

FIELDS OF DREAMS OR DIAMONDS IN THE ROUGH:
UNCONVENTIONAL RETIREMENT MIGRATION

by

BENJAMIN C. BOLENDER

B.S., Northern Michigan University, 2004
M.A., Kansas State University, 2006

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

Department of Sociology, Anthropology, and Social Work
College of Arts and Sciences

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2010

Abstract

Retirement age migration is not new. However, it has recently been garnering the attention of both researchers and local policy makers. Older migrants present the possibility of economic stimulus without creating additional pressure on the labor market. That said, a majority of works on retirement migration come to the same conclusions. Conventional theories state that older people move to places based on natural amenities and recreation opportunities. Further, these findings are often utilize a binary dependent variable based on whether a county has achieved a certain level of growth from immigration of all people age 60+. I argue that this view is too narrow. Older age migrants move for a variety of reasons. These motives also vary across different age, sex, and race-ethnicity characteristics of the migrants in question. Further, not all counties that attract older migrants have bountiful natural or recreation amenities. Not only have these unconventional retirement destinations (URDs) had different historical trajectories, they also possess a different kind of amenities that appeal to older people who have relocated to the area. Finally, a focus on binary retirement classifications misses both diversity in retirement patterns and fails to explicitly account for the influence of space in county desirability.

The goal of this work is to address these issues. First, I discuss the history and theories of retirement migration. Second, I develop models accounting for variation across older age migrant groups with varying demographic characteristics. Third, I identify and describe URD counties. Fourth, I present the results of a small-scale survey, community leader interviews, and a new model with additional variables to get at what other kinds of things should be labeled as “amenities.” Finally, I examine the role of space in migration research. My analysis demonstrates that there is much to be learned from looking at spatial models, micro-regional effects, and relative advantage between neighboring counties. Results indicate that conventional theories of retirement migration, while not necessarily wrong, are at least incomplete. The addition of diversity, new amenities, and space may greatly enhance our understanding of older age migration and migration research as a whole.

FIELDS OF DREAMS OR DIAMONDS IN THE ROUGH:
UNCONVENTIONAL RETIREMENT MIGRATION

by

BENJAMIN C. BOLENDER

B.S., Northern Michigan University, 2004
M.A., Kansas State University, 2006

A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

Department of Sociology, Anthropology, and Social Work
College of Arts and Sciences

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2010

Approved by:

Major Professor
László Kulcsár

Copyright

BENJAMIN C. BOLENDER

2010

Abstract

Retirement age migration is not new. However, it has recently been garnering the attention of both researchers and local policy makers. Older migrants present the possibility of economic stimulus without creating additional pressure on the labor market. That said, a majority of works on retirement migration come to the same conclusions. Conventional theories state that older people move to places based on natural amenities and recreation opportunities. Further, these findings are often utilize a binary dependent variable based on whether a county has achieved a certain level of growth from immigration of all people age 60+. I argue that this view is too narrow. Older age migrants move for a variety of reasons. These motives also vary across different age, sex, and race-ethnicity characteristics of the migrants in question. Further, not all counties that attract older migrants have bountiful natural or recreation amenities. Not only have these unconventional retirement destinations (URDs) had different historical trajectories, they also possess a different kind of amenities that appeal to older people who have relocated to the area. Finally, a focus on binary retirement classifications misses both diversity in retirement patterns and fails to explicitly account for the influence of space in county desirability.

The goal of this work is to address these issues. First, I discuss the history and theories of retirement migration. Second, I develop models accounting for variation across older age migrant groups with varying demographic characteristics. Third, I identify and describe URD counties. Fourth, I present the results of a small-scale survey, community leader interviews, and a new model with additional variables to get at what other kinds of things should be labeled as “amenities.” Finally, I examine the role of space in migration research. My analysis demonstrates that there is much to be learned from looking at spatial models, micro-regional effects, and relative advantage between neighboring counties. Results indicate that conventional theories of retirement migration, while not necessarily wrong, are at least incomplete. The addition of diversity, new amenities, and space may greatly enhance our understanding of older age migration and migration research as a whole.

Table of Contents

List of Figures	viii
List of Tables	x
Acknowledgements.....	xi
CHAPTER 1 - Introduction	1
Unconventional Retirement Migration	3
Topic Outline	5
CHAPTER 2 - Background	8
Problems with Conventional Theories of Retirement Migration.....	11
Scope and Trends in Retirement Migration	13
CHAPTER 3 - Data and Methods.....	26
Net Migration Rates as Percentile Ranks	29
URD County Selection	30
Survey/Interview Methodology	34
Regression and Spatial Modeling	35
CHAPTER 4 - Unconventional Migrants	38
Maps and Visual Interpretation.....	38
Regression Modeling	52
CHAPTER 5 - Unconventional Destinations	58
Descriptive Analysis	58
Logistic Regression Analysis.....	68
CHAPTER 6 - Unconventional Explanations.....	71
Survey Findings	71
Interview Results	73
Empirical Testing.....	78
CHAPTER 7 - Unconventional Methods	86
Basic Spatial Regression.....	86
Spatial Extensions.....	91
CHAPTER 8 - Discussion and Conclusions.....	98

Summary of Key Findings	98
Implications	103
References.....	109
Appendix A - Mixed Mode Survey Instrument	112

List of Figures

Figure 2.1: Net Migration Percentile Rank Quintiles Age 60-64 in the 1950s.....	16
Figure 2.2: Net Migration Percentile Rank Quintiles Age 60-64 in the 1960s.....	17
Figure 2.3: Net Migration Percentile Rank Quintiles Age 60-64 in the 1970s.....	18
Figure 2.4: Net Migration Percentile Rank Quintiles Age 60-64 in the 1980s.....	19
Figure 2.5: Net Migration Percentile Rank Quintiles Age 60-64 in the 1990s.....	20
Figure 2.6: Net Migration Percentile Rank Quintiles Age 75+ in the 1950s.....	21
Figure 2.7: Net Migration Percentile Rank Quintiles Age 75+ in the 1960s.....	22
Figure 2.8: Net Migration Percentile Rank Quintiles Age 75+ in the 1970s.....	23
Figure 2.9: Net Migration Percentile Rank Quintiles Age 75+ in the 1980s.....	24
Figure 2.10: Net Migration Percentile Rank Quintiles Age 75+ in the 1990s.....	25
Figure 3.1: Residual Selection Example Diagram.....	32
Figure 3.2: URD Locations with Case Study Sites Highlighted.....	33
Figure 4.1: ERS Official Retirement Destination Counties 2000.....	40
Figure 4.2: Net Migration Percentile Rank Quintiles Total Population Age 60-64 in the 1990s.	42
Figure 4.3: Net Migration Percentile Rank Quintiles Total Population Age 80-84 in the 1990s.	43
Figure 4.4: Net Migration Percentile Rank Quintiles White Population Age 60-64 in the 1990s	45
Figure 4.5: Net Migration Percentile Rank Quintiles Black Population Age 60-64 in the 1990s	46
Figure 4.6: Net Migration Percentile Rank Quintiles Hispanic Population Age 60-64 in the 1990s	47
Figure 4.7: Net Migration Percentile Rank Quintiles White Population Age 80-84 in the 1990s	49
Figure 4.8: Net Migration Percentile Rank Quintiles Black Population Age 80-84 in the 1990s	50
Figure 4.9: Net Migration Percentile Rank Quintiles Hispanic Population Age 80-84 in the 1990s	51
Figure 5.1: URD, CRD, and Non-RMD Population Size 1969-2000.....	60
Figure 5.2: URD, CRD, and Non-RMD Net Migration for 60-64 from 1950s-1990s	62
Figure 5.3: URD, CRD, and Non-RMD Net Migration for 75+ from 1950s-1990s	63
Figure 5.4: URD Employment per 1000 Population by Sector 1969-2000.....	64
Figure 5.5: CRD Employment per 1000 Population by Sector 1969-2000	65

Figure 5.6: Non-RMD Employment per 1000 Population by Sector 1969-2000	66
Figure 7.1: Low and High Spatial Autocorrelation Example	87
Figure 7.2: Spatial Autocorrelation Net Migration Percentile Rank Age 60-64	88
Figure 7.3: Spatial Autocorrelation Net Migration Percentile Rank Age 80-84	89
Figure 7.4: Spatial Lag Demonstration Using Riley County, Kansas as an Example	90

List of Tables

Table 2.1: Correlation of Net Migration Percentile Rank Age 60-64 from 1950s-1990s	14
Table 2.2: Correlation of Net Migration Percentile Rank Age 75+ from 1950s-1990s	15
Table 4.1: Standardized Regression Coefficients Net Migration Percentile Rank Age 60-64.....	53
Table 4.2: Standardized Regression Coefficients Net Migration Percentile Rank Age 80-84.....	55
Table 5.1: Regional Distribution of Natural Amenities and Recreation Dependence	58
Table 5.2: Additional Descriptives: Means for URD, CRD, and Non-RMD Counties in 2000...	67
Table 5.3: URD and CRD Logistic Regression Odds Ratios	69
Table 6.1: Significant Differences in Ratings by Geography (ANOVA).....	73
Table 6.2: Regression Models Using Additional Amenities for Age 60-64.....	82
Table 6.3: Regression Models Using Additional Amenities for Age 80-84.....	84
Table 7.1: Regular, Micro-Regional, and Spatial Advantage Models Age 60-64.....	93
Table 7.2: Regular, Micro-Regional, and Spatial Advantage Models Age 80-84.....	96

Acknowledgements

There are many people that I would like to thank for their help in this dissertation. My committee members especially have made a mark both on my education and personal growth throughout the last few years. Though the words written here are few, the appreciation from which they flow knows few bounds.

It is especially difficult to express the gratitude I owe to Dr. László Kulcsár. Not only did he provide the opportunity for numerous extra-curricular research activities, but also he made sure that no matter what project I was researching, it became valuable to me both as a professional activity and a learning experience. For five years, he has been my advisor, confidant, colleague, and friend. He taught me demography and pushed me to excel. His guidance has almost single-handedly allowed me to build a career. I am glad to include him among my closest friends, and he has my deepest respect.

I would also like to thank Dr. Robert Schaeffer for his “silver-lining” world view and the sharp intellectual contrast between us on a variety of topics. I have greatly enjoyed our debates over the years, regardless of how many I have lost. Further, I credit him with tempering my worldview at a time when I was most critical.

I am grateful for the time I have known Dr. Gayle Doll. Not only did she give me office space in which to work for the past two years, but she has been a guiding influence and a grounding force. I am especially thankful for her practicality, which often kept me from getting lost in the academic clouds.

Dr. Jeff Peterson has shown me a more open and inclusive view of economics than I knew existed. I would also like to thank him for always treating me as an academic, not just another graduate student. Legitimacy is not often conferred to a student, but he always made me feel as though my ideas were worthy of attention. Also, he has given me several wonderful ideas for expanding the models in this work into future research directions.

I would like to thank Dr. Spencer Wood for his unerringly optimistic and energetic approach. Also, I am thankful for his uncanny ability to retain, recall, and cite valuable literature with little or no notice.

Dr. David Brown at Cornell University has been like a second mentor to me. Not only was he partially responsible for drawing me into retirement migration research, he has continued to support both my research and professional networking to this day. He has opened several doors that would remain closed to outsiders and shown me several opportunities that I did not know existed.

I would also like to thank the consortium for Global Research on Water-based Economies (GRoWE) team at K-State for their financial support during my dissertation work and for exposing me to interdisciplinary work. The lessons I have learned around the table with economists, hydrologists, civil engineers, agronomists, landscape architects, and others have laid the foundation for cross-disciplinary understanding and team work dynamics in general.

Scott Sanders at Cornell University has given me a variety of help both with our work on retirement migration and on spatial statistics in particular. I am indebted to him for his assistance and for our friendship. I would also like to thank Richelle Winkler at the University of Wisconsin Madison for providing a variety of data for my work. Rick Chubb at K-State has been very helpful both in terms of managing geographic analysis programs, and in exposing me to a variety of geographical concepts.

Finally, I wish to express my deepest gratitude to my wife, Lois for loving me and putting up with the endless toil of the educational process. Our path has not been easy, nor has my mood always been cheery. However, she continued to stand by me and support me even in the bleakest times. Further, she has been willing and able to be the primary care provider for our two children, Jason and Morgan. She is the pillar of our home, and the love of my life.

CHAPTER 1 - Introduction

Nemaha County is located in northeast Kansas. It is not especially gifted in terms of natural amenities or recreation opportunities. The countryside has the typical rolling hills and grassland associated with much of the rest of Kansas. There are few recreation opportunities that would garner the attention of distant migrants. In fact, there is little that would differentiate it by appearance from many of the other counties in Kansas that are experiencing population aging and population loss.

Much of Kansas has experienced many of the problems associated with aging-in-place. Many of the social concerns and problems with aging in place are considerably magnified in rural settings. Aging in rural areas is most often caused by the out-migration of the young and working age populations. Many small towns have experienced such net out-migration of these younger age groups for much of the 20th century (Glasgow 2003; Kulcsár and Bolender 2006). In general, younger people leave to seek education and occupational opportunities that are not present in their hometowns. In general, areas dependent on extracting natural resources (farming, logging, and mining for example) have struggled to maintain both population and businesses in the US since the 1970s. The history of out-migration from rural communities is well documented (Longino and Haas 1993; Longino and Smith 1998; Redford 1998). Increased rates of education and college completion over the second half of the century merely exaggerate this trend.

With the loss of the young, population aging can create significant challenges for rural communities in relation to their more urban counterparts. These issues include greater levels of elderly poverty, poorer health status, more difficulty in providing services, salient changes in family structure, lack of transportation and quality housing, and general community decline.

As small rural towns lose farms and businesses, they also lose the job opportunities that young people (especially educated young people) need and the services they desire. These working-age people increasingly leave to get a job or go to college and never return. This, in turn, leads to a loss of consumers and tax revenue, contributing to further business failures and crumbling local infrastructure. In a sense, many rural towns that are experiencing population aging are trapped in a negative, de-development spiral with demographic and economic trends

reinforcing each other. For many reasons, most communities want to avoid this downward spiral and seek possible solutions.

Even though Nemaha County has many features that closely resemble the rest of rural Kansas, a more thorough inspection of demographic trends reveals underlying differences. Nemaha is not suffering from the same kinds of population loss as other areas. Even though they are proportionally older than the US average, they are still not quite as old as a large number of rural communities. The reason is that they are the only retirement migration destination county in Kansas as defined by the Economic Research Service (ERS) of the US Department of Agriculture. These are counties that experienced 15 percent or more growth in the population age 60 or above due to migration. What this means for the community is that older people are moving into the area in fairly large numbers. Popular cultural, though, focuses primarily on areas in Florida and Arizona as retirement destinations. Why would elders move to Kansas?

One answer is that have a very highly developed health care system and a strong religious local culture. Both of Nemaha's larger places, Seneca and Sabetha, have fully functioning hospitals. They both also have several nursing homes and assisted living facilities each. The largest, the Apostolic Christian Home in Sabetha, has room for over a hundred residents at different levels of care. Seneca also has several nursing homes and had recently opened a brand new assisted living community that is part of a national franchise. It is these nursing homes that are contributing to the influx of older people. This is supported by looking at age specific net migration rates for the area. People are not moving into Nemaha County as a first move after retirement. If that were the case, we would see higher net migration rates for people in their early to mid-sixties. Instead, we see that people are relocating there at ages beyond 85. Case study interviews conducted in the area confirmed that a majority of the in-movers are coming for the nursing homes and assisted living facilities.

This is by no means amenity migration in the conventional sense. Older people are not locating in Nemaha for palm trees and warm sun. They are moving there because they need help. We might ask, why here and not somewhere else with nursing services? The answer may lie in the religious nature and family orientation of the communities. On the other hand, it could be something else entirely. In the case of Nemaha, research indicates that they possess a unique combination of health services, cultural values, and family connections that lead to drawing older migrants from neighboring counties and states.

Unconventional Retirement Migration

A majority of the literature and research on retirement migration trends focus almost exclusively on the role of natural and recreation amenities. Older people, not being tied to the labor market as many migrants, are not as likely to move because of job opportunities. Further, a majority of older people do not move. Those that do are likely to have greater levels of resources. Therefore, it is argued, older people will tend to go to places that offer the leisure activities that they desire. This makes a great deal of sense, especially since popular culture mirrors these ideas with pictures of retirement villages in high amenity places like Florida or Arizona.

However, cases like Nemaha lead to a number of issues. For example, what factors other than natural and recreation amenities are able to draw older age migrants? We might expect that factors such as cost of living, access to healthcare services, and cultural amenities may be able to exert influence on their decisions. Also, do all older age migrants go to the same kinds of places? Research indicates that people's motivations for moves change as they age. People at younger-old ages may move for amenities, but those in their 70s and 80s often move out of necessity. Either they are going to a cheaper place because of relatively reduced income, or they move because health issues require that they obtain care (through professional or family means). Race and ethnicity may also play a role. Given their lower access to resources, minorities may have constricted relocation choices. Even if money were no concern, it is still likely that people with different racial-ethnic backgrounds would have different preferences in terms of natural, cultural, or community amenities that they find attractive.

This work is an attempt to explore these issues. The first question we might have, based on the title is: What exactly is "unconventional" about this kind of migration? The general definition I have developed is: Unconventional retirement migration is any kind of movement of older age people that does not conform to conventional theory. This sounds somewhat circular. Basically, what is unconventional is defined as a residual category. Conventional retirement migration, by my definition, is the movement of an undifferentiated group of older people toward counties or locations that offer pre-defined natural or recreation amenities. This is the picture presented in the literature. In essence, the story usually runs: Older people are moving to this location because the climate is nice and there is opportunity for outdoor recreation. These stories, though take no account of the influence of differences in characteristics of the older people in

question or that they may be moving to particular areas for completely different reasons. My purpose is to examine these unconventional people, places, and explanations.

We might also wonder why this is important to do. The answer is that large numbers of communities are spending their money promoting retirement migration to their area. They have heard the popular claims that retirees present a wealth of money, job opportunities, and experience for volunteer work. Whether that is or is not true is beyond the scope of this discussion. The point is that both public and private money are being spent in order to promote migration activity that we do not fully understand. While it is true that natural amenity-rich areas like those in Florida will probably always hold a certain appeal for older people, there are several other issues addressed by this study.

To a reader who is pro-development, this work offers hints at additional factors that may lead to retirement migration processes. If it is possible to attract retirees without conventional kinds of environmental and recreational factors, there becomes an opening for a much wider range of geographies to compete. In other words, a particular town may not have bright, sunny beaches, but with strong medical services and the appropriate advertising, there might be a chance that they could attract the older age migrants they seek. Also, information that different kinds of migrants are available could also broaden the pool of areas that seek to cash in on retirees. Perhaps areas with culturally significant landmarks and activities will find a new, older group of people from different racial-ethnic backgrounds to attract.

To more critical eyes, this study also provides information. While it is true that older migrants go to amenity rich locations in large numbers, there are other, less discussed migrant streams that are exposed by this analysis. For example, a county may be labeled an official retirement migration destination, even though it is consistently attracting only those age 85+. Whereas other retirement destinations are benefiting from younger retiree spending, these places are either rapidly building their healthcare infrastructure or facing a number of the economic and social challenges present in counties that may have been experiencing population loss for an extended period of time. Alternatively, an area could be attracting older migrants primarily from a minority racial-ethnic group. The social issues with this phenomenon would both mirror public debates about other minority migrant streams, and simultaneously add a number of new issues to the table. If both young and older migrations combine, there could be social pressure revolving around labor market issues, healthcare provisions, and cultural issues.

I have tried throughout this work not to take a particular political stance on whether retirement migration is bad or good. Much research points to community profitability from drawing older people into the area. However, there are several issues that may lead to an area not wanting to become a retirement destination. First, migrants in general and older migrants in particular come with a certain cultural baggage. In many situations, migrants may be seen as outsiders who are changing the area. This may in fact be true if the movers are characteristically different from the resident population. For example, a small rural community that begins to draw large numbers of upper-middle class older people from a neighboring city may see housing prices rise, certain kinds of businesses appear or disappear, and new, politically active members of the local community with different ideas about the way things should be done. In addition, communities need to be aware that once older people move into the area, they will continue to age. This means that there will eventually need to be appropriate healthcare and transportation services in the area to handle issues as they get older. If these things are not present, the community should be prepared for a cycling effect as retirees move in when young and healthy, but move out as they age and become more infirmed.

In any case, the point of this work is to inform us about the diversity inherent in retirement migration patterns. It holds value for those who are currently spending time and money attempting to attract an older population. There is also value for those who are considering this as a developmental strategy and for researchers in general. Even with recent economic hardships, the Baby Boom generation still has a great deal of resources tied to their home ownership and other assets. They also have the cultural tendency to be driven to live the kinds of lives they want. Though recent figures indicate that retirement migration has slowed in the 2000's, there are many reasons to expect the rates to increase again in the future. If they do, it is in all of our interest to have the most complete understanding of retirement migration that we can. This work is a step in that direction.

Topic Outline

The chapters are organized in an intuitive manner. Chapter 2 covers background material related to the study of retirement migration. This takes two parts. First, I present a summary of the literature currently available on retirement migration. The primary purpose of this is to orient the reader to the general theories surrounding the topic. I will also highlight gaps in the literature

that fail to be addressed by conventional explanations. The second part of the chapter examines historical trends in older age migration patterns over time. Though there is variability by age, many patterns are geographically stable, even across generations. This provides evidence that similar patterns may continue to hold into the foreseeable future.

Chapter 3 discusses the data sources and methodological approach for the book. I explain difficulties with using binary threshold-based measures for understanding a phenomenon as complex as retirement migration. Using raw age/race-ethnicity specific net migration rates provide a suitable alternative, but they do so at the expense of ease in interpretation. I propose an alternative measure using percentile ranks to represent a county “desirability score.” The section then describes the process I used to create a list of “unconventional retirement destinations” (URDs) along with the survey and interview methods used to develop a list of alternative kinds of amenities from these locations. I also briefly present a look at the spatial techniques used to raise space from a statistical annoyance to a meaningful variable in its own right.

Chapter 4 looks at unconventional migrants. First, it presents a series of maps demonstrating the differences in spatial distribution associated with different groups by age and race-ethnicity. Though there are issues with missing data, real differences can be easily observed between the various groups. Following this is a more rigorous statistical examination of the differences. Using multiple regression, each group is compared on the effects of a variety of factors. The findings here clearly support the more intuitive visual interpretation presented in the maps.

Chapter 5 examines unconventional destinations (URDs). First, basic descriptive demonstrate that URDs, conventional retirement destinations (CRDs), and counties that are not retirement destinations (Non-RMD) are somewhat different in terms of population, economic, and migration characteristics and historical trajectories. Further, it is shown through logistic regression that the standard model does a much better job at predicting CRD status opposed to URD status. This supports the conclusion that we are, in fact, looking at something unusual.

Chapter 6 presents findings associated with URD in-depth analysis. The project’s small scale survey and interview portions are discussed and results are presented. Though findings are hampered somewhat by low response rates, both the people in the areas and their community leaders tended to cite the same kinds of factors as contributing to older age migration trends in the area. Using data culled from a variety of source, I also attempt to test some of their assertions

in an effort to move toward a typology that would be of use to policy makers. Though the findings from the model are substantively interesting, unfortunate limits in the data prevent me from creating a typology that can be empirically tested.

Chapter 7 builds on community leader's emphasis on space in creating local migration patterns. Their statements suggest a re-working of spatial analysis and the importance of including space as a causal factor in mathematical models about retirement migration. This chapter briefly presents the basic concepts of spatial regression analysis, then moves on to more unique contributions. First, I argue for the inclusion of micro-regional effects as the influence of several factors may actually extend across county boundaries. Second, I introduce the concept of relative advantage in a spatial aspect. In essence, counties may be seen as more or less desirable simply because of their relative position on various factors relative to their immediate neighbors. Third, I embed regular, micro-regional, and relative advantage models within the context of a spatially controlled regression model. The findings strongly argue for the explicit inclusion of spatial factors in future research on retirement migration.

Finally, Chapter 8 presents a summary of the work. I also draw some conclusions about the necessity of understanding the diversity of retirement migration processes. Finally, I discuss situations where these findings and techniques could be applied to future research endeavors, both in terms of retirement migration and other spatially oriented substantive areas.

CHAPTER 2 - Background

Population aging is occurring across the globe. It is usually defined as an increase in the proportion of people at or above a certain age (age 65 in the US). As of the year 2000, this means that about 12.4 percent of Americans were considered to be “older”. By 2030, older people are projected to make up about 20 percent of the total US population (He et al 2005). This means that about one in five people would be old enough to retire by present standards. Numbers like these are starting to receive attention. We need answers to questions that range from how to provide care and social insurance to where these people will be choosing to spend the later parts of their lives.

At the global level, population aging is a result of the combination of falling birth and death rates (McCracken and Phillips 2005). Fewer children plus greater chances of people living to advanced ages means that, proportionally, the population is getting older. In smaller geographic areas, such as nations and regions, migration can also play a role. Areas that gain young people remain proportionally younger not only through mathematical means, but also because those younger people are likely to contribute to the fertility of their host area. As a counterpoint, areas that are losing their younger people are also losing fertility with them.

This process can affect any geographic level. As the scale of the area decreases, the influence of migration increases (Bean et al 1994). While converging birth and death rates do continue to create change, in US counties and places it is arguable that migration alone accounts for a great deal of the variation in rates of population aging. This has a lot to do with the ease of movement that people enjoy in the US. With limited political barriers to geographic mobility, people tend to be limited only by cost, information, and social networks. In other words, given the money, motivation, and connections, people can change their residence for economic benefit, local amenities, or almost any other reason.

The literature focuses on two ways in which these migration patterns can affect aging in a local area. The first is called aging-in-place. Here, the out-migration of the young, in essence, leaves the older population behind. This is especially prevalent in many small rural towns. Younger people may realize that they need to get a college education to be upwardly mobile. Alternatively, there may be few jobs in their towns that pay well. In both cases, the young have a tendency to move away from the area (usually toward larger cities) and never return. This can

create a mutually reinforcing demographic-economic spiral of decline, which can create real challenges, especially for rural communities (Kulcsár and Bolender 2006 and 2007).

The second way that migration can influence population aging is through retirement migration. In this case, the number of older people in an area is supplemented directly through the in-migration of elderly from other places. This is usually seen as desirable for economic development, especially in rural areas (Reeder 1998). Older people are believed to create extra job growth in the area by demanding services, spending money, and simultaneously not requiring a position in the job market.

Retirement migration can be considered a special case because it can add older people to an area without appearing to create population aging in the classical sense. Many times, younger people will follow older people into an area to fill the jobs created by increased elderly demand. On average, official retirement destination counties (as defined by the Economic Research Service of the USDA) were only about 1 percent higher in terms of the percent age 65+ than non-retirement destination counties (Kulcsár et al 2008). However, we can still think of this as a kind of “population aging” since a rapid numeric increase in the population of older people can induce not only economic growth, but also produce strain on the local social infrastructure.

