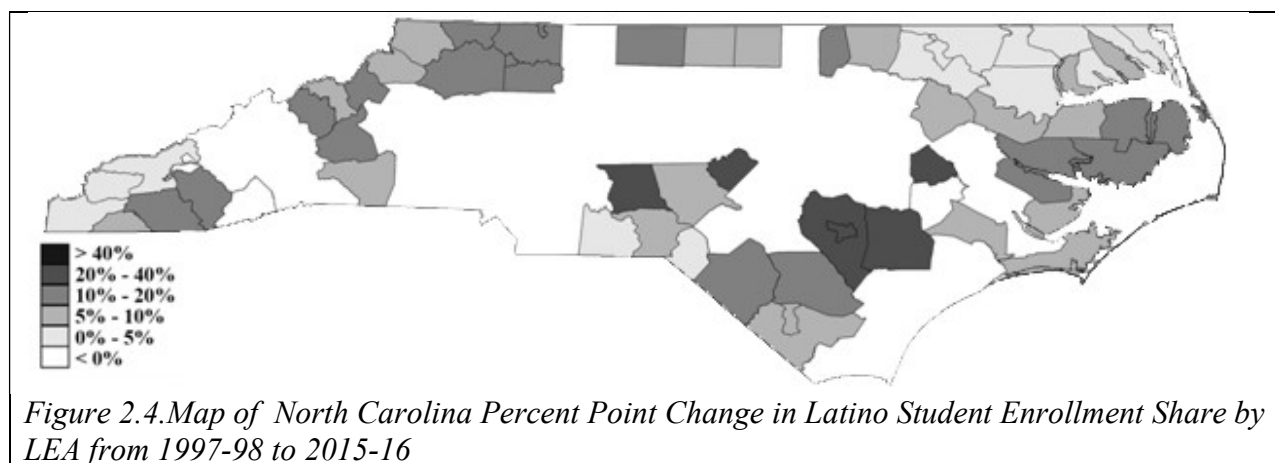
Table 2.18

South Region Student Rural and Town Public School Percent Share of Latino Students from 1997-98 to 2015-16 School Years

	<u>1997-98</u>	<u>2003-04</u>	<u>2009-10</u>	<u>2015-16</u>
Alabama	1.0	2.7	5.2	8.1
Arkansas	1.7	3.6	6.4	8.7
Delaware	4.2	8.8	14.9	22.4
Florida	9.0	12.2	15.0	19.7
Georgia	1.7	4.0	6.9	9.5
Kentucky	0.3	0.9	2.0	3.9
Louisiana	0.8	1.2	2.0	3.4
Maryland	0.7	2.0	4.4	7.7
Mississippi	0.3	0.9	1.8	2.8
North Carolina	2.4	5.7	9.4	14.0
Oklahoma	3.6	5.3	7.4	10.9
South Carolina	0.6	2.4	4.0	6.0
Tennessee	0.7	-	3.5	5.4
Texas	30.9	35.0	39.6	44.4
Virginia	0.9	2.0	3.7	6.0
West Virginia	0.2	0.3	0.5	0.8

Notes. Tennessee did not report student enrollment by race during the 2003-04 school year.

North Carolina experienced a share increase in Latino student enrollment by nearly 12 percentage points. This change is more similar to those of the Midwest than Texas in terms of share, but it is notable for two reasons. First, the Latino student population more than quintupled over the 19-year period. Second, the distribution (Figure 2.4) change in state reflects an outward expansion of the Latino population (including students) into the rural areas of the state. As Figure 2.4 indicates, *rural* and *town-rural* LEAs near *city* and *suburb* LEAs experienced large (10% to 40%) percentage point increases in Latino student shares. This reflects both a decline in White student population and the rapid growth of the Latino student population.



Over a relatively short period of time, this represents a rapid change for schools and LEAs to adjust, particularly if these schools and LEAs have been traditionally homogenous in terms of student race.

In terms of this homogeneity, the South region has a larger distribution of predominantly White and non-White schools. While the Midwest and Northeast do have a considerable tally of predominantly White schools, there is not the same number of predominantly non-White schools in addition to these schools as it is the case in the South. Table 2.19 reports this distribution over time.

Table 2.19

Distribution of Schools by Percent White Student Enrollment from 1997-98 to 2015-16 School Years

<u>Percent White</u>	<u>1997-98</u>	<u>2003-04</u>	<u>2009-10</u>	<u>2015-16</u>
0% - 10%	582	650	721	728
10% - 20%	297	350	351	432
20% - 30%	375	406	474	546
30% - 40%	508	534	614	656
40% - 50%	748	814	848	914
50% - 60%	928	935	995	989
60% - 70%	1032	1031	1033	1089
70% - 80%	1099	1028	1150	1171
80% - 90%	1199	1186	1332	1218
90% - 100%	3059	2447	2294	1814
<i>Total</i>	<i>9847</i>	<i>9920</i>	<i>9813</i>	<i>9557</i>

As the data in the table suggests, schools in the South region are becoming less predominantly White in terms of student enrollment. In fact, the number of schools that are predominantly non-White (particularly 80% - 100% non-White) has increased steadily over time. Most striking, though is the drop in predominantly White (80% to 100% White student enrollment) schools by about 1,500 schools over the 19-year period.

Like other rural locales in the U.S., the South region has experienced increases in student poverty. Unlike the Midwest and Northeast (but like the West), southern states have an already high starting level of student poverty by 1997-98. Over the 19 years, enrollment tallies of FRPL eligible students has only increased, with almost all southern states reporting more than 50% FRPL eligibility in *rural* and *town-rural* schools. In fact, 12 out of the 16 states report three out of every five students being FRPL eligible, with South Carolina and Mississippi reporting more than 80% of their rural students as being FRPL eligible by 2015-16.

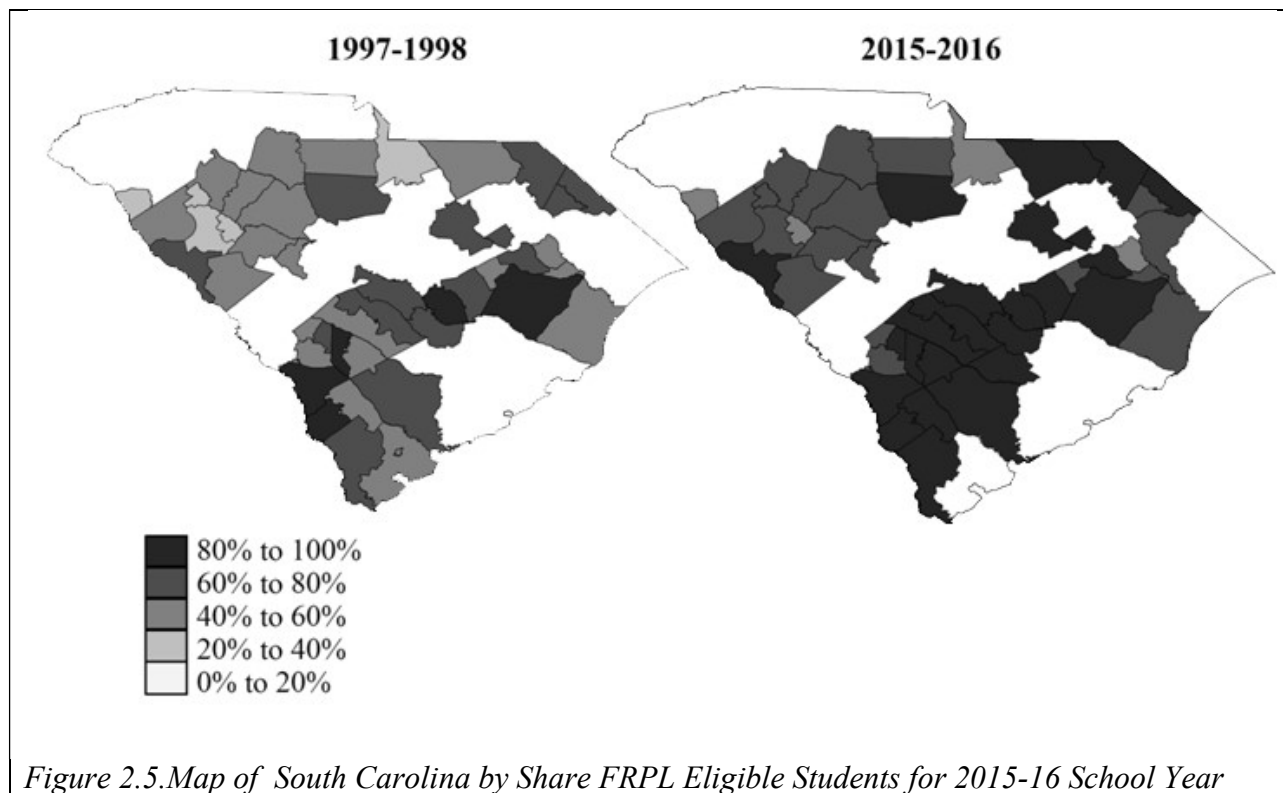
Table 2.20

South Region Student Rural and Town Public School Free and Reduced-Price Lunch Student Eligibility Trends from 1997-98 to 2015-16 School Years

	<u>1997-98</u>	<u>2003-04</u>	<u>2009-10</u>	<u>2015-16</u>	<u>2015-16 % Share</u>
Alabama	105813	138306	148990	136639	59.8
Arkansas	106376	135148	157024	161622	68.0
Delaware	4422	5221	7716	5920	35.8
Florida	53484	67328	74489	68763	59.6
Georgia	202646	210017	234713	274644	75.1
Kentucky	158825	-	217241	229225	64.1
Louisiana	100622	110706	111075	102267	65.6
Maryland	8262	9647	11718	13391	54.1
Mississippi	209151	227322	234421	237415	80.6
North Carolina	122294	176353	170717	219161	73.3
Oklahoma	133220	189427	215453	219402	65.5
South Carolina	100193	119064	114397	123229	80.5
Tennessee	-	-	168232	180836	65.5
Texas	320473	415554	451416	505767	60.6
Virginia	74101	92725	110001	116359	53.3
West Virginia	69179	76049	76311	66347	51.5

Notes. States with missing counts did not report FRPL eligibility during those given years.

South Carolina highlights this rapid increase in student poverty. Examination of LEA shares of FRPL eligible students (reported in Figure 2.5) reveals that nearly every *rural* and *town-rural* LEA in the state has a majority, if not a high or extreme majority, of FRPL eligible students. In fact, the entire southern portion of the state LEAs included in the analysis has at least 80% FRPL eligibility by 2015-16.



West. The West region represents the most diverse in terms of discernable patterns and trends in student characteristics. Owing much to its sheer geographic size, the states in the region appear to have experienced different types of changes in both enrollment and characteristics over the 19-year period. Unlike the South, Midwest, and Northeast, where general narratives and trends seem shared among the states in each region, the states that comprise the West are indeed mixed. As the data in Table 2.21 reports, overall student enrollment in *rural* and *town-rural* schools generally declined across the western states. The exceptions to this decline being Arizona (8.9% increase), Alaska (0.4% increase), and Utah (22.4% increase). This decline in enrollment is smaller than the Midwest in terms of size (total enrollment counts) and percent change. Thus, while most of these states are losing population, the loss is gradual over time. Of note is the state of Hawaii, which because of how the criteria for defining *rural* and *town-rural*

were established, shows a total loss of student population in these locales (with the closure of a single school).

Table 2.21

West Region Student Rural and Town Public School Enrollment Trends from 1997-98 to 2015-16 School Years

	<u>1997-98</u>	<u>2003-04</u>	<u>2009-10</u>	<u>2015-16</u>	<u>% Change</u>
Alaska	61972	62124	55995	62240	0.4
Arizona	129500	143473	154373	140995	8.9
California	350492	360746	333803	341736	-2.5
Colorado	125445	128530	134200	116059	-7.5
Hawaii	7	3	0	0	-100.0
Idaho	112365	106462	106604	108842	-3.1
Montana	118346	106946	101562	103506	-12.5
Nevada	45617	43425	43754	40674	-10.8
New Mexico	143842	128517	123661	122634	-14.7
Oregon	147309	137705	136349	138477	-6.0
Utah	73727	72935	85447	94984	22.4
Washington	171986	164315	157761	163713	-4.8
Wyoming	69913	59153	62054	67271	-3.8

Similarly, Utah stands out as one of the few states with a sizeable *rural* and *town-rural* population that has also increased its population significantly over the 19 years. Examination of the distribution of this change at the LEA level (Figure 2.6) reveals that much of this growth is concentrated around the Salt Lake City region. Because of the size of Utah's rural LEAs, it is likely that the student population growth has occurred on the inside edges of these district boundaries (closest to Salt Lake City). Thus, as the urban center expands in terms of population, the edges of these LEAs also expand. Similarly, the southern half of the state shows population decline, which is reflective of the other states in the region.

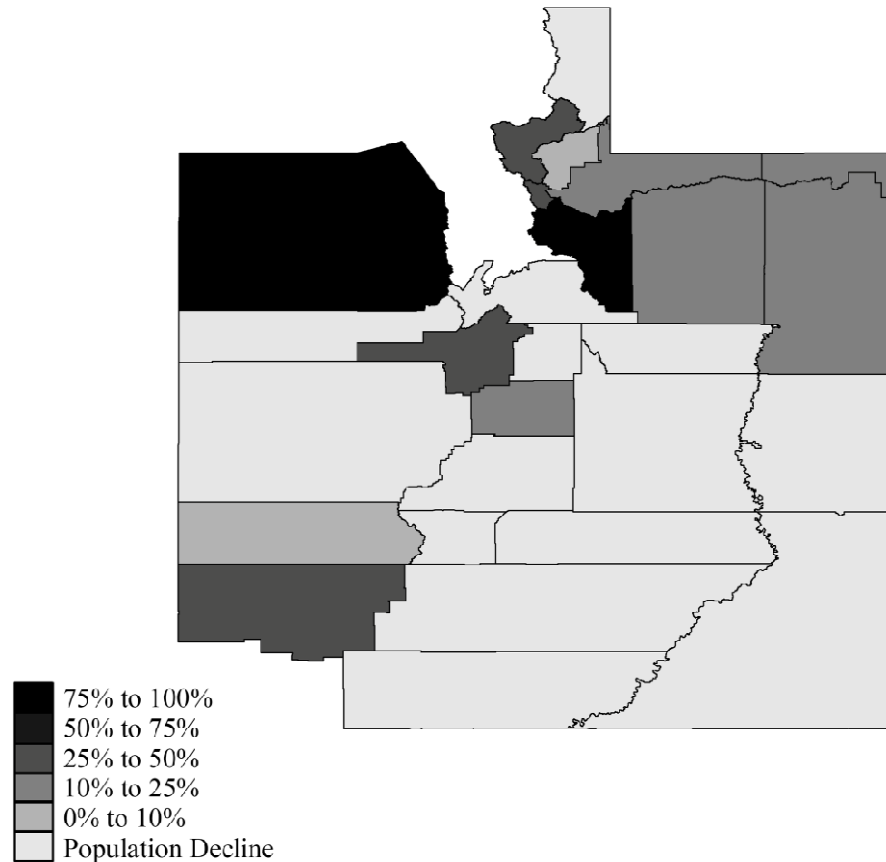


Figure 2.6. Map of Utah Rural and Town-Rural Enrollment Decline by LEA from 1997-98 to 2015-16

Examination of percent shares of non-White students (Table 2.22) showed that coastal and southern border states experienced large changes in share over the 19 year period. Notably, California saw a 23 point change in share over the period. With a large rural student population, this suggests a substantial change in student composition in Californian schools. Washington is another notable state, with more than an 18 point change in share. Generally, though, all states experienced an increase in Latino student enrollment and, thus, statewide enrollment tallies indicate an increasingly less White rural student population.

Table 2.22

South Region Student Rural and Town Public School Percent Share of Non-White Students from 1997-98 to 2015-16 School Years

	<u>1997-98</u>	<u>2003-04</u>	<u>2009-10</u>	<u>2015-16</u>
Alaska	43.9	46.0	49.7	53.0
Arizona	57.6	58.4	59.6	62.1
California	37.7	47.2	55.7	60.7
Colorado	22.3	28.3	33.9	37.5
Hawaii	100.0	100.0	-	-
Idaho	-	18.2	22.0	25.6
Montana	13.8	15.6	17.3	20.9
Nevada	20.2	25.0	31.1	36.9
New Mexico	62.4	66.7	70.8	73.7
Oregon	14.8	20.2	25.7	30.3
Utah	10.1	12.9	23.7	17.5
Washington	25.3	30.5	37.0	43.7
Wyoming	10.4	12.8	17.9	21.1

Notes. States with missing counts did not report enrollment by race during those given years.

As with each of the other regions, western states have also experienced increasing levels of student poverty. While not as predominant as in the South, most western states are approaching or have surpassed 50% FRPL eligibility by 2015-16. Reported tallies (Table 2.23) suggest that the largest gains occurred during or prior to the Great Recession, with states like Arizona, Colorado, and Utah beginning to reverse direction and show declines in FRPL eligible students. The remaining states in the region report generally gradual increases in FRPL, even with the largest gains occurring prior to 2009-10.

Table 2.23

West Region Student Rural and Town Public School Free and Reduced-Price Lunch Student Eligibility Trends from 1997-98 to 2015-16 School Years

	<u>1997-98</u>	<u>2003-04</u>	<u>2009-10</u>	<u>2015-16</u>	<u>2015-16 % Share</u>
Alaska	19483	21599	25127	29320	47.1
Arizona	-	77245	88793	78935	56.0
California	169447	182966	198183	222156	65.0
Colorado	30568	45440	56604	54986	47.4
Hawaii	4	0	0	0	-
Idaho	31602	45704	51939	57377	52.7
Montana	27546	37559	41719	45454	43.9
Nevada	12622	14112	16756	18263	44.9
New Mexico	-	82861	88056	94426	77.0
Oregon	45485	66224	76106	77953	56.3
Utah	19267	28695	39546	39511	41.6
Washington	-	79676	88831	96417	58.9
Wyoming	13408	18066	21295	23987	35.7

Notes. States with missing counts did not report FRPL eligibility during those given years.

Discussion

Student population change. From the findings reported above, it is clear that the student population in *rural* and *town-rural* schools across the United States is changing. The ways in which these changes have and are occurring differ from state to state, but four general trends appear to be common for most states. First, *rural* and *town-rural* schools are becoming less White. Every state except for Hawaii and Mississippi saw increases in their percent share of non-White students over the 19-year period. Data reported in Table 2.19 for the South region further illuminates this point. Clearly, predominantly White schools (particularly those with fewer than 20% share of non-White students) have become increasingly fewer. In part this is due to the decline in White student enrollment experienced by *rural* and *town-rural* schools across the United States.

Second, almost all states have reported marked increases in Latino student enrollment in *rural* and *town-rural* schools. While the degrees to which this growth varies across states, every

state except for Hawaii saw increases in the statewide share of Latino students. This growth appears to have been experienced in two ways. States along the southern border and coasts generally had established Latino student populations, including a large share, during the 1997-98 school year. These shares continued to increase as the Latino student population also increased and White student population decreased. This supports Longworth's (2009) observations and the research by Parrado & Kandel (2010): Latino workers, along with their families, are moving into small town and rural communities, replacing (to an extent) the declining existing population.

Third, student poverty in *rural* and *town-rural* schools has grown, dramatically in most states, over the 19 year period. With the start of the Great Recession around 2007-2008, this finding is not unexpected; however, it is noteworthy that the increases in FRPL eligibility started prior to this event. Indeed, *rural* and *town-rural* communities had experienced increases in FRPL shares since at least the beginning of the time range (1997-98 school year). This increase is not unique to *rural* and *town-rural* locales as *suburb* schools also reported large increases – particularly around the start of the Great Recession. This increase in FRPL appears to not be connected specifically to race; however, it must be cautioned that this study cannot causally link FRPL eligibility, enrollment, and race. Likewise, the available data treats race and FRPL reporting separately, so there it is not possible to disentangle the two reported statistics to determine if the FRPL increases are linked to the new student population. Instead, it is likely that FRPL increases are related to existing local and state contexts, as well as developing or evolving contexts related to events like the Great Recession. Thus, findings like those of Parrado and Kandel (2010) – that the rapid migration of Latino workers into traditionally White communities do not increase economic inequality nor do they lower the economic outlook of these communities – still fit within the findings of this analysis. Similarly, Kuznets's (1955) theory of

migrating populations cannot be proven; however, the findings presented in this analysis still support his explanation for labor migration between rural and urban markets.

The degree to which states experience increases in FRPL does not appear to be equal in the reported findings. Indeed, there does appear to be general similarities based on geographic regions, which makes sense given that these similar-type areas would also likely share similar industries. What is troubling, though, is that the increase in FRPL eligibility increased in states and regions that already reported high starting shares of FRPL eligible students. States like South Carolina and Mississippi are notable as their *rural* and *town-rural* shares of FRPL eligible students increase above 80% - suggesting that four out of every five students is now (as of the 2015-16 school year) FRPL eligible. This represents a serious challenge for communities and leaders, as they not only have to navigate population decline but they also must address these large increases in student poverty.

Fourth, the number of *rural* schools is steadily declining. While Table 2.4 shows a modest decline in *town-rural* schools (about -3.2% from 1997-98 to 2015-16), the drop by more than 10% in *rural* schools (almost 1800) and LEAs (nearly 700) reflects the precarious position that these locales are in with continued declines in enrollment and other contextual changes (such as economic trouble). These declines also demonstrate the very real possibility of district closure and/or consolidation, especially with continued enrollment declines.

Funding. As discussed in the literature review, small rural schools are generally inefficient when compared to larger, more urban schools (Howley, Johnson, & Petrie, 2011). Decreases in student enrollment, in particular, will only serve to create greater inefficiencies in these schools and LEAs – as there will be fewer students to generate revenues for programs and operations. Schools in states that rely on property taxes to generate revenues will require

additional funding to maintain operational costs (such as busing and transportation, which is likely to operate regardless of the decline in students) and services. Similarly, schools in states that do not rely on local property taxes to directly generate revenues for the local LEA/school will continue to lose funds as student enrollment dwindles. In both cases, it is expected that leaders are placed in precarious positions: cut programs and services to keep school doors open; or, develop and support policies to generate additional revenues for the LEA/school (such as property tax increases). Neither of these solutions appear tenable given the already property poor nature of these schools (Monk, 2007) and the already comparably limited curricular offerings of small, rural schools (Barker, 1985).

Pressures to consolidate. With fewer students and per pupil funding, the pressure to consolidate will almost certainly increase. Undoubtedly, school leaders face tremendous pressure to keep their schools and districts open. Given the findings from this paper, it is also clear that consolidation has been occurring and will continue to occur as enrollment declines and funding operations become unsustainable. As research on school consolidation suggests, schools are intrinsically linked to the communities in which they are located (Bard, Gardener, & Weiland, 2006; Peshkin, 1978). Efforts to close or consolidate schools are often met with fierce opposition (Bard, Gardener, & Weiland, 2006; Post & Stambach, 1999) and fear that such closures could threaten the survival of the community (Woodrum, 2004). Thus, school leaders are burdened with finding strategies and solutions to avoid such undesirable outcomes. Such tasks are not beyond the purview of leadership, but add an additional layer of responsibility on leaders who are likely already tasked with much of the managerial and operational leadership duties and decision-making of the school and district. Indeed, with the average *rural* LEA containing about two schools, there are likely few formal leaders – likely a superintendent and building principals.

Given the small average size of these schools reported in the findings section, it is also likely that there are few assistant principals and/or other central office administrators in these small LEAs. Thus, this expectation of wide-reaching leadership duties and responsibilities is not limited to this discussion on funding and consolidation, but is considered for each of the topics in this discussion.

Community and student needs. As rural schools and communities become more diverse in terms of race, the question of community representation becomes a clear issue. As Peshkin (1978) and Longworth (2009) note, new residents are viewed as outsiders – never attaining the same social statuses within the communities as those who have lived there their entire lives. The tight-knit social networks that provide access for insiders also insulated the community from outsiders and change. Thus, tension appears when such communities are exposed to change (Allen & Dillman, 1994; Howley, 2004). The presence of a new population – as indicated by the increases in Latino student enrollment – represents such a tension. Indeed, Longworth (2009) observed generally hostile attitudes (either covert or overt) from long-time residents in communities that had influxes of immigrant laborers and overt xenophobia in communities yet to experience such increases – even when these increases helped to ensure the survival of the community. Thus, school leaders – just as other community leaders – will need to be prepared to navigate these tensions to ensure that students’ needs are not being ignored.

Services. In terms of education, this outsider status presents a challenge for school leaders in ensuring that students’ needs are being met. One such potential need is for additional services - such as English Language Learner (ELL) programs - that are likely not present in schools that, until recently, did not need them. NCES does not collect ELL data and so it is not possible for this study to determine whether there has been an increase in ELL services in *rural* and *town-*

rural schools; however, research has shown the presence of a relationship between increases in Latino student enrollment and the need for ELL services (Artiles, Rueda, Salazar, & Higareda, 2005). For services like ELL, it is up to educational leaders and staff to allocate resources and work to program these services as needed by the students. Without a prior need for these services, there is the possibility that leaders and staff are not prepared to implement them. Where schools that serve a student population of English Language Learners or whose primary language is not English are likely to have exposure to professional learning and training centered on addressing these students' needs, schools without such population would seem less likely to devote attention to such tasks. In other words, the concern with schools that have few or no students in need of ELL services is that leaders and staff may fail to recognize such a need or may be delayed in adjusting and adding services. Thus, challenges exist in recognizing trends in terms of students' needs and ensuring proper training to be prepared to recognize when to make timely and appropriate decisions to meet these needs.

Representation. Given the discussion presented above, there is also concern that the new population (both students and families) will not be represented in education-related decisions. This moves beyond the recognition of students' needs in terms of services but still emphasizes the need for school leaders to be aware of changes in student enrollment. Namely, this awareness is needed in order to recognize what the existing school board may not: differences in needs, beliefs, and values that new students and families may have in terms of education. It is unclear how or if new populations will be able to achieve representation in these small communities. Peshkin's research (1978) and Longworth's (2009) anecdotes suggest that the representative power and social capital will largely remain with the established residents. Thus, the local governance of the public school district could fail to represent the values and beliefs of a rapidly

growing share of its population. Because of public education's obligation, school leaders must be aware of these potential differences between formal and informal representatives, as well as those who are not represented (but are present).

