

WHY DO SOME COMMUNITIES SUCCEED WHILE OTHERS STRUGGLE?
UNDERSTANDING RURAL ECONOMIC DEVELOPMENT IN GEORGIA

SAMUEL PERREN

(Under the Direction of J. Edward Kellough)

ABSTRACT

This dissertation examines factors that help explain the variation in economic well-being among rural Georgia counties. A mixed methods approach is utilized, with a regression model used to predict what each county's economic status should be based on quantifiable intrinsic factors, followed by a series of qualitative elite interviews with economic development stakeholders in rural counties that consistently performed far better or worse than the model predicted. Findings suggest that positive leadership, relationships, infrastructure, planning, and entrepreneurship are important factors for relative success. Struggling communities also demonstrate an over-reliance on grant funding and a lack of economic diversification.

INDEX WORDS: Rural, Economic Development, Intrinsic Factors, Leadership, Relationships, Infrastructure, Planning, Entrepreneurship, Grants, Economic Diversification

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by

SAMUEL PERREN

AB, University of Georgia, 2011

MPA, University of Georgia, 2015

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SAMUEL PERREN

Major Professor:	J. Edward Kellough
Committee:	Gene Brewer
	Grace Adams

Electronic Version Approved:

Ron Walcott
Vice Provost for Graduate Education and Dean of the Graduate School
The University of Georgia
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DEDICATION

To my beautiful wife Hannah, who supported me throughout this long and arduous process and my parents Ray and Mary Perren, who taught me to read, to question, to care, and so much more.

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CHAPTER 1

INTRODUCTION

More than 30 years ago, Lyson and Falk (1993) wrote:

It is both ironic and disconcerting that amid prolonged periods of economic growth in the United States since World War II, there are still rural regions of the country that continue to stagnate, and in some cases decline. It is all the more troubling that many millions of people who live in these areas lack access to decent jobs, housing, and the types of social services that are taken for granted in urban America. (p. 1)

If anything, these trends have only intensified in the decades since. Yet, despite these overwhelmingly negative trends, some rural communities find a way to succeed economically or at least outperform expectations. This dissertation explores the difficult conditions facing rural communities, focusing on those that have performed significantly better or worse economically than would be expected. Ultimately, I identify generalizable themes that can be utilized in future scholarship and practice to help rural communities move forward in economic development.

While rural living still holds an idyllic place in the American consciousness, the rural population is facing major shifts, with approximately two-thirds of U.S. counties outside of metropolitan areas losing population between the 2010 and 2020 censuses (Johnson, 2022; Lapping, 1997). Although anecdotal evidence points to limited migration to rural areas in response to the COVID-19 pandemic and associated work-from-home revolution, available data still suggest that rural America is losing people in droves, and thus struggling economically

(Johnson, 2022; Popken, 2020). Rural population loss and declining economic development present something of a “chicken or the egg” question, as a critical mass of people is required to support commercial and industrial enterprises, both as consumers and workers. Without this critical mass, it becomes very difficult to revive a flagging economy. Declining economic opportunity may first cause people to leave an area, leading to businesses closing because they no longer have a sufficient base of customers or employees, creating a vicious cycle (Carr & Kefalas, 2009).

Conversely, global economic changes may cause industries to leave town, leading people to migrate out of rural areas to seek job opportunities elsewhere. Globalization and the ability for American companies to import low-cost goods from overseas led to the closure of thousands of industrial facilities throughout rural America in the 1990s and 2000s, particularly decimating sectors like textiles and other low-skill manufacturing industries (Low, 2017). From 2001 to 2015 alone, 71% of U.S. counties experienced a net loss in manufacturing jobs, representing an overall employment decline of nearly 30% in a sector that had once been the economic lifeblood of many rural communities (Low, 2017). Where someone may have once worked the floor in a clothing factory one mile from her home, she now may be competing for a cashier job at a local Dollar General or a Walmart two counties away. Barkley (1995) describes this trend as leading to “a more distinct spatial division of labor...where rural areas are the recipients of the less skill-intensive, low-wage jobs, which contributes to persistent rural-urban income differences” (p. 1252).

Even the industrial jobs that persist in rural areas may pay little more than poverty wages, as the market forces of the capitalist economy push industry to “rural areas for natural resources and cheap labor” (Tickamyer & Duncan, 1990, p. 79). Clugston (1997) describes this dynamic as

a “transition from locally self-reliant economies to an international economy dominated by huge, vertically integrated corporations” (p. 79). E-commerce and the accompanying expectations of low-cost, instant goods and services also contribute to economic decline as local establishments are no longer concerned with competing only with the regional Walmart and local Dollar General, but also global behemoths like Amazon (Asche et al., 2021).

The e-commerce market, along with improved highway infrastructure and automobile access, combine to make the market for commercial enterprises in rural areas more challenging than it was in past generations. Local retailers struggle to compete with the prices and convenience of Amazon or Walmart, and may only survive in higher population areas or regional hubs (Chandra & Thompson, 2000). This dynamic leads to the closure of small-town, specialized local businesses and the rise of regional big box stores, leaving many rural counties without basic necessities like grocery stores (Blanchard & Lyson, 2006). With the local grocery store closed and the closest Walmart perhaps thirty miles away, many communities are left as “food swamps,” where the only food available is high-sodium, shelf-stable, processed food sold at the local gas station (Goodman et al., 2020). The unfortunate irony of this dynamic is that rural areas are also often major agricultural producers, producing fresh fruits and vegetables for the rest of the country that residents can no longer buy locally.

As rural America shrinks in population and faces increasingly difficult economic headwinds, it becomes particularly critical for researchers and policymakers to understand the forces at play and what, if anything, can be done to revitalize struggling rural economies. This push for rural economic development comes from both sentimental and practical perspectives. Sentimentally (and politically), rural living has always had a certain appeal in the American consciousness (Lapping, 1997). Family farms, rolling hills, and small towns are major aspects of

American mythmaking and our manifest destiny past. This quaint rural version of the American dream is a common trope in political advertisements and the stories Americans tell about themselves, pointing to its enduring emotional appeal (Samuel, 2012). This search for “Mayberry” plays a major role in our politics, in everything from federal agricultural subsidies in the Farm Bill to President Trump’s well-known slogan “Make America Great Again.”

The push for solutions for rural economic development is also practical though, as thousands of cities, counties, and school systems throughout rural America seek to maintain deteriorating infrastructure and provide critical services to both residents and for travelers passing through as they transit between urban areas (McBride & Anshu, 2021). While political beliefs shape differing ideas on how and where this principle should apply, equal opportunity for all is a core tenet of the American ethos. Thus, it is critical for all Americans, including those in rural areas, to have access to functioning local economies and governments so that they can meet basic needs and pursue personal prosperity.

Importantly, while the rural share of the United States population has never been lower, approximately 46 million Americans still live in rural areas (Johnson, 2022). It is not in the United States’ best political or economic interest for 14% of its people to live in rapidly declining communities (Johnson, 2022). It is definitely in urban America’s interest to ensure that there are functioning water systems and power grids in rural America, if for no other reason than to preserve a safe and healthy food and natural resource supply for the entire country (Bergland, 1990). This problem comes into sharper relief at the state level, where many states are entirely rural outside of a small number of metropolitan areas, pointing to the political and economic necessity of solutions for declining rural economies.

While a growing majority of Americans are concentrated in densely populated urban areas, approximately 70% of U.S. land lies outside of metropolitan areas, with as much as 95% meeting various definitions of rural (Johnson, 2022; U.S. Department of Health and Human Services, 2020). The United States is increasingly populated by a series of dense, economically prosperous urban islands largely concentrated on the coasts and sprinkled throughout a struggling rural desert encompassing the rest of the country. This geographic separation helps to create palpable economic and cultural divisions (Johnson, 2022).

Rural decline is also related to the stark political polarization facing the United States. Many rural Americans feel increasingly left behind by economic growth and social changes primarily concentrated in urban areas and coastal states, strengthening the rural attachment to the Republican Party, and particularly to the grievance politics and “Make America Great Again” message of Donald Trump (Berlet & Sunshine, 2019). This message resonates with many rural Americans who remember a more prosperous past for their small towns and would like that success to return (Berlet & Sunshine, 2019). Despite declining rural populations, institutions like the United States Senate and Electoral College will always magnify rural interests by design, pointing to the increasing relevance of rural issues to urban Americans, even as the urban share of the population continues to grow (Badger, 2016).

Because of the relationship between economic development and population, rural economic development is essential for the survival of many U.S. communities. As populations age, young people leave, and career opportunities dry up. Many rural communities are literally dying off. This trend is particularly pronounced in the Deep South, which has a long history of “uneven development,” intertwined with the region’s historical record of race-based slavery and widespread social, political, and economic inequality (Lyson & Falk, 1993, p.2). Rural Georgia

stands out as a stark example of this phenomenon of uneven development, making it a strong candidate for more in-depth study.

While definitions of the term “rural” can vary dramatically, one common definition for a rural county is one with a population of less than 50,000 people (Georgia Code, 2025; Georgia Department of Economic Development, 2020; U.S. Department of Agriculture, 2019).

According to this definition, 118 of Georgia’s 159 counties are rural as of the 2020 census (U.S. Census Bureau, 2021). These counties represent 74% of the state’s land area and more than 20% of its population (Carl Vinson Institute of Government, 2021; U.S. Census Bureau, 2021). Yet, Georgia is also home to Atlanta and its sprawling metropolitan area that is home to more than 6 million of the state’s 10.7 million people, creating a stark cultural and economic divide between an international cultural center and transportation hub on one hand, and the dozens of rural counties that comprise the vast majority of the state’s land area on the other hand (U.S. Census Bureau, 2021). While most of the state’s population now lives in urban areas, the rural population still includes millions of Georgians spread over tens of thousands of square miles (Carl Vinson Institute of Government, 2021).

While Georgia’s population grew by more than 1 million between the 2010 and 2020 censuses, the overwhelming majority of that growth was concentrated in a small handful of metropolitan counties; in fact, 67 of the state’s 159 counties (all but two of them rural) lost population in that time (U.S. Census Bureau, 2021). Many of these counties saw decreases in population both through outmigration and the death rate exceeding the birth rate, pointing to an older, less fertile population, that is projected to only get older in the years to come (U.S. Census Bureau, 2021).

As rural Georgia ages, the labor force shrinks as there are fewer working age people available. This trend has intensified since the Great Recession of 2008-2009, when many aging baby boomers left the labor force and never returned (DeFeo, 2022). Paired with the long tail of the Great Recession, this dynamic meant that the labor force participation rate, the measure of working-age adults who are either employed or actively seeking full-time employment, has fallen below 50% in 33 rural Georgia counties (Carl Vinson Institute of Government, 2024b). Among the working age people remaining in rural Georgia, many are too unhealthy to work, or are charged with taking care of children or older family members (Eldridge, 2021, 2022). Declining labor force and labor force participation are strong signals of struggling local economies.

Counties throughout rural America see widespread negative health outcomes, and Georgia is no exception. In fact, Georgia is one of the least healthy states in the United States, and its least healthy counties are very rural (County Health Rankings, 2022b; United Health Foundation, 2021). Overall, the state ranks 48th in clinical care, 37th in health behaviors, and 36th in health outcomes, driven largely by negative health indicators in rural counties (County Health Rankings, 2022b; United Health Foundation, 2021). Some health factors in these rural counties rank far below the standard of a typical “first world” country. For instance, in 2023, an astounding 26.1% of children born in Hancock County, Georgia had low birthweight, a rate higher than any developing country in sub-Saharan Africa (Georgia Department of Public Health, 2025; UNICEF, 2022). Low birthweight is a key predictor of a variety of lifetime health and development issues, pointing to the impact that widespread poor health can have on communities (UNICEF, 2022). Hancock County abuts Lake Oconee, which on the Greene County side is home to luxury resorts and multi-million-dollar vacation homes for college

football coaches. How can these two rural communities, with similar intrinsic factors like location and access to recreation, have such different outcomes?

While it is unclear empirically which factor influences the other (or whether other factors influence them both), health and economic outcomes are tightly linked, and it is easy to understand how poor health outcomes could negatively impact a local economy (Smith, 1999). In this situation, fewer people are able to participate in the labor force, yet many have consistent and expensive healthcare needs. Notably, Georgia did not expand Medicaid in the wake of the Affordable Care Act and the federal health insurance exchange was unevenly promoted in the state, leading to uninsured numbers much higher than the national average, particularly in rural counties (County Health Rankings, 2022a; Gringlas, 2022; Rau, 2020).

Similarly, lack of Medicaid expansion is associated with loss of acute care hospitals and a decline in availability of emergency care (Wallace et al., 2020). A meta-analysis from Mills and colleagues (2023) demonstrated that rural hospital closure is strongly associated with negative economic impacts. Residents of states that did not expand Medicaid are also less likely to visit primary care providers, specialists, nurses, nurse practitioners, and physician's assistants than residents of states that did so (Biener et al., 2018). These dynamics would only be expected to grow as the population ages and encounters more health problems, which may compound due to low access to care. As a population becomes older and less healthy, people may leave the labor force earlier than anticipated due to health problems while increasing demand for limited and expensive healthcare services, negatively impacting the local economy.

Many of the most economically successful rural Georgia counties, typically located in close proximity to urban centers, saw massive population growth and economic development as part of the general Sun Belt boom of the 1990s, 2000s, and 2010s, leading them to no longer

meet most definitions of rural (Crabtree, 2016). Consider Forsyth County, now a wealthy north Atlanta suburb, but a generation ago a small rural community. Forsyth County had a population just under 28,000 in the 1980 U.S. Census, meaning that the entire county's population would fill less than one third of the University of Georgia's football stadium. The county saw significant growth by percentage in the 1980s, reaching just over 44,000 in the 1990 Census. By 2000, Forsyth's population more than doubled to greater than 98,000, nearly doubling again the next decade to approximately 175,000 in 2010. Between 2010 and 2020, growth in Forsyth County slowed to "only" about 43%, with a 2020 count of 251,283. Overall, in 40 years, Forsyth County's population grew by nearly 900%, fully enmeshing it in metro Atlanta (Carl Vinson Institute of Government, 2024a). By 2023, Forsyth County's median household income was \$138,000, nearly double the state and national medians (U.S. Census Bureau, 2024).

Looking at the map though, there is no mystery as to why Forsyth County (and others like Bartow, Fayette, Henry, and Paulding) "graduated" from rural status in the 1980s and 1990s. These counties just represented the next wave of growth out from Atlanta's longstanding suburbs, like Cobb and Gwinnett counties. As Atlanta's economy grew, population and economic growth stretched further and further out. A rural county cannot simply decide to be located adjacent to a booming metropolitan area though, so the story of these communities ultimately may not be that helpful to a 2025 rural community trying to grow its economy.

The dynamics leading to growth in Forsyth and similar counties mean that the Georgia counties still meeting conventional definitions of rural in 2025 often lack many of the structural and location-based advantages of their most successful former peers. This is a critical factor to dwell on, as stakeholders in rural communities may tell you that they want economic growth, but they do not want to lose their rural character—creating a bit of a paradox for economic

development (Weinberg, 2000). Many rural communities seem to seek a mythical “Goldilocks zone” of economic and population growth, just enough to recruit their desired stores, restaurants, housing developments, and quality of life amenities without sacrificing their homespun small-town feel (Audirac, 1997). In other words, local leaders may want growth, but not necessarily Forsyth County-level growth. Is this Goldilocks zone possible? If so, is it replicable, or tied up in intrinsic factors and blind luck?

State and federal governments have invested in many rural development programs over the years, but the lack of counterfactuals makes it difficult to know how much better or worse off rural Georgia communities are as a result. If there was some way to break the vicious cycle of decline for rural communities, it would be critically valuable information to thousands of counties around the country and most Georgia communities. Moving toward an answer to that imperative is the purpose of this research. Thus, the research question for this dissertation is: *What factors help explain the variation in economic well-being among rural Georgia counties?*

While some potential answers to this question are obvious—proximity to a large urban center or university, interstate exits or significant natural amenities, significant population growth, and a young and/or highly educated population—they cannot be easily replicated and often are based on intrinsic factors like location. The more interesting, and ultimately helpful answers to this question involve interrogating what is distinctive about those rural communities that find relative success in economic development, beyond what might be expected given their natural advantages and disadvantages. These are the answers this dissertation seeks to illuminate. The above factors can be analyzed through secondary data analysis, but an in-depth qualitative analysis of a small number of cases will help identify success factors that resist quantification. It is important to note that this approach is interrogating communities that perform better or worse

economically than would be expected—not that they are necessarily doing *well* economically, just better than the underlying factors would predict.

Consider the case of Taliaferro County, Georgia. Taliaferro, one of the least economically successful counties in Georgia, is located at least an hour's drive from the closest urban areas of Athens, Atlanta, and Augusta. With a 2020 population of just 1,559 and median household income of roughly \$48,000, Taliaferro is highly unlikely to see significant population or commercial growth or suddenly see a university established within its borders (U.S. Census Bureau, 2020b). Nor is it likely that the utility companies or the Army Corps of Engineers will suddenly build a new hydroelectric/recreational lake within its confines, generating new tourism and quality of life opportunities. For these reasons and others, the proverbial deck is stacked against communities like Taliaferro County.

As a counterexample, consider Oconee County, Georgia. Though Oconee County is located just 47 miles away from Taliaferro and both counties meet many definitions of the term rural, the two communities are worlds apart. Oconee County is a wealthy suburb of Athens-Clarke County, home to the University of Georgia and a prosperous urban area. Many high-income earners in Athens reside in Oconee County and the county is able to punch above its weight commercially by locating large shopping centers just inside the county line to generate revenue from Athens-Clarke residents (Fetter, 2015). What then, is Taliaferro County to do, lacking the proximity to an urban area, university, and natural amenities of a place like Oconee County? What can leaders in a county facing rough waters do to swim upstream and perform better than expected in economic development? Through the course of this research, I seek answers to these kinds of questions.

In Chapter 2, I discuss relevant literature on rural economic development and build the case for my research approach. In Chapter 3, I describe my mixed methods approach and data, including a regression model that controls for intrinsic factors to predict the vitality of rural county economies using a measure from the Appalachian Regional Commission called county economic status. I then compare each rural Georgia county's predicted economic statuses from 2006 to 2020 to its actual values and identify major positive and negative outliers. I then repeat this process with each of the three components of county economic status: unemployment rate, per capita market income, and poverty rate as the dependent variable. After quantitative methods, I discuss the collection of data through elite interviews with key economic development stakeholders in positive and negative outlier counties from the county economic status model. In Chapter 4, I analyze the results of the four regression models and discuss major outliers. In Chapter 5, I analyze data from the qualitative elite interviews with rural economic development stakeholders. Finally, in Chapter 6, I summarize my work and discuss the broader implications of my findings.

CHAPTER 2

THE LITERATURE ON RURAL ECONOMIC DEVELOPMENT

There is no consensus definition of what constitutes a rural community, in either scholarship or practice. According to Lapping (1997), “The concept of rurality lacks precision. Though hardly without meaning, it is expressed by a term that apparently defies neat definition” (p. 29). For the purposes of this dissertation, I define a rural community as a county with fewer than 50,000 population, a definition commonly used by USDA and state government in Georgia, where my study is set (Cromartie & Bucholtz, 2008; Georgia Code, 2025; Georgia Department of Economic Development, 2020). This definition is one of the more expansive versions of rural, allowing for more variation in the kinds of communities considered, while still excluding large suburban and urban counties. I will discuss the implications of this definition in greater detail in Chapter 3.

While it is plausible that some of the factors that lead to successful economic development in urban and suburban areas could also apply in rural areas, the literature clearly establishes rural economic development as a distinctive enterprise, worthy of specific study (Barkley, 1995; Lyson & Falk, 1993; Wilkinson, 2019). One of the key differences between rural and urban communities is that rural economies often rely heavily on a few major employers, whereas urban economies are more diversified (Green, 1997). This difference makes rural communities more vulnerable to sudden devastation, like the fallout felt in many rural Georgia communities after manufacturing plant closures in the 1990s and 2000s. This dominance of a small number of major industries in rural areas is magnified by the wide fluctuation in prices for

rural products, like agricultural commodities and raw materials (Green, 1997). While agriculture dominates many rural communities, diversifying the agricultural economy rather than relying on a single cash crop is associated with stable economic development. Urban demand, however, often pushes rural communities toward specialization and lack of agricultural diversity (Audirac, 1997; Flaccavento, 1997). Rural areas also provide population centers with food, water, and countless natural resources, so while their economies are distinct, urban American has a vested interest in rural America's survival (Luloff & Swanson, 1990).

Past scholarship on the rural-urban divide and rural economic development has largely consisted of qualitative case studies, though there has been limited quantitative and mixed-methods work. As early as 1941, Charles Johnson conducted a quantitative analysis of economic development in the south, comparing plantation cotton counties to counties with other kinds of farming, and finding that the economies of non-plantation counties had performed much better since the end of the U.S. Civil War (Johnson & Jones, 1941). The communities in Johnson's study, plagued by the longstanding impacts of slavery, also lacked a diversified portfolio of crops—the same theme explored by Flaccavento (1997) half a century later. While types of farming framed this discussion, Johnson's lower-performing plantation farming counties were also overwhelmingly poor, with low educational attainment, and higher minority populations, factors that still profoundly influence rural economic development today (Johnson & Jones, 1941).

In 1993, Falk, Talley, and Rankin conducted a quantitative analysis of economic development in the Black Belt, which they defined as “counties drawn from the fourteen census-designated states of the South where 33% or more of the population is black” (p. 56). This study represents the work closest to my research question in the extant literature. While not all of the

counties in their sample were rural, many of them were, including most of central and southwest Georgia. In this analysis Falk, Talley, and Rankin (1993) determined that 43 Black Belt counties were “successful” in economic development, based on educational attainment, median incomes, or poverty rates one standard deviation better than the mean of all Black Belt counties (p. 70).

In almost all of the 43 counties in Falk, Talley, and Rankin’s (1993) study, intrinsic factors make their economic development success difficult to replicate in a standard rural county. Eighteen of the successful counties were immediately proximate to major metropolitan areas, eight were home to post-secondary education institutions, one contained a military base, and another contained a coastal resort area. In the remaining successful cases, the authors were not able to identify reasons for success, pointing to the need for further research (Falk et al., 1993). One key difference between my research and Falk, Talley, and Rankin’s work is that my analysis controls for the kinds of intrinsic factors that they identified as drivers of rural economic development, providing an opportunity to advance scholarship by studying less-tangible factors that do not lend themselves to quantitative analysis.

Two University of Georgia studies in the early 2000s, one looking at the Southeastern U.S. broadly and the second focused specifically on Georgia, examined persistent poverty in the American south (Carl Vinson Institute of Government, 2002, 2003). They focused on a crescent-shaped region running across the coastal plain from southern Mississippi, through southern Alabama and Georgia and up through most of South Carolina, eastern North Carolina, and parts of southeastern Virginia. This region is predominantly (though not entirely) rural, and, at the time, was home to more than one third of all Americans living in poverty. Eventually, this work led to the creation of the Southeast Crescent Regional Commission (SCRC), a federal agency designed to function similarly to the Appalachian Regional Commission for the Black Belt

counties of the south (Doner et al., 2022). While the SCRC was nominally established by the 2008 Farm Bill, it did not actually begin operations until late 2021, and has received sparse funding in relation to its Appalachian counterpart (Congressional Research Service, 2024).

The Georgia-focused report identified six rural communities described as “leaders among Georgia’s distressed counties,” listing noteworthy characteristics and activities potentially linked to their relative success. These communities were the City of Douglas and Coffee County, the City of Dublin and Laurens County, the City of Hinesville and Liberty County, the City of Colquitt and Miller County, the City of Thomasville and Thomas County, and the City of Tifton and Tift County. The table below quotes anecdotes describing each county’s success (Carl Vinson Institute of Government, 2003).

Table 1: Positive Examples from "Dismantling Persistent Poverty in Georgia: Breaking the Cycle" (Carl Vinson Institute of Government, 2003)

<u>County</u>	<u>Description of Success</u>
City of Douglas and Coffee County	“provided extensive leadership and local commitment for development along US Highway 441, including efforts to attract a Wal-Mart Distribution Center. The county has received a South Georgia EXCEL (Early Learning Opportunities Act) Grant and implements a Girl Power Program for high-risk girls ages 9-15.” (p. 10)
City of Dublin and Laurens County	“serves as a regional center for education and training through several institutions—including satellite campuses for University of Georgia, Middle Georgia College, and Georgia Southern University as well as the Heart of Georgia Technical College whose campus contains the DuBose Porter Business and Industry Training Center. The county built a welcome center along I-16 to increase tourism. Bank of America and the United Way provide funds for a “Success by 6 Initiative” to ensure that all children reach school age healthy, well-nurtured, and ready to succeed.” (p. 10)
City of Hinesville and Liberty County	“home of the Fort Stewart military installation—a primary economic engine in the county—implemented aggressive efforts to increase housing for retaining retired military personnel. The county has shown

<u>County</u>	<u>Description of Success</u>
	impeccable local government leadership and management working in concert with the military base and boasts a high school dropout rate below the state average. Literacy is promoted through a Georgia Reads grant, and the Family Connection collaborative also has an affiliate program entitled Pathways to Success focused on life skill enrichment and prevention.” (p. 10)
City of Colquitt and Miller County	“initiated extensive downtown development and historic preservation efforts with the Tarrer Inn, Cotton Hall, and the entire town square is listed on the National Historic Register. In addition, Colquitt has been recognized as a Better Hometown Community, Georgia’s small town equivalent to a Main Street City. The county also exhibits a strong community vision and commitment to rural arts and culture, as exemplified by its production of Swamp Gravy, the “Official Folk Life Play of Georgia,” which has received national attention.” (p. 11)
City of Thomasville and Thomas County	“a leader in agribusiness development through the GENESIS Food Park, a restored manufacturing building that now houses a vegetable processing plant serving several counties. With Thomasville’s downtown area generally known as the retail hub for parts of southwest Georgia and north Florida, the city recently partnered with Flowers Industries to relocate over 100 jobs to the historic JC Penney’s building. The county has shown great foresight by incorporating technological innovation and providing high-speed Internet service.” (p. 11)
City of Tifton and Tift County	“Georgia’s center for farm experimentation and agricultural education, and houses the Agrirama, University of Georgia Rural Development Center, and Abraham Baldwin Agricultural College. In response to their human capital development efforts for youth and children, Tifton has distinguished itself as the “Reading Capital of the World.” (p. 11)

While the individual actions of local leaders clearly must have been instrumental in the success of each community, many of them have intrinsic advantages that may not be easily replicable by the standard rural Georgia county. Liberty County, with a population over of 50,000 since the 1990 Census, does not meet conventional definitions of rural, and also benefits

from the intrinsic economic engine of a large military installation (Carl Vinson Institute of Government, 2024a). The City of Dublin and Laurens County and the City of Tifton and Tift County are located along interstate highways, serve as hub cities for their regions, and are home to multiple higher education institutions. While the City of Douglas and Coffee County are located off of the interstates, they do benefit from U.S. Highway-441, a major transportation corridor. In this analysis, the City of Colquitt and Miller County and the City of Thomasville and Thomas County stand out as successful communities without as many readily apparent intrinsic economic advantages. Their success stories seem to hinge more on the decisions of local leaders to invest in downtown revitalization and arts and culture.

Some of the key quantifiable factors driving rural economic development, like those described in the Georgia report, emerged in scholarship in the 1990s and 2000s. Below, I synthesize research related to topics like population, aging population, minority population, educational attainment, proximity to metropolitan areas, natural amenities, major highways, and institutions of higher education, and discuss how they relate to rural economic development.

Population

The economic development challenges facing rural communities are often discussed through the lens of population loss, rather than population growth. As Crabtree (2016) notes though, many of the most successful rural communities of prior generations are no longer considered rural. Many Georgia communities “graduated” from conventional definitions of rurality by seeing their populations grow higher than 50,000 in the second half of the 20th century. Interestingly though, only five Georgia counties made this leap between the 2000 and 2020 U.S. Censuses: Barrow, Camden, Gordon, Effingham, and Jackson. All five enjoy natural advantages, like major highways and proximity to metropolitan areas.

Conversely, population decline has a clear relationship to economic decline. A decline in rural population often leads to heavy closures of small downtown businesses, independent restaurants, hospitals, and public schools, perhaps leading to even more population loss (Clugston, 1997; Wood, 2008). This cycle of decline, closure, and then further decline often leaves communities with an increasingly aging population, as younger people leave to pursue jobs and economic opportunity (Clugston, 1997; Wood, 2008). Carr and Kefalas (2009) sum up the economic difficulty facing rural communities in population decline, saying:

Scattered throughout the nation, thousands of towns find themselves twenty, ten, or even five years away from extinction because there are too few taxpayers, consumers, and workers to keep going. For many locales, the final death knell sounds when there are no longer enough children to keep the doors of the area school open. (p. 2)

Population loss and brain drain can be difficult to address. In a case study examining rural brain drain in Iowa, Carr and Kefalas (2009) examined then-Governor Tom Vilsack's effort to recruit 300,000 native Iowans spread across the country to move back home. Only 1,000 answered the call, illustrating the battle rural communities face to stop the bleeding with population loss.

Aging Population

While a wealthy, aging population may be an economic asset in a beach or mountain retirement destination, in many rural areas an aging population can put a strain on the local economy, as seniors require more services, particularly around healthcare, while being less able to work and contribute to the economy. Maestas, Mullen, and Powell (2023) found that for every 10% increase in national population over 60, you could expect a corresponding decline of 5.5% in gross domestic product. Alongside population decline and brain drain, an aging population can

put a community in a particularly difficult situation, where it loses its hospital, just as the aging population needs it most (Clugston, 1997).

Minority Population

The two largest minority groups in Georgia are black and Hispanic populations, roughly 33% and 11% of the state's population, respectively (U.S. Census Bureau, 2025). In some communities, including many rural counties, these numbers are substantially higher. Additionally, the Hispanic population may be larger than reported, as some people may be wary of being officially counted due to immigration concerns (Ax, 2022).