That said, older age migration in the US is not new. It has been occurring for decades (Johnson and Cromartie 2006), and it has been the subject of research for almost as long (Walters 2002). Interest in the topic, however, has been recently increasing. This is primarily a result of the impending retirement of the Baby Boom generation, the largest US cohort to ever enter retirement age. It has been shown that retirement migration itself is selective in terms of both migrants and destinations (Brown and Glasgow 2008) with motives ranging from natural amenities to need for old age assistance (Haas and Serow 1993; Litwak and Longino 1987; Longino and Bradley 2003).

Much like other theories of migration, research on later-life mobility can be divided into two categories. First are social-demographic models. For example, the lifecourse model argues that movements arise in response to people reaching certain lifecourse events (Warnes 1992a and 1992b). By this view, retirement migration may occur in response to relinquishment of job-based ties, declining income, loss of spouse, or need of assistance, all of which are more likely to affect people at different age groups. Younger people are more likely to have the resources and lack of

need that allow them to seek out geographic amenity hotspots while older or disadvantaged people are more likely to move toward places where they may obtain the help they need.

Second are economic and equilibrium approaches. In essence, people may move in response to their own personal characteristics or place preferences. Walters (2000) discusses the ideas of intention and enabling attributes. Many may have the intention to use natural amenities and recreation opportunities; but younger, whites are more likely to have the necessary level of enabling attributes (such as money and cultural access) in order to use them. Taking a more economic approach, Clark and Hunter (1992) extend this model to cover the relationship between amenities in an area and the “rent” that it costs to live there. In general, local wages, rent, and amenities are in relative balance or equilibrium. However, changes in the value of amenities or the characteristics of the potential migrant pool (such as aging) can move faster than wages and rents can keep up, thus creating motivation for migration.

In any case, retirement migration has become progressively more important for policy makers. This is because it tends to be selective for people with greater resources, and many researchers view it as contributing to economic growth and development in the destination communities (Glasgow and Brown 2006; Haas and Serow 1993; Serow 2003; Reeder 1998). This growth could be for several reasons. First, middle and upper-middle class older people moving into a community may bring resources to spend without taking up jobs (Fagin and Longino 1993; Haas and Serow 1993). Second, younger people are believed to follow the old, filling the service and healthcare jobs created by retiree demand (Reeder and Glasgow 1990). Third, the relationship could be spurious. It has often been argued older people tend to go to places with natural amenities and recreation opportunities (Johnson and Beale 2002; McGranahan 1999). These are also the places that tend to have higher rates of population growth in general.

Regardless of the conceptual approach taken, much research on later life migration reaches the same kinds of conclusions. The conventional story is that older people move to a place generally to gain access to local amenities. Specifically, a majority of recent studies cite the correlation between binary retirement destination counties (as defined by the ERS) and either natural amenity scales or recreation county classifications (Johnson and Beale 2002; Johnson et al 2005; McGranahan 1999). However, there are a number of “official” retirement destination counties that do not conform to this pattern.

For example, as discussed, Nemaha County does not have palm trees, babbling brooks, beautiful mountains, casinos, or extensive shopping opportunities; yet it is still a retirement migration destination. Nemaha is attracting older people through a unique combination of religious communities, job opportunities for younger families, and a proportionally high availability of nursing care services for the aged. Manufacturing plants and health services in the area allow younger couples to find semi-skilled and skilled employment. The religious culture provides larger families with tighter family and community ties while nursing homes provide services that older people need. Together, these things are able to draw retirees from several states away (Bolender 2010; Kulcsár and Bolender 2008).

The economic structure can also be shown (through quantitative modeling) to contribute to rural retirement migration more directly (Bolender and Kulcsár 2008). Younger retirees look for places with larger businesses, less farm employment, less urbanized settings, higher natural amenities, and less health services. Basically, they follow the amenity migration pattern described above. Older retirees, however, seem to move for a completely different set of reasons. They are attracted to smaller businesses, more service employment, more urbanized areas, lower natural amenities, and a higher concentration of health services.

Problems with Conventional Theories of Retirement Migration

Here lies the problem. If a place can be considered an “official” retirement destination without a significantly large endowment of conventional draws like natural or recreation amenities, why does so much research focus on only these things? What makes URDs like Nemaha County possible? If older-old people are not attracted to the same things as younger-old people, what other differences might there be by sex and racial-ethnic category?

As can be seen, the conventional explanations leave a number of questions unanswered. The first question I seek to address is whether the strength of various kinds of attractions varies by the age, sex, and racial-ethnic composition of migrant groups. To paraphrase, not all retirees are created equal. Research up till now has focused primarily on binary classifications based on a threshold percentage of in-migrants at or above the age of 60. However, some research has pointed to varying motivations over the later life-course. For example 60 year olds may indeed seek out babbling brooks and sunny beaches while those aged 80 might gravitate toward urbanized areas and greater access to assistance. It is also important to examine differences by

sex and race-ethnicity. These have received relatively little attention in terms of later-life migration patterns (with the exception of Beale and Fuguitt 2006 and Longino and Smith 1991). It is likely that women, either due to cultural factors or demographic situation (tending to reach more advanced ages and being more likely to be widowed), may move more toward assistance while men may continue to move more toward recreation. Further, black and Hispanic retirement migration (though it occurs in lower rates) would be geographically localized to particular areas. For example, there is an idea that blacks are moving back to the South due to complex motives and emotions surrounding deeply held conceptions of “home” (Stack 1996).

A further question deals with issues of measurement. Often retirement migration is studied either through individual level interviews or at the county level through the use of binary classification based on migration/population growth thresholds. This work expands upon the usual methods by examining age/sex/race-ethnicity specific net migration rates and their percentile ranks directly. The use of standardized rates broken down to particular five year age groups will enhance our overall picture of retirement migration and allow us to begin to investigate questions of diversity and exclusion, both in terms of destinations and choice patterns by type of migrant. These questions have been sorely lacking in most large scale research on this topic.

Second, I plan to explore, define, and examine unconventional retirement destinations themselves. This work will examine them in terms of their descriptive differences from their more conventional counterparts. Further, we should ask what factors make URDs desirable places to move in people’s older years, even without the conventional amenity draws? In other words, is there something about the economic, business, demographic, or social structure in these areas that is particularly appealing to retirees, irrespective of local natural resources and recreation activities? Different draws appeal to different people. Researchers’ general preoccupation with natural and recreational amenities has led to the exclusion of other factors that may be of interest and measurable, such as the availability of health services, the relative cost of living in an area, and access to different kinds of historical and cultural amenities. Here these will be explored in two ways. Surveys and community leader interviews in selected URD counties will provide a qualitative foundation for variable selection and large scale modeling. Although, given the qualities of the data, a complete explanation is likely impossible at this time,

these models will give us a sense of what other kinds of things should be attracting the attention of retirement migration researchers.

This work will lay the foundation for future research to attempt the development of a model or set of models for generating retirement migration in URD areas. If there are identifiable patterns of retirement destinations that do not fit into the usual explanations, it would be desirable to develop a kind of planning typology or set of archetypes that could be of use to local area planners. This typology could inform policy decisions by helping to illuminate what is either probable or improbable for the given community. This would be true for at least two groups. First, a number of small rural areas currently face the challenges of depopulation and economic decline. If it is possible to “create” a retirement destination irrespective of geographic location or natural environment, this would create an added development strategy for rural community leaders whose options are running short. Second, several areas are spending money trying to promote their community as a retirement destination. If it is shown that URDs are simply the product of historical accident and cannot be “built,” it may encourage planners in these areas to divert money toward more achievable ends. In any case, these recommendations would need to be couched in the particular demographic, social, economic, and historical trajectory of the place in question.

Scope and Trends in Retirement Migration

It is important, also, to understand changes in retirement migration patterns over time. One argument against this kind of research is that older people only make up a small proportion of all the movers in the US. Not only are they a small proportion of migrants, they are also much less likely to move. Between 2002 and 2003, only about four percent of all people age 65 or above changed their permanent residence (He et al 2005). However, we must note that that four percent was equivalent to about 1,371,000 people. Of those, about half (just under 49 percent) moved across county or state borders. Further, we should remember that these are single year estimates (He et al 2005). Looking at a broader time period (five or ten years) would most likely reveal even higher proportions of movers among the older population. While older movers account for only about 3.7 percent of total domestic migrants in the US, they are still a numerically large group that deserves attention.

A second argument against attention to older age movement is retirement migration patterns from the 1990s are no longer valuable. The Baby Boomers make up a very different generation than those that have come before. Some might argue that their increased resource pools, reputation for opinionated choices, and increased acceptance of the information age would lead to very different relocation outcomes than for any past generation. On the other hand, it is possible that recent economic hardship, public distrust in the economy, and more volatile job markets will both delay the retirements of Baby Boomers and effectively cut or redirect their migration decisions for several years to come.

I would respond to these criticisms by noting the relative stability of retirement migration patterns both within age groups and over time. Table 2.1 shows correlation coefficients for county attractiveness from the 1950s to the 1990s among movers age 60-64 (using percentile ranks of counties on net migration rates in order to allow easier comparison between high and low migration decades). Though patterns were not very strongly related in earlier years, we can see that attractive counties in the 1970s, 1980s, and 1990s all achieve correlations above .70. This means that areas that were attractive to 60 year olds stayed relatively stable for three decades. The '70s, '80s, and '90s were very different in terms of the characteristics of retiring cohorts, economic change, and cultural variation. If the same kinds of places attracted younger retirees under those conditions, it is not unreasonable for us to assume that similar areas will have remained attractive during the early 2000s and the upcoming Baby Boom transition.

Table 2.1: Correlation of Net Migration Percentile Rank Age 60-64 from 1950s-1990s

	<i>1960s</i>	<i>1970s</i>	<i>1980s</i>	<i>1990s</i>
1950s	0.407***	0.237***	0.202***	0.013
1960s		0.629***	0.548***	0.449***
1970s			0.722***	0.705***
1980s				0.72***

p<.001=***, p<.01=**, p<.05=*

However, based on my argument, we should also examine the distribution of older age migrants. Table 2.2 shows these correlations among the 75+ age group. Again, we see similar patterns, though the relationships are not as strong. Correlations among the last three decades of data range from about .46 to about .56. While these relationships are surely not as strong as for younger retirees, they do represent a significant association between attractive counties in the

later decades of the century. Though not presented here, tables for migrant groups age 55-75+ were created and examined. They show a relatively smooth decline in association as the age of the group increases. This is understandable, considering that the older-old are more likely to move for family and health related reasons, while those who are younger are moving more based on personal preference.

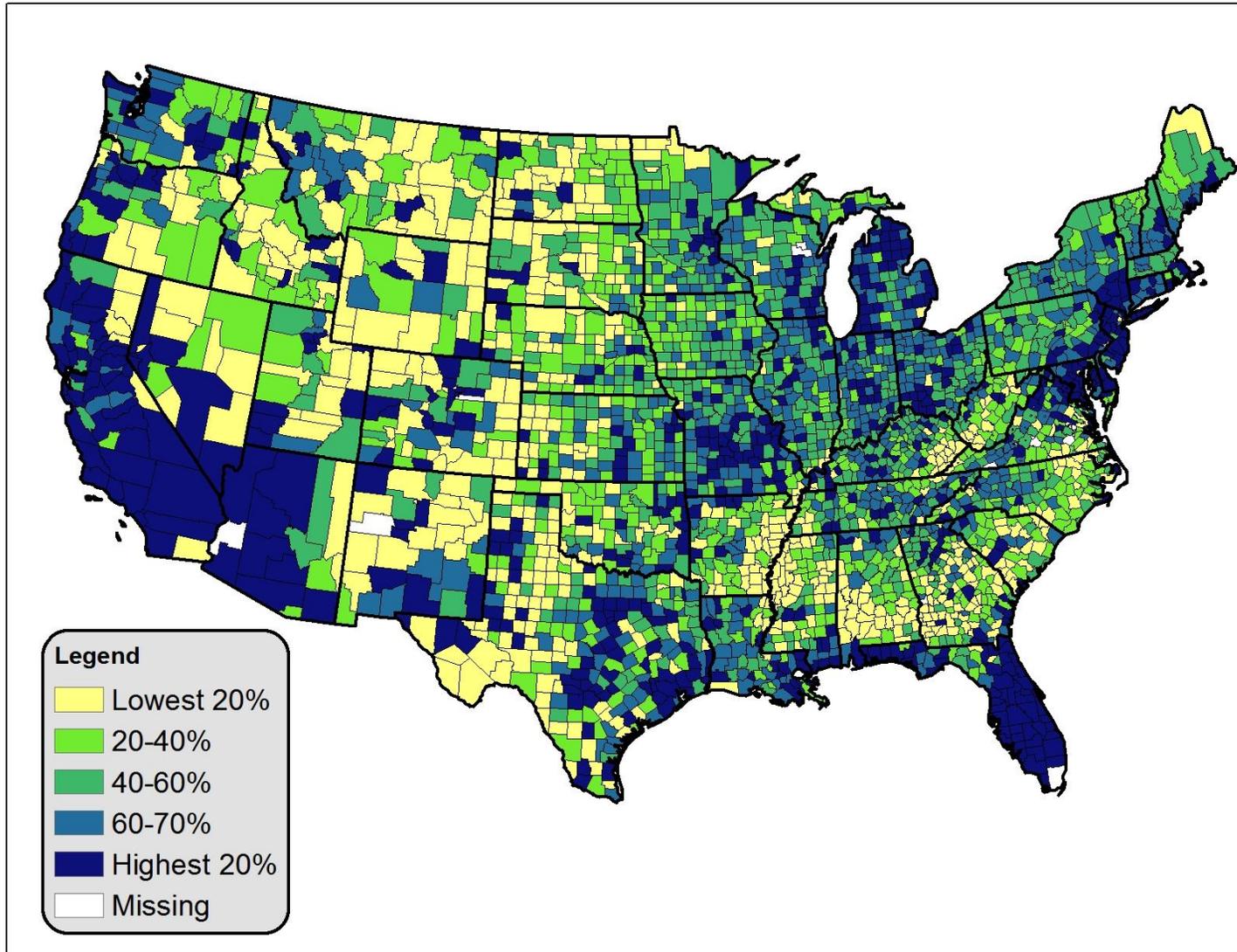
Table 2.2: Correlation of Net Migration Percentile Rank Age 75+ from 1950s-1990s

	<i>1960s</i>	<i>1970s</i>	<i>1980s</i>	<i>1990s</i>
1950s	0.487***	0.4***	0.372***	0.288***
1960s		0.532***	0.48***	0.327***
1970s			0.559***	0.459***
1980s				0.482***

p<.001=***, p<.01=**, p<.05=*

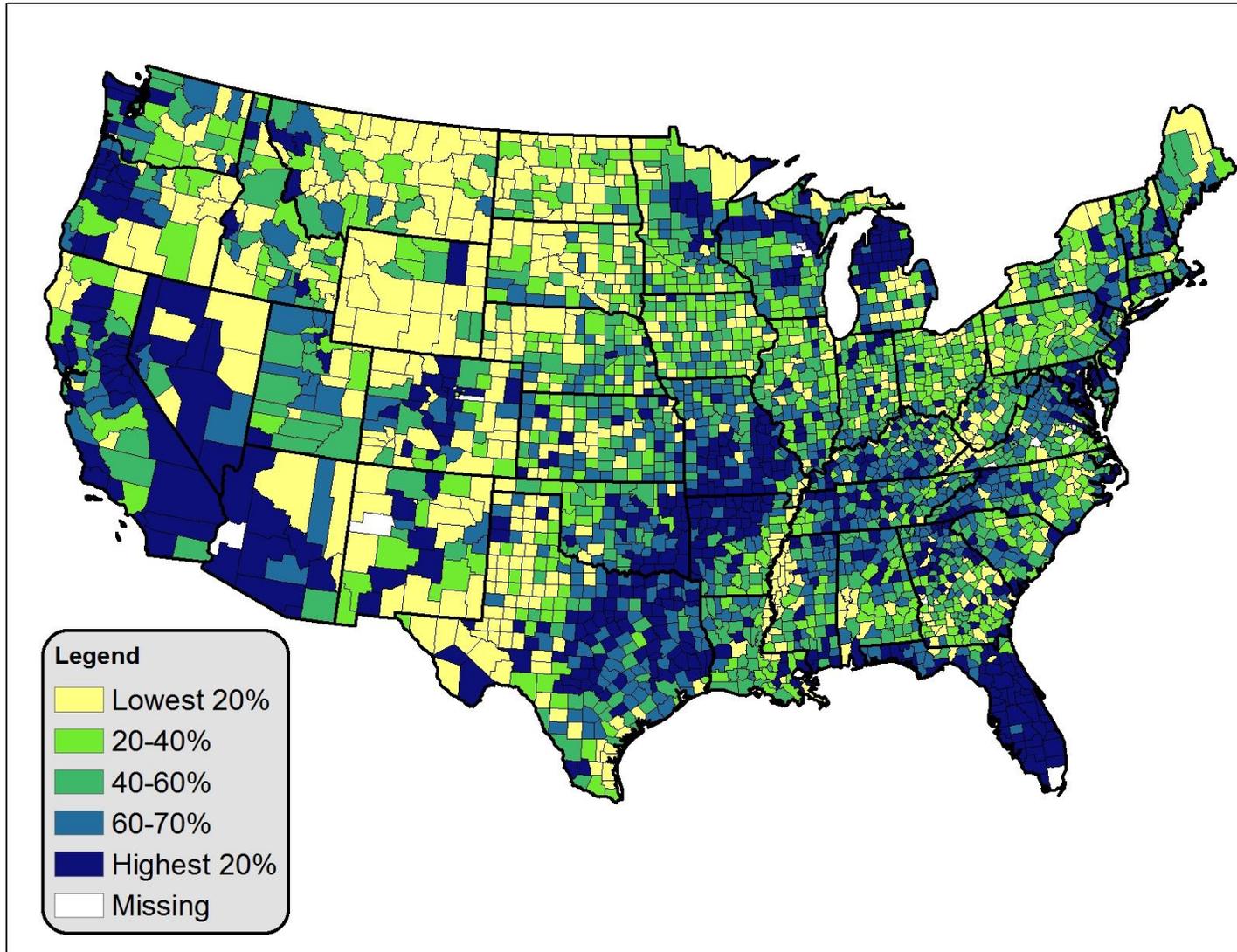
We might also want to examine these distributions visually. Figure 2.1 through Figure 2.10 present the percentile ranks for US counties based on their net migration rates at age 60-64 and 75+ across decades from the 1950s to the 1990s. The maps are divided into quintiles for easier viewing. We can see a great deal of spatial clustering in the younger age group (this is mirrored in the 65-69 group, though that is not shown). In the higher age group, there is also some spatial clustering, though it is much more limited. In any case, we can see that regional patterns tend to remain fairly consistent over time, especially in the younger ages where a majority of migration occurs.