Instruction. In addition to increasing inefficiency due to declining enrollment, educational leaders also must navigate changes related to curriculum. As discussed above, small schools program a comparatively small curriculum when compared to larger schools (Barker, 1985; Monk & Haller, 1993). FTE statistics reported in Table 2.7 shows the average *rural* school employing considerably fewer instructional staff than any other locale type with only 18 FTE positions. Indeed, Monk (2007) suggests that these limited FTE positions change the ways in which rural schools view teacher quality: teachers must be broadly trained (as opposed to specialists in a specific subject area), capable of teaching general subject areas (i.e. grade level math as opposed to just Calculus) to a wide range of ability levels. As student enrollment declines and funding along with it, principals will face the challenge of reducing FTE positions to offset these declines – further reducing the comprehensiveness of the curricular offerings in the school. With most states mandating a minimum (or essential) curriculum for graduation, leaders have little choice when faced between eliminating a core course and an elective. While rural secondary schools do have less comprehensive offerings in terms of electives, Barker (1985) found that these schools still maintain a select offering of courses intrinsically linked to and valued by the community. This is problematic because these courses (i.e. an agricultural set of courses or program like Future Farmers of America in an agricultural industry-dominant community) will become threatened, leaving little in terms of additional options for students to pursue interests and posing a threat to community identity which is tied to the school (Howley, 2004). Thus, as student enrollment declines, it is expected that these rural schools will become

less competitive in terms of what they can offer students when compared to much larger schools and districts. Interestingly, the mean FTE statistic increased over time in *rural* schools; although, not by much. This does suggest that there is not a precipitous drop in school FTE positions that match the rapid decline in student enrollment; however, this slight increase in FTE still suggests concerns regarding the teacher and principal labor markets in these schools.

Labor market. Although the FTE positions in *rural* and *town-rural* schools increased slightly (Table 2.7), the findings reveal concerns for the future labor markets in these areas. First, the continued closure and consolidation of these schools and LEAs suggests that the teaching and administrator labor force is shrinking. While the FTE average did marginally increase, it is not likely that such increases offset declines in *rural* LEAs and schools (approximately 700 and 1800 respectively). Such rapid declines suggest that demand for teachers and administrators are initially low; although NCES does not collect data in the CCD to determine if this is the case. Thus, it is unclear to what extent teachers and administrators exit the market (temporarily or permanently) or if they seek other positions in contextually dissimilar settings. Similarly, it is possible that, over time, the dwindling enrollment and growing fiscal inefficiencies of schools and districts will make these schools less stable and desirable for attracting labor.

Second, with fewer students graduating rural schools, there will be a smaller teacher and administrator labor force to seek positions in such locales. Research on teacher labor markets suggest that teachers prefer to teach in close proximity to their hometowns or in contextually similar settings (Boyd, Lankford, Loeb, & Wyckoff, 2005; Reininger, 2012). Thus, with a smaller graduate pool likely to become teachers, it follows that there would be similarly fewer to seek open positions in these locales. Indeed, Monk (2007) notes that attracting teachers with little

or no experiences with rural contexts and locales is difficult for schools and leaders: the salaries are often comparatively lower than more urban locales; there is less access to services and amenities; and these teachers may be averse to rural life.

Third, the data suggests that rural schools are changing – in some states, rapidly. Considering Reininger’s (2012) findings along with those of Boyd, Lankford, Loeb, and Wyckoff (2005), teachers prefer settings that they are comfortable with. With these student demographic and enrollment changes, the schools that these teachers leave as graduates and return as staff, the schools could be different in terms of composition and needs. The ways in which these teachers experienced education as students may not be the ways in which the school provides education in just four or five years. Thus, the knowledge, experiences, and skills that these teachers and administrators developed as students to navigate these contexts – and those that would arguably suit them for positions in these schools – may no longer be appropriate fits for the demands and needs of the current students.

Representation. The data reported in the findings section reinforce the discussion presented in the review of literature: the problematic nature of representation of rural schools in educational policy decision making. As Table 2.6 shows, both *rural* and *town-rural* schools contain a small share (less than 20% combined) of the overall U.S. public school population. In fact by 2015-16, *rural* schools enrolled fewer than 8% of all public school students in the U.S. With such a small share, it is not surprising that these schools would attract little attention in terms of statewide and federal policies, especially when compared to the much larger *city* and *suburb* populations.

While the findings reported in Table 2.6 cannot prove a causal relationship between low share of population and policy decisions, it does support Portz’s (1991) concept of problem

definition in policymaking. That is, the small share of students that are spread across vast regions of rural and sparsely populated spaces are likely to not attract the same attention as densely populated urban spaces. In other words, an LEA of 5,000 is likely to be more visible than a dozen LEAs with fewer than 400 students in each. This is similar to political representative district maps: rural districts comprise large swaths of sparsely populated regions – representing dozens of communities, townships, and villages – while urban districts generally comprise a densely populated section of a city or metropolitan area. Thus, the combination of what the literature discusses about policymaking and what the findings from this data suggests that representation for *rural* schools and LEAs is concerning – that these locales are likely not prominently considered in terms of statewide policies.

When considering just the share of student population, the expectation of less representation (proportional to the share) in statewide, wide-reaching policies makes sense; however, it becomes problematic once the share of LEAs is considered. Namely, *rural* and *town-rural* LEAs comprise a majority of all LEAs in the U.S. (see Table 2.4). Thus, policies focused on the most visible issues and topics are designed for the urban LEA of 5000 students, but then are implemented in not only that one LEA but also the dozen rural LEAs of 400 students each.

In terms of school leadership, there are two major concerns for policy representation. First, what defines and influences a policy may not address rural issues. With a lack of representation, rural leaders also lack a means of communicating issues in their schools and attracting attention in the policy making arena. Similarly, the number of small, rural LEAs presents a challenge to policymakers in that there are so many LEAs to tailor responses and design to. As such, rural school leaders are voices among many, whereas a larger, urban LEA presents a much larger and easier to interact with focus (a single superintendent with multiple

principals as opposed to dozens of superintendents, each with fewer principals). Second, the implementation design of a policy may not be appropriate for rural LEAs. One-size-fits-all policies run the risk of being poor fits if the contexts for which they were designed are not reflective of a school or LEA. With so many rural LEAs, it seems likely that poor policy fit or implementation strategy does and will happen – especially without adequate representation of rural issues. This connects to the discussion in the literature review about the need to understand and consider rural issues in terms of both educational leadership and educational policies (that affect rural schools and leaders).

The continuing decline in rural student population presents further threat to representation at the state and federal levels. The demands of new policy initiatives on already taxed and inefficient systems (see the review of literature) are likely to place rural school leaders in tough positions – either assuming full responsibility for implementation as the sole accountable leader in the school or LEA or having to navigate tough resource decisions to ensure compliance with the new policy. However, this paper cannot address and explore this issue pertaining to rural schools. Instead, the third paper in this dissertation seeks to expand upon this issue – in addition to the need for continuing research exploring both rural education issues and educational policy implementation in rural schools.

Conclusion

The findings from this study suggest that the student population is changing in U.S. rural public schools. The nature of the change differs - owing much to the large geographic regions of the U.S. and the varying economic, social, and political contexts therein – with states experiencing these changes to varying degrees; although generally, enrollment is declining, schools are becoming less predominantly White, and students (and their families) are becoming

poorer. While the findings reported in this study cannot confirm those from economic studies that focus on labor migration, they support the general trends also reported by those studies. These changes present challenges to educational leaders in already small and inefficient districts. The degree to which these changes are addressed presents a clear and important avenue for future research – of which the third paper in this dissertation seeks to explore.

The findings from this study also differ from those reported by NCES in its reports of CCD data. First, the way in which rural is conceptualized and defined departs from the definition used by NCES. This re-conceptualization, or refinement, of the definition serves as a continued conceptual discussion in considering how researchers conceptualize rural and rurality quantitatively. In doing so, it is hoped that rural issues can be better represented in the broader education conversation. Second, the focus on longitudinal trends related to student demographics and school characteristics also departs from the general nature of NCES reports – especially those related to rural education and rural issues. While admittedly not without limitations, the use of longitudinal data to explore the ways in which rural schools are changing brings to light a phenomenon that has been experienced in thousands of rural schools – yet largely escapes wider attention.

Finally, it is the intended goal of this study to serve as a foundational point for exploring the phenomena of population change in rural schools in terms of both this dissertation and future research.

CHAPTER 3:

PRINCIPALS' PERCEPTIONS OF LEADERSHIP BEHAVIORS AMIDST POPULATION CHANGE

Introduction

Stemming from industrialization (Tieken, 2014) and the urban-skew of labor markets (Carr & Kefalas, 2009; Kuznets, 1955), rural communities have experienced phenomena of population change. This change encompasses both an out-migration of the existing population in response to these labor market disparities and incentives, what Carr and Kefalas (2009) refer to as *brain drain*, and an in-migration to fill the remaining labor demand, which comprises an increasing immigrant population (Parrado & Kandel, 2010) including a 45% increase in Latino residents between 2000 and 2010 (USDA, 2017). Indeed, analysis of NCES Common Core of Data in Chapter 2 indicates that Michigan *rural* and *town* public schools have experienced a 22.2% enrollment decline and a 66.6% increase in free and reduced-price eligibility (FRPL) over an 19 year period (1997-98 to 2015-16). While Michigan has not experienced as significant of growth of immigrant populations when compared to other states, both of these observed changes in student characteristics distinguish *rural* and *town* Michigan schools from *suburban* (increasing FRPL eligibility) and *urban* (declining enrollment) locales. Additionally, rural communities have been traditionally seen as homogenous in terms of racial composition, culture, and politics (Howley, 2004; Longworth, 2008; Peshkin, 1978). Rapidly increasing heterogeneity presents an under-researched change to these contexts.

While the effect of principal leadership on student outcome measures is indirect, it is significant (Hallinger & Heck, 1996) and mediated through teachers and instruction (Seashore

Louis, Leithwood, Wahlstrom, & Anderson, 2010). Research on principal leadership in schools experiencing population change suggests both organizational and leadership challenges (Evans, 2007); however, these studies are located in non-*rural* schools. Indeed, this is to be expected. Rural schools are often far removed from major research institutions (Monk, 2007) and their size (among other characteristics) do not capture the same visibility as larger schools, which leaves much of what is happening in these schools under-researched and relatively unknown. With a significant effect (albeit indirect) on student learning and outcomes, it is unclear, then, to what extent changes to student population influences leadership in these schools. It is the purpose of this paper to explore the ways in which rural school leaders perceive population change as both influencing their leadership and interacting with the existing challenges and opportunities in their schools.

Summary of Literature

This paper explores population change and educational leadership. While literature pertaining to these two topics is presented in the review of literature in Chapter 1, a summary of relevant literature is provided. Thus, a concise summary of the literature presented in Chapter 1 related to population migration will be reviewed, followed by a similar summary of literature related to rural school leadership. Additionally, a summary of the Michigan public education climate, particularly related to population change (i.e. funding), will be presented to establish a broad, state-level context in which this study takes place.

Population migration. Population migration can be defined simply as the movement of people from one location to another. Of interest to this paper are the phenomena of in-migration and out-migration to and from rural communities. While migration can occur for various reasons, marked migration to and from rural communities is generally connected to labor (Kuznets, 1955)

and recreation (Johnson, 2006). In terms of labor, rural spaces are predominantly agricultural with generally saturated or declining markets – limiting the growth potential and expansion of these areas (Kuznets, 1955). Urban spaces, as a result of industrialization and rapid urbanization of the country over the last century (Longworth, 2008; Tieken, 2014), have much more robust potential in terms of growth and demand. Similarly, urban markets have a much greater demand for high-skill labor – providing much greater incentives for professional labor than rural markets (Carr & Kefalas, 2009; Kuznets, 1955). Thus, as urban industries and markets continue to expand, professional and high-skill labor out-migrates from rural communities to urban metropolises. At the same time, rural communities generally have a narrower income gap between types of labor, incentivizing low-skill labor from urban markets – which generally has a much wider income gap – to migrate to these rural communities to meet labor demands of these communities (Kuznets, 1955). While this demand is generally not the same in scale as urban areas, declines in birthrates and out-migration of existing population (Johnson, 2006) creates a demand for labor. Indeed, as high school graduates and professionals leave rural communities (Carr & Kefalas, 2009), new migrant workers and their families arrive (Parrado & Kandel, 2010).

In terms of recreation, rural communities on the fringe of urban areas (just outside of the suburbs) have grown as retirees and those wanting to escape the city (but still remain close enough to maintain access to urban goods and services) move outward (Johnson, 2006). Similarly, out-migrants from more remote communities have relocated to these fringe locales (Johnson, 2006). Thus, rural communities near urban areas have grown amidst the decline of the more remote rural communities.

Rural school leadership. Existing literature points to the rural principalship as a position that can vary quite strikingly among rural locales and from positions in other locales. This is expected, given the large geographic expanses and sparsely populated, remotely located communities that define rural spaces (U.S. Census Bureau, 2015). Often, the small size of rural schools and districts (Snyder, de Brey, & Dillow, 2018) leads to either principal-superintendents or the principal being the only (or one of few) administrators in the building. As such, principals often wear many hats and are expected to execute duties neither found in traditional models of educational leadership nor included in context-indifferent preparation programs (Canales, Tejeda-Delgado, & Slate, 2008; Preston, Jakubiec, & Kooymans, 2013). Similarly, opportunities for collaboration, networking, and professional development can be limited based on stretched resources and distance between these schools and districts (Matthews & Stewart, 2015). Thus, leaders are in positions of being the sole source of leadership, suggesting that the leadership capacity of the school and/or district relies on the capacity, behaviors, and decisions of the individual leader.

This nature of rural school leadership is a departure from what literature on school leadership suggests. Indeed, Marks and Printy (2003) suggest that such a position is untenable: leaders cannot simply go it alone. They must be willing to share and distribute leadership as assuming the sole burden of leadership risks burnout and turnover. This is not to argue that such an assumption is incorrect; however, the nature and contexts of these rural schools may create an environment where principal/leaders are limited in their capability to share the burden of leadership or principal/leaders lack the capacity to do so. As the literature presented above suggests, rural principals operate in relative isolation. Since research on educational leadership, like that of Marks and Printy (2003), is typically conducted in densely populated, non-rural

locales (Leitner, 1994; Monk, 2007), it is unclear if the findings and assumptions of these studies hold up in considerably different contexts, especially given the presumably vastly different organizational (both bureaucratically and instructionally) structure of small schools and districts. In other words, the limited body of rural educational leadership literature presents a gap in knowledge that overlaps a gap in knowledge created by the lack of inclusion of rural contexts in the broader educational leadership literature.

Michigan public education. Using the analysis from Chapter 2, the state of Michigan contains 858 public local education agencies (LEAs) that reported at least one enrolled student during the 2015-16 school year. Of these, 348 LEAs are located in rural communities and small towns (a thorough description of this definition process is provided in Chapter 2 and summarized in the methods section of this paper). These 348 LEAs further break down into 880 public schools. While the LEA count has been relatively stable over an 19-year period (a 1.4% increase from 1997-98 to 2015-16), rural and town schools have declined by -18.7% (down from 1083 schools in 1997-98). Thus, it appears that Michigan's rural and small town LEAs have persisted despite a -22.2% enrollment decline – albeit, the decline in schools suggests that many these LEAs have reorganized over time.

Funding. In 1994, Michigan changed its school finance system so that it no longer relied on local property taxes to generate revenues for the corresponding local schools (Courant & Loeb, 1997). Instead, the state uses “the sales tax and a variety of other taxes, earmarking the new revenues for the School Aid Fund” (Arsen & Plank, 2003, p. 4) and disburses funds based on a set foundation formula and the student enrollment of the school/district. Thus, Michigan relies on a centralized distribution method for school funding that is tied directly to student enrollment (Courant & Loeb, 1997). Arsen and Plank (2003) note that while generally rural

schools are better off under the funding system because it increased foundation levels for funding, schools that have experienced large declines in enrollment end up in worse shape. They also note that continued declining enrollment presents challenges to these schools and districts in terms of offering services and the quality of education, especially since the formula does not consider differences in educational costs. Both observations are important given the focus of this paper on rapid population decline, especially in the years after their findings and discussion.

Schools of Choice. Michigan Schools of Choice policy has been around for more than 20 years as a part of the then growing choice movement in the United States. The policy is by voluntary participation for each district and allows for three choice options: the ability of parents to enroll their students in schools or districts within the same intermediate school district (ISD) or a bordering ISD; the ability to enroll in districts that have an agreed choice partnership/cooperative; or the ability to enroll in a different school in the same district (Michigan Department of Education, 2013). The policy is also linked to Michigan's school funding structure, which attaches funding to student enrollment (essentially, the money follows the student) and does not rely on local property tax revenues (Arsen, Plank, & Sykes, 1999).

Research Questions

As Chapter 2 demonstrates, marked population change, in the form of population decline and demographic changes, has occurred in rural public schools over the last 19 years. The already small enrollment and fiscally inefficient (Duncombe & Yinger, 2001; Howley, Johnson, & Petrie, 2011) nature of many of these schools suggests that these changes could have serious influence over how leaders behave and how the needs of students in these changing (sometimes rapidly) schools are being met. Thus, this study seeks to explore and address the following research questions:

- How do changing student demographics influence rural school leadership behaviors?
- What do school leaders perceive as challenges and opportunities for their schools and communities as a result of these changes?
- How do school leaders perceive these changes as interacting with existing challenges and opportunities characteristic of rural public schools and communities?

Methods

To address both the purpose and research questions, this study conducted primary data analysis of interviews involving 10 Michigan secondary school principals identified as being both rural and having experienced district-wide student enrollment decline. Similar to an instrumental case study (Stake, 1988), these schools and leaders are “examined to provide insight into an issue” (Stake, 1988, p. 88), namely population change in rural schools. These schools and their leaders represent unique contexts and experiences, yet they share a common thread that is intended to illuminate the changes happening in these schools.

Participant selection. Participant selection for this study involved critical case sampling of Michigan rural public schools. Patton (2002) defines critical case sampling as a form of purposeful sampling that includes “those that can make a point quite dramatically or are, for some reason, particularly important in the scheme of things” (p. 236). This approach differs from extreme case sampling in that, while these schools are purposefully selected based on certain population characteristics, the observations from leaders in these schools may be more representative of experiences in other schools that share similar characteristics and not simply outlier cases. Thus, the selection strategy was designed to consider five criteria components and will be discussed below. The full selection strategy is outlined in Table 3.1.

Table 3.1

Participant Selection Strategy		
Stage	Description	Participant Size
1	Total number of LEAs in Michigan ¹	858 LEAs
2	LEAs that are located in rural locales and small towns that are removed from densely populated areas	348 LEAs
3	LEAs that have experienced > 20% student enrollment decline from 1997 to 2015 school years ²	206 LEAs
4	LEA pool after removing the smallest LEAs in 1997 (10%) and the largest LEAs in 2015 (10%) to eliminate extreme school sizes	165 LEAs
5	Secondary schools in LEA pool that have consistently interpretable enrollment counts from 1997 to 2015	132 Secondary Schools
6	Participant pool of principals who indicated a willingness to participate in the recruitment survey	20 Principals
7	Final total of participants interviewed in study	10 Participants ³

¹NCES Common Core of Data Public Elementary and Secondary Universe Survey Data from the 2015-16 school year. LEAs must contain traditional, "Type I" schools and enroll at least 1 member.

²State average for rural and small town LEAs is -22.2%

³12 principals agreed and were scheduled to participate, 2 withdrew during the course of the study. Additional participants from the study pool were unable to be scheduled to participate in interviews.

Selection criteria. Participant selection involved the use of four criteria. These criteria guided the selection strategy and informed the critical case sampling (Patton, 2002). The first criterion was defined by the location of the LEA. Because this study is focused on rural schools and districts, this criterion was used to include only participants located in rural schools. The definition of *rural* is complex, lacking a cohesive set of defining characteristics (culturally, geographically, etc) that is agreed upon by a consensus of rural and educational scholars (Arnold, Newman, Gaddy, & Dean, 2005). Thus, the choice of rural definition is not prescribed, but is instead a choice with tradeoffs. For this study, the definition system used by the National Center for Education Statistics – based on the U.S. Census Bureau’s (2015) population density and distance based system - was chosen. While this system does not consider cultural or social variables, it defines *rural* as being both a low population density and at distance from high population density urban centers. Additionally, the Common Core of Data Public Elementary

and Secondary School Universe Survey data and Local Education Agency Universe Survey data collected by NCES, used in this study's participant selection strategy, employ this definition system. These survey data sets are appropriate for use in this longitudinal strategy because they include all public schools and LEAs in the state of Michigan and they contain consistently defined and collected student enrollment and school characteristic variables.

For this first criterion, CCD LEA data from the 2015-16 survey was used. LEAs that enrolled at least one student and contained schools designated as traditional (Type I) were retained. In Michigan, this process left 858 LEAs in the pool (see Stage 1 in Table 3.1). LEAs were then sorted by locale type. NCES uses the 12-type system shown in Table 3.2, which is based on the U.S. Census Bureau urban-rural definition system (U.S. Census Bureau, 2015).

Table 3.2

NCES Urban-Centric Locale Classification Definitions

<u>Code</u>	<u>Name</u>	<u>Description Summary</u>
11	City, Large	Principal city within an urbanized area with a population greater than 250,000
12	City, Midsize	Principal city within an urbanized area with a population between 250,000 and 100,000
13	City, Small	Principal city within an urbanized area with a population fewer than 100,000
21	Suburb, Large	Territory within an urbanized area with a population greater than 250,000
22	Suburb, Midsize	Territory within an urbanized area with a population between 250,000 and 100,000
23	Suburb, Small	Territory city within an urbanized area with a population fewer than 100,000
31	Town, Fringe	Territory within an urban cluster less than or equal to 10 miles from an urbanized area
32	Town, Distant	Territory within an urban cluster between 10 and 35 miles from an urbanized area
33	Town, Remote	Territory within an urban cluster less at or beyond 35 miles of an urbanized area
41	Rural, Fringe	Rural territory less than or equal to within 5 miles of an urbanized area, or less than or equal to within 2.5 miles of an urban cluster
42	Rural, Distant	Rural territory between 5 and 25 miles of an urbanized area, or between 2.5 and 10 miles of an urban cluster
43	Rural, Remote	Rural territory beyond 25 miles of an urbanized area, or beyond 10 miles of an urban cluster
Source: Phan, T. & Glander, M. (2008). Documentation to the NCES Common Core of Data public elementary/secondary school locale code file: school year 2005-06 (NCES 2008-332). Washington DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.		

Following the strategy and rationale employed in Chapter 2, four locale types (*town-distant*, *town-remote*, *rural-distant*, and *rural-remote*) were retained. This reduced the LEAs in the pool down to 326 (see Stage 2 reported in Table 3.1).

The second criterion was defined by the changes in LEA student enrollment over time. Because this study is interested in population change, this criterion was used to include participants in LEAs that have experienced noted changes. To do this, CCD survey data (both

LEA and school level) was expanded to include 19 years of longitudinal data from 1997-98 to 2015-16 schools years. Student enrollment data was analyzed for the 326 LEAs in the pool. While Michigan did not see large-scale or widespread change in non-White student population change in rural LEAs (unlike other states and regions in the U.S. as reported in Chapter 2), these LEAs experienced an average decline in student enrollment of approximately -22% over the 19 year period. Thus, LEAs that experienced at least a -20% decline in enrollment over the time period were retained as being representative of the phenomenon of enrollment decline in rural LEAs throughout the state. This reduced the LEAs in the pool down to 206 (see Stage 3 reported in Table 3.1).

Analysis of the Michigan CCD survey data also reveals a wide range of LEA size for rural LEAs in the state. Visual analysis of the location of these LEAs revealed that the geographic nature of the state, particularly the sparsely populated Upper Peninsula, is likely responsible for LEAs, out of necessity, to include fewer than a dozen students. While these LEAs are of interest for further study, they do not meet the contextually representative appropriateness of critical case sampling and represent the third criterion. Thus, LEAs with enrollments on the extreme ends of the range (<10% and >10% of the total pool) were not retained. This reduced the LEA pool to 165 LEAs (see Stage 4 reported in Table 3.1).

The fourth criterion was defined by the level of the school within the LEA. This is focused on secondary schools to align with available rural literature (particularly on curriculum and curricular offerings) and to allow for participant data to be clearly compared and analyzed. Inclusion of multiple levels of schools muddies the participant pool in terms of analysis of data and expands the scope of the study beyond its purpose. Schools that contained grades 9-12 were

retained. Note, that this did retain schools with varying degrees of organization structure (i.e. grades 7-12, grades K-12, etc). This reduced the pool from 165 LEAs to 165 secondary schools.

The fifth criterion was defined by the ability to interpret enrollment trends. Analysis of the Michigan CCD school data revealed that schools reorganized their grade structures and that such reorganization was not uncommon. While less common, some rural schools repeatedly reorganized and shifted their grade structure to where the school enrollment trends were difficult to consistently interpret without the broader LEA trends. Similarly, and even less common, schools may also have inconsistent grade sizes – with an especially large class, when matriculated fully from the school, responsible for perception of an enrollment decline. Thus, schools in the pool were examined for both interpretable enrollment counts and decline. This reduced the pool of secondary schools down to 132 (see Step 5 reported in Table 3.1).

Finally, a sixth criterion was initially included in the selection strategy: the principal must have held his or her current position for at least five years. This criterion was considered because it represented the participant's familiarity with the school as a leader through at least a third of the observed data range (from the CCD data). Thus, it was thought that the leader may be able to provide more discourse into how leadership roles may (or may not) have changed and how the school and school leadership have responded to population change. However, only 8 of the 20 prospective participants (principals who indicated a willingness to participate in the study in the recruitment survey) responded to having at least five years of experience as principal but 15 of the 20 indicated at least five years experience in the district. Thus, this criterion was not used in order to allow for a larger participant pool and recognize that participants, while not as formal leaders, would still likely have perceptions and experiences tied to enrollment decline and population change as professionals in the district.

Recruitment survey. To recruit participants from this pool, a recruitment survey was created using Qualtrics Survey Software. The primary purpose of the survey was for recruitment; however, additional items were added to allow modest triangulation with the CCD data and, if possible, with the responses of the participants. Similarly, the addition of these questions allowed principal who did not wish to participant in the interview sessions to participate in a similarly modest way. The survey (Appendix A) was designed to gather information on the following items: consent to participate; general information about the principal and school; perceptions about different types of change in relation to the operations of the school and leadership; and willingness to participate in the larger study. Surveys were sent via e-mail to principals. Contact information for the principals at each of the 132 schools was obtained through publicly available media (state published school registry and school websites).

Survey response rates. Invitations to participate in the recruitment survey were sent in March of 2018 and were extended until the end of April. Of the 132 school principals contacted, 45 responses were recorded (a 34.1% response rate). A summary of the principals' characteristics are reported in Table 3.3.