As far back as 1941, Charles Johnson demonstrated that former plantation cotton counties, which would be expected to have large black populations, performed worse than those with diversified farming. The work of Lyson and Falk (1993) and Falk and colleagues (1993) showcases the economic difficulties facing rural southern communities with high black populations across the Black Belt, defined as counties in the southeastern U.S. where at least one third of the population is black. At the time of their study, every community meeting their definition had a per capita income lower than the national average, both rural and urban. More recent studies have similar findings, with Wilkinson (2019) noting that the most extreme economic and social inequalities in the U.S. are found in rural areas, fueled in part by prejudice. This prejudice is not limited to the black population but also includes other minority racial and ethnic groups, most notably Hispanic people.

While the literature on rural economic development in the southern U.S. has traditionally focused on the long shadows of slavery and segregation and their enduring economic impact on the black community, rural areas in Georgia and in other heavily agricultural parts of the country have seen substantial growth in their Hispanic population in recent decades. The rural Hispanic

population doubled from 1990 to 2000 (Wood, 2008). Hispanic population growth is sometimes the only population growth rural communities see, but this growth also puts a strain on local resources and services, potentially negatively impacting the economy (Whitener & McGranahan, 2003).

Educational Attainment

Like many of the factors at play in local economic development, educational attainment of the local population intertwines with other factors discussed, like the presence of a college or university, and becomes sort of self-fulfilling over time (Falk et al., 1993). A community may continue to attract an educated population by already having an educated population, leading to a higher performing local school system and better paying jobs, and attracting more people and businesses (Whitener & McGranahan, 2003). Likewise, low educational attainment leads to low-paying jobs, creating a vicious cycle where a community cannot attract high paying jobs because they lack a qualified workforce and the mostly highly educated young residents leave (Carr & Kefalas, 2009; Falk et al., 1993).

Proximity to Metropolitan Areas

There is a clear path to economic growth for rural communities located within or immediately proximate to metropolitan areas. As discussed in Chapter 1, Forsyth, Fayette, Henry, Bartow, and Paulding counties and their nationwide peers saw massive population and economic growth in the 1990s (Barkley, 1995). In Falk, Talley, and Rankin's (1993) study of the Black Belt, nearly half of the communities identified as positive outliers were located adjacent to large metropolitan areas. Many such rural communities eventually grow beyond the rural designation, as urban economic engines spread their influence further afield (Crabtree, 2016; Macke & Markley, 2006).

Natural Amenities

Natural amenities and other quality of life and tourism assets are critical drivers of local economic development in rural areas (Flaccavento, 1997; Lorah & Southwick, 2003; Schwarzweller & Lean, 1993; Whitener & McGranahan, 2003). Mountains, rivers, and lakes can be “used as a magnet to attract new residents, small businesses, and tourists,” helping rural economies grow (Lorah & Southwick, 2003, pp. 268–269). Similarly to interstate highways, natural amenities drive up tourism, enabling communities to generate tax revenue from people who do not live in their jurisdiction (Afonso, 2016). It follows then that tourism-heavy communities would be able to excel with infrastructure and quality of life amenities for their local residents by relying more heavily on taxing visitors.

Further, natural amenities like lakes and mountains can lead to the construction of second homes for high-income earners. These part-time residents may pay substantial local taxes while still relying primarily on services in other communities. Tourism and second home construction are not necessarily a panacea though, as they can introduce an “us vs. them” battle between outsiders and long-term permanent residents over the character of the community (Qin, 2016). On the other hand, a lack of natural amenities and recreation opportunities can aggravate brain drain, population loss, and the accompanying economic decline (Mayer et al., 2018).

Highways

Isserman and Rephann (1995) researched economic development in the counties served by the Appalachian Regional Commission, the vast majority of which are impoverished and rural. In a model featuring 20 variables, they found that highway construction was the biggest driver of economic development in the region, indicating an important factor to control for in future analysis: the location of interstate highways. Local governments and school systems in

Georgia rely heavily on sales tax for capital projects, so it is easy to see how the location of an interstate would drive up sales tax revenue for one community, providing more funding for water, sewer, roads, and schools, while a neighboring county without an exit would miss out. The development of interstate highways was not without downsides for rural America though; they often led to the decline of historic downtown commercial districts, as more efficient routes bypassed small towns (Wood, 2008). Where a major state or federal highway passing through a rural downtown may have once been a major transportation and commerce corridor, chain stores and restaurants along interstate exits may have largely absorbed this economic activity.

Institutions of Higher Education

Several studies identify colleges and universities as assets for economic development, locally and regionally (Carr & Kefalas, 2009; Falk et al., 1993; Goldstein & Drucker, 2006). Universities produce innovations that sometimes transfer to the private market, serve as major local employers, and graduate alumni who contribute to the state and earn higher wages (Goldstein & Drucker, 2006). However, many economic impact studies on institutions of higher education, commissioned by individual universities to showcase their impact to politicians and other stakeholders, are not peer-reviewed (Siegfried et al., 2007). While indications in the literature are largely positive, this area in the research may be ripe for further study.

While it is easy to recognize the intertwined nature of the above factors, the literature makes it clear that some, such as population growth, aging and minority population, educational attainment, proximity to metropolitan areas, natural amenities, presence of major highways, and institutions of higher education are more intrinsic to a community. That is, they are driven to varying degrees by factors outside of the immediate influence of local community members and can be analyzed through secondary data analysis. It follows then, that there may also be other

factors that resist quantification that could help explain the variation in economic well-being among rural communities. In the following chapter, I will describe my methods for seeking to understand how all of these factors influence rural economic development in Georgia.

CHAPTER 3

RESEARCH METHODS

I utilize a mixed methods approach to answer the research question, *what factors help explain the variation in economic well-being among rural Georgia counties?* For the quantitative portion of this analysis, I run four regression models. Model 1 is the primary model for this research and is the model connected to the qualitative portion of this dissertation. Model 1 features a measure called *county economic status* as the dependent variable. I use Model 1 to generate a predicted county economic status for each rural Georgia county for each year from 2006 to 2020. County economic status, an index developed by the Appalachian Regional Commission, will be explained in greater depth in the subsequent section (Appalachian Regional Commission, 2022). The secondary models, Models 2, 3, and 4, feature the same independent variables as Model 1, but substitute the three component parts of county economic status (unemployment rate, per capita market income, and poverty rate) as the dependent variable for each model, respectively.

After using Model 1 to predict county economic status, I generate residuals from the actual county economic status scores to the values predicted by Model 1 for each county in the sample by year to determine the difference between each county's *predicted* and *actual* economic status for each year. I use these residuals to identify consistent positive and negative outlier counties by averaging all fifteen years of residuals for each county in the sample. To explain, for each year from 2006 to 2020, each of the 118 counties in the sample has an actual county economic status (the dependent variable) and a predicted county economic status

(generated by Model 1). The annual residual is the difference between these numbers. These annual residuals are averaged at the county level, resulting in a set of 118 average residuals demonstrating each county's average difference between predicted and actual county economic status over the 15-year study period. These average residuals showcase communities who have consistently performed significantly better or worse than would be expected along the economic metrics contained in the county economic status index, given their underlying characteristics.

The outliers are the counties with the strongest consistent divergence between predicted and actual county economic status, on average, over the 15-year study period, in both the positive and negative directions. Community leaders from these outlier counties are interview subjects for the qualitative portion of this research, in which I seek to understand what factors enable some communities to perform significantly better or worse than expected given underlying conditions. Units of analysis are the 118 rural Georgia counties. The 15 years (2006-2020) of data result in a total of 1,770 observations.

“Rural” Defined

While definitions of rural vary widely, I use “county population of 50,000 or fewer,” as the definition for this dissertation. This definition is used commonly by researchers and by policymakers in Georgia, as well as several USDA programs (Cromartie & Bucholtz, 2008; Georgia Code, 2025; Georgia Department of Economic Development, 2020). All 118 counties in the sample met this definition of rural from 2006 to 2020, meaning they can all be treated as rural for the full sample period (U.S. Census Bureau, 2021). It is important to attenuate the sample to rural communities rather than including all 159 Georgia counties, as it is clear from the literature that rural economic development is fundamentally different from urban development (Barkley, 1995; Lyson & Falk, 1993; Wilkinson, 2019). My research question focuses

specifically on *rural* economic development, so including the 41 urban Georgia counties would add noise to the data set while making it harder to discern relationships between variables in rural communities.

Rural-urban continuum code (RUCC) score, another measure of rurality developed by the U.S. Department of Agriculture, was considered to define this study's sample. RUCC scores range from 1 (counties in large metropolitan areas with populations greater than 1 million) to 9 (urbanized population fewer than 5,000, located neither inside, nor adjacent to a metropolitan area), with scores of 1 to 3 representing metropolitan areas and 4 to 9 representing rural areas (U.S. Department of Agriculture, 2025). While the variation created by a range of codes may seem attractive for this sort of analysis, RUCC codes manifest in counterintuitive ways due to their treatment of small-population counties on the fringes of large metropolitan areas. Using the RUCC definition of rural would reduce the sample to 88 counties, leaving out several counties of decidedly rural character that lie on the edges of metropolitan areas (examples include McDuffie, Morgan, and Pulaski counties, all of which have populations under 25,000).

While on the surface, RUCC appears to allow for a more granular rural definition, in practice, its focus on metropolitan areas versus non-metropolitan areas leads to a narrower definition of rural, with a county like McDuffie (population approximately 21,000) falling into the same category as neighboring Columbia County (population approximately 160,000), and only the smallest counties meeting the criteria for my sample. Interesting variation for my research question likely falls within the category of RUCC-3 counties (small counties on the outer edge of metropolitan areas) in a way that I would not be able to separate. Using an indicator for metropolitan statistical area as independent variable instead allows me to account for inclusion in a metropolitan area without eliminating small population metropolitan area

counties from the sample entirely. This approach will be explained in greater detail in the discussion of independent variables later this chapter.

Quantitative Methods

For the quantitative portion of this research, I applied the following regression equation to the primary dependent variable, county economic status, and, separately to each of county economic status' component parts: three-year unemployment rate, per capita market income, and poverty rate, respectively. Variables will be explained in greater depth in the following section. This approach results in four regression models, each represented by the following equation:

$$\begin{aligned}
 Y = & \beta_0 + \beta_1 \text{Population Squared}_{i,t} + \beta_2 \text{Population 65 and Older}_{i,t} \\
 & + \beta_3 \text{Black Population}_{i,t} + \beta_4 \text{Hispanic Population}_{i,t} \\
 & + \beta_5 \text{Educational Attainment}_{i,t} + \beta_6 \text{Metropolitan Statistical Area}_{i,t} \\
 & + \beta_7 \text{Natural Amenities Scale}_{i,t} + \beta_8 \text{Major Highways}_{i,t} \\
 & + \beta_9 \text{Institutions of Higher Education}_{i,t} + \varepsilon_{i,t}
 \end{aligned}$$

Data and Variables

Model 1 Dependent Variable: County Economic Status

The primary dependent variable in this research, and thus the dependent variable of Model 1, is county economic status, as calculated by the Appalachian Regional Commission (ARC). The ARC calculates a county economic status score for every county in the country each year, regardless of Appalachian status. County economic status is an index calculated from county three-year average unemployment rate, per capita market income, and poverty rate. These three variables are first indexed at the indicator level, then averaged to generate an overall index score. In this index, a score of 100 represents the national rate for each indicator each year. For

instance, if a county's unemployment rate, per capita market income, and poverty rate exactly match the national rates, its indexed value for each of the three components would be 100 and these would be averaged to generate an overall county economic status of 100. Per capita market income differs from typical measures of per capita income, in that ARC subtracts government transfer payments to more closely reflect private market income. Since poverty rate and unemployment rate are both negative indicators, ARC inverses the indexed per capita market income measure to give all three indicators the same directionality. ARC's approach results in a counterintuitive scale where each whole number below 100 represents one percentage point better than the national average.

ARC's data typically lags three years, so I utilized their Fiscal Year 2009 to Fiscal Year 2023 analyses for this dissertation, reflecting actual data from 2006 to 2020. For the first few years of the sample period, ARC's per capita income data lagged four years behind rather than three. In order to address this issue, I gathered 2011 per capita income and transfer payment data directly from the Bureau of Economic Analysis and used that to calculate per capita market income. Then I calculated each rural Georgia county's county economic status for 2006 to 2011 to align the per capita market income data with all of the other variables for each year. Additionally, from 2006 to 2008, ARC did not have annual county-level poverty estimates and instead relied on county poverty rates from the 2000 Census. In order to address this issue, I collected poverty data for Georgia's 118 rural counties from the U.S. Census Bureau's Small Area Income and Poverty Estimates for 2006, 2007, and 2008 and recalculated county economic status in comparison to the national average for those years to accommodate these annual estimates. Thus, the county economic status scores used in this dissertation differ from official ARC versions for 2006 to 2011.

ARC indexes county economic status so that a score of 100 represents the national average, while a score of 95 represents 5% better than average and a score of 105 represents 5% worse than average. Thus, county economic status demonstrates how counties perform relative to each other. Due to the counterintuitive nature of this scale, I rescaled the variable for my analysis so that county economic status is indexed at a score of 0 as the national average. In my rescaled version, each whole number above or below 0 represents 1% above/below the average U.S. county across the average of the three indexed indicators (three-year unemployment rate, per capita market income, and poverty rate). For example, if County A has a rescaled county economic status of 5, this means it performed 5% better than the national average across the average of the three indexed indicators. It should be noted that lower unemployment and poverty rates are better than higher, so a percent decrease in these measures represents a positive outcome (i.e., a community would rather have 4% unemployment than 8%).

Table 2, featuring sample data from 2020, shows the calculation of the rescaled county economic status variable. The row labeled *Average U.S. County* shows national average data from 2020, with the national average values indexed at 0 for the three indicators that make up county economic status (unemployment rate, per capita market income, and poverty rate). The row labeled *Appling County, Georgia* demonstrates how Appling County compared to the national values for each of the three indicators.

Table 2: Components of County Economic Status, Transformed for Analysis

County	Three-Year Average Unemployment Rate, 2018- 2020	Per Capita Market Income, 2020	Poverty Rate, 2016-2020	Indexed Rescaled Unemployment	Indexed Rescaled Per Capita Market Income	Indexed Rescaled Poverty	Rescaled Composite Index Value (Average of Three Indexed Indicators)
Average U.S. County	5.2%	\$46,638	12.8%	0	0	0	$((0) + (0) + (0))/3 = \underline{0}$
Appling County, Georgia	4.4%	\$26,108	23.4%	<i>Appling County Rate/National Rate x 100 - 100 x -1 4.4/5.2 x 100 = 84.1 - 100 x -1 = 15.9</i>	<i>National Value/Appling County Value x 100 - 100 x -1 46,638/26,108 x 100 = 178.6 - 100 x -1 = -78.6</i>	<i>Appling County Rate/National Rate x 100 -100 x -1 23.4/12.8 x 100 = 182.4 - 100 x -1 = -82.4</i>	$((15.9) + (-78.6) + (-82.4))/3 = \underline{-48.4}$

**Totals may not sum due to rounding*

The index scores I use are rescaled from ARC's method to be more intuitive, with positive numbers representing better than average performance and negative numbers representing worse than average. For example, to calculate the rescaled indexed value for unemployment I divided Appling County's rate of 4.4 by the national average of 5.2, which demonstrates that Appling's value is approximately 84% of the national value. This was then multiplied by 100, and inverted by subtracting 100 and multiplying by -1, to get to an indexed unemployment value of 15.9. This indicates that Appling County's unemployment rate was 15.9% better than the national rate in 2020.

In the transformed scale, you can see that Appling County performed 48% worse than the national average. Its unemployment rate of 4.4% was 15.9% better than the national rate, while the national per capita market income was 78.6% higher than Appling's value. Appling's poverty rate, indexed at -82.4, was nearly double the national rate. These three indexed values were averaged together to generate Appling County's composite county economic status of -48.4, showing that even though it outperformed the national unemployment rate, its overall economic status fell far below the national average. This method helps explore greater variation across indicators than simply saying that Appling's unemployment rate was about one point lower than the national average.

In this scale, a score of 100 would represent indicators two times better than the national average while a score of -100 would represent two times worse than the national average. It is important to note, though, that county economic status scores are relative measures. Even if a county's poverty rate and unemployment rate decline and its per capita market income rises, its county economic status score will still decline if it does not ultimately perform better than the

average U.S. county along those three measures in a given year (Appalachian Regional Commission, 2022).

The three-year average unemployment rate used in the county economic status index comes from the Bureau of Labor Statistics and represents an average of monthly unemployment rates for each county over the preceding three years. Unemployment rate measures the proportion of the civilian labor force that is actively seeking employment but does not currently have a job. Unemployment rate is widely accepted as a key economic indicator, with lower unemployment rates representing stronger local economies.

Likewise, per capita income is frequently cited as a key indicator of local economic health, with higher per capita incomes representing greater health. Per capita market income reflects not just local employment opportunities, but the quality of local jobs and other sources of income. The ARC measure is slightly different from standard per capita income measures, making it stronger for analysis. ARC removes transfer payments from income, so that the measure represents income generated by the private market rather than government initiatives like unemployment insurance, disability payments, or veterans' benefits.

Lastly, poverty is another common indicator for local economic vitality, with lower poverty rates representing more success. These three components of the county economic status index work in concert to paint a simple, but relatively complete picture of local economies, with unemployment rate indicating availability of jobs, per capita market income representing quality of local jobs and other sources of income, and poverty rate representing both quality of jobs and local inequality (Appalachian Regional Commission, 2022). The following table features definitions and sources for the components of county economic status.

Table 3: Components of County Economic Status, Defined

Indicator	ARC Definition	Source(s)
Three-Year Average Unemployment Rate	“The unemployment rate is calculated by dividing the three-year sum of persons unemployed by the three-year sum of the civilian labor force and expressing the result as a percentage.” (Appalachian Regional Commission, 2023)	U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics.
Per Capita Market Income	“Per capita market income is calculated by dividing total personal income, less transfer payments, by population. Transfer payments include retirement and disability insurance benefit payments, medical payments, income maintenance benefit payments, unemployment insurance benefit payments, veterans benefit payments, and other such payments.” (Appalachian Regional Commission, 2023)	U.S. Department of Commerce, Bureau of Economic Analysis, Local Area Personal Income.
Poverty Rate	“The poverty rate is computed by dividing the number of persons living below the poverty threshold by the number of persons for whom poverty status has been determined.” (Appalachian Regional Commission, 2023)	2009-2020: U.S. Department of Commerce, Census Bureau: American Community Survey 5-Year Estimates. 2006-2008: U.S. Department of Commerce, Census Bureau: Small Area Income and Poverty Estimates

The following figure and table show the distribution of rescaled county economic status scores. As demonstrated by the figure and the variable's kurtosis and skewness values in the subsequent table, the distribution of rescaled county economic status is approximately normal.

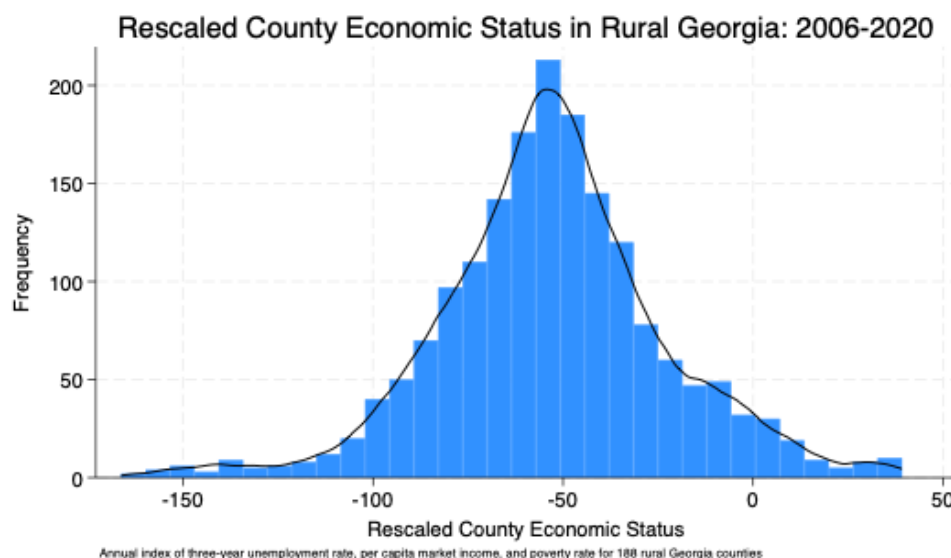


Figure 1: Rescaled County Economic Status in Rural Georgia, 2006-2020

The lowest rescaled county economic status in the sample is Wheeler County in 2016, with a score of -166.28. For context, its three-year unemployment rate for that year was 10.8%, still nearly double its 2008 pre-recession rate of 5.9%. In 2016, the national average was 5.4%. Wheeler's per capita market income that year was \$9,271, against the national average of \$40,679. Its poverty rate was 27.4 while the national rate was 15.1%. Conversely, the highest performer in the sample was Oconee County in 2020 with a county economic status of 39.17. That year, Oconee had a per capita market income of \$62,686, the highest in the sample, against the national average of \$46,638. Oconee had full employment with a three-year unemployment rate of 3.1% and a poverty rate of just 6.2%, against the national rates of 5.2% and 12.8%, respectively.

Table 4: Rescaled County Economic Status

<u>Rescaled County Economic Status</u>	
Minimum	-166.2801
Maximum	39.1673
Mean	-52.9701
Observations	1,770
Standard Deviation	29.9223
Variance	895.3435
Skewness	-.07035
Kurtosis	4.0467

Interestingly, more than 95% of Georgia counties performed worse than the U.S. average over the 15-year sample period. Of the 1,770 observations, the 84 positive ones represented just 10 counties, mostly mountain communities or wealthy suburbs of major cities. Table 5 lists these communities and their number of years in the 15-year sample with a rescaled county economic status above zero. The four most-frequent high performers were Oconee, Harris, Bryan, and Lee, all suburbs immediately adjacent to urban centers (Athens, Columbus, Savannah, and Albany, respectively). Monroe County, the seventh-most-frequent positive performer, is also adjacent to the urban hub of Macon in the central part of the state.

Table 5: County Economic Status: Top Performers: 2006-2020

County	Number of Years with Positive Rescaled County Economic Status
Oconee	15
Harris	15
Bryan	15
Lee	14
Pickens	7
Dawson	7
Monroe	5
Morgan	3
Towns	2
Pike	1

Oconee had 15 of the 16 highest scores in the sample, with only one year of Harris County beating out Oconee's worst year. Pickens, Dawson, and Towns are mountain communities and Pickens, Dawson, Pike, and Morgan lie along the outer fringes of the Atlanta metropolitan area. Of these counties, the most interesting on the surface would appear to be Morgan and Pike. While they are technically part of metro Atlanta, they lie on the outermost edge of the region, and lack the mountain retirement community advantages of Pickens, Dawson, and Towns.

Model 2 Dependent Variable: Three-Year Unemployment Rate

Three-year unemployment rate, one of the three variables indexed into county economic status, serves as the dependent variable for Model 2. Data for this variable come from ARC, who compiled three-year unemployment averages from the Bureau of Labor Statistics. Three-year rates are utilized as unemployment is prone to intermittent spikes that tend to normalize over a slightly longer period. The figure below displays the distribution of three-year unemployment rates in the sample. While visually right-skewed, the variable's skewness of 0.8351 and kurtosis of 3.5953 are acceptable levels for OLS regression analysis. In Stata output, a skewness of 0 and kurtosis of 3 would represent a perfectly normal distribution (StataCorp, 2025). Standard threshold values for skewness and kurtosis in large samples are absolute values of 2 and 7 respectively, so while the skew in the figure below is visually striking, unemployment rates in this sample are still a good fit for OLS regression analysis (Kim, 2013).

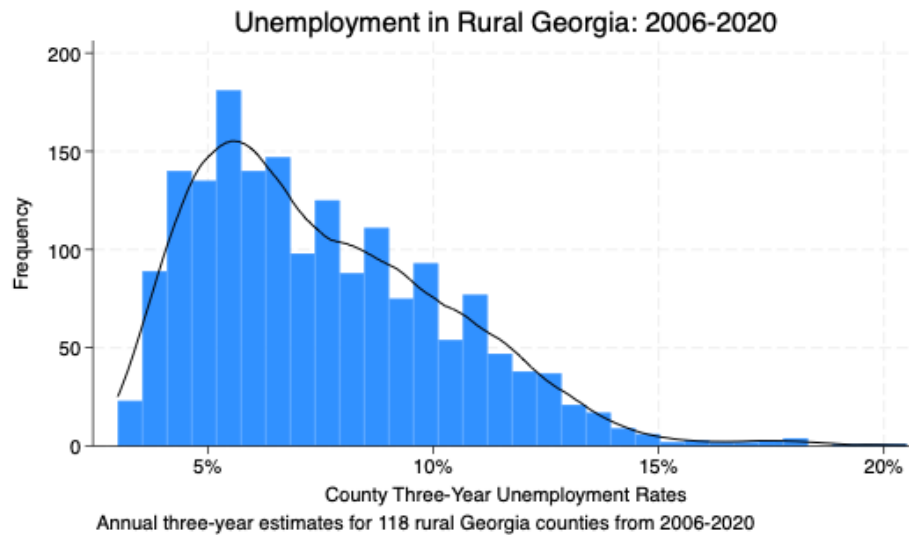


Figure 2: Unemployment in Rural Georgia

The lowest unemployment rates in the sample belong to Echols County (before the Great Recession, in 2007) and Oconee County (before the COVID-19 pandemic in 2019) at 3%. These

two counties have very little in common otherwise. While both are included in MSAs, Echols has a population of less than 4,000, with poverty rates regularly exceeding 25%, whereas Oconee County has ten times Echols' population, the highest per capita market income in the state, and some of its lowest poverty rates, never exceeding single digits in the sample period. On the other hand, the seven highest unemployment rates in the sample belong to Hancock and Jenkins counties in the wake of the Great Recession, topping out at 20.5% in Hancock County in 2011. Hancock and Jenkins have much more in common than Echols and Oconee; both sit in the mostly rural region in eastern Georgia known as the Central Savannah River area. Hancock was a majority minority county throughout the study period, while Jenkins' black population consistently topped 40%.

Table 6: Three-Year Unemployment Rate

<u>Three-Year Unemployment Rate</u>	
Minimum	3%
Maximum	20.5%
Mean	7.5438%
Observations	1,770
Standard Deviation	2.7925
Variance	7.7983
Skewness	.8351
Kurtosis	3.5953

Model 3 Dependent Variable: Log of Per Capita Market Income

Per capita market income, another of the three indicators comprising county economic status, serves as the dependent variable for Model 3, in logarithmic form. Per capita market income differs from standard measures of per capita income in that ARC, using data from the Bureau of Economic Analysis, removes government transfer payments such as disability, unemployment, and veterans' benefits to better reflect private income levels. As described earlier, ARC's data typically lag three years, and as such my sample of 2006 to 2020 comes from ARC's Fiscal Year 2009 to 2023 analyses. For the first few years of this sample period though, per capita market income rates lagged by an extra year, meaning they were four years behind rather than three. ARC eventually skipped one year of per capita market income data (2011), to align the index for 2012 and subsequent years across all indicators. To address this issue, I gathered data for 2011 from the Bureau of Economic Analysis and applied all of the ARC data to the correct year, aligning per capita market income values with other variables for the same year. Additionally, I utilized the St. Louis Federal Reserve's implicit price deflator to adjust all dollar figures to 2020 U.S. Dollars.

Figure 3 and Table 7 show that adjusted per capita market incomes in the sample are not normally distributed, with several outliers skewing to the right and a high degree of kurtosis, with much of the sample clustered around the mean of approximately \$20,000. The lowest per capita market income in the sample comes from Telfair County in 2010, with a value of \$8,296.35. Nineteen of the 20 lowest adjusted per capita market incomes in the sample come from Telfair, its neighbor Wheeler County, and Hancock County, all three highly impoverished counties in the east central region of the state. The highest value, once again, comes from

Oconee County, with a 2020 per capita market income of \$62,686. In fact, Oconee has the six highest adjusted per capita market incomes in the sample, and eight of the top ten.

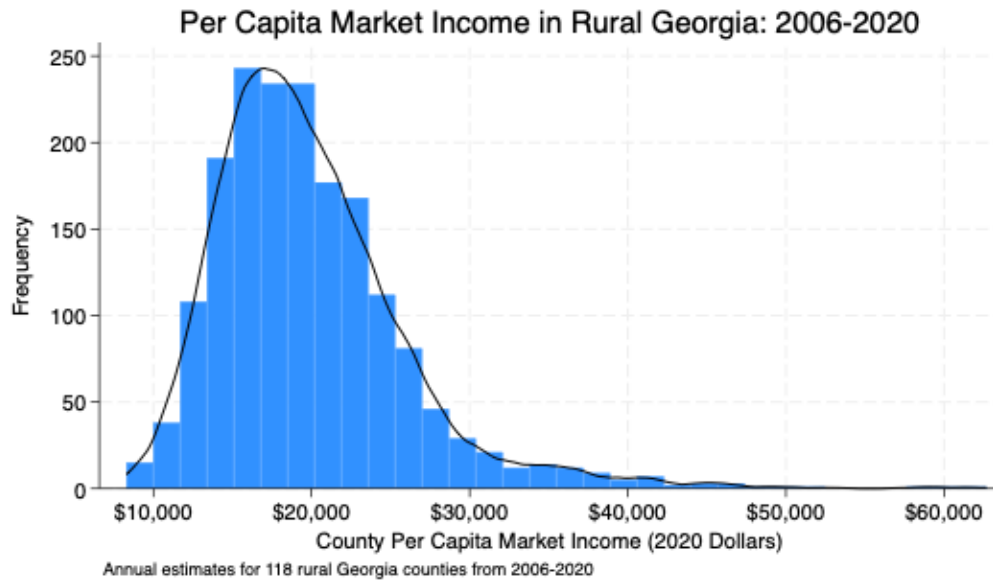


Figure 3: Per Capita Market Income in Rural Georgia, 2006-2020

Table 7: Per Capita Market Income (2020 U.S. Dollars)

<u>Per Capita Market Income (2020 U.S. Dollars)</u>	
Minimum	\$8,296.35
Maximum	\$62,686
Mean	\$19,869.86
Observations	1,770
Standard Deviation	6107.96
Variance	3.73e+07
Skewness	1.6515
Kurtosis	8.4676

To account for the high level of kurtosis exhibited by the adjusted per capita market income distribution, I applied a logarithmic transformation to the variable, resulting in the distribution displayed below. The logarithmic transformation results in a distribution much more closely approximating normal, making it a viable candidate for OLS regression. The log of per capita market income has a skewness of .3586 and kurtosis of 3.6463 (perfectly normal distribution would be 0 and 3, respectively).