Figure 2.1: Net Migration Percentile Rank Quintiles Age 60-64 in the 1950s



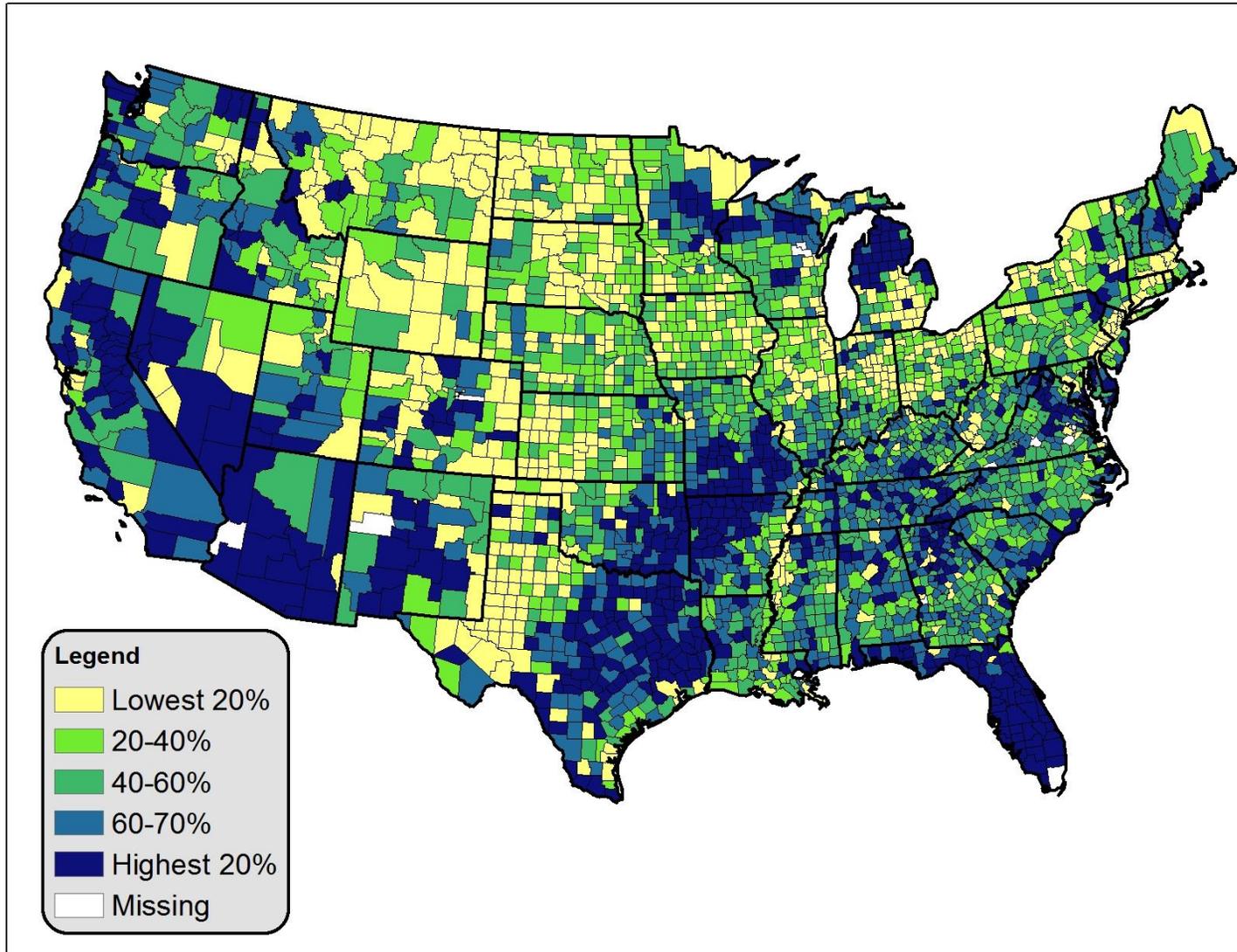
Data Source: Bowles and Tarver 1965

Figure 2.2: Net Migration Percentile Rank Quintiles Age 60-64 in the 1960s



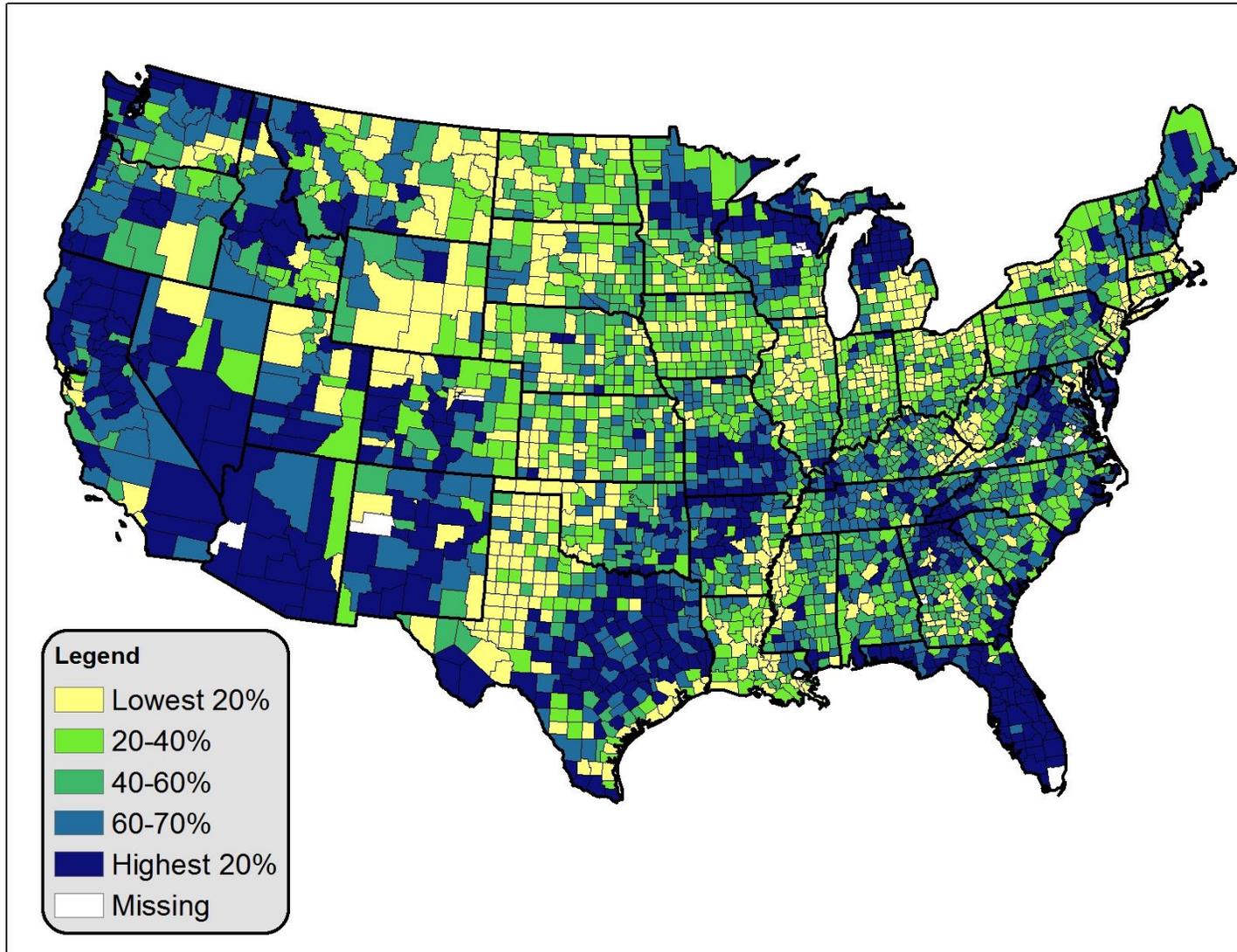
Data Source: Bowles et al 1975

Figure 2.3: Net Migration Percentile Rank Quintiles Age 60-64 in the 1970s



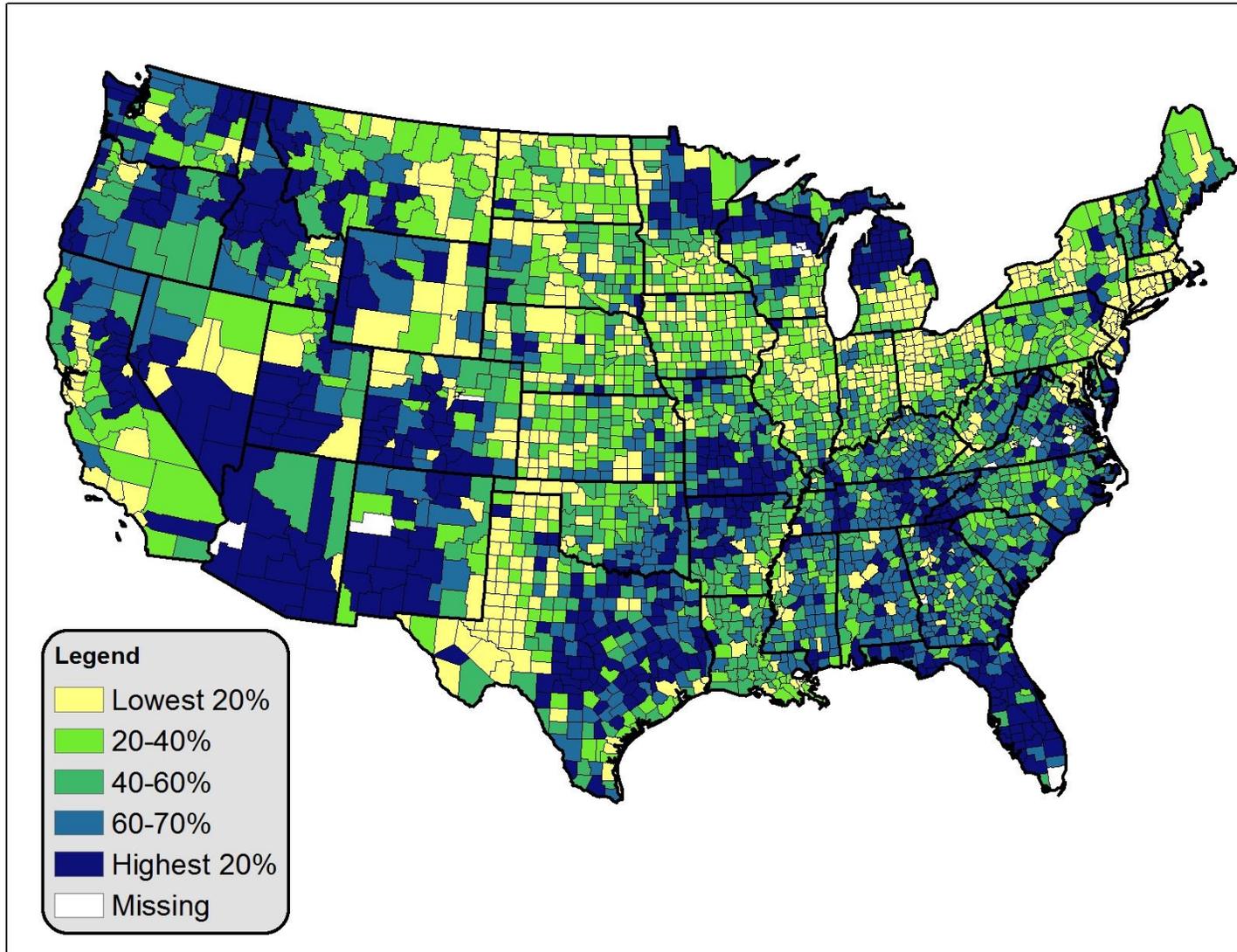
Data Source: White et al 1987

Figure 2.4: Net Migration Percentile Rank Quintiles Age 60-64 in the 1980s



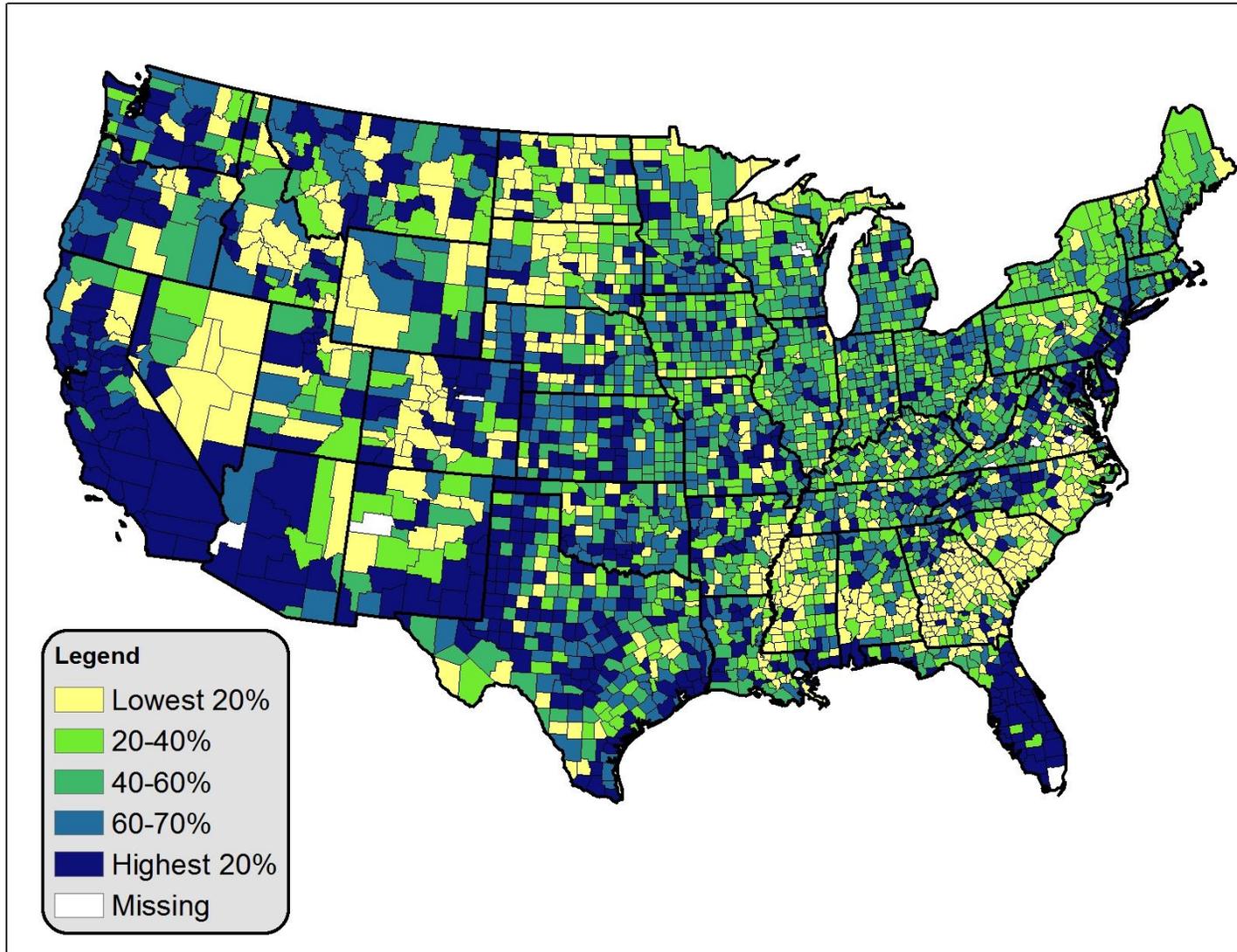
Data Source: Fuguitt et al 2010

Figure 2.5: Net Migration Percentile Rank Quintiles Age 60-64 in the 1990s



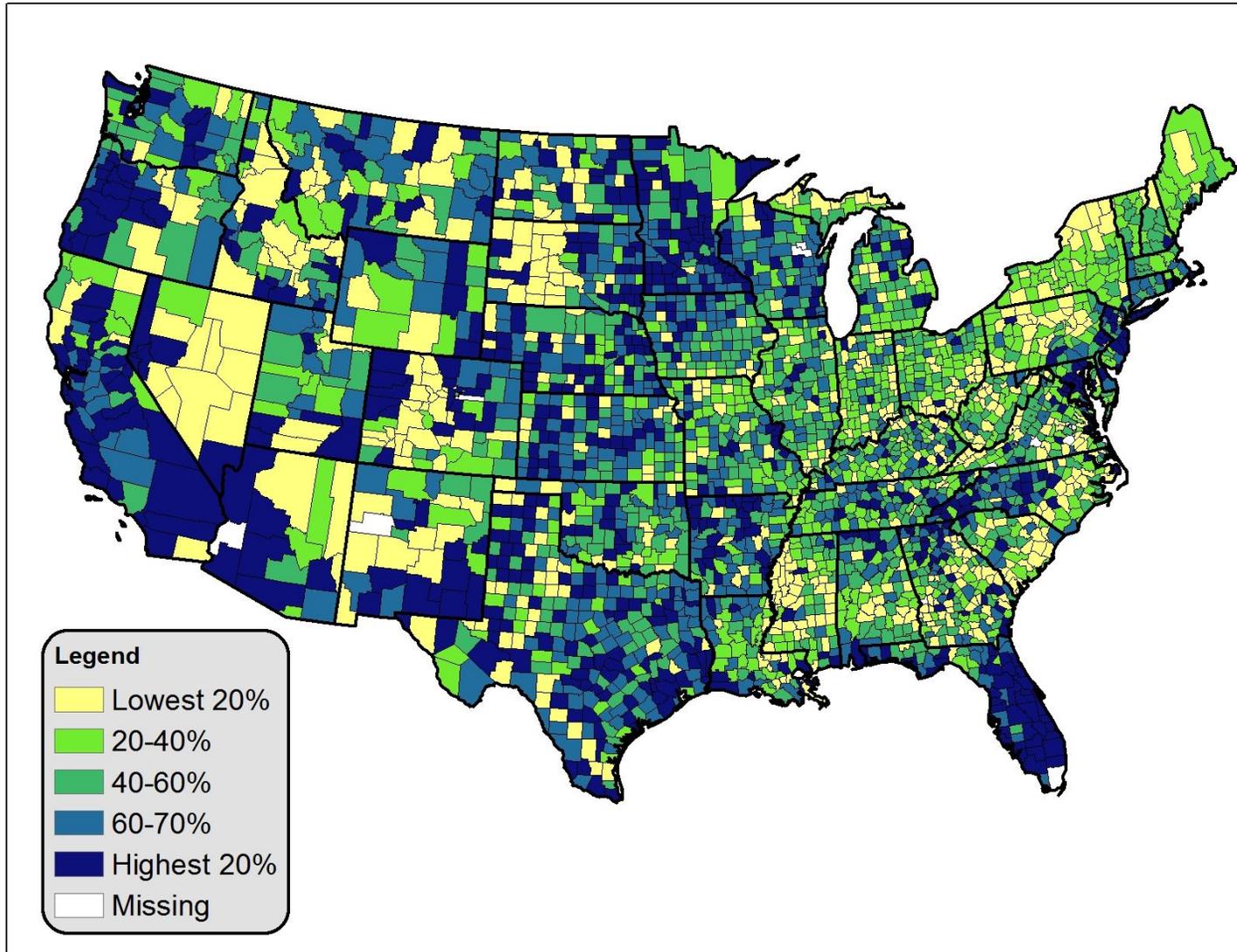
Data Source: Voss et al 2004

Figure 2.6: Net Migration Percentile Rank Quintiles Age 75+ in the 1950s



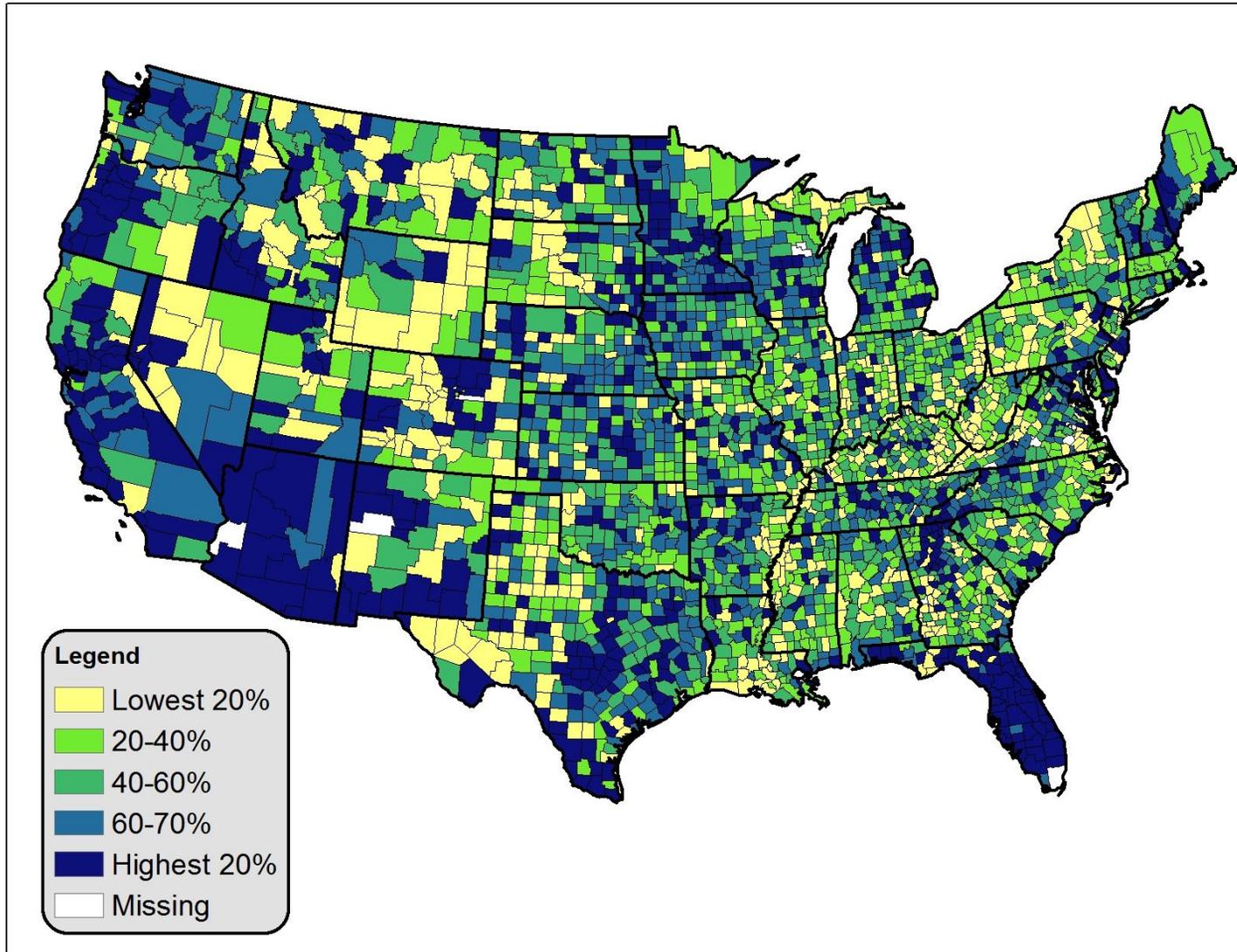
Data Source: Bowles and Tarver 1965

Figure 2.7: Net Migration Percentile Rank Quintiles Age 75+ in the 1960s



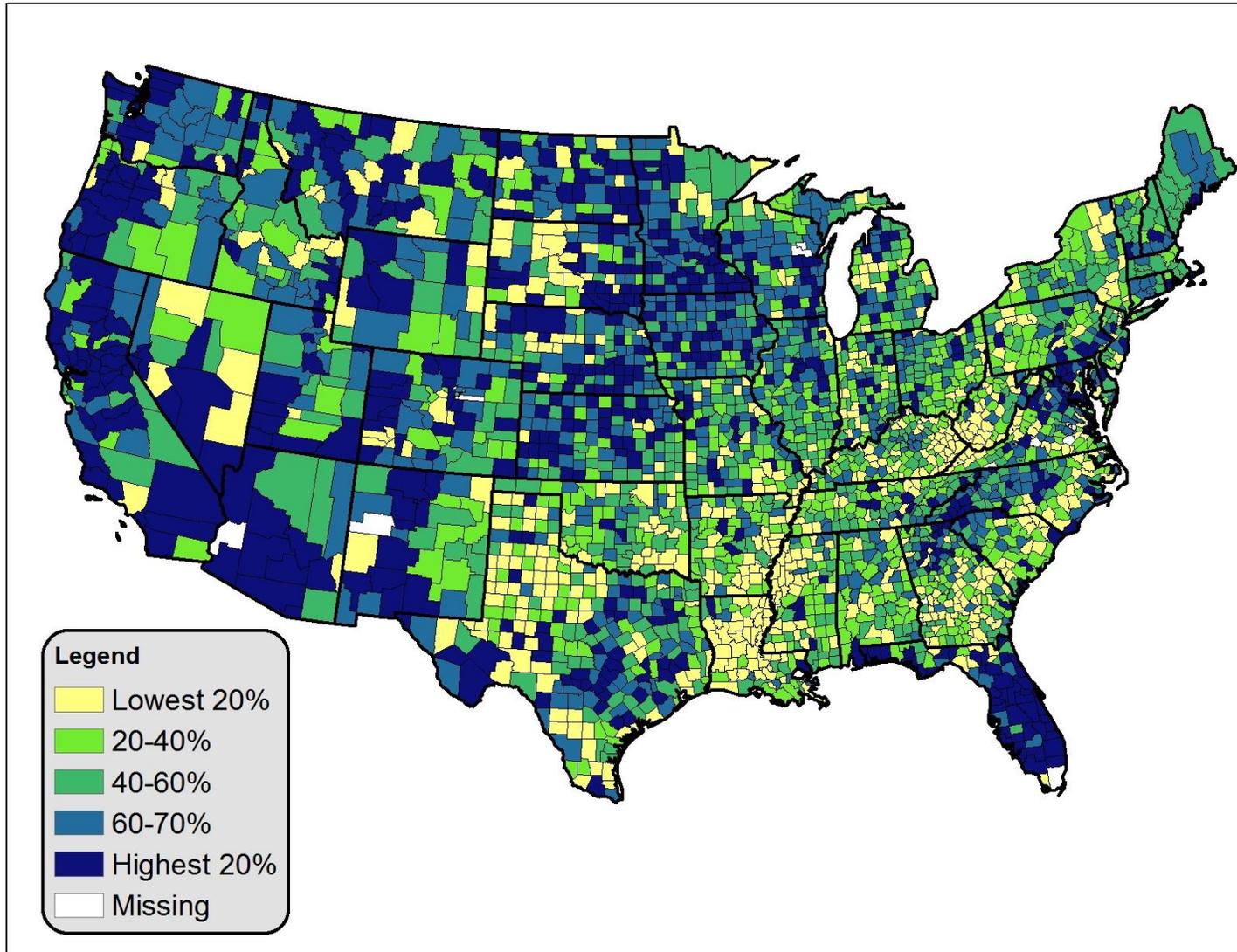
Data Source: Bowles et al 1975

Figure 2.8: Net Migration Percentile Rank Quintiles Age 75+ in the 1970s



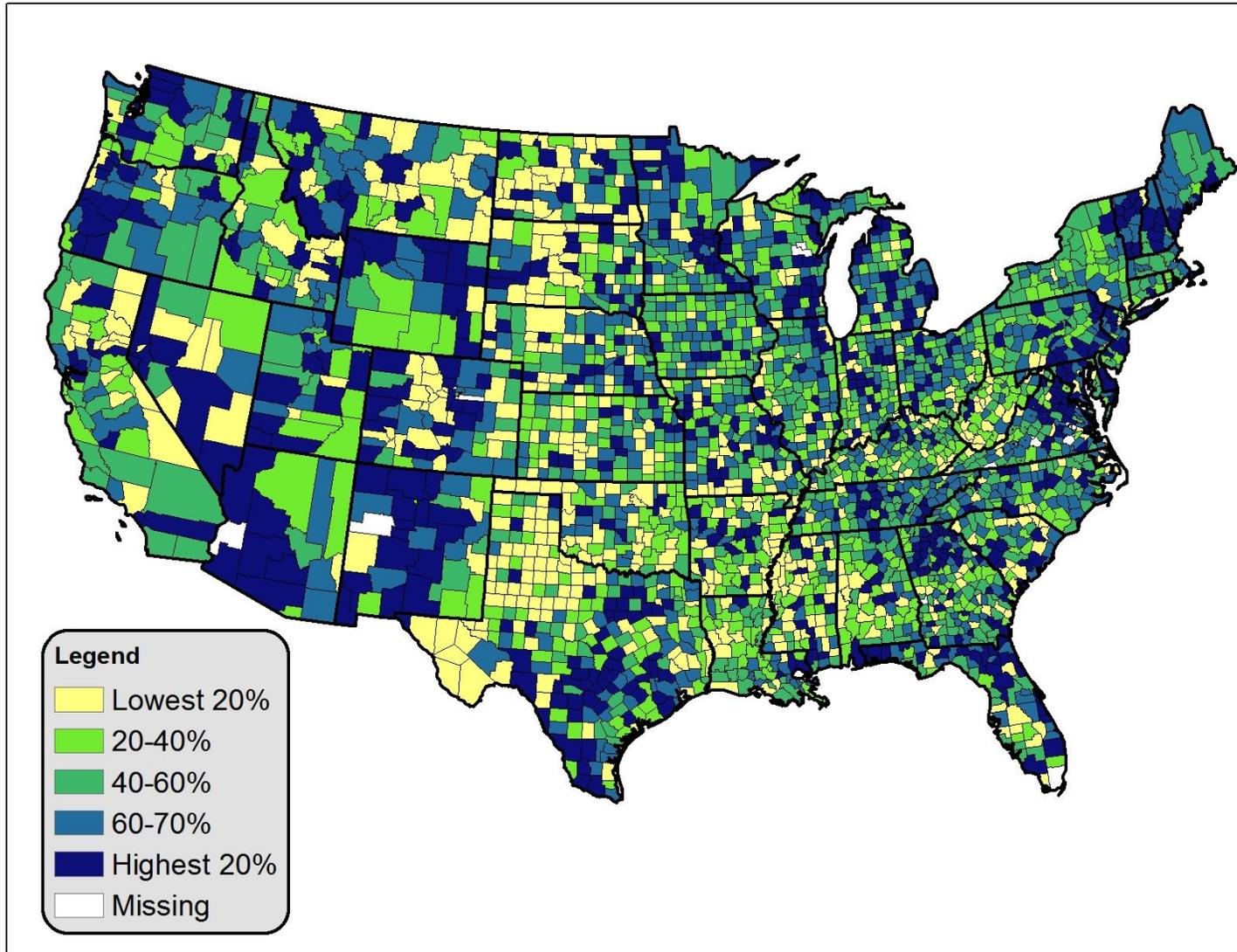
Data Source: White et al 1987

Figure 2.9: Net Migration Percentile Rank Quintiles Age 75+ in the 1980s



Data Source: Fuguitt et al 2010

Figure 2.10: Net Migration Percentile Rank Quintiles Age 75+ in the 1990s



Data Source: Voss et al 2004

CHAPTER 3 - Data and Methods

This project had three major phases. The first phase consisted of large scale secondary data analysis using all US counties (both metro and nonmetro). Though much research on older age movement focuses on nonmetropolitan counties, examining both metro and nonmetro areas allows a much more complete look at migration patterns along with loosening the analysis' dependency on temporally shifting definitions of nonmetro/metro classifications. The overall purpose of initial modeling was to explore county level older age migration patterns across the country and to identify counties that could be considered as unconventional or not fitting the standard amenity migration theory. These led to the regression models discussed in Chapter 4 dealing with unconventional migrants. This analysis also led to the selection of several unconventional retirement destinations (URDs). In the second phase, I selected eight counties out of the pool of URDs to provide a more detailed view of the kinds of areas that attracted older migrants. People at randomly selected addresses were surveyed in a limited fashion. The primary use of these surveys was to inform a second wave of community leader interviews in the case study locations. These interviews took an in-depth, top-down perspective to community planning in these URD locations. Telephone interviews with community leaders and local service providers provided both detailed information on the specifics of older age migration in the area and a more general picture of the local situation. The findings then informed a second, more intensive quantitative analysis of retirement migration in general. This third phase seeks to expand our knowledge of retirement migration through the addition of variables measuring alternative "amenities" and the use of complex spatial statistical techniques to account for clustered values on the dependent variables, micro-regional independent variable effects, and relative difference measures between counties and their resident county clusters.

Data for this study come from a variety of sources. All variables represent 1990 unless otherwise specified. This is to avoid temporal ordering difficulties in predicting net migration rates in the 1990s. The county level US data were compiled from a variety of sources. Many of the demographic and socioeconomic variables come from the United States Decennial Census of the Population (1970-2000). These include the population size (here presented as a natural log), percent change in population size between 1980-1990 (as a control for growth rate), percent of

the population at 65+ (to represent general aging), percent of residents who lived outside the county in 1985 (as a general measure of migration activity), percent urban (to examine relative access to goods and services), percent age 25+ who had completed some college (as a rough measure of educational attainment), percent white non-Hispanic (as a proxy for diversity), percent under the poverty line (as a measure of economic health), and median household income (also measuring economic conditions).

Employment sector data and the average number of employees per establishment were compiled from the Regional Economic Information System (1969-2000) and County Business Pattern data (1986-2000) respectively. Employment sectors here are divided into five broad Standard Industrial Classification (SIC) codes: farming, manufacturing, retail, government, and services. The definitions of these categories have received considerable debate in a literature that is beyond the scope of this work. However, they do represent a consistent classification from 1969-2000. After 2000, employment was divided into the North American Industrial Classification System. Population measures were also obtained for individual years from 1969-2000 through the Population Estimates program indirectly through the REIS data release. I used these to create measures of employment by sector per 1000 population. This makes these numbers roughly comparable across US counties of various size. Together, they represent a reasonable picture of employment concentrations in the area. Average employees per establishment was used as a proxy for average business size. Again, this represents a proxy for the prevalence of large or smaller businesses in the area.

Natural amenity scores come from the McGranahan natural amenity scale. This scale is based on the addition of standardized scores on six measures: average January temperature, average days of January sunshine, low winter-summer temperature gap, low average July humidity, topographic variation, and the natural log of the proportion of the county covered in water. Though these were measured in the mid-1990s, it is reasonable to assume that these factors remain relatively stable over time. The problem is that, while seemingly intuitive, there are issues with using this measure. For example, it fails to account for forest cover (a key component to a variety of outdoor activities). This research also utilizes a measure of recreation activity in the county. Previous research has focused on the binary “recreation county” classification created by Johnson and Beale. That measure was undesirable for this analysis both because it is binary in nature and because it was only applied to nonmetropolitan counties. As an

alternative, I was fortunate that the Economic Research Service provided a raw recreation score created from combined standardized values on counties' employment in recreation activities, revenue from recreation businesses, and amount of seasonal housing in the area. Though much of this work will criticize these measures, I am not trying to argue that they are necessarily wrong. I only argue that the explanation provided by using only these two measures is incomplete at best and misleading at worst. That said, they are included here both to accentuate the changes in the relationship between these factors and migration and as appropriate controls demanded by the literature.

Measures of other kinds of amenities come from a variety of sources. Data on cultural recreation sites, national forests, historical sites, and general medical employment were compiled by the Environmental Systems Research Institute. These were converted from point and polygon data and attached to county level shapefiles. Recreation sites, historical sites, and medical employment were divided by the population of the county, giving a ratio per 1000 people. National forest area was divided by the total area of the county, giving a measure of the proportion of land area occupied by these features. This was to prevent extremely large counties from inadvertently skewing the results. Information on median monthly owner costs and gross rent were taken from the 1990 housing data provided by the US Census Bureau. These measures serve as a proxy for cost of living in the area.