Table 3.3	
<i>Summary of Principal Characteristics From Recruitment Survey</i>	
<u>Item</u>	<u>Response Statistic</u>
Female	9
K-12 Principal	19
Mean Years Principal (Current Position)	5.17
Mean Years Principal (Total)	8.00
Mean Years in Education	10.10
Willing to Participate in Interviews	20
<i>Notes.</i> 45 of 132 school principals responded to the survey.	

Of the 45 principals who responded, 20 were willing to participate in interviews and the broader study. A short list of items was also included in the survey that gauged principals' perceptions of

the important of population change and issues related to population change in relation to their schools' functions/operations and their abilities to lead (as discussed above). These items used a Likert-type scale based on varying degrees of importance: *critically important, important, somewhat important, and not important*. A control or comparison group was not surveyed, so these results are only mean for descriptive purposes. A summary of the responses to the perception of change questions are reported in Table 3.4.

Table 3.4

Percent Distribution of Response Rates of Principal Perception Items From Recruitment Survey

<u>Item</u>	<u>Critically Important</u>	<u>Important</u>	<u>Somewhat Important</u>	<u>Not Important</u>
Decline in School Funding	74%	16%	7%	2%
Decline in Student Enrollment	47%	42%	9%	2%
Decrease in FTE positions	47%	37%	12%	5%
Decline in Community Population	37%	37%	19%	7%
Increase in FRPL Eligibility	14%	51%	33%	2%
Increase in Student Racial Diversity	0%	7%	40%	47%

Notes. The prompt for each item was the following: "rate the importance of the following items to you, as principal, and your school." 43 of 45 respondents completed this portion of the survey.

Final participant pool. Principals who responded with a willingness to participate in the interview sessions were contacted and sent information regarding consent and participants' rights documentation (in compliance with Michigan State's Institutional Review Board), study procedures, and scheduling information. Of the 20 principals who responded with a willingness to participate, 12 were able to be scheduled for interview session during the spring and summer. During the course of the study, two of these participants withdrew from the study. The remaining eight principals were unable to be scheduled within the timeframe of this study. Thus, 10 principals participated in primary data collection (interviews). A summary of characteristics of the participants and their schools is reported in Table 3.5.

Table 3.5

Summary of Participant and Participants' School Characteristics

<u>Item</u>	<u>Response Statistic</u>
Female	4
K-12 Principal/School	3
Mean Years Principal (Current Position)	2.68
Mean Years Principal (Total)	4.23
Mean Years in Education	9.70
Mean School Enrollment	378.80
Mean FRPL Eligible	195.80
Mean Non-White Student Enrollment	64.30
Mean FTE	19.15
Mean LEA Enrollment Change 1997 to 2015	-36.50

Notes. 10 principal participants. Data reported in this table is from both the recruitment survey and CCD data from the 2015-16 school year.

Data collection. Primary data collection for this study involved the use of participant interviews. Interviews were scheduled based on participant availability, with a preference towards on-site, and were designed to be completed in two hour-long sessions or one multiple hour session. Interviews were also recorded using a digital audio recorder with the consent of the participants. Three of the ten interviews were unable to be scheduled for in-person and on-site sessions. These interviews were conducted using Skype and were recorded digitally with the consent of the participants. Interviews were completed during the spring and summer of 2018.

The interview instrument used what Patton (2002) describes as a combined approach: a standard, open-ended instrument will structure the interview to ensure consistency of broad questions for all participants while use of an interview guide for follow up questions within each strand will allow for greater flexibility in exploring, in detail, responses to these broad questions. As such, the interview protocol employed a funnel strategy: broad, key questions comprising the main structure of the interview with both structured and unstructured follow up opportunities contained within each of these key questions (as interview guides).

The interview instrument (Appendix B) consisted of two parts, enabling it to be completed over one or two sessions. Part one of the instrument focused primarily on the participant and the school context, aligning with the *individual* and *contextual* spheres of the conceptual model that guides the study. As such, questions focused on the following topics: the participant's experiences, path to position, and relationships with the school and community (or communities); observations and experiences, from the participant's position, related to student population changes in the school; and perceived fit in the context. Part two of the instrument focused primarily on understanding the role of principal as leader in the school and how the school and leadership (including principal) have acted to address (or not) changes in the student population amidst the local and broader contexts, aligning with the *theoretical* and *contextual* spheres of the conceptual model that guides the study. Similarly, questions in part two also focused on how leadership has changed in response to changes in student population and other contextual changes. To help ensure that the interview does address these topics and is generally free from bias, a review of the interview instrument was conducted by a small panel of non-participant practitioners (discussed below in the trustworthiness section).

Trustworthiness. As a part of the qualitative inquiry process (Creswell, 2003), steps were taken to ensure the validity of the analysis and findings. To do this, I used Guba's (1981) 4-component model for establishing *trustworthiness* in qualitative inquiry. This model conceptualizes four components commonly associated with quantitative research as internal validity, external validity, reliability, and objectivity into qualitative analogues: *credibility*, *transferability*, *dependability*, and *confirmability*. Guba argued that consideration and use of such a model is necessary because "the [researchers] have not made systemic efforts to codify the safeguards that they intuitively build into their inquiries" (1981, p. 76) and that ensuring

trustworthiness ensures adequate research design and validity of the inquiry (1981). This study establishes *trustworthiness* by considering and addressing each of the four components. These components and steps taken are presented below.

Credibility. Guba (1981) associates *credibility* with the ability to produce findings that are plausible and can account for the messiness and complexity of reality. This study considers and addresses *credibility* in four ways. First, the interview instrument was reviewed by non-participant practitioners to ensure that the instrument addressed its intended purpose. Edits and revisions were then made to the instrument as a result of this feedback. Second, participants were provided copies of their interview transcripts and this paper as a form of member-check on the data and the interpretation of the study's findings. Third, the use of modest cross-methods triangulation (Patton, 2002) was considered through the use of the quantitative data presented in Chapter 2 and the results of the recruitment survey. Fourth, the participant review of data and interpretation served as an internal check and a data audit conducted by a researcher not involved in the collection of data served as an external check (Patton, 2002).

Transferability. Guba (1981) associates *transferability* with the ability to produce findings that are relevant to and descriptive of similar contexts to that which is studied. This study considers and addresses *transferability* through the use of critical case sampling (Patton, 2002). Thus, the analysis and interpretation of findings is considered within the scope of schools and leaders in similar contexts in terms of rurality and population change.

Dependability. Guba (1981) associates *dependability* with the ability to produce findings that are stable and reliable. This study considers and addresses *dependability* through the use of an audit trail, which involved the review of documentation by a researcher not involved in the collection of data. Documentation, including record keeping of decision making throughout the

research process, was maintained for review by the auditor to ensure that research decisions and actions were appropriate and ensured reliable and stable data and findings.

Confirmability. Guba (1981) associates *confirmability* with the ability to produce findings that are investigator-free (accounting for and mitigating researcher biases) and can be confirmed independent of the researcher. This study considers and addresses *confirmability* through the use of reflexive practice (Guba, 1981), including journaling and note-taking. This process overlaps with the audit processes described above, involving the use of an external review an audit of documentation by a researcher not involved with the collection and analysis of data.

Analysis. Interview recordings were converted into editable audio files and transcribed for data analysis. A preliminary codebook or “start list” (Miles & Huberman, 1994, p. 58), was created that was guided by the research questions and conceptual model of leadership. Six main sections comprised the preliminary codebook that followed the structure of the conceptual model (see Appendix C): *individual* (participant’s personal history, path to position, and personal beliefs and values), *theoretical* (leadership duties and roles as defined and undefined by leadership theory), *contextual* (school, community, and state contexts, participant’s definition of rural context, challenges and opportunities of rural context, and population change), *capacity to navigate* (relationship, trust, labor preference, and expectations), *capacity to practice* (education training, leadership training, and the perceived effectiveness of the training), and *capacity to adapt* (actions taken by leadership, school, and community in response to change). While the primary focus of the study is on how leadership has or has not responded to change (involving the *capacity* to adapt and *contextual components* of the model), the inclusion of all components in the model is appropriate and is intended to establish a more comprehensive understanding of both the leader and context. Similarly, the codebook was further developed and extended as a

result of emerging themes, linkages, and codes and reflects the researcher's continued engagement with the research throughout the analysis process.

Analysis and coding of the data was conducted using MAXQDA software (version 2018). Data was coded using the preliminary codebook and analyzed for themes and linkages. Emergent linkages and themes in the data resulted in the addition of new codes for analysis and warrant for a second analysis of the data. Codes pertaining to the state context (*school of choice*, *teacher supply*, and *intermediate school district*), the participant's recognition of change and the need to adapt (*perception of change* and *change in leadership*), and the participant's perception of themselves in their context (*perception of self in context*) were added as a result of the responses of the participants and to further allow linkages and themes to emerge. A third analysis of the data was conducted to further capture any themes or codes with specific attention towards school context (*school climate*), community context (*community values* and *community identity*), and how the participants shared leadership (*distribution/shared leadership*). Final analysis and review of the coded data revealed common (some strong) linkages and themes among the participants that are reported in the findings section.

Findings

Analysis of the interviews revealed key linkages among participant responses. These linkages are both indirect and direct in the ways in which they address the research questions and purpose of the study. The indirect linkages help to frame the perceived contexts within which these leaders are positioned and are presented in the first two sections: perceptions of place and leadership roles and expectations. The direct linkages are focused specifically towards addressing the research questions are presented in three subsequent sections: perceptions of population change; changes in leadership; and linkages to policy.

Perceptions of place. As the review of literature illuminates, there is no consensus as to what constitutes a rural place, especially through the use of quantitative methods (i.e. U.S. Census Bureau definition and Office of Management and Budget definition). Since this is a study focused on rural leadership, it is essential to establish how these schools and communities are rural. Each principal was asked to provide their conceptualization and definition of rural as well as his or her perception of self as rural. This was done to contextualize each principal's setting and to explore commonalities among responses.

Defining "rural". Principal responses included multiple strong linkages in which all or nearly all of the principals articulated the same features in their definition of "rural". First, nine of the ten consider rural places to be small and identify their communities as being such. The tenth principal did not specifically mention size but identified rural places as being outside of city limit – in line with the absence of urban treatment of the U.S. Census Bureau (2015) and indirectly referring to size. Second, nine of the ten principals mentioned distance and the remoteness of their communities from urban areas. Additionally, this feature was linked to limited access to amenities, goods, and services (in terms of community) as well as educational opportunities (in terms of school and education) that are prevalent in urban areas. The perceived level of necessity of these amenities varied from non-essential (entertainment and recreation) to essential (medical and food). Third, seven of the ten principals included tight-knit relationships as part of their rural definitions. One principal considered these relationships to be like those of a family: "when I think of it, I also think of community. I think of family". Another articulated these relationships as ones "where you walk into a grocery store and everybody know who you are or you going to the local restaurant it's just that small community feel whenever you walk in the library or any of your local establishments you know pretty much everybody there." In each

of these cases, this feature is considered something not as readily found in larger, urban communities – at least, not to the same extent as small, rural communities.

Beyond these three near-consensus features are several others that were tied to the concept of rural, although not shared as commonly. Four of the principals linked agriculture to both their definition of rural and to their communities. Along similar lines, principals also noted the lack of industries in the communities (a result of economic downturns and the size and distance of their communities not being attractive to such industries). Half of the principals also mentioned a particular mindset as being a feature of rural. One principal articulated this mindset as “a state of mind. Kind of wanting to be a little more laid-back and not so progressive on how it moves - I guess a little more conservative.” The conservative nature of rural residents, both politically and socially, was shared by more than one other principal. Another principal described his community as “a very conservative town, in a conservative county, in a conservative pocket in the state. That, in the large, Michigan is a toss-up between conservative/liberal points of view. But this has historically been a very conservative district.”

A divergent viewpoint shared by two of the principals involves a deficit perspective of the community members. This is distinct from the perceived challenges and issues that rural communities face because it considers individuals in inferior positions relative to their urban peers. In one case, a principal conceptualized a typical rural resident as “somebody that's probably a little bit poorer, that's probably not as well educated.” In another case, a principal discussed the need to broaden the exposure of students to diverse ways of thinking, noting the “sheltered” life that students currently live in a politically and culturally insulated community. A third principal shared a similar observation; however, the deficit perspective was one held by the students of themselves and their community. In this case, the students identified themselves and

their community as “[town]-tucky” (a reference to Kentucky, which presumably has a negative connotation), “... the sticks”, and “Podunk-town.” The principal noted that the quality of life and daily issues of residents and community members is not very different from the urban context that he or she has experienced, but that the students have no experience to compare or change their negative perceptions of self (similar to that of the second principal discussed above).

Rural issues and challenges. With the definition of rural come associated challenges and opportunities. They are treated distinctly from those presented in the findings section tied to population change. Instead, these challenges and opportunities are those articulated by the principals as being inherently tied to the definition of rural and their communities. In terms of challenges, there is not a strong consensus among principal responses that identify any one issue as being salient for all of rural schools in the study; however, several common threads do appear that are shared by a majority (at or around half) or near-majority of the principals in each case – suggesting that these challenges are likely common for many rural schools in the state.

The distance of rural communities from urban areas was also acknowledged as limiting the access of the community to essential and non-essential goods and services. This was discussed above as commonly held feature of rural communities and was also identified as a challenge. In one instance, the principal discussed distance and remoteness in terms of access to large-chain general stores (i.e. Wal-Mart). Similarly, another principal noted the lack of access within the community:

... the town, like many communities, has lost accessibility to resources. There's not a grocery store here anymore. It hasn't been here for many years. There is no fast food. There are no services at all. They still have a dentist but they do not have a medical practitioner at all in the community.

This perception of distance not only was seen as a challenge for rural quality of life but it was also seen as a negative in terms of attracting teachers used to an urban lifestyle and amenities.

One principal from the Upper Peninsula remarked:

It takes a special individual to want to commit to living in a rural community and teaching in a rural district if you don't have ties to that district. You know, you look around there's not a lot going on if you're 21, 22, 23, 24, or 25 and you're not a diehard outdoorsman. There's not a lot happening here to keep people here, so it becomes a stepping stone for a lot of young teachers to get some experience and try to get closer to home.

Poverty was frequently mentioned; although it is important to note that it was primarily discussed in two different ways – existing poverty as inherent in the rural nature of the community and poverty that has occurred as a result of economic downturn (i.e. The Great Recession). While only a few principals associated rural with poverty, most noted a lack of industries and high-skill, high-wage jobs in or near their communities that similarly limited the number of professionals. In one instance, the principal viewed this as a challenge in motivating students to seek opportunities and further educational advancement and attainment beyond high school and the community. She noted the limited post-secondary experiences of community members and, especially, parents as creating a cycle in which the students only strive to achieve to the level of their parents.

Housing was also a common thread among the principal responses. The nature of housing as a challenge took two forms. First, housing was viewed as being limited, especially for middle- and high-income families. In two cases, the principals noted that housing was not attractive for professionals, which also acted as a deterrent for attracting teachers and other school personnel

from outside of the community. Similarly, one principal mentioned that the influx of workers commuting from distant, larger towns has also limited the demand for new housing – even with local industries recovering and growing. Second, one principal found that the increase in new housing in her community was a benefit to attracting families and professionals from other, surrounding communities. In that specific case, new investments into the community, including industry development, spurred development growth in housing. For that community, housing presented an opportunity; however, as she noted, it also served as a challenge for the surrounding rural districts and communities.

Finally, several principals expressed frustration with the lack of representation in the decision making process in terms of state policies. This was attributed to the small nature of the schools and the location of the majority of the population in the state (in the south-central portion of the state). One principal had named this lack of representation:

I call it the US-10 effect. So, there are those of us above US-10, very rural, and don't have the supports in place that things below us have. Or their size allows for. There are people below US-10 that are making decisions that should not be made without our being in the discussion.

This observation supports the general literature on rural education and policy, in which the small size of rural schools often lacks the ability to gain the attention of policy makers at the state level. On the other hand, two principals noted their involvement in state efforts to review its funding structure and administrator certification. In terms of specific policy fit, these will be discussed further down in the findings section; however, a common thread among principals was that state policies were generally a poor fit for rural schools in terms of both design and perception of consideration of rural needs.

Opportunities. In terms of opportunities that rural schools and communities have, two threads were common among the responses. First, most principals noted the tight-knit nature of their communities as being a distinct advantage for their schools and communities. In terms of schools, this allowed the principals the ability to know and have relationships with students, families, and teachers that would otherwise not be possible in a larger school. One principal highlighted this point:

I taught at Kalamazoo for my first job ... there are 1400 kids in that building. I knew maybe 10% of them. You just can't have that connection. We have 200 kids in our high school. I know every one of their names. I know where most of them live and I've had conversations with all of them and I think just having those that type of stuff it makes it deeper connection.

This belief was shared by a majority of the principals. Conversely, though, these relationships can also present some challenges. One principal noted that the familiarity among educators, students, families, and community members can also create pressures to act (as a leader) in certain ways, otherwise decisions could be taken more personally than what he perceived would be the case in a larger district. In terms of the community, principals noted a trust that exists among community members. This, in turn, creates a safe and welcoming atmosphere for residents. This safety was a frequent response, as principals referred to their communities as small and safe, often in the same sentence. Of note, though, is that the two principals that specifically mentioned this safety were from the communities in which they were principals. It is unclear if this would be the same sentiment of a principal not from the community and, especially, if the principal diverged from the community politically, culturally, or even racially.

Second, the small nature of the schools allowed students the ability to participate in a multitude of available activities and organizations. While responses seemed to indicate that course offerings were comparably weaker when compared to larger, more urban districts, the small student enrollment in these schools did create a demand for participants. Thus, principals indicated that while there were fewer opportunities overall, students were able to be involved in comparably more opportunities than their urban peers. One principal noted: “if you want to join a club you are going to get the join the club. If you want to take a class you're going to get to take a class.”

Perceptions of fit. Principals were asked about their perceptions of fit through two different threads. The first concerned how they identified themselves, as rural or not. Seven of the principals identified themselves as being rural. Interestingly, most of these responses involved the description of preference instead of a clear definition as to how they were rural. For example, one principal stated: “I would describe myself as an individual that prefers a slower pace, so yes, I would describe myself as rural for sure.” Similarly, principals also referred to their personal history of growing up in their school’s community or in a community similar to the one in which they currently hold their position as a reason for their identity as a rural person. In this sense, their identity as a rural person appears to be linked to their definition of rural discussed above – in that they express a preference for the lifestyle afforded the characteristics described above. This is not entirely the case, however, for all principals. Three of the principals indicated that they did not consider themselves to be rural. Interestingly, two of the principals interviewed identified themselves contrary to how they described growing up. Specifically, one principal who identified herself as rural grew up in Chicago, while another principal who grew up in the

community in which she currently holds her position identified herself as not being rural. Yet, in both cases, the principals expressed a preference for the communities in which they worked.

The second involved the perceptions of their relationships within their schools and communities. In all cases, principals perceived themselves as having expansive autonomy to lead in their schools (it should be noted that two of the principals were also superintendents). This autonomy was attributed to an established trust between district members (superintendent and board members) and community. A common thread among responses also suggested that the small, tight-knit relationships found in the communities helped to establish this trust more quickly than they [the principals] perceived would be the case in larger, more bureaucratic school districts. Similarly, principals also discussed their comfort and identity as rural allowed them to also navigate these relationships. Finally, a majority of the principals in the schools had some existing familiarity with the communities in which they held their positions, either as having grown up in the community or having worked as a teacher in the district prior to becoming principal. In this way, principals were already familiar with the community, district leadership, and school board. In fact, several principals noted that their schools and districts experienced high administrator turnover from individuals. One principal observed:

We have been a small district. We tend to be a stepping stone for principals who kind of get their feet wet and get their experience and move on. I live in the town where the school is located and I felt like we needed consistent leadership.

In general, the experiences described by the principals suggest that many of their districts rely on existing familiarity with staff and attempt to develop a grow-your-own leader style for recruiting principals. Indeed, one principal noted that her district tries to grow leaders from within when possible:

So, next year my assistant principal is going to go run the middle school. The middle school principal is coming here to be the assistant. We are training one of the counselors to be an assistant principal. And we are doing all of this – he doesn't have to come over here until his last year, but we are training [him] to be able to run a building because he has only ever been an assistant principal ... [We] try to grow them within.

The reason for this was twofold. One, the superintendent was able to save money by transitioning teachers into leadership positions without currently possessing a degree (they seek alternative certification once the transition begins). Two, the principal thought that there was more stability in developing leaders who were already familiar with the school district.

Expectations and leadership role. To contextualize the position of leadership that the participants hold, principals were asked questions related to their district (superintendent and school board) and community expectations as well as their role in terms of instructional leadership and general management duties. Surprisingly, responses among principals were generally consistent from all ten principals: not necessarily that they are all the same, but the ways in which their expectations align with their duties and latitude to act is similar.

Expectations. In terms of district expectations, principals were generally consistent in their responses. First, there were few explicit expectations that the principals could articulate beyond the performance of duties associated with instructional leadership (i.e. evaluations, maintain a safe environment, oversee curriculum and instruction) and management (i.e. personnel, facilities, and completing state mandated reports). Two principals noted an expectation from the board to stabilize and then increase both the student population and curricular offerings – a direct response to the population loss in these schools. Another principal

stated that the district expected the principal (and other administrators) to improve and maintain positive community relationships, essentially to keep the community happy. Surprisingly, test scores and academic achievement was generally not linked explicitly to district expectations; although, one principal noted that student achievement was a core focus of hers because it made the school and district attractive to students and families outside of the district.

In terms of community expectations, a common thread among responses was the expectation that the principal is visible. Seven of the ten participants noted an expectation of being seen at extracurricular and community events. Two of the remaining participants also mentioned the role of athletics and extracurricular activities as important to the community's identity and their [communities'] perceptions of district success. In fact, principals generally perceived these extra programs as being expressions of each of their community's identity and values. The loss of these programs through cuts, a direct result of population decline, created either demand from the community to find ways to restore the programs or caused families to transfer to other districts that offered these opportunities. In most cases, the principals observed these expectations from the position of schools that made cuts, whereas one principal observed these expectations (and their ramifications) from the position of a school that pulled students away from schools that have had to make severe cuts. Finally, student safety was explicitly discussed by three of the principals as an expectation of the district. With recent acts of violence in schools (namely mass shootings), this is not surprising; however, one of the principals noted that the priority of new safety measures took attention away from other perceived needs of the school.

The degree to which principals are given autonomy to act is perceived to stem from two sources: first, the extent to which the school board exerts its influence and power to manage; and

second, the relationship with and access to the district superintendents. In terms of school board influence, principals reported varying levels of board oversight and management. In instances where the board was generally hands off, which were nearly all cases, principals suggest that they have a wide range of discretion to act within their building. In fact, nine of the ten principals thought that they had wide latitude to act and make decisions within their building. This was also often contingent upon the second point: the relationship with the district superintendent. The relationship between principal and superintendent appears to be critical from the responses of the participants. The district boards were generally noted to interact directly and formally with the superintendent, with the interactions between board and principal noted as being generally informal – although, several principals observed that the small size of these districts did create an ease of access between groups. In these cases, the superintendent was either seen as the final check-off (or oversight) for school-level decisions or trusting in the principal to make an appropriate decision or action. Two principals specifically mentioned the alignment of values and beliefs in establishing trust and relationships with their superintendents. Similarly, the access to the superintendent, much like that of the district board, is greater than what would be expected in a much larger school district, in which there would be a larger pool of administrators to share time with the superintendent. One principal discussed this access in his description of autonomy:

My philosophy and our superintendent's philosophy both for education and ethics are really similar and I think it's given me some freedom in some aspects. His office is also 45 feet away so if I need something he's not too far away to help.

This autonomy does not come without concerns. Two principals mentioned the lack of oversight for decisions that could directly impact the school. One principal observed:

It comes back to checks and balances. There really is nobody to check what I am doing, which as a new principal was very, very scary. It's also freeing because I choose the curriculum, I choose the schedule, I make the decisions – where, in larger schools, would be pushed down from the district office sometimes, which, to be honest, part of me would like, too, because I don't have a lot of time to make these decisions as informed as they should be.

Another principal discussed that while he enjoyed the freedom to act (as both principal and superintendent), there was concern that someone stepping into the position that lacked the ability to lead and/or manage the district and school could cause problems or harm to the school. In other words, there appeared to be considerable trust between board, superintendent, and principal to act within their bounds.

A final influence on principal autonomy that was discussed by principals was that of the needs of the school. This was primarily discussed by one principal, who felt that the established goals of the school conflicted with her ability to make decisions that she thought were appropriate and/or in the best interest of the school:

There's a big push and pull. School improvement is driving the bus. When I came in, I thought: wow, I can take this school in a direction ... I'm like: if we don't do this, we don't improve. So, that school improvement has stood in my way.

This principal was in her first year in that position. Indeed, a common thread among the principals' responses was that their autonomy generally increased over time, especially as district board and superintendent began to trust the principal to act independently and as the principal was able to transition from the previous administrator's plans and policies. Similarly, a common thread among principals (with the exception of the principal having difficulty with the

school improvement team) was that they felt they had an advantage in terms of trust and relationships with the board and superintendent if they were from the community – either as a veteran teacher or a resident with a family history in the area.

Leadership role. Like autonomy, there was a general consensus among principals about their leadership duties. In fact, the instructional leadership behaviors (i.e. evaluation, school climate, and instructional supervision) were similar in each of the schools. In articulating their duties, principals noted that they were responsible for school-level evaluations of staff, student discipline, maintaining a safe and learning supportive school climate, planning and coordinating (with the intermediate school district) professional development, interpreting data for school improvement, personnel decisions (i.e. hiring and firing of staff), and completing state mandated reports. Because these responsibilities were prevalent among the ten principals, they appear to comprise a core set of responsibilities and duties for the principals (in addition to the expectations presented above). In fact, there were few responses that deviated from these core responsibilities in terms of leadership role and autonomy. This is not surprising, given the prominence of these duties and behaviors in existing leadership literature.

There were discrepancies among responses beyond these core duties and responsibilities. The degree to which principals had control over budgetary decisions varied. Two of the principals also acted as superintendent, allowing them considerable discretion towards allocating resources and budget decisions (both noted that they consulted regularly with a budget specialist). The remaining eight principals reported experiences that ranged from total school-level control over budget decisions to no control over the budget and/or allocating school-level funding resources. In general, there was no consensus among responses; however, several

principals discussed their relationships with their superintendents allowing them to request funding and/or resources when needed for a justifiable purpose.