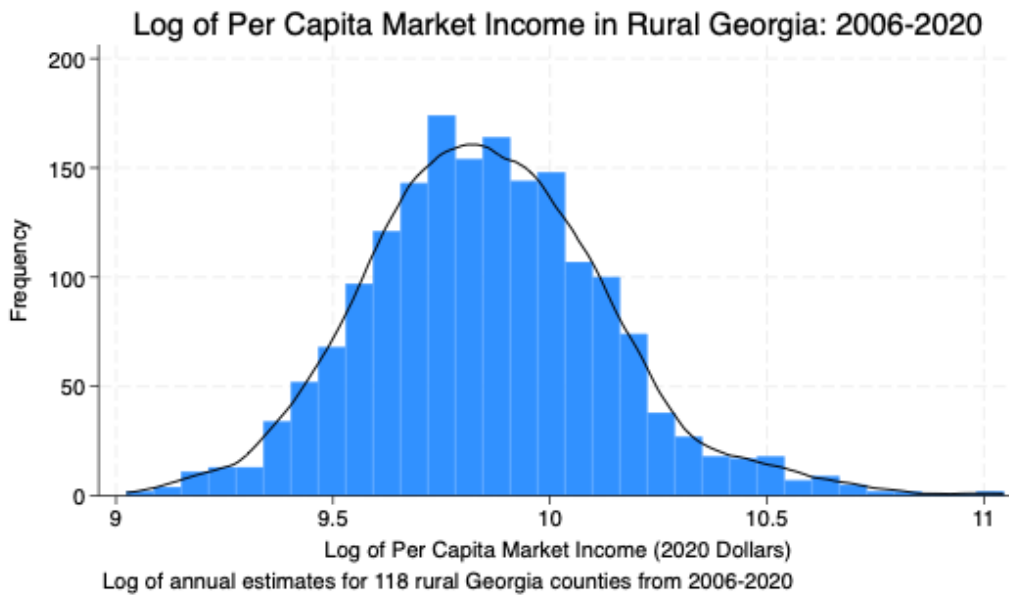


Figure 4: Log of Per Capita Market Income in Rural Georgia, 2006-2020

Model 4 Dependent Variable: Poverty Rate

Following the established pattern, the third indicator of county economic status, poverty rate, serves as the dependent variable for Model 4. For 2009 to 2020, these data come from ARC who compiles them from the U.S. Census Bureau's American Community Survey. For 2006 to 2008, these data come from the U.S. Census Bureau's Small Area Income and Poverty Estimates program. Figure 5 and Table 8 below describe the distribution of poverty rates in the sample, with the average rural Georgia county having a poverty rate of 21.9% over the study period. The

lowest poverty rate in the sample is 5.8%, coming from Harris County in 2020. As with per capita market income, the best poverty rates are heavily concentrated in wealthy suburbs of urban centers, with the 15 lowest coming from Oconee and Harris counties. On the other hand, the highest poverty rates are situated in the southern reaches of the state, further away from hub cities. Clay County, in southwest Georgia, has the five highest poverty rates in the sample, remaining above 42% for five straight years as the community dealt with the long tail of the Great Recession, and peaking at 47.7% in 2012, more than triple that year's national average of 14.9%.

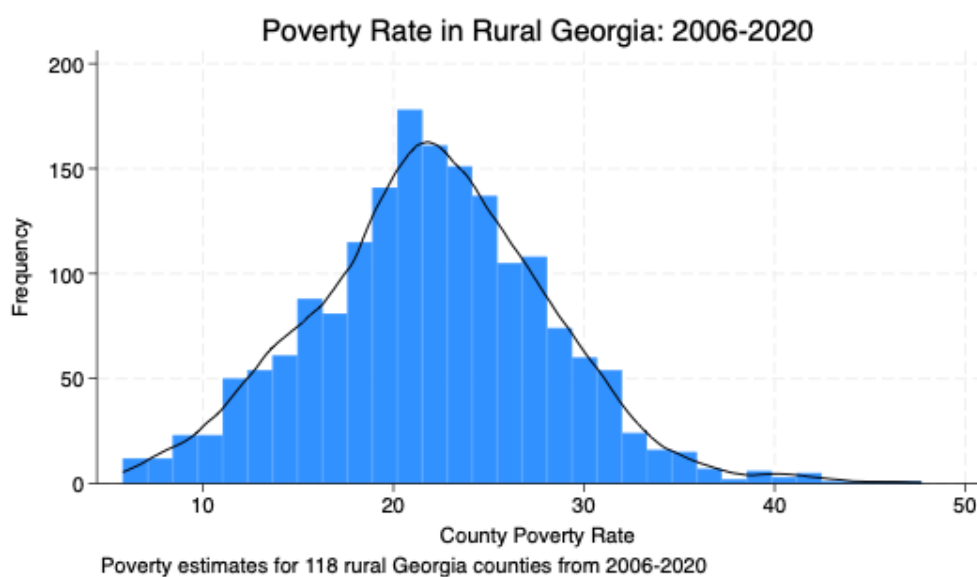


Figure 5: Poverty Rate in Rural Georgia, 2006-2020

Table 8: Poverty Rate

<u>Poverty Rate</u>	
Minimum	5.8%
Maximum	47.7%
Mean	21.9%
Observations	1,770
Standard Deviation	6.2288
Variance	38.7978
Skewness	0.1639
Kurtosis	3.3420

Independent Variables

A variety of independent variables were utilized to control for as many known factors as possible that could explain the variation in economic status between rural counties, as the purpose of this dissertation is to dig beneath the surface of what can be easily discerned from secondary data. Each of the four models features the same nine independent variables, selected based on their prominence in the literature as quantifiable drivers of rural economic development. Independent variables include the following: population squared, percent of population aged 65 or older, black population percentage, Hispanic population percentage, an indicator variable for inclusion in a metropolitan statistical area, percent population aged 25 and older with bachelor's degree or higher, an indicator variable for major highways, natural amenities scale score, and an indicator variable for the presence of an institution of higher education. These measures will be explained in the following paragraphs, with each variable's

expected relationship to county economic status in Model 1 explained in the table below.

Expected relationships between variables in Models 2, 3, and 4 are described in a subsequent table.

Table 9: Independent Variables

Variable	Coding	Expected Relationship to County Economic Status	Source
Population squared	Annual count estimate of county population, squared	Positive	U.S. Census Bureau
Population 65 and older	Annual percentage estimate of county population aged 65 and older	Negative	U.S. Census Bureau via Georgia County Guide
Black population	Annual percentage estimate of county population identifying as black	Negative	U.S. Census Bureau via Georgia County Guide
Hispanic population	Annual percentage estimate of county population identifying as Hispanic, regardless of race	Negative	U.S. Census Bureau via Georgia County Guide
Educational attainment	Annual percentage estimate of county population aged 25 and older with a bachelor's degree or higher	Positive	U.S. Census Bureau via Georgia County Guide
Metropolitan statistical area (MSA)	Indicator variable coded as "1" for counties that are part of an MSA in a given year and "0" for those that are not	Positive	U.S. Census Bureau
Natural amenities scale	Scale developed by USDA that combines warm winter, winter sun, temperate	Positive	U.S. Department of Agriculture

Variable	Coding	Expected Relationship to County Economic Status	Source
	summer, low summer humidity, topographic variation, and water area data into a single score for each county. Scores range from -6.40 (Red Lake County, Minnesota) to 11.17 (Ventura County, California)		
Major highways	Indicator variable coded as “1” for counties with a major highway and “0” for those without. Major highways include interstates and select major state routes like 316 and 400	Positive	Georgia Department of Transportation
Institutions of higher education	Indicator variable coded as “1” for counties with a main campus of public or private two-year or four-year institution of higher education. Small satellite campuses not included.	Positive	Georgia County Guide

Since county economic status and per capita market income are positive variables (i.e., higher is better), variables with a positive economic impact would be expected to have a positive relationship to them, and negative relationships to negative economic development indicators like unemployment rate and poverty rate. For this reason, the expected relationships between independent variables and the dependent variable are the same for Model 1 (dependent variable:

county economic status) and Model 3 (dependent variable: log of per capita market income) and flipped for Model 2 (dependent variable: unemployment rate) and Model 4 (dependent variable: poverty rate). Expected relationships for the secondary models are described in the subsequent table.

Table 10: Independent Variables and Expected Relationships for Secondary Models

Variable	Expected Relationship to County Three-Year Average Unemployment Rate (Model 2)	Expected Relationship to County Per Capita Market Income (Model 3)	Expected Relationship to Poverty Rate (Model 4)
Population squared	Negative	Positive	Negative
Population 65 and older	Positive	Negative	Positive
Black population	Positive	Negative	Positive
Hispanic population	Positive	Negative	Positive
Educational attainment	Negative	Positive	Negative
Metropolitan statistical area (MSA)	Negative	Positive	Negative
Natural amenities scale	Negative	Positive	Negative
Major highways	Negative	Positive	Negative
Higher education	Negative	Positive	Negative

Population data come from the U.S. Census Bureau. County population estimates in the sample range from 1,537 in Taliaferro County in 2019 to 48,434 in Laurens County in 2010 and 2011. Population is a key driver of rural economic development and population loss can spell death for a rural community as the community can no longer support jobs or commercial enterprises. “Brain drain” is a major problem facing rural communities, as their best and brightest often leave for college and never return, reducing population and educational attainment levels (Mayer et al., 2018). Population growth, on the other hand, can be a boon for economic development and can help capture communities that are gradually transitioning out of

rural status. Including these factors as independent variables allows me to isolate the economic impact of population and population change while exploring less-tangible factors that may also substantially impact rural economic development in the qualitative section.

The square of population is utilized rather than simply the raw population number in order to account for potential non-linearity. While it makes sense that a county of 2,000 people might struggle economically compared to a county of 20,000, this relationship would not necessarily be linear, as there is plenty of poverty and unemployment in urban areas, and there thus might be a “sweet spot” for population growth. For this reason, I utilized population squared in the model; since it is expected to be a positive economic indicator, it is anticipated to have a positive relationship to county economic status and per capita market income and a negative relationship to unemployment rate and poverty rate.

Percent of population aged 65 or older is an important indicator, as older adults are less likely to be in the labor force and more likely to require extensive (and expensive) healthcare and desire expensive quality of life amenities. Communities with higher concentrations of older adults would be expected to be in a particularly difficult economic situation, as they have a high demand for services and amenities, but relatively low labor participation, income, and local tax revenue generation. Data for this variable come from the Georgia County Guide, which compiles and breaks down data from the U.S. Census Bureau (Carl Vinson Institute of Government, 2021). Populations over 65 years of age in the sample range from 2.58% in Chattahoochee County in 2006 to 35.35% in Towns County in 2020. Percentage of population 65 or older is expected to have a negative relationship to county economic status and per capita market income and a positive relationship to the negative indicators of unemployment and poverty rates.

The variables representing the percentages of the population that are black or Hispanic allow me to estimate the effects of racial and ethnic minority composition on economic status. Due a variety of systemic and structural issues, along with the troubled racial history of the United States and the Deep South in particular, it would be expected that rural Georgia counties with a higher proportion of white population would economically outperform counties with higher proportions of black and/or Hispanic populations. Data for race and ethnicity come from the Georgia County Guide's compilation of Census Bureau data (Carl Vinson Institute of Government, 2021). Both of these variables, operationalized as percentages of the county population, are expected to have a negative relationship to county economic status and per capita market income, with expected positive relationships to unemployment rate and poverty rate. Black populations in the sample range from 0.35% in Fannin County in 2010 to 75.83% in Hancock County in 2008. Hispanic populations range from 0.47% in Glascock County in 2007 to 34.53% in Stewart County in 2020.

The educational attainment variable helps isolate the effect of an educated population on economic development. This will be particularly illuminating for communities whose industrial base requires a high degree of education. Counties with higher levels of educational attainment would be expected to perform better economically than those with low levels. This variable helps to account for the dynamics around a community like Oconee County, just a few miles from the University of Georgia, as discussed in the introduction. Educational attainment data also come from the Georgia County Guide's compilation of Census Bureau data (Carl Vinson Institute of Government, 2021). This study operationalizes educational attainment as the percentage of county population 25 years and older with at least a bachelor's degree, with values ranging from 3.20% in Quitman County (2013) to 52.30% in Oconee County (2019). Educational attainment is

expected to have a positive relationship to county economic status and per capita market income, while exhibiting a negative relationship to unemployment and poverty rate.

The indicator variable for inclusion in a metropolitan statistical area (MSA) helps account for small suburbs and bedroom communities just outside of urban areas. While these communities may appear superficially to have a lot in common with other rural areas, their proximity to urban areas brings several uncommon economic advantages (Barkley, 1995; Lyson and Falk, 1993). While all sample counties meet this study's definition of rural (per the 2020 Census), several of them may gradually transition out of the category as they are subsumed by urban sprawl in the decades to come. This has already happened to many suburban counties that would have met the definition of rural utilized in this research in the 1990s or 2000s (Crabtree, 2016).

Like the population variable, the MSA variable helps capture communities that are primed to "graduate" from the rural category or see substantial economic success derived from tangible factors. Data for metropolitan status come from the U.S. Census Bureau's list of core based statistical areas (U.S. Census Bureau, 2020a). Put simply, there is nothing the leadership of a county can do in 2025 to decide to be located right next to an urban center. Either you are or you are not. The indicator variable for MSA is anticipated to have a positive relationship to county economic status and per capita market income, with negative relationships to unemployment rate and poverty rate.

Recreational tourism is a major facet of rural economic development and has only grown in importance to local economies in the era of COVID-19. The natural amenities scale, calculated by the United States Department of Agriculture, attempts to account for the impact of recreational tourism by quantifying the accessibility of natural factors such as mean temperature,

hours of sunlight, topography, mean relative humidity, and percent water area (U.S. Department of Agriculture, 1999). Counties with a higher number of natural amenities would be expected to perform better economically, as these amenities improve both local quality of life and tourism, leading to increased economic development (Lorah & Southwick, 2003). Thus, it follows that communities with lower natural amenities scale scores would be expected to perform worse economically. Natural amenities scale, with values ranging from -1.42 in Schley County in Southwest Georgia to 3.18 in the mountain community of Towns County, is expected to have a positive relationship with county economic status and per capita market income, with negative relationships to unemployment and poverty.

The development of the interstate highway system in the 1950s and 1960s inadvertently created a series of winners and losers all over the country, as former truck stops and roadside businesses along state and federal routes were supplanted by new businesses along interstate exits (Herzog, 2021). The presence of an interstate highway exit in a county can lead to substantial increases in commercial retail activity, and thus corresponding increases in local sales tax revenue, allowing local governments to invest in large capital projects without increasing taxes on residents, potentially stimulating local economic development (Chandra & Thompson, 2000; Isserman & Rephann, 1995). Conversely, being bypassed by the interstate economically devastated many communities around the country, particularly if a nearby community received an interstate instead (Herzog, 2021).

Data for the highway variable come from the Georgia Department of Transportation (Georgia Department of Transportation, 2007, 2022). This variable includes both federal interstate highways and select major state highways, such as State Route-316 and State Route-400, as designated by the Georgia Department of Transportation. Of the 1,770 county-year

observations in the sample, 465 have a major highway, representing more than 26% of the sample. The indicator variable for major highways is expected to have a positive relationship to county economic status and per capita market income, with an anticipated negative relationship to unemployment and poverty rates.

Similarly, institutions of higher education are commonly seen as economic development assets (Carr & Kefalas, 2009; Falk et al., 1993; H. Goldstein & Drucker, 2006). They help attract innovation, bring prestige to a community, and may help combat brain drain. For this research, the higher education indicator variable is operationalized using data from the Carl Vinson Institute of Government to generate an indicator variable with a value of 1 for any county that contains a public or private, two-year or four-year institution of higher education. 377 of the 1,770 county-year observations in the sample have an institution of higher education, reflecting just over 21% of the sample. The higher education indicator variable is expected to have a positive relationship to county economic status and per capita market income, with a negative relationship to unemployment and poverty.

Other potential independent variables considered, but not included in the final model, include: deaths, death rate, percentage of adult population with at least a high school diploma or general equivalency diploma (GED), Rural-Urban Continuum Code (RUCC) score, and an indicator variable for counties with a hospital. Number of deaths was strongly correlated with population squared, as might be expected. Similarly, death rate was too highly correlated with population 65 and older and adult population with a high school diploma or GED was too highly correlated to adult population with a bachelor's degree or higher. Bachelor's degree or higher was selected as the educational attainment metric since it would be expected to have a greater

positive impact on the local economy by allowing for more high paying jobs than a high school diploma or GED. RUCC scores were too highly correlated with the indicator variable for MSAs.

In the planning stages for this work, I developed an indicator variable for counties with a hospital through a combination of the University of North Carolina's rural hospital database and internet searches of individual counties not represented in their database, giving counties a value of 1 in years where they had an open hospital and 0 in years where they did not have a hospital or after one closed. Running the model with the hospital variable included as an independent variable produced results similar to, but subtly different from, the final version analyzed in this study. In the version of the model with the hospital variable, suburban counties without their own hospital that border urban counties with large hospitals effectively get more credit for economic development success than small counties that manage to keep a rural hospital open.

For instance, Harris County, a wealthy suburb of Columbus without its own hospital, rises to the top four outliers in this version, because the model treats it as lacking a hospital despite easy access to multiple large hospitals in a bordering county. Similarly, Oconee County, which does not have its own hospital due to its proximity to multiple hospitals in Athens, overperforms in this version of the model. Conversely, counties like Pulaski (less than 10,000 population) are effectively penalized by this model for maintaining a rural hospital. Ultimately, the hospital version of the model over-credits wealthy suburban counties at the expense of small counties that have managed to keep their hospitals open against significant economic headwinds. Small rural counties who manage to keep their hospitals open might be exactly the kind of communities I am looking for, as there are likely significant intangible factors that allow this to happen. For this reason, I utilize the model that does not include a variable for hospitals.

Since the quantitative portion of this analysis is exploratory, there is no primary independent variable of interest, with each of the independent variables discussed above used to examine known quantifiable factors that could impact county economic status. The models utilized in the quantitative portion of this dissertation seek to illuminate cases worthy of more detailed investigation, to learn what factors might distinguish some rural communities in economic success (or lack thereof) in ways that resist quantification. The qualitative portion of this research, then, focuses on bringing to light less-tangible factors that influence county economic status. This qualitative analysis can then be used to generate hypotheses and corresponding primary independent variables of interest for subsequent research.

Qualitative Methods

For the qualitative portion of the dissertation, I identify four positive and four negative outlier communities from the analysis of Model 1 and interview four key community leaders from each outlier county. These counties have consistently performed significantly above or below their predicted county economic status, an index composed of unemployment rate, per capita market income, and poverty rate. Typical interview subjects include economic developers, county commission chairs, mayors, chamber of commerce executives, and city/county administrators or managers, subject to the unique local dynamics of each community and the availability of requested interview subjects.

I utilize purposive snowballing sampling, starting with the local economic development professional or chamber of commerce staff where possible and asking them for further interview suggestions, while leveraging internet searches and connections to find other interview subjects. While the pool of outlier communities is identified in the quantitative portion of the dissertation with the Model 1 results, interview respondents' identities remain confidential and the individual

counties they represent are not named in the qualitative portion of the study. I describe each participant by their roles in the community and identify them as coming from either a positive or negative outlier county, but not a specific county.

The qualitative interviews were semi-structured, built around open-ended questions and based on the literature for elite interviews. See the appendix for the interview protocol, approved by the University of Georgia's Institutional Review Board upon prospectus approval. The goal of these interviews was to identify distinctive factors about rural communities that do better or worse than expected economically, beyond the obvious structural and natural advantages controlled for by the independent variables in the quantitative portion of this analysis. Questions were specifically structured around subjects that resist quantification and thus cannot be covered by the independent variables in a regression model.

The literature on rural economic development indicates several factors worthy of deeper, qualitative investigation, including leadership, connections to political leaders and/or financial capital, entrepreneurship, past economic success (perhaps due to once-intrinsic factors like the location of historic railroads or various political or personal factors from history), and local philanthropy (Green, 1997; Hyland & Timberlake, 1993; Israel & Beaulieu, 1990; Nunn, 2020; Schwarzweller & Lean, 1993; Sokolow, 1990; Wood, 2008). Notably, these factors are strongly dependent on the actions, personalities, and strengths of individual people, making them difficult to study in a large-N quantitative model, but ideal for analyzing through one-on-one conversations. Thus, the interview questions for the elite interviews are rooted in these themes. A more detailed discussion of these factors continues below.

Leadership

Leadership is a particularly noteworthy common theme in case studies about rural economic development (Green, 1997; Israel & Beaulieu, 1990; Wade & Pulver, 1991; Wood, 2008). While the “Great Man Theory” of history has largely fallen out of favor in recent decades, and for good reason, sometimes history truly does hinge on the actions of individuals. This is perhaps most striking to see at the local community level, where the influence of individual leaders is keenly felt, for good and bad, sometimes for decades after their death. Green (1997) collected data from 100 rural communities, pursuing what he referred to as “self-development strategies” (p. 180) as local leaders, refusing to be swallowed up by broader market forces, creatively leverage local assets in order to stimulate the local economy. Examples from this analysis include community or workers’ groups buying businesses to keep them open when local owners retire or corporate owners leave, employing creative financing like community development loan funds to incentivize development, and utilizing land trusts.

Kraybill and Weber (1995) suggested that the ability of individual leaders to utilize adaptive learning to optimally respond to the changing economic landscape and overcome intrinsic disadvantages is critical for economic development success. Similarly, Israel and Beaulieu (1990) found that:

Communities which appear best able to act on matters of local concern are graced with a leadership that is skilled in involving a diverse set of actors in local decision-making activities, who operate on the basis of democratic principles, and who place the welfare of the total community above the needs of any given special interest. (p. 182)

In rural communities, leadership often falls to a small group of people; further, leaders do not always put the needs of the whole community first, sometimes showing favor to certain

constituencies (Israel & Beaulieu, 1990). Leadership is also intertwined with entrepreneurship, as research indicates successful cultivation of entrepreneurship in rural communities is predicated by intentional action to build a culture of entrepreneurship and grow your own businesses to help the local economy (Macke & Markley, 2006). Other aspects of personal leadership connected to successful rural communities include intentional capacity building and social capital development (Marré & Weber, 2010).

Access to Capital

Access to capital relates to several of the themes discussed in the quantitative and qualitative portions of this research, as assets like interstate highway exits and tourism destinations drive up sales tax revenue for capital projects and influential local leaders flex their muscle in the state and federal capitols to “bring home the bacon.” Access to capital allows communities to build up their infrastructure (e.g., roads, water systems, and sewer systems), which has also been linked to success in economic development.

Weinberg (2000) suggests that many rural small businesses are undercapitalized, negatively impacting entrepreneurship and economic growth. Related to access to capital is the willingness to provide it. In case studies of successful rural communities in Kansas, Wood (2008) found that the willingness of local people to take a risk and invest was critical for economic development. Local people had to be willing to make an investment or provide capital not necessarily because it was the most profitable move, but because they believed in the community. Similarly, the case studies reflected the importance of local philanthropy in pushing through revitalization projects that would not be taken on by the private market (Wood, 2008).

Entrepreneurship

The actions and philosophies of individual local businesses emerge in several studies as important factors in rural economic development. In a qualitative study involving more than 2,000 interviews with local stakeholders, Macke and Markley (2006) found entrepreneurship to be a strong factor in rural economic development, particularly in what they deem to be the “third rural America,” or rural communities that have not been subsumed by the suburbs or become resort destinations (p. 1). The counties included in my study largely fit this category, indicating that entrepreneurship is a factor worthy of further investigation. Similarly, in a series of case studies in Northern New England, Luloff and Nord (1993) found that strong entrepreneurship can set rural communities apart from their peers.

Conversely, Audirac (1997) suggested that a lack of entrepreneurship can lead to brain drain, and thus economic decline. Similarly, Clugston (1997) noted that by the mid 1990s, market forces had pushed small towns out of local, somewhat independent economies into a global economy dominated by monoliths. Implied in this finding is the loss of entrepreneurship, as formally local and independent businesses gave way to massive international firms. Weinberg (2000) found that “high road firms,” or “producers that employ the best workers and latest technology to yield products with a high value” can be successful in helping small communities develop sustainably (pp. 173-174). Together, these studies indicate that the individual actions of members of the local business community are important factors in rural economic development that warrant further analysis.

Local Government

Similarly, the actions and disposition of local government can play a major role in economic development. Does the local government have zoning in place that meets the needs of

potential employers? Does it invest in infrastructure, property, and even buildings for potential industrial development? Is leadership interested in economic growth? While the answer to this last question may feel obvious, local governments often seek to slow growth or stop it altogether in order to maintain a small-town feel. Virgil (2010) found that local government support was critical to community economic development efforts in rural areas. Local governments also play a key role in planning and developing a vision for the future, which Furuseth and Thomas (1997) argued was essential for sustainable development. Key to this planning is infrastructure like water, sewer, roads, and schools which rely on local government funds and the local government's ability to secure external capital (Sokolow, 1990).

History

History is another important driver of rural economic development identified in the qualitative scholarship. Past economic success can have a positive effect on future economic success, providing communities with assets that become intrinsic over time, like an educated workforce, tourism assets, interstate exits, and strong entrepreneurial base. Conversely, a community who has struggled in economic development is likely to continue to do so (Falk & Lyson, 1993) This is particularly striking for the rural south. Many communities have struggled for more than a century, dealing with the long tail of Jim Crow and a history of racism and classism that led to stubbornly persistent poverty (Nunn, 2020; Tickamyer & Duncan, 1990). In many areas of life, the best predictor of future success is past success, and economic development may be no exception (Nunn, 2020). Ultimately, much of rural community development depends on the ability of local leaders to overcome “deficits in access to resources for meeting common needs” and “severe inequalities in access to resources that are available”

(Wilkinson, 2019, p. 1). One of the goals of this research is to determine how communities succeed in these efforts.

Elite Interviews

The one-on-one conversational approach of elite interviews is not without pitfalls, as factors like personal leadership could be overstated in interviews with local leaders. For this reason, it was critical to interview a variety of people from each of the outlier communities, taking great pains to identify people who are representative of different groups within each community, rather than only interviewing “certain types of respondents” whose views may not be reflective of other key stakeholders (Goldstein, 2002, p. 669). Additionally, the protocol was based on established best practices from the literature on elite interviewing, where this sort of self-aggrandization is a well-established concern. While small-town mayors and chamber of commerce directors are not the agency heads and corporate executives typically analyzed in elite interviews, they play many of the same leadership roles within their community ecosystems and serve as elites within their local context, making this literature a logical source for guidance on how to structure the qualitative portion of this study (Harvey, 2011).

The interview protocol in the appendix represented an outline and starting point for the outlier community interviews, but I utilized a semi-structured approach, meaning that the interviews were not all exactly the same. Instead, they proceeded conversationally, allowing me to ask probing questions to dig more deeply into unanticipated insights as they arose. While this approach introduces some variation into the interviews, it can result in much richer data and important answers to unanticipated questions (Aberbach & Rockman, 2002). Additionally, the interview questions were primarily open-ended, leading to more complex coding on the back end, but richer data that does not box respondents into a limited number of potential responses.

Elites are particularly averse to closed-ended questions, making mostly open-ended semi-structured questions the best option for these conversations (Aberbach & Rockman, 2002).

After completing the interviews, I use qualitative thematic analysis to review interview transcripts and identify prominent factors impacting rural economic development according to interview subjects. I compile and code quotations in a software program called Atlas.ti and organize statements from the participants around common themes, allowing me to identify potential factors for success or struggles in rural economic development. In the following chapter, I describe and analyze the results of the four quantitative models and identify a pool of outliers from Model 1 who serve as case studies for qualitative analysis.

CHAPTER 4

QUANTITATIVE RESULTS

This chapter describes and analyzes the results of the quantitative models. I discuss Model 1, the primary regression model, with rescaled county economic status as the dependent variable first, followed by analysis of the three secondary models, with dependent variables of three-year unemployment rate, log of per capita market income, and poverty rate, respectively, the three components of county economic status. For each of the four models, I use the following regression equation, with county economic status, unemployment rate, log of per capita market income, and poverty rate serving as the dependent variables for Models 1, 2, 3, and 4, respectively.

$$\begin{aligned}
 Y = & \beta_0 + \beta_1 \text{Population Squared}_{i,t} + \beta_2 \text{Population 65 and Older}_{i,t} \\
 & + \beta_3 \text{Black Population}_{i,t} + \beta_4 \text{Hispanic Population}_{i,t} \\
 & + \beta_5 \text{Educational Attainment}_{i,t} + \beta_6 \text{Metropolitan Statistical Area}_{i,t} \\
 & + \beta_7 \text{Natural Amenities Scale}_{i,t} + \beta_8 \text{Major Highways}_{i,t} \\
 & + \beta_9 \text{Institutions of Higher Education}_{i,t} + \varepsilon_{i,t}
 \end{aligned}$$

Model 1: County Economic Status

County economic status, developed by the Appalachian Regional Commission (ARC), indexes unemployment rate, per capita market income, and poverty rate and averages them to create an overall measure of county economic status. ARC indexes each of the three component parts at 100 with 100 representing the national average for each measure. ARC's version of the

variable is scaled counterintuitively, where each whole number below 100 represents a 1% increase in economic status. I rescaled the county economic status data to make it easier to understand. In the rescaled version, a score of 0 represents the national average while -1 represents 1% worse than average and 1 represents 1% better than average. Model 1, like the other models, has 1,770 observations representing annual values for 118 rural Georgia counties for each year from 2006 to 2020.

The following table describes the hypothesized relationships between the independent variables and the dependent variable for Model 1: rescaled county economic status.