Age/Sex/Race-Ethnicity specific net migration rates for 1990-2000 were drawn from data compiled by Voss et al (2003) from the US Census of the Population. They used survival methodology to estimate the expected population of whites, blacks, Hispanic, and "other" race groups for each sex across five year age groups from 0-85+. In essence, this involved taking the population of each group in 1990, adding births and subtracting age specific deaths to arrive at an expected population in 2000 (assuming no migration). Subtracting the observed 2000 population value left a measure of total net migrants. These migrant numbers were then divided by the expected population to yield per person age/sex/race-ethnicity specific net migration rates for each group across most counties. The primary issue with these data was that race-ethnicity information was relatively limited. As such, the discussion of racial differences will be somewhat limited, though still informative. Age specific net migration rates used for historical comparison were drawn from a variety of sources depending on whether they were from the

1950s (Bowles and Tarver 1965), 1960s (Bowles et al 1975), 1970s (White et al 1987), 1980s (Fuguitt et al 2010), and 1990s (Voss et al 2004).

Net Migration Rates as Percentile Ranks

By themselves, the use of actual group specific net migration rates provides a significant advantage over the more typical binary “retirement destination county” classification used by the Economic Research Service (ERS) of the USDA. Not only can these data be aggregated to mimic the ERS classifications for different age/sex/race-ethnicity characteristics, they can also be used in their raw, five-year age group form. The seven groups initially analyzed were 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, and 85+. The analysis of only the 60-64 and 80-84 groups are presented in Chapter 4 to preserve empirical clarity. There was a rough pattern that changed relationships as the group got older, as will be discussed. Race-Ethnicity and sex were also initially divided into seven comparison groups, though only total population, non-Hispanic whites, non-Hispanic blacks, and Hispanics of any race will be presented. An “other” category, including Asians, Native Americans, Alaskan Natives, and Pacific Islanders among others, was excluded from this analysis. The separate analyses splitting each group into male and female showed that almost no differences existed between them.

There are a few problems, though, with using net migration rates in their raw form. For one thing, the distributions of net migration rates almost always exhibit a high degree of positive skew. This is because, at a per person level, net migration rates have a lower bound of -1 and an upper bound of infinity. In layman’s terms, a county can gain any number of people, but it can only lose what it had at the beginning of the period in question. For another, it is difficult to intuitively interpret regression coefficients in terms of raw net migration data after it has gone through a series of power transformations to correct for skew. As a solution, I developed county percentile ranks on net migration rates. All counties were ranked on their level of net migration with -1 receiving the lowest rank. Ties were given the average rank of their respective locations. These ranks were then converted to percentile ranks by subtracting .5 from the ranks of the scores, dividing by the maximum rank (or the sample size for each age/sex/race-ethnicity group), and multiplying by 100.

The resulting distribution of percentile ranks still differs from the appearance of a normal curve, but there are several advantages to this approach. First, the deviation from normality is

much less drastic. Frequency distribution histograms present a primarily rectangular shape with lower bars on the tails of the distribution as opposed to the extreme skewness associated with the raw migration scores. A second advantage is that percentile ranks are easily comparable across groups. For exploratory comparative work such as this, the ability to compare similar models across different groups could be compromised by the various degrees of power transformations necessary to approximate normality within each of the groups. Finally, percentile ranks have a much more user-friendly interpretability for policy makers and the public. They can be seen as a kind of “desirability score” for each county. In essence, what the models will be predicting is the influence of various factors on the overall relative desirability of one county over others for people in particular age/sex/race-ethnicity groups. It is easier for lay people to understand statements about a factor raising the desirability rank by some percentage as opposed to raising the natural logarithm of the net migration rate.

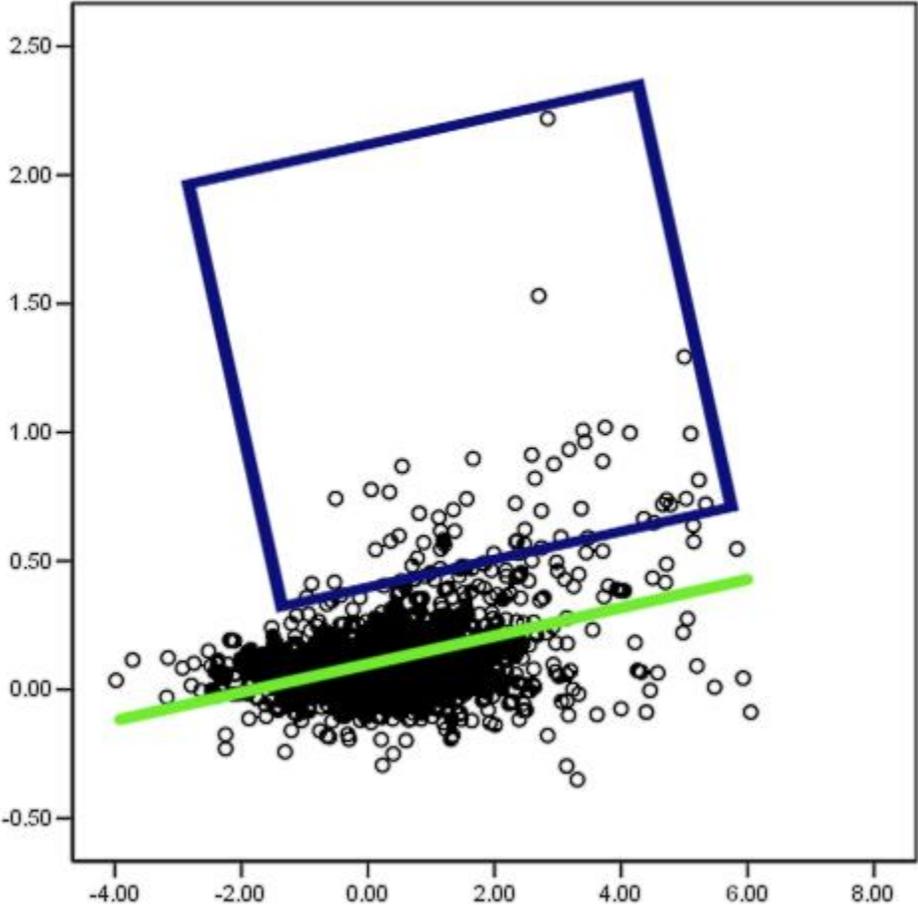
URD County Selection

Unconventional retirement destinations were identified and selected both through statistical and purposive methods. URD counties were initially modeled through qualified residual selection. An ordinary least squares regression model was fitted using the total net migration rate at age 60+ (the conventional retirement migration group) as the dependent variable. Independent variables included: the 6-point McGranahan’s natural amenity scale, a quantitative ERS recreation dependence score, the natural log of population size, the percent of the population considered urban, and the total net migration rate for the area. This model was run separately for the West, South, and Northeast/Midwest Census regions. It is especially important to note that the natural amenity scale was divided and re-standardized based on the region in question. Based on McGranahan’s (1994) original research, regions of the country vary considerably in their level of natural amenities (primarily due to climate and topography). As such, leaving the natural amenity scale in its original form would give extremely high scores to counties in the West and extremely low scores to counties in the Midwest. Had the residuals been based on this type of model, a majority of URDs would have been located in the Great Plains, with almost none in the West or South. As such, the model was actually predicting migration using natural amenity scores relative to other counties within the same region.

Studentized residuals from this model were then converted to percentile ranks within region. Counties that were in the top 5 percent of residuals were included in the pool from which cases could be selected. Figure 3.1 presents a visual example of residual selection, using unnamed variables so that the reader may more clearly understand the process. These counties were also selected based on the 15 percent threshold of immigration at age 60+ used by the ERS. In other words, URDs, as here defined, have both generally high rates of older immigration, and they have much higher rates of older immigration than would be predicted by conventional theory. The result was 108 URD counties. These were then mapped to ensure geographic diversity in the selection process. Using the map, county level data, and online content analysis of the local areas, the pool was progressively trimmed to eight counties that could be studied using survey and interview methodology. These counties may be seen in Figure 3.2. Places were purposively selected primarily for geographic diversity, but relative levels of income, racial-ethnic composition, the proportion above the age of 65, and various other indicators also played a role. The final list of case study locations included Polk County, MO; Dorchester County, SC; Walworth County, SD; Leon County, TX; Kane County, UT; Bennington County, VT; Prince Edward County, VA; and Ferry County, WA.

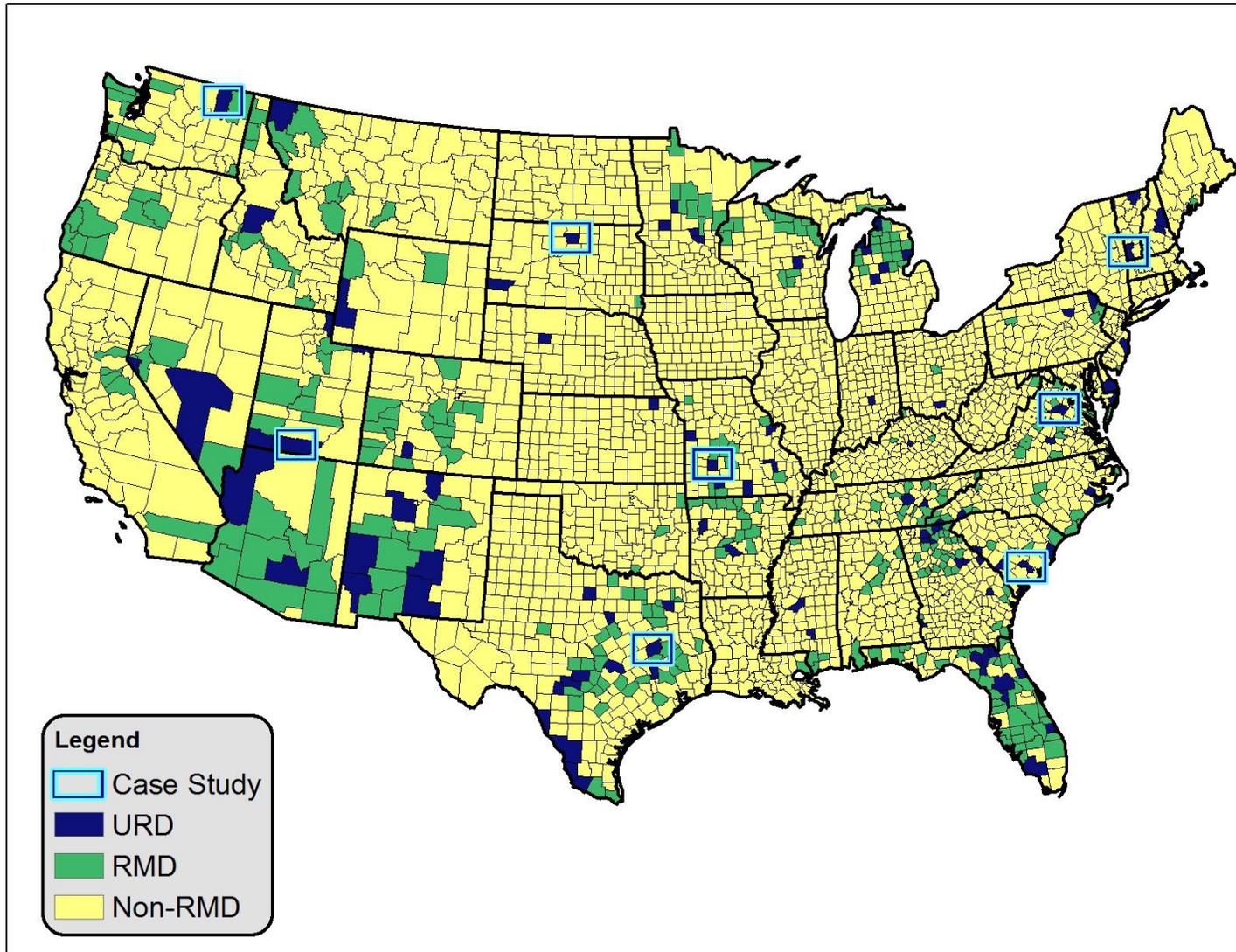
It is also important to note, given the findings of later phases of this research, that spatial statistics were not used in the selection process due to methodological limitations at the time. Explicitly accounting for spatial autocorrelation (and, for that matter, using different contiguity rules when addressing adjacency) would most likely alter the locations and characteristics of URDs in this classification scheme. However, this simpler methodology does hold theoretical interest, as conventional theories and models rarely account for spatial effects. The point of the model, as stated, was to discover residuals from a very conventional model of older age migration. Including adjustments for spatial influences, while leading to interesting findings, would no longer have been performing its intended function. It is, however, a possibly fruitful path for future research on the topic.

Figure 3.1: Residual Selection Example Diagram



Notes: The X axis represents natural amenity scores while the Y axis depicts raw net migration rates for people age 60+. The line is a regression function drawn through the scatterplot. The box represents large positive outliers.

Figure 3.2: URD Locations with Case Study Sites Highlighted



Data Source: ERS County Typology 2004 and developed list of URD Locations 2000

Survey/Interview Methodology

The survey used a mixed-mode approach to attempt to reach the general population living in these unconventional retirement destinations (Dillman, Smyth, and Christian 2008). Its goal was to obtain an “on-the-ground” view of the general community life and cultural environment from the “average” resident’s perspective. It used both mail and internet techniques. Participants were initially recruited through a postcard mailing based on addresses obtained from the Kansas State University Office of Educational Innovation and Evaluation (OEIE). The post card contained a brief description of the study and a link to follow to get to the online survey. The K-State Axio Survey system administered the online participation. The instrument contained a list of closed ended questions relating people’s attitudes and perceptions on activities, availability of services, local culture, political feeling, economic development, and other factors of community life in their area. There were also several open ended questions looking for more general feedback or other kinds of migration attractions.

Within each of the eight counties, OEIE and their associates generated randomly selected addresses based on zip codes and sent each address an initial and a follow-up postcard. Approximately 3000 addresses received postcards. Generally, online surveys have methodological issues, especially in terms of participation and representativeness. Namely, disadvantaged social groups tend to be underrepresented in terms of response rates. Respondents to online surveys are more likely to be young, male, white, less rural, educated, and have greater financial resources (Dillman et al 2009). This is because these people are more likely to have access to and regularly use computers and higher speed internet access. Three steps were explicitly taken to combat these issues.

First, the recruitment was through the mail, ensuring that everyone on the respondent list had equal chance to participate. Postcards were not sent to invalid email addresses, blocked by spam filters, or only accessible to people who personally own and/or regularly use a computer. This strategy also helped to ensure that the original geographic coverage areas were maintained as much as possible. Second, the possibility for a small financial reward was available to help encourage participation from people in less economically well off situations. Third, a security code was added to the postcard that the respondent had to enter at the end of their survey. This helped to make sure that only one response was returned from each address. Validating the codes

would allow me to filter out and/or examine any “friends” responses that may result from respondent driven snowball sampling. Further, because the prize would be sent to the address associated with the postcard, there was little incentive for anyone to steal the survey entries and/or respond for others.

I then conducted follow-up telephone interviews with community leaders in all eight selected URD counties. Participants included people in city office, nursing home administrators, representatives from the chambers of commerce, directors of home health programs, regional economic planners, and one head of a local newspaper. In most cases, I was able to contact at least one central political figure, an economic representative, and someone who specifically works with the older population in each area in addition to others. Questions were similar to those put to the general population but were also tailored by previous project findings. The interviews were short and relatively conversational, though they were technically semi-structured. Many of the discussions, though, centered more on service availability, business trends, development, amenity locations/types, and top-down impressions of the older population in the area. We also discussed whether leaders are actively promoting particular retirement migration and how national statistical trends were expressed in the area.

Regression and Spatial Modeling

A majority of the models displayed in this work are based on standardized ordinary least squares multiple regression techniques. In all cases, standardized regression coefficients are presented as they are the most easily interpretable between models. When using more advanced techniques, such as logistic and spatial regression, models were created with standardized independent variables so that slopes could be more easily compared. These represent the change in the dependent variable given a one standard deviation increase in the independent variable.

This work also expands on the concept of space in retirement migration research. In general, counties that are attractive to the majority of retirement migrants tend to be relatively close together in space. This creates a problem with spatial autocorrelation. Standard regression techniques assume that there should be no automatic relationships between cases either within values of the dependent or independent variables. Spatial regression allows a way around these difficulties (Johnson et al 2005; Ward and Gleditsch 2008). In essence, this involves one of two changes. Using maximum likelihood estimation, spatial lag models include an extra variable to

represent the average of the dependent variable and its neighbors while spatial error models statistically account for correlation among the regression error terms. Rules for making these county averages change with the purposes of the research, but they may deal with contiguity, the nearest number of neighbors, or others. The models here use a first order queen's contiguity rule to determine county clusters. What this basically means is that county clusters include the county of interest and any county that is touching its border. It is reasonable to assume that adjacent counties exert a considerable influence, though that influence likely drops significantly two or more counties away.

Less conventionally, I add three different expressions of space in the independent variables to the normal formulation which focuses only on the dependent variable. First, I use spatially oriented data sources compiled to represent access to particular kinds of natural, cultural, and recreation amenities. These include measures of national parks and forests, churches, cultural recreation areas (like museums, zoos, and others), and historical landmarks. These are computed as either the number of sites per square mile of county area (churches, historical landmarks, and recreation areas) or as the proportion of square miles in the county taken by the feature in question (national parks and forests). Second, I explore whether factors may exert an influence on a county's fortunes from at least one county away. To do this, I created spatially lagged versions of all of the independent variables in the model using a queen's first order contiguity rule. In other words, these variables represent the average score on that factor across the county of interest and any county which touches it. These act as proxies for micro-regional effects.

Third, I examine the possibility that relative attractiveness within a county cluster might have an influence on older people's migration decisions. For example, a person may want to live near a lake, but cannot afford the property costs. If they live in a neighboring county, they may still have access to the amenity they want without having to pay a premium on their living costs. These relative difference measures were constructed by taking the difference between the county's value and its lagged value (the average value of the cluster). A high relative difference score would mean that the county of interest has a higher value on that factor than in surrounding counties. A low relative difference score would mean the opposite. While it is obvious that there are issues with this measure (for example, one very high value county in a cluster could skew the

results), these measures provide a good argument for expanding the role of space and adjacency in the study of retirement migration.

Finally, it should be noted that steps are also taken to account for the spatial autocorrelation inevitably created by using micro-regional independent variables. They must be at least partially correlated as each micro-region overlaps with those next to them. To account for this, I have included these measures both by themselves and nested within a spatial lag and spatial error model. These nested functions allow us to get a true feeling for the strength of the measures while reducing the associated statistical difficulties.

CHAPTER 4 - Unconventional Migrants

The goal of this chapter is to examine how the processes of retirement migration vary across different categories of retirement migrants. To do this, I will present the results both of a visual, map-based analysis and a more rigorous statistical approach. As previously discussed, several other groups were analyzed including the differences between males and females of each group and all five year age groups between 55 and 85+. However, the discussion here will be limited primarily to age and racial-ethnic differences. This is for two reasons. First, differences were not very great across the sex boundary. Though males and females did seem to go to different places as the age of the group increased, there was little statistical evidence for significant differences between the groups. It is safe to say, though, that models worked equally well (or equally poorly) regardless of the sex of the group in question.

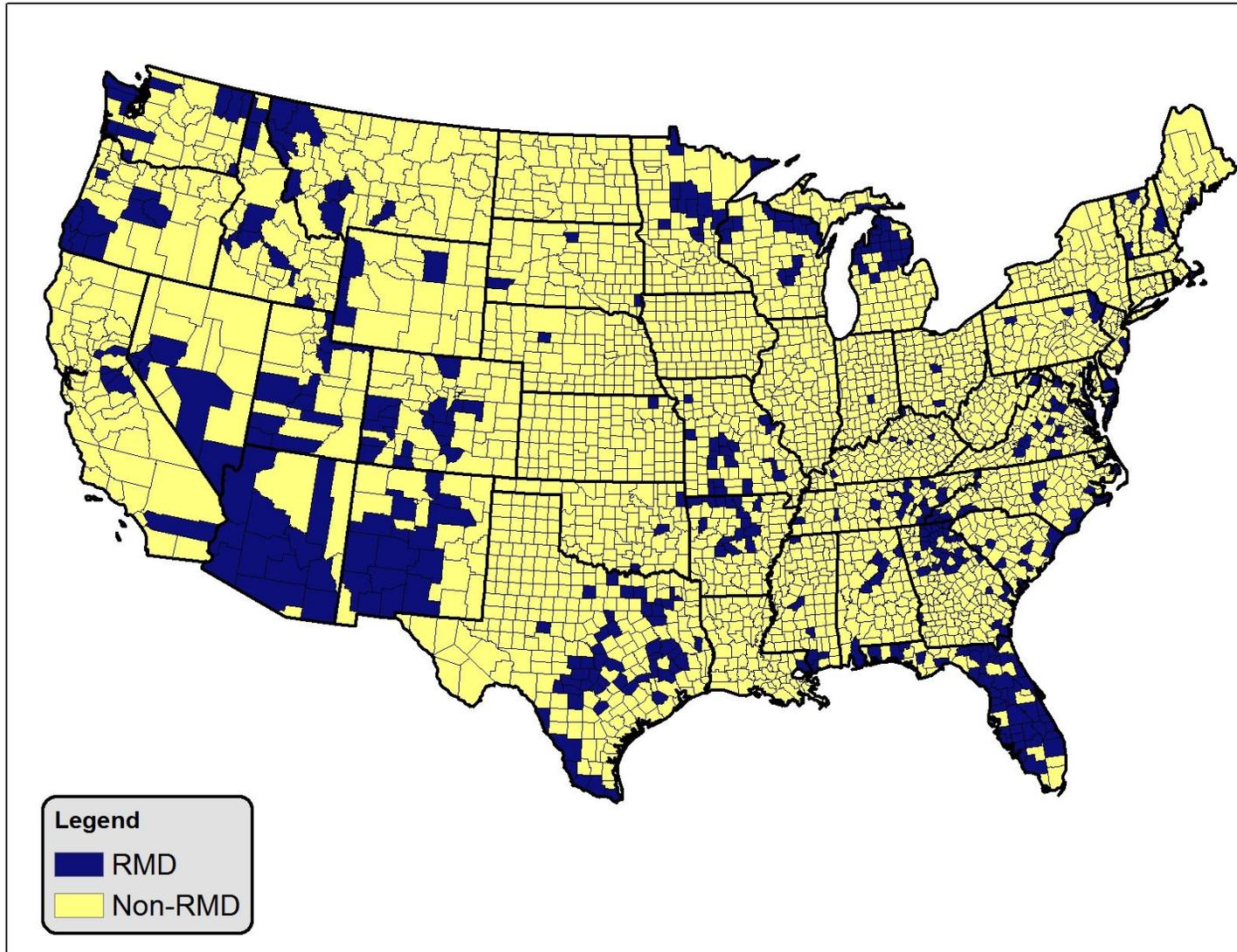
Age on the other hand was very different. There were significant differences between both the predictive power of the models and significance, strength, and direction of the indicators. However, these followed a fairly predictable pattern. As will be shown, the model works very well for the younger age groups. It starts to lose strength once the group in question reaches the 70-74 age group and drops rapidly into the older ages. At age 80-84, the impact of the various factors looks very different. The age 85+ group is excluded here due to the fact that it is, by definition, a residual category. It is possible for a county to appear to have a high rate of immigration at age 85+ simply by having an unusually high life expectancy for its older residents. Overall, then, the 60-64 and 80-84 age groups provide a good overall picture of the changes in the effects of the models without disrupting the empirical analysis with unnecessary clutter.

Maps and Visual Interpretation

This section presents the results of map construction based on county level percentile ranks on net migration rates for younger- and older-old migrants for various race-ethnicity groups. The first map demonstrates the distribution of conventional retirement counties (Figure 4.1). These are official retirement destinations in 2000 as classified by the ERS. This is based on their definition of a retirement county as having a 15 percent or greater population increase at ages 60+ due to migration. We can see a fairly high degree of spatial concentration of retirement destination counties. A large number of counties in Florida, Arizona, and New Mexico qualify

for the status. Also, there seem to be pockets in upper Michigan, Texas, around the northern part of Georgia, and some scattered counties in the northwest. However, this binary definition gives no indication as to counties' relative attractiveness, either compared with each other or along different characteristics of movers.

Figure 4.1: ERS Official Retirement Destination Counties 2000

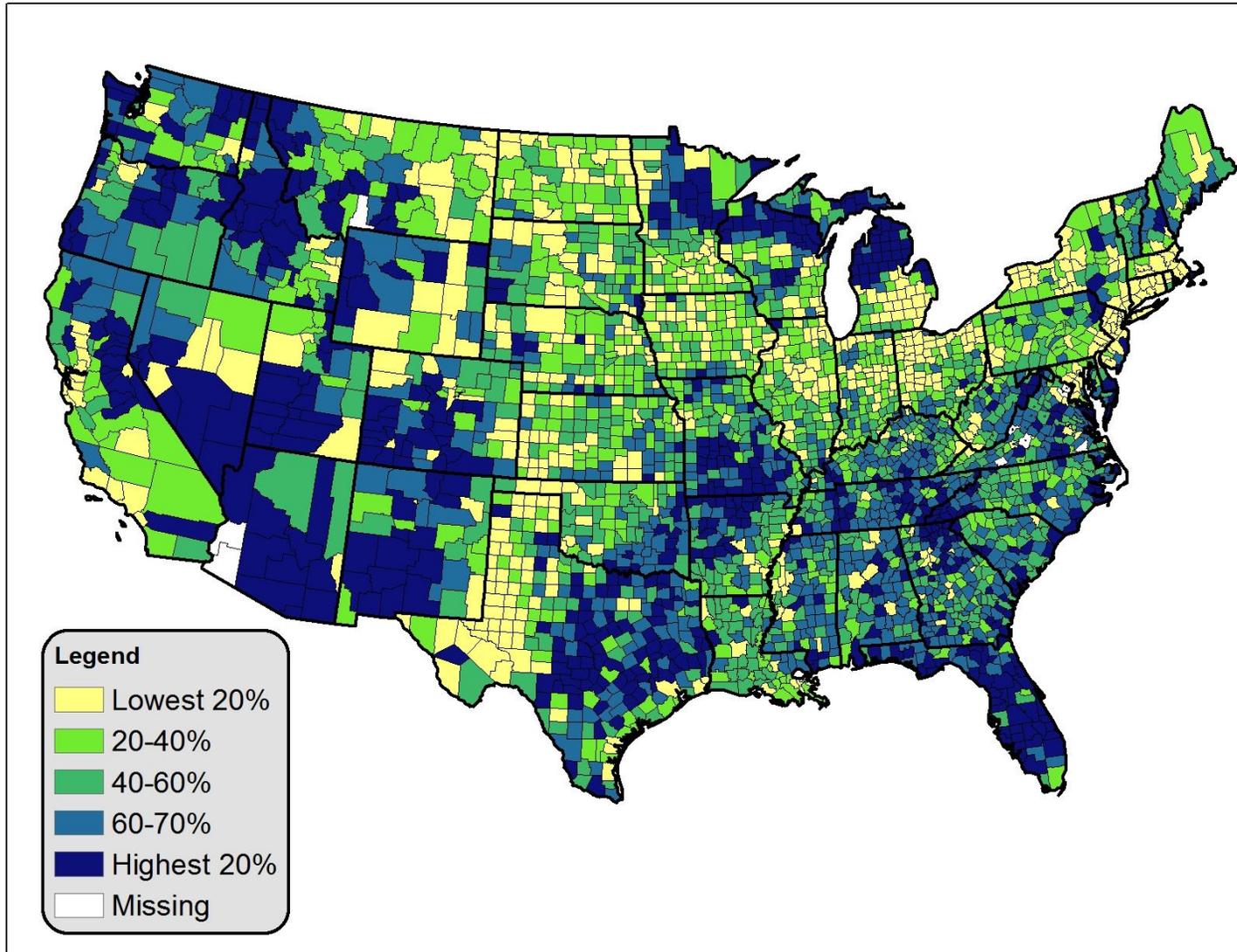


Data Source: ERS County Typology 2004

The following choropleth maps present the spatial distribution of 60-64 and 80-84 year olds for total, white, black, and Hispanic groups. The shades of the maps are divided into five categories, each representing a quintile of the cases. The lightest yellow shade indicates counties in the lowest 20 percent of the distribution. These would be considered less desirable or even undesirable for that group (because they have the lowest actual net migration rates compared to other counties). The darkest shade, in contrast, represents the highest 20 percent of the cases. These are the most attractive places with the highest rates of net in-migration for people in those groups. The three mediating shades correspond to the quintiles in the middle of the distribution. Blank or white counties indicate the presence of missing data, which is a significant problem (especially for the black migration patterns).