A common thread among responses was the desire of the principals to distribute leadership to teachers in the school, particularly when it came to hiring personnel and school improvement. When asked to elaborate, principals' responses were the same: there was no mandate to distribute leadership, however, in each case the principals felt that the input from teachers was valuable in supporting their [principals'] final decisions. Similarly, there seemed to be a general aversion to shouldering all of the responsibility for a decision that affects the school like a hiring decision:

I have a lot of influence over that [personnel], but in a hiring decision we do try [to reach consensus with the committee of teachers]. It should not just be who I want to work with. It needs to be a team decision, because if you are the band director you're probably going to work with the person a lot more closely than I am. So, we want to make sure that it's someone that's a whole team feels comfortable about.

This principal felt that the decision could be made alone, but the nature of the decision impacted more than just the principal. Thus, he felt that teacher input was essential in fulfilling his personnel responsibilities.

Perceptions of population change. Principals' perceptions of population change were fairly consistent among responses. This was not entirely surprising, especially given the economic downturn in the mid-2000s (i.e. The Great Recession); however, it was interesting to note that the principals all noted the out-migration of residents regardless of location in the state. While the exact nature of the causes for out-migration varied, principals generally placed the

time in which their community population and student enrollment started to rapidly decline between 2005 and 2010 – approximately corresponding with the start of the Great Recession. Indeed, using analysis from Chapter 2, the overall trend of student enrollment in rural and small town schools supports their perceptions (Table 3.6).

Table 3.6

Michigan Rural and Town Public School Enrollment Trends from 1997-98 to 2015-16

	<u>1997-98</u>	<u>2003-04</u>	<u>2009-10</u>	<u>2015-16</u>
Enrollment	395171	388446	342913	307611
FRPL Eligible	90513	134646	164605	149323

Note. Data comes from the NCES Common Core of Data Public Elementary/Secondary Universe Surveys from 1997-98 through 2015-2016 school years.

As Table 3.6 reveals, these schools did have a slight decline (~7,000 students) between the 1997-98 and 2003-04 school years; however, the largest drops occurred between the 2003-04 and 2015-16 school years (~80,000 students) – leading to an overall decline of about -22.2%.

As mentioned before, the exact causes varied. A common thread was the closure of small factories or industries located in or nearby the communities in which the schools are located.

These closures caused a rapid decline in population in the communities, thus causing a correspondingly rapid decline in student enrollment: “when I came here in the year 2000, we had almost 2000 students. This year, we’ll be lucky to maintain over a thousand. We have had a precipitous drop. The 2008-2009 Great Recession really did us in.” A majority of principals noted a rapid decline in population, linked to these closures; however, it is important to note that this was not the case in every community. In these instances, population decline was gradual over time; although, it still resulted in enrollment declines of more than 20% over the 19 year range. In these cases, workers (and their families), particularly in construction, left the communities to pursue jobs in other states where there was a demand for such labor:

It was all financial. They could not find work. The more people that left ... it was all builders that left. They decided that they could go out to the Dakotas and make money and that's what it was going to be because they were losing homes. Of course with all of the crazy mortgages that were going on, lots of people lost their homes. [They] had to put food on the table and so they went to The Dakotas and Pennsylvania. They were all not skilled labor they were just laborers.

Additionally, the consolidation of family farms and declining birthrates has created a gradual downward trend on top of the rapid decline related to the economy:

There used to be many factories in this county including this town that serviced the auto industry in some way shape or form. There remain two in this town that still do that. We had a lot more in some of the outlying communities ... So those dried up. And then, there's not as many family farms anymore. All of the farmland is still being used but the big farmers are buying more and more and more. People that farmed early were family farmers. They have now become hired employees. A lot of families – you know, the parents decided to get out of farming – maybe sold the land. So the son and daughter that grew up that may have thought I may run the farm when I grow up now had to find something else to do.

Similarly, principals also noted the loss of student graduates who leave to pursue professional degrees and high-skill labor opportunities. In these cases, the students were generally seen as not returning to their hometowns; although, this was not always the case with principal responses (three of the principals mentioned that students who do go off to college surprisingly return back to their communities within a few years).

Amidst this population decline, principals also reported increases in student poverty. This is supported by the reported student data in Table 3.6. In fact, the perception of this increase in poverty appeared to take priority in the discussion of the student population change during the interviews. Principals all reported free and reduced price lunch eligibility figures in excess of 50%, with many at or above 60%. Just as Table 3.6 suggests, these eligibility rates have grown gradually in these schools over the 19 year period. As one principal observed:

We are at 70% free and reduced-price lunch. Historically, we've always been at least 50%, but it has gone up some. It doesn't bounce much. It has been a gradual - just a little bit at a time. Of the other 30 or so percent, the others aren't super wealthy themselves. They aren't free and reduced lunch. Then, you'll have your handful that are driving Silverados.

This perception of poverty and wealth was a common thread among responses: schools had high levels of student free and reduced-price lunch eligibility and the remaining students were not much higher above the poverty threshold. While there was not much in the way of responses that explicitly linked the two, it appears suggestive from the principals' perceptions that gradual increase in student poverty was related to the lack of high-paying jobs in and surrounding the communities.

The decline in enrollment has changed in some of the principals' communities. While this is not the case for half of the participants, the other half reported enrollment declines and community population size starting to stabilize. In these cases, the industries that had contracted during the Great Recession have begun rehiring and labor demands have started to slowly increase or the demand for labor has changed in response to market changes:

Once the one factory over here shut down, there were people who left the town.

That's pretty much returned. People have come back and found other jobs. It's just our market shift is kind of changed from some of the industrial things to more of an agricultural base.

For the remaining principals' communities, jobs have not returned and industries have not expanded. Instead, the out-migration of workers and their families has simply slowed as economic prospects have improved and/or the out-migration has sufficiently reduced supply to the level to meet demand.

School perceptions and climate. In terms of the school-level perceptions of change, only half of the principals had observed changes that they were comfortable discussing. The five principals that did share details in their responses suggested that the rapid population decline led to large layoffs of instructional and service staff. Unsurprisingly, this created a negative climate within the staff ranks. In one school, the principal discussed the difficulty retaining teachers due to this fear of job loss – especially for new and elective teachers who may be less likely to be retained. He also attributed this turnover to the difficulty of new teachers breaking into the tight social networks of the veteran teachers, further compounding the challenges of the school climate. One principal, while noting the necessity of program cuts, noted that the climate was not as negative as she would have expected. She attributed this largely to the fact that the superintendent was able to avoid layoffs by reducing teaching positions through attrition – a strategy experienced by another principal in a district during building consolidation. Thus, the fear of job loss was avoided.

The uncertainty of turnover and job loss in schools associated with enrollment decline and the instability of funding related to enrollment also was perceived to affect the student

climate. Most of the principals indicated that increases in mental health issues in the student population have affected the climate of the school; although, the attribution of the cause of this is varied. One principal specifically mentioned that the loss of friends and family members due to out-migration has caused what they have perceived as trauma: “they've lost their friends or the turnover of staff. All of that leads to trauma.” Similarly, the loss of teaching staff due to school instability and enrollment decline has been perceived to affect the students and their attachment to the school:

Listening to our salutorian speech, she said I am not sure which principal to thank because I have had four of them; and she really has same with guidance counselors, teachers, coaches, all of the important figures here. When you go to school, you latch on to they leave so, that's really hard for students. They form a relationship with their special teacher, which all of our students should have a relationship like that; but, when that person leaves consistently year after year, it's really hard to get attached to the school as an entity at all.

In terms of student mental health, a common thread among responses was that there was a marked increase in the number of student mental health issues and challenges in their communities and schools. As mentioned above, this was not entirely attributed to enrollment decline and poverty, in fact the cause of this change was perceived to be varied by the principals in their responses (from being related to out-migration to social media and technology use/dependence). However, this increase also represents an unexpected form of population change in the course of this study – one that could not be anticipated using the NCES reported data to inform population change and identify schools and principals for investigation and exploration. It was also unclear if the mental health issues have increased in the student

population or if the recognition and awareness of such issues has simply increased – something the principals were unsure of as well. Yet the prevalence of mental health issues in these schools was clearly articulated: “We just had a psychiatrist come in to talk to our staff this year. 90% of all of our students are dealing with anxiety.” While this change was unanticipated, given the nature of the study, it still represents a change in the population and leadership that will be discussed below.

Community perceptions. Principals’ responses related to their communities’ perceptions of student population change centered around two themes: awareness of population decline and the out-migration of graduates. In terms of awareness of the decline in student enrollment, principals’ responses were mixed as to when their communities began to show awareness and demonstrate concern. One commonality among responses was that the communities were seen as not being particularly aware of the changes going on in the school so long as the most visible aspects of the school were intact. This appeared to be a key point from this perception, as the trigger for community concern did not occur until after the school’s most visible programs (especially athletics) were cut – regardless of the duration and severity of the decline in student enrollment. One principal, in her response, highlighted this point:

They still have their Friday night football games ... I don't think they understand really where we are at, because the building has been maintained. We have never been a rich district ... When I went to school here the building has always functioned and there has always been just enough and it looks nice. It could look nicer. We could not have weeds, but I don't think that has changed. I don't think that in 1990 they have had any less weeds. They do what they can and they as long as it is not falling down, I don't think they have too much to say

Another common response was that the community did not act or increase their interactions with the school and district until the threat of building-level or district-level consolidation was present. At that point, principals noted an increased mobilization of community members towards rejecting consolidation efforts, for fear of losing their schools and/or district. In fact, one district in the Upper Peninsula followed through with school closure (an elementary in one of the communities in the district) amidst what the principal described as intense community resistance. Even though the district remained intact, the loss of the elementary caused a rift with the community to the point where very few of the students living in that community still attend district schools – instead, they elect to enroll in another district using the Schools of Choice option.

In terms of the out-migration of graduates, there was a general consensus among the principals: the community was aware that students were graduating and not coming back, which they typically attributed to the lack of professional jobs and/or incentives for the students to remain. This would appear to put the schools in two conflicting positions: on the one hand, the school serves as one of the central pillars of the community's identity and is one of the large employers in the community; on the other hand, the school, through its curriculum and adherence to state education expectations/requirements, is simultaneously preparing arguably the community's most essential individuals for its survival for export. In this sense, schools contributing to the more general decline (as opposed to the more sensitive swings in population migration due to economic changes) by helping to develop skills and training for students to leave. Principals have noticed this awareness of the community and recognize the growing fear that the towns are slowly drying up (as the younger generations leave). Yet, even though there is

this awareness, community members are not generally seen as resentful. Instead, they express fear and concern while still supporting their students' ambitions:

Yes, we are fearful that we are losing talent ... We want to make sure the perception isn't there that we are holding kids back from what they want to do.

We want to make sure that they know there are opportunities here, although not as great as a bigger city. If there is a factory that is building Styrofoam, you don't necessarily have to have a blue collar job unless you want that blue collar job.

As that principal noted, the presence of industries in or near the community do allow for opportunities for graduates who want to stay. In communities where industry is not present, the fear of larger losses does create tension between the community and the school:

I think there's that fear that are we going to lose our talent to other places. Why do that to ourselves? Which I think: listen, let them spread their wings and let them go after their goals. Maybe they'll come back to us at some point. But there's not that faith in the community.

Yet, in each of the cases where the principal articulated this fear from the community, there were no direct actions or threat of actions by community members to reject what the school is doing or the ways in which students are being prepared for post-secondary education. Instead, communities have worked with school leaders to try and implement programs and partnerships to provide career options that at least give them [the students] the option of staying in the community.

Changes in leadership. Interestingly, principals responded with generally mixed opinions on whether the decline in enrollment and increases in poverty affected their leadership, at least when they were asked directly. This appeared to be mostly the case with principals who

were still new in their career, so they had little leadership experience to reference the change over time with (even though they were familiar with the school through their experiences as teachers and staff members prior to becoming principals). However, when probed further, it became clear that there were, in fact, changes that have occurred in terms of their actions and expectations – and, that these changes were experienced and expressed by all of the principals participating in the study. It may be that the way in which the initial question was asked did not allow for a reflective response from the principals or that it was too broad (confronting each principal with a simple answer to what should be a complex question), whereas the follow-up and probing questions looked at the more specific aspects of leadership. It is clear, however, that changes in leadership, both actions and expectations, were perceived to occur by all of the principals in the study. In examining the responses, six themes emerged as being strong threads among the participants: changes in expectations; expansions of duties and responsibilities; the role of marketer; curriculum programming; professional development; and services provided by the school (with the involvement of the leader).

Expectations. Principals' responses suggest that the decline in student enrollment figured prominently in the ways in which their communities expected them to lead and for the direction of their schools. One of the major effects of enrollment decline on each of the schools in the study was the cut to instructional staff and programs (athletic, extra-curricular, and elective courses). The nature of these cuts varied, from attrition (retirements and staff leaving the district) to reductions in force, but the outcome was generally the same across the board. In the largest district in the study (with more than 1000 students district wide), the principal noted that the superintendent was able to retain most of the instructional staff and only made cuts through attrition and programs that had little participation from students (programs she noted that were

nice to have for the half-dozen students who were interested, but did not affect the student population at large when lost). In that case, the expectation was to retain as much as possible while attracting new students into the district, especially from smaller surrounding districts that could not offer as much.

In the smaller schools and districts (fewer than 300 students), which comprised most of the remaining schools in the study, these cuts were much more severe. In one southern Michigan district, the school elected to eliminate its Future Farmers of America program. It was at that point that the principal-superintendent noted a change in community expectations: the community expected the principal-superintendent to stabilize the school and district, and then reintroduce FFA and other such programs that were valued by the community. In these cases, the principals perceived their communities' expectations generally falling into a pattern of two phases: first, the community expected the leaders to keep school doors open and survive through the economic downturn and population loss; then, once the situation stabilized, the leaders were expected to reintroduce cut programs or introduce new programs that were feasible given the available resources in the schools.

The introduction of new programs, especially technology and STEM (science, technology, engineering, and mathematics) were frequently mentioned by the principals when discussing their communities' demands curriculum and their [principals'] own plans for expanding their program offerings. One principal elaborated on this point:

The community really was angry when they got rid of the metals and the shop and the woods. That is still a discussion to this day. When I brought up the whole issue of bringing in the plastics STEM, they were just over the moon. This was the best thing since apple pie because you're going to bring opportunities back to

our kids. But, there's a lot of money that needs to be raised to make that happen and that's where, in the curriculum, trying to get that to mesh. I told them, this is a 5 to 10 year project. It's something we're going to do overnight. They don't get that. They see this school as being able to snap its fingers and make it happen.

This appeared to be connected to the desire to return to a more comprehensive and expansive course offerings after many of these schools made cuts down to the bare minimum of course offerings and programming. In particular, the communities appear to prioritize these additions based on their preferences and values in terms of both identity (i.e. agriculture and FFA, industry and STEM). Additionally, this expansion was connected to the desire to be competitive in attracting students from other districts that lack these programs. In this sense, the principals saw these expansions as a way of carving out a specialty to attract interested students:

I think that the districts in the area, or the schools in the area, offer things that we don't offer and I think that has an impact a small percentage of our students; but, I also feel like we offer some things that they do not as well, which helps us.

Such an expansion and niche offering aligns with the pressures to attract students through the Michigan Schools of Choice policy discussed above. This also leads to another way in which principals reported their leadership duties have changed: marketing.

Marketing. Seven of the ten principals mentioned the necessity of marketing their schools and discussed the ways in which their duties have expanded to include marketing. Of the remaining three principals, one suggested that the success of the district in maintaining programs has attracted students into the district – mitigating the need of the principal to increase marketing, instead relying on the existing reputation of the district to serve as a de facto

marketing strategy. The principals' responses for both of these issues were quite similar among all seven participants.

First, the principals saw a need for the school/district to market itself in order to attract new students. This was seen as a way to respond to each school's declining enrollment and attempt to use the School of Choice policy for their benefit. The principals also appear to recognize the cost of attracting students, noting the competition among districts has the potential to become cutthroat. One principal noted both the need and the potential climate that the policy creates:

I think we could do a better job of marketing ... The reality is, you are competing for students because of School of Choice. You are competing with your neighbors for students, but we try. The local school districts are good about this, also: we try not to compete too hard where you are undermining the next door neighbor.

While the districts surrounding this principal's school/district have an informal agreement to not compete "too hard" for students, this was not always the case in other schools. Another principal termed this informal arrangement as a "gentlemen's agreement" between districts not to allow the competition for students to spiral out of hand. In his case, he specifically mentioned that districts generally did not run negative advertisements about nearby districts, nor did they bus directly into or through each other's district. Such "gentlemen's agreements" were brought up by three of the principals. In the case of the other four, districts competing for students did spill over to busing into districts. As one principal, whose district loses about two-thirds of its in-district student population to School of Choice, observed:

Down at this four corners, after school you'll see 4 or 5 different busses from different schools. There's parents parking in the parking lot and they get their

kids. It kind of breaks my heart. The people are right outside our fence right here, used to go here, and they took their kids to other schools.

Thus while principals recognize the need to attract students, they also recognize their tenuous position in using the policy to their schools' advantages.

Second, the principals assumed the responsibility of acting as the lead marketer for their school. The reason for this responsibility was unanimous: the cuts to administration and support staff have left these rural schools with few administrators – one per school, in most cases. Similarly, principals cited the lack of additional funds to afford a marketing specialist or consultant to coordinate with the school/district. Instead, principals have taken the lead. One principal explained that the funding benefits tied to increased enrollment are too much to ignore in schools like his, necessitating marketing:

We don't have a marketing department and so we are fumbling our way through it looking at a lot of videos and going: wow that's very expensive, but if it costs \$10,000 to [do] a marketing campaign and you get two students because of it, well it pays for itself. But, at the same time, from an educational background it's strange to think of kids as units and trying to attract more of them to make more money. It has been a strange shift.

This led to follow-up questions related to how these principals acted to increase the marketing presence in their schools. While a few, like the principal above, noted the willingness of the school/district to commit to expending considerable resources (given the size of the district and precarious financial situation) just short of hiring a specialist or consultant, principals have primarily acted in creative and thrifty ways to use the limited resources they have:

I am constantly taking pictures and putting them on Instagram, Twitter, and on Facebook. Trying to put out: this is what is happening, this is what we are doing, kids are getting a good education. Send your kids to [our school].

In the above comment, the principal highlighted the ways in which he was able to promote his school without the need to allocate considerable resources and without directly advertising against or aggressively towards another community or district. The extent of marketing actions undertaken by the principals did vary. For the most part, they reflected the description above or used similar low-resource cost options (i.e. print materials). One principal mentioned the use of radio advertisements and local news print, although he also noted the presence of more than ten nearby districts, which he felt created a more competitive environment, as being part of the necessity for such a marketing presence. Even with the actions taken seemingly creative uses of existing technology and resources the principals had available, generally the principals felt unprepared for this new demand:

The problem is, you know, in regards to marketing and all of those services, I don't have a marketing degree. I like colorful pretty graphics and I try my best but we just don't have the capacity. If I am promoting and marketing, what else am I not doing in the mean time. Quite often, myself and a couple of our staff members will create these pretty brochures, but it is like; where are we going to disperse them, who is going to see it, what is going to happen?

This sentiment was shared by several of the principals. While they have taken steps to increase each of their school's marketing presence, they were unsure of the effectiveness of their choices and noted a lack of training and/or experience in these new responsibilities.

Expanded duties. For the principals who have been in their positions and/or schools long enough to experience the rapid drops in student enrollment, duties have changed. For the principals who have not, it is less clear. As noted above, when directly asked about changes in duties as a result of student enrollment decline the answer was not decisive. Using follow-up questions and proceeding through the interview instrument, the presence of change (including the addition of marketing discussed above and other changes discussed later) became much clearer. One such change in terms of those principals who have held their position since the rapid declines in enrollment was the general expansion of duties as school leader. Principals were asked to describe the administrative structure of their district. In almost every case, the district included a superintendent, building principal, and a small cadre of support staff (typically one to two per building). For about half of the schools – those that have both a superintendent and principal – assistant principals were one of the first positions (in addition to central office staff) cut in response to drops in funding. For two others, the superintendent and principal position were combined. The remaining schools did not make cuts, keeping to a district superintendent and building principal structure or maintaining assistant principals positions (although, in both cases, the assistant position was combined with another position – such as Athletic Director or Dean of Students).

The result of these changes was that these principal and superintendent-principal positions absorbed the duties of the cut positions. When principals were asked to describe their leadership duties, the answer was almost always the same: they are completely responsible for leadership and management in the building. One principal highlights this role:

I do everything. So, I do a lot of the state reporting. I do all of the discipline. I do all of the evaluations of the staff. I evaluate the teachers, the support staff. So, the

support staff would be the paraprofessionals [paraprofessionals], administrative assistant, our athletic director, and guidance counselor. I do all of the curriculum work, which is what we just said. We just redid our math curriculum this year, so I spearheaded that. I do a lot of different communications out and so a lot of just typing things - a lot of paperwork. There's a lot of community outreach I do. A lot of event planning, the graduation, different awards nights. Honestly, this is my first year, so I probably missed a lot of what should have been done really. I have my hand and just about everything that's going on. I do a lot of substitute teaching. We have a sub shortage and so probably once or twice a week I teach a different class.

In instances where two positions were combined, principals noted the lack of assistance and support that existed prior to the position change; however, most also noted the use of teacher committees to distribute leadership decision making and support (although in those cases, the principals also were quick to mention that they still had the final say). Like the principal's self-described role above, the changes in administrative structure did not change the principal's leadership duties in any one specific way. Instead, the responses of the principals articulate a general increase in just about every aspect of leadership and management in the building – to where most of these principals are the sole source of leadership in their building.

Principals also reported that the increases in responsibilities were not unlike the increased duties and expectations experienced by teachers in their schools. In general, as the districts have made cuts, teachers and administrators alike have shouldered an ever increasing burden in their respective positions. Given the rapid drop in enrollment and funding as well as the tremendous cuts discussed by the principals, these findings are not surprising.

Curricular programming. Curricular programming followed two themes: what the principal wanted in terms of offerings and programming (beyond the minimum state requirements) and what they perceive are their communities' wants. Principals' wants were varied: principals articulated their desired programming to be vocational training to college dual enrollment. There was no unifying consensus, nor did their responses appear to align with their conceptualization of self as rural (there appeared to be no link between identifying as rural and wanting more agricultural courses nor identifying as urban and wanting more college preparation). In general, the principals articulated desires to offer as much as they could to meet the needs of the students (this was expressed by all of the participants); however, they did prioritize the types of programs added (or retained in the case of schools not yet able to begin to rebuild their lost programs) differently. In two cases, local industries seemed to influence the principals' priorities towards vocational and industry-specific training. The quotation above from the principal desiring a plastics program is one such example.

Perceptions of community needs were mixed. About half of the principals discussed their communities having expressed specific desires for specific courses and programs, while the other half mentioned just a general desire for their schools to expand offerings in order to provide, what they term, a "good" education. The specific demands were in two camps. The first was in schools that had cut all of their essential programs. Thus, returning community-valued programs, like FFA, were expectations for the district once finances were stabilized. The second was to create industry or locale-responsive programs that reflect the values of the community (including their vision for the school) and/or provide a niche with which the school can specialize. This niche was mentioned by several principals as a way of attracting students, something they felt the community was supportive as a way to increase enrollment and strategically use limited funds.

STEM-aligned programs and vocational training were the two most cited wants of the communities; although, principals in each case also discussed the presence of Career Technical Education (CTE) programs offered through the Intermediate School District (ISD) or another partner/provider that alleviated the school's need to expand in that regard.

In terms of the principals' roles in curricular programming and decision making, the responses shared a strong common thread. The principals provided their recommendation to the superintendent (unless the principal was also the superintendent), which when feasible was then agreed upon by the board. The principals described different influences on such decisions, but all reported that the final decision to make a recommendation came from them. A common influence was a committee of teachers that assisted the principal in navigating the creation of a new curriculum, curricular offering, or program. Another such influence was the available certifications within the teaching staff. Since many of these schools had major reductions to staff, principals were limited by which teacher was available to teach an additional class, the type of certification available, and scheduling availability to get interested students into the class.

Professional development. Of the ways in which leadership was perceived to change in response to population change, professional development was the most clearly articulated. In almost every case (all but one), principals noted the increases in student poverty as being a focal point for professional development. The lone principal indicated that she was at loggerheads with her school improvement committee and felt constrained or locked into their developed plan from the previous year (she was a first year principal). Since she was departing at the end of the year, there was no impetus for her plan for the next year (although she did indicate the importance of recognizing and addressing student poverty in the area). For the other nine, the degree to which poverty was a prominent focal point for the year (or years) varied. In some cases, the focus on

student poverty was one of several focal points for the year. For others, student poverty was the main focus for the year. The work of Dr. Ruby Payne was cited by two principals as being a continuing theme throughout the year. Six principals implemented new programs in their schools in response to increases in student poverty: two mentioned a program called Capturing Kids Hearts (based on a book with the same name); two started Positive Behavioral Interventions and Supports (PBIS) in their schools/districts with the assistance of their local ISDs and grant funding; two played significant roles and/or spearheaded efforts in establishing free meal programs from their schools/districts (programs that offer free breakfast, lunch, and dinner for students). Each of these programs and services required professional development and training to implement, which each of the principals indicated that they spearheaded or coordinated with their ISD. In one case, the principal directly coordinated with her ISD to bring Dr. Ruby Payne in as a speaker – a desire of her school, but not feasible without the added resources and audience of the wider ISD.

Only one principal indicated that he focused on enrollment decline for professional development; the remaining principals did not indicate any specific efforts to address enrollment decline through professional development. This makes sense, as issues like student poverty are much clearer in terms of actions that can be taken by school staff to address, whereas the effects of a declining enrollment would seem to be largely influential on the workload and program offerings of the school – not something readily addressable through professional development sessions. The principal that did focus on enrollment decline did not make it a yearlong focus, but instead planned a session to overview the changes so that teachers could understand the trends in their district. He described the rapid loss in students over four years (about 150 students, or a 21% decline) as difficult on staff morale and school climate, so he thought that the presentation

would help the staff, as a group, to understand where the school stood and how they could make adjustments and preparations if the trend continued.

In terms of providing professional development, principals reported that ISDs played a critical role. Without the presence of the local ISD, principals felt that funding and securing external professional development opportunities would be much more difficult than their present situation. In nearly every case, the ISD provided staff specifically to support professional development and learning and/or coordinated with local districts to organize large-scale opportunities that a district of fewer than 500 students may be otherwise unable to afford or attract. One principal specifically noted the integral role his ISD played in the area:

Our ISD does a really good job of about bringing in resources, though, so that we can have those resources available. They can send out coaches to our schools. We have training every month for every different core teacher group and the elective teacher groups have meetings. They have taken a huge role in that area.