Table 11: Independent Variables

Variable	Expected Relationship to County Economic Status
Population squared	Positive
Population 65 and older	Negative
Black population	Negative
Hispanic population	Negative
Educational attainment	Positive
Metropolitan statistical area (MSA)	Positive
Natural amenities scale	Positive
Major highways	Positive
Institutions of higher education	Positive

As noted in the following table, the variance inflation factors (VIF) and tolerance for all independent variables in the model are within conventional levels, indicating minimal multicollinearity. Variables with no correlation to each other would have a VIF of 1 and tolerance of 1, while a variable with VIF over 5 and tolerance below 0.2 may cause problems for

regression analysis due to multicollinearity (Kim, 2019). Since all four regression models in this chapter include the same independent variables, with only the dependent variable changing, the VIFs for all four models are the same.

Table 12: Variance Inflation Factors (VIF) for Independent Variables

Variable	VIF	Tolerance (1/VIF)
Population^2	1.53	0.65
Pop. percent 65+	1.49	0.67
Percent black	1.27	0.79
Percent Hispanic	1.19	0.84
MSA	1.27	0.79
Percent bachelor's degree+	1.46	0.68
Natural amenities	1.31	0.76
Highway	1.13	0.88
Higher education institution	1.3	0.77
Mean VIF	1.33	

Table 13 summarizes the results of Model 1, the primary regression model for this research, with rescaled county economic status as the dependent variable.

Table 13: Rescaled County Economic Status in Rural Georgia: 2006-2020

Rescaled County Economic Status	Unstandardized Coefficient	Std. err.
Population^2	6.08E-09***	1.03E-09
Pop. percent 65+	-0.4606946***	0.120618
Percent black	-0.785964***	0..0288107
Percent Hispanic	-1.380592***	0..0970416
MSA	14.09718***	1.061543
Percent bachelor's degree+	1.746502***	0.089339

Rescaled County Economic Status	Unstandardized Coefficient	Std. err.
Natural amenities	0.5486757	0.5108356
Highway	2.234245**	1.049691
Higher education institution	-3.415653	1.210691
Constant	-46.96616	2.729088

N = 1,770

$R^2 = 0.6288$

p-value* = 90% statistical significance level in one-tailed t-test

p-value** = 95% statistical significance level in one-tailed t-test

p-value*** = 99% statistical significance level in one-tailed t-test

Most independent variables demonstrate the expected relationship to county economic status with statistical significance greater than the 95% level, with one major exception, institutions of higher education, discussed at length later in this section. Since I predict the direction of the relationship between each independent variable and county economic status, a one-tailed t-test is more appropriate than two-tailed. Thus, I utilize one-tailed t-tests throughout this chapter.

Population squared demonstrates the expected positive relationship to county economic status, at greater than 99% statistical significance. The model indicates that for each one person increase in population squared, a county would expect its county economic status to increase by 0.00000000608, an infinitesimal amount. To put this in context, a county population increase of 5,000 people would translate to a population squared increase of 25,000,000, which when multiplied by the population squared coefficient would increase county economic status by 0.15%. Even if a county were to grow by 25,000, resulting in population squared increase of 625 million, the model suggests its county economic status would only increase by 3.8%. Altogether this indicates that population squared has a highly statistically significant positive relationship, but very little impact on the margins of county economic status outside of massive population

growth that may move a county beyond the 50,000-population used to define rural in this dissertation.

Percentage of population aged 65 and older demonstrates the expected negative relationship to county economic status with greater than 99% statistical significance. The coefficient for this variable of -0.46 indicates that for each 1% increase in population aged 65 and older, a county would expect its economic status to decrease by about one half of one point. An increase of population aged 65 and older by 10% would be expected to result in a decrease in county economic status of 4.6%. As discussed in the literature review, rural Georgia and the rest of rural America are rapidly aging. While the sample for this study ends in 2020, it would be expected that the population 65 and older in many rural Georgia counties has only increased since that time, as the baby boomers continue to age and retire, likely associated with continued decline in county economic status.

Likewise, the variable for black population percentage demonstrates the expected negative relationship to county economic status, at greater than 99% statistical significance. The black population percentage variable demonstrates a larger impact than population 65 and older, with each 1% increase in black population indicating a decline in county economic status of nearly 0.8%. This finding supports prior research cited in the literature review, demonstrating that high-black population rural counties, many of which were once home to massive plantations and thousands of enslaved African Americans, continue to lag behind economically more than 150 years since emancipation. Similarly, the variable for Hispanic population percentage demonstrates the expected negative relationship to county economic status, at greater than 99% statistical significance. The Hispanic population variable demonstrates an even larger impact, with each percentage increase indicating a decline of approximately 1.38 points in county

economic status. As Georgia's Hispanic population continues to grow, this has major implications for rural economic development and the need to develop policies and programs to assist this population.

The indicator variable for metropolitan statistical area (MSA) showcases the expected positive relationship to county economic status and a large impact. The model suggests that counties in an MSA will have a county economic status more than 14 points higher than they would otherwise, all other variables being equal. This confirms expectations and indicates how important it is to include MSA as a variable in the model, so as to avoid ascribing success to communities that have succeeded economically largely on the basis of their proximity to hub cities and urban centers.

The educational attainment variable of population aged 25 and older with a bachelor's degree or higher also shows the anticipated positive relationship with greater than 99% statistical significance. The coefficient of 1.75 indicates that for each percentage increase in educational attainment, a county would expect its economic status to increase by 1.75 points. This could quickly become a substantial impact if educational attainment were to increase in a county by a few percentage points. The natural amenities variable subverts expectations by failing to demonstrate a statistically significant relationship to county economic status. The indicator variable for the presence of major highways demonstrates the anticipated positive relationship to county economic status with greater than 95% statistical significance. The highway coefficient of 2.23 suggests that the presence of at least one major highway in a county would be expected to increase its county economic status by more than two points, pointing to the importance of logistics and transportation infrastructure in economic development.

The indicator variable for institutions of higher education confounds expectations by demonstrating a negative relationship to county economic status. As the p-value for higher education institutions indicates, it is very clear that this variable does not have a positive relationship to county economic status, as predicted and tested with a one-tailed t-test. In fact, if I had predicted a negative relationship, the higher education variable would have passed the threshold for statistical significance at the 99% level. The coefficient of -3.42 indicates that the presence of an institution of higher education in a rural county would be expected to result in a decrease of county economic status of more than 3%. The educational attainment variable may largely account for the positive economic contributions of institutions of higher education, which has a substantial opposite impact on county economic status. The indicator variable for institutions of higher education is then left to account for the large number of low-wage workers colleges and universities often employ, along with many students who are likely technically living in poverty. The correlation between the educational attainment variable and the higher education indicator variable is only 0.17 though, suggesting that while the two variables are strongly linked theoretically, they are not strongly correlated in the sample.

Overall, the results are mostly in line with expectations and the relationships suggested by the literature. Membership in an MSA shows the largest marginal positive impact on county economic status but is also likely the variable most closely tied to the blind luck of geography. A county cannot simply choose to be located adjacent to a thriving metropolitan area, so while this variable does explain a fair amount of variation in county economic status, it provides little actionable information to policymakers. Perhaps most concerningly, the variables for percentage 65 and older, black, and Hispanic demonstrate substantial, statistically significant negative

impacts on county economic status. Rural Georgia is rapidly aging and the whole state is becoming more diverse, so these relationships could indicate further decline on the horizon.

Residuals

After running the regression for Model 1, I use the model to predict county economic status for each county, each year, and tabulate residuals to identify the outliers with the largest difference, both positive and negative, between actual and predicted county economic status values. County economic status, a composite index developed by the Appalachian Regional Commission, measures a county's overall economic vitality compared to the average U.S. county, by indexing unemployment rate, per capita market income, and poverty rate against the national average and averaging the indexed values for these three indicators to create an overall score. For the rescaled version of county economic status used here, the national average index is given a score of 0, while a county performing 1% better than the average county would receive a score of 1 and a county performing 1% worse than the average would receive a score of -1.

After running Model 1, I calculate the average residual for each of the 118 counties over the 15-year study period, to assess counties that consistently out- or underperform expectations for county economic status over time. Each residual represents the difference between the county economic status *predicted* by the regression model for each county each year and each county's *actual* county economic status for that year. For instance, Miller County's average residual of 29.34 indicates that, on average from 2006-2020, its county economic status was more than 29% better than that predicted by the model. This is calculated by adding all 15 of Miller County's residuals together, representing each year from 2006 to 2020, and dividing by 15 (the number of years in the sample) to determine its average difference between predicted and actual county economic status over the full study period. Conversely, Telfair County's average residual of

53.06 indicates that, on average, its county economic status was 53% worse than predicted by the model. While these percentages may seem large, it is important to consider how they are created. In these terms, if a county's poverty rate decreases from 20% to 10%, that is a 50% improvement, not 10%. It is important to calculate the average residual for each county in order to find counties whose economies consistently exceed or fall below expectations over the full study period, not just counties who had one particularly good or bad year.

The full table of average residuals follows, showing how communities performed relative to expectations, on average, over the full 15-year study period. In the following qualitative chapter, I discuss themes from interviews with key economic development stakeholders from a subset of these communities who consistently perform far better or far worse than predicted by Model 1, to try to understand what is distinctive about them that pushed them to perform so much better or worse than expected.

Table 14: Average Residual Between Predicted and Actual County Economic Status: 2006-2020

County	Average Residual
Miller	29.33959687
Banks	26.1577122
Webster	25.04491891
Talbot	24.76499073
Morgan	24.213108
Putnam	23.9402236
Harris	21.7502436
Lee	20.93625492
Greene	20.48858188
Pulaski	19.27557236
Evans	19.17253121
Washington	18.49971129
Grady	16.24851267
Early	16.00220399
Mitchell	15.81340391
Baker	15.75284824

County	Average Residual
Wilkinson	15.64576444
Monroe	15.07905546
Seminole	14.40027738
Oglethorpe	14.25368099
Pike	12.00656799
Thomas	12.00064321
Jones	11.45892953
Elbert	10.88489873
Bacon	10.28321639
Colquitt	9.41201624
Tattnall	8.328823093
Worth	8.086797787
Brooks	7.974711593
Appling	7.920957007
Decatur	7.829045553
Quitman	7.460539123
Randolph	7.054590097
Pierce	6.751128807
Echols	6.354739753
Wilkes	6.207344627
Habersham	6.147589252
Jasper	6.035380807
Bryan	5.350497507
Tift	5.184181868
Marion	5.061774053
Peach	5.04845446
Toombs	4.811445639
Wayne	4.746153911
Stephens	4.585209233
Crawford	4.476865743
Stewart	4.289134513
Polk	3.99733721
Screven	3.768335247
Union	3.706427167
Atkinson	3.59126482
Lincoln	2.950127833
Dooly	2.305251417
Schley	1.747453146

County	Average Residual
Long	1.35062602
Jefferson	1.159836564
Pickens	1.025079723
Warren	0.968468591
Upton	0.648859447
Taliaferro	0.512138983
Butts	0.383816313
Terrell	0.121245887
Candler	-0.01172378
Franklin	-0.255486053
Madison	-0.327020273
Turner	-0.408781715
Montgomery	-0.527180293
Towns	-0.91848732
Coffee	-1.493557711
Dawson	-1.500174707
Gilmer	-1.526272205
Bleckley	-1.816861073
Macon	-1.943968411
White	-2.744458587
Glascock	-2.81108564
Twiggs	-2.852516587
Hart	-3.20943176
Meriwether	-3.411382559
Jeff Davis	-4.626265848
McDuffie	-4.805569783
Lamar	-4.813600176
Cook	-4.950983613
Oconee	-5.349212367
Charlton	-5.432352493
Dade	-5.59599146
Ware	-5.695839653
McIntosh	-5.934027313
Fannin	-6.548147687
Calhoun	-7.48114619
Wilcox	-7.854791279
Dodge	-7.967462857
Sumter	-8.21524088

County	Average Residual
Berrien	-8.740600027
Irwin	-9.90073202
Lumpkin	-10.71495911
Laurens	-11.63530267
Rabun	-11.64863716
Heard	-11.68702594
Emanuel	-11.76265871
Chattooga	-12.57793958
Burke	-12.82426709
Clay	-13.56550651
Taylor	-15.06471769
Murray	-15.5189507
Crisp	-16.2676655
Haralson	-16.95876987
Chattahoochee	-18.10790747
Ben Hill	-18.87585434
Lanier	-19.49703776
Johnson	-21.57077551
Hancock	-22.53205279
Baldwin	-22.85594344
Clinch	-23.26964109
Treutlen	-24.43647335
Jenkins	-24.76594249
Brantley	-31.15757233
Wheeler	-50.73961152
Telfair	-53.061532

In order to develop a pool of potential interview subjects, I focus on the counties that consistently exceed county economic status expectations by the greatest amount (positive outliers) and the counties that consistently fall below county expectations by the greatest amount (negative outliers). The positive outlier communities appear first in the table below.

Table 15: Top Ten Outlier County Economic Status Counties

County	Average Residual
Miller	29.33959687
Banks	26.1577122
Webster	25.04491891
Talbot	24.76499073
Morgan	24.213108
Putnam	23.9402236
Harris	21.7502436
Lee	20.93625492
Greene	20.48858188
Pulaski	19.27557236

The positive outlier communities are an interesting mix of very small counties like Miller, Webster, Talbot, and Pulaski—all with populations of approximately 10,000 or less—and communities with some natural advantages, that managed to still exceed expectations. Banks County is strategically located along the Interstate-85 corridor in northeast Georgia. Morgan, Putnam, and Greene are neighbors along Interstate-20 in Georgia’s lake country, while Harris and Lee are suburbs of Columbus and Albany, respectively. The model controls for many of these communities’ natural advantages though, so the interviews are helpful in determining how some of these communities leverage local assets to exceed expectations.

The negative outlier counties are more straightforward, clustered heavily in the eastern half of central and south Georgia in the Black Belt portion of the state, as discussed extensively in the introduction and literature review. Still, qualitative interviews with a subset of these counties can provide important insights to the challenges facing rural communities in economic development.

Table 16: Bottom Ten County Economic Status Outlier Counties

County	Average Residual
Telfair	-53.061532
Wheeler	-50.73961152
Brantley	-31.15757233
Jenkins	-24.76594249
Treutlen	-24.43647335
Clinch	-23.26964109
Baldwin	-22.85594344
Hancock	-22.53205279
Johnson	-21.57077551
Lanier	-19.49703776

The following pages summarize and analyze the results from the three secondary models, wherein each of the component parts of county economic status were individually modeled as the dependent variable. For Models 2, 3, and 4, I use the raw data for the three dependent variables (three-year unemployment rate, log of per capita market income, and poverty rate respectively), rather than the indexed version. For this reason, some of the signs (positive or negative) will switch in the analysis, since per capita market income is a positive indicator and poverty rate and unemployment rate are negative indicators, though the core relationships hypothesized are expected to hold true. Thus, variables hypothesized to have positive relationships to county economic status in Model 1 would be expected to have positive relationships to per capita market income and negative relationships to unemployment rate and poverty rate, with the opposite holding true for those variables hypothesized as having negative relationships to county economic status in Model 1. The table below summarizes hypothesized relationships for each of the three secondary model dependent variables with the independent variables.

Table 17: Independent Variables and Expected Relationships for Secondary Models

Variable	Expected Relationship to County Three-Year Average Unemployment Rate (Model 2)	Expected Relationship to County Per Capita Market Income (Model 3)	Expected Relationship to Poverty Rate (Model 4)
Population squared	Negative	Positive	Negative
Population 65 and older	Positive	Negative	Positive
Black population	Positive	Negative	Positive
Hispanic population	Positive	Negative	Positive
Educational attainment	Negative	Positive	Negative
Metropolitan statistical area (MSA)	Negative	Positive	Negative
Natural amenities scale	Negative	Positive	Negative
Major highways	Negative	Positive	Negative
Higher education	Negative	Positive	Negative

As discussed in the analysis of Model 1, all four models feature the same independent variables, so the VIF and tolerance values are the same for each model. VIF and tolerance values for each independent variable are reprinted below, demonstrating acceptably low levels of multicollinearity.

Table 18: Variance Inflation Factors (VIF) for Independent Variables

Variable	VIF	Tolerance (1/VIF)
Population^2	1.53	0.65
Pop. percent 65+	1.49	0.67
Percent black	1.27	0.79
Percent Hispanic	1.19	0.84
MSA	1.27	0.79
Percent bachelor's degree+	1.46	0.68

Variable	VIF	Tolerance (1/VIF)
Natural amenities	1.31	0.76
Highway	1.13	0.88
Higher education institution	1.3	0.77
Mean VIF	1.33	

Model 2: Unemployment Rate

Results from Model 2 are summarized in Table 19. Regression results were mixed in light of expected relationships. These relationships are discussed in-depth following the table. The expected direction of the relationship between each independent variable and unemployment rate is opposite the expected relationships from Model 1, as unemployment rate is a negative indicator—i.e. higher unemployment rates are worse than lower unemployment rates.

Model 2 indicates that as expected, population squared has a negative relationship to county unemployment rate, at greater than 99% statistical significance. As with Model 1 though, while the relationship is statistically significant, changes in population squared result in very small changes to unemployment rate. Using the same hypothetical example from Model 1, population growth of 25,000 would result in a population squared increase of 625 million, but only a decrease of one quarter of 1% in unemployment rate.

Table 19: Three-Year Average Unemployment Rate in Rural Georgia: 2006-2020

<u>County Unemployment Rate</u>	<u>Unstandardized Coefficient</u>	<u>Std. err.</u>
Population^2	-3.93E-10***	1.49E-10
Pop. percent 65+	-0.1032434	0.0173806
Percent black	0.0369266***	0.0041485
Percent Hispanic	-0.0244403	0.013973
MSA	-0.8282534***	0.1528516

<u>County</u> <u>Unemployment Rate</u>	<u>Unstandardized</u> <u>Coefficient</u>	<u>Std. err.</u>
Percent bachelor's degree+	-0.0270856**	0.0128639
Natural amenities	0.207546	0.0735552
Highway	-0.020007	0.1511449
Higher education institution	0.3032599	0.1743274
Constant	8.977736	0.3929613

N = 1,770

R² = 0.1163

p-value*= 90% statistical significance level in one-tailed t-test

p-value**=95% statistical significance level in one-tailed t-test

p-value***=99% statistical significance level in one-tailed t-test

Using a one-tailed t-test with an expected positive relationship, population percentage aged 65 and older does not achieve statistical significance. Contrary to expectations, if I had predicted a negative relationship, it would have been statistically significant at the 99% level. One potential explanation for this relationship may be that communities with high senior populations may just have lower numbers of people participating in the workforce, as seniors age out of the labor force altogether. Lower labor force participation due to an aging population could drive unemployment down as the number of job seekers decreases, while still acting as a net-negative force on the economy, as employers may not have enough job seekers to fill local positions. The coefficient indicates that for each 1% increase in population 65 and older, a county could expect its unemployment rate to decline by one tenth of a percent.

Conversely, as anticipated, black population percentage has a positive relationship to unemployment rate that is statistically significant at greater than the 99% level. The coefficient of approximately 0.04 indicates that for every 1% increase in a county's black population, it could expect an increase in unemployment rate of 0.04%. Going against expectations however, the variable for Hispanic population percentage did not achieve statistical significance in the expected positive direction but would have achieved statistical significance at the 95% level with

a negative relationship. This result warrants further investigation, particularly into how different minority groups interact with various economic development indicators. This finding also supports evidence from the literature that Hispanic immigrants are not taking jobs away from American citizens, as this would be expected to result in a higher unemployment rate for the majority white population (Turner, 2014).

The indicator variable for MSA, on the other hand, demonstrates the expected negative relationship with greater than 99% statistical significance. The MSA coefficient of -0.83 indicates that rural counties in an MSA would be expected to have unemployment rates nearly 1% lower than they would if not located within an MSA. When dealing with unemployment rates, 1% is a substantial decrease, so MSA once again looms large in its impact. In the one-tailed t-test, the educational attainment variable of population percentage aged 25 or more with a bachelor's degree or higher shows the expected negative relationship at the 95% level of statistical significance. The coefficient of roughly -0.03% indicates a marginal negative impact on unemployment rates, as each percentage increase in population with a bachelor's degree or higher would be expected to decrease county unemployment by almost three tenths of 1%.

Natural amenities scale runs counter to expectations, failing to achieve statistical significance in the expected negative direction in the one-tailed t-test. Like Hispanic population, natural amenities would have achieved statistical significance if I had predicted a positive relationship to unemployment. The natural amenities scale relationship is surprising, as the literature indicates that natural amenities should be associated with economic success. It is feasible however, that communities with more natural amenities could be hit by seasonal spikes in unemployment outside of major tourism seasons, as these communities' economies may not be very diversified. In Model 2, the indicator variable for major highways does not come close to

statistical significance, indicating that it does not have a measurable impact on unemployment in either direction. This stands in contrast the substantial and significant positive impact highways had on the overall county economic status measure in Model 1.

The indicator variable for the presence of an institution of higher education in the county confounds expectations once again by failing to produce the expected negative relationship. Similar to Model 1, in Model 2, the higher education indicator variable would have had a statistically significant positive relationship if that was the direction hypothesized in the one-tailed test. The coefficient of 0.30 indicates that the presence of an institution of higher education in a rural county would be expected to increase its unemployment rate about one third of 1%. As with natural amenities, counties with colleges may see more seasonal increases in unemployment when school is out of session. Further, they may be hit harder by economic downturns, as their student population sits at the bottom of the local labor force and may be first to lose employment when times are tough. Overall, Model 2 has quite low R-squared and adjusted R-squared values of just over .11, indicating that the model does not explain very much of the variation in unemployment rates.

Model 3: Log of Per Capita Market Income

For Model 3, the dependent variable is the log of per capita market income, an ARC measure that subtracts government transfer payments from the more traditional measure of per capita income, to showcase income exclusively earned in the private market. Due to the abnormal distribution of per capita market income in the sample as discussed in Chapter 3, it is necessary to use a logarithmic transformation of per capita market income to serve as the dependent variable of Model 3. Since I use the log of the raw data for this version of the model rather than the indexed version from Model 1, it is necessary to adjust for inflation to 2020 U.S.

Dollars over the study period using the St. Louis Federal Reserve's implicit price deflator before employing the logarithmic transformation.

As shown in Table 20, population squared exhibits the predicted positive relationship with the log of county per capita market income at the 99% level of statistical significance. Similarly to the other models though, this relationship results only in marginal increases to per capita market income. Using the same extreme example discussed with the first two models, if a county's population increased by 25,000 (and thus 625,000,000 in population squared) it would expect a per capita market income increase of 5%.

Table 20: Log of Per Capita Market Income in Rural Georgia: 2006-2020 (2020 Dollars)

Log of County Per Capita Market Income	Unstandardized Coefficient	Exponentiated Coefficient	Std. err.
Population^2	9.04E-11***	1.00000000009	1.00E-11
Pop. percent 65+	0.0259215	1.02626038387	0.0011714
Percent black	-0.0001168	0.99988320682	0.0002796
Percent Hispanic	0.0035602	1.00356654504	0.0009418
MSA	0.1738911***	1.18992597583	0.0103019
Percent bachelor's degree+	0.0267721***	1.02713369232	0.000867
Natural amenities	-0.0624743	0.93943720603	0.0049575
Highway	0.0239441***	1.02423306166	0.0101869
Higher education institution	-0.0598664	0.94189036173	0.0117494
Constant	8.983911	7973.75657391	0.0264849

N = 1,770

R² = 0.6063

p-value* = 90% statistical significance level in one-tailed t-test

p-value** = 95% statistical significance level in one-tailed t-test

p-value*** = 99% statistical significance level in one-tailed t-test

Population percentage 65 and older runs counter to the anticipated relationship in Model 3, failing to reject the null hypothesis in the one-tailed t-test. If a positive relationship had been hypothesized though, it would have been statistically significant at the 99% level. The model

suggests that a 1% increase in population aged 65 and older should result in a per capita market income increase of approximately 2.6%. Since ARC's measure of per capita market income does not include government transfer payments like social security and disability, it is particularly perplexing to see aging population linked to higher income in rural communities. One plausible explanation may be that older workers stayed in the workforce longer in the wake of the Great Recession in some rural communities, earning end of career wages longer into life before transitioning to social security. Wealthy seniors in rural lake and mountain communities may also skew the results for this variable. This is a topic ripe for investigation in future research.

The variable for black population percentage does not have a statistically significant relationship to per capita market income in Model 3. Similarly to Model 2 though, the variable for Hispanic population percentage subverts expectations by not only failing to demonstrate the expected negative relationship in the one-tailed t-test, but in fact showing a positive relationship that would have been statistically significant at the 99% level if that was the direction hypothesized. While the literature on rural economic development in the South focuses largely on the long-term impacts of slavery and Jim Crow on the economic vitality of the black community, the Hispanic community has largely been treated as a similar minority group. These data, however, indicate important differences demanding subsequent research.

It is also important to note that this model simply suggests that rural counties with a higher percentage of Hispanic population have a higher per capita market income, not necessarily that the Hispanic population *themselves* have a higher per capita market income. The Hispanic population in the south often works disproportionately in laborious, low-wage jobs in agriculture, construction, and poultry processing. Workers in these industries may be part of

businesses that generate significant income for people higher up the organizational chart, but not necessarily the laborers themselves (Turner, 2014).

The indicator variable for metropolitan statistical area has the expected positive relationship to the log of per capita income with greater than 99% statistical significance. The exponentiated coefficient for MSA suggests that being in an MSA increases a rural county's per capita market income by nearly 19%, giving MSA the largest marginal impact in the model. The educational attainment variable of population 25 years and older with a bachelor's degree or higher shows the hypothesized positive relationship to the log of per capita market income with more than 99% statistical significance. The exponentiated coefficient indicates that for each 1% increase in educational attainment, a rural county should expect its per capita market income to increase by roughly 2.7%. As one might expect, this suggests education has a major impact on per capita market income. For instance, a 10% increase in educational attainment would be expected to correspond to a per capita market income increase of nearly 27%.

Natural amenities do not follow the expected positive relationship, instead indicating a negative relationship that would have been statistically significant at the 99% level if hypothesized. Natural amenities also contradicted expectations in Model 2, as they were associated with higher unemployment rates; the same factors driving higher unemployment rates seem to be driving lower per capita market income for this variable. Explanations might include seasonal variation in low-wage tourist industry and hospitality jobs, lack of development along preserved natural landscapes, or wealthy part-time residents whose income is reported in other communities. The indicator variable for highways plays to expectations, with a positive relationship at the 99% threshold of statistical significance in the one-tailed t-test. The

exponentiated coefficient for highways in Model 3 suggests that the presence of a major highway is associated with approximately a 2% increase in per capita market income.

Lastly, the indicator variable for institutions of higher education continues to befuddle, failing to reject the null hypothesis in the one-tailed t-test and showcasing what would have been a statistically significant negative relationship if hypothesized. The exponentiated coefficient for higher education indicates that having a college or university is associated with a decrease in per capita market income of roughly 6%. It seems plausible that the educational attainment variable is capturing most of the positive economic impacts of colleges and universities, with this indicator variable left to account for low-wage jobs and students who may be working few hours, if at all.

Model 4: Poverty Rate

Model 4 was the cleanest of the three secondary models, with most of the independent variables demonstrating the expected relationships to poverty rate, similar to Model 1 and its composite county economic status as dependent variable. Since poverty rate is a negative indicator (i.e. higher rate is worse), the expected relationships are opposite that of Model 3.

Table 21: Poverty Rate in Rural Georgia: 2006-2020

County Poverty Rate	Unstandardized Coefficient	Std. err.
Population^2	-6.14E-10***	2.33E-10
Pop. percent 65+	0.1067235***	0.0260831
Percent black	0.1990513***	0.0062256
Percent Hispanic	0.3625642***	0.0209694
MSA	-2.275342***	0.229385
Percent bachelor's degree+	-0.2845046***	0.0193049
Natural amenities	-0.1006758	0.1103846
Highway	-0.0495715	0.2268238

County Poverty Rate	Unstandardized Coefficient	Std. err.
Higher education institution	0.9919576	0.2616138
Constant	17.36059	0.5897187

N = 1,770

R² = 0.6000

p-value* = 90% statistical significance level in one-tailed t-test

p-value** = 95% statistical significance level in one-tailed t-test

p-value*** = 99% statistical significance level in one-tailed t-test

Model 4 produces a coefficient of -0.000000000614 for the population squared variable, indicating the expected negative relationship with 99% statistical significance, but only a marginal impact. Using the extreme example of 25,000 in population growth (625,000,000 in population squared), Model 4 predicts a poverty rate decrease just over one-third of 1%. The relationship is highly significant but makes very little impact. Population 65 and older demonstrates the anticipated positive relationship to poverty rate with greater than 99% statistical significance. The coefficient suggests that for each 1% increase in population 65 and older, a county could expect an increase in poverty rate of roughly 0.11%.

The variable for black population percentage also shows the expected positive, highly statistically significant relationship to poverty rate, with each 1% increase corresponding to roughly 0.20% growth in poverty rate. Likewise, the Hispanic population percentage variable has a highly statistically significant positive relationship with poverty rate as anticipated, indicating that each 1% increase in Hispanic population should be expected to relate to an increase in poverty rate by 0.36%. The results are in line with expectations from the literature and stand in contrast to the Hispanic population percentage variable's relationship to unemployment and per capita market income.

The indicator variable for MSA shows the predicted statistically significant negative relationship to poverty rate at the 99% level. The MSA coefficient of -2.28 means that rural

counties within an MSA are expected to have poverty rates just over 2% smaller than rural counties outside of MSAs. Like in Model 1, natural amenities do not demonstrate a statistically significant relationship to poverty rate in Model 4.

Major highways did not demonstrate a statistically significant relationship with poverty rate and the indicator variable for institutions of higher education for the fourth time ran counter to expectations, failing to reject the null hypothesis in the one-tailed test and instead demonstrating a significant negative relationship to poverty rate. The coefficient indicates that the location of an institution of higher education would be expected to increase its county's poverty rate by about 1%. Similarly to the per capita market income conversation, it could be that the educational attainment variable is accounting for most of the positive economic impacts of an institution of higher education, leaving only the impact of a large number of low wage jobs, rather than the innovation and high-paying jobs accounted for by the more educated employees and local alumni.