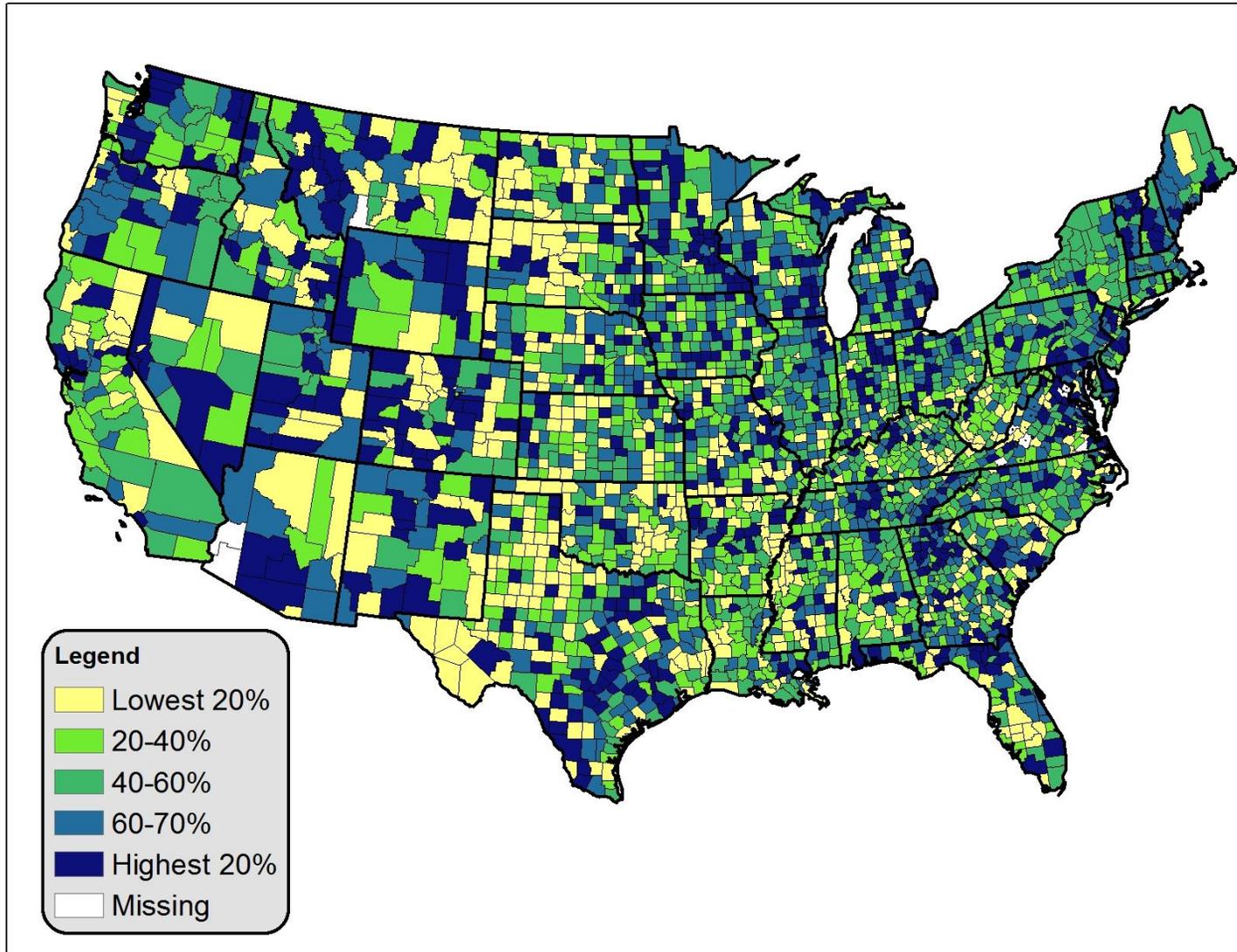
Figure 4.2 and Figure 4.3 show the spatial distribution of percentile ranks for the total population at two age groups. The 60-64 year old group greatly resembles the spatial pattern present in the ERS classification. The reason that more counties are represented as dark is due to the more inclusive nature of the measure compared to a binary either/or situation. We can broadly see a similar pattern of hotspots, though, centered on Florida, Arizona, New Mexico, upper Michigan, Texas, and northern Georgia. In contrast, the Great Plains looks like a retiree desert. The distribution for the 70-74 year olds (not shown) looks similar, although it appears as though the spatial concentration is diminishing. Visible pockets still exist, but they are often interrupted by counties with lower rankings. For the 80-84 year old total population group, the pattern is much more diverse. Counties begin to resemble a checkerboard. Further, places that seemed to attract a large proportion of younger migrants have apparently less interest, on average, for people in the more advanced age categories. For example, large parts of Florida rank fairly low on the measure of desirability.

Figure 4.2: Net Migration Percentile Rank Quintiles Total Population Age 60-64 in the 1990s



Data Source: Voss et al 2003

Figure 4.3: Net Migration Percentile Rank Quintiles Total Population Age 80-84 in the 1990s

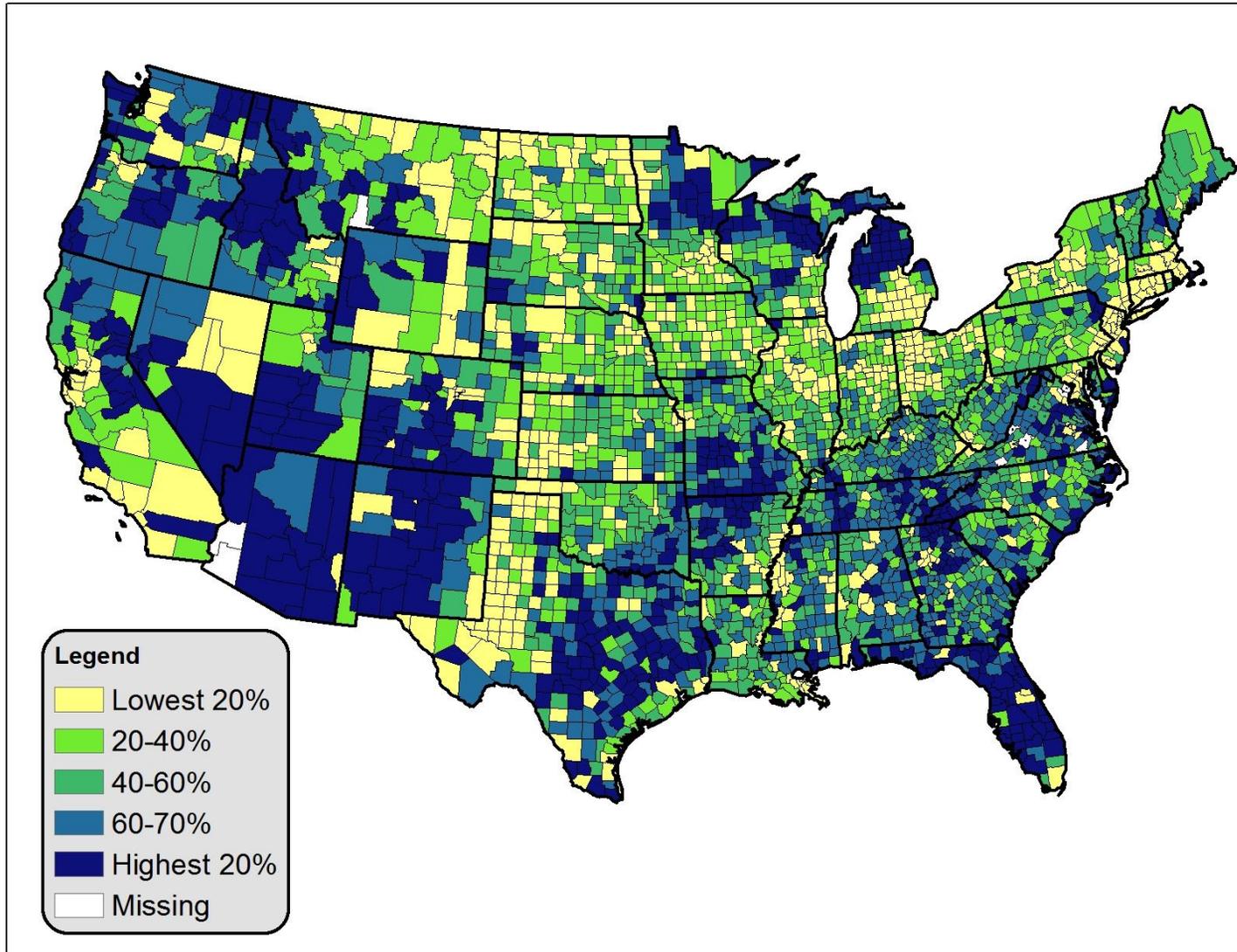


Data Source: Voss et al 2003

These differences are likely due to the different reasons that older people migrate at different age groups. Younger migrants, fresh into their retirement, have the desire and resources to choose a location based on desirable amenities such as local culture, climate, or the availability of activities. This fits well with the standard theoretical interpretation of retirement migration patterns. However, as people continue to age, their migration patterns start to become more dependent on other factors, such as seeking help from adult children or needing access to health services. They are also more likely to have limited resources to make their moves. Therefore, as age increases, the spatial tightness of the distribution decreases. By the time people are in their 80s, moves are often either to be closer to family members or to assisted living facilities of some kind. This means that their spatial distribution would also become quite diverse.

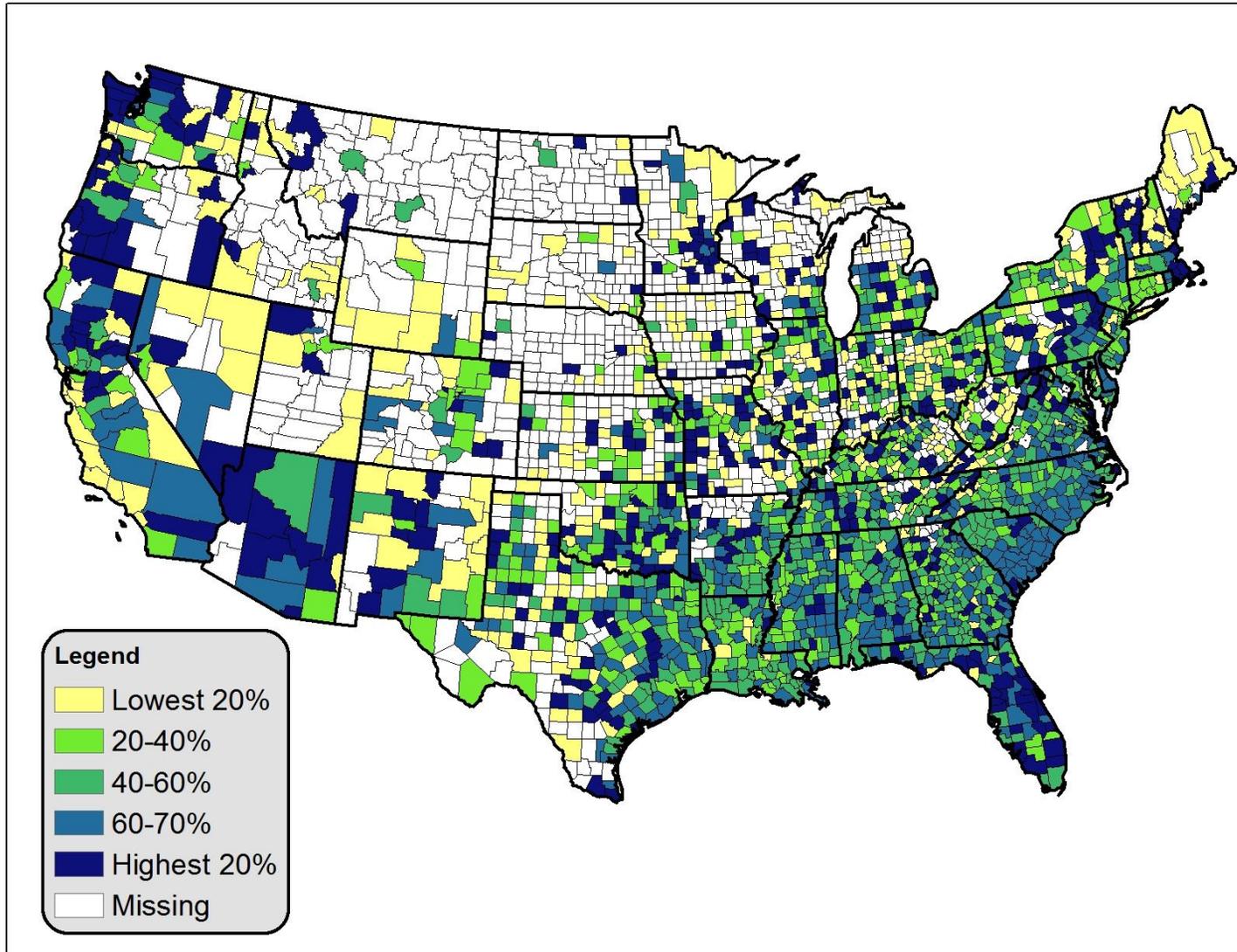
Figure 4.4, Figure 4.5, and Figure 4.6 show the spatial distribution of county percentile ranks for white, black, and Hispanic 60-64 year olds. Unsurprisingly, the pattern for whites is very similar to the overall pattern observed in the total population. This is because whites make up such a large proportion of the people who are actually able to migrate in their later years. The literature citing white advantage in terms of resources is voluminous. These advantages tend to be present, on average, at all ages across the life-cycle and are expressed in 60-64 year old whites' abilities to move primarily to amenity areas. These people tend to concentrate in the South, Southwest, and the forested areas of the North. Hispanics at this age group, in contrast, seem to concentrate primarily in the Southeast and Midwest. Very few counties in the Midwest have this kind of draw for whites at this age. A probable cause is the relative lack of natural amenities. Hispanics, however, may be drawn to this area following general streams of Hispanic migration. The data for the black population is unfortunately very limited. The map contains significant missing data in the Midwest and West regions. From the data that is present, 60-64 year old blacks do seem to show preference for more southern areas, but the information is too limited to make any particular claims.

Figure 4.4: Net Migration Percentile Rank Quintiles White Population Age 60-64 in the 1990s



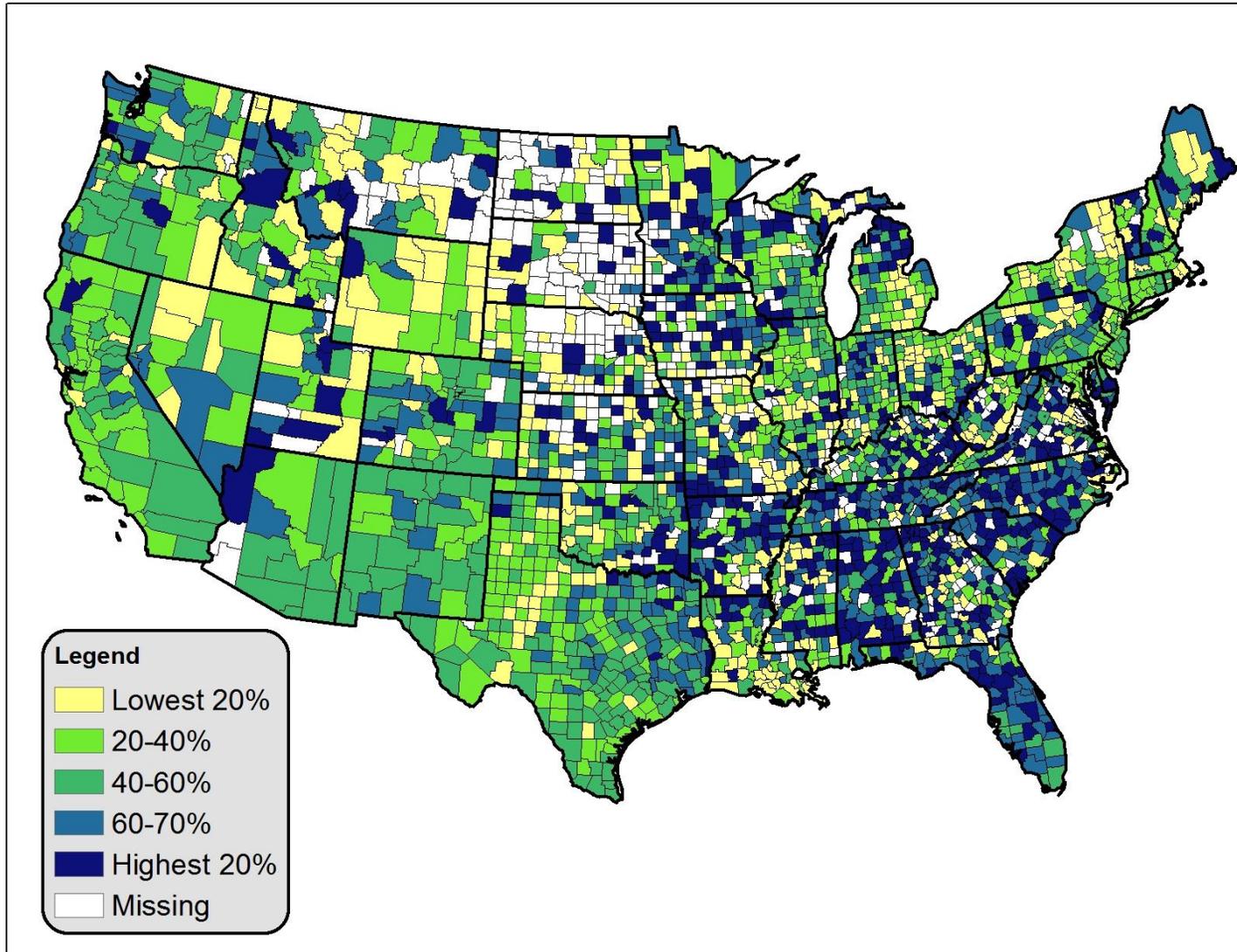
Data Source: Voss et al 2003

Figure 4.5: Net Migration Percentile Rank Quintiles Black Population Age 60-64 in the 1990s



Data Source: Voss et al 2003

Figure 4.6: Net Migration Percentile Rank Quintiles Hispanic Population Age 60-64 in the 1990s

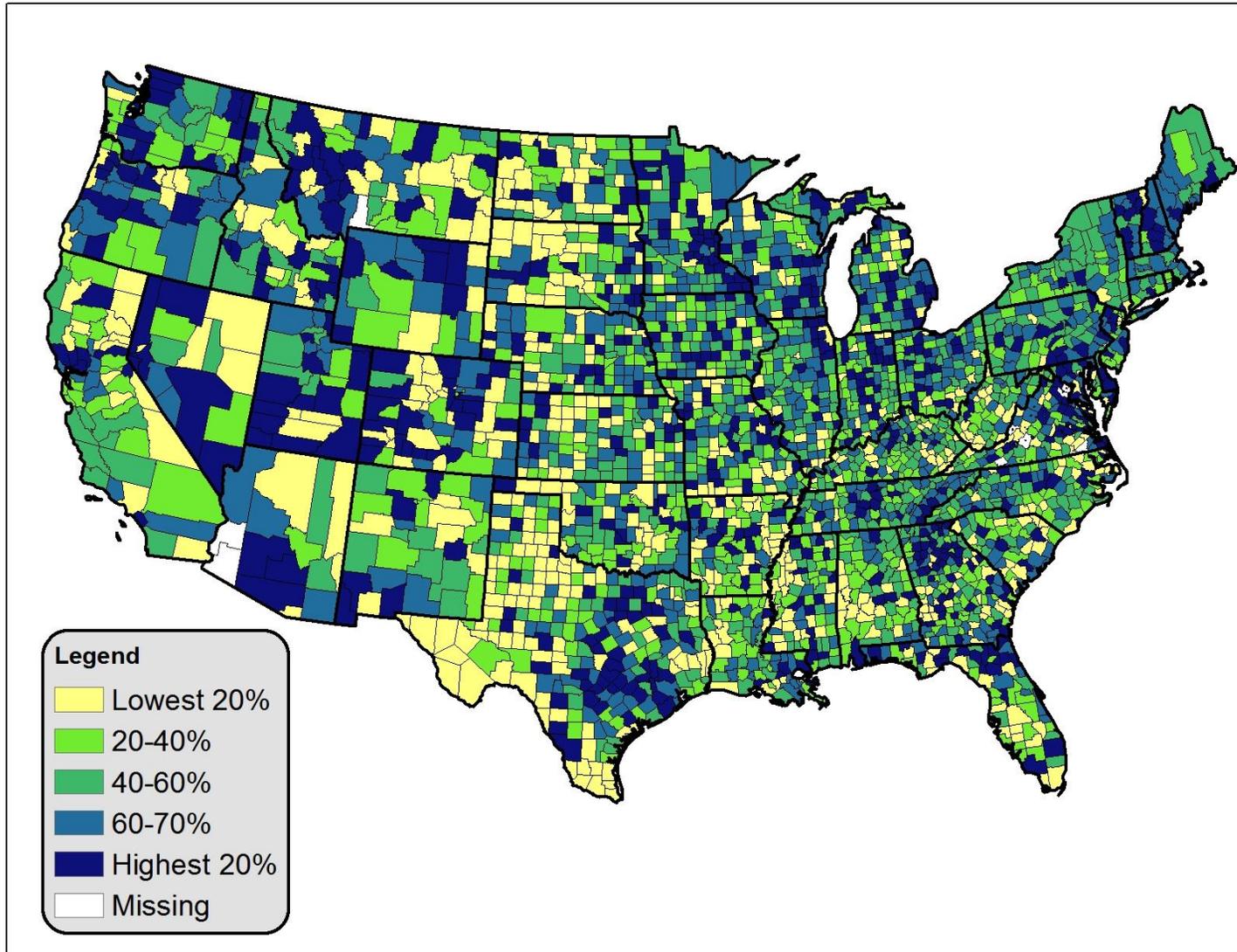


Data Source: Voss et al 2003

Finally, Figure 4.7, Figure 4.8, and Figure 4.9 below show the same race-ethnicity comparison for 80-84 year olds. Highly attractive counties seem to be distributed fairly randomly across the country for whites. Hispanic migration patterns also seem to be a bit more diverse, though the data now suffers from several holes. Even with missing data, we can see that Blacks no longer seem to exclusively favor the South. While there is a higher concentration of attractive counties in the South, there is also an apparent pocket in the East Coast major metropolitan zone. The fact that the younger and older migration patterns seem to match so little gives us reason to suspect that the motives and abilities to migrate at these ages are very different, not only for whites, but also for blacks and Hispanics. The more random distribution for whites and Hispanics more likely indicate moves based on need for assistance as opposed to residential preference.

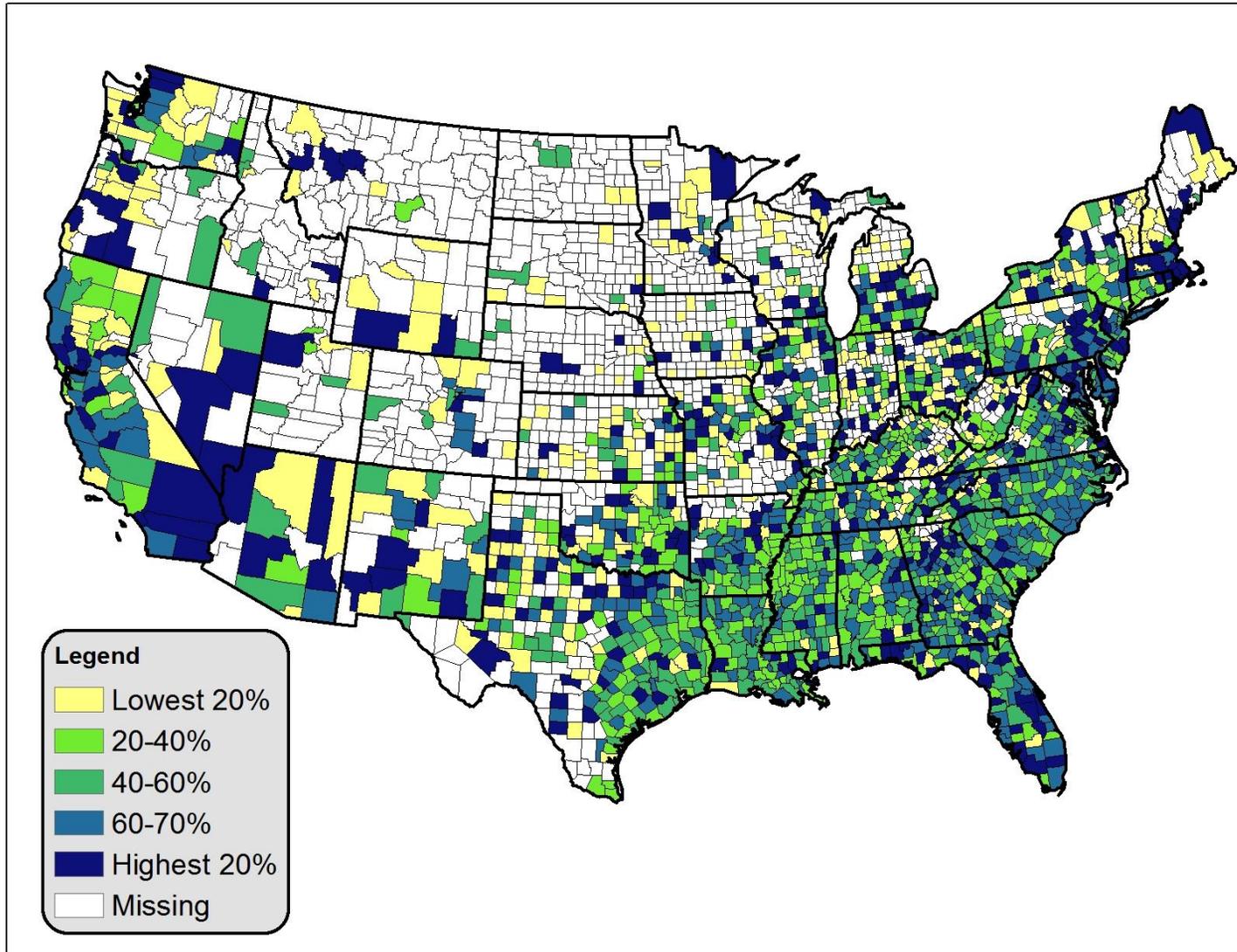
As previously noted, I also ran these analyses for all five-year age groups between 55 and 85+ and also separately for male and female migrants of each group. The maps are not presented for space considerations, but the stories are what would be expected. The spatial concentration of county desirability tends to decrease (though not always smoothly) between 55 and 85+. Women, in general, followed the same spatial pattern as men, though there is some divergence at the older age groups. This makes sense because many younger retirement age migrants tend to be married, especially whites. Attractive counties for women at advanced ages are just as randomly distributed as those for men. However, they do seem to still favor some similar counties (with a bivariate correlation coefficient of .57). This again points to the fact that advanced age migration is often motivated by the need for familial or health assistance.