Similarly, ISDs provided or coordinated the Career Technical Education (CTE) programs for the region. Principals' perceptions of these programs were generally positive, although a few stood out as negative experiences. Where the programs were seen as positive, students were enrolled in the CTE programs – allowing the schools to not have to allocate resources for in-house programs that would overlap. Where the programs were seen as a negative, the principals indicated that their students were either enrolled in a different CTE program (either through another local provider or through a different ISD) or the school still had programs available to support similar learning outcomes. Overall, the principals saw the presence of their ISDs as necessary and beneficial given the financial strain in each of their districts.

Services. In addition to the programs related to student poverty discussed above, principals also articulated the need for additional services and resources to address student mental health. A common theme in the principals' responses was the perceived increase in student mental health issues and needs. This was not anticipated in the design of the study – as the data on population change and student enrollment data (as collected by NCES) does not include data related to mental health (nor does it include any other data related to students' medical information). These increases are notable, as they have occurred amidst what the principals have described as large cuts to school-funded services and staff that they feel is necessary to address student mental health. One principal articulated this divergence of needs and resources:

I think that student mental health issues have increased in my time working here. At a time where my counseling and social workers have decreased ... We can't just ask a student to try a little harder on a day where they're suffering mentally or emotionally from whatever it might be socially. I think that is where – and again, that's two arrows in the wrong direction: an increase in mental health issues and a decrease in the resources with which to [address them]. I think that's something we will need to continue to work on: how to do a better job to support the needs of the students in a time where we don't have ancillary supports.

While principals noted an increase in mental health needs, they were unable to pinpoint the source of the increase or even if there was an increase. Instead, one principal admitted it was plausible that these issues have always been present, but the increased awareness and training related to mental health has increased its visibility in and around his school. Similarly, one principal suggested that the issues may have always been present to an extent but they have been

augmented and enhanced by social media. He further described social media as preventing students from being able to escape their peers:

I think people are more willing to talk about it now. I think that there were student mental health issues and societal mental health issues that just didn't get talked about because they are considered to be more taboo ... I graduated in [90s] and I believe wholeheartedly that my students, today, have more challenges going through school than I did. I don't want to blame it all on the internet and cell phones, but I think that's a big part of it. To take one aspect of that, bullying, which I find very rarely by being – by the accepted education definition – do we get a lot of bullying in this building. What we get a lot of is, not a lot of, but what we get some of is a lot of harassment ... When you do run into those cases, you can't run from it. If I had some sort of conflict with a student when I was in school, for the most part, that conflict ended at 3 o'clock when I went home. I might worry, because it might pick back up at 8 o'clock when I got back. But at least I got home. With the phones, and with social media and things of that nature, you can't get away from that. Even if you tried to, you can't.

The inescapability of social media is compounded by the small nature of these schools and communities. As discussed above, the same tight-knit communities that allow members to know one another with ease also appear to act to create inescapable social networks for harassed students. Increasingly, principals feel like they either being asked to address the issues outside of school hours or they are taking it upon themselves to address these issues. One principal spoke to her increasing role:

We just had a psychiatrist come in to talk to our staff this year. 90% of all of our students are dealing with anxiety. A lot of this is due to social media. Things that we didn't have to experience as kids. Yeah, we had anxiety but not to the level that these kids are having. I think it's change of the times. And so there's more being demanded out of my office. I've got parents calling saying: hey, so-and-so put this on social media, do something about it. It was at 10 o'clock at night and I can't. But, hey I'm supposed to go follow up on it. These are the types of things that eat your time. The public wants you to deal with.

This perception of demand from the community was not isolated to just this principal's experience. Instead, it was a common thread among responses that specifically discussed student mental health issues.

In addition to the demands on principals to address these issues, there has also been a noted difficulty getting support staff in to these schools. As already discussed, these schools have already made large cuts to support staff and are very limited in the resources available to hire the staff needed to address these issues – thus, the principal feeling that they must shoulder the burden. Yet, even with the resources available to add support personnel, some principals report difficulty attracting candidates in the hiring process. This is similar to the difficulty attracting teachers discussed in the review of literature in Chapter 1: the remote nature, comparatively low salary, and rural lifestyle act as challenges in attracting quality staff that prefer the comforts and lifestyle of urban settings (Monk, 2007).

Discussion

Given the experiences and responses of the principals reported in the Findings section, the discussion will consider three keys aspects (of the findings): discussing the ways in which

population change has been perceived to influence principal leadership and school operations; discussing the ways in which state policy (directly and indirectly related to population change) has been perceived to influence principal leadership and school operations; and the ways in which these principals' experiences and responses highlight rural issues in Michigan and how such issues can be addressed. The section will conclude with a discussion of the broader implications for rural education and rural leadership. In doing so, this section connects the findings to the purpose and research questions of this study.

Population change and principal leadership. The experiences shared by the principals in this study suggest that population change has had considerable influence on their leadership behaviors and decisions as well as the operations and functions of their schools. This section will discuss the relevant reported findings and the ways in which they are perceived to affect leadership. The discussion will address three key parts: the influence of population decline on principal leadership; the influence of student poverty on principal leadership; and the ways in which principals identify as rural and how that influences their leadership. Since enrollment decline is intrinsically connected to state policies, the ways in which these two components are perceived to address principal leadership will also be addressed in the next section.

Enrollment decline. It was surprising in the data analysis and findings that the principals did not perceive nor articulate enrollment decline to directly influence their decisions; however, follow up questions revealed that enrollment appeared to play a significant role. Principals noted that their schools made large cuts to staff, programs, and services. In some cases, schools were closed (including building-level reorganization) and consolidation was presented as a possibility if trends persisted. In each of these actions, principals played an integral role in the decision making process. As building-level leaders and granted enormous latitude and autonomy in their

positions (from their perspectives), these principals reported working closely with district leaders (or leader) and working to creatively resolve personnel issues related to drops in funding (including scheduling and course offerings). While these duties are not radical departures from what a principal, as building leader and manager, is expected to perform, they are actions in direct response to declining student enrollment.

Similarly, reductions in staff were also perceived to increase the duties and responsibilities of school staff, including the principals. One of the first cuts to personnel included the elimination of assistant positions at the district and school level. As a result, these principals assumed the duties of the assistant principal in addition to what they were already expected to perform. In this way, these rural leaders continue to increase their workload and responsibilities – a potential threat to the sustainability of the individual in the position. As the rural literature suggests, these leaders are already expected (formally and informally) to perform a wide range of duties beyond those that traditional educational leadership suggests. Thus, the increased burden on these principals could create the potential for increased burnout and turnover. While some principals in the study mentioned high administrative turnover (in both the superintendent position and their position prior to their hire), it is unclear to what extent this increasing demand on leadership can be sustained and/or lead to greater turnover in these rural schools. This concern warrants further study in rural schools that have made changes and reductions to leadership positions, especially those schools that had few administrators to begin with.

The decline in enrollment also spurred on efforts by these principals to attract students to the district. While much of this is linked to SOC and will be discussed and explored in Chapter 4, principals saw themselves as leaders in these efforts. Marketing and creative program/curricular

expansions were the two most common actions that these principals saw as viable given their limited resources and expressed wants/expectations of the community. These efforts were far from certain and reflect a risk to the school and district (more so the increased resource allocation to marketing). In this sense, these rural principals are being asked to commit to strategies (specifically marketing) with which they acknowledge little familiarity with resources that are already strained. Yet the reward is promising: one principal said that the addition of just two students would pay for television and/or radio advertisements, well worth the expense. In this area though, it was clear that these principals were generally uncomfortable with the new responsibilities that they felt necessary to take on – something additional training (both continuing professional development and preparation programs) can help to alleviate.

Student poverty. The principals' perceptions of and responses to increasing student poverty were much more clearly articulated. In some ways, this makes sense. Student poverty is well-researched and generally considered in principal preparation and training. Thus, principals should be expected to recognize changes in a school's student poverty level and that changes are likely necessary in the school's routine. Nearly all of the principals acknowledged rapid and/or significant increases in student poverty and discussed ways in which they were addressing issues associated with such an increase. Generally, the principals addressed this in two ways: professional development and services. In both, principals perceived themselves as taking the lead and/or initiative in implementation. In the few cases where this was not the case, the principals still played a critical role (i.e. data collection and grant writing).

It is also important to note the difference in funding options for declining enrollment and increasing poverty. For these rural schools, enrollment decline represents a corresponding drop in funding revenues whereas increasing poverty opens up additional state and federal dollars in

funding for services and programs for high poverty schools. Principals appeared to be aware of the available options for funding related to student poverty, which likely contributed to their familiarity and preparedness for leading the process in applying for these funds. This contrasted their responses for addressing enrollment decline.

Professional development was a key way in which the principals addressed their perceived poverty issues. Most of the principals made student poverty a primary focus for professional development and staff training. Similarly, they coordinated with their ISDs to bring in specialists and coaches – saving the schools/districts considerable money and resources that would have had to allocate without the ISDs. In the conversations with the principals, it seemed much of the attention to poverty came from concerns over negative effects on academic achievement and behavior. Addressing student poverty was mostly not linked to community improvement or betterment, which was somewhat surprising given how nearly all of the principals identified as rural and a part of their community. In this sense, the principals appeared to mostly consider the issue from the perspective of school leader and in terms of how the state holds them accountable, not in terms of being a member of the broader community and/or recognizing their (the school's) role in the community.

The perceived role of the ISDs in coordinating professional development and providing programs such as CTE has been critical for these schools. As the findings suggest, the ISDs were able to save schools and districts considerable funds for both. In terms of professional development, ISDs either provided these opportunities or worked with the principals to bring in outside providers/speakers. This allowed other districts to participate and cost-share – something that principals admitted would be much more difficult to do on their own. In terms of programs like CTE, schools are able to enroll students in these programs in place of creating or

maintaining a similar program in-house. Thus, ISDs provide a crucial service to these schools and mitigates some of the leadership burden that these principals would otherwise have to shoulder.

Identifying as rural. An interesting finding that came through in the interviews was the ways in which principals identified themselves in relation to their rural contexts. With few exceptions, the principals saw themselves as being rural – either because of their personal history (including growing up in a rural community) or because they express a preference for aspects commonly associated with a rural lifestyle (i.e. small communities, tight-knit relationships, perception of “safety”, and a “slower pace” compared to city life). A perceived benefit of this comfort and familiarity was the ease with which most principals felt they were able to navigate their communities both socially and politically. In fact, it was felt that this gave the principals greater leeway to act as well as patience from the school board. This could, however, create two problems. First, the expectations for insider (those who identify as rural and/or are from the community) principals may create too much patience or leeway – allowing the potential for ineffective principals to persist. Second, community expectations could conversely create pressure for the principal (especially as a member of the community) that is unsustainable. One such case existed in this study: the principal felt too much pressure to act as both a school leader and member of the community – leading to her choice to depart from the school. On the other hand, the familiarity of context and the ability to navigate social and political aspects of the community would seem to offer a greater benefit than detractor. In terms of actions and behaviors, these principals appeared to be mindful of their contexts and communities – their responses suggested that they base their decisions on communities’ needs and recognize how these decisions affect their communities.

The degree to which the familiarity of the principals with the community served to better recognize change is unclear. This is a slight distinction from the recognition of ways in which to adapt to and navigate through change given the principal's familiarity and comfort with the context. In this case, it may be beneficial to further understand if a so-called outsider (a principal not identifying as rural and not familiar with the community and/or region) is able to recognize changes that are occurring. This represents a timing issue: are the principals able to adeptly navigate local rural contexts also those in the best position to recognize change when it happens. In other words, does the connection to the community (particularly personal history) affect the principal's ability to see the phenomenon for what it is? This is a question left for future research to explore, especially in regions where rural schools are experiencing not only a declining population but one that is changing in other ways (such as racial diversity).

Inescapable from the local context that influences leadership is the broader, state context. State policies and the statewide education climate appear to have considerable influence over how these principals perceive themselves leading their schools through population change. Even without population change, the responses reported in the findings section make it clear that these principals and schools are directly and indirectly influenced by state actions and policies – with several of these linked particularly to enrollment decline. Thus, the discussion of the influence of population change on principal leadership in Chapter 4 will address these state-level issues.

Addressing the issue of population change. Given the findings, there is a need for additional supports and resources for these principals and principals in like-situations and contexts. While generally these principals appear to recognize changes in their student population and have taken actions in direct response to these changes, their experiences and perceptions point to challenges and issues that are beyond what they can address - issues that are

embedded in (or intrinsically tied to) state policies and structures (i.e. funding and SOC). This paper considers several ways in which the challenges reported by the principals could be addressed. Because of the focus of this study, this discussion will primarily focus on ways in which the perceived needs of these leaders and the issues related to enrollment decline can be addressed. Similarly, this discussion will not include larger-scale, state level policies, since that will be the focus of Chapter 4. While these recommendations cannot resolve all of the issues related to enrollment and population decline (as there are even broader economic and social forces at work), they provide support for rural schools – like the ones in this study – that are struggling and facing a further spiraling/compounding set of issues due to these declines.

Small-scale changes. In terms of small-scale recommendations, this paper recommends addressing the ways in which principals are trained and equipped to address enrollment decline and poverty increases. It is important to note that these are based on the perceptions and experiences of the ten rural school principals in this study and may not reflect every school in the state; however, the frequency and degree to which perceptions were similar (especially given the geographical range that these schools cover in the state) suggests common needs and issues facing these leaders and schools. Additionally, these recommendations require additional resources; however, the scale of additional resources is small when compared to state-level changes. Recommendations will be examined that focus particularly on increases in training as well as minor policy adjustments.

Principals appear to have a general lack of training and/or experience in navigating the choice elements of SOC. Specifically, the proliferation of marketing has placed rural principals in an uncomfortably or unfamiliar position. In larger schools, marketing may involve the hiring of a consultant or team and the allocation of resources to execute their plans and campaigns. In

these small rural schools, the funding does not exist to employ additional staff, especially after having experienced the large scale cuts that the principals in this study report. Thus, the principals assume the lead in the marketing efforts of the school. As such, this paper recommends that professional development opportunities, particularly coaches or instructors, be available for current principals to gain experience and develop skills in marketing their schools. Such a program could include solutions/suggestions for a variety of levels based on the resources available to the school (from social media outreach to radio and TV advertisements). ISDs have already been perceived to serve adeptly at coordinating and providing professional development resources and coaches for these schools; thus, it would make sense to use these existing resources to provide marketing focused training through these ISDs.

For principal/leader candidates, the inclusion of marketing components in an administrator preparation program is recommended. While this should not necessitate the creation of a new course or curricular program, principals should be prepared to navigate the state's competitive choice climate. Similar to the professional development training, this can be addressed through school promotion and technology use topics and/or issues. In this sense, principals could be trained on how to represent their schools through media such as social media, advertisements, and printed press (i.e. newspaper articles and/or advertisements). The difficulty of such a recommendation is its appropriateness for all school leaders. Since larger districts are more likely to have the resources for marketing specialists, it may be less meaningful. On the other hand, the use of social media for school promotion may be valuable for all principals and leader candidates, since it is a low-resource medium and includes communication etiquette and skills that are likely necessary regardless of school size.

Similarly, the findings of this study call into question the effectiveness of principal preparation programs in preparing these principals for their positions and recognizing the diverse contexts in which these principals will work. Principals' perceptions of program effectiveness were mixed, with responses generally recognizing experience in the school/district and comfort with navigating community and school spaces as being largely responsible for their fit in their positions. In terms of preparation programs, this mixed assessment suggests that either not all programs are created equally (in terms of curricular programming and coursework) or the relevance of the programs do not match with the learning style and/or needs of the principal (or principal candidate) – or both. The challenge with recommending change is that too much focus on context (i.e. rural and urban) could lead to pigeonholing or even tracking into specific schools and/or contexts, which presents further issues based on who is being tracked into what positions. However, the small administrative size of rural schools is indicative of a need for preparing principals in these schools to be able to navigate decisions and actions that may otherwise be considerably more limited in larger, more bureaucratically structured districts. Generally, the principals in this study had wide latitude to act and make school-level decisions. In some cases, these principals were also district superintendents. In others, the principals made budget and resource allocation decisions that would otherwise be expected of a central office staff member, which was not possible in these schools that lack a central office.

Conclusion

From findings in this study, it is clear that population change has had influence over the ways in which they lead. Because of the commonality of responses and the representation of schools across the state, these experiences are likely to be shared by other rural schools and districts in the state. The findings from this study also point clearly to ways in which rural issues

- especially rural schools and rural leaders - need to continue to be explored. The experiences and perceptions of these ten principals are just the tip of the iceberg in terms of the ways in which rural schools and communities are changing. Michigan rural schools generally have undergone enrollment decline and increases in student poverty. As Chapter 2 suggests, states across the U.S. have also experienced changes in racial composition and/or combinations of all three. The ways in which principals navigate these changes should vary, based on many factors including regional, cultural, social, and political contexts. Thus, there is the potential for rich discoveries in different regions of the U.S. in these rural schools as well as the opportunity to contribute greatly in expanding our understand of rural schools, leaders, and communities as well as contribute towards addressing issues related to these changes.

Furthermore, this study explores one primary viewpoint: that of the principal/school leader. From these discussions, it is also clear that potential issues exist in the ways in which community members and especially leaders are recognizing and addressing (or adapting to) the changes that are occurring. The implications of this are crucial, failure to do so could delay steps to adapt or, more importantly, could either marginalize families and students (especially in providing services and meeting needs) or further compound the existing issues related to outmigration and poverty.

The rural schools in this study have experienced rapid and sometimes crippling population decline over the last decade (and extending into the last two decades). These changes have been perceived to change the ways in which principals lead and how they have address and plan to address issues related to these changes. There are also areas in which these principals appear to need additional training and development in order to better navigate these changes. Similarly, state policies have served to further compound the issues facing these leaders and

schools, suggesting a need for greater attention and consideration of rural contexts and challenges.

CHAPTER 4:

NAVIGATING STATE POLICY AMIDST ENROLLMENT DECLINE

Introduction

In Chapter 3, the level of focus for the study was primarily centered on the local contexts. While the state level contexts, including the education climate and policies, are inescapable even at the local level, they were not the focus of that study. Yet, this inescapable nature of state policies and climate, especially one-size-fits-all policymaking that is a hallmark of this current educational era, suggest a richness of influence and interaction with these local contexts and the school leaders contained in them. Thus, this chapter examines the ways in which state policies and education climate influence rural principal leadership amidst the population changes highlighted in both Chapter 2 and Chapter 3. In doing so, this chapter will illuminate how the state creates further challenges and opportunities for school leaders in rural schools experiencing population change.

Michigan public education. Each state in the United States is granted governance over the public education of its students under the 10th Amendment of the U.S. Constitution. As such, each state creates its own public education policies and structures. Without a national system, these policies and structures can vary, sometimes greatly, among states. Michigan is no exception. As Chapter 3 details, there are unique policy features of Michigan that make it of interest in this study (and the previous work presented in Chapter 3). Namely, the state has two policies that work in tandem that are inextricably tied to district operations and even survival: funding and school choice. Because they are linked to local level context, an explanation of these policies was provided in Chapter 3. In that study, school funding policies were anticipated to be

highly relevant to school budget decisions and responses to population decline. For this chapter, they are similarly regarded. Thus, a summary of both unique policies will be provided.

Funding and School of Choice. In a nutshell, Michigan uses a policy structure that centralizes public education funding. Instead of relying on local property taxes for generating district revenues (a system that is common in the United States and one that Michigan used prior to the implementation of its current policy), Michigan uses tax dollars to create a School Aid Fund which is then disbursed to districts based on a set foundation level (Arsen & Plank, 2003) and reported district enrollment (Courant & Loeb, 1997). In terms of rural schools, the implementation of this funding policy generally created increases in school funding (Arsen & Plank, 2003) at the outset, as many of these rural districts are property poor or had low local property taxes (and, thus, low local revenues).

Michigan's SOC policy allows a student to enroll in a nearby district (either directly bordering or contained within the same region and/or Intermediate School District) or one that is partnered with the school district (Michigan Department of Education, 2013). As such, students and parents are empowered with the ability to choose the district that they will attend, which this choice would ideally be predicated on the quality of academic services provided by these districts – allowing students (and parents) to leave academically troubled schools and districts. Additionally, the inclusion of choice creates competition among districts for students, especially given that educational funding dollars are essentially attached to the student (via enrollment tallies). Thus, this policy is also a mechanism for school improvement, since schools and districts should be expected to improve the quality of their services in order to attract students and increase their funding.

Purpose. Research focused on Michigan's education policies in rural schools is sparse. This is likely due to these schools and districts having comparatively small enrollment size, which will not attract the same attention as a much larger, urban district. Similarly, rural schools are discounted in some research as being too limited in available choice options compared to more densely populated areas or not the focus of such policies (Lauren, 2007). Yet, statewide policies should be expected to have some effect in these rural and small town districts, especially given a steady population and enrollment decline in Michigan's rural and small town communities over the past several decades (Wyckoff, Adelaja, & Gibson, 2011). Such schools are already highly fiscally inefficient (Howley, Johnson, & Petrie, 2011), which, with enrollment declines, could make funding-related policies highly critical. Similarly, the influences of state policies on leadership and districts could be even more striking in these locations because of the threat towards district survival. Thus, the purpose of this study is to examine how these state policies are perceived, by principals, to influence school leadership and school functions amidst existing, and often rapid, population decline and change.

Summary of Literature

A comprehensive review of literature on rural schools and population change is presented in Chapter 1; however, it is important to include a summary a relevant literature as both a review and to highlight the focus of this study on rural schools, population change, state policy, and schools leadership. Thus, a concise summary of literature will be provided and discussed on these topics.

Characteristics of rural schools. This study defines *rural* as those places, communities, and small towns beyond the fringe and influence of urban population centers. More importantly, however, this study conceptualizes rural schools based on salient characteristics embedded

within that definition. Three characteristics in particular, distance, population size, and fiscal (in)efficiency, provide key linkages among rural academic literature and connect to the purpose of this study.

Numerous sparsely populated communities and towns occupy the large, geographic areas that comprise rural and nonmetropolitan spaces in the United States. Historically, these communities have coalesced around predominantly agricultural industries (Tieken, 2014). This agricultural predominance has remained largely intact, except in areas in close proximity to expanding suburbanization and urban out-migration (Brown, Johnson, Loveland, & Theobald, 2005). Without close proximity to industrialized labor markets that characterize urban areas, remote rural communities have remained largely preserved with the exception being those who out-migrate to these urban labor markets (Carr & Kefalas, 2009).

The remoteness of rural schools also influences how these schools operate. From a financial perspective, rural schools have disproportionately high transportation costs (Howley, Johnson, & Petrie, 2011) and highly variable ranges in the costs of goods and services due to scarce access and remoteness (Blauwkamp, Longo, & Anderson, 2011). Such costs are often unavoidable and can reduce the resource pool available for allocation to other areas like instruction; however, this is also dependent upon the funding structure of the district and state. Distance also serves as a barrier to accessing professional development opportunities for both teachers and leaders beyond the school and district (Preston, Jakubiec, & Kooymans, 2013). Similarly, Stewart and Matthews (2015) found that principals in small rural schools spent less time collaborating with other schools' leaders, suggesting that distance and lack of other administrators in the school acts as a barrier to these opportunities.

Population size has a direct influence on rural schools. Excluding consolidated and large county schools, rural public schools reflect the small population sizes of their surrounding communities. With small enrollment sizes, rural schools rely on a small but broadly trained instructional staff to teach a wide ability range of students (Monk, 2007). As such, these schools offer a comparatively limited curriculum than those offered by larger schools (Barker, 1985; Monk & Haller, 1993); however, courses and subjects tied to community values and traditions often persist (Howley, 2004).

Small rural schools are also fiscally inefficient. Given their size, these schools suffer from both poor economies of scale (Duncombe & Yinger, 2007) and disproportionately high operational costs (Duncombe & Yinger, 2007; Howley, Johnson, & Petrie, 2011). Combined with limited local revenues from proportionally small population sizes and property-poor communities (Monk, 2007), rural schools are constrained in how they allocate funds for instructional services beyond the minimum necessary to meet state and federal mandates. Thus, these schools have historically been particularly susceptible to cuts, consolidation, or closure as a result of economic downturns and changes in state funding policies (Bard, Gardener, & Wieland, 2006).

Yet even with these challenges, rural school leaders have advantages and opportunities because of these small school sizes. In a meta-analysis of school size research, Cotton (1996) found that students in small schools are actively involved in school activities, report a strong sense of belonging, and have fewer negative behaviors (i.e. attendance, discipline, etc) than students in large schools. Similarly, a small instructional staff allows for the development of strong social networks (Renihan & Noonan, 2012) and fewer opportunities for participation avoidance (Howley, 2000).

Population change. Michigan, like every state in the United States, has experienced changes in its rural population. Economic literature details this change as both an out-migration and an in-migration of workers and their families in response to changes in labor demand and industry (Carr & Kefalas, 2009; Kuznets, 1955; Longworth, 2009; Parrado & Kandel, 2009; USDA, 2017). Generally, existing rural populations have declined or stagnated as a result of low labor demand (Kuznets, 1955; Longworth, 2009; USDA, 2017), greater incentives for urban labor (Carr & Kefalas, 2009; Kuznets, 1955; USDA, 2017), declining birth rates (Johnson, 2006), and improved efficiencies in agricultural industries (Tieken, 2014) – the most dominant source of labor in rural areas (Brown, Johnson, Loveland, & Theobald, 2005). Where demand still exists, the population has changed. In-migrating workers and their families have replaced (to some extent) the declining or out-migrating population (Parrado & Kandel, 2009). In terms of rural schools, the findings from Chapter 2 support these observed changes in community population and also find a general increase (sometimes rapid) in poverty among rural students.

Policy. Public education in the United States is in an era of statewide, national, and, especially, one-size-fits-all policies and initiatives. While state control through such policies is nothing new, the degree to which states are incentivized to exert greater control and implement wide-reaching and sweeping policies has increased as the federal government has played an ever-increasing role in public education. No policy encapsulates this era more than *No Child Left Behind* from the turn of the century and *Race to the Top* a little more than a decade later. With both policies, the federal government incentivized states to make policy changes for education improvement (i.e. test scores). The result of which were statewide policies that focused on accountability and choice.

The very definition of rural locales (U.S. Census Bureau, 2015) suggests that districts in these areas are likely serving large, sparsely populated areas. For policymaking at the state and federal level, this may be problematic for representation of rural district (and the corresponding communities) values and issues. Priority in the policymaking agenda is achieved through a competitive process. The way in which a problem is defined, both severity and by whom, is a critical piece in attracting sufficient attention and prioritization on the policymaking agenda (Portz, 1996). The small size of these rural communities and districts and the shear distances between them, suggests that these locales are likely to have difficulty achieving the visibility necessary to become a priority. For rural districts, this also means more units are competing for attention from a single representative than what may exist in a densely populated area and a few urban districts (although, the population density of these urban congressional districts presents a different challenge for representation). The result of this lack of representation and consideration in the policymaking process is the potential for education policy implementation that is, at best, a poor fit for these districts and schools or, at worst, a threat to their survival. Either way, challenges likely exist for districts to function within a state system that does not consider their specific issues and needs.