Analysis

The following table summarizes the results from all four regression models.

Table 22: Summary of All Regression Results

<u>Variable</u>	<u>Model 1:</u> <u>Rescaled</u> <u>County</u> <u>Economic</u> <u>Status-</u> <u>Unstandardized</u> <u>Coefficient</u>	<u>Model 1:</u> <u>Rescaled</u> <u>County</u> <u>Economic</u> <u>Status-</u> <u>Std. err.</u>	<u>Model 2:</u> <u>Unemployment</u> <u>Rate-</u> <u>Unstandardized</u> <u>Coefficient</u>	<u>Model 2:</u> <u>Unemployment</u> <u>Rate- Std. err.</u>	<u>Model 3: Log of</u> <u>Per Capita</u> <u>Market</u> <u>Income-</u> <u>Unstandardized</u> <u>Coefficient</u>	<u>Model 3: Log</u> <u>of Per Capita</u> <u>Market</u> <u>Income-</u> <u>Exponentiated</u> <u>Coefficient</u>	<u>Model 3:</u> <u>Log of</u> <u>Per</u> <u>Capita</u> <u>Market</u> <u>Income-</u> <u>Std. err.</u>	<u>Model 4:</u> <u>Poverty Rate-</u> <u>Unstandardized</u> <u>Coefficient</u>	<u>Model 4:</u> <u>Poverty</u> <u>Rate-</u> <u>Std. err.</u>
Population^2	6.08E-09***	1.03E-09	-3.93E-10 ***	1.49E-10	9.04E-11***	1.00000000009	1.00E-11	-6.14E-10 ***	2.33E-10
Pop. percent 65+	-0.4606946***	0.120618	-0.1032434	0.0173806	0.0259215	1.02626038387	0.0011714	0.1067235***	0.0260831
Percent black	-0.785964***	0.0288107	0.0369266***	0.0041485	-0.0001168	0.99988320682	0.0002796	0.1990513***	0.0062256
Percent Hispanic	-1.380592***	0.0970416	-0.0244403	0.013973	0.0035602	1.00356654504	0.0009418	0.3625642***	0.0209694
MSA	14.09718***	1.061543	-0.8282534***	0.1528516	0.1738911***	1.18992597583	0.0103019	-2.275342***	0.229385
Percent bachelor's degree+	1.746502***	0.089339	-0.0270856**	0.0128639	0.0267721***	1.02713369232	0.000867	-0.2845046***	0.0193049
Natural amenities	0.5486757	0.5108356	0.207546	0.0735552	-0.0624743	0.93943720603	0.0049575	-0.1006758	0.1103846
Highway	2.234245**	1.049691	-0.020007	0.1511449	0.0239441***	1.02423306166	0.0101869	-0.0495715	0.2268238

<u>Variable</u>	<u>Model 1:</u> <u>Rescaled</u> <u>County</u> <u>Economic</u> <u>Status-</u> <u>Unstandardized</u> <u>Coefficient</u>	<u>Model 1:</u> <u>Rescaled</u> <u>County</u> <u>Economic</u> <u>Status-</u> <u>Std. err.</u>	<u>Model 2:</u> <u>Unemployment</u> <u>Rate-</u> <u>Unstandardized</u> <u>Coefficient</u>	<u>Model 2:</u> <u>Unemployment</u> <u>Rate- Std. err.</u>	<u>Model 3: Log of</u> <u>Per Capita</u> <u>Market</u> <u>Income-</u> <u>Unstandardized</u> <u>Coefficient</u>	<u>Model 3: Log</u> <u>of Per Capita</u> <u>Market</u> <u>Income-</u> <u>Exponentiated</u> <u>Coefficient</u>	<u>Model 3:</u> <u>Log of</u> <u>Per</u> <u>Capita</u> <u>Market</u> <u>Income-</u> <u>Std. err.</u>	<u>Model 4:</u> <u>Poverty Rate-</u> <u>Unstandardized</u> <u>Coefficient</u>	<u>Model 4:</u> <u>Poverty</u> <u>Rate-</u> <u>Std. err.</u>
Higher education institution	-3.415653	1.210691	0.3032599	0.1743274	-0.0598664	0.94189036173	0.0117494	0.9919576	0.2616138
Constant	-46.96616	2.729088	8.977736	0.3929613	8.983911	7973.75657391	0.0264849	17.36059	0.5897187

N = 1,770 for all models

Model 1 $R^2 = 0.6288$

Model 2 $R^2 = 0.1163$

Model 3 $R^2 = 0.6063$

Model 4 $R^2 = 0.6000$

p-value*= 90% statistical significance level in one-tailed t-test

p-value**=95% statistical significance level in one-tailed t-test

p-value***=99% statistical significance level in one-tailed t-test

Overall, the secondary models provide more questions than answers, suggesting that the fully indexed Model 1, with the composite county economic status as dependent variable, may be greater than the sum of its parts. The indexing process makes the results for Model 1 more striking and coherent than the raw results for each indicator. That said, Models 2, 3, and 4, which focus separately on the three component parts of county economic status, unemployment rate, per capita market income, and poverty rate respectively, point toward potentially fruitful avenues for future research, while confirming some suppositions from the extant literature and contesting others. In order to facilitate comparison across models, when I refer in this section to a variable having a positive relationship to economic development overall, that means it has a statistically positive relationship to county economic status and per capita market income, since increases in these variables are desirable, while also exhibiting a negative relationship with unemployment and poverty, since increases in these variables are detrimental to economic development.

The four regression models demonstrate that just because a variable is positively or negatively associated with economic development *overall* does not mean it will necessarily have the same relationship to a specific aspect of the local economy, like unemployment, income, or poverty. For example, the literature suggests that an aging population should be expected to have a negative relationship to economic development. While this hypothesis holds true in the primary model with the composite county economic status as dependent variable, it does not hold true for two of the three component parts of county economic status (unemployment rate and per capita market income) when analyzed on their own in Models 2 and 3. Similarly, the variable for Hispanic population percentage demonstrates the expected negative relationship to county economic status in Model 1, but an unexpected positive relationship to two of its component parts: unemployment rate and per capita market income in Models 2 and 3, respectively.

Natural amenities also produce perplexing results, producing no statistically significant relationship in Models 1 and 4 and diverging from expectations with a negative relationship to economic development in Models 2 and 3, where the variable is associated with an increase in unemployment rate and a decrease in per capita market income. Prior literature strongly indicates that natural amenities are assets for economic development, but my research suggests some downsides as well. It is plausible that communities that depend on natural resources tourism for economic activity may be more prone to swings in unemployment outside of tourism seasons or in economic downturns, when the tourism industry overall declines. Additionally, it is possible that lake and mountain counties may have artificially low per capita market incomes due to part-time residents being officially counted in their primary counties of residence.

Relationships between variables in Model 4, with poverty rate as the dependent variable, tracked most closely to Model 1, with overall county economic status as dependent variable. This suggests that if only one measure is available to measure local vitality, poverty rate may be a stronger indicator than unemployment rate or per capita market income at measuring overall economic vitality.

Population squared consistently demonstrates the expected relationship to economic development across all four models (positive relationship with overall county economic status and per capita market income and negative effect on unemployment and poverty) but consistently shows a modest predicted effect on all dependent variables. This suggests that population growth is a positive for economic development, but that growth alone is not a panacea. The black population percentage variable largely demonstrates the expected negative relationship to economic development across the models, though surprisingly there was no statistically significant relationship between black population and per capita market income. The

findings across the other three models, though, suggest that the historical relationship between race and economic development in the South is still an important consideration in rural economic development.

Being geographically located within an MSA has a consistently strong positive relationship to economic development across all four models, underscoring the themes in the literature about the importance of location in economic development. The indicator variable for major highways demonstrates the expected positive relationship to economic development in two of the four models, lending support to prior work that established highways as major assets for economic development, though it did not have a statistically significant relationship with unemployment and poverty in Models 2 and 4, respectively.

The most surprising impacts come from institutions of higher education, which consistently demonstrate a negative relationship to economic development across all four models. While the literature on higher education and economic development suggests there should be a positive relationship, some scholars note that much of the work dealing with higher education and economic development comes from colleges and universities reporting on their own economic impact, with obvious incentives to report positive impacts (Siegfried et al., 2007).

That said, the educational attainment variable of population aged 25 and older with a bachelor's degree or higher demonstrates a consistently positive relationship to economic development across all four models. While the indicator variable for institutions of higher education is isolated from educational attainment of the population in these four models, in reality, it would be very difficult to disentangle these factors from each other. Institutions of higher education inevitably lead to a more educated local population, if for no other reason than all of the highly educated people they employ. That said, the two variables are only weakly

correlated at 0.17, indicating they are sufficiently different from each other to capture separate aspects of the local economy.

While the indicator variable for institutions of higher education consistently has a stronger marginal effect on economic development than educational attainment across all four models, it is important to note that higher education is an indicator variable, and thus this effect can only be felt once. Educational attainment, on the other hand, is a percentage variable, so in Models 1, 3, and 4, an increase of just a few percentage points in educational attainment is enough to overcome the negative effect of the higher education variable. In Model 2 however, it would take an increase of 15 percentage points in educational attainment to overcome higher education institutions' effect on unemployment. The entanglement between educational attainment and the location of an institution of higher education makes it unwise to draw any broad conclusions about the impact of institutions of higher education on rural economic development based on these four models. It does suggest, though, that there is still ground to be uncovered on this subject in future research, particularly around the relationship between institutions of higher education and unemployment.

Taken in concert, the independent variables largely demonstrate the expected relationships to *overall* economic development, but Models 2, 3, and 4 suggest there is room for further research investigating how these variables relate to specific aspects of a rural economy, like unemployment rate, per capita market income, and poverty rate.

CHAPTER 5

QUALITATIVE RESULTS

This chapter will describe this study's qualitative methods and qualitative data from elite interviews and analyze and synthesize results. As discussed in Chapter 4, I utilized a regression model, known as Model 1, to predict the economic status of each of Georgia's 118 rural counties from 2006 to 2020, controlling for measurable or intrinsic factors that would be expected to impact a local economy, like population, age, race, and ethnicity demographics, metropolitan statistical areas, major highways, natural amenities, and institutions of higher education. While I discuss four regression models in Chapter 4, the qualitative portion of this dissertation stems exclusively from the primary regression model, known as Model 1. The dependent variable for Model 1 is county economic status, an index developed by the Appalachian Regional Commission (ARC) that compares three-year unemployment rate, per capita market income, and poverty rate for each U.S. county to the national average.

After running the regression for Model 1, I compared each county's actual economic status to that predicted by the model, for each year of the study period, and averaged the residuals for each county to identify the most consistent positive and negative outliers over the full 15-year period. The top ten and bottom ten outliers, the communities that most consistently exceeded or fell below the county economic statuses predicted by Model 1 over the full 15-year study period, are listed in the following tables. While much of the variation in county economic status can be explained by the quantifiable factors that serve as the independent variables in

Model 1, the size of the average residuals in the outlier counties suggests that there is more to the story in these communities, as they consistently diverge strongly from the county economic status predicted by the quantifiable factors in Model 1.

The top ten outliers are the communities that most consistently exceeded Model 1's expectations for their county economic status from 2006 to 2020, while the bottom ten outliers regularly fell the furthest below expectations over the same time period. It should be noted that being an outlier here does not necessarily mean that a county performed particularly well or poorly in economic development. Rather, it means that *the county's economic status significantly diverged from expectations* based on the quantifiable factors in the model. That said, seven of the top ten positive outlier counties listed below had county economic statuses below the national average for all 15 years of the study period. Model 1 suggests, though, that based on quantifiable factors, these counties' economic statuses should have been even lower. In this chapter, I explore potential qualitative explanations for this overperformance (in four positive outlier communities) and underperformance (in four negative outlier communities), pulled from the tables that follow.

Table 23: Top 10 Outlier County Economic Status Counties

County	Average Residual
Miller	29.33959687
Banks	26.1577122
Webster	25.04491891
Talbot	24.76499073
Morgan	24.213108
Putnam	23.9402236
Harris	21.7502436
Lee	20.93625492
Greene	20.48858188
Pulaski	19.27557236

Table 24: Bottom Ten County Economic Status Outlier Counties

County	Average Residual
Telfair	-53.061532
Wheeler	-50.73961152
Brantley	-31.15757233
Jenkins	-24.76594249
Treutlen	-24.43647335
Clinch	-23.26964109
Baldwin	-22.85594344
Hancock	-22.53205279
Johnson	-21.57077551
Lanier	-19.49703776

I selected four communities each from the top and bottom ten outliers and interviewed four economic development stakeholders from each of these eight. To maximize confidentiality, I assigned pseudonyms to each of the eight outlier counties and only describe interview subjects by their role in the community. Ensuring confidentiality was essential to soliciting genuine responses and ethically sharing interview data, as some perspectives shared by interview subjects could be professionally damaging. In many of these communities, there are only a handful of people heavily involved in economic development, so county names/roles would immediately identify interviewees to fellow community members and others involved in rural economic development in Georgia. For these reasons, I also do not report average residuals for the case study communities in the following section, as this information could easily be cross referenced to the tables above to determine the county in question and thus the identities of interview subjects.

I utilized purposive snowball sampling to identify interview subjects, starting with local economic development or chamber of commerce staff where available in each community. I then asked them for recommendations for who to talk to next. In communities without economic

development staff, I first approached elected officials and local government staff and followed the same process. Where connections were not available, I conducted internet searches to find other relevant stakeholders, like utility partners, school system staff, a state elected official, and a Cooperative Extension agent. The table below describes the interview participants. While the table indicates 32 subjects, I actually interviewed 31 individuals; one interviewee works for a local electrical utility that serves two of the outlier communities and discussed both counties in detail in the interview.

Table 25: Interview Participants

County	Outlier Direction	Role(s)
County 1	Positive	Elected Official
		Former Elected Official
		Entrepreneur
		Extension Agent
County 2	Positive	Economic Development/Chamber Staff, Development Authority Board Member, Former Utility Staff
		Former Local Government Staff
		Local Government Staff
		Development Authority Board Member, Entrepreneur
County 3	Positive	Elected Official
		Chamber of Commerce Staff
		State Legislator, Former Chamber Chair and School System Staff
		School System Staff, Chamber Board Member
County 4	Positive	Utility Staff
		Elected Official, Entrepreneur
		Economic Development Staff
		Former Elected Official, Former Development Authority Board Member
County 5	Negative	Elected Official, Development Authority Board Member, Entrepreneur
		Local Government Staff, Development Authority Board Member
		Elected Official, Development Authority Board Member, Entrepreneur

County	Outlier Direction	Role(s)
		Economic Development/Chamber Staff
County 6	Negative	School System Staff, Former Chamber Board Member
		Chamber Board Member, Entrepreneur
		Entrepreneur, Former Chamber Board Member
		Utility Staff
County 7	Negative	Utility Staff
		Development Authority Board Member, Former Utility Staff
		Development Authority Board Member, Entrepreneur
		Economic Development/Chamber Staff
County 8	Negative	Utility Staff, Development Authority Board Member
		Economic Development Staff
		Development Authority Board Member
		Elected Official, Development Authority Board Member

I utilized Zoom for interviews, recorded them, and used Zoom’s automated transcription feature to begin the transcription process. I then cleaned the transcripts and compared to audio recordings for further correction where necessary. Next, I uploaded the transcripts to Atlas.ti, a qualitative analysis software program, to organize and code each interview. I then read each transcript and through an iterative process identified 141 factors through qualitative thematic analysis, some of which eventually became secondary and tertiary factors for more general factors. Overall, this process resulted in 1,161 quotations associated with at least one of the 141 factors. Many factors have secondary levels, like positive or negative, and other more detailed descriptors. For instance, if a participant told a story of inspiring local leadership, that would be noted as both leadership-positive and leadership-local as part of the overall leadership factor. After the initial analysis, I read back through transcripts to add factors identified later in the process. I organized the full set of factors into ten major groups as showcased in the table below.

Table 26: Major Factors

Factor Group	First Tier Factors
Attitudes and Soft Factors	anti-development, communication (positive and negative), diversity (positive and negative), lack of understanding, minority support for growth, mistrust, negative attitudes
Business	downtown (positive and negative), entrepreneurship (positive and negative), grocery store (positive and negative)
Financing	bonds, grants, incentives (positive and negative)
History	history (positive and negative)
Infrastructure and Assets	affordable housing (positive and negative), arts, available facilities, healthcare (positive and negative), infrastructure (positive and negative), land (positive and negative), location, natural resources, quality of life (positive and negative), school system
Leadership and Policy	continuity (positive and negative), leadership (positive and negative), regionalism (positive and negative), state involvement
Philanthropy	philanthropy (positive and negative)
Planning and Economic Diversification	planning (positive and negative) economic diversification (positive and negative)
Population Characteristics	aging population, brain drain, commuting, educated population, generational poverty, lack of educational opportunities, telework, workforce (positive and negative)
Relationships	relationships (positive and negative)

Attitudes and soft factors include factors based on sentiment more than action, concerning statements where the interviewee described their perception of the attitude of people or groups in the community. The business factors deal with private sector actors and their impact on the community. Financing includes both the sources of funds that communities use for economic development and the incentives that they sometimes offer to industry. History is broken into positive and negative secondary factors and was used to capture historical context

that set communities on their current trajectory. Infrastructure and assets include both the hard (i.e. infrastructure, healthcare, school system) and soft (i.e. quality of life, natural resources) assets that can either promote or discourage economic development.

Leadership and policy deal with the influence and actions of individuals and governments and how they impact local economic development. Philanthropy captures the activities of the nonprofit sector and its impact on local economic development. Planning and economic diversification deal with a community's intentional (or not) approach to building out a diversified local economy. Population characteristics include factors relating to the general population, like age, education, or income. Lastly, relationships capture the impact of connections between the various individuals involved in the economic development landscape. The three most common sets of first-tier factors were further broken down into second-tier levels of analysis, as showcased below.

Table 27: Secondary Factors

First Tier Factors	Second Tier Factors
Infrastructure (positive and negative)	airport, electricity, natural gas, internet, railroad, transportation, water and sewer
Leadership (positive and negative)	local, private, state
Relationships (positive and negative)	local, state, federal

Infrastructure includes several secondary factors based on different aspects of physical infrastructure as they relate to economic development. Leadership and relationships both have positive and negative dimensions, as well as other secondary levels describing the people involved. Local leaders include local government elected and appointed officials, chamber of commerce staff, and other community members officially involved in economic development. Private leaders include members of the private sector engaged in grassroots, unofficial

community leadership. State leaders include elected leaders like state legislators and the Governor. Similarly, local relationships include comments related to relationships between members of the same community, whereas state and federal deal with their relationships with governments, organizations, and elected officials outside the local community. State relationships differ from state involvement, which is coded separately, and deals more with top-down policy initiatives from state government.

The following table gives the full list of factors by number of quotations identified. Not included in the list were some third-tier factors developed for the sole purpose of differentiating between comments made about County 6 and County 7 in an interview with a stakeholder who served both communities. Most statements were assigned multiple factors, sometimes spanning different factor groups. For instance, an anecdote about the commitment of a local family operating a local grocery store to keep their community from becoming a food desert was coded as leadership, leadership-private, leadership-positive, entrepreneurship, entrepreneurship-positive, grocery store, and grocery store-positive. For this reason, the sum of quotes by factor is greater than the total sum of quotes overall for tables throughout this chapter.

Table 28: All Outlier Communities: Factors by Frequency

Factor	Number of Quotes	Second Tier Factors (Number of Quotes)
Leadership	329	Local (268), Positive (210), Negative (135), Private (74), State (10)
Infrastructure	185	Positive (140), Negative (74), Transportation (69), Water and Sewer (56), Railroad (25), Natural Gas (24), Internet (24), Airport (12), Electricity (8)
Relationships	177	Positive (146), State (90), Local (82), Negative (40), Federal (35)

Factor	Number of Quotes	Second Tier Factors (Number of Quotes)
Entrepreneurship	106	Positive (84), Negative (25)
Planning	96	Positive (76), Negative (25)
Grants	64	N/A
Location	59	N/A
Workforce	54	Negative (34), Positive (25)
Economic Diversification	53	Negative (43), Positive (16)
Land	49	Positive (35), Negative (14)
History	42	Negative (35), Positive (11)
Anti-Development	38	N/A
Negative Attitudes	38	N/A
Philanthropy	38	Positive (22), Negative (21)
Generational Poverty	32	N/A
Diversity	29	Positive (18), Negative (11)
Natural Resources	28	N/A
Downtown	28	Positive (20), Negative (8)
Healthcare	26	Negative (16), Positive (15)
Affordable Housing	25	Negative (17), Positive (9)
Quality of Life	25	Positive (17), Negative (8)
Communication	24	Negative (13), Positive (11)
School System	23	N/A
Incentives	22	Positive (14), Negative (9)
Brain Drain	21	N/A
Grocery Store	20	Positive (10), Negative (10)
State Involvement	15	N/A
Bonds	13	N/A
Arts	11	N/A
Regionalism	10	Positive (8), Negative (2)
Telework	8	N/A
Commuting	7	N/A
Continuity	7	Positive (6), Negative (1)
Lack of Understanding	7	N/A
Lack of Educational Opportunities	6	N/A
Available Facilities	4	N/A
Aging Population	3	N/A
Educated Population	3	N/A
Minority Support for Growth	3	N/A
Mistrust	2	N/A

Leadership clearly leads the way in the analysis, with more than 300 quotes identified. Infrastructure and relationships also have more than 100 quotes, with entrepreneurship and planning rounding out the top five. While sheer number of quotes is not necessarily the only indicator of importance, it is clear that these subjects were prominently on the mind of interview

participants when discussing rural economic development. The following tables break down the distribution of factors between positive and negative outlier communities. Once again, totals will not sum, as many quotes were assigned multiple factors (i.e. leadership, leadership-positive, and leadership- local).

Table 29: Positive Outlier Communities: Factors by Frequency

Factor	Number of Quotes	Second Tier Factors (Number of Quotes)
Leadership	171	Positive (145), Local (138), Private (36), Negative (37), State (6)
Relationships	84	Positive (77), State (44), Local (41), Federal (15), Negative (11)
Infrastructure	81	Positive (72), Transportation (43), Water and Sewer (28), Negative (14), Internet (9), Railroad (8), Natural Gas (6), Electricity (4), Airport (0)
Planning	74	Positive (72), Negative (6)
Entrepreneurship	56	Positive (50), Negative (7)
Location	38	N/A
Anti-Development	23	N/A
Workforce	23	Negative (14), Positive (12)
Grants	22	N/A
Downtown	20	Positive (20), Negative (0)
Negative Attitudes	20	N/A
History	19	Negative (13), Positive (9)
Economic Diversification	18	Positive (12), Negative (8)
Land	18	Positive (18), Negative (0)
Philanthropy	18	Positive (14), Negative (6)
Quality of Life	18	Positive (16), Negative (2)
Diversity	15	Positive (12), Negative (6)
Natural Resources	15	N/A
School System	15	N/A
Bonds	10	N/A
Brain Drain	10	N/A
Affordable Housing	9	Negative (6), Positive (4)
Arts	9	N/A
Communication	8	Positive (8), Negative (0)
Generational Poverty	8	N/A
Incentives	8	Positive (7), Negative (1)
State Involvement	8	N/A
Grocery Store	7	Positive (7), Negative (0)
Continuity	6	Positive (6), Negative (0)

Factor	Number of Quotes	Second Tier Factors (Number of Quotes)
Healthcare	6	Positive (6), Negative (1)
Regionalism	4	Positive (4), Negative (0)
Educated Population	3	N/A
Minority Support for Growth	3	N/A
Telework	3	N/A
Aging Population	2	N/A
Commuting	2	N/A
Available Facilities	1	N/A

Table 30: Negative Outlier Communities: Factors by Frequency

Factor	Number of Quotes	Second Tier Factors (Number of Quotes)
Leadership	158	Local (130), Negative (98), Positive (65), Private (38), State (4)
Infrastructure	104	Positive (68), Negative (60), Water and Sewer (28), Transportation (24), Natural Gas (18), Railroad (17), Internet (15), Airport (12), Electricity (4)
Relationships	93	Positive (69), State (46), Local (41), Negative (29), Federal (20)
Entrepreneurship	50	Positive (34), Negative (18)
Grants	42	N/A
Economic Diversification	35	Negative (35), Positive (4)
Land	31	Positive (17), Negative (14)
Workforce	31	Negative (20), Positive (13)
Generational Poverty	24	N/A
History	23	Negative (22), Positive (2)
Planning	22	Negative (19), Positive (4)
Location	21	N/A
Healthcare	20	Negative (15), Positive (9)
Philanthropy	20	Negative (15), Positive (8)
Negative Attitudes	18	N/A
Affordable Housing	16	Negative (11), Positive (5)
Communication	16	Negative (13), Positive (3)
Anti-Development	15	N/A
Diversity	14	Positive (9), Negative (5)
Incentives	14	Negative (8), Positive (7)
Grocery Store	13	Negative (10), Positive (3)
Natural Resources	13	N/A
Brain Drain	11	N/A
Downtown	8	Negative (8), Positive (0)
School System	8	N/A

Factor	Number of Quotes	Second Tier Factors (Number of Quotes)
Lack of Understanding	7	N/A
Quality of Life	7	Negative (6), Positive (1)
State Involvement	7	N/A
Lack of Educational Opportunities	6	N/A
Regionalism	6	Positive (4), Negative (2)
Commuting	5	N/A
Telework	5	N/A
Available Facilities	3	N/A
Bonds	3	N/A
Arts	2	N/A
Mistrust	2	N/A
Aging Population	1	N/A
Continuity	1	Negative (1), Positive (0)

The top overall factors are very similar for positive and negative communities with a couple of notable exceptions. While leadership, infrastructure, relationships, and entrepreneurship were very common factors in both sets, the directionality of these comments differs significantly, with the positive outlier communities having a higher percentage of positively coded comments. Planning was a much more frequent topic in positive outlier communities, and when it did come up in the negative outlier communities, comments were much more negatively phrased. Philanthropy and healthcare were not at the top of the list in either cohort, but also differed significantly in the expected direction, with far more negativity on these subjects in the negative outlier communities. Workforce was a negative theme in both cohorts, though much more negative in the negative outlier communities.

Negative outlier communities were much more concerned with economic diversification, with these comments being overwhelmingly negative. History was a consistently negative theme across both groups, pointing to the shared national and global economic forces they have faced over the last few decades, like NAFTA, offshoring, population loss, and the Great Recession. The shared negative history makes the outliers all the more interesting, as even the positive

outliers had to overcome major negative economic trends to succeed. Workforce was also a concern in both cohorts, though a higher percentage of the comments were negative in the negative outlier communities. While it did not rise to the top in either cohort, there was anti-development sentiment in interviews from both sets of counties. In the subsequent pages, I describe each of the eight cases in depth, then identify shared themes within and across the two groups, seeking to understand what causes the differences noted in these factors.

Positive Outlier Community Case Studies

County 1

County 1 is a very small community of just over 2,000 people located in southern Georgia, a population so small that the local high school does not have a football team. The population is roughly evenly split between white and black residents, with a small reported Hispanic population. County 1, like its neighbors throughout the rural south, has major economic challenges, and its population has been in consistent decline for nearly a century. The community is rapidly aging, with more than a quarter of residents aged 65 or older. County 1 is not located in a metropolitan area and does not contain any institutions of higher education. Educational attainment lags behind, with a rate of bachelor's degrees roughly one third of the state and national averages. While it is home to a crossroads of state highways, it does not have any interstate highways in its borders. Agriculture and forestry are the major industries in the community, just as they are for many of County 1's neighbors. County 1's natural amenities scale score is slightly below the state average.

County 1's per capita market income is just over half of the national average, while its poverty rate and unemployment rate consistently fall behind the national averages as well. Over the 15-year study period, its county economic status was, on average, more than 50% worse than

the national average. It shows up on the positive outlier list though, because despite its economic struggles, it significantly outpaced its predicted economic status over the study period. The following table summarizes the qualitative analysis of County 1 elite interviews, with detailed analysis following the table.

Table 31: County 1: Factors by Frequency

Factor	Number of Quotes	Second Tier Factors (Number of Quotes)
Leadership	31	Local (27), Positive (26), Private (5), Negative (6)
Infrastructure	20	Positive (16), Negative (9), Transportation (9), Water and Sewer (7), Internet (4), Railroad (2)
Entrepreneurship	17	Positive (13), Negative (5)
Relationships	17	Positive (17), Local (11), State (7), Federal (3), Negative (1)
Planning	8	Positive (7), Negative (1)
Workforce	8	Negative (7), Positive (1)
Brain Drain	7	N/A
Diversity	6	Positive (3), Negative (3)
Grocery Store	6	Positive (6), Negative (0)
Grants	6	N/A
Land	6	Positive (6), Negative (0)
Quality of Life	6	Positive (4), Negative (2)
Generational Poverty	5	N/A
History	5	Negative (5), Positive (1)
Regionalism	4	Positive (4), Negative (0)
State Involvement	4	N/A
Diversification	4	Negative (4), Positive (0)
Philanthropy	4	Positive (3), Negative (1)
Location	4	N/A
Natural Resources	4	N/A
School System	3	N/A
Affordable Housing	2	Negative (2), Positive (0)
Aging Population	2	N/A
Commuting	2	N/A
Telework	2	N/A
Anti-Development	1	N/A
Bonds	1	N/A
Healthcare	1	Positive (1), Negative (0)
Incentives	1	Negative (1), Positive (0)
Negative Attitudes	1	N/A

Major themes from County 1 interviews included leadership, infrastructure, entrepreneurship, relationships, planning, and workforce. The most prominent theme in County 1 elite interviews was leadership, with the vast majority of references focusing on positive, local leadership. Private sector leaders also played an important role. One major reported aspect of local leadership was the foresight of community leaders more than 30 years ago to consolidate the governments of the county and its two small cities. Then a novel approach for a small county, County 1's consolidation was a major win for local taxpayers according to interview participants. One stakeholder noted the conditions that led to the consolidation:

The county was already running the ambulance service. The county was running the sheriff. The city was having trouble keeping their police department manned and having trouble there. The fire department was getting outdated. They didn't have really no public works doing any work in the cities, so they get the county to do it, so there was a lot of double taxing.