Figure 4.7: Net Migration Percentile Rank Quintiles White Population Age 80-84 in the 1990s



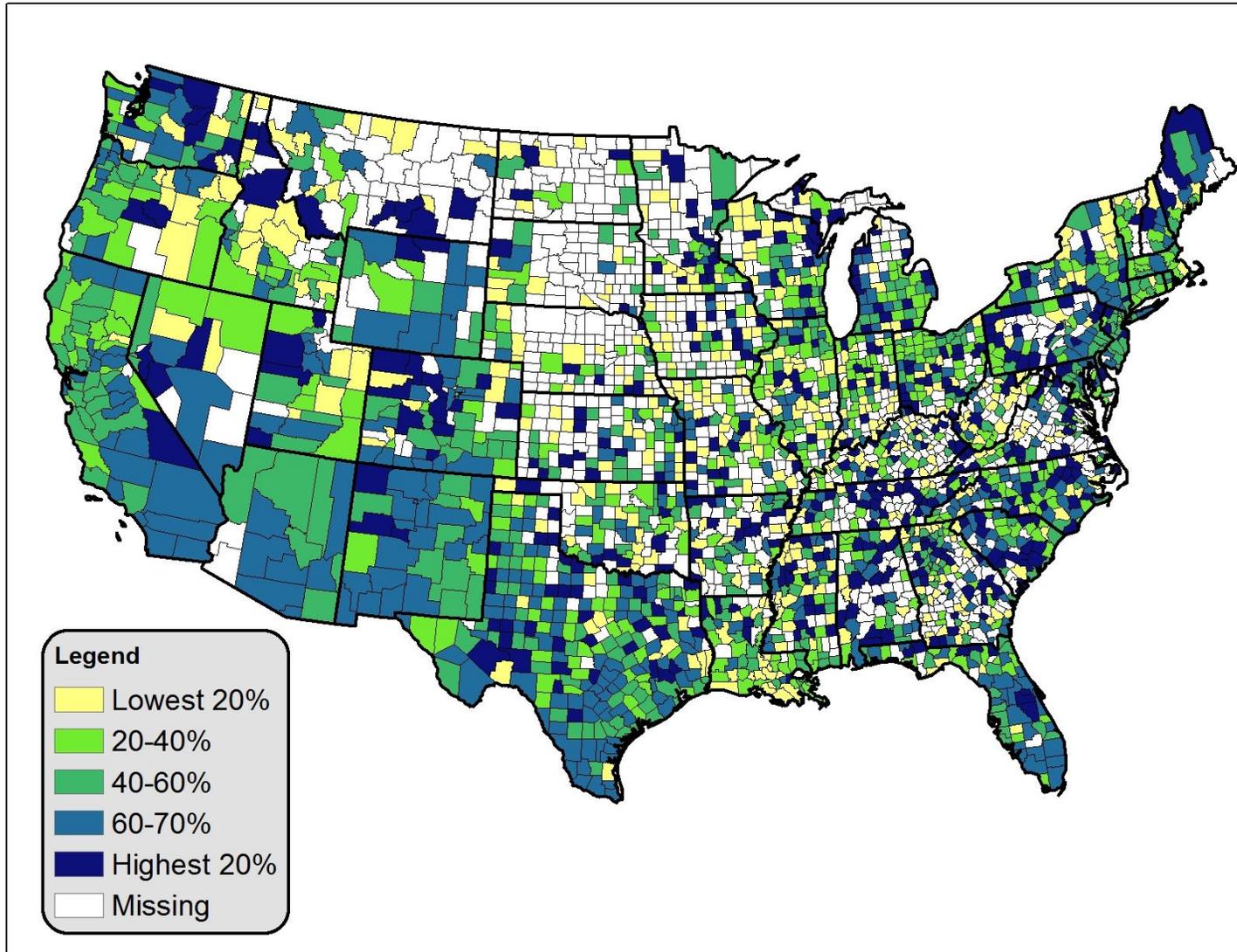
Data Source: Voss et al 2003

Figure 4.8: Net Migration Percentile Rank Quintiles Black Population Age 80-84 in the 1990s



Data Source: Voss et al 2003

Figure 4.9: Net Migration Percentile Rank Quintiles Hispanic Population Age 80-84 in the 1990s



Data Source: Voss et al 2003

Regression Modeling

The goal of this section is to present the results of examining various racial-ethnic groups (total population, white non-Hispanic, black non-Hispanic, and Hispanic of any race) at younger-old and older-old ages using standardized ordinary least squares multiple regression modeling. The tables are organized to compare different race-ethnicity groups across each age level, though it would be equally interesting to arrange the tables to show age groups side by side. The tables themselves present standardized beta coefficients for each of the variables in their respective models. Because the dependent variables are in the form of percentile ranks, standardized betas allow the effects of each factor to be compared both within its own model and across models.

Table 4.1 displays the standardized betas for all race-ethnicity groups age 60-64. When looking at the total population, it is immediately obvious that natural amenities and recreation opportunities exert a strong, positive influence. This fits nicely with conventional theories on retirement migration. However, that is not the entire story. We may also note that people seem to avoid more farming and government dependent areas, areas with high incomes and educational attainments, and places that are more urbanized. In contrast, they seem to be drawn to areas that are growing, attracting immigrants, and are proportionally older than average. They also seem to show a slight preference for avoiding predominantly white areas, though this is undoubtedly related to the lower incomes, education, and urbanization of highly attractive counties. Overall, this simplified model does a relatively good job predicting the variation in counties' desirability scores with an adjusted R^2 of .62.

Table 4.1: Standardized Regression Coefficients Net Migration Percentile Rank Age 60-64

	<i>Total</i>	<i>White</i>	<i>Black</i>	<i>Hispanic</i>
Natural Amenity Scale	0.194***	0.212***	-0.029	-0.044*
ERS Recreation Composite Score	0.185***	0.182***	0.009	-0.01
1990 Employees/Establishment Total	-0.038	-0.028	-0.074	-0.013
1990 Farm Employment per 1000 Pop	-0.121***	-0.136***	-0.073*	-0.038
1990 Manufacturing Employment per 1000 Pop	0.101***	0.076***	0.055	0.164***
1990 Retail Trade Employment per 1000 Pop	0.016	0.01	0.105**	0.093**
1990 Services Employment per 1000 Pop	-0.036	-0.041	-0.085*	-0.008
1990 Government Employment per 1000 Pop	-0.06***	-0.05***	-0.119***	-0.088***
1989 Median Household Income	-0.313***	-0.282***	-0.044	-0.284***
1989 Percent Persons Under Poverty Line	-0.049	-0.053	0.033	-0.148***
1990 Percent Completed Some College	-0.203***	-0.219***	-0.09	-0.101*
1990 Percent White Non-Hispanic	-0.046**	-0.01	-0.124***	-0.055*
1990 Population Natural Log	0.016	-0.022	0.148***	0.054
1980-90 Percent Change in Population	0.307***	0.273***	0.202***	0.218***
1990 Percent Age 65+ years	0.257***	0.26***	0.103***	0.05
1990 Percent Lived Outside County in 1985	0.232***	0.232***	0.107*	0.069
1990 Percent Urban	-0.278***	-0.274***	-0.065	-0.088**
Adjusted R-Squared	0.620	0.617	0.093	0.121
Model Significance	0.000	0.000	0.000	0.000

p<.001=***, p<.01=**, p<.05=*

When divided into different race-ethnicity categories, we can see much more diversity. Whites follow almost exactly the pattern of the total population (this is unsurprising, since they make up a majority of those who migrate in their older ages). In several cases, the effects of certain variables (such as natural amenities) grow stronger. The models for blacks and Hispanics look very different. Natural and recreation amenities make very little difference for blacks. They are also drawn to areas with higher retail employment, greater non-white racial diversity, and much larger places. While still favoring growing places, blacks also seem less drawn to counties with larger old aged populations and lower immigration rates. What is most striking, however, is the relative lack of predictive power that this amenity-based model has for predicting black migration patterns. The adjusted R^2 only reaches .09, which is very poor.

Hispanics show some patterns in common with whites and blacks. For example, they also seem to be attracted to areas with manufacturing employment and population growth while tending to avoid government employment, high income, high education, and high poverty. Taken together, these economic indicators suggest that Hispanics at younger-old ages are looking for places that have lower than average incomes, but are not overly poor. Unlike the other groups, they seem to avoid high natural amenity areas while showing no particular preference in terms of farm employment. Again, the model is not very good for predicting Hispanic county desirability scores with an R^2 of only .12.

Overall, at age 60-64, the total population does follow primarily an amenity driven path. The models demonstrate that whites primarily move to areas that are less urbanized, growing centers without a high degree of economic specialization (though there is preference for manufacturing over farming or government related activities). Blacks and Hispanics, while sharing some of these tendencies, are much less interested or able to move to places that are rich in natural and recreation amenities. Instead, they seem more focused on economic and social characteristics such as diversity, employment in manufacturing, urbanization, and relative income.

Table 4.2: Standardized Regression Coefficients Net Migration Percentile Rank Age 80-84

	<i>Total</i>	<i>White</i>	<i>Black</i>	<i>Hispanic</i>
Natural Amenity Scale	-0.111***	-0.11***	0.043	0.029
ERS Recreation Composite Score	-0.228***	-0.229***	-0.099***	-0.032
1990 Employees/Establishment Total	-0.143***	-0.134***	0.081*	-0.077
1990 Farm Employment per 1000 Pop	-0.112***	-0.125***	-0.029	0.013
1990 Manufacturing Employment per 1000 Pop	0.087***	0.079**	0.014	0.081*
1990 Retail Trade Employment per 1000 Pop	0.142***	0.122***	0.083*	0.068
1990 Services Employment per 1000 Pop	0.087**	0.083**	-0.062	-0.034
1990 Government Employment per 1000 Pop	-0.059**	-0.075***	-0.007	-0.043
1989 Median Household Income	-0.025	-0.046	0.17**	-0.029
1989 Percent Persons Under Poverty Line	-0.093*	-0.135***	0.079	0.008
1990 Percent Completed Some College	0.071*	0.09**	-0.131**	-0.021
1990 Percent White Non-Hispanic	0.124***	0.155***	-0.048	-0.029
1990 Population Natural Log	-0.041	-0.028	0.1*	0.08
1980-90 Percent Change in Population	0.22***	0.181***	0.087*	0.144***
1990 Percent Age 65+ years	-0.179***	-0.162***	0.025	-0.079**
1990 Percent Lived Outside County in 1985	0.005	0.025	0.106*	0.045
1990 Percent Urban	0.046	0.035	0.046	0.095**
Adjusted R-Squared	0.244	0.258	0.091	0.066
Model Significance	0.000	0.000	0.000	0.000

p<.001=***, p<.01=**, p<.05=*

Table 4.2 shows a similar model for 80-84 year olds. The first thing that strikes us is that the effects of natural amenities and recreation opportunities are now negative for the total population. This means that, in effect, older-old people are avoiding areas that are high in the conventional amenities that many argue drive older age migration processes. In terms of business structure, older-migrants as a whole avoid areas with larger businesses, farm employment, and government employment. Though they are still somewhat attracted to manufacturing areas, they also now show a preference for areas with higher employment in retail and service industries. They also avoid poorer areas in favor of those with higher education, a greater proportion of the population being white, a younger population, and population growth. Another striking finding is that the models begin fit this older group much less effectively with an R^2 of only .24

As expected, whites follow very similar patterns (again because they are proportionally larger in terms of migrant groups). If anything, their preference for non-poor, young, white areas is actually higher. In terms of blacks and Hispanics, the model presents an even worse fit at these older ages. Though limited data makes these interpretations somewhat limited, we can see that blacks most likely avoid high recreation areas. Some coefficients seem counterintuitive. For example, blacks seem to move toward areas with higher median incomes and higher immigration rates but lower levels of education. This could be related to the fact that they also show preference for larger areas than the other groups. The model fits the Hispanic data very poorly, with only population growth, proportionally older age composition, manufacturing employment, and the percent urban being significant. However, the principle finding here is that the amenity-based model only accounts for about 7 percent of the variation in Hispanic migration patterns.

These models were also run including a proxy measure for previous retirement migration into a county. In essence, some have theorized that retirement migration is a path dependent process (Brown et al 2010). The theory states that, at some point in the past, something produced a migration stream. The social networks that were created by this stream, however, can be enough to sustain and create future migration trends regardless of changes in other factors. In layman's terms, if a place was a retirement migration destination before, it probably is now. However, adding proxies for retirement migration behavior in the previous decade did very little to the models except raise the predictive power slightly (more so for whites than other groups). The addition of the path dependent variables did very little to change any of the previously observed relationships.

Further, I examined these models for all 49 age/sex/race-ethnicity groups, though the results are not presented. In summary, Relationships that changed between the younger-old and older-old groups did so relatively gradually. The biggest change was typically in the 70-79 age groups. Those from age 55-69 tended to be relatively similar to each other, as were the 80+ year olds. In terms of sex differences, there were very few. Though the spatial distribution of attractive counties changed somewhat across the sex line, almost nothing changed in terms of the predictive power of any of the models or variables in the regression analysis.

In summary, we can clearly see that the amenity based model most often used to describe retirement migration behavior is geared primarily toward younger-old, white people. This is at least partially understandable, considering that a large majority of the movers fall into this category. It is just as likely, though, that these same amenity seeking patterns may apply to minority movers who have access to greater levels of resources. However, this analysis shows clearly that differences exist in migration patterns between the bulk of people in different age and race-ethnicity groups. Not only are they likely to move to different areas, but they may also move for different reasons. It is inappropriate to claim that natural and recreation amenities drive total retirement migration behavior when it can be shown that some older or minority migrant groups are actually pushed away from places with these kinds of factors.

This is not to say that these groups do not have a preference for these types of amenities. Since this analysis is limited to county level national statistics, it is impossible to say anything definitive about migrant preferences. There are two possible explanations. First, older-old and minority groups may not seek to move into areas rich with natural and recreation amenities. In this case, their motives for moving might be either for personal reasons (such as to be closer to family) or for different kinds of amenities (a minority culture, historical meaning, or lower cost of living). The other explanation is closely connected to the first. It may be possible that, regardless of preferences, older-old and minority migrants are disadvantaged groups. Their residence choices may not really be choices in the freest of senses. Being more likely to be economically disadvantaged, many movers in these groups may be seeking out areas that are cheaper to live, provide access to family and community, or present access to healthcare services that are harder to come by in the more remote, scenic parts of the country. In the end, we should be careful about presenting the natural/recreation amenity pattern as a set of factors that drive all retirement migration. We are losing a valuable view of diversity in the process.

CHAPTER 5 - Unconventional Destinations

This chapter’s purpose is to empirically describe and examine unconventional retirement destination (URD) counties. The first question to ask is whether unconventional retirement destinations are actually different from other, more conventional retirement destinations (CRDs) or from other counties that are not retirement destinations at all. To reiterate, URDs consist of 108 counties selected through the residual analysis procedure described in the methodology chapter. Because they have 15 percent or higher net immigration rates at age 60 and above, they would normally be included in the retirement destination classification created by the ERS. Here, I will compare URDs with what I have labeled “conventional retirement destinations” (CRDs). These are ERS retirement destinations that do not fit the requirements of the URD residual analysis. For comparison, I have also included all other counties (non-RMD) that are not retirement destinations by the official classification.

Descriptive Analysis

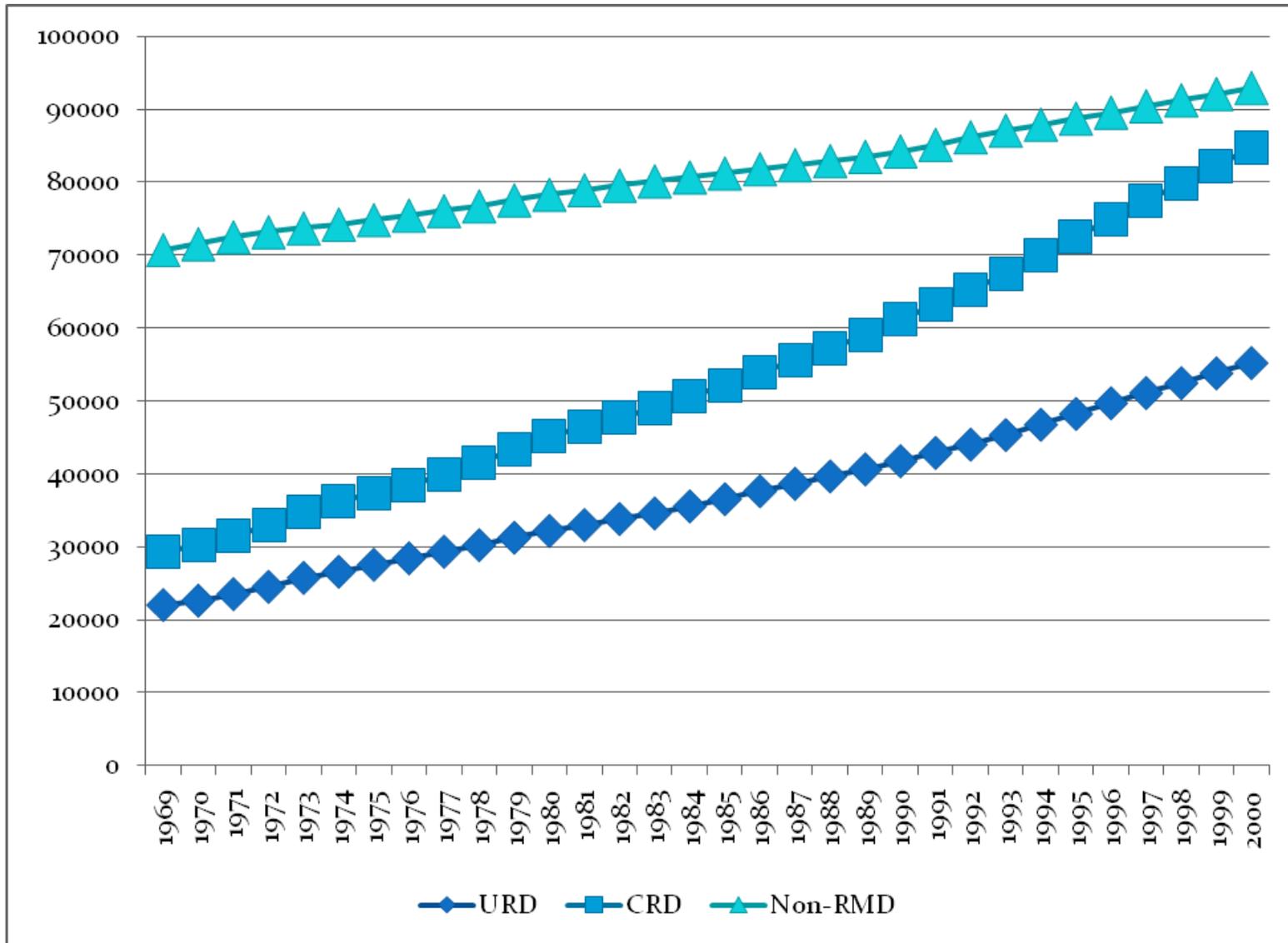
The most obvious issue concerns whether URDs are actually lower in natural and recreation amenities. The answer is not that simple. If presented side by side in a table, URDs have similar mean natural amenity scores and a similar probability of being a recreation county. This may seem counterintuitive. However, it is necessary to remember that natural and recreation amenity scores tend to be very regional in their distribution (see Table 5.1). I selected URD counties using their values on these variables relative to their own region (with the Midwest and Northeast combined). This resulted in a fairly evenly distributed geographic representation. As such, they will appear to have very similar mean scores as CRDs when looking at an overall summary measure.

Table 5.1: Regional Distribution of Natural Amenities and Recreation Dependence

	<i>Natural Amenity Scale</i>	<i>ERS Recreation Composite Score</i>
Midwest	-1.746	-0.064
South	0.373	-0.177
West	3.598	0.593
Northeast	-0.006	0.213
Total	0.056	0.000

In terms of other factors, one thing that is obvious is that URDs tend to have smaller populations than either CRDs or non-RMDs. This can be seen clearly in Figure 5.1. Further, both kinds of retirement destinations have been growing much faster than non-RMDs, though CRDs are growing more rapidly than the other two groups. This follows closely with much of the literature that retirement destinations in general tend to be smaller, fast growing areas. This also supports the idea that being a retirement destination can coincide with other kinds of demographic and economic development. It is also important to note that URDs tend to be much smaller than either CRDs or non-RMDs. This is true both for substantive and statistical reasons. Substantively, relative lack of population in URD counties means that they will most likely have a lower capacity to deal with a rapid numerical increase in their older population. Statistically, it is also possible that URDs are more likely to show up as statistical anomalies. If there are very few older people in a county at the start of the period, an immigration of a relatively small number can create a large proportional increase in the elderly population. For these reasons, URDs should be treated as a special group both in terms of methodological caution and in terms of their ability to effectively absorb a proportional increase in older people.

Figure 5.1: URD, CRD, and Non-RMD Population Size 1969-2000



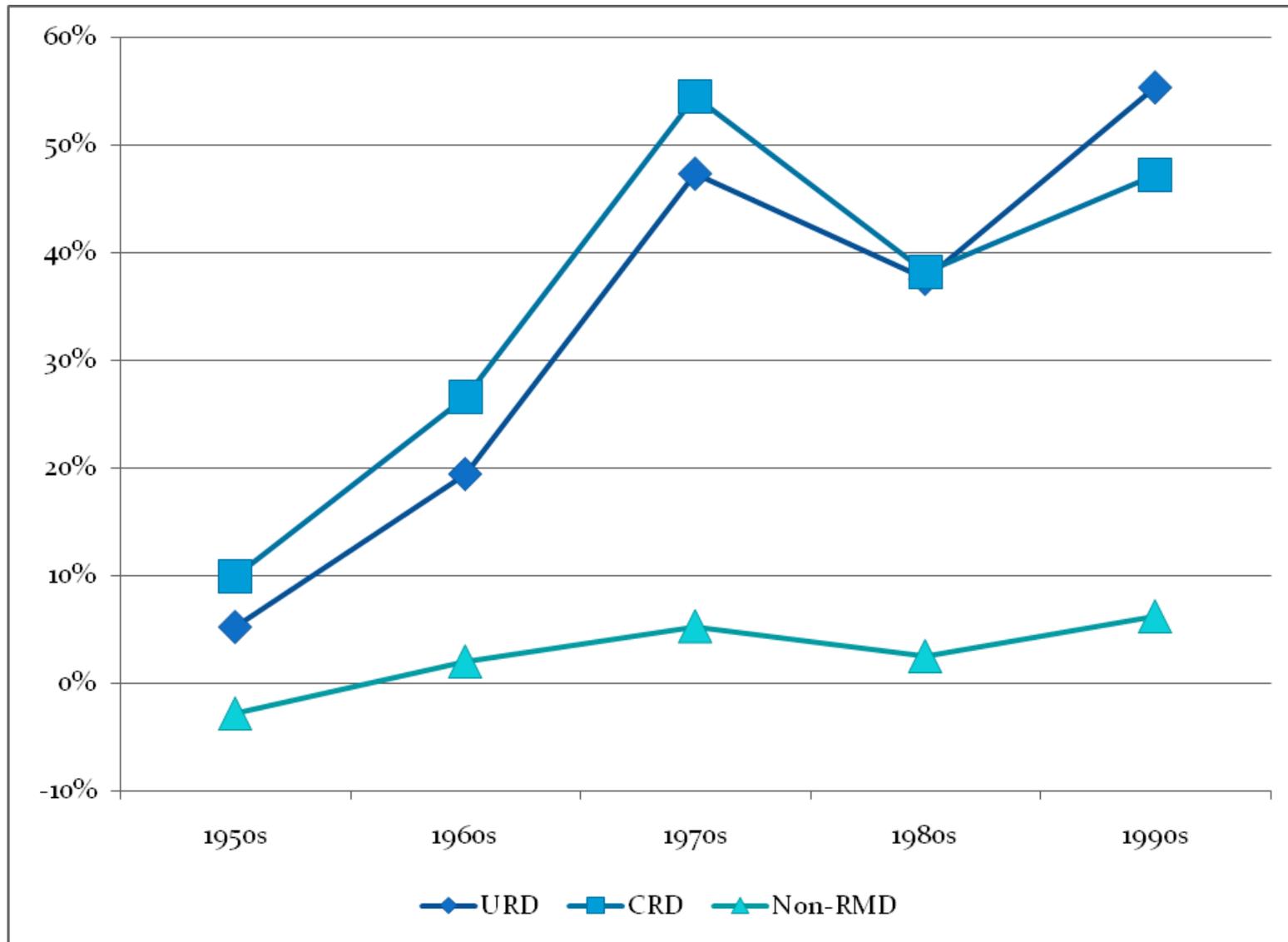
Data Source: Developed URD/CRD/Non-RMD Classification 2000 and REIS 2007 Population Estimates Records

URDs and CRDs, understandably, also have had generally higher rates of immigration at older ages. Here, their differences become more apparent (see Figure 5.2 and Figure 5.3 below). While both kinds of destinations have attracted, and still do attract, a high proportion of older people, URDs have recently drawn a greater proportion of older people (relative to their current stock). This is especially true for the older age groups. URDs have attracted a proportionally greater number of people age 75+ than CRDs. In the 1990s, URDs had an over 24 percent increase in their oldest-old populations through migration. By comparison, CRDs only experienced a 8.5 percent increase in the same age group. What this means is that URDs are rapidly increasing their population of older-old adults even without many of the advantages of more conventional destinations. These are also the people most likely to require healthcare services and public assistance. This may pose a considerable challenge to public planners in URD counties in the future.