School leadership. The small size of rural schools is also suggestive of a small administrative staff, including generally one principal in a school and/or district (Snyder, de Brey, & Dillow, 2016). Thus, rural principals are in a comparatively (to suburban and urban principals) unique position: they operate in relative isolation (Canales, Tejeda-Delgado, & Slate, 2008; Preston, Jakubiec, & Kooymans, 2013) – if not at the district level, then the building level. As with the instructional staff, principals assume many duties and responsibilities that may otherwise be distributed amongst a pool of school-level leaders in larger schools (Canales,

Tejeda-Delgado, & Slate, 2008; Stewart & Matthews, 2015). Similarly, opportunities to network and collaborate are limited within a rural district (owing to a lack of like-position administrators) and distance creates barriers for opportunities outside the district (Stewart & Matthews, 2015). With few administrators, it is expected that these rural principals enjoy a comparatively (to suburban and urban principals) large degree of autonomy and control within their schools. Indeed, the perceptions of principals in the findings section of Chapter 3 speak to this wide latitude and autonomy. Thus, rural principals should be expected to regularly navigate, grapple, and make sense of state policies that may otherwise be filtered, distilled, and otherwise interpreted through additional layers of bureaucracy and organizational structures in large, more urban districts.

Research Questions

The research questions for this paper are a subset of the broader questions explored in the larger dissertation study. Notably: *how do principals in Michigan rural schools that are undergoing demographic and population change perceive that change as influencing their leadership and the functions of their schools and districts?* In Chapter 3, this question was examined with particular focus on the local level and influences. In this chapter, the question will be explored with particular focus on the state level in terms of policies and contexts. To address this purpose, the following research questions will be explored:

- In what ways do Michigan rural and small town principals perceive specific state policies affecting their schools? How does this relate to population decline and, possibly, change?
- How do these same principals perceive policies as influencing their leadership actions and responsibilities?

Methods

To address the purpose and the research questions, this study conducted primary data analysis of interviews involving 10 rural secondary school principals in Michigan. This study uses the same participants, collected data, and analysis strategy employed in Chapter 3. Thus, a summary of the full methods section outlined in Chapter 3 will be presented here, with additional information unique to this study discussed where relevant.

Participants. The study collected original data in the form of participant interviews of 10 rural public secondary school principals in Michigan. Participant selection was the same for this paper as Chapter 3 and was guided by purposeful sampling (Patton, 2002), which establishes selection criteria focused on the phenomenon of interest: in this case, the phenomena of student enrollment decline. The selection strategy was a multi-step process (see Appendix B), which included analysis of publicly available data from the National Center for Education Statistics Common Core of Data survey spanning 19 years (from the 1997-98 to 2015-16 school years) and a participant recruitment survey sent to potential participant candidates. In total, 20 participants agreed to participate in the study, with 10 participants being selected from that pool.

Data collection. Data collection involved the use a recruitment survey and on-site participant interviews. In the case where an on-site interview was not possible, an audio interview was conducted. The recruitment survey consisted of 18 items that was designed to gather basic information (personal identification, contact information, etc), recruit participants, and to capture a simple perception of the influence of population decline on both leadership and school function. The interview instrument addressed four core themes tied to the research questions of the larger study: the participant's experiences, path to position, and relationships with the school and community or communities; observations and experiences, from the

participant's position, related to student population changes in the school, including enrollment changes related to population migration; how school leadership decisions have (or have not) been influenced by a combination of student population change and state policies; and how school leadership has acted to address (or not) changes in the student population amidst existing state policies and climate.

Analysis. Participant interviews were recorded and transcribed for data analysis. A preliminary codebook, or “start list” (Miles & Huberman, 1994, p. 58), was created based on the research questions and relevant literature. This codebook then underwent revisions as the data was analyzed and coded over multiple passes as part of an iterative process. During this process, transcripts were read for key linkages and themes, while allowing for emerging, unanticipated themes to also be added over subsequent analyses as reflective of the continued engagement of the researcher with the research. For this study, codes/themes related to population decline and change, leadership decisions, and state policies were particularly examined. As Chapter 3 noted, School of Choice and teacher supply emerged as major discussion focuses after the first analysis of the interviews. These two state policy-related focuses were coded and analyzed upon additional passes through the data and represent two of the three strong linkages among principals' responses and perceptions related to state policies.

Trustworthiness. To support the trustworthiness of this study, actions/steps were taken throughout the research process to satisfy Guba's (1981) 4-component trustworthiness model (*credibility, transferability, dependability, and confirmability*). For *credibility*: the interview instrument was reviewed by non-participant practitioners; data and interpretations were reviewed by participants, providing an internal check (Patton, 2002); and a data audit was conducted by a researcher not involved in the data collection, providing an external check (Patton, 2002). For

transferability: the use of critical sampling (Patton, 2002) allows for some extension and transfer to schools experiencing similar phenomena. For *dependability*: an audit trail was maintained; and the methods section of this paper provides a detailed, sequential account for the study to allow for potential replication. For *confirmability*: reflexive practice (Guba, 1981) was maintained. In terms of triangulation, the use of a single source (the principal participant) at each school lowers the power to triangulate; however, the member-check and trustworthiness steps should mitigate this loss in power.

Findings

As the findings and discussion from Chapter 3 suggest, student enrollment decline is perceived by principals as influencing the ways in which they lead and the ways in which their schools function. This influence of enrollment decline and increasing poverty on principal leadership is perceived by the principals to be compounded further by state policies. In particular, three issues related to state policy were commonly reported by the principals in their responses. First, every principal noted the importance of funding losses related to enrollment decline. This was discussed to a limited extent in Chapter 3; however, it will figure more prominently in this chapter. Second, Michigan's Schools of Choice policy created both challenges and potential opportunities tied directly to enrollment loss. Findings related to the perceptions of this policy also overlap to some extent with the findings and discussion presented in Chapter 3. Third, the statewide climate for teacher supply, including certification, has created difficulties for these schools to attract candidates for open positions. Each of these three will be discussed below.

Funding. The connection between funding and enrollment was anticipated in the questions as well as informed by the responses in the recruitment survey. Given Michigan's

education funding system (discussed in the review of literature), it is not surprising that the principals perceived funding as a major challenge in their schools especially given each school's rapid drop in enrollment.

The prominence of funding cannot be understated in the principals' responses: every principal discussed what they perceived as the effects of funding on their decision making and on the function/operations of their schools. These effects and influences were not trivial. With the enrollment downturns, schools and districts eliminated programs, cut teachers, and closed buildings in response to the sudden, and often large, drops in funding. Generally, principals' took a negative tone in their discussion of state funding, either making suggestions that the way funding is designed punishes schools for rapidly losing students – arguably when then need funds to stabilize the most – or noting the necessity of increases in per pupil revenues (principals that discussed this generally suggested increases by a few hundred dollars per pupil). One principal's response summarizes these sentiments:

The financing of education is a joke. When you come right down to it, we are not keeping up with inflation and so this school district, whether it wants to admit it or not, is about 2 million dollars behind what it would typically be. We just had to do a million dollar loan to do pay day for the summer. Are quite a few schools doing that? Sure. That's an indicator to me of problems. The fact that we have one budgetary year for schools and the state has their budgetary year – the common sense factor of all of that is that it boggles my mind that we're not on the same page. But, it's the state. So, in the mean time, we're not getting paid and we're getting paid less because we have less kids.

The ways in which the state has been perceived to fail to address these funding issues have led some of the principals to believe that the state either lacks the will or the desire to provide additional funding for inefficient schools. One principal shared her experience discussing this issue with a local legislator:

I feel like for a rural school they would prefer that we not exist. I have had our local legislator directly tell that to my face. I feel like [sometimes] the policies they are making are with the intention of taking us down. They don't want to have small little isolated schools. They would rather have larger districts and I understand where they're coming from a fiscal point, but I feel like in general rural communities have a lot of disadvantages.

Drops in school funding have put school and district leaders in positions that are difficult to navigate. In one case, the principal-superintendent discussed the challenge of keeping a community-valued program even though it caused budget strain:

We cannot afford to run the program, but we cannot eliminate the program because the community values it. It is very important to their identity and that we maintain some sort of working vocational trade/hands-on program; but, [it] has a line item for \$8,000. I think the true cost is about \$12,000 to \$15,000 it service is about 15 kids an hour and average which is much lower so we spend about \$1,200 more per student than we do with our Gen Ed kids

This scenario is one that every principal discussed to varying extents. Indeed, the decisions to cut programs and reintroduce/introduce new ones are intrinsically linked to funding.

Solutions or changes to the way in which the state currently funds education were mixed. Several principals (as mentioned above) suggested small, per pupil increases to struggling, rural

schools (generally around \$200~\$300 per pupil). Others were unsure how the state could adjust its existing system without a complete overhaul. In one case, the principal had no suggestions on how to make improvements, as he only observed that the system is not working:

I won't pretend to know about where the money should come from, how the money should be raised, or if we want to raise additional revenues, because no one wants a tax increase. I won't pretend that I am an authority on that; but, there is a lot of recent and compelling research that says that we are dramatically underfunding public education in this state. So when I think of state policies that are getting in the way, that's the number one.

Schools of Choice. The perceived importance of Michigan's Schools of Choice (SOC) policy, in terms of influencing leadership and school operations, is one that is also intrinsically linked to funding and enrollment. Much of the perceived effects of SOC have been highlighted in the sections above, so the most salient responses and themes will be summarized here. In terms of SOC, there are four common threads/themes among the principals' responses. First, the opportunities created by SOC (in that students are able to elect to enroll in nearby districts) for students and families have compounded enrollment decline. Principals in schools that have experienced net losses in SOC enrollment have noted that cuts to programs and curricular offerings have caused students invested in those programs to leave for other schools/districts that still have such programs/offerings. These departures are not seen as rational in terms of academic performance, since test scores and other performance measures were not perceived as the deciding factor in using SOC. One principal acknowledged the loss of extra-curricular programs and elective courses, but touted his school's comparatively high achievement measures compared to other districts:

We have 500 kids attending other districts that live within our district, which is a major problem and is something that once I've been hired, we've been working very hard at reassessing why they are not attending our school. Our test scores are higher than theirs. We have the facilities, we have the after-school activities. If a kid wants to go to a Baptist School that's seven miles away, I get that for religious reasons. But why are they going to the charter schools? What is better about that when our scores are better and our resources are good? Is it a grass is greener?

This uncertainty is one that is not isolated: three principals cited their test scores as being high when compared to nearby districts. This suggests that there are other factors at play, including the desire to continue with programs that were lost. This is not surprising, as, for example, it would be expected for musically talented students to find a school that has a music program if their current school eliminates its program. In this sense, these principals may not be conceptualizing the quality of their education beyond the achievement measures in which they are being assessed.

Second, principals think that the policy has been used by parents as a means of resolving issues with the school/district, leadership, and/or teachers. The causes for these departures are varied, but the principals' responses generally center on parent satisfaction with the school and district as a common reason for their decision to use SOC. This was particularly the case for districts that closed schools. The two principals located in the Upper Peninsula noted that their districts closed elementary schools. Because of how these elementary schools were located the district (serving as quasi-satellite schools in the communities), the threat (and subsequent follow through) of closure caused intense community objection. One of the principals summarized the consequences of the closure in his district:

There is an elementary school about 20 miles down the road that used to be a part of [our district]. They closed it about 10 to 12 years ago now. It's a charter school, so the kids that used to be [our district's] students now go there. And, closing the school had a negative impact on how that community and [town] and area feels about [our district]. Many of the students there, after they get the 7th grade, which is their last grade - they may go to [another district], because of the negativity that was associated with closing that school.

The other district in this anecdote is not particularly close. The principal indicated that it was more than 20 miles away from the town; although, he also noted that this town was also roughly the same distance to the district's largest town and other school facilities. In that case, the parents made a conscious choice to leave the district – one the principal conceded did not appear to recognize nor represent the needs of the community (in their eyes).

On a smaller scale, principals have also noted that students with discipline issues in the school have used SOC to get a fresh start in a new district. This was generally viewed as negative, since principals have had experiences in which parents attempted to use SOC as a threat for leverage to resolve discipline issues or other issues with the schools. One principal shared her frustrations with the policy that highlight this issue:

When you look at our school, and although there are many areas of need holistically, [it is] not much different than that school or that school; but, because of School of Choice, parents don't even walk through our doors. So, what it did was it disrupted our community. It allowed people who had no valid reason to leave just because they could. Instead of working together as a community [on] whatever issue or question or concern was presenting, [at] any minute a parent

could come in here mad because a policy was enforced or rightfully so, when X Y Z happened. That's it, I'm gone.

As such, parents and students have gained considerable power, which principals suggest affect their ability to perform their duties. A particularly salient incident was shared by a principal in which parents were able to undermine his responsibilities as principal. In that incident, a staff member acted recklessly – risking the well being and safety of students. As a result, the principal made the decision to fire the staff member. This decision was supported by the superintendent and district board. The staff member was well liked by parents, which resulted in swift pushback and a threat to use available options like SOC to leave the district. Because of the size of the students threatening to leave, it was possible that the decision to terminate the staff member could cause the district to close. Thus, the superintendent and board rescinded their support for the principal's decision and instead decided to retain the staff member, even though the actions of the individual merited immediate dismissal. This threat was not an isolated experience. Other principals reported similar, smaller scale threats for students to leave based on what the principals see as disgruntled parents feeling their students are being unfairly disciplined for disciplinary actions.

Third, parents have used SOC for reasons beyond what the policy appears to be intended. This, in part, is connected to the second thread – as the decisions the principals perceive parents and students to be making to enroll in other districts is not linked directly to academic performance. In addition to expressing frustration and use as leverage in issues/conflicts with the school, district, and leadership, principals shared common experiences dealing with SOC in terms of students leaving for athletic reasons. Indeed, principals of small schools in the study noted similar issues with athletically talented students electing to go to larger schools and/or

districts. This was primarily for visibility and recognition as well as the ability to participate in an athletic activity that is not offered at the current school. One principal specifically mentioned this issue with SOC: “Yeah you get a free year of eligibility. If we are just talking athletics - SOC really encourages students to move from school to school for athletics.” The concept of school athletic prestige was brought up these discussions of SOC with principals. One principal noted the importance of visibility that the larger schools offer: “If they think they are going to University of Michigan to play football or whatever, they [will] want to be exposed to the larger crowds and things.” In these instances, the principals recognize the drawbacks of the current policy as it is written in terms of their schools, particularly for non-academic reasons and especially in schools/districts that are simply incapable of offering the scale to which these larger schools can provide in terms of athletics. Similarly, it also reflects (through the principals’ perceptions) the ways in which students and parents consider the importance of the school/district and community – a departure from what the literature on small towns and communities suggests.

Fourth, principals see SOC as the opportunity to get students back into their buildings. This was primarily addressed in the discussion and reporting of the findings on marketing in Chapter 3. Nearly all of the principals (with the exception of two that have seen net gains in student enrollment due to SOC) have acknowledged the role of SOC in further dropping their schools’ enrollment tallies. However, these principals also see SOC as the way to get students back into the district, either getting those that have left to return or by attracting new students. In one case, the principal-superintendent reported a high percent of currently enrolled students being SOC participants (he suggested the figure was about two-thirds of the student population) which offset the loss of about two-thirds of the students living in the district to SOC options.

This desire to use SOC to their advantage has resulted in several proposed ideas, which have generally been spearheaded by the principals. As mentioned before, marketing played a key role in these efforts. Principals generally felt that it was their responsibility to increase the marketing presence of their school and make decisions based on the need to attract new students (or get students back who have left). In addition to increasing the school's marketing presence and marketing resource allocations, each of the principals in schools that made large program cuts saw the addition of specialty, or niche, programs will help them draw in students who could not otherwise receive that form of education. While they cannot compete with the scale of athletic prominence and prestige of larger districts, principals discussed the attention to the individual student that these small schools can offer.

Certification and personnel. Nearly all of the principals discussed the issues they face in hiring and retaining personnel. This stems from both direct state policy and the current education climate in Michigan. In terms of state policy, principals noted that the certification bands, the subject areas and/or grade levels a certified teacher is allowed to instruct, are too narrow for rural schools' needs. For many of these rural schools, there is one or a handful of teachers in each subject area. As such, principals discussed needing candidates and/or staff who can instruct a wide range of courses and ability levels. Instead, the narrow bands, which also allow teaching candidates to specialize, reduce the candidate pool significantly. One principal expressed her dissatisfaction with the policy and her struggles with personnel decisions related to certification:

Right now, I am utilizing teachers in multiple facets, grades 7-12. This new reworking of the bands – it's going to be tricky hiring. I am really going to have to parse out how to use someone and what's going to be the most effective use of my dollars. That's an investment in someone of at least a million dollars over the

course of a career. I've got to think about: is that possible, is that what I want to put my money into, someone that is just 7, 8, [and] 9, whereas, I need someone able to work 7-12. They are really thinking about re-banding: K-3 band; 3-6; 6-9; and then a 9-12. That, for us, is disgusting in my humble opinion. That, yeah, if I'm ... in Grand Rapids, sure. They've got buildings upon buildings that they can put together. I've got one.

For these rural schools, the principals noted specifically the lack of science and math teachers willing to teach in their districts or unable to do so because of the way certification does not align with the specific needs of the school/district. Similarly, the small staff size also created issues in schools that relied on a single teacher to instruct multiple subject areas. In one such case, the principal doubted that he would be able to find another teacher that could teach that combination of subjects and that he was skeptical that he could convince two candidates to apply for part time positions.

In terms of the education climate, principals generally observed there to be existing shortages (especially in the Upper Peninsula) or the likelihood of shortages in the near future in teacher supply. This was commonly attributed to two causes: the aversion to rural lifestyle; and the combination of state policies (no one specific policy as the case above). Principals' experiences with the aversion to rural lifestyle were discussed above (see *rural issues and challenges*). To summarize: several of the principals felt that unless there were ties to the community or a desire for the recreational and isolated/remote lifestyle, candidates generally avoided their schools or took a position for a year or two and left for a more desirable (to them) position. The combination of state policies are not necessarily specific to rural schools and, unlike the certification policy discusses above, generally appear to indirectly affect the ability of

these principals' abilities to hire and retain personnel. One of the principals observed the ways in which he felt the state was acting and/or supporting a climate that hurt rural schools in attracting teachers:

The other issue is the state has taken a lot of the perks of what it is to be a teacher in Michigan. That's why we're going to have – that we have a teacher shortage. We had a position unfilled all year: our foreign language position, because there are no foreign language teachers available. Last year, there was an unfilled math position because there weren't any teachers available. They had to fill with subs or someone teaching on their prep. The state changing the retirement [policy] has made it so that some people don't want to go into it. One reason you went into it was because you had a good pension. The other one that I think that has hurt a lot that people don't really think about is the health care benefit match. Your salary was never that high as a teacher. People were fine with that because they had good health care. Now we have teachers paying \$500 a month for healthcare and their salaries are not that high. People will say: that's still better than what other people are dealing with. The problem is that the salary is not with the professional job that goes with it.

Another principal referred to her experience with a nearby university: during her career, the number of student teachers and teacher candidates has dropped significantly. Not only are rural teacher candidates limited by aversion, the sheer drop in total candidates further limits the pool. Similarly, principals reported the lack of incentives for teachers to take jobs in their schools. This is connected to funding, but furthermore highlights the struggles that rural schools face without

additional support from the state. As such, principals report shortages in candidates, with several noting unfilled positions in their buildings.

Discussion

State policies and principal leadership. It is difficult to ignore the presence of the state in further complicating the ways in which these principals and their schools are addressing declining enrollment and increasing student poverty levels. As reported in the findings section, three common threads were shared among the principals' responses: Schools of Choice (SOC); funding; and teacher supply. The first two themes were directly influenced by state policies, since both SOC and funding are specific statewide policies that apply to public schools in Michigan. The third theme was indirectly influenced by state policies and the broader education climate, since actions by the state contribute to the shortage in teacher candidates and the ways in which certification is decided (this is much more direct than the former). In each of these three areas, the principals generally felt that the state further compounded the issues they were experiencing related to enrollment decline (in particular, compared to increasing student poverty). Because each theme/issue is distinct, they will be discussed individually.

Schools of Choice. The perceived impact of SOC in a majority of the schools in the study was one that exacerbated the enrollment declines already experienced in these schools and districts. Principals noted the decision (out of necessity) to eliminate programs and to cut teaching positions. In schools with already few FTE positions, these cuts shrunk the available course offerings to the point where only a handful of non-required (minimum state requirements for graduations) electives and programs were able to be offered. In that scenario, SOC appears to be an appropriate and logical option for students and parents who want the ability to attend a school that offers more than the minimum. In this sense, SOC appears to be fulfilling one of its

intended purposes: to allow students and parents to option/choice to attend a school that they feel meets their wants and needs.

The difficulty with the policy, however, appears to be fulfilling one of its other intended purposes: the use of student choice as a driver for school improvement. From the findings section, it appears that the effect of SOC in these rural schools is one of the rich getting richer. Principals in the smallest schools and those that made large cuts in response to rapid enrollment decline reported a similarly large exodus of students to other districts that were not so gutted from student loss. As a result, these principals and schools had to further reduce staff and programs to adjust to their ever-decreasing budget. On the opposite side of the effect, the principal in the largest school in the study reported large gains in SOC students – enough to soften the blow of rapid enrollment decline of in-district students. As such, it appears that the smallest schools and districts in this study were the most vulnerable to enrollment decline spiraling out of control due to SOC. It is also unclear, given the large losses in students and cuts, how the principals will be sufficiently able to make the school improvements that the policy intends through this competition.

Similarly, if population decline (principals have reported mixed trends: most have seen either stabilization or further decline in the last few years) continues or schools/districts fail to resolve their budget issues (with their current enrollment levels), the level of competition among neighboring districts may increase to a cutthroat atmosphere – a winner take-all scenario that principals suggest could wreak havoc on their schools and districts. Indeed, most principals noted the desire to increase their marketing presence in the area to attract students and use SOC to their advantage. This appears to have presented a challenge and a tension, owing much to the inexperience of these leaders in marketing and the necessity to allocate resources towards

marketing efforts that would otherwise go towards instructional and operational services. In other words, this solution – one that logically fits within the SOC policy set forth by the state – is a gamble for these schools. Failure to make gains from these efforts could also mean failure to thrive. Of course, as two of the principals stated, these attempts at marketing as well as the creation of new, niche programs (those to set them apart from nearby schools and districts while also trying to get students who enrolled elsewhere to return) are some of the few options remaining to keep their districts from closing their doors.

Of all of these efforts and discussion, only one of the principals noted the academic performance of the school being an advantage towards gaining students through SOC. Instead, principals generally were perplexed by the continued loss of students through SOC even though their scores were competitive (to their advantage) or the highest in the area. In this manner, SOC also has appeared to have unintended consequences for these rural schools. The experiences shared by the principals in the study suggest SOC is being used, by some, as leverage in resolving issues with the school/district. Generally, this appeared to be tied to discipline: parents used SOC to remove the student from the school as a means to avoid responsibility for disciplinary actions or because they felt the student was being unfairly treated. In two cases, the closure of a school resulted in a schism between community members and the district. This use of SOC was observed to be much more large-scale as in one case nearly an entire village now sends its students to another district instead of the district in which it is located.

Furthermore, the use of SOC for athletic benefits was a common theme and source of frustration for these principals. This use of the policy appears to blur the line in terms of meeting students' needs and the role of public education. As the findings suggest, principals have observed athletically talented students leaving their schools for larger and/or more prestigious

ones. In other words, these rural schools do not have the visibility nor the capacity to provide a comparatively robust (in terms of training, coaching, etc) programs as larger, better funded districts (in terms of the availability of resources to allocate towards these programs). The findings do not suggest any recruiting or other such improprieties with the policy that are unethical, however there is concern among at least some of these principals that failure to address this issue in the policy could create problems in the future.

Finally, SOC appears to be highly influential over the capacity of these principals to lead. Drawing from the findings and discussion to this point, principals have reported changes in their leadership duties to address issues related to SOC and to attempt to use the policy for their own benefit. Of concern is the anecdote shared by one principal and reported in the findings section: the use of SOC as leverage in disrupting the necessary actions of the school and district. In that instance, the principal was contractually within his bounds (and arguably ethically compelled to do so) to dismiss a staff member for actions that directly endangered students. The way in which parents (and students) were able to threaten departure, knowing that it could result in the closure of the school and/or district, is concerning. In this sense, SOC was used to undermine a public official in executing duties that he was contractually obligated to fulfill. It is unclear to what extent similar instances have occurred throughout the state in regards to this policy; however, the majority of the principals in this study discussed the necessity of being mindful of SOC in their decision making and actions.

Funding. A less surprising finding from this study is the importance of funding in the decision making and actions of these principals and its connection to enrollment decline. To succinctly summarize the findings, principals noted that funding drops hit their schools hard as their enrollment declined. The way in which Michigan ties student enrollment to funding did

provide an initial boost to these rural schools according to these principals, which are mostly property poor (and thus would have comparatively low revenues due to low property values in a property tax based funding system). However, as soon as enrollment declines escalated around 2008, the general inefficiency of these schools became increasingly worse (more inefficient). Thus, school and district leaders made drastic cuts to programs, staff, and services.

Of the policies discussed, Michigan's funding system was one of the least discussed in terms of large-scale policy solutions. In other words, principals noted funding as a major concern but were unsure if they would completely overhaul the system and/or replace it with a new one. Instead, principals suggested smaller scale adjustments to state funding that would help off-set the inefficiencies of their buildings. The most common was a simple increase in the per pupil foundation level. Such an increase would instantly boost revenues in these schools and likely allow them to retain staff and programs that would otherwise need to be cut. The downside, however, is that it does not entirely resolve the existing fiscal inefficiencies created by continued enrollment decline. Principals also reported that Michigan does not account for regional cost differences and increased inefficiencies due to the rural nature of their schools. The districts in the study were generally large in geographical area, with some covering more than 1,000 square miles. The cost to transport students to and from these schools (a necessity for these public schools) was reported to be incredibly high for these schools/districts – considerably larger than smaller and more urban districts. Yet the principals note that the state does not adequately provide funding adjustments to help with these disproportionately high transportation costs. Instead, these schools/districts simply shoulder the additional burden and provide proportionally fewer other operational or instructional services. While they are still able to meet the state's minimum curriculum requirements, these principals and schools are turning to alternative

services (such as online education providers) to augment and/or replace their own instructional services when cuts are needed. Similarly, the loss of programs and services beyond the bare minimum also serve to further incentivize students in the district to consider SOC as an option to seek a more comprehensive education – further putting these schools and districts into financial strain.