Up to this point, this description could fit dozens of rural Georgia counties, as multiple governments compete for limited taxing bandwidth in a small, impoverished population. The difference here appears to be visionary leadership, as the county commission chair and his eventual successor took it upon themselves to work with all of the relevant stakeholders and educate the community on its options. One interview subject noted:

That's where it all came from. There's me and [county commission chair] working with the two cities, looking at all the different things [they] need to do...It was in front of both city councils and the Board of Commissioners. Everybody said, look, this is the best way we need to do it, and that's gonna happen. Put it on the ballot. Got voted in. It was a gradual process of getting it done.

Another stakeholder, who was just a child at the time of County 1's consolidation, noted this about its impact decades later:

I think that that has also helped us financially to survive, because we're not spending all this excess money and resources on keeping county and city government. All of those government positions are just consolidated, so there's not a lot of wasteful spending on...double employment...but I think that's why the counties around me are struggling because they're paying county managers, city managers, county law enforcement, city police. All of those things cost counties a lot of money, and I think that's important...I think it's been crucial for us to be able to be viable. I think we have a surplus of money. You know we're not in the in the red. We're in the black, so if we need things repaired or fixed or whatever, we have the funds to do that because we're not wasting it on all these double expenses with county and city governments.

Another aspect of local leadership in County 1 comes from unelected private sector stakeholders. Notably, one family owns the only grocery store, pharmacy, and health clinic in the county. While they are business owners, it is clear that they could be more profitable in a more highly populated community. One key member of this family noted:

I mean, I could work for somebody else and make more money...and I wouldn't have the stress...And you know, people ask me all the time like, why do you do this? And I mean you have to have a love for your neighbors and your community, and you know you have to have a passion for it not to die. Somebody has to stay and make sure that it doesn't die. I mean, that's a lot of the reason that we don't have people my age or the older people in my communities, you know, their children have gone to school and moved away because

they can't find a job or whatever. But somebody's got to stay, I mean, or either it's gonna die.

These sentiments appear to go beyond simple entrepreneurship and more into the realm of public service, as the mission of these businesses is not just making money, but helping the community survive.

Stakeholders also saw local infrastructure as a major asset, particularly state and federal highways, with three running through the community, connecting it to hub cities in the region. While water and sewer were typically referenced negatively, one stakeholder did note that County 1 had some of the lowest water rates in the region, benefitting residents and industry alike. On the negative side, one participant noted about County 1's struggles with water and sewer and its impact on industrial recruitment:

We might have missed a few times because of our water and sewage... 'cause... the more meters you put on a water system, the higher the certification goes, and the higher you go that means you gotta pay somebody. And having the right person with the right certification to run that water system. And so those things kind of limited us. Gotta stay within a certain bracket.

While leaders have been creative in saving the community money through consolidation, the community's size and tax base still limit its growth potential by effectively capping infrastructure spending on things like water and sewer and qualified personnel.

Planning is strongly linked with infrastructure and leadership in County 1. Participants described a simple, but workable comprehensive plan that focused on reducing red tape and being hospitable to business and industry. Interview subjects described the consistent forward-thinking nature of local leaders, whether it be the vision for consolidation more than three

decades ago or partnering with seven other counties on a consolidated 911 authority in more recent years. A local leader explained the reasoning for pursuing regional 911, saying:

We have a consolidated 911 authority... We cover eight counties... There's going to be a lot of these counties in Georgia going to be mandated to go to the new enhanced 911 stuff. They're going to have to take money out of economic development because... they got to build up these 911 centers.

In a funding environment with very limited resources, County 1's leaders have creatively used the tools available to them to consolidate services locally and regionally, all the while applying for grants to help their local dollars go further.

Local entrepreneurship was another common theme in interviews, which in concert with the private sector leadership examples point to the importance of grassroots, unelected leaders in the community. One participant noted that the county has more than 80 active business licenses, remarkable for a county of only 2,000 people. Entrepreneurship is closely linked with the grocery store theme. County 1 is home to the only true grocery store in a multi-county region otherwise dominated by shelf-stable foods at dollar stores and gas stations. The same family has owned the store for many years and has gone on more recently to open a local independent pharmacy and rural health clinic, each of which is also the only option in the community. A second-generation member of the family, who manages the pharmacy and health clinic, noted the following about the challenges the family faces and their resolve to serve the community:

We did get a dollar store five, six, seven years ago and that cut about 30% off the top of our business, which you know my dad was extremely upset about, because I mean he's poured his heart and soul into keeping a grocery store open in this town, and then you have a dollar store that comes in, and, you know competes with you and so, I mean, I

think that small business is really the heartbeat of all of these towns...I mean, we don't have Publix. We don't have Kroger. Thankfully, we don't have a Walmart, so I think that the only thing, really, that's keeping these communities alive are small businesses that were started from entrepreneur vision and drive.

Relationships were also a common theme in interviews, with almost all comments under this factor focusing on the economic impacts of positive relationships with local, state, and federal partners. One interview subject, a former county commissioner, summed up the importance of relationships in economic development thusly:

There's no substitute for a personal connection...When people have a personal connection, you can pick up the phone, and you can call that person in a position of authority or power. Very often that relationship makes the difference in whether a project moves ahead.

Local stakeholders demonstrated adeptness at leveraging relationships, at the state and local level, to help the community do more with less.

While quality of life did not have as many comments as some of the other factors, those given were particularly poignant, with responses focusing on the natural beauty and outdoor amenities for hunting, fishing, and similar activities. One interview subject noted regarding County 1's quaint pastoral environment, "I'd rather listen to whippoorwills than automobiles." The interview subject is not alone in this sentiment as he also noted:

Got a new neighbor...He was working in Atlanta...He's an engineer. He was living north of Atlanta, and he bought a hundred acres of property and built a home [in County 1] and he works remotely now. He told me that he has to go to the office one day a month.

The subject was optimistic that County 1 could see further population growth along these lines as internet access continues to improve, noting that country living is not for everyone, but that for others like his new neighbor, County 1 could have a certain appeal.

County 2

County 2 profiles very differently to County 1, with an average county economic status only about 3% worse than the national average over the 15-year study period, including some years where it even surpassed the national average. The model predicted that County 2 would perform much worse than it actually did though, leading to its appearance on the positive outlier list. Over the study period, County 2 mostly outperformed the national poverty average, while generally falling slightly behind the national rates in per capita market income and unemployment rate.

County 2 has a population of roughly 20,000, with slow, but steady growth in recent years. Midway through the study period, County 2 was added to a large metropolitan statistical area by the Census Bureau, where it lies on the outer frontier. Roughly three quarters of the local population is white, with approximately one-fifth black, and a small reported Hispanic population. County 2 contains an interstate highway and other transportation assets like state highways and railroads. There are no institutions of higher education in the county. County 2's natural amenities scale score is roughly in line with the state average. The county's age distribution is relatively evenly split, with roughly one-fifth under age 18, one-fifth 65 or older, and three-fifths in prime working age. Educational attainment is below the state and national averages, but only by a few percentage points. Table 32 summarizes the County 2 analysis, with greater detail to follow.

Table 32: County 2: Factors by Frequency

Factor	Number of Quotes	Second Tier Factors (Number of Quotes)
Leadership	42	Positive (37), Local (33), Private (9), Negative (6), State (5)
Planning	25	Positive (25), Negative (2)
Relationships	24	Positive (23), State (13), Local (9), Federal (5), Negative (3)
Infrastructure	17	Positive (17), Transportation (11), Railroad (6), Water and Sewer (5), Natural Gas (3), Electricity (2), Internet (1), Negative (0)
Anti-Development	12	N/A
Location	11	N/A
Entrepreneurship	8	Positive (8), Negative (0)
History	7	Positive (4), Negative (3)
Continuity	6	Positive (6), Negative (0)
Incentives	6	N/A
Philanthropy	6	Positive (6), Negative (0)
Bonds	5	N/A
Diversification	5	Positive (5)
Downtown	5	Positive (5), Negative (1)
Grants	5	N/A
Land	5	Positive (5), Negative (0)
School System	5	N/A
Communication	4	Positive (4), Negative (0)
Negative Attitudes	4	N/A
Quality of Life	4	Positive (4), Negative (0)
Affordable Housing	3	Negative (3), Positive (1)
Diversity	3	Negative (2), Positive (1)
Minority Support for Growth	3	N/A
Workforce	3	Positive (3), Negative (0)
Brain Drain	2	N/A
Educated Population	2	N/A
State Involvement	2	N/A
Arts	1	N/A
Available Facilities	1	N/A
Healthcare	1	Positive (1), Negative (0)
Natural Resources	1	N/A

Major themes from County 2 elite interviews include leadership, planning, relationships, infrastructure, and anti-development sentiment. While the leadership cases were not universally positive, the vast majority were, with most examples focusing on the actions of local leaders.

Private sector and state-level leadership also featured prominently in interviews. One participant told the story of a former mayor's visionary leadership and how that set the community up for success in the present day, also connecting to the planning theme:

Our former mayor, a couple mayors back...thought it was really important for [county seat] to get all into [reservoir in nearby county] ...our mayor insisted that we can, so we have more water. And we need it. And we probably built a new sewer plant before we needed to, but we have capacity.

While it did not rise to the top level of most frequently reported themes, continuity stands out as another critical piece of County 2's story, particularly as it relates to leadership and planning. Over a period of roughly 50 years, the county seat had just two city managers, as well as decades of continuity in the mayor's office and key city departments. Interview participants cited this continuity as critical in ensuring the long-term success of the community's vision and plan, with one stating:

In 50+ years [county seat] has had two managers...But I mean that stability, that's tough to do. And I've got a mayor that's been in office for a long time. Commission is pretty stable. They don't turn over every election. They're not these huge upheavals of issues.

While entrepreneurship did not rise to the top of the list in County 2, it did receive several mentions, particularly as it relates to private sector leadership. Interview subjects shared about a local nonprofit founded by retired business executives seeking to mentor the next generation of local business leaders and help them succeed in starting small businesses in County 2. This organization started organically with private leadership, not as a government program, but ties into the community's overall long-term plan for sustainable growth.

Planning was the second most prominent theme in County 2, with overwhelmingly positive comments on the impact of planning on the community's successes in economic development. One participant noted that the community always "looks 30-40 years ahead" and all participants remarked on the intentionality of decades of zoning and historic preservation work in the community. The way one participant worded it, the community has "always been a little bit big for its britches" regarding historic preservation, placing a greater emphasis on planning than peer communities.

While County 2 has what seems like a natural advantage of location along a major interstate highway, it did not have to be that way. According to an interview participant, in an example of state-level leadership, a prominent local state legislator successfully lobbied to route an interstate highway through the community decades ago, giving rise to what now feels like an intractable location advantage. Building on this tradition of leadership, in the ensuing decades local leaders prioritized planning by putting infrastructure and zoning in place to encourage development alongside the interstate exit, while also very intentionally preserving the historical look and feel of their downtown area a few miles away.

Relationships were also a prominent theme in County 2 interviews, with almost all examples focusing on positive relationships, split across local, state, and federal stakeholders. The relationships highlighted in the interviews were highly interconnected with leadership and planning, particularly as the longtime mayor, local state legislator, and city manager were able to leverage their influence to secure funding and support for the community's long-term infrastructure and development plans. One participant summed up the importance of relationships in economic development, stating:

If you've got the right local people that are connected to the right state people, that are connected to the right federal people, then you get things done. I'm amazed sometimes at programs that are available that you know not of, just 'cause you're not connected in the right way.

Infrastructure also featured prominently in discussions with stakeholders. In the interviews, infrastructure was presented as closely intertwined with planning, leadership, and relationships. Interview subjects saw County 2's transportation infrastructure as a major asset, with multiple major highways passing through the community. Additionally, participants highlighted the carefully planned expansion of water, sewer, and natural gas to key development corridors and the county's nearly 200-year relationship with the railroad as major infrastructure assets.

Interestingly, despite the community's successes in economic development, comments were not universally positive. Perhaps due to their successful economic growth, interview subjects reported that there were vocal groups of residents in opposition to many economic development projects. One participant referred to the anti-development crowd as "B.A.N.A.N.A.S.", which stood for "build absolutely nothing anywhere near anybody." He noted that much of this anti-development sentiment comes from newer residents, often retirees, who moved to the area seeking an idyllic rural environment, stating, "The more retirees that you get coming in from other places that have a lot of money...they would like to close the door and draw up the drawbridge as soon as they move into the county, and not let anybody else in." These attitudes sometimes split along racial lines, with the black community generally more supportive of new development opportunities than white residents. One participant described this dynamic thusly:

But the disadvantaged folks, the folks normally of color, are more embrative of growth and new industry coming in than the retirees that I talked about earlier...If you go talk to the black churches about a [large new industrial employer] or someplace like that, they are four square behind...because they see that as their opportunity to get a piece of the pie.

Together, these factors paint a picture that even with success beyond expectations come new challenges in leading a community.

County 3

County 3 is located in north Georgia and has a population of roughly 20,000. Nearly 90% of the population is non-Hispanic white, with most of the remaining population Hispanic and a very small black population. County 3 is not included in a metropolitan area and does not contain any institutions of higher education. The community's natural amenities score is well below average. Educational attainment lags significantly in County 3, with a rate of bachelor's degrees roughly half of the state and national averages. County 3's population got significantly older over the study period, with the percentage of population aged 65 and older nearly doubling from 2006 to 2020, likely indicating a large cohort gradually phasing out of the labor force.

County 3 consistently significantly falls behind the national average in per capita market income, while hovering close to the national average in poverty rate and typically outperforming the national average unemployment rate. Overall, this combination led County 3 to perform roughly 15% below the national average over the 15-year study period. That said, the model predicted County 3's economic status to be much worse than it actually was, leading to its appearance as a positive outlier.

Table 33: County 3: Factors by Frequency

Factor	Number of Quotes	Second Tier Factors (Number of Quotes)
Planning	37	Positive (37), Negative (2)
Infrastructure	32	Positive (27), Transportation (16), Water and Sewer (10), Negative (5), Internet (4) Electricity (2), Natural Gas (2)
Leadership	32	Positive (25), Local (25), Negative (10), Private (7), State (1)
Location	14	N/A
Entrepreneurship	12	Positive (10), Negative (2)
Relationships	12	Positive (10), State (8), Local (4), Federal (2), Negative (1)
Negative Attitudes	10	N/A
Anti-Development	7	N/A
Grants	4	N/A
Philanthropy	4	Positive (2), Negative (2)
Bonds	2	N/A
Diversification	2	Positive (2), Negative (0)
Land	2	Positive (2), Negative (0)
School System	2	N/A
Communication	1	Positive (1), Negative (0)
Diversity	1	Positive (1), Negative (0)
Healthcare	1	Positive (1), Negative (1)
History	1	Positive (1), Negative (0)
Quality of Life	1	Positive (1), Negative (0)
State Involvement	1	N/A
Workforce	1	Positive (1), Negative (0)

Noteworthy themes from the County 3 elite interviews include planning, infrastructure, leadership, location, entrepreneurship, and relationships. Planning was the most prominent factor in the County 3 transcripts, with almost all references entirely positive. Interview subjects spoke of how the county very intentionally concentrated development along a single interstate highway exit, resulting in substantial sales tax and commercial and industrial property tax revenues. These revenues allowed the county to keep property taxes for residents far below the rates of neighboring counties while intentionally preserving the rural character of the county outside of

the small, heavily developed area along the interstate through zoning. A county commissioner summarized the County 3 approach this way:

Well, pretty much, the history was that they started putting fast food and motels because you had the intersection of two state highways...needed some...commercial growth in order to help keep taxes down, so then the development authority bought some land, and put a road in there and then attracted a business to come and then another business came from there, and another came from there, so kind of built it up from there.

Traditionally, development authorities in Georgia work primarily on industrial development, but the approach in County 3 was more inclusive, with the development authority using its powers to promote commercial development in a designated corridor, generating revenue to reduce the tax burden on residents.

Planning was closely intertwined with infrastructure, as community leaders frequently spoke of how they were able to utilize revenues generated by the isolated development corridor to fund expansion of water and sewer services throughout the county. They were even able to sell water to neighboring municipalities because they had planned well enough to have substantial excess supply. Planning and infrastructure were also closely linked to leadership, as interview subjects cited a key former elected official who decades ago had purchased a “800-acre county farm” where water and sewer infrastructure were installed that far exceeded demands at the time. While many saw the county farm as an unnecessary and expensive boondoggle when it was built, the county continues to benefit from this foresight decades later, in the eyes of interview subjects.

Location was another prominent theme in County 3 interviews. It would be easy to write this off as intrinsic to the community and impossible to replicate, but similar to the County 2

example, there may be more than meets the eye when it comes to location in County 3. Similar counties along the same interstate corridor have lacked this level of success. Perhaps what residents see as location benefits are truly the result of the decades of careful planning and infrastructure development described by local leaders.

Entrepreneurship was also key in County 3 interviews, particularly as it related to commercial development along the contained interstate development corridor. Interview subjects frequently cited the risk taken by business owners, particularly in the early days of development, in making a substantial investment in the community. The county's approach to prioritizing commercial development over heavy industry is necessarily dependent on the actions of private businesses and entrepreneurs. Participants recognized this and were quick to point to the critical importance of entrepreneurship to the county's economic development, with one participant noting that entrepreneurs along the interstate "have sacrificed millions of dollars to start a business here...to try to...make a living but also help make the county better." One participant even shared an anecdote of a large local business that straddled the county line but made sure to put its cash register in County 3 in order to generate local sales tax revenue.

Relationships once again featured prominently in County 3 discussions, with most examples referencing positive relationships with state leaders and the impact they had on economic development in the community. These relationships were cited as critical in securing funds for the infrastructure assets the county developed as part of its long-term plan. Relationships between local entities like city government, county government, development authority, and school system also emerged in the County 3 interviews. A local elected official described local relationships this way: "But we've always worked good together, because we

knew we were all in the same boat, and we can either fight and throw each other overboard, or we can get along.”

Similarly to County 2, comments were not universally positive, as interview subjects cited a vocal minority of anti-development sentiment in the community along with general negative attitudes from some residents about the community, particularly on social media. They noted that residents may not always understand how the county benefits financially from development along the interstate, as they mostly just interact with its traffic impacts, with one participant stating, “They don't understand that because they don't want any industry, they don't want anything. If you don't want anything, then you're going to force people to sell their property, and you can't stop people from building houses.” The county has developed a delicate balance of planned, contained growth, that, while not always popular with residents, has allowed the community to invest in infrastructure beyond expectations for a community of its size while keeping property taxes low.

County 4

Like County 1, on the surface, County 4 has struggled, with an average county economic status score roughly 25% worse than the national average over the 15-year study period. The model predicted that County 4's score would be much worse than it actually was though, leading it to be a positive outlier. County 4's scores were driven largely by per capita market income and unemployment rates substantially lower than the national average, while its poverty rate hovered slightly below and above the national average over the study period.

County 4 has a population of roughly 20,000, with modest growth in recent years. Roughly two-thirds of residents are white, non-Hispanic, while about one quarter are black, and the remainder are primarily Hispanic of any race. Educational attainment slightly lags state and

national averages with a few percentage points fewer having a bachelor's degree or higher. The county's population is older than the state average, with more than a quarter aged 65 and older.

An interstate highway runs nearby, but not through the county. It has the highest natural amenities scale score in the sample, thanks to portions of two large lakes. There are no institutions of higher education in the county, and it is not part of a metropolitan area. The table below summarizes the County 4 analysis, with in-depth discussion to follow.

Table 34: County 4: Factors by Frequency

Factor	Number of Quotes	Second Tier Factors (Number of Quotes)
Leadership	66	Positive (57), Local (53), Private (15), Negative (15)
Relationships	31	Positive (27), Local (17), State (16), Federal (5), Negative (6)
Entrepreneurship	19	Positive (19), Negative (0)
Downtown	15	Positive (15), Negative (0)
Infrastructure	12	Positive (12), Transportation (9), Water and Sewer (6), Natural Gas (1), Negative (0)
Workforce	11	Positive (7), Negative (7)
Natural Resources	10	N/A
Location	9	N/A
Arts	8	N/A
Economic Diversification	7	Positive (5), Negative (4)
Grants	7	N/A
Quality of Life	7	Positive (7), Negative (0)
History	6	Negative (5), Positive (3)
Affordable Housing	4	Positive (3), Negative (1)
Diversity	5	Positive (4), Negative (1)
Land	5	Positive (5), Negative (0)
Negative Attitudes	5	N/A
School System	5	N/A
Planning	4	Positive (3), Negative (1)
Philanthropy	4	Negative (3), Positive (3)
Anti-Development	3	N/A
Generational Poverty	3	N/A
Healthcare	3	Positive (3), Negative (0)
Communication	3	Positive (3), Negative (0)
Bonds	2	N/A
Brain Drain	1	N/A
Educated Population	1	N/A

Factor	Number of Quotes	Second Tier Factors (Number of Quotes)
Incentives	1	Positive (1), Negative (0)
State Involvement	1	N/A
Telework	1	N/A
Grocery Store	1	Positive (1), Negative (0)

Major themes from the County 4 analysis include leadership, relationships, entrepreneurship, downtown, and infrastructure. Leadership comments were overwhelmingly positive and focused on the actions of local elected leaders, with private sector leaders featuring prominently as well. Many of the leadership comments also related to other major themes and often featured the long-time mayor of County 4's seat. He described his philosophy of leadership and improving the whole community through economic development like this:

Oh, man, you got to be the leader. You got to be the one out front. You've got to be out there. You got to bring good things to your table. One thing that they taught me also in economic development, you bring people into your community trying to get them to raise a job there. Then, you're going take them and show them the job site. Then you're going take them to all the best parts of your community, but you never know when somebody on that bus or however you're traveling, is going say, take me over here. Let me see how my employees are going. How do they live here? So you never know when you're going to have to turn off that main, beautiful Main Street that you got and go into your community...which is why it helped to inspire me to do all the [community development block grants] that I do, and it should, so that when somebody come here, they know that we're going treat their employees as well as we're going to treat them.

County 4 faced serious economic headwinds in the early 2000s when the largest employer in town, a mobile home manufacturer, closed and was replaced by a much smaller company. Just a few years later, a large power plant in the community shut down. Despite these

challenges, participants thought that community leadership bounced back well, by taking a balanced approach in pursuing commercial development, industrial development, and tourism.

Relationships were also overwhelmingly positive, with comments spread across local, state, and federal partners. Local officials noted that relationships between government entities are strong in County 4 and are currently the best they have been in decades, paving the way for increased collaboration in economic development. Positive relationships were noted, from collaboration between the local economic developer and the school system to close contacts with the Governor's office. One stakeholder described an interaction with a development authority board member that sums up the power of relationships with state officials:

We're having a meeting about something, and she's like, 'Well, I'll just call Brian and tell him'...And I was like, 'Do you mean Governor Kemp?' She's like, 'yes, I will call Brian and tell him.' I was like, 'Whoa, okay. you're good. First name basis with the governor.' So yeah, if we were to ever be able to need something, I think we got enough cachet of people that it wouldn't be a problem.

Entrepreneurship was another prominent theme, with a lot of discussion of an intentional approach to cultivating entrepreneurs, particularly in the downtown area. County 4 was recently selected for an intensive entrepreneurship development program sponsored by a statewide economic development organization. A local utility partner described County 4's approach to entrepreneurship this way:

Now the city is actively working on, 'how can we promote entrepreneurship? How can we get more people, more homegrown people to open businesses here versus trying to recruit them here?' You still recruit obviously, but...a lot of communities are now

looking at, ‘well, maybe the best way to grow businesses is to promote our students [to] stay here.’

Downtown comments focused on the revitalization of the county seat and were closely interconnected with leadership, entrepreneurship, and relationships. The long-time mayor of the county seat spent decades cultivating downtown and turning it around. Downtown went from a largely empty and decaying place in the early 1990s to one with a thriving arts scene, shops, restaurants, and other local businesses, including one just opened in 2025 by the mayor himself and his wife. He said the following about the community’s downtown revitalization efforts:

I had the agenda, the goal of making our town busy again and I said, in order to prepare for it, we're going to need parking, and I'm going to be proactive and work on the parking, so I was able to acquire some land, and when I acquired the land...we let [the downtown development authority] have the property that I had acquired for the parking lot, and they put a stage there with it. So, that stage right now, like I say, we having our concert there, and even when we have our Christmas parade, if the weather's good, that's where Santa sets up on the stage and sees the kids.

Infrastructure comments were universally positive and largely focused on transportation and water and sewer. Infrastructure was closely connected with leadership, as the long-time mayor utilized his influence and relationships to secure substantial funding over the years to rebuild the county seat’s water system and in his words, “work the system.” He provided a colorful anecdote about working smarter, not harder, by planning water system improvements alongside road projects, so as to avoid tearing up newly paved roads to replace aging water infrastructure. While this may seem simple, it was not commonplace in County 4 until the mayor saw a crew tear up a newly paved road to address a leaking water pipe decades ago.

The mayor summarized the state of County 4's infrastructure when he first ran for office like this, saying:

The reason I ran for Mayor—at the time I ran we had no water, no sewer, and no chance at economic development, because I always tell people. I said, you can't flush, nobody's coming, and we couldn't flush. My first year in office, two houses were built in the city...and those two houses, I had to call back to write a letter to [the state Environmental Protection Division] and asked, could we place them on our sewer system? So, if you know, you can't put a house on the sewer system, you certainly won't want to put any jobs on there.

Location was also mentioned prominently in the County 4 interviews. The benefits of location may feel inevitable now, but that may well be due to the actions of leaders like those described above. There are neighboring communities with similar demographics and similar or greater access to the lakes that have not seen County 4's level of success relative to expectations, pointing to something special about the community beyond just luck of the draw in geography.

Negative Outlier Community Case Studies

County 5

The population of County 5 has mostly held steady in recent decades, at slightly less than 10,000. It is located in a sparsely populated, highly rural area in eastern Georgia. It is not part of a metropolitan statistical area and does not contain an interstate highway or institution of higher education. Its natural amenities scale score is slightly below the state average. County 5's educational attainment is far below the state and national averages, with less than 10% of the adult population having a bachelor's degree or higher. The county's age distribution is spread fairly evenly and closely mirrors the national average, with a little less than one-fifth of the

population aged 65 or older. A slight majority of the county's population is non-Hispanic white, with almost all of the remainder black and a small reported Hispanic population.

County 5's average economic status score over the 15-year study period was nearly 100 points below zero, indicating rates, on average, twice as bad as the U.S. average. County 5 consistently fared far worse than the national rates for per capita market income, unemployment, and poverty throughout the study period. Over that same period though, the model predicted that County 5's economic status should have been much better, indicating substantial underperformance relative to expectations given the county's intrinsic characteristics. The following table summarizes themes from elite interviews with economic development stakeholders in County 5.

Table 35: County 5 County: Factors by Frequency

Factor	Number of Quotes	Second Tier Factors (Number of Quotes)
Infrastructure	35	Positive (28), Negative (19), Railroad (15), Water and Sewer (12), Natural Gas (8), Transportation (8), Internet (2)
Relationships	33	Positive (31), Local (16), State (15), Federal (6), Negative (3)
Leadership	31	Local (26), Positive (25), Negative (9), Private (7)
Grants	21	N/A
Affordable Housing	16	Negative (11), Positive (5)
Economic Diversification	9	Negative (9), Positive (4)
Entrepreneurship	9	Positive (7), Negative (2)
Land	9	Positive (9), Negative (0)
Workforce	8	Negative (7), Positive (2)
Healthcare	7	Positive (7), Negative (3)
Diversity	5	Positive (4), Negative (1)
History	5	Negative (4), Positive (2)
Philanthropy	5	Negative (5), Positive (0)
Anti-Development	4	N/A
Downtown	4	Negative (4), Positive (0)
Location	4	N/A
Bonds	3	N/A
Planning	3	Positive (3), Negative (0)

Factor	Number of Quotes	Second Tier Factors (Number of Quotes)
School System	3	N/A
Available Facilities	2	N/A
Communication	2	Positive (2), Negative (0)
Incentives	2	Positive (2), Negative (0)
Brain Drain	1	N/A
Generational Poverty	1	N/A
Lack of Understanding	1	N/A
Natural Resources	1	N/A
Negative Attitudes	1	N/A
Quality of Life	1	Negative (1), Positive (0)

The top themes from County 5 elite interviews were infrastructure, relationships, leadership, grants, affordable housing, economic diversification, entrepreneurship, and land. Comments on infrastructure were primarily positive, though more than half of the comments had negative elements as well. Leaders saw transportation, water, and sewer as assets, and emphasized the importance of access to major transportation corridors connecting to hub cities in the region. Interview subjects were proud of their water and sewer rates and their work to acquire grants to expand service for potential industrial development. One interview subject emphasized the importance of low water and sewer rates for economic development, saying, “I would love for bigger companies to look at us first. It's just a lot cheaper to even do business here in rural communities.” Despite their best efforts, though, local leaders still felt that overall, utility infrastructure deficiencies were a barrier to development, with one stating:

We don't have the infrastructure. That's where we struggle with the money aspect of it.

We don't have money like some of the bigger counties to go put water and sewer and gas and rails...so we totally depend on grant funding for anything.

The railroad, while sometimes cited as an asset, was also discussed extensively as a hindrance to development, with one interviewee describing it as “a blessing and a curse.” The area receives long trains from the Port of Savannah; these trains often stretch for miles and stop

in the county seat, to change rails or for maintenance. Participants described a years-long battle with the railroad stemming from long trains completely shutting down their downtown area for hours at a time. The issues with the railroad are connected directly with relationships, as the community has long had a contentious relationship with the railroad. Despite these struggles, most of the relationship examples given were positive, with many focusing on local elected officials' recent ability to secure funding and political approval for an overpass, finally permitting vehicle traffic to coexist with the railroad. One local leader described the situation this:

We fought a battle with the railroad for probably the last four, five, six years, because the railroad has grown so, and they're pulling three-mile trains...They got trains going in three different directions and they pull up to [county seat], and then they have to wait on a train coming north and south, and then a train has to come from the west, going east to Savannah. Well, that train has got to sit there till that train clears. Then, he may sit an hour. He may sit three hours, and the way the tracks are...and there has been times when all the crossings have been blocked, and the only crossing we have is an overpass through town and oh, it's I mean, there have been times when trains stayed on the track for 20 hours and kept it blocked out and so we have work with the local DOT and different Senators and Representatives, the Governor, and we got some federal money.