Further, we may examine the industrial sector composition of employment at URD, CRD, and non-RMD counties. Figure 5.4 presents the average number of employees in each of five major sectors per 1000 population in URD counties. Like the rest of the country, URDs have experienced a rise in retail and service employment and a corresponding decline in farming related jobs. They also saw a significant rise in service employment from 1980 forward. However, they are different in a couple of respects. First, service employment was relatively higher in URD counties than in either CRD or non-RMD counties. The rise in retail jobs has also been slightly more dramatic. This indicates that the economies of URDs, on average, have tended to be more dependent on lower paying kinds of occupations. Again, this could create issues for community capacity when it comes to dealing with larger proportions of older-old people along with smaller and less quickly growing populations.

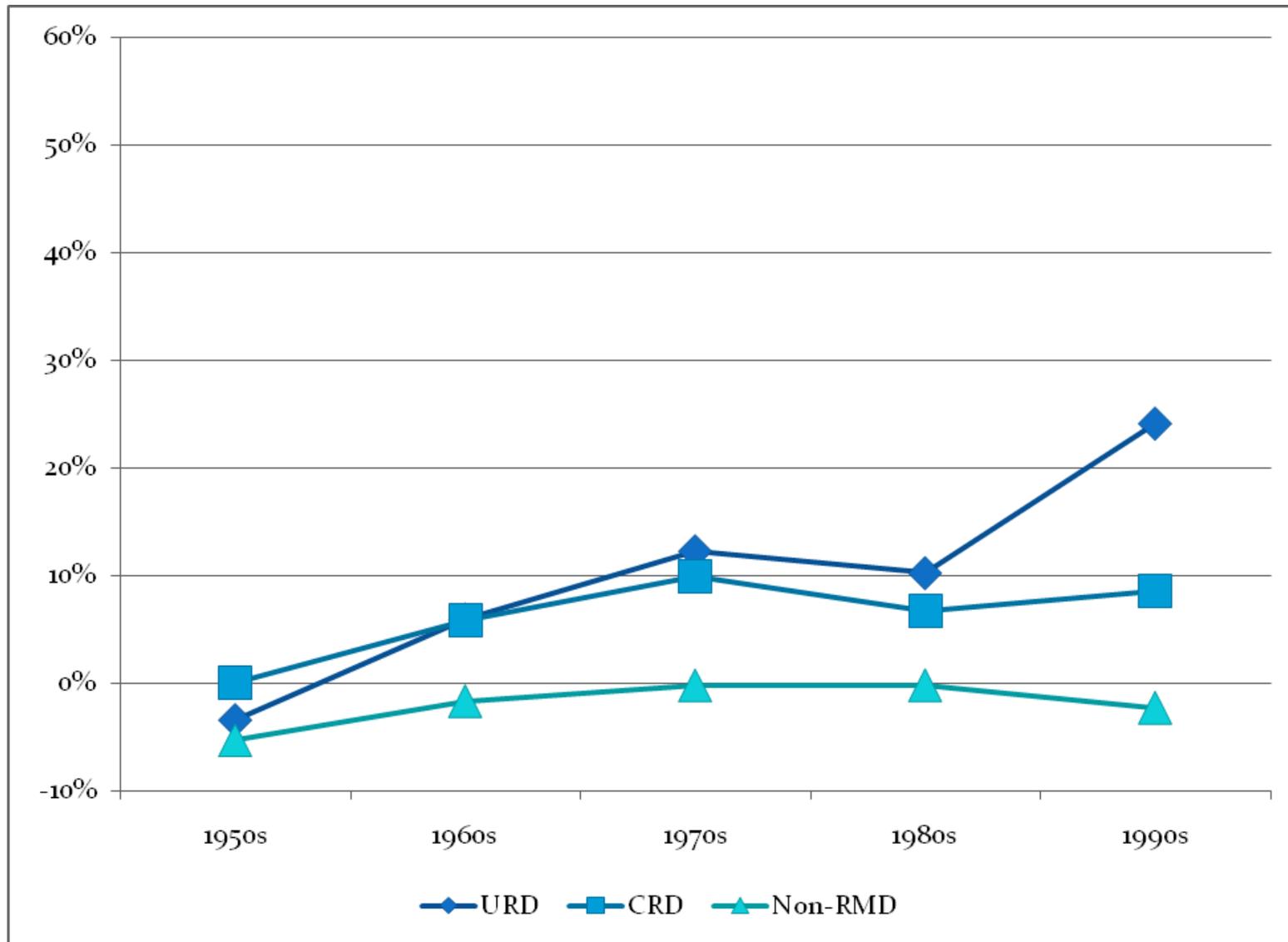
In a way, economic decline and increasing populations of older people will begin to resemble less fortunate areas experiencing aging in place. If higher paying jobs are not present in an area for whatever reason, often the result is a cascading spiral of economic and demographic decline. Younger people or those with specialized skills migrate to other areas in search of work, taking their skills, financial resources, and families with them. Local businesses, robbed of consumers and potential labor face uncertain futures. If this is the case, significant challenges may lie ahead for URD counties. Figure 5.5 and Figure 5.6 are also presented for comparison.

Figure 5.2: URD, CRD, and Non-RMD Net Migration for 60-64 from 1950s-1990s



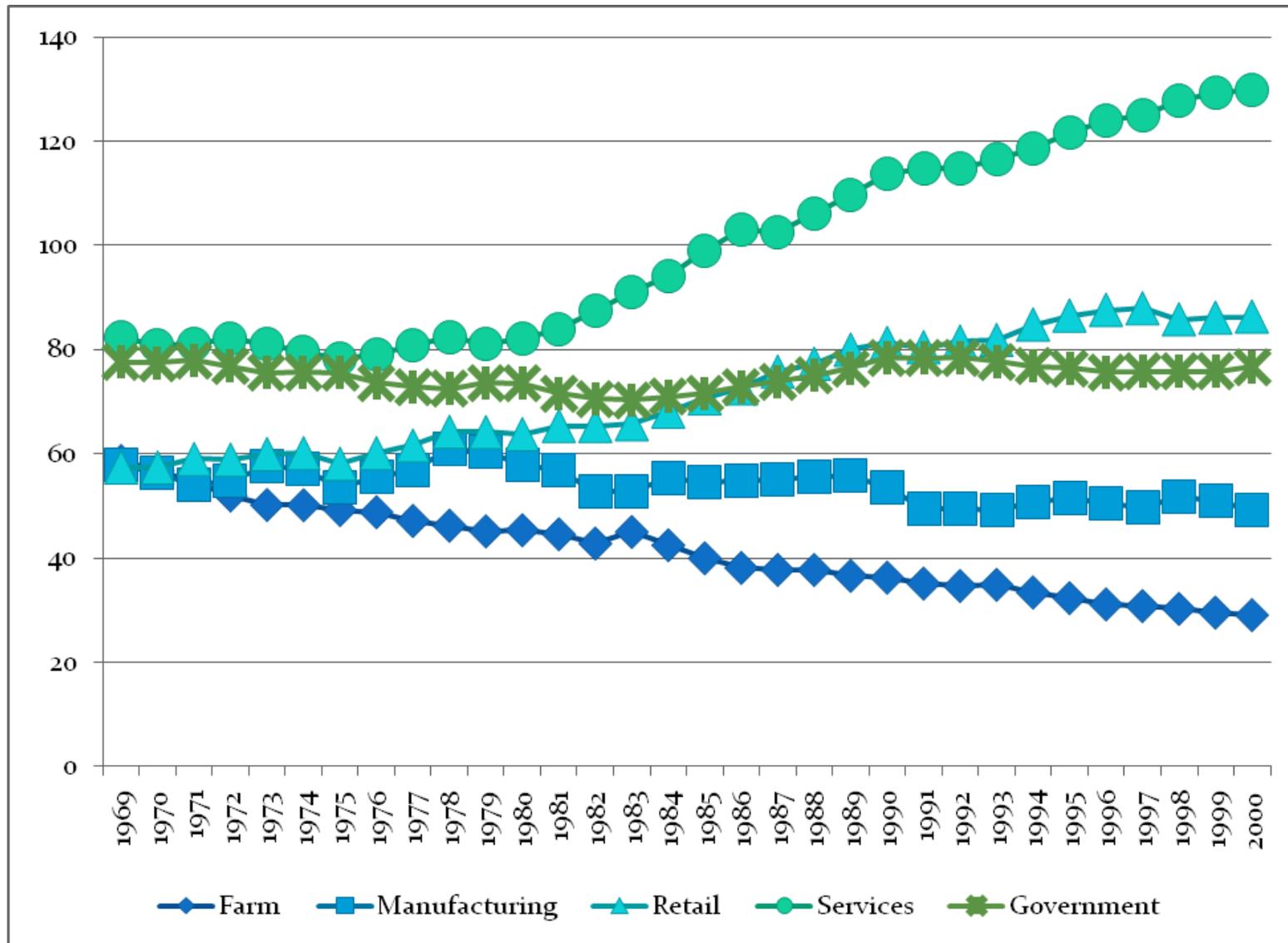
Data Source: Developed URD/CRD/Non-RMD Classification 2000, Bowles and Tarver 1965, Bowles et al 1975, White et al 1987, Fuguitt et al 2010, and Voss et al 2004

Figure 5.3: URD, CRD, and Non-RMD Net Migration for 75+ from 1950s-1990s



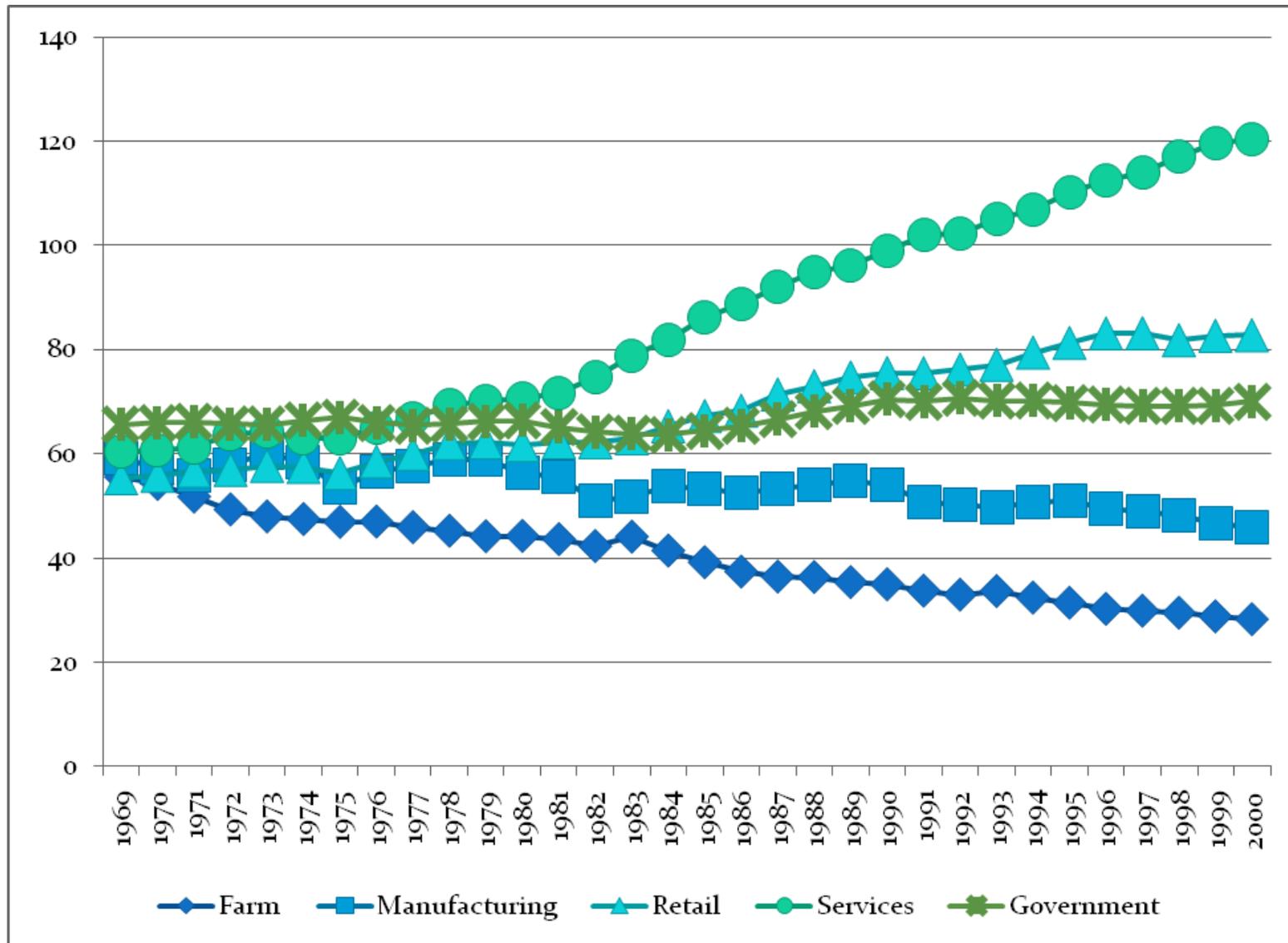
Data Source: Developed URD/CRD/Non-RMD Classification 2000, Bowles and Tarver 1965, Bowles et al 1975, White et al 1987, Fuguitt et al 2010, and Voss et al 2004

Figure 5.4: URD Employment per 1000 Population by Sector 1969-2000



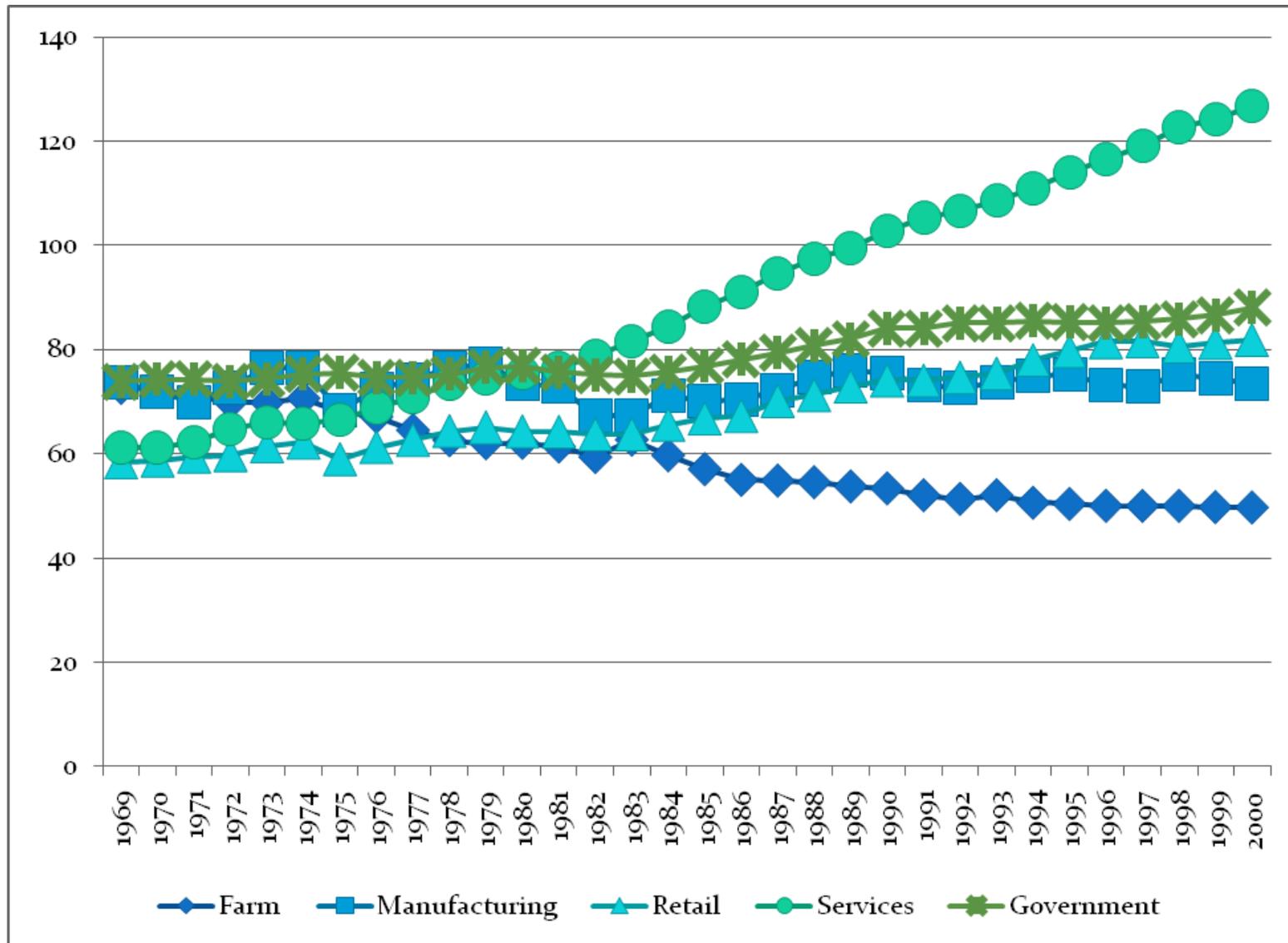
Data Source: Developed URD/CRD/Non-RMD Classification 2000 and REIS 2007 Employment Data

Figure 5.5: CRD Employment per 1000 Population by Sector 1969-2000



Data Source: Developed URD/CRD/Non-RMD Classification 2000 and REIS Employment Data

Figure 5.6: Non-RMD Employment per 1000 Population by Sector 1969-2000



Data Source: Developed URD/CRD/Non-RMD Classification 2000 and REIS Employment Data

Table 5.2 presents additional descriptive information for comparison. We can clearly see that URDs tend to be physically larger and have a lower overall population density than either CRDs or non-RMD counties. They also tend to be proportionally older. We also notice that, unlike either CRDs or non-RMDs, they seem to be continuing to get older during the 1990s. This seems unsurprising considering what we know about population aging in general. However, as we can see from the non-RMD and CRD averages, many of the counties in the country actually became proportionally younger. This could be due to a number of things, such as a statistical anomaly surrounding the fact that the cohort before the Baby Boom was actually somewhat smaller than previous cohorts. In any case, though the difference is small, URDs seem to be aging even more rapidly than other kinds of counties. This could be due to a lack of the younger immigration that normally occurs in retirement migration destinations.

Table 5.2: Additional Descriptives: Means for URD, CRD, and Non-RMD Counties in 2000

	<i>URD</i>	<i>CRD</i>	<i>Non-RMD</i>
Population Density (per sqmi)	83	102	256
Area (sqmi)	1352	1281	1119
Pct 65+	16.17%	15.54%	14.60%
Change in Pct 65+ (1990-2000)	1.23%	-0.31%	-0.13%
Pct White Non-Hispanic	80.61%	83.16%	81.07%
Pct Urban	38.56%	35.72%	40.70%
Pct Lived Outside County in 1995	21.76%	22.32%	17.70%
Pct Institutional Group Quarters	2.04%	2.25%	2.26%
Pct Some College (Age 25+)	45.67%	45.24%	42.26%
Pct Under Poverty	13.00%	12.54%	13.84%
Median Household Income	\$36,561	\$37,090	\$35,111

Though not a very large difference, URDs also tend to be more racially diverse than either CRDs or non-RMDs. URDs also fall between CRDs and non-RMDs in terms of the percent urban. This is related to the migration preferences of people in very advanced ages. Previous research has shown that those in very old age categories tend to move toward more urbanized areas with access to health care services (Bolender 2009). URDs are very similar to CRDs in terms of being attractive to the general population, as seen by the percentage of people who lived outside the county in 1995. All three groups are fairly similar in terms of the group quarters, education, poverty rate, and median household income.

Overall, then, URDs appear similar in some ways to more conventional retirement destinations. However, there are real differences. They are physically larger with lower population density. The fact that they are also more urbanized indicates that they tend to be somewhat near larger areas. Statistics reflect this, as they are also more likely to be non-metropolitan but adjacent to metropolitan areas. At the same time, they are proportionally older, aging more rapidly, experiencing greater growth in older age categories through migration, tend to be less economically diverse, and have lower relative natural amenity and recreation scores to their region. This means that URDs may be gaining older people without many of the same positive benefits associated with being a retirement destination.

Logistic Regression Analysis

While these numbers are intuitively interesting, it is also important to examine whether URD counties can be adequately predicted and differentiated from their more traditional CRD counterparts. To do this, I have examined both URD and CRD county classification as the result of logistic regression models using the same predicting factors as those in the chapter discussing unconventional migrant patterns. Logistic regression attempts to predict a unit's status on a binary variable given a one unit increase in the dependent variable. Here I present the exponentiated Betas which are roughly interpretable as odds ratios. If the coefficient is higher than 1, it increases the odds of being a URD or CRD county respectively. If the coefficient is less than 1, it decreases the odds proportionally. Table 5.3 presents the results of these models.

Table 5.3: URD and CRD Logistic Regression Odds Ratios

	<i>URD</i>	<i>CRD</i>
Natural Amenity Scale	0.929	1.176***
ERS Recreation Composite Score	1.145	1.434***
1990 Employees/Establishment Total	0.863*	0.961
1990 Farm Employment per 1000 Pop	0.991*	0.99***
1990 Manufacturing Employment per 1000 Pop	1.003	1.001
1990 Retail Trade Employment per 1000 Pop	1.008	1.006
1990 Services Employment per 1000 Pop	1.006	0.991***
1990 Government Employment per 1000 Pop	0.997	0.99**
1989 Median Household Income	1.008	0.936
1989 Percent Persons Under Poverty Line	1.057	0.994
1990 Percent Completed Some College	0.96*	1.004
1990 Percent White Non-Hispanic	0.997	1.008
1990 Population Natural Log	0.862	1.194
1980-90 Percent Change in Population	1.033***	1.047***
1990 Percent Age 65+ years	1.038	1.109***
1990 Percent Lived Outside County in 1985	1.06*	1.067***
1990 Percent Urban	1.001	0.978***
Constant	0.067	0.019

p<.001=***, p<.01=**, p<.05=*

It is apparent that a generous allocation of natural and recreation amenities increases the odds that a county will be a CRD. One standard deviation unit increase in natural amenities raises a county's chances by about 17.6 percent. Increasing recreation score increases its odds by over 43 percent. Population growth, percent age 65+, and immigration also increase the odds of a place becoming a CRD. High concentration in farming employment, services employment, and percent urban decrease this likelihood.

In contrast, very few of these variables have an effect on URD status. This is as intended, seeing as URDs were selected partially because they had higher net migration rates than would be expected given their lower level of recreation and natural amenities. Relatively large businesses, farm employment, and higher rates of education all lower the probability of being a URD county. Similar to CRDs, population growth and immigration also contribute to the probability of becoming a URD. Also, the model fits the data much less well for URD counties than CRDs (as can be seen in the Nagelkerke R^2 statistics). Much like the situation with conventional versus unconventional migrants, the conventional model has much less predictive

power when applied to areas that lie outside the norm. However, this provides us with comparatively little information about what is actually driving retirement patterns in these areas. For that, we need to move away from national statistics in favor of a more qualitative approach.

CHAPTER 6 - Unconventional Explanations

This chapter examines the explanations provided by the general population and community leaders in URD case study sites around the country. The results here are not intended to be statistically rigorous or generalizable. Instead, the findings here demonstrate alternative ideas and concepts beyond what is commonly applied in the study of retirement migration. Results from a limited survey and telephone interviews with community leaders lead to a number of new ideas for variables to be included in a more broad examination of retirement migration. Even though data was limited on a variety of the characteristics respondents considered important, I also present a preliminary model to explore the impacts of other kinds of amenities on older age migration patterns.

The findings in this section are based on 69 completed online survey forms, nine telephone interviews with general public respondents, and 25 community leader discussions across eight case study locations. Though I was able to speak with at least three community leaders in each location, response rates to the survey varied (though it was not concentrated in one particular area). Survey respondents varied in age group from 18-24 to 85+, though a majority (about 75 percent) were age 55+. A little less than 55 percent of the sample was female. While a majority of respondents were white (about 89%), other racial and ethnic categories were present. Community tenure varied strongly with about 41 percent having lived there for more than 20 years and almost 19 percent having lived in the area for less than five years. Only about 63 percent were currently married. Educational degree completed covered a wide range with 25-30 percent each saying they had high school education, a bachelor's, or a graduate/professional degree. Finally, while almost 70 percent had household incomes in the \$20,000-\$80,000 range, there were respondents on both ends of the income distribution. In general, then, even with a poor response rate, the survey was able to capture the opinions of a wide variety of people in a number of the case study locations.

Survey Findings

Results in this section will be somewhat limited. Regardless of the steps taken to avoid problems (as laid out in the methodology chapter), the survey suffered from a very poor response rate. The data collected was not sufficient for complicated statistical analysis. A total of 62

people responded to the survey instrument. In terms of age, 68.5 percent of the sample was above the age of 55. In other words, the majority of people who took the survey were those who would be most credible in terms of describing what appeals to older people in their community.

It is good to note that many of the problems with online surveys were not apparent in the characteristics of the sample. Geographically, responses were somewhat evenly spread, though there was a high concentration of responses in Utah and Washington, with very few from South Carolina. Responses were roughly divided evenly between males (45 percent) and females (55 percent). Racial diversity was somewhat lower than would have been representative of the local populations (with whites making up 89 percent of the respondents). However, there were both black and Native American respondents. There was also an interesting distribution regarding how long people had lived in the community. About 19 percent had been there less than 5 years, 41 percent had been present for 5-20 years, and 40 percent had lived in the area over 20 years. Further, all education categories were represented with 30 percent having a high school degree or less, 16 percent with an Associate's degree, 30 percent with a Bachelor's, and 25 percent having either a graduate or professional degree. Respondents also represented many income categories with the largest group falling in the \$20,000-\$40,000 range.

The bulk of the survey asked people to rate a variety of natural, recreation, economic, social, and cultural amenities in their area. It also asked respondents to rank their communities on a variety of social and economic characteristics (on a scale from 1-7 with 7 being the most desirable). Though it is difficult to draw inferences, there were strong differences in the rank orderings depending on the location. For example, people in Utah rated their community highest on lack of traffic, general outdoor activities, and public safety while viewing job opportunities, general indoor activities, and casinos as inferior. Missouri, on the other hand, rated their religious organizations, general doctors, and hospitals most strongly while ranking severe weather in the area, bars and restaurants, and casinos quite low. In general, people's responses did vary significantly by location (see Table 6.1). However, due to the small sample and the lack of representativeness, it is too dangerous to attempt strong assertions about these relationships.