What is also concerning is the interaction between the local legislator and the principal that was highlighted in the findings section. The explicit desire to see these inefficient schools close suggests a sentiment and temperament (at least from one lawmaker) towards rural schools that is hostile – particularly, concerning since this lawmaker represented a largely rural (representative) district. This also gets at one of the core issues with funding rural schools: are these schools truly inefficient or are they efficient given their context? From the discussions with these principals, there seems little in the way of poor financial decision making that has caused their schools to flounder. While some have experienced less than desirable decisions, the drop in funding as a result of enrollment decline has ultimately been the largest contributor to their [the districts’ increasing inefficiencies. Similarly, it is unclear what other options are available to students other than their existing district or nearby districts (in the case of SOC). The low population density of these communities and geographical areas would seem to hold little incentive for private organizations to provide competition. Indeed, only one principal mentioned competition from private entities – the remaining principals only noted other local public school districts. Thus, it would seem in the best interest of the state to recognize the financial challenges facing its rural districts and take steps to adjust their funding system to ensure the viability of these districts.

Teacher supply. The reported shortages in teacher supply is one that is likely not contained to just rural schools; however, it presents a considerable challenge for Michigan's rural schools. Nearly every principal mentioned the lack of teachers to fill their open position – most notably science and math positions – and concerns that the state is on the verge of a teacher shortage epidemic. For rural schools in particular, this is concerning. The literature on teacher supply in rural areas already suggests a smaller pool even during the best of times. A shortage in supply could leave many of these schools with positions left unfulfilled or covered by long-term substitutes. In one case, the principal was afraid of the time when his veteran teachers would retire – leaving him with multiple positions that he is doubtful he could fill. Similarly, the small size of rural schools has caused some to hire teachers who have multiple certification areas and/or endorsements. The benefit is clear: a half-math, half-foreign language teacher could save a district money and provide key subject area coverage for the school. On the other hand, the loss of such a teacher means the principal now has to find a similarly certified teacher or hire two half-time positions. This was an expressed concern by more than one of the principals in the study.

The resolution of this issue is not simple. As the findings sections reports, there are multiple, interwoven contributors to this supply shortage. As one principal discussed, the state will need to overhaul the way it incentivizes teacher candidates to improve both quality and supply in the state. Similarly, the further focus in specialization through the narrowing of certification bands (particularly grade level ranges) ignores the reality of these small rural schools. Indeed, most of the schools in this study employ teachers who are responsible for not only high school level (grades 9-12), but also middle school level (grades 6-8) and potentially even younger (grade 5 and lower). Instead, the state should consider district-level waivers for

schools like those in which the principals in the study are employed to allow teachers with reasonably and logically comparable certifications (including bands) to be employed within the district conditional upon additional professional training/development to address overlap gaps between the certification held and the position. This does not resolve teacher supply in its entirety (far from it), but it does allow school leaders more flexibility and options in addressing the personnel needs of their schools and districts.

Implications for change. Where Chapter 3 discussed the ways in which perceived issues can be addressed through both small-scale policies and training (including principal preparation programs), the findings from this chapter suggest larger changes are necessary to resolve perceived issues. Thus, the implications of this study are in the form of policy recommendations with the recognition that such changes require additional examination and modes of inquiry to support the findings of this study. In particular, this discussion will focus on the teacher shortage as a small-scale change (since the shortage appears to be statewide, but with rural schools having unique challenges with this shortage), and funding and SOC as large-scale changes.

Small-scale changes. The reported teacher shortage is one that is not sufficiently addressed through small changes in policy; however, small adjustments could be made to the existing certification policy to acknowledge the need of small rural schools and allow them to better fill open positions that are increasingly left unfilled. Principals in the study reported the narrowing of certification bands and the inflexibility with which hiring decisions can be made with respect to these bands has dropped their candidate pools to near-zero levels. Positions have been left unfilled and principals fear that this problem will only get worse as fewer teachers will possess the necessary certification bands. Similarly, some of these small rural schools have hired into issues: they have hired teachers with multiple subject area certifications/endorsements,

which works to their advantage until the teacher leaves. Then, the schools are on the hook for not only one position, but two (usually half-time).

The findings from this paper suggest the following recommendation to address the issue: an adjustment to Michigan's teacher certification policy to allow for public schools below a certain size (by grade level or school/district size) to use certification waivers when hiring teachers. Thus, a superintendent could waive the certification requirement for a position so long as the candidate was certified in the same/similar subject area with the same/similar bands. The stipulation for the use of waivers would be that the candidate would then have a probationary period with which he/she could complete training (i.e. a series of professional development/training sessions) to address potential gaps in the certification. This would allow these rural schools/districts two key benefits. First, the waivers would allow for teachers certified only for high school science to also teach middle school science in these small schools (this was the most cited issue and need, as many of the schools in the study lacked the enrollment size to have separate middle and high school positions). Second, the knowledge of a waiver system for these schools may increase the candidate pool as candidates may be more readily willing to apply for a position in which their certification was similar but not entirely matched. The foreseeable increases in funding/resources to implement such a change should be contained to the provision of professional development and training to comply with such a waiver. Again, ISDs could be used for this purpose, especially if the training focused on addressing gaps in band ranges. Similarly, changes to preparation programs would involve primarily time and modifications to the existing curriculum.

Large-scale changes. The perceived issues facing the rural principals and schools in this study point to larger issues with existing state education policies. Namely that it appears that

these policies fail to consider rural schools and the challenges that they face in dealing with enrollment decline. Funding and SOC are the two primary state policies named by these principals. Changes to either policy are not simple. Indeed, making changes to a state funding system or the way in which school choice is permitted has far-reaching implications beyond rural schools. Nevertheless, the position that these rural principals and schools are placed suggests that consideration of rural schools is necessary for their continued survival and, if the literature on rural school consolidation is correct, the survival of their communities. Based on the discussions with the principals and the perceived issues that they face, this paper makes two recommendations.

In terms of the state funding system, the principals suggest that there is insufficient adjustment by the state (in its formula) to address regional costs differences, differences in scale, and contextual differences. As student enrollment declines, districts that cover a large geographic area (such as those in the Upper Peninsula) end up with fewer revenue dollars (a result of fewer students) yet still have to maintain their bus routes. In one interview, the principal suggested that students in the district were riding the bus for multiple hours each day. With declining enrollment, he only saw this issue getting worse as the district will need to consolidate routes to save money. In this case, it would make sense to provide additional/supplemental funding for these large districts to continue to allow them to operate buses and provide transportation to students for a reasonable length of time. While the exact threshold for transportation tolerance is likely debatable (and not the focus of this study), it seems a disservice and/or inadequate for students to ride a bus for more than an hour and a half to two hours each way if it can be avoided through reasonable funding fixes.

Similarly, it is recommended that the state consider the rural nature of these schools by providing additional funding to supplement the disproportionately high (compared to larger and more urban districts) operational costs. Research has suggested that rural districts are inefficient when compared to urban and suburban districts (Howley, Johnson, & Petrie, 2011); however, it is important to consider whether these schools are truly inefficient given their contexts. While some of the principals mentioned private and charter school options, the majority noted an absence of such schools. Indeed, it appears that using SOC to enroll in nearby districts is the primary manifestation of competition and choice in these areas. Similarly, the failure of these existing districts is likely not to draw more choice options into the area. Indeed, the low population-density and remote natures of these communities suggests little incentive for new education entities. Thus, competition should not be expected improve the efficiency of these existing districts nor should consolidation to improve efficiency be considered a panacea, especially with many districts in northern Michigan already occupying large swaths of land. Instead, the state should consider implementing new supplemental and/or categorical funding to assist these rural schools, especially the more remote and sizeable in terms of land area coverage, and allow them to provide services adequately to students.

Another recommendation is to allow for supplemental funds and/or adjustments to funding if the school/district experiences rapid population loss over a short period of time. Principals reported that the drop in funding created shocks to their districts, resulting in swift but necessary cuts to programs, staff, and services. Because of this, the principals generally felt that it took years (if ever) to begin to stabilize funds after the massive cuts and reductions. Similarly, the rapid cuts to programs, staff, and services also created additional ramifications: more students left these districts to other, generally larger districts that were able to maintain (or at

least not cut as much) programs and services. As such, it is recommended that the state amend its funding policy to allow for funding buffers to allow districts the time to adjust to their swiftly declining enrollment. Such a buffer could soften the blow of enrollment loss and allow the districts to better prepare and make more strategic decisions moving forward. Indeed, principals suggested that these cuts came fast, which may have looked different if the districts had more time to transition to their smaller size (including strategic reorganization, attrition of staff, staff reassignment, etc). Instead, districts made quick cuts and continue to cut as needed in hopes that the student outmigration would slow. Such a system could be created by establishing a threshold for decline, such as a predetermined percent decrease in enrollment between years. If a district exceeded the annual threshold, the state could supplement the district's funding to the threshold level. Eventually, funding would decrease to the actual enrollment of the district but it would buy district and school leaders valuable time to strategically plan for these losses (instead of being hit hard over a short period of time).

In terms of SOC, there are expressed concerns by the principals on how the policy is currently being used (as evidenced in the findings and discussion sections). The difficulty in recommending changes in the policy is the acknowledgement that there is significant difficulty and challenges with determining the validity of parents' and students' expressions of choice. Yet, the experiences of the principals in this study suggest that there are compelling reasons why the policy should be changed, which centers squarely on policy intent. Mainly, this stems from the issue that many of the school principals in the study reported higher achievement and test scores when compared to the districts that they were losing students to. Yet parents and students still elected to enroll in these other districts via SOC.

One concern is with the perceived usage of the policy as leverage in resolving issues with the school/district. While the policy is a benefit if the student is being unfairly treated or is not receiving adequate or equitable services, the use of SOC to avoid responsibility or to subvert school officials' mandated responsibilities is troubling. The experience of one principal with a staff member that endangered students highlights this concern. In this sense, the policy is being used beyond its intent. It is unclear to the extent that similar situations exist across the state – as this was the most striking instance shared by the ten principals. Similarly, it is difficult to assess validity of choice, especially given only one side of these experiences. Thus, more research focused on SOC in these rural schools is warranted and should be considered in order to support changes to the policy that may affect parents' and students' abilities to use the policy.

On the other hand, the use of SOC for athletic purposes seems to stray from the intent of the policy. In the current climate, there are few limitations for the student when deciding to depart a school for athletic reasons. Indeed, principals expressed frustration with students leaving their schools in order to get playing time or more visibility (in the case of larger schools). Of course, students and parents may not report athletics as a reason for using SOC; however, this paper suggests changes in the policy that considers athletic eligibility during the transfer (including a waiting period for students who enroll via SOC). The challenge with such a suggestion is the extent to which any program could be used to recruit or attract students away from other districts. Instead, it is recommended that the state reexamine the purpose of SOC and adjust its eligibility stipulations based on that purpose. If the purpose is purely academic, then such eligibility restrictions and/or stipulations would seem warranted. If the purpose remains broadly one of pure choice, then rural schools will continue to experience these swings and/or, in some cases, downward spiral of enrollment as students elect to attend other schools.

Conclusion

The findings from this study suggest that principals perceive state policies as having a detrimental impact on their schools' abilities to operate and are, at the same time, highly influential on the ways in which they [principals] lead. In particular, the rapid decline in enrollment in these schools has created a context in which principals seemingly act out of survival for their schools. In terms of funding, these declines have resulted in experiences of large cuts to programs and curricular offerings, which further diminishes the quality (in terms of comprehensiveness) of the education of students in these schools. Similarly, SOC has allowed students and families to leave these schools, adding to the already problematic decline. While some of these losses are understandable and expected, given the desire for quality of education, the experiences of the principals suggest that the policy is being exploited for purposes beyond its intent. This also speaks to the problematic nature of the policy in terms of who is being left behind. Not every student leaves, which can be attributed to a multitude of reasons and rationales beyond the scope of this study; however, it also calls attention to the issue of who truly has the power of choice and under what circumstances can that power be exercised. This is especially true for larger districts, like those in Michigan's Upper Peninsula, in which transportation becomes critically important and could serve as a deterrent for impoverished students and families. Such issues are raised through the findings of this study and that of the previous two presented in Chapter 2 and, particularly, Chapter 3 and warrant continued and more expansive research, especially since these issues represent issues of equity in public education that has been largely unrecognized (or ignored).

This study does not find fault with the intent of the policies implemented by the state of Michigan. Indeed, its purpose is not to take a political stance. Instead, it is to highlight the ways

in which policy design works counter to the presumed intent of policy, especially when such policies are created to be implemented in all or nearly all districts and/or schools in the state regardless of contextual differences. In this sense, this study, through the perceptions and experiences of rural principals, argues that context matters and should be considered and addressed through the design of such impactful and far-reaching policies.

CHAPTER 5:

SUMMARY AND IMPLICATIONS

This chapter presents a summary of the findings from the three studies and preceding review of literature. First, a summary of each study is presented followed by a discussion of overlaps and common themes between the studies. Then, a discussion of how the studies address the dissertation's overarching research questions is included. The chapter then concludes with discussion on the implications of the research and recommendations for continued and future research.

Chapter Summaries

Each of the three papers in this dissertation speaks to the phenomenon of population change through the changes that are occurring in rural public schools. Yet, each of these papers also focus on different aspects of these changes, providing, in sum total, a comprehensive look at the ways in which student populations are changing and the influences of these changes on schools and leaders. In this section, each of the papers is summarized in terms of key findings, and the unique ways in which they address the overarching research questions of this dissertation study. Then, common threads and how these three papers overlap to present a coherent look into rural schools undergoing population change will be discussed.

Chapter 2. The study presented in Chapter 2 examined large-scale (both national and state-level) longitudinal trends in rural schools and districts over an 19-year period. Research on the U.S. rural population has been undertaken before; however, it is either economic and focuses on general population trends and labor or it is educational and focuses on cross-sectional and non-longitudinal data in analyzing rural areas. Thus, a clear gap exists in which this study

addresses: longitudinal population trends, but specifically focused in schools and districts. The findings from this study support the economic literature presented in both Chapter 1 and the review of literature in Chapter 2: rural student populations, much like community populations, are changing and becoming more diverse. The degree to which these changes are occurring and the nature of these changes is also different based on regions and, sometimes, state. The study generally found that rural students across the U.S., much like students in the suburbs, have become increasingly poorer – with double digit increases in percent-point share of free- and reduced-price lunch eligible students.

Other changes, such as racial composition and changes in enrollment tallies (largely decreases, but some increases) were, as mentioned above, largely dependent upon the region and/or state the district was located in. In terms of regions, the following general trends were observed: in the Midwest, district enrollment tallies declined, sometimes rapidly (by more than 15%), student poverty increased, and districts became incrementally more diverse (generally <10% percent-point increases in share of non-White student enrollment), particularly in Latino-identified student enrollment; in the Northeast, the trends were generally the same as the Midwest with large enrollment declines, large increases in student poverty, and modest increases in non-White, mainly Latino, student enrollment; in the South, enrollment decline was present but not as robust as the first two regions, student poverty increased rapidly (in some states, like Mississippi and South Carolina, the share of FRPL eligible students approached or exceeded 80%), and Latino-identified student enrollment increased rapidly; in the West region, student enrollment change was mixed, student poverty increased, and Latino-identified student increased rapidly.

The findings from this study present a narrative of rural schools that has not been of focus in the education literature, and generally not of focus outside of economic literature on labor and migration patterns. Additionally, the discussion of the findings connected these trends to the literature presented in Chapter 1 for school leadership and operations. These changes in student population, particularly declining enrollment and increases in racial diversity, suggest potential points of tension and/or issues for rural school leaders, especially if these leaders are unprepared for recognizing and adapting to these challenges. While this study cannot speak directly to this preparedness and/or influences on leadership, it is highly suggestive of the potential for such issues to be present. Thus, the study also serves as a call to further examine and explore rural schools and districts that are experiencing the changes highlighted in this study.

Chapter 3. The study presented in Chapter 3 remained focused on student population in rural schools but unlike Chapter 2 did so at the school level with rural secondary school principals. The study conducted interviews of 10 such principals in Michigan schools that had experienced rapid enrollment decline (at least 20% over an 19 year period) and explored how these principals perceived student population change and its influence on their leadership behaviors and decisions as well as the functions of their schools. Data analyzed in Chapter 2 was used to inform participant selection criteria and identify rural schools and districts in Michigan for the study.

Findings reported in Chapter 3 suggest that student population change, particularly rapid declines in enrollment and increases in poverty, were perceived to be highly influential on principals' leadership and school functions. Because of Michigan's education funding system, drops in enrollment also correspond to drops in funding, forcing all of the participants' schools and districts to make cuts to staff, programs, and curricular offerings. Thus, nearly all of the

principals experienced expansion of duties (as administrative staff were often the first to be cut or reduced) and challenges in terms of offering a comprehensive curriculum staffed by a certified and/or qualified teacher. Principals generally acknowledged a desire to address increases in student poverty through professional development activities and opportunities, which were also generally coordinated with the local Intermediate School District (ISD); however, the extent to which such opportunities occurred were at the discretion of the principals. This highlights the other key finding from this study: the principals in this study were generally the sole source of leadership in their building. Thus, they perceived themselves to have wide latitude and autonomy in decision-making, actions, and leadership within their building. In two cases, the principal was also the superintendent (adding further to the leadership responsibilities). Generally, this autonomy was perceived to be present except in the few cases in which the school board was micromanaging or extremely hands on or trust between the two (principal and board) was not fully established. Principals also generally acknowledged gaps in preparation for the contexts and positions in which they were currently; although, their assessment of the quality of their preparation for their positions was mixed. Because these principals found themselves in positions where they are given such wide latitude and autonomy, there are clear implications for the ways in which they are prepared to lead in these schools – especially in contrast to larger districts with a multitude of administrators and organizational structures (this will be discussed further in the implications section).

In terms of ways in which their leadership had changed, principals noted the expectation from their boards and superintendents (with the exception of one school principal) to increase enrollment to increase district revenues. Michigan's School of Choice policy allows students to enroll in neighboring school districts, which further drove down enrollment in all but one of the

schools in the study. In the case of SOC, principals recognized the way in which policy could benefit their schools, but felt unprepared for navigating the marketing and recruitment necessary to attract students – something that most principals noted as being an expectation for their position given the extremely limited funds in their districts to allocate towards marketing, etc.

Where this study is limited, in terms of the broader narratives suggested in Chapter 1, is the lack of changes in student diversity in terms of race. Michigan is noteworthy for its large and rapid decline in enrollment (the average rural district lost more than 20% of its student enrollment over an 19 year period from 1997-98 to 2015-16); however, Michigan rural school districts did not experience significant or noteworthy increases in non-White student enrollment outside of a few districts. Thus, it is anticipated that a similar study (also discussed in the recommendations for research section) in a state with a much more robust change in non-White student enrollment, particularly Latino-identified student enrollment, may find additional experiences and perceived challenges and issues that principals navigate as leaders in their schools.

Chapter 4. Where Chapter 3 focused on the local level and contexts in which principals navigated student population change, Chapter 4 focused specifically on the state level policies and contexts that present challenges and issues for these same principals. While funding and SOC are inescapable at either level, especially in terms of analyzing how principals' leadership has been influenced by student enrollment decline, this study was particularly interested in how these policies created challenges and issues for rural principals and schools given enrollment decline and the rural nature of their contexts. This study used the same 10 rural secondary school principals and collected data during the same interview process; however, the interview items of

interest for this study were specific to state policies and climate (in addition to the contexts and challenges related to student population change).

Responses from the principals suggested three key state policies and/or contexts that created challenges and issues for their leadership and school functions given student enrollment decline (in particular): funding, SOC, and teacher supply. Michigan's funding system essentially attaches revenue dollars to the individual student. The rapid loss in student enrollment over a short period of time (especially noted to be around the 2008-09 school year, which was the start of the Great Recession), caused districts to make severe cuts to educational services and staff. For principals, this created immediate challenges in terms of duties and decisions, but also increased expectations and pressures to find ways to bring back programs in more recent years. This also created a cascading effect: as students' families left in response to the Great Recession (especially labor related reasons), more students departed as programs and services were cut. In this sense, the schools and districts that were able to maintain programs and curricular offerings benefited from students departing less fortunate districts. In this way, SOC created an immediate challenge for rural schools and leaders with these departures. But, SOC also created additional issues that seem to stem from the policy being used for purposes other than what it appears to be intended. A majority of the principals in the study noted that parents would use SOC as leverage in disputes with the school (from discipline decisions to personnel dismissal). In some cases, the small sizes of the districts empowered these parents – as losing additional students via SOC could close the school and/or district. Thus, the observations and experiences of these principals suggest that SOC has created issues in their schools and the ways in which they lead, and that the policy appears poorly designed for implementation in these schools and districts.

In terms of teacher supply, nearly every principal has experienced difficulty in hiring teachers to fill positions in their schools. This was attributed to three key reasons. First, principals observed that the supply of teacher candidates has dropped significantly over the last decade. While the reasoning for this decline varied, the consensus was that there simply were not enough candidates exiting teacher preparation programs who remained in the state to fill the demand for teachers in the state. Second, these rural districts were unable to competitively incentivize teachers. As the literature in Chapter 1 suggests, rural schools already face difficulty attracting teachers because of the limited access to goods, services, and entertainment. With few candidates to begin with (as supply), these districts lack the budget to offer monetary incentives that could potentially overcome the lifestyle differences associated with not being near an urban center or hub. Third, the state certification bands (the grade range and subject areas a teacher is qualified to teach) do not align with the needs of small rural schools. In some schools, principals were looking for teachers who could teach either a wide range of grade levels or multiple subject areas – which are already rare qualities in candidates, compounded further by a small supply.

In this way, Chapter 4 is distinct from Chapter 3. Similarly, recommendations to address the issues and challenges in Chapter 3 focused on small-scale potential solutions to address leadership concerns and preparation gaps noted by the principals. In contrast, Chapter 4 highlighted the ways in which current state policies and contexts fail to account for rural schools and the ways in which changes could be made to address these issues. These changes would require much larger-scale change in statewide policy design; however, the discussion in Chapter 4 also argues the need for policy design to include considerations based on context – using the experiences of these principals to illuminate how current policies fail to consider rural contexts.

Unifying themes. In addition to the three studies addressing the same overarching research questions and purpose of the dissertation, there are three themes from the findings that cut across all three papers. First, the decline in student enrollment in rural schools and districts creates challenges and issues for rural principals. The study presented in Chapter 2 also illuminates how widespread the decline in student enrollment, through outmigration and natural decline, is in rural districts across the United States. This is not an issue facing schools in a single state or a region, but is something that is widespread. While in terms of overall population size, this may not seem like an important call to action; however, because half of all public school districts are located in these rural areas, it is potentially affecting a significant share of U.S. districts. This study also connects these findings to what existing research literature suggests for small schools and districts. In a sense, both Chapters 3 and 4 take the findings and implications of Chapter 2 (without being dependent upon Chapter 2) and add the necessary thick description and depth to understand how these large-scale trends translate into challenges, issues, and influences on principal leadership in rural schools. Both of these chapters support the discussion of findings and the connection to literature in Chapter 2, but they also highlight the importance of understanding and exploring the contexts (both local and state) in which these principals operate. Chapter 4 highlights this in particular with its focus on state policies: Michigan (as it should be anticipated with any state) creates a unique climate and context based on the policies it implements. In the case of Michigan, both funding and choice policies, in particular, further compound the challenges facing rural principals in schools experiencing enrollment decline (as discussed above).

Second, the ways in which broader entities recognize and address rural issues is concerning. From Chapter 3 and 4, this is leveled at the state in terms of policy design and at

leadership preparation programs in terms of the ways in which they prepare and train candidates for positions in rural schools. Chapter 2 speaks to these issues, but to a much lesser extent; although, the findings from the study suggest the presence of potential issues and challenges, especially in districts observed to have rapid population change (of any sort) and/or increases in student diversity (especially in schools that have gone from ~0% share non-White student enrollment to > 10% share non-White student enrollment over a short period of time). Both Chapters 3 and 4 suggest that Michigan state education policies have compounded issues related to population decline in these schools and districts while providing little avenue for resolving these issues – beyond creative decision-making at the school and/or district level. In other words, the exception is not the poorly managed schools (in terms of budget decision), but more likely the school that is able to maintain its services and programming. Similarly, it is unclear the degree of effectiveness to which principals are being prepared for roles in these schools. The data collected for Chapters 3 and 4 suggest mixed experiences, with many of the principals noting their previous experiences in the community and/or district as being the most effective preparation for their positions.

Third, the lack of research focused on this topic has created challenges for understanding the phenomena at hand. This speaks directly to the second point. All three chapters examine population change occurring in rural school districts, something that has been lacking in current education research. While elements related to these changes have been studied (i.e. English Language-Learner services, consolidation, and funding), there has been a paucity of literature on rural school leadership, let alone leadership in changing schools and districts. Thus, it is unclear how well recognized these phenomena are at either the state level or in preparation programs; however, the experiences and perceptions of the 10 principals in Chapter 3 and 4 suggest that

they are not [recognized]. Thus, the three chapters not only illuminate the phenomena but also speak to these gaps in awareness present in public education, particularly as it pertains to rural schools. This third theme also directly connects to the implications of this dissertation.

Addressing the Research Questions

As stated in Chapter 1, this dissertation is guided by three overarching research questions that address the purpose of the study and focus on both rural school leadership and student population change. These questions are as follows:

- How have the demographics and student population of rural public schools changed over 19 years?
- How do principals in Michigan rural schools that are undergoing demographic and population change perceive that change as influencing their leadership and the functions of their schools and districts?
- How are principals in Michigan rural schools that are undergoing demographic and population change addressing this change?

Each of the three papers addressed the questions to different degrees, with each paper also including a subset of questions unique to that study but contained within the larger, overarching questions; however, the combination of the three studies address and answer the three research questions.

Question 1. Chapter 2 primarily addresses this question through the findings from its longitudinal analysis of 19 years of NCES CCD public school survey data. The ways in which change has occurred is complex and varies by region, and sometimes by state. Nonetheless, changes have occurred. Generally, rural districts have experienced net enrollment decline and increased student poverty. Chapters 3 and 4 explore the quality and nature of these changes

through the perceptions and experiences of principals. In these studies, Michigan rural principals noted rapid enrollment decline as families left their communities for job-related reasons at the start of the Great Recession around the 2008-09 school year. These losses were rapid and reflect a large drop in enrollment in the state.