Despite the negative relationship with the railroad, these anecdotes underscore a positive relationship with state and federal officials and the ability to leverage that influence for funding. One elected official described the power of these relationships, saying, "I have the governor's number in my phone, and I call him if I need him. He told me to call him...and I just think that's really big." Underneath these positive anecdotes, though, is the subtext that past relationships

with external partners had not been sufficient to rectify the railroad issue. On the other hand, *local* relationships stood out as an identified economic development asset, as several local entities regularly partner with each other to promote the community for economic development. “The city, the county and Board of Education work together to try to do whatever's necessary to attract industry and jobs to the community,” shared one elected official. “There are a lot of areas that, as I understand it, are not as cooperative as we are.”

Similarly, the majority of leadership comments in County 5 were positive, with many mentions of local leaders, some negative comments, and comments about private leadership. One participant described how the community had long benefitted from the foresight of a group of private business leaders in the 1960s, who used their own money to establish the local development authority and build the community’s first industrial park. Participants praised the work of the local economic developer, who also staffs the chamber of commerce, Main Street office, downtown development authority, and tourism efforts for the city and county. One official described the impact of these current and historic leaders:

Well, that generation of men that are gone now that actually started the development authority...they give us a lot to work with...and we were very fortunate they did the things that they did, and our executive director is just on top of her game...She doesn't miss much.

Leadership in the healthcare arena was also a mixed bag. Participants shared how a private company purchased the local hospital several years ago, only to turn it into an illegal lab mill, ultimately leading to multiple federal indictments. As a positive example of local leadership, though, the local government purchased the hospital back to keep it open. They have contracted with a new management company and report that things are going well.

Grants were discussed extensively as the primary source of capital funding in County 5. Interview subjects noted fairly substantial success in applying for state and federal grants. That said, the reliance on grants may indicate some negative trends beneath the surface. The comments make it clear that the county is not using grants to supplement local funds for infrastructure, but as the only source of major funding. One participant described the community as “totally dependent” on grants for infrastructure spending. This reliance on grants perhaps led to the years-long battle with the railroad that was only rectified when the right funding opportunity and strong grant application happened to come along.

Additionally, in an era of high inflation and increasing infrastructure costs, grant dollars do not always go as far as they used to. One local official described the dynamic of applying for a grant with one cost estimate and reckoning with higher cost estimates at the time of implementation this way, saying:

We just wrote a grant to EDA, and it's a federal grant...when we initially wrote that grant, we wrote it for water and sewer, but by the time it was submitted and approved, you know everything skyrocketed, and now...we can't afford the sewer portion of it, so we're just doing the water portion.

The current funding environment may make it even more difficult for communities like County 5 to build out infrastructure through grants.

Affordable housing was much more straightforward, with most comments discussing the shortage of housing in the area as a barrier to population and economic growth, a common theme throughout the state. One participant referred to affordable housing as “our downfall right now,” noting that it was a major barrier to economic development and population growth. That said,

some participants did note that the community had received a few new residents who had been priced out of more affluent counties in the region.

Economic diversification, or lack thereof, was a critical theme in the County 5 analysis. For several decades, the community was highly reliant on one very large textile manufacturing employer. In the wake of NAFTA and the Great Recession, this manufacturer moved offshore, devastating the local economy. While the community has gradually gained back jobs, leaders have been intentional about rebuilding in a more diversified way, so as not to become so reliant on a single large employer again. One local leader described the economic devastation of the community in the 2000s like this:

So, in 2008-2009, we lost every industry we had here. 1,800 jobs. One...moved overseas with the NAFTA Act and they employed 800 people. [Another manufacturer] was a windows and doors plant, so the housing market fell in 2008 and 2009. Of course, they didn't need windows and doors. They employed about 500 people, and these businesses have been here since the seventies, so they've been here a long time. And then...a...mobile home manufacturer fell as well, and that was 500 jobs, so about 1,800 jobs.

Interview participants felt they had gradually built back a more diversified economy, but this massive upheaval cast a long shadow. As part of that recovery process, community leaders noted they had become more reliant on entrepreneurship as the lifeblood of the local economy, though the data indicate that this has not yet been enough to make up for the industrial losses of the early 21st century. Still the community has hope for the future. One local leader described the impact of a recently arrived entrepreneur:

We did have one move from Atlanta that actually bought our old school system. They bought that 90,000 square feet of a school system, and they have turned that into a manufacturing facility and so I have talked them into renting out classrooms...they're doing what I've always wanted to do. They're doing that incubator first thing...giving people the opportunity. So, they've opened up maybe 6 rooms. Now they're getting ready to open up another wing and let people start moving in, and then they're talking about taking one wing and turning it into a senior assistive living facility.

Lastly, available land was cited several times as an economic development asset. That said, digging beneath the surface of these comments, you can see there may be more to the story. While participants noted that there was substantial land available for industrial development, much of it lacked sufficient utility access, or had just gained it. This indicates that while the land is, in theory, available for industrial development, it is not necessarily primed for this sort of growth.

County 6

County 6's per capita market income, unemployment rate, and poverty rate were all consistently far worse than the U.S. average during the 15-year study period, resulting in an average county economic status more than 124 points below zero. The model predicted that County 6 should struggle, but not nearly to the extent that it did, with predicted county economic status scores far better than actual scores over the study period.

Located in the central part of the state, County 6 has a population of roughly 7,000, slightly declining over the last few years. Nearly two-thirds of the county's population is prime working age, while less than the national average is under 18 and 65 or older. The population is roughly 60% white, with a little less than 40% black. There is also a small percentage of

Hispanic of any race officially reported, though one interview subject noted that he thinks this population is grossly undercounted in County 6. Logging is the major local industry. Educational attainment is far below the state and national rates, with just over 12% of the adult population having a bachelor's degree or higher. County 6 is not part of a metropolitan statistical area and does not have an interstate highway or institution of higher education. Its natural amenities scale score is close to the state average. The table below summarizes interview data, with analysis following.

Table 36: County 6: Factors by Frequency

Factor	Number of Quotes	Second Tier Factors (Number of Quotes)
Leadership	49	Local (41), Negative (38), Private (12), Positive (11), State (2)
Relationships	21	Negative (14), Local (11), Positive (10), State (10), Federal (4)
Entrepreneurship	17	Negative (9), Positive (8)
Infrastructure	16	Positive (10), Negative (7), Internet (5), Transportation (5), Electricity (3), Airport (2), Natural Gas (2)
Generational Poverty	13	N/A
Economic Diversification	9	Negative (9), Positive (0)
Workforce	9	Negative (6), Positive (3)
Brain Drain	8	N/A
Grants	8	N/A
Grocery Store	8	Negative (8), Positive (0)
Planning	8	Negative (8), Positive (0)
Healthcare	6	Negative (6), Positive (0)
History	6	Negative (6), Positive (0)
Philanthropy	6	Negative (4), Positive (2)
Diversity	5	Negative (4), Positive (1)
Location	5	N/A
Lack of Educational Opportunities	4	N/A
Negative Attitudes	4	N/A
Anti-Development	2	N/A
Land	2	Positive (2), Negative (0)
Mistrust	2	N/A

Factor	Number of Quotes	Second Tier Factors (Number of Quotes)
Natural Resources	2	N/A
Quality of Life	2	Negative (2), Positive (0)
Regionalism	2	Negative (2), Positive (0)
Telework	2	N/A
Aging Population	1	N/A
Communication	1	Negative (1), Positive (0)
Incentives	1	Negative (1), Positive (0)

Major themes from County 6 elite interviews include leadership, relationships, entrepreneurship, infrastructure, generational poverty, diversification, and workforce. In County 6, the leadership comments were overwhelmingly negative and focused primarily on local leaders, with some private sector and state-level leadership as well. Many comments dealt with short-sighted decision-making from local leaders and a failure to develop a vision and plan for the community. Participants noted that the mayor of one of the county's two towns had been in power for decades, running unopposed in almost every election. He finally received opposition in the most recent election and won by only two votes.

One interview subject described the relationship between the community's consistency in leadership and economic stagnation like this:

I'd be willing to say, if you've been in a position of power in politics for 40 years and things have declined perpetually through that 40 years, at some point there either needed to be a shift in leadership style or a shift in leadership and so when you look at somebody like [the mayor]...these folks are really trying to keep the status quo.

One participant suggested that persistent apathy from the population was the community's biggest problem. Another described the county's leadership dynamic like this:

There's a disconnect between segments of leadership. In order to create that shared vision, these folks are going to need to communicate and I think if these folks started

communicating with each other, walking into that process, understanding that they're not going to agree—there's going to be Ds and Rs next to these people's names and that does not necessarily mean that you can't work with them to achieve a common goal. So, some open-minded communication and also understand that they're going to have...to be willing to look at our world as it is. Understand that economic development in 2024 and economic development in 1986 are two different things and they've got to get out of that mindset that they can keep on doing it like they did in '86. If they would do that and...if those communication lines would open up, I really think they could do something.

Similarly, relationship comments were predominantly negative and focused on the local as well, with state and federal relationships also included. Multiple participants noted how bad relations were between the two small towns in the county, noting that their rivalry was like the “Hatfields and McCoys.” According to participants, the rivalry between the two towns dates back more than a century and stems from the decision over where to locate the county courthouse in the early 20th century. Since then, successive generations of leaders have continued to bicker and failed to pool resources to serve the community. One interview subject described the rivalry:

Their main reason why they struggle is because the county cannot get along. Got that separation between [city] and [city] and...I don't even know whether they understand what they're fighting over at this point...This all started. Where do you put the courthouse? And then it moved to where do you put the school? And then...where do you put the library? So, it's a constant battle...no business is going to come to a county that can't get along within its own borders.

This lack of cooperation was not limited to relationships within the county, as multiple participants described local leaders' apprehension to get involved with successful regional economic development efforts led by neighboring counties. Participants also felt that local relationships with state officials and agencies were weak, with one noting:

The general feeling is that politicians in Georgia mostly make laws for north of I-20...and this is not true of every politician in our state, but sometimes folks will forget that there's a whole a population of folks living down here.

Comments on entrepreneurship were mixed, with positive comments focusing on the local telephone company, which has recently received substantial funding for broadband deployment. Negative comments focused on a failure to grow local businesses organically, and the county's over-reliance on one key industry, logging. Comments on infrastructure were mixed as well. Participants noted that broadband access had been a major hindrance, but that progress was being made thanks to a large grant to the local telephone company. Transportation networks were generally seen as a positive, with easy connections to major hub cities.

Generational poverty was another common theme, with participants discussing the community's lack of economic prospects going back several decades as the best and brightest leave the community to pursue higher education and never return. Relatedly, workforce was cited as a major concern, with few reasons or opportunities to pursue any sort of higher education or advanced training due to the minimal prospects for employment in the community and lack of nearby options for higher education. One stakeholder put it like this:

The difference is, if you've got kids that are already financially insecure, that are already dealing with a generational kind of problems with education to begin with. Some of them are first generation high school graduates and navigating those waters and of technical

college, that's difficult for most people, but definitely for them and if you add a 40-minute travel time and those individuals are already in poverty and don't have a vehicle, they don't really have a chance to go get those skills.

Economic diversification also featured prominently in County 6 interviews, with respondents noting that the only major employers in the county were a private prison, logging companies, and the school system. One participant shared concern about the county economy's reliance on a private prison, saying:

My biggest worry in this county is that prison because again, it's a private prison...private prisons have been outlawed at the federal level...should private prisons be banned at the state level, [the community] will be absolutely crushed. 100%.

Another participant viewed the county's lack of economic diversification as a major cause of brain drain and economic loss, saying:

There's just not enough jobs here for people. There's no jobs except for Circle K. Well, [the community] has a correctional facility...and there's a small nursing home here... but there's really nothing for the people to do and the younger people just work outside of town.

County 7

County 7 has a population of roughly 10,000, which has declined more than 30% since the 2010 Census. The population is roughly 50% non-Hispanic white, with slightly more than one third black and the remainder largely Hispanic. The population is aging faster than the state and national averages, with more than one fifth aged 65 and older and less than one fifth under 18. Educational attainment is low, with approximately 10% of the adult population holding a bachelor's degree. There is no interstate access or institution of higher education in the county

and the natural amenities scale score is slightly below the state average. County 7 is not part of a metropolitan statistical area.

All three components of the county economic status score (per capita market income, unemployment rate, and poverty rate) were consistently far worse than the national average during the 15-year study period, resulting in an average county economic status of -135.34. Given the county's intrinsic challenges, the model predicted that its county economic status would be far below average, but not nearly to the extent that it actually was. Interview responses are summarized in Table 37.

Table 37: County 7: Factors by Frequency

Factor	Number of Quotes	Second Tier Factors (Number of Quotes)
Leadership	31	Local (27), Negative (19), Positive (14), Private (10)
Relationships	19	Positive (16), State (11), Federal (7), Local (6), Negative (6)
Infrastructure	17	Negative (11), Positive (8), Water and Sewer (8), Transportation (5), Airport (3), Electricity (1), Internet (1)
Economic Diversification	15	Negative (15), Positive (0)
Generational Poverty	10	N/A
Entrepreneurship	9	Positive (8), Negative (3)
Grants	8	N/A
Healthcare	8	Negative (7), Positive (2)
History	8	Negative (8), Positive (0)
Workforce	8	Negative (6), Positive (3)
Location	5	N/A
Negative Attitudes	5	N/A
Philanthropy	5	Positive (3), Negative (2)
Anti-Development	4	N/A
Planning	4	Negative (4), Positive (0)
Quality of Life	4	Negative (3), Positive (1)
Airport	3	N/A
Brain Drain	3	N/A
Incentives	3	Negative (3), Positive (0)
Natural Resources	3	N/A
Arts	2	N/A
Commuting	2	N/A

Factor	Number of Quotes	Second Tier Factors (Number of Quotes)
Diversity	2	Positive (2), Negative (0)
Downtown	2	Negative (2), Positive (0)
Grocery Store	2	Positive (2), Negative (0)
State Involvement	2	N/A
Available Facilities	1	N/A
Communication	1	Negative (1), Positive (0)
Lack of Understanding	1	N/A

Major themes from County 7 interviews include leadership, relationships, infrastructure, diversification, and generational poverty. Leadership comments were largely negative and focused on local elected officials, with some positive comments and comments about private sectors leaders as well. One stakeholder put the leadership concerns bluntly, saying, “We’ve got to have some funerals.” Others focused on leaders’ failure to develop a long-term vision and plan and blamed them for financial mismanagement, with one saying:

I think our county government is in debt to the tune of \$2.5 million and they've got to borrow that money, you know...they want to borrow that money ‘til January, so that then they can...pay that loan back, then turn around and get another loan. That's not how you live, so it's a big hole that's got to be dug out of.

Another participant noted that political polarization has always been a major issue in the community, with leaders unwilling to cooperate with leaders of the opposition party, saying, “it's always just been a difficult place for politics over the years. Smaller areas, a lot of time, people are so tied to...one side or the other.”

Conversely, relationship comments were largely positive and primarily focused on connections to state and federal partners. Participants noted strong connections to (and help from) state and federal partners over the years, with one stating, “We'll use any help we can get. And believe me, I've called on every politician that represents our county. And they're in my

speed dial. I promise you.” Another participant was impressed by the responsiveness of state and federal partners, given County 7’s small population, saying, “There's not enough votes down here to affect either of those people, so it's from the heart when they're helping... There's really nothing for them to gain.”

Infrastructure comments in County 7 were fairly evenly split between positive and negative sentiments, with positive comments primarily about access to major state highways and negative comments largely about the quality and reach of local water and sewer infrastructure. In an example of the interconnectedness of the themes, the most poignant infrastructure story deals with water and sewer problems but relates to other major themes. Several years ago, the water system for one of the county’s cities was in such bad physical and financial shape that the city gave up its charter and merged with a neighboring city, with assistance from a state legislator. This merger showcases positive relationships and leadership at the time of the union, but also negative leadership that led the city to such a dire financial and safety situation in the first place.

Comments on economic diversification in County 7 were universally negative, with respondents noting how the county had been highly dependent on a handful of major employers, all of which closed over a 20-year period. Multiple major manufacturers closed and left town in the wake of NAFTA, while a federal policy change closed a large private prison more recently, taking away more than 1,000 local jobs in less than two decades. The state was quick to purchase the prison and plans to operate it as a public prison, providing significant local employment, but taking away the substantial property tax revenue that had been paid by the private prison. Respondents were very concerned about this loss of tax revenue and what it would mean for their already-strapped budget.

Generational poverty was another major theme, with participants talking about the vicious cycle created by an impoverished population and a lack of industry. They noted the difficulty of recruiting new industry without incentives and infrastructure, but the population cannot afford the taxes it would take to finance such endeavors, with one saying, “I think it's because we were so economically deprived. We can't offer very much to the businesses...it does depend on the taxes, the property taxes.” Another participant saw the community's poverty as a barrier to retail development and access to basic necessities, saying, “We don't even have a Walmart...so you hear that Walmart does studies, too. They know if they need to come based on what's there.”

County 8

County 8, located in southern Georgia, has a population of just under 20,000 that has mostly held steady for the last couple of decades. Uniquely among the negative outlier communities, County 8's population is more than 90% non-Hispanic white, with small black and Hispanic populations. County 8's age distribution is roughly in line with state and national averages, with about 18% aged 65 and older and nearly a quarter under the age of 18. Educational attainment in County 8 is low, with roughly 10% of the adult population holding a bachelor's degree. County 8 is on the outer edge of a metropolitan statistical area and has a natural amenities scale score close to the state average. The county does not contain any interstate highways or institutions of higher education.

During the 15-year study period, County 8 consistently fell behind the national rates in per capita market income and poverty. County 8's unemployment rate was actually better than the national average in the early years of the study period but eventually became far worse.

These factors led to County 8 having an average county economic status of -62.24 over the study period. The model predicted that County 8 would struggle, but not nearly as much as it did.

Table 38: County 8: Factors by Frequency

Factor	Number of Quotes	Second Tier Factors (Number of Quotes)
Leadership	49	Local (38), Negative (34), Positive (15), Private (10), State (2)
Infrastructure	39	Negative (25), Positive (23), Natural Gas (8), Transportation (8), Water and Sewer (8), Internet (7), Railroad (2) Electricity (1)
Relationships	26	Positive (17), State (14), Local (10), Negative (9), Federal (5)
Land	20	Negative (14), Positive (6)
Entrepreneurship	16	Positive (11), Negative (5)
Communication	12	Negative (11), Positive (1)
Incentives	9	Positive (5), Negative (5)
Negative Attitudes	8	N/A
Planning	8	Negative (8), Positive (1)
Airport	7	N/A
Location	7	N/A
Natural Resources	7	N/A
Anti-Development	6	N/A
Grants	6	N/A
History	5	Negative (5), Positive (0)
Lack of Understanding	5	N/A
Philanthropy	5	Negative (5), Positive (2)
School System	5	N/A
State Involvement	5	N/A
Economic Diversification	4	Negative (4), Positive (0)
Regionalism	4	Positive (4), Negative (0)
Commuting	3	N/A
Generational Poverty	3	N/A
Grocery Store	3	Negative (2), Positive (1)
Telework	3	N/A
Brain Drain	2	N/A
Diversity	2	Positive (2), Negative (0)
Downtown	2	Negative (2), Positive (0)
Lack of Educational Opportunities	2	N/A
Continuity	1	Negative (1), Positive (0)

Major themes from the County 8 interviews include leadership, infrastructure, relationships, land, entrepreneurship, and communication. Comments on leadership were largely negative and focused on local elected leaders, with other comments focused on private sector and state-level leaders. Participants described a lot of negativity around economic development decisions made by leaders, often resulting in rabble-rousing candidates gaining election to oppose issues they may not have totally understood. One interview subject noted the following about the dynamics of local leadership and their effect on economic development:

Politics is what it boils down to, and that has been very negative on our community as far as economic development goes because it seems like they hold that one or two person that voted yes accountable for something that they really didn't know anything about, and then they get elected and now, all of a sudden you're talking to them, and they're like, 'oh, oh, that that makes a little bit better sense. No wonder you voted yes or no wonder you voted no.'

Another participant saw apathy in leadership as a major barrier to economic development, saying, "They just have never decided what they want. They want to see nice, wonderful things...but as far as real growth and companies coming in you know, it's kind of like, well, that'd be nice but we're not going to do anything." While continuity only came up once in the County 8 interviews, it was notable in its relation to leadership, as one stakeholder noted the frequent turnover in the city manager position (three managers in four years) was making it difficult to progress with a plan for development.

Infrastructure was another major theme, with comments roughly split between positive and negative sentiments. Participants saw the county's lack of natural gas access as a major impediment to economic development, with access to state highways and rail as significant

assets. Additionally, internet access was a major bright spot, with fiber broadband available throughout the county for more than a decade thanks to the vision of a local entrepreneur. Water and sewer were major concerns, particularly regarding capacity for growth. At one point, the county seat went more than one year completely unable to add any new water customers due to capacity and maintenance issues. Available property in the county's industrial park does have water access, but no sewer, limiting economic development prospects. There is no water or sewer access at all in the unincorporated portions of the county. The infrastructure concerns of the interview subjects are also connected to negative leadership, as they noted that leadership had the opportunity in the past to gain natural gas access but declined and that they allowed the water system to fall into disrepair.

Comments on relationships were largely positive, with several negative comments as well. Relationship comments focused primarily on state-level and local partners, with federal partners also included. Notably, the positive broadband situation came up in the context of negative relationships with state partners. In recent years, state government has had a major push for broadband funding. Since County 8 already had county-wide high-speed internet, local leaders had sought unsuccessfully to convince state government to allow them to use the money for other infrastructure purposes, like water and sewer. Regional cooperation was a bright spot in relationships, as the county was an active participant in a multi-county regional economic development organization funded through fees from the port in a nearby county. Stakeholders also felt they had a strong relationship with their U.S. congressman and that he had been helpful with funding in the past.

Lack of available land suitable for industrial development was seen as a major impediment to economic development. Participants noted that roughly 60% of the land in the

county is owned by three timber companies, making it difficult to acquire any for a different economic purpose. One local stakeholder described the land situation thusly, “We struggle... because a lack of inventory that's actually owned by the authority. Now, we've got a lot of land. I mean tons of land, but most of it is owned by the timber companies.” The limited land available for industrial development also lacked great utility access, with no natural gas or sewer.

Entrepreneurship was discussed largely positively, most often in relation to the entrepreneur who owns the local telephone company and his foresight to install fiber internet cable more than a decade ago. County 8's other infrastructure and land availability challenges may limit the impact of this asset, though. One participant described the decline of local small businesses as residents began seeking lower-cost options in neighboring communities on their commutes home from work in hub cities:

But it is hard to pop by [for a] \$7 gallon of milk when I'm driving to [hub city] to work, and I can stop and get a \$4 gallon of milk in [hub city] ...so we really do struggle with small business...When I was a child growing up, it seemed like my family bought everything from [the local community]. We had a furniture store ...we had hardware stores. We had grocery stores...We bought everything from [the community] ...Now we don't have much of that anymore.

Communication was another major theme in County 8. Almost all comments on the subject focused on a lack of communication from local leaders about the community's needs in economic development and the incentives it might take to improve the local economy.

Participants lamented the recent failure of a local sales tax referendum that would have funded infrastructure projects for economic development, with one saying:

When you say another one cent sales tax, it's getting voted down and it don't really matter what it's about. You try to educate, and I still think that's something we need to continue to try to do very hard is educate our public.

Positive Community Themes

While each case has its own unique flavor, the positive outlier cases share a handful of themes: leadership, relationships, infrastructure, planning, and entrepreneurship. While these were not always the five most prominent factors in the positive outlier interviews, these themes are all strongly interconnected and there were prominent elements of each in all four positive outlier cases. As simple as it sounds, it is clear from these cases that individual leadership still matters. While three of the four positive outlier cases seem to benefit intrinsically from location, interviews indicate that their location advantages, rather than only an accident of geography, are also the product of decades of intentional leadership and planning. Whether it be a local state legislator successfully lobbying for an interstate highway exit or decades of targeted infrastructure spending, it was clear from the cases that location benefits were derived as much from nurture as from nature.

Leadership manifested differently in each of the positive cases, but its importance is clear in all. In County 1, it was the foresight of local government leaders to push for consolidation decades ago, allowing the community to do more with less, and the dedication of one family of private sector leaders who were committed to keeping the community viable. In County 2 and County 3, leadership was about committing to a vision for the community and building the infrastructure to make it happen. In County 4, leadership manifested primarily through the dedication of a handful of civil servants in revitalizing aging infrastructure and a once dormant downtown through entrepreneurship and the arts.

Similarly, in all four outlier cases, local leaders and community members were able to successfully leverage relationships, with each other and state and federal partners, to support economic development success. These relationships, not just one-off requests for grant funding, were carefully curated over decades. What is distinct about these cases, though, was not just the positive relationships with state and federal partners, which were also present in the negative outlier cases, but the importance of positive relationships between local stakeholders and organizations. As one County 3 stakeholder put it, “we knew we were all in the same boat.”

In the positive outlier communities, infrastructure went hand in hand with leadership and planning, as local leaders, particularly in the County 2 and County 3 cases, committed to a long-term vision for economic development. This vision enabled these communities to plan for and manage growth sustainably by zoning commercial and industrial growth into targeted infrastructure-rich corridors. All the while, they preserved the rural character of the rest of the community and used the sales tax and utility revenue generated by development to keep property taxes down for residents. Planning was also critical in County 4, as local leaders wove together a complex web of grant funding opportunities over the decades to reinvigorate the community, particularly the downtown area. In County 1, planning was less directly about infrastructure and more about developing a unified long-term vision for a collaborative approach, with consolidated local government and regional shared services.

Entrepreneurship was also present in all four cases. County 2 and County 4 had formalized efforts designed to spur entrepreneurship, with County 4 participating in an entrepreneurship program developed by a statewide utility partner and County 2 taking a more grassroots approach, with an organization created by several local retired business leaders. In County 1 and County 3, entrepreneurship was more organic but supported by local leadership

nonetheless. Entrepreneurship and private sector leadership were particularly critical in County 1, where one family was dedicated to keeping a grocery store, pharmacy, and health clinic open amidst significant economic headwinds. While leadership, relationships, infrastructure, planning, and entrepreneurship were all coded separately in this analysis to provide more granular detail, it is clear that they are all related and all ultimately hinge on the actions of local leaders.

Negative Community Themes

Primary themes across the negative outlier communities similarly include leadership, relationships, infrastructure, and entrepreneurship, while also featuring grants and economic diversification. The biggest difference between the two sets of communities is the directionality of the comments around leadership. The impacts of leadership were overwhelmingly negative in the negative outlier communities. Relationships were still mostly positive, but not to the extent of the positive outlier communities, while infrastructure comments were fairly evenly split. Notably, negative outlier communities seemed more prone to infighting, as evidenced by the “Hatfields and McCoys” 100-year rivalry between neighboring towns in County 6.

Entrepreneurship was seen as important in all four negative outlier communities and most of the comments coded under this theme were positive, though not to the extent of the positive outlier communities. Generally, negative outlier community stakeholders recognized the importance of entrepreneurship and were thankful for the little that they had, but did not seem to have any strategy (like those seen in County 2 and County 4) for fostering entrepreneurship. Notable positive examples of entrepreneurship in the negative outlier counties were the local telephone companies in County 6 and County 8. The County 8 telephone company had led the charge for rural broadband more than a decade ago in their community, while County 6’s telephone company was just embarking on a grant-funded project to expand broadband access

throughout their service area. Perhaps these investments will pay dividends in the future, helping these communities to move forward.

While all eight communities leverage grant funding as part of their approach to infrastructure development, the four negative outlier communities rely on grants as essentially their only source of substantial capital funding, meaning that when their applications are unsuccessful or costs are higher than originally anticipated, they are unable to address urgent needs. The County 5 railroad debacle and County 8 water infrastructure situation stand out in this area, as these communities had to react to crises and wait, in some cases for years, for the right grant to come along, rather than planning proactively. These stand in contrast to positive outlier County 4, who faced a similar dynamic with its water system decades ago, but thanks to positive local leadership and a clear vision and plan spent years systematically building up local infrastructure proactively rather than waiting on the next crisis.

Economic diversification was less prominent in the positive outlier interviews, though it did come up 18 times, 12 of these including positive comments. In the negative outlier communities though, comments on economic diversification were more numerous and almost universally negative. All four had, essentially, single-industry economies, with County 5 and County 7 particularly devastated by major employer closures. In fairness to these communities, the closures were tied up in national and international forces like NAFTA, the Great Recession, and federal prison policy, so it is hard to say what local leaders could have done differently to avert this fate. That said, these communities may have benefitted from more of the long-range economic planning that was seen in the positive outlier communities.

Overall Themes

Almost all of the themes in this chapter could be categorized under the heading of leadership. While all eight communities in this study are undoubtedly home to dedicated public servants, there was a clear difference in the outlook and effectiveness of local government leaders in the positive outlier communities. They emphasized working together within the community, rather than simply developing relationships with powerful funders at the state and federal level, though they also did that, too. There were also clear divides around planning, as the positive outlier communities used zoning and targeted infrastructure to develop intentionally, whereas negative outlier communities were more likely to rely on grants to react to crises.

This dynamic is perhaps best demonstrated by the contrast between County 2, a positive outlier, and County 6, a negative outlier, in their approach to local sales tax revenue. In Georgia, local governments can institute special purpose local option sales taxes (SPLOST) through ballot referenda, which must be periodically renewed. These dollars can only be used for capital projects, like infrastructure and buildings. According to interview subjects in County 2, SPLOST dollars are strategically leveraged as match for larger state and federal funding opportunities, rather than used just to cover individual projects. A long-time city staffer described it this way, saying “How can I take every SPLOST dollar and pull in two more dollars? And we don't think of our SPLOST as spending money. We think of it as leverage money.” Contrast this approach to County 6, where according to one interview participant, local leaders simply forgot to put SPLOST on the ballot when it was up for renewal, shutting down revenue for capital projects for a year and a half.