Table 6.1: Significant Differences in Ratings by Geography (ANOVA)

<i>Amenity</i>	<i>Sig.</i>
Severe weather/disaster potential	0.002
Amount of insects and pests	0.050
General outdoor activities (e.g. golf/hiking/fishing/skiing)	0.006
Movies/Cinema	0.000
Shopping	0.021
Casinos	0.000
General indoor activities (e.g. bowling/gyms/recreation facilities)	0.002
Sporting events for spectators (e.g. high school/college/professional)	0.005
Public areas (e.g. parks/trails/playgrounds)	0.006
General local culture/residents' values	0.017
Museums/Art exhibits/Zoos	0.029
Performances/Concerts/Theatre	0.030
Religious organizations	0.032
Traffic/Roadway congestion	0.003
Crime rate/Public safety	0.016
Job opportunities	0.001
Hospitals	0.002
General doctors	0.001
Specialist doctors/services (e.g. MRI, physical therapy, dialysis)	0.000
Nursing homes/Assisted living facilities	0.001
Homecare	0.029
Community is conservative vs. liberal	0.000
Community is non-religious vs. religious	0.001

Adding value to the survey, while engaged in data collection, I conducted several telephone interviews with survey respondents who could not or did not want to use the online form. During the course of those conversations, we both filled out the survey and discussed their local situation in a more general fashion. The results from these conversations closely mirrored the findings gained from the community leader interviews presented below.

Interview Results

Overall, community leaders in URDs seem to know that they are retirement destinations. This is contrary to what we may expect given the difficulties that smaller towns and less populated areas face. Previous case study research that included Nemaha County (a URD as currently defined), found that community leaders were generally aware of the movement of

retirees into the area, but did not know that those numbers were so large as to classify their location as a retirement destination in national statistics (Bolender 2010). In contrast, many people in the URD case study locations immediately recognized their area's situation when told the topic of the research. Though the "unconventional" concept was not as easily entertained, the idea that their places were attracting older people was instantaneously apparent to most participants.

In terms of economic factors, respondents seemed to agree that a strength of their respective areas was a moderate or lower cost of living. One said, "Cost of living is fairly inexpensive here, once you get past the housing aspect of it... That's the only thing I can see as a major attraction." Another added, "The cost of living is really important, because it just basically allows the money that they've saved up... and their social security is essentially what they're living off of... So the lower the cost of living, the more they're going to be able to enjoy life instead of spending their monthly stipend on housing costs and grocery costs, gas and all that, they can do a little bit more."

This makes intuitive sense. Often when making a first move after retirement, people have a fair amount of resources at their disposal. However, they may also be aware that their new financial situation is not as strong as while they were employed. Budgeting for a fixed (and most likely reduced) income can shape migration decisions toward areas with cheaper relative cost of living. Many respondents claimed that they were drawing people from major cities an hour or more drive away. They wanted to retire, but could no longer afford the city, so they moved to a more rural setting.

However, they also discussed considerable variability that would be obscured by a simple "cost of living" measure. For example, in some places housing was cheap and easily obtainable. At the same time, many of these places did not have access to national chain stores, and therefore had to pay higher prices for the things they wanted. It was fairly common, in fact, for participants to say that people in these areas would need to drive an extended distance to get to a larger city for shopping. Still, this was often cited as a strength of the local areas. Participants proudly proclaimed that they were "halfway between major cities X and Y."

This raises a number of new questions. First, how far away can a place be and still be considered "adjacent" to a metropolitan area by the people who live there? Participants said that a majority of residents were willing to make drives of up to an hour and a half to reach metro

shopping opportunities. Second, how important is it for a retirement destination to have access to a major highway? Several URD community locations were either on major roads or at or near the intersections of them. There may also be an interaction between the natural climate and the ability of people to utilize the roads. The community in Washington said that they had good access to metro areas unless the weather was bad. Unfavorable weather could easily block the roads and limit outside access. A third question deals with the lack of immediately present local services and the reduced capacity for driving that many elderly experience. If URD towns continue to age, but do not provide spatially immediate access to necessities, they may have difficulties dealing with transportation issues. The Washington community had at least partially dealt with this issue by setting up a public bus that operated on the main roads and would transport people back and forth up to the distance of the neighboring town 20 miles away. However, this bus only ran four hours a day. This is a good case. Several other communities complained that transportation was a very big problem in their area. What this means is that the concentration of retiree migrants measured at the county level may mask important spatial distribution trends driven by transportation patterns, especially if there is a tradeoff between the costs of living and the presence of broadly defined amenities.

Respondents in several locations proclaimed the scenic beauty of their area. This took many forms, from the mountains of Washington to the deserts of Utah to the historical sites of Virginia. This was often enhanced by the tourism promotion in the area. For example, the town in Washington is built like an “Old West” town. Every year they have a particular festival. Describing it, one participant said, “That’s been going on about 50 years and that draws quite a few people. You know, it’s a typical festival, but we have can-can girls and we have a shootout in the middle of the street.” The site in Utah is known as the filming location for several very popular Western and science fiction movies featuring desert areas. A participant told me, “Every year they do a western legends festival which really celebrates the western movies that were made from and they have all the old movie stars come out, and they are slowly dying off. The Lone Ranger, Gunsmoke...all those old TV shows were all filmed here. Daniel Boone...So I think that promotes the area to retired folks.”

This leads to two interesting findings. First, our common measures of natural amenities may be incomplete. These locations all had much higher rates of older immigration than would have been predicted from their region-specific natural amenity and recreation opportunity scores.

At the same time, many community leaders strongly proclaim the natural beauty of their areas. A logical conclusion is that we should expand or reformulate the concept of natural amenities to include things other than temperature, humidity, sunshine, topographic variation, and water surface area. Second, historical or cultural amenities can often be just as important (if not more so), than natural amenities. This is especially true in terms of attracting tourists which may choose to relocate later. Participants in Virginia stated that many people visited the area to take in the Civil War and other US history sites. Once there, they realized they liked other aspects of the community and the natural environment. This then provided the impetus for future migrations.

In terms of access to health services, stories varied somewhat widely. Several communities seemed much less interested in the natural beauty of their area. Instead, they tended to immediately cite their award winning hospitals, doctors, or nursing homes. The community in Missouri, for example has a hospital which has a long list of awards. They said, “[The hospital is] one of the #1 rural hospitals in the United States. They get recognized all the time for their innovation, their quality of care, their medical excellence, so I think people pay attention to that when they’re looking at communities and looking at the possible need of future healthcare... It’s just amazing what resource we have in our community.” One participant in Vermont was actually surprised when she stopped to think about how many nursing home and assisted living facilities they had in the area. The presence of health care of some kind was a fairly consistent finding across the counties. However, often, it was not located directly in the town. People in several places need to make at least a 20 minute drive to get to higher quality medical care. In Utah, one respondent said, “We’re almost 90 miles away from [a larger city] where the best healthcare facilities are...the closest to this area. So how are [older people] supposed to get to those specialists from here? They can’t drive themselves, so that’s actually an issue.” In a lot of cases, though, there was at least basic medical care in the vicinity and often specialized medical care for the aged (either through assisted living, home care, or some other means). Access to healthcare, then is a central factor in URD locations.

This brings us to what I believe is one of the most important findings of this research. I argue that there is a need to expand the role of space (and the space itself) in research on retirement migration. In each case, whether it was natural amenities, recreation opportunities, tourist attractions, health care, or shopping, often the desired amenity was not located within the

URD county itself. In the words of one participant, “We kinda say that we’re just a drive away. Because we’re centrally located in [our state].” This means that important real-world relationships would not be found using standard county level statistical analysis. Though steps have recently been made to expand the analysis of retirement migration by controlling for the spatial autocorrelation present in migration destinations, it may be equally beneficial to look at slightly larger areas or relative adjacency advantage/deprivation measures when trying to explain retirement migration patterns.

Several respondents noted that, while their area was attractive, the biggest tourism sites were in adjacent counties. Often the most popular lakes, the rivers, or the historic tourist attractions were some distance away. One said, “There are points [of larger lakes] that are as close as 15 minutes. So, [Lake A] and [Lake B] are not in our county, but they’re close.” Another added, “National parks are all around us... But it’s not part of the town, but you know, we’re just centrally located in between all those.” Hospitals could also be some distance outside the town, possibly across county borders. Urban shopping opportunities could also be a considerable distance away and still be mentioned as a local amenity due to a desirable location.

We should note, though, that these things do not seem to be effective at enhancing local attractiveness from the same kinds of distances. Health care, if not immediately present, needs to be within a 20-30 minute drive from the town in question. Attractive natural or cultural features such as lakes and monuments can also be about a half hour away. Shopping, in contrast, can exert considerable effects on these areas from between an hour and an hour and a half away. This provides evidence that what may really separate URD from CRD counties is more of a question of borders and distance than an actual difference in kind.

These results, though limited in a quantitative sense, shed a great deal of light on the phenomenon of retirement migration to unconventional places. On one hand, survey respondents in each case study location rated several items similarly. Many of these are most likely found in more conventional destinations. For example, most people thought they had excellent outdoor activity opportunities, landscapes, and public safety. However, there are also significant differences between URDs and their more conventional counterparts. For example, respondents tended to rank job opportunities, indoor activities, and the availability of shopping very poorly. This is not what we would expect to find in typical retiree destinations. They also indicated that access to healthcare was fairly good in their URD locations. Conventional, fun-in-the sun models

say very little if anything about access to health services. While the survey results have limitations, such findings reflect differences between retirement migration flows based on the lifecourse perspective.

The interviews with community leaders and residents helped to clarify the situation a great deal. They did not describe a situation with excellent amenities within the county borders, but instead painted a picture of access to amenities by physical adjacency to an area that did have these things. Some things were generally present in the county. Access to healthcare, for example, was very important in some cases. However, it was also acceptable for healthcare, natural amenities, and historic landmarks to be several miles away in another county. Shopping is the most extreme case. Access to shopping could still be considered an amenity even if it was an hour and a half drive to a metropolitan area, provided that high quality transportation was also present.

Empirical Testing

Based on the results from the survey and interviews, it is possible that URDs could be categorized into three theoretical groups. First are those URDs that are spatial extensions of the conventional model of retirement migration. In these cases, the forces shaping migrant flows are essentially the same. The difference is simply in the effect that migrants' resources have on their ability locate closer to or further away from desirable amenities. Thus, these counties may not even qualify as unconventional destinations as I have defined them here. However, this distinction allows researchers to revisit the spatial measurement of retirement migration, moving away from a county-based model to one which emphasizes community characteristics, transportation links, and the importance of relative distance measures. These spatial aspects will be the focus of the next chapter. The other two categories will be discussed and tested in a limited way below.

The second group would be comprised of unconventional retirement destinations that attract older migrants based on healthcare services and the general business structure. Previous quantitative work has supported this to some extent (Bolender 2009; Bolender and Kulcsár 2008). These places are not necessarily found in close proximity to natural amenity areas. Further, the social and economic composition of these places is different, as they tend to attract a different group of migrants (mostly older people who place a higher priority on quality

healthcare). These healthcare based URDs are the most likely to yield a systematic policy model for places that wish to attract retirees without reasonable spatial proximity to more conventional amenities. Some evidence suggests that investment in healthcare structure will induce older immigration. However, two important caveats should be mentioned. First is that this migration flow will be different from what the general public perceives about retiree migrants. Migrants in the more advanced ages generally have fewer resources. As such, their contribution to local economic growth will be more limited. Second, these places will probably attract retiree migrants from shorter distances. A rural community with high quality health services but without widely recognized natural or cultural amenities may become a retirement destination for urbanites or very small town residents living within an hour drive. These people may be attracted by lower living costs and quality healthcare, but probably would like to remain in close proximity to their origin communities.

Finally, the third group consists of URDs that became retirement migration destinations based on local peculiarities, such as unique cultural amenities. These are the real outliers, and their success could be very difficult to reproduce. On the other hand, this may encourage local decision makers to look for place-specific characteristics to induce retirement migration. URDs in this group usually also have decent health services and local business structures, but it is more likely that those emerged as a response to the unique characteristics that made the place attractive to migrants in the first place. Further, the processes leading to attractive cultural characteristics have probably been in motion for quite some time. Policy makers would need to work to capitalize on current characteristics as opposed to actively creating some new impetus to future migration. Conceptually, this is a different causal mechanism, requiring a different policy approach.

To attempt to test the validity of these relationships, I offer a limited multiple regression analysis. Along with standard retirement migration predictors, it includes a number of additional test factors to explore whether there are other kinds of amenities that may produce strong impacts on retirement migration patterns. Unfortunately, both this list of variables, and the number of cases on which the regressions were based is somewhat limited. Because the data come from a variety of sources, about one quarter of the total number of counties were excluded in a listwise basis. However, though I do not show it here, mapping these counties shows no obvious spatial pattern to those that become missing. Models here cover only the 60-64 and 80-

84 age groups for the total population. Missing data became a pertinent issue when trying to construct the data for the black or Hispanic population.

In addition to some of the more standard predictors, I add several measures of additional amenities. Employment in general hospital and medical services in the area per 1000 population is included as a proxy for the availability of health services in the area. Median gross rent and median monthly owner costs (both mortgaged and non-mortgaged) represent rough measures for the cost of living in the area. These costs not only include actual rent or mortgage payments, but also the cost of utilities, insurance, and maintenance as well. Since people generally use about 25 percent of their income on housing related expenditures, this will provide us a reasonable estimate of relative cost of living in the area. Measures of cultural recreation sites (including zoos, resorts, museums, and others) and historical sites (such as monuments or battlegrounds) per square mile serve to measure cultural activities in the county not necessarily associated with outdoor recreation. The ratio of natural forest milage to the square milage of the county is also included. This provides an additional factor outside of the typical natural amenities scale. Related to this, I have only included the non-climate based natural amenities as they are the most likely to vary quickly over geography. The model also includes some typical controls to help ensure validity.

Variables are added according to blocks based on theoretical relevance. The first block contains only employment in hospitals. In general, we would expect a weak relationship, if any at younger ages with a more pronounced positive effect for higher age groups. Health services are likely to be a more pressing concern as the age of the migrant group increases. The second model adds proxies for cost of living. Younger old migrants, being drawn to more rural areas, would tend to go to places associated with lower household incomes and more expensive rental markets (due to their general population growth and desirability). Older old movers, in contrast, tend to move toward more urban areas with higher average incomes and lower housing costs. Cultural recreation and historic sites are added in the third model to measure the effects of non-environmental kinds of activities. The fourth and fifth models include more traditional kinds of environmental amenities and population controls. However, I took care to focus more on topography and landscape features as opposed to the entire natural amenity scale. I argue that using the entire natural amenity scale in a non-spatially oriented analysis, conflates region of the

country with “natural amenities.” Demographic controls were added primarily to help preserve robustness in the models as a whole.

Looking at the 60-64 year old total population category (Table 6.2 below), we see that the effect of health employment is actually negative across all models. This means that younger retirees do not tend to seek out health services for their younger-old age moves. If anything, they tend to avoid places with a high concentration of health service employment. Model 2 adds housing cost variables. In general, these economic factors have a very strong influence on migration locations. Younger-old migrants gravitate toward areas with higher renter costs, lower non-mortgaged owner costs, and lower median income. The effects of cultural and historic amenities are the opposite of what would be expected. They have a negative effect on county desirability. Natural amenities and outdoor recreation opportunities, on the other hand, are positive factors for inducing younger-old immigration. Demographic controls also act as expected, with younger-old migrants showing preference for older, quickly growing, less urbanized areas.

Taken individually, these findings may seem somewhat confusing. However, things become more clear when we think about the kinds of areas that have all these things in common. Younger-old migrants really are looking for natural amenity-rich areas that match their idealized image of rural life. These places are typically poorer (due to the prevalence of low-wage restaurant and recreation jobs), quickly growing (due to immigration of all ages), with smaller or distant urban centers. It is also natural that rental costs in an area such as this would be a bit higher (since many who move in will take a rental property while looking for a more permanent residence). Further, places focused on natural amenities are typically farther from more established cultural and historical centers.

Table 6.2: Regression Models Using Additional Amenities for Age 60-64

	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 4</i>	<i>Model 5</i>
Ratio: Health Employment per 1000 Pop	-0.163***	-0.17***	-0.162***	-0.143***	-0.068***
1990 Median Gross Rent		0.558***	0.517***	0.215***	0.041
1990 Median Monthly Owner Costs - Mortgage		0.043	0.122*	0.097	0.074
1990 Median Monthly Owner Costs - Non-mortgage		-0.349***	-0.356***	-0.353***	-0.201***
1989 Median Household Income in Thousands		-0.596***	-0.613***	-0.367***	-0.319***
Ratio: Cultural Rec Sites per Square Mile			-0.064**	-0.047**	-0.025
Ratio: National Historical Sites per Square Mile			-0.044*	-0.051**	-0.019
NatAmen: Standardized Typography Score				0.055**	0.069***
NatAmen: Standardized Water Area				0.141***	0.115***
Recreation Composite Score				0.293***	0.177***
Ratio: Area of National Forest per Square Mile				0.1***	0.089***
1990 Population Natural Log					0.055*
1980-1990 Percent Change in Population					0.457***
1990 Percent Age 65+ years					0.229***
1990 Percent Urban					-0.227***
Adjusted R-Squared	0.026	0.235	0.240	0.370	0.547
Model Significance	0.000	0.000	0.000	0.000	0.000

p<.001=***, p<.01=**, p<.05=*

Examining the same models applied to those age 80-84 reveals a much different picture (Table 6.3 below). Except for the first model, employment in health services is now a positive predictor of a county's attractiveness to the older-old population. Higher housing costs serve as a deterrent for this group, though there is evidence that they favor areas with higher average incomes. Again, the older-old population seems to avoid areas with a high degree of cultural recreation and historical sites. The only conventional amenity that provides a draw for the older-old population is the topographic variation in an area, though it is overshadowed by every other significant effect in the model. Demographic controls reveal that they are also moving to growing areas; however, they are attracted to younger and more urbanized locations. The overall picture in the data for the 80-84 age group is one of preference for more urbanized areas with higher average incomes (due to more professional employment), lower housing costs, and greater access to health services. These people are not moving to amenity rich, fun-in-the-sun locations

Again, these models are not all-inclusive. There are definite issues with these measures. For example, it would be best to differentiate health service access based on type of facility, relative cost, ability to provide specialized care, and some measure of quality or reputation. Housing costs is only a loose approximation for the cost of living. Information on the prices of staple food items, transportation, insurance, tax rates, and entertainment would be helpful. However, what these models do demonstrate is that there are other kinds of amenities that have an effect on retirement migration patterns beyond recreation opportunities and primarily climate-based measures of the natural environment.

Table 6.3: Regression Models Using Additional Amenities for Age 80-84

	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 4</i>	<i>Model 5</i>
Ratio: Health Employment per 1000 Pop	0.021	0.052**	0.062**	0.06**	0.069***
1990 Median Gross Rent		-0.036	-0.089	-0.064	-0.263***
1990 Median Monthly Owner Costs - Mortgage		-0.083	0.017	0.003	-0.144*
1990 Median Monthly Owner Costs - Non-mortgage		-0.127***	-0.134***	-0.118***	0.022
1989 Median Household Income in Thousands		0.554***	0.531***	0.517***	0.525***
Ratio: Cultural Rec Sites per Square Mile			-0.084***	-0.083***	-0.062**
Ratio: National Historical Sites per Square Mile			-0.048*	-0.052**	-0.033
NatAmen: Standardized Typography Score				0.028	0.058**
NatAmen: Standardized Water Area				-0.013	-0.025
Recreation Composite Score				-0.033	-0.03
Ratio: Area of National Forest per Square Mile				0.016	0.011
1990 Population Natural Log					0.014
1980-1990 Percent Change in Population					0.216***
1990 Percent Age 65+ years					-0.083***
1990 Percent Urban					0.104***
Adjusted R-Squared	0.000	0.141	0.148	0.149	0.190
Model Significance	0.000	0.000	0.000	0.000	0.000

p<.001=***, p<.01=**, p<.05=*

The definition of outliers always depends on how one specifies the mainstream or conventional phenomenon. Given the complexity of migration decision making, a study focusing on county-level characteristics can only reveal so much about how these places became retirement migration destinations. Individual motives, such as the desire to relocate close to children, are still very strong and difficult to predict from macro level data. Thus, one future direction of this research should be the synthesis of macro and micro approaches to retirement migration in the context of unconventional retirement destinations. In summary, there are most definitely retirement migration destinations that do not fit the conventional pattern using traditional methods. However, further research may expand our knowledge of retirement migration in general by focusing on expanded spatial boundaries, different kinds of “amenities,” and differences in location decisions by migrant characteristics.

CHAPTER 7 - Unconventional Methods

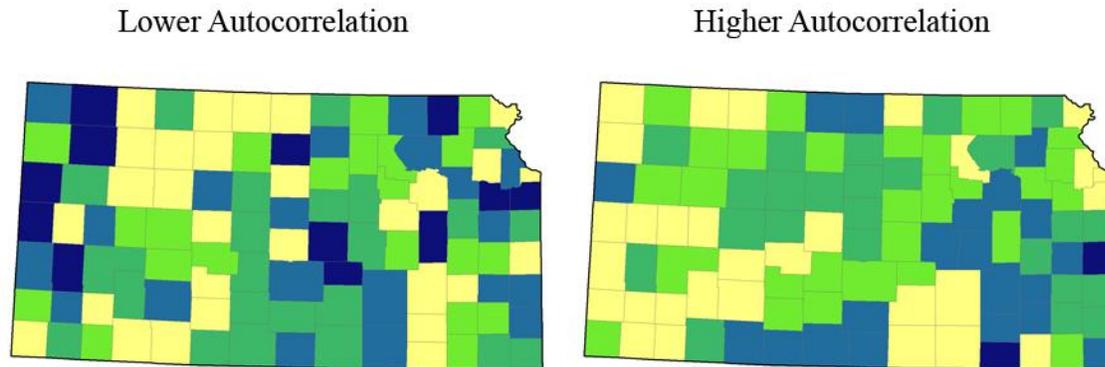
This chapter presents an example of the possibilities of explicitly adding space into models predicting standard retirement migration patterns. To begin, I will briefly discuss the basic mechanics of spatial regression modeling (Johnson et al 2005; Ward and Gleditsch 2008). It is apparent from visual geographic and statistical analysis that retirement migration patterns tend to be clustered across space (Brown et al 2009). In other words, counties that are physically near to each other tend to have similar net migrations rates at older ages. For example, there are 44 official retirement destinations in Florida (almost 65 percent of Florida counties) but only one in Kansas. Methodologically speaking, this can create problems with the assumptions of regression modeling. Using regression with a spatially lagged dependent variable or a spatial error term can help tease out the effects of various independent variables, regardless of their spatial clustering.

In addition, I utilize three additional expressions of space in the independent variables to the normal formulation. First, I explore whether factors may exert an influence on a county's fortunes from at least one county away. Second, I examine the possibility that relative attractiveness within a county cluster might have an influence on older people's migration decisions. Third, I embed both of these enhanced functions within a spatial error model in order to account for the inevitable autocorrelation created by independent variables that apply to physically overlapping county clusters.

Basic Spatial Regression

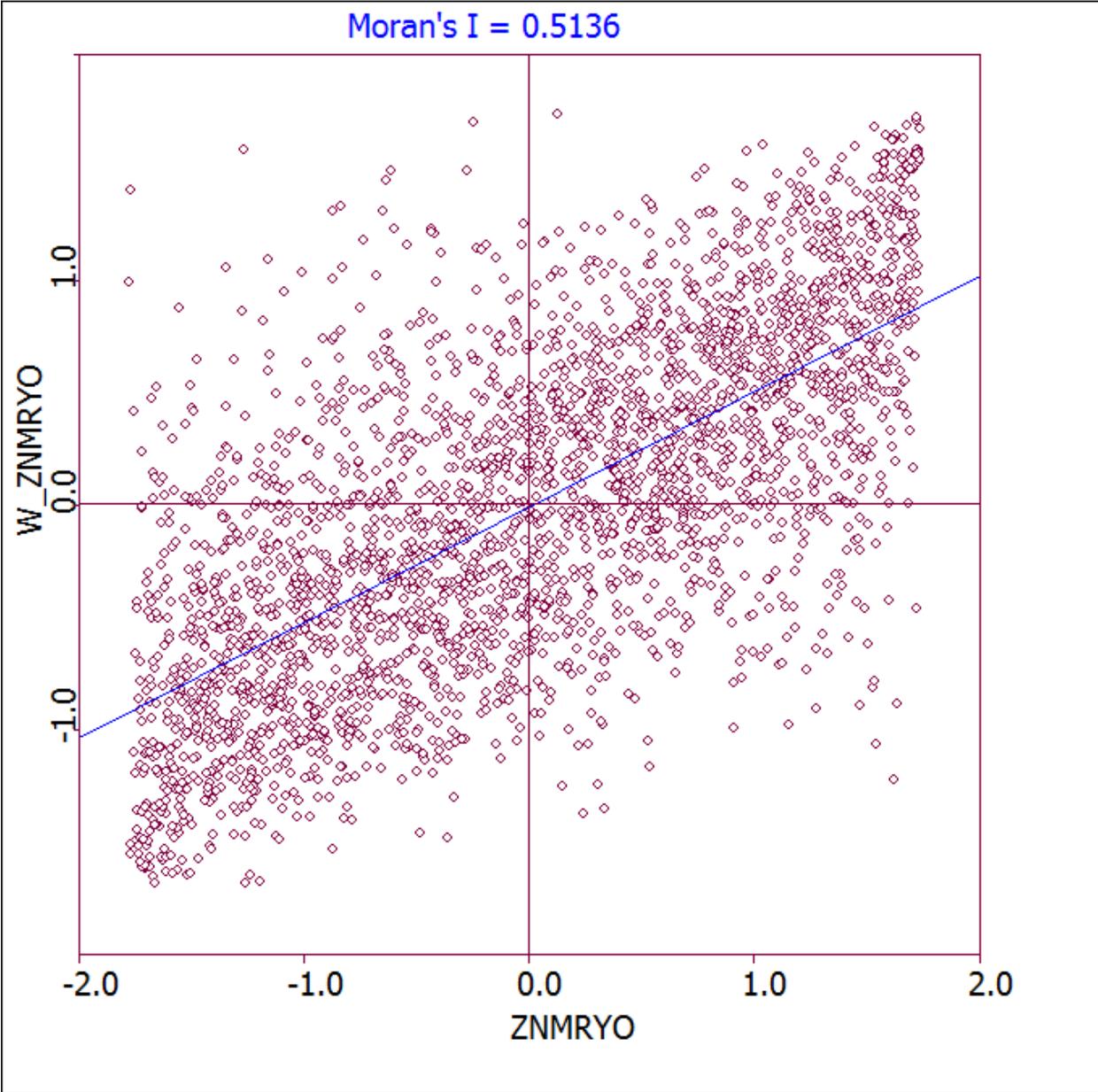
Spatial regression is a valuable technique for teasing out the real effects of independent variables when geographic areas that are physically adjacent tend to have either very similar or very different scores on a variable of interest. If we were looking at a checkerboard, it would have perfect negative spatial autocorrelation since no red square was directly adjacent to another red square. If all the red squares were on one side of the board and all the black squares on the other, we would have perfect positive spatial autocorrelation. Randomly distributing red and black squares would create the least autocorrelation possible. The same is true for counties (or any other spatial unit of analysis). See Figure 7.1 for a visual example.

Figure 7.1: Low and High Spatial Autocorrelation Example