Question 2. Chapters 3 and 4 primarily address this question through the analysis of interview data from 10 Michigan secondary school principals. Chapter 3 focused on the local level and contexts, which centers directly on this question. Findings from that study found that population change in the form of enrollment decline and increased poverty was perceived to have tremendous influence on principals' leadership behaviors and decisions. Similarly, Chapter 4 examined principal perceptions of state policies and contexts and found that these policies were intrinsically linked to enrollment decline. Thus, principals' abilities to act and the nature of their decisions were heavily influenced by funding and the ability of students to choose to enroll in other schools. Additionally, shortages in teacher candidates limited these principals' abilities to hire qualified personnel to fill position vacancies – a key function and responsibility of their positions. Chapter 2 is less focused on this question (as well as Question 3); however, the findings from that study were connected to literature on rural schools and rural school leaders to provide discussion on the potential ways in which student population change could be influential.

Question 3. As with Question 2, Chapters 3 and 4 primarily address this question. The findings from Chapter 3 suggest that principals are aware of the changes occurring in their schools, but that there are different ways in which they are choosing to address these changes or are able to address these changes. Enrollment decline was addressed through increased student recruitment and marketing, which was largely a responsibility of the principals (for lack of resources). Increases in poverty were addressed through professional development, which was

generally organized in partnership with the local Intermediate School District. In terms of capability, the findings Chapter 4 speaks to this issue. The findings from that study suggest that certain state policies (funding and School of Choice) serve as obstacles to principal leadership, particularly in limiting the available resources (funding) and constraining choices out of school/district survival (SOC). While Chapters 3 and 4 suggest principals are attempting to address issues related to population change, there were concerns expressed by the principals in terms of gaps in training and preparation to handle these new responsibilities.

Implications

Based on the findings from each of the three chapters, there are several implications that this dissertation has for rural school leadership, rural school issues, and even state policy. Some of these implications have been addressed in Chapters 3 and 4; however, they will be summarized and presented here.

Rural school leadership. In terms of rural school leadership, there are two implications from this dissertation based on the existing literature and predominantly from the findings from Chapters 3 and 4. While these findings are from the Michigan public education context, they will be presented in a way that values this context while still drawing potential implications beyond Michigan.

Principal preparation. The findings from Chapters 3 and 4 suggest that principal preparation programs are not perceived to be consistent in how they prepare candidates for roles as leaders in rural schools. This is a notable challenge for two reasons. First, as Chapter 1 highlights, rural contexts are highly diverse and complex. Tailoring a program to address specific contextual demands may be impractical for a preparation program to undertake, especially given similar demands of other contexts. Similarly, too specific of a training program may create issues

of tracking candidates into certain contexts, which is also highly problematic. Second, the diverse nature of the roles that the rural principals expressed as having in these studies suggest that it may be difficult for such programs to anticipate the possible range of duties and expectations that rural principals face, especially given how these duties shift and change as positions are cut or added.

However, the findings from Chapter 3 and 4 also suggest that more is needed. In terms of perceptions of quality of preparation, responses were mixed with principals acknowledging that their experiences in their districts and communities helped more to prepare them for their positions. In this sense, existing experience, comfort, and relationships served as more preparation than coursework other than the technical skills (i.e. reports and school law). Furthermore, the mixed responses suggest that the perception of quality was uneven among programs (admittedly, the principals received training and preparation from various institutes across the state), which suggests that there are variances between programs and that more research is needed to validate these perceptions and determine how these programs are preparing principals. What is possible is that preparation programs are focused on a standard conceptualization of principal leadership, which would make sense given the responses in the studies. In this sense, the ways in which these programs develop courses is based on theory, which as Chapter 1 suggests is likely to be derived and/or generated from empirical data in more urban-oriented schools (i.e. suburbs and cities, which are often much closer to major research institutes). Thus, there are potential implications for these programs under-serving their rural students/candidates; however, more research is needed to make this implication clearer.

Continued development and training. The findings from Chapters 3 and 4 also suggest that there is a clear need for continued development and training for these principals. Because of

the rapid nature of the student population change, the principals in the studies noted changes in their duties and expectations. In part, these were a result of combined positions; however, some key additions to responsibilities and expectations occurred in response to change and state policies. In particular, marketing was a key change in principals' leadership duties. Nearly all of the participants noted the imperative for increased marketing and recruitment of students; however, these schools and districts lacked the funding to be able to hire a consultant or staff member to execute these duties. Instead, these principals assumed the role of marketer in their schools – a role that none of the principals expressed comfort, confidence, or training in. Such a gap represents a need for additional and continued training that is not occurring for these principals. Marketing was viewed as the key to survival for these schools that have lost large chunks of their student populations due to outmigration and SOC. Yet, little training or preparation has existed that helps them to meet these needs. As such, a recommendation that came out of Chapter 3 is the need for additional development and training for principals in marketing and how to navigate technology use to promote a school. In other states, these needs may look different. Indeed, not every state has a choice policy like Michigan; however, rural principals' needs for additional training and skills may still be highly relevant. In this sense, the broader implication is that professional development providers (or structures like Michigan's Intermediate School District) should be aware of the context-specific or specialized needs of the rural principals in their state/region and tailor training to meet these needs.

Additionally, Chapter 2 suggests that there are other types of student changes occurring across the United States, especially changes in rural districts' racial diversity. In many of these instances, a predominantly white student population is becoming increasingly less so, with the new population predominantly identified as Latino students. With new students there are also

new values and needs. In both cases, there are clear implications. In terms of values, there is the possibility for tensions to exist between new and old residents of the community. A few of the principals' responses indicated that power was generally held long term. In those cases, the school board represented this power – with school board membership running in families over generations. This was not a robust finding, so more work focused on these dynamics is needed. Given similar findings presented in Chapter 1, there is the potential for new residents, especially if they are not like the existing residents (in terms of race, values, etc), to become marginalized as they access to power within the community and, particularly, the schools. For needs, there is an implication for equity. In schools and districts that have been traditionally homogenous, there is the potential for needs to go unrecognized since the leaders and service providers will have not had experience recognizing them. Again, the changes in Michigan did not address students' needs that have legal implications, which suggest more research is needed to explore this potential issue. This dissertation is limited in that it was not able to collect data in districts in which large changes in student racial diversity have occurred. Thus, more research is needed to illuminate and highlight these implications.

Rural school issues. Beyond school leadership, these studies highlight implications for rural school issues in general. These findings are not striking when considered in the larger context of rural education research; however, they do continue to support this body of literature and further serve to underscore the need to recognize and address rural schools issues as being both distinct and contextually diverse. In particular, the failure to recognize and address these issues carries implications that threaten the survival of these schools and districts. This dissertation highlights two of these issues: sensitivity to rapid change and dwindling enrollment.

Sensitivity to rapid change. As Chapter 1 presents in the literature review, rural schools and districts are inherently small (except in the case of consolidated, regional or county districts). With that small size comes poor economies of scale and fiscal inefficiency when compared to urban districts (Howley, Johnson, & Petrie, 2011). Thus, these districts are sensitive to change, especially rapid change. For example, a loss or gain of 20 students in a 200 student rural district will have greater ramifications (i.e. cutting/hiring a teacher) than a suburban district of 800 students. Thus, rapid changes in student enrollment have tremendous implications for rural schools. As the findings from all three studies suggest, rural schools are experiencing such changes in population, particularly enrollment decline in regions like the Midwest and Northeast. Similarly, the changes in leadership duties detailed in Chapter 3 further emphasize how these changes have repercussions for teachers and leaders working in these districts. The implication of these findings is that while some of these changes may look small from a state-level view (i.e. a loss of 20 students in a 200 student district), they are highly consequential in small rural schools. Awareness of these changes and the inherent sensitivity to them is necessary in order to provide support to these schools from a training perspective and a policy perspective.

Dwindling enrollment and consolidation. Like sensitivity, the continued dwindling of student enrollment has clear implications for rural schools; although, in this case, the consequences could be much direr in terms of district survival. The findings from Chapter 2 suggest that rural school districts, on the whole, are losing students. The continued dwindling of student enrollment suggests that rural districts will increasingly face the prospects of district consolidation. Chapter 3 suggests that some of the principals in the study have already experienced these challenges, if not full district consolidation then district reorganization. Consolidation is nothing new for rural schools: historically, the total number of public school

districts in the United States has declined steadily over the last century. Yet the continued outmigration of rural population to urban areas suggests that an increasing number of districts could be facing consolidation. What this means for the communities in which these districts are located is not entirely clear in the research; however, the literature reviewed in Chapter 1 suggests that there is a fear that consolidation will lead to the loss of the community as a whole. Indeed, principals' responses in Chapter 3 suggest that their schools are integral parts of the communities and that in districts that entertained consolidation met stiff resistance from community members for these reasons.

The dwindling enrollment also creates potential implications for equity for the students who remain. As Chapter 3 reports, students left as a result of outmigration (families leaving for job-related reasons) and through SOC in response to program and services cuts, which created a vicious downward spiral. Yet students do remain in these districts that neither leave because of labor nor because of the attraction to other districts. These are the stayers. They remain in districts that have been gutted not once, but twice from outmigration and departures. For these students, the questions become: what is the quality of education that remains after the dust has settled from all of the cuts? How is this system equitable, when the districts that were able to maintain programs continue to pull from the districts that have entered their death spirals? The loss of population then becomes a question of equity given the system. Not all students can or choose to leave. Should they be punished for this decision, especially given that it is to remain in a public education entity like the ones that other students are leaving for? These questions are difficult to answer, but they speak to the implications of state policies.

State policies. The implications for state policies are discussed in detail in Chapter 3; however, it is important to summarize them here as part of the larger discussion of implications.

In particular, two implications come from this study: the way in which rural schools are funded and the ways in which policies are designed.

Funding. In terms of funding, Michigan presents both opportunity and challenges. As the literature review from Chapter 3 reports, Michigan's funding system provided additional funds to rural districts with the implementation of the new system. In this way, the state appears to be responsive to the needs of rural districts and the inherent funding inequalities given the low-population density and low-property wealth of many school districts (Monk, 2007). Yet, the findings from Chapters 3 and 4 suggest that there are persisting issues in funding, especially in connection to rapid population loss. In this sense, this dissertation suggests implications for the need for adjustments in how funds are disbursed. In particular, the operations side of rural district budgets is problematic. Principals in districts that cover a large area, especially those in the Upper Peninsula, still operate large transportation routes whether there are 30 students or 100 students. Yet, the way in which Michigan funds education is tied to enrollment. Thus, these schools are receiving fewer revenues while still have to maintain the same level of non-instructional operations. Thus, principals report that their districts have to make cuts in other areas, including instruction, to be able to maintain operational services and keep doors open. In this sense, districts that are large in terms of area but small in terms of student population are placed in precarious positions – ones that could become increasingly inequitable when compared to districts with similar student enrollment but much small land area coverage. Thus, as Chapter 4 discusses, there is a clear need for states to consider regional cost differences and the natural fiscal inefficiencies of rural schools – not because they are mismanaged, but because it is inherent with the context and their location.

Design. In terms of design, Michigan's SOC highlights a clear way in which a state policy has unintended consequences for rural schools. This also suggests a clear implication for the ways in which policies are designed and the need to recognize the needs and contextual diversity of rural schools. Findings from Chapter 4 suggest that SOC is being used by parents as leverage in school decisions and disputes as well as to gain a perceived advantage in athletics. In both instances, the policy is perceived to be used for purposes beyond the academic intent of the policy. For the former, the use of SOC as leverage undermines the school's and leader's ability to act, including in the best interest of the school and the wellbeing of the students. For the latter, the use of SOC represents a form of recruitment and creates an environment where visibility and facilities become the modus of choice, not academic quality. While it is likely that such uses of the policy exist in other, non-rural districts, the small size of the schools in Chapters 3 and 4 suggest that they are more susceptible to the misuse and misapplication of the policy. These chapters highlight the implication of why rural contexts should be considered in the design of policy. Indeed, principals perceived the policy was not meant for their districts, yet the nature of implementation did prove to affect them. Similarly, district survival is no longer contingent upon the successful leadership and management of district budgets, but seemingly on the whim of parents. Additionally, the presence of SOC has changed the ways in which leaders operate, with principals becoming increasingly occupied with marketing and recruiting students – out of necessity for district survival. In this sense, students have become goods for acquisition. This is not to challenge the value of SOC as it is intended, but to highlight the ways in which the policy appears to be ill-designed for use in rural schools and to highlight why these rural contexts should be considered in policy design.

Finally, the paucity of rural education research is suggestive of an important implication: the need for more research on rural schools, leaders, and issues. While this dissertation adds to the existing body of literature of rural schools and leaders, additional work is needed to provide a more comprehensive understanding. This implication is discussed in further detail in the next section, recommendations for research.

Recommendations for Research

Given the small, but growing, body of research rural school leaders, the recommendations for research are clear. First, rural leaders, schools, and leaders remain largely under-researched given the sheer number of rural districts and communities across the United States. This dissertation serves to highlight some of these issues, specifically related to leadership and population change; however, more quality research focused on rural schools is needed to provide a comprehensive understanding of what is happening in these schools. As each of the three studies suggests, rural schools are facing issues related to student equity, appropriate policy design, context, and appropriateness of training for school personnel. Thus, a call for focused research on rural schools and rural issues must be the first, principle recommendation from this dissertation.

Second, the findings from Chapter 4 suggest that one-size-fits-all policy design, particularly at the state and federal levels, could be highly problematic for rural schools and can serve to compound existing issues in these schools and districts. Yet policies like Michigan's funding system and SOC persist, suggesting that there is not an awareness of these seemingly unintended consequences. Similarly, Michigan also represents but one of fifty states in the U.S., each having unique education governance, policies, and climate. While the combination of funding system, SOC, and rapid population decline creates important implications and

consequences for rural schools in the state, understanding other states' contexts in tandem with their rural schools and rural issues could illuminate further how policy design creates challenges and opportunities for rural schools and issues. Additionally, understanding how different state policies are designed to consider rural schools and issues may better inform other states in the design and revision of their policies.

Finally, in terms of future research related directly to the studies presented in this dissertation, there are limitations based on the types of change explored in Chapters 3 and 4. Michigan rural public school districts have experienced rapid and widespread population decline (something that has also occurred in cities as well) and similarly rapid increases in student poverty. But the findings from Chapter 1 suggest that there are other robust types of change occurring in different parts of the United States. In particular, southern and western states have had large increases in Latino students amidst their declines in white student enrollment. These changes are likely to include different types of challenges and potential issues, particularly in communities that were predominantly white or similarly homogenous. Further research into such communities and schools/districts is needed to illuminate how principals perceive these changes in population and are addressing them through leadership behaviors and interactions. Thus, the ways in which principals are prepared can be better informed for continuing development and principal preparation programs. Similarly, the ways in which principal preparation programs are preparing principals to lead in rural schools and navigate rural communities is also of concern. The mixed responses of principals reported in Chapter 3 combined with the general lack of awareness of these changes (at a broad level) suggest that there may be gaps in such training. Thus, research into these (potential) issues would seem valuable and appropriate.

Conclusion

The findings from this dissertation add to the body of knowledge of rural school leadership by illuminating both the ways in which schools are changing and the ways in which these changes in population have influenced the leadership decisions and behaviors of rural school principals. Because of these findings, there are clear implications for principal training and preparation as well as the ways in which these rural schools should be recognized and considered in the design of state-level policies. Similarly, the findings from this dissertation support the existing economic literature and limited education literature on rural population change and migration. Findings from Chapter 2 in particular highlight how these changes, as posited and examined by economic literature focused on rural communities, look in rural schools and communities, while Chapters 3 and 4 highlight the ways in which they influence leadership. Each of the three chapters presenting studies are self-contained and provide discussion and implications based on their respective findings. This chapter summarized these findings, discussion, implications and further presented recommendations for future research. In short, rural schools are changing, many rapidly, and these changes have implications for the ways in which leaders are able to navigate and lead in their buildings as well as, if not more importantly, how students' needs are being met in these ever-changing contexts.

The way forward is clear: there is a real need for continued examination and exploration of rural education issues, especially the topics of focus in this dissertation. Without a continued focus, rural schools will continue to be overlooked and under-represented in research and, more importantly, the design of policies that directly impact them. As Chapters 3 and 4 highlight, the consequences of a lack of consideration create issues and challenges in the operations of schools and the leadership capability of principals as well as, and more importantly, threaten the survival

of these rural schools and districts. Thus, it is imperative that rural issues be presented to secure visibility and create awareness of these issues so that they may be addressed and considered by academics, policymakers, and preparation programs.

APPENDICES

APPENDIX A:

Recruitment Survey

Rural Population Change General Information and Recruitment Survey

Start of Block: Consent Page

You are about to participate in a survey that will provide new information about principal leadership in schools that have undergone population change. In this survey, you will answer basic questions about your professional experience, your district, and your ability and willingness to participate in a research study on population change and rural school leadership. Your participation today will take no more than 5~10 minutes. Some participants in this survey will be invited to participate in two interview sessions as a part of further study into population change and rural school leadership. These interview sessions should last about 1 hour per session and will be scheduled at each participant's convenience. Participation in this survey is completely voluntary. You have the right to say no. You may change your mind at any time and withdraw. You may choose not to answer specific questions or to stop participating at any time. Your responses will only be recorded if you complete and submit the survey. As part of our study, we would like to relate your answers on the survey to information provided by the Common Core of Data Universe Survey collected by the National Center of Education Statistics about your school and district. Any information that you give will be saved on a secure server maintained by Michigan State University. No identifying information will be released by the researchers and will be kept private and confidential in accordance with MSU's IRB and Human Research Protection Program guidelines. In reporting the results of our study we will average our data over many participants' responses. By submitting this survey you are consenting to be a part of this research study. If you have any questions about this study, please contact Professor John T. Yun, Michigan State University (e-mail: jyun@education.ucsb.edu), or Ian C. Kinkley, Michigan State University (e-mail: kinkleyi@msu.edu).

If you would like to participate, please choose "Yes":

☐ Yes (1)

☐ No (4)

Skip To: End of Survey If You are about to participate in a survey that will provide new information about principal leader... != Yes

End of Block: Consent Page

Start of Block: Basic Information

Q1 Name

Q2 School Name

Q3 What is the lowest grade level in your school?

▼ Kindergarten (1) ... Grade 12 (13)

Q4 What is the highest grade level in your school?

▼ Kindergarten (1) ... Grade 12 (13)

Page Break

End of Block: Basic Information

Start of Block: Principal Information

Q5 How long have you held your principal position at your current school? (in years)

Q6 How long have you held any position at your current school? (in years)

Q7 How long have you held any principal position? (in years)

Page Break

Q8 Rate the importance of the following items (or issues) to you, as principal, and your school:

	Critically Important (1)	Important (2)	Somewhat Important (3)	Not Important (4)
Decline in Student Enrollment (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increase in Student Free and Reduced-Price Lunch Eligibility (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increase in Student Racial Diversity (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Decline in FTE (Teacher/Instruction) Positions (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Decline in Community Population (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Decline in School Funding (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q9 For any items that were selected as Critically Important or Important, please briefly explain why.

Q10 Since becoming principal, has your district or school reorganized its grade level structure (ie. changing from a 9-12 High School to a 7-12 Jr/Sr High School)?

☐ Yes (1)

☐ No (2)

Skip To: End of Block If Since becoming principal, has your district or school reorganized its grade level structure (ie.... != Yes

Q11 Briefly describe how your school has been reorganized.

Page Break

End of Block: Principal Information

Start of Block: Study Participation

Q12 We will be conducting interviews about issues facing principals of rural schools. The interviews should take between 1 and 2 hours total depending on your availability. Would you be interested in participating?

☐ Yes (1)

☐ No (2)

Skip To: End of Survey If We will be conducting interviews about issues facing principals of rural schools. The interviews... != Yes

Q13

Please provide the best e-mail address and/or phone number to contact you.

E-mail Address

Q14 Phone Number

Q15 Is this a school phone number?

☐ Yes (1)

☐ No (2)

Q16 Which method of contact would you prefer?

☐ E-mail (1)

☐ Phone (2)

Page Break

End of Block: Study Participation

Start of Block: Thank You Screen

Thank you for your time! Your responses are very valuable and much appreciated. If you have expressed interest in participating in the further study, we will be in contact with you in the next several weeks.

End of Block: Thank You Screen

APPENDIX B:

Interview Instrument

Part I – Population Change

Introduction (who, what, how long)

Past Experience and Training

► What made you decide to become a principal?

What was your professional experience in public education before becoming principal at XXXX? Was it a school like this? How so OR how was it different?

► What type of program did you complete to become certified?

Was it far from where you were employed at the time?

► Would you describe yourself as “rural”? Why or why not?

Describe to me how you define “rural”. Why do you define it this way?

Job Search

► How did you end up at XXXX?

What about XXXX led you to accept the position?

How would you describe the community as being rural?

Population Change

► Describe how your school has changed, in terms of student population and demographics / characteristics, since becoming principal – and over the last 10 to 15 years (if not the same)?

How has this change occurred? (gradual, swift, etc)

What do you attribute these changes to? Why?

Does this relate to the rural nature of your school?

► In what ways, if any, have you seen population change as a challenge in your school?

How do you perceive these changes as influencing the day-to-day operations of the school? Programs and Support Services? Curriculum? Climate?

► How does the community view these student changes?

Have there been changes in the community (or communities) along with these changes in

student characteristics? How so?

What do they attribute these changes to?

How do you perceive the community to be responding / reacting to these changes?

How might these changes have influenced or challenged community identity?

Do you see these changes as having an influence over community expectations and vision of the school? How so or why not?

School/district policies, school board membership, goals

Does this conflict with how you or other school staff interprets the needs of the school and students?

Does this have influence over how you are expected to lead in the school?

► What about state policies? How might these changes create opportunities or challenges with respect to the population changes that are occurring? Are there any policies that come to mind?

What changes would you like to see in state policies, requirements, or supports?

Does this relate to being “rural”?

What recommendations do you have?

What about school funding?

What is (or are) the biggest challenge[s] you have faced as principal in your school?

Part II – Influence of Population Change on Leadership Behavior

Duties and Expectations

► Describe the leadership structure in the district.

How much latitude / autonomy do the principals have as leaders within their schools?
Has this changed since becoming principal? Why or why not?

Change related to student changes?

Is this autonomy supported by the board and community?

What are the board and district expectations for this?

► What does your job entail, what do you do?

Are these all contractual?

IF “no”: Did you expect these duties? Were you prepared for them?

► What are the district expectations for your position?

What happens if you do not meet these expectations? Evaluation/contract?

► Are there community expectations?

What happens if you do not meet these expectations?

► What about the state? What are you held accountable for?

What happens if you do not meet these expectations?

► Going back to your training: do you think it prepared you for this position? How so OR why not? What did prepare you for this position?

Influence on Leadership Behaviors

► Have your duties changed since becoming principal? How so?

Are any of these changes in response to changes in your student population? How so?

Why else have they changed?

From your experiences and training, did you feel prepared for this? Why or why not?

What about your expectations of a “rural” school/district?

► Have there been new initiatives, policies, or programs that your school has implemented based on changes in the student population (demographics, characteristics)? Describe.

Why? Are they mandated?

Who initiated these programs (source), expectations, goals/purpose.

What has been your role in the process? Why?

How are these programs funded? Does this compete with existing programs in the school? How so?

► What is your role as a leader in relationship to school curriculum?

Have these changes influenced this role? Curriculum in general?

What about other changes that have influenced this role? Curriculum in general?

policies, funding, district/school mission and goals

“Rural” nature of the school?

Post-secondary education?

► What about personnel? What is your role?

What challenges and opportunities are there with hiring and other personnel decisions in a “rural” school?

Have student changes influenced personnel decisions?

Dismissals, unions

How does this relate to curriculum and/or services offered by the school?

What is your role in teacher evaluations and instructional feedback?

What about teacher relationships and attitudes in the school?

► Describe to me the process for developing or programming professional development.

What is your role in this process?

Has this role changed over time? Why?

Has there been professional development programmed to specifically address changes in student population?

Why was this chosen? Or, why not?

Has the “rural” nature of your school influenced these professional development decisions?

Last Question

► Describe to me what you think is the most important thing you have done at XXXX as principal.

APPENDIX C:

Data Analysis Codebook

Codebook for Data Analysis	
Individual (Leader-Participant)	1
Personal History	1.1
Position Information	1.2
Path to Position	1.3
Personal Beliefs and Values	1.4
Context	2
Rural	2.1
Definition of Rural	2.1.1
Challenges of Rural Context	2.1.2
Opportunities of Rural Context	2.1.3
School and District	2.2
Structure	2.2.1
<i>School Climate</i>	2.2.2
<i>Student Information</i>	2.2.3
Community	2.3
<i>Community Identity</i>	2.3.1
<i>Community Values</i>	2.3.2
Perceptions of Community	2.3.3
State	2.4
State Policies	2.4.1
<i>School of Choice</i>	2.4.1.1
Funding	2.4.2
<i>Intermediate School District</i>	2.4.3
<i>Teacher Supply</i>	2.4.4
Population Change	2.5
Nature of Change	2.5.1
Perception of Change	2.5.2
School Level Perception	2.5.2.1
Community Level Perception	2.5.2.2
Theory	3
Educational Leadership	3.1
Curriculum and Instruction	3.1.1
Professional Development	3.1.2
Goals and Mission	3.1.3
School Climate	3.1.4
Evaluations	3.1.5
<i>Distribution and Shared Leadership</i>	3.1.6
Management	3.2
Personnel	3.2.1
Other Duties and Responsibilities	3.2.2
Capacity to Navigate	4
Preference (Labor)	4.1
Relationships	4.2
School and District	4.2.1

Community	4.2.2
Trust	4.3
School and District	4.3.1
Community	4.3.2
Perception of Self as Rural	4.4
Expectations	4.5
District Expectations	4.5.1
Community Expectations	4.5.2
State Expectations	4.5.3
<i>Perception of Self in Context</i>	<i>4.6</i>
Capacity to Adapt	5
Leadership Actions in Response to Population Change	5.1
School/District Actions in Response to Population Change	5.2
Community Actions in Response to Population Change	5.3
<i>Perception of Need to Adapt</i>	<i>5.4</i>
<i>Change in Leadership</i>	<i>5.5</i>
Capacity to Practice	6
Education Training	6.1
Nature of Training	6.1.1
Leadership Training	6.2
Nature of Training	6.2.1
Perception of Preparation Effectiveness	6.3
<i>Notes.</i> Codes added to the preliminary codebook upon subsequent analyses of the data are italicized.	

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