Interestingly, subjects mentioned location as a major economic development asset in all eight communities. A stakeholder from County 2 put it best, saying:

You know, it never ceases to amaze me how even the worst-located community in a state or in a region could say we have location on our side. I've never had anybody say we have a rotten location, you know. Everybody says we're 50 miles from this or this or this.

While the quantitative model does account for location through the indicator variables for metropolitan statistical areas and major highways, it is interesting to note that two of the four positive outlier communities contain interstate highways, while none of the negative outlier communities contain interstates. The only interview subject who said anything negative about location actually came from County 1, a positive outlier, adding further intrigue to the impacts of location on economic development.

While brain drain was not a primary theme in any of the case studies, it was reported in interviews from seven of the eight communities, excluding only County 3, a positive outlier. Despite its lack of volume in the interviews, brain drain and population loss stand out as perhaps the greatest existential threat to rural Georgia communities, as even a positive outlier community like County 1 is just trying to stop the bleeding with population loss. While Georgia's population continues to grow, growth is concentrated in urban centers and their outlying metropolitan areas. This is, ultimately, the way in which location may matter the most, as counties located too far away from metropolitan areas face ever growing headwinds just to maintain their local population, much less grow it enough to entice new business and industry. A stakeholder from one of the positive outlier communities said:

I think we're in a cycle that's just a never-ending turnover, where your kids graduate, they either need a job or go to college, and then that's the last time you see them. Population is going to keep dropping until we break that cycle somewhere.

Relatedly, workforce was a major concern across all communities, with both cohorts having net negative comments on the subject.

Interview subjects in positive and negative outlier communities alike were concerned about the rural-urban divide in the state, with one positive outlier participant referring to it as the “haves and have nots.” A participant from another county suggested that “politicians in Georgia mostly make laws for north of I-20,” while another spoke of the resource gap between large and rural communities and its implications for industrial recruitment:

I see these other communities are spending money bringing, you know, consultants in and the state in, and the utility partners in, and doing these extravagant parties, and so what happens there is that these consultants and state project managers are now funneling projects right through that community because they've kind of given them the dog and pony show. I can't afford to do that.

Participants across both cohorts reported relatively little on the impacts of racial diversity on rural economic development. That said, all of the black interview participants reported encountering racial prejudice in their communities over the years, though they thought relationships were improving. One former elected official from County 4 shared the following anecdote to illustrate this dynamic:

I was on city council with an older black lady, and she made a statement to me once. She said, ‘We might have come over on different boats, but we're on the same one now, and we can rise, or we can sink, and we'll all go the same way.’

Given the nature of the sample’s focus on economic developers and other local leaders, it is unsurprising that the majority of respondents were white, but it is also important to take this into account when analyzing the results.

Overall, these case studies clearly indicate that the actions of individuals and their ability to develop and implement a clear plan for development can have major positive implications for rural communities, while infighting and a reactive approach to crises can leave communities reeling. The actions of individuals, from a powerful state legislator flexing his muscle to ensure the interstate highway goes through his hometown, all the way down to a hometown family-owned grocery store fighting to stay open and keep their community from becoming a food swamp, have major implications for the continued viability of rural communities. It is clear in these cases that people make the difference.

CHAPTER 6

SUMMARY AND CONCLUSION

Chapter 1 described the rural economic development landscape, and the existential threat facing many rural communities throughout the country, establishing my research question of *what factors help explain the variation in economic well-being among rural Georgia counties?* Georgia is an example of a state with a dynamic rural population facing major economic challenges. Chapter 2 discussed the literature on rural economic development, identifying factors like population size, aging population, minority population, educational attainment, proximity to metropolitan areas, natural amenities, highways, and institutions of higher education that have been linked to success and struggles in rural economic development.

Chapter 3 presented the dissertation's data and methods, laying out a mixed methods approach for identifying factors related to success in rural economic development. In the quantitative section, I described an ordinary least squares (OLS) regression model with county economic status as the dependent variable and a series of literature-informed intrinsic factors as independent variables. County economic status, a measure developed by the Appalachian Regional Commission (ARC), indexes unemployment rates, per capita market income, and poverty rate, comparing each county in the country to the national average. This regression model was used to predict what each county's economic status *should have been* from 2006-2020, based on tangible factors like population size, age, racial, and ethnic demographics, metropolitan areas, natural amenities, highways, and institutions of higher education. I also ran

three secondary regression models with each of the three component parts of county economic status as the dependent variable to further illuminate differences across communities.

In Chapter 4, I summarized and analyzed results of the OLS regression models, using the primary model with county economic status as the dependent variable to identify consistent outliers over the 15-year study period. Chapter 5 summarized and analyzed qualitative data generated by elite interviews with economic development stakeholders in eight rural Georgia counties. These counties were consistent outliers in relation to predicted-versus-actual county economic status from 2006 to 2020. Four of the counties consistently exceeded the model's expectations, while four consistently fell below predicted values. Counties were given pseudonyms to provide confidentiality to interview participants.

I conducted 31 elite interviews, developed through purposive snowball sampling, starting with the local economic development professional or chamber of commerce staff where available and searching for further stakeholders from there. The 31 interviews represented four economic stakeholders per county, with one interview subject serving two neighboring counties that were both negative outliers. I then conducted qualitative thematic analysis through an iterative coding process, whereby I read all transcripts and coded phrases, then recoded as themes began to emerge.

Summary of Results and Findings

Quantitative Analysis

The primary quantitative model, Model 1, featured county economic status as the dependent variable. Model 1 results largely fell in line with expectations from the literature, demonstrating statistically significant positive relationships with population squared, metropolitan statistical areas (MSA), educational attainment, and major highways, while

showing statistically significant negative relationships with population percentage aged 65 and older, black population percentage, and Hispanic population percentage.

The relationship between the presence of an institution of higher education in a rural community and economic development was surprisingly negative in all four models, though this may be explained by its inextricable link to educational attainment, which demonstrates a statistically significant relationship in the opposite direction across all four models. That said, the higher education indicator variable and the educational attainment percentage variable exhibit a correlation of only 0.17, suggesting they are not collinear and that there must be more to the story. It is also important to note that this study only looks at the relationship between higher education and economic development in rural communities. The positive relationship between institutions of higher education and economic development suggested from the literature may still hold true if larger universities in urban areas are included in analysis. The natural amenities variable also subverted expectations by failing to demonstrate a statistically significant relationship to county economic status and poverty rate in Models 1 and 4, respectively, while demonstrating surprising negative relationships to economic development in relation to unemployment and per capita market income in Models 2 and 3.

The three secondary regression models, Models 2, 3, and 4, focus on the three component parts of county economic status as the dependent variable, respectively. These models did not cohere to expectations as cleanly as Model 1, illuminating that a variable's overall positive or negative association with economic development may not result in the same relationship to an individual component of economic development, such as unemployment, income, or poverty.

While population squared shows the expected positive relationship to economic development across all four models, it is important to note that the projected effect is consistently

marginal. This suggests that while population growth is a positive for economic development, it will not cure a community's economic ills on its own. More optimistically, this consistently significant but weak relationship between population and economic development suggests that population loss and brain drain may not mean death sentences for communities, as the impact is small enough that it could be overcome through other means.

The MSA indicator variable is associated with a consistent strong positive effect on economic development across all four models, lending further support to prior research on the subject. Even among variables that largely cannot be controlled by communities, MSA stands out though as the factor most out of their hands. For this reason, it was interesting to see that three of the four positive outlier communities interviewed in the qualitative chapter are not part of an MSA, and the fourth lies on the outermost edge of one. Altogether, this suggests that while inclusion in an MSA is a major advantage in economic development, communities further away from urban centers can still exceed expectations.

Educational attainment also consistently demonstrates the expected relationships in association with positive economic development across all four models. This variable's marginal effect is fairly small, but the models suggest that an increase in educational attainment will likely be associated with an even greater increase in economic vitality. Educational attainment is easily measurable, so it was included in the quantitative models, but it can also be influenced by local policy and leadership, through the recruitment of high-paying industries who employ educated workers. While this recruitment is certainly easier said than done, it does at least point to a path forward for struggling communities. Major highways are associated with positive economic development in the overall Model 1 and Model 3, which deals with per capita income. However, the indicator variable for major highways does not exhibit a statistically significant relationship

to unemployment or poverty. Highways are often seen as part of a community's intrinsic location advantage, but as is clear from the interviews, strong political relationships and local leadership can help steer highway construction toward a specific community, paying dividends economically for years to come, though not necessarily across all aspects of economic vitality.

The black population percentage variable largely meets expectations across all four models, demonstrating a negative association with economic development in three of the models and no relationship to per capita market income. The Hispanic population percentage variable has more complicated relationships to the economic development variables, showing a negative relationship to county economic status and a relationship with increasing poverty, while also being associated with decreases in unemployment rate and increases in per capita income. It is important to note though, that these data simply suggest that a larger Hispanic population is *associated* with higher per capita market income in the county where they reside, not that the Hispanic population themselves are making more money. These results suggest that as the minority population continues to grow in Georgia, further economic development challenges could arise and that the dynamics around different aspects of economic development, race, and ethnicity are complicated. Similarly, the variable for percentage of population aged 65 and older demonstrates complex results, showing a negative relationship with the overall metric of county economic status and an association with increasing poverty, while also relating to lower unemployment rates and higher per capita market income.

While potential explanations for these discrepancies are discussed in Chapter 4, the results across variables and models suggest that the relationships between factors like aging population, Hispanic population, and higher education are more complicated than previous literature suggests. When viewed in concert, the regression results indicate that individual

aspects of a local economy, like unemployment, income, and poverty, may react differently to changes in the community. This suggests that a change in one variable may lead to one step forward and two steps back, adding complexity to the rural economic development landscape.

Qualitative Analysis

Major themes from qualitative analysis include leadership, infrastructure, relationships, entrepreneurship, and planning across the full set of outlier communities. Those were the same top five themes for the positive outlier communities, while the negative outlier communities substituted grants for planning. Positive outlier community interview subjects were also far more likely to describe those themes as assets for their communities, whereas negative outlier communities had a higher percentage of negatively phrased comments. This clear differentiation between positive and negative comments from the two cohorts of outlier communities provides support for the regression model that identified them as outliers.

Each of the four positive outlier communities had its own story to tell regarding the highly interdependent themes of leadership, relationships, infrastructure, planning, and entrepreneurship. These stories primarily highlighted the actions of local elected leaders and public sector staff along with dedicated local private sector actors. In the negative outlier communities, there was a greater emphasis on grants and economic diversification.

Leadership was a major theme in prior qualitative analyses of rural economic development (Green, 1997; Israel & Beaulieu, 1990; Wade & Pulver, 1991; Wood, 2008). My study reinforces and adds new dimensions to this theme. The case of the community known in my analysis as County 1 has two unique elements that provide new insights into leadership and its relationship to rural economic development: local government consolidation and private sector leadership.

Local government consolidation, or the unification of city and county governments, is relatively rare nationwide, and particularly in Georgia, where just eight of the 159 counties are consolidated. County 1's consolidation story is one of intertwined local leadership, relationships, and planning, as key local leaders leveraged their relationships to sell the community on a vision of a more efficient local government better equipped to serve its community at a lower cost. More than three decades later, County 1 stakeholders universally praised the impacts of consolidation. While each case is unique, similar counties may benefit from County 1's approach, making this case an important new contribution to the literature.

Likewise, leadership and entrepreneurship are both established themes from prior case studies. However, the case of the County 1 grocery store, pharmacy, and rural health clinic owned by the same family adds a new wrinkle to the literature, with its focus on unelected private sector leadership. The family members that own these establishments are more than simply entrepreneurs looking to build a profitable business—they are dedicated to serving the community and have chosen to stay in their hometown rather than pursue more lucrative business opportunities elsewhere. While this dedication may be difficult to replicate or train, it is clearly essential to the story of County 1's success.

The emphasis on relationships found in these case studies is a new contribution to the rural economic development literature. While relationships are certainly related to leadership, prior analyses had not separated the concepts or delved as deeply into the impacts of relationships. My analysis showed that there are local, state, and federal dimensions to relationships, and each can impact economic development positively or negatively. It is interesting that relationships came up so often in the context of grant applications for infrastructure, a subject typically thought of as formulaic and bureaucratic. My analysis suggests

that grant funding is far more political, and that relationships between local leaders and state and federal partners can be massive assets in the pursuit of funding for infrastructure projects.

Conversely, negative relationships, like the 100-year rivalry between neighboring towns in the County 6 case, appear to be detrimental to rural economic development. While relationships were mostly spoken of positively in the negative outlier communities, a higher percentage of their statements were negative than in the positive outlier communities. There also appears to be an interplay between negative local leadership and a decreased ability to leverage state and federal relationships. While interview subjects largely reported positive relationships with state and federal partners, there was a noticeable difference in their ability to leverage these relationships to address crises in a timely manner, as evidenced by the multi-year railroad saga in County 5.

Infrastructure and planning were largely discussed in prior literature through the lens of local leadership and local government (Furuseth & Thomas, 1997; Green, 1997; Sokolow, 1990). These connections are present in my analysis as well. What is unique about this dissertation's contribution though, is its focus on the way that planning and infrastructure interact when local leaders strategically invest in targeted corridors and how that impacts the rest of the community. Positive outlier case studies make it clear that community leaders can create what will eventually feel like an intractable, intrinsic location advantage through carefully planned infrastructure investments. This planning does not just positively impact the economic development of the targeted corridor though, but also leverages tax revenues from the developed area to keep tax burdens low elsewhere, allowing local residents outside of it to accumulate more wealth. While two of the four positive outlier communities were located along interstate highways (with another nearby), the quantitative model accounted for this, and they were still outliers.

Additionally, each has rural neighbors with similar location and highway access who did not perform as outliers, pointing to something distinctive about the communities in the case studies.

Findings around entrepreneurship largely met the expectations established by the literature, with the positive outlier communities demonstrating more positive examples of small homegrown businesses than the negative outlier communities (Audirac, 1997; Clugston, 1997; Luloff & Nord, 1993; Macke & Markley, 2006; Weinberg, 2000). As discussed in the leadership section, the contributions of entrepreneurs went beyond simply generating local revenue though, with local business owners also serving a critical leadership role in helping communities survive.

While grants are typically thought of as positive assets for economic development, this analysis provides a unique contribution regarding the differences in the ways negative and positive outlier communities approached grant applications. While all communities in the study made use of grants to fund some infrastructure projects, the negative outlier communities appeared to rely almost entirely on grants for infrastructure spending and seemed to lack a coherent plan and strategy for how to connect various grant-funded projects toward an overall goal. The negative outlier communities also had less diversified local economies, relying almost entirely on, and sometimes being devastated by, the departure of just a handful of major employers.

Limitations

This research, being largely rooted in qualitative case studies, has the same limitations as all case studies, namely, potentially limited generalizability. The findings in this dissertation are based on in-depth analysis of eight rural Georgia counties, so while it is likely that many of the themes would translate to other communities in other parts of the country, some aspects may be unique to the communities in question or limited to the Georgia context. That said, the

quantitative model is rooted in national literature on rural economic development and the independent variables largely demonstrate the relationships to county economic status expected from the national literature, increasing the strength of generalizability. Additionally, the primary themes identified in the qualitative analysis of leadership, infrastructure, relationships, entrepreneurship, and planning are sufficiently general to be applicable outside of Georgia.

Due to a lag in data reporting from ARC and the Census Bureau, along with well over a year spent recruiting participants, conducting elite interviews, and analyzing results, data for the quantitative portion of this study stopped in 2020, just capturing the earliest impacts of the COVID-19 pandemic and accompanying economic shock. Future research could extend the study period further into the 2020s, potentially capturing more long-term pandemic impacts.

Implications for Future Research and Practice

It would be interesting to revisit this research question in several years in order to capture any long-term economic impacts of the COVID-19 pandemic. The impacts of the Great Recession lingered much longer in rural Georgia than in the country overall, so it would be interesting to see how the pandemic effects compare. Several interview subjects shared anecdotes about people moving to the community and teleworking as internet infrastructure improved in recent years. It will take several more years to see if this is a lasting impact and trend or just a series of short-term anecdotes.

This study is not alone in pointing to the importance of individual leadership in rural economic development, but community leadership is a difficult subject to measure. It largely depends on “the eye of the beholder” and falls into the category of “you know it when you see it.” Many rural Georgia communities host community leadership programs, often in partnership with the University of Georgia’s J.W. Fanning Institute for Leadership Development. Further

research could seek to measure the economic impact of these programs by tracking graduates over the course of their careers and trying to find a more measurable, direct economic impact of individual leadership.

Leaders in the positive outlier communities were also generally more adept at navigating relationships with state and federal politicians and other external actors and funders. Further research could focus more specifically on exactly *how* leaders develop these relationships and leverage them to benefit their communities. Similarly, local leadership development programs could utilize these findings to teach local leaders more explicitly how to develop and leverage these essential relationships.

Consolidation of local governments is another subject for future research and practice, as it emerged in one of the positive outlier communities as a major theme. Georgia has eight consolidated governments, four of which are large urban centers while the other four are very small rural communities. These eight counties could make for interesting case studies, perhaps in contrast to similarly sized counties without unified city-county governments. This study could have implications for economic development, as well as local government finance and operations.

While most of the independent variables in Model 1 demonstrated the expected relationships to county economic status, Models 2, 3, and 4 produced less predictable results. This demands future research on how variables associated positively or negatively with economic development overall relate to specific aspects of economic vitality like unemployment, income, and poverty. It is clear from this work that it is not as simple as supposing that a variable associated with positive economic development will be positively associated with any one economic development indicator, and vice versa. Additionally, the consistent negative

relationship between institutions of higher education and economic development across all four models points to the need to further understand how these variables interact. Future research could stratify institutions by size and type and use different combinations of variables in order to continue exploring this relationship.

Policy Recommendations

After conducting this research, three primary recommendations for rural policymakers stand out to me: invest in community leadership development, reform the local government planning process, and explore innovative solutions to combat brain drain. The difference in the quality of leadership across the positive and negative outlier communities is stark, including both elected and appointed officials and informal private sector leaders. While some people, like the family that owns the grocery store and pharmacy in County 1, may just have an inherent desire to serve their community, this sort of dedication could be intentionally fostered. Perhaps other potential leaders would be willing to stay in small towns and maybe even run for local office if they knew there was a pipeline for opportunities to serve and make a difference.

The University of Georgia's J.W. Fanning Institute for Leadership Development facilitates community leadership development programs throughout the state, often in conjunction with local chambers of commerce. These programs help participants understand how to leverage their personal strengths to serve the community. Strategic investment from the state in leadership development programs for the communities that need them most could help to develop a local leadership pipeline in struggling communities. Additionally, investment in and requirement of long-standing and successful governmental training programs from the University of Georgia's Carl Vinson Institute of Government could help local elected officials better understand their roles and responsibilities, particularly regarding planning for infrastructure.

There is a clear gap in planning between the positive and negative outlier communities, with major implications for the quality and quantity of local infrastructure and economic development. All cities and counties in Georgia are required to maintain a comprehensive plan, but the planning process is highly prescribed and specialized, decreasing its utility, particularly for struggling communities that may need it most. Some leaders, like those in County 1 and County 2, have been able to leverage the required planning process to create and follow plans that work for them, but in many other communities, comprehensive plans are completed simply to “check a box” and wind up collecting dust on office shelves.

Georgia already has the infrastructure in place to help communities develop and implement workable comprehensive plans through the Department of Community Affairs and the 12 regional commissions. Simplification and flexibility in comprehensive planning regulations could help more rural communities develop and implement more useful plans, providing a forum to create the sort of long-term strategic vision that has been so beneficial to the positive outlier communities.

Lastly, policymakers should pursue new ideas to stem the tide of brain drain and population loss. The University of Georgia Archway Partnership is currently piloting a new rural internship program called Look Ahead Georgia that could serve as a model. Look Ahead Georgia matches University of Georgia students with meaningful, paid summer internships in their rural hometowns. Throughout the summer, the students also receive professional development and networking opportunities to help them see what life as a working professional could look like in rural Georgia. Strategic investment in programs like Look Ahead at the University of Georgia and other institutions of higher education may help combat brain drain and contribute to rural economies by demonstrating a pathway to career success in small towns.

Leaders should continue to explore and pilot programs like Look Ahead Georgia and other innovative ideas to help rural communities retain or bring back their best and brightest.

Conclusion

The most prominent theme across all eight case studies was that the actions and relationships of individual public and private sector leaders can have major implications for the economic development of rural communities. It is important to note that the outlier communities studied in this research were not selected because they were doing particularly well or poorly economically; rather, they were consistently performing far above or below expectations given their intrinsic advantages and disadvantages. That said, the elite interviews demonstrated clear differences between the two cohorts. Even positive outliers who were not necessarily doing *well* economically showed clear distinctions in leadership, relationships, infrastructure, planning, and entrepreneurship, among other factors, that help to explain their outsized performance. This is the key finding of this dissertation. It should give hope to struggling communities, that even given all of global economic forces beyond their control, it is still possible for individuals to make a difference and help their communities survive.

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APPENDIX A: AVERAGE RESIDUAL BETWEEN PREDICTED AND ACTUAL COUNTY

ECONOMIC STATUS: 2006-2020

County	Average Residual
Miller	29.33959687
Banks	26.1577122
Webster	25.04491891
Talbot	24.76499073
Morgan	24.213108
Putnam	23.9402236
Harris	21.7502436
Lee	20.93625492
Greene	20.48858188
Pulaski	19.27557236
Evans	19.17253121
Washington	18.49971129
Grady	16.24851267
Early	16.00220399
Mitchell	15.81340391
Baker	15.75284824
Wilkinson	15.64576444
Monroe	15.07905546

County	Average Residual
Seminole	14.40027738
Oglethorpe	14.25368099
Pike	12.00656799
Thomas	12.00064321
Jones	11.45892953
Elbert	10.88489873
Bacon	10.28321639
Colquitt	9.41201624
Tattnall	8.328823093
Worth	8.086797787
Brooks	7.974711593
Appling	7.920957007
Decatur	7.829045553
Quitman	7.460539123
Randolph	7.054590097
Pierce	6.751128807
Echols	6.354739753
Wilkes	6.207344627
Habersham	6.147589252
Jasper	6.035380807
Bryan	5.350497507
Tift	5.184181868

County	Average Residual
Marion	5.061774053
Peach	5.04845446
Toombs	4.811445639
Wayne	4.746153911
Stephens	4.585209233
Crawford	4.476865743
Stewart	4.289134513
Polk	3.99733721
Screven	3.768335247
Union	3.706427167
Atkinson	3.59126482
Lincoln	2.950127833
Dooly	2.305251417
Schley	1.747453146
Long	1.35062602
Jefferson	1.159836564
Pickens	1.025079723
Warren	0.968468591
Upton	0.648859447
Taliaferro	0.512138983
Butts	0.383816313
Terrell	0.121245887

County	Average Residual
Candler	-0.01172378
Franklin	-0.255486053
Madison	-0.327020273
Turner	-0.408781715
Montgomery	-0.527180293
Towns	-0.91848732
Coffee	-1.493557711
Dawson	-1.500174707
Gilmer	-1.526272205
Bleckley	-1.816861073
Macon	-1.943968411
White	-2.744458587
Glascock	-2.81108564
Twiggs	-2.852516587
Hart	-3.20943176
Meriwether	-3.411382559
Jeff Davis	-4.626265848
McDuffie	-4.805569783
Lamar	-4.813600176
Cook	-4.950983613
Oconee	-5.349212367
Charlton	-5.432352493

County	Average Residual
Dade	-5.59599146
Ware	-5.695839653
McIntosh	-5.934027313
Fannin	-6.548147687
Calhoun	-7.48114619
Wilcox	-7.854791279
Dodge	-7.967462857
Sumter	-8.21524088
Berrien	-8.740600027
Irwin	-9.90073202
Lumpkin	-10.71495911
Laurens	-11.63530267
Rabun	-11.64863716
Heard	-11.68702594
Emanuel	-11.76265871
Chattooga	-12.57793958
Burke	-12.82426709
Clay	-13.56550651
Taylor	-15.06471769
Murray	-15.5189507
Crisp	-16.2676655
Haralson	-16.95876987

County	Average Residual
Chattahoochee	-18.10790747
Ben Hill	-18.87585434
Lanier	-19.49703776
Johnson	-21.57077551
Hancock	-22.53205279
Baldwin	-22.85594344
Clinch	-23.26964109
Treutlen	-24.43647335
Jenkins	-24.76594249
Brantley	-31.15757233
Wheeler	-50.73961152
Telfair	-53.061532

APPENDIX B: INTERVIEW GUIDE FOR OUTLIER COMMUNITY ECONOMIC DEVELOPMENT STAKEHOLDERS

The following is a draft guide for interviews with community leaders in outlier communities. These interviews are designed to be semi-structured, meaning that the questions below will serve as an outline for conversation, not an exact script. Depending on answers and pace of conversation, I will insert follow-up questions and questions stemming from unanticipated answers as needed.

Getting to Know You

- Please tell me a little about yourself
 - How long have you lived in X County?
 - What is your role in the community now?
 - What roles have you played in the community in the past?
 - How did you get involved in the community?

Rural Economic Development Generally

- Tell me about the history of economic development in your community.
- What sets your community apart from other rural communities in economic development?
- What are your community's most important assets for economic development?
- What are your community's biggest challenges in economic development?
- Tell me about the roles of local government and the local business community in economic development in your community.
- Has race and/or ethnicity impacted the economic development of your community? If so, how?
- Why has your community succeeded (or struggled) in economic development?

Leadership

- What role do local leaders play in economic development in your community?
- Who has been most influential in your community's successes in economic development?
 - Follow up questions as necessary to find out more about these people's roles in the community and specific actions or characteristics that lead to success
- Who has been most influential in your community's failures in economic development?
 - Follow up questions as necessary to find out more about these people's roles in the community and specific actions or characteristics that lead to failure

Philanthropy

- What is the role of philanthropic organizations in your community? Are there any local foundations that invest heavily in the community?

External Capital

- How does your community acquire external funding for major projects?
 - Follow up about grants, political connections, state, and federal government as needed.

Entrepreneurship

- What role does entrepreneurship play in economic development in your community?
 - Ask for specific examples as needed.

Politics

- Tell me about the role of politics in economic development in your community.
 - Probe as needed about local, state, and federal politics.

What did I miss?

- Is there anything I did not ask about that you would like to share that could help tell the story of economic development in your community?

APPENDIX C: ATLAS.TI REPORT

Dissertation Factors grouped by Factor groups

Report created by Sam Perren on Mar 15, 2025

Attitudes and Soft Factors

12 Factors:

- Anti-Development
- Communication
- Communication- Negative
- Communication- Positive
- Diversity
- Diversity- Negative
- Diversity- Positive
- Lack of Understanding
- Minority Support for Growth
- Mistrust
- Negative Attitudes
- Negative Attitudes- County 7

Business

17 Factors:

- Downtown
- Downtown- Negative

- Downtown- Positive
- Entrepreneurship
- Entrepreneurship- County 6
- Entrepreneurship- Negative
- Entrepreneurship- Positive
- Entrepreneurship- Positive- County 6
- Entrepreneurship- Positive- County 7
- Entrepreneurship- County 7
- Grocery Store
- Grocery Store- County 6
- Grocery Store- Negative
- Grocery Store- Negative- County 6
- Grocery Store- Positive
- Grocery Store- Positive- County 7
- Grocery Store- County 7

Financing

6 Factors:

- Bonds
- Grants
- Grants- County 7
- Incentives
- Incentives- Negative
- Incentives- Positive

History**3 Factors:**

- History
- History- Negative
- History- Positive

Infrastructure and Assets**42 Factors:**

- Affordable Housing
- Affordable Housing- Negative
- Affordable Housing- Positive
- Airport
- Arts
- Available Facilities
- Electricity
- Electricity- County 6
- Healthcare
- Healthcare- County 6
- Healthcare- Negative
- Healthcare- Negative- County 6
- Healthcare- Negative- County 7
- Healthcare- Positive
- Healthcare- County 7
- Infrastructure

- Infrastructure- County 6
- Infrastructure- Negative
- Infrastructure- Negative- County 6
- Infrastructure- Negative- County 7
- Infrastructure- Positive
- Infrastructure- Positive- County 6
- Infrastructure- Positive- County 7
- Infrastructure- County 7
- Internet
- Internet- County 6
- Internet- County 7
- Land
- Land- Negative
- Land- Positive
- Location
- Natural Gas
- Natural Gas- County 6
- Natural Resources
- Quality of Life
- Quality of Life- Negative
- Quality of Life- Positive
- Railroad
- School System

- Transportation
- Water and Sewer
- Water and Sewer- County 7

Leadership and Policy

20 Factors:

- Continuity
- Continuity- Negative
- Continuity- Positive
- Leadership
- Leadership- County 6
- Leadership- Local
- Leadership- Local- County 7
- Leadership- Negative
- Leadership- Negative- County 7
- Leadership- Positive
- Leadership- Positive- County 6
- Leadership- Private
- Leadership- Private- County 6
- Leadership- Private- County 7
- Leadership- County 7
- Leadership- State
- Regionalism
- Regionalism- Negative

- Regionalism- Positive
- State Involvement

Philanthropy

3 Factors:

- Philanthropy
- Philanthropy- Negative
- Philanthropy- Positive

Planning and Diversification

12 Factors:

- Economic Diversification
- Economic Diversification- County 6
- Economic Diversification- Negative
- Economic Diversification- Negative- County 6
- Economic Diversification- Negative- County 7
- Economic Diversification- Positive
- Economic Diversification- County 7
- Planning
- Planning- Negative
- Planning- Negative- County 7
- Planning- Positive
- Planning- County 7

Population Characteristics

13 Factors:

- Aging Population
- Brain Drain
- Commuting
- Educated Population
- Generational Poverty
- Generational Poverty- County 7
- Lack of Educational Opportunities
- Telework
- Workforce
- Workforce- County 6
- Workforce- Negative
- Workforce- Positive
- Workforce- Positive- County 6

Relationships

13 Factors:

- Relationships
- Relationships- County 6
- Relationships- Federal
- Relationships- Local
- Relationships- Local- County 6
- Relationships- Negative
- Relationships- Positive
- Relationships- Positive- County 6

- Relationships- Positive- County 7
- Relationships- County 7
- Relationships- State
- Relationships- State- County 6
- Relationships- State- County 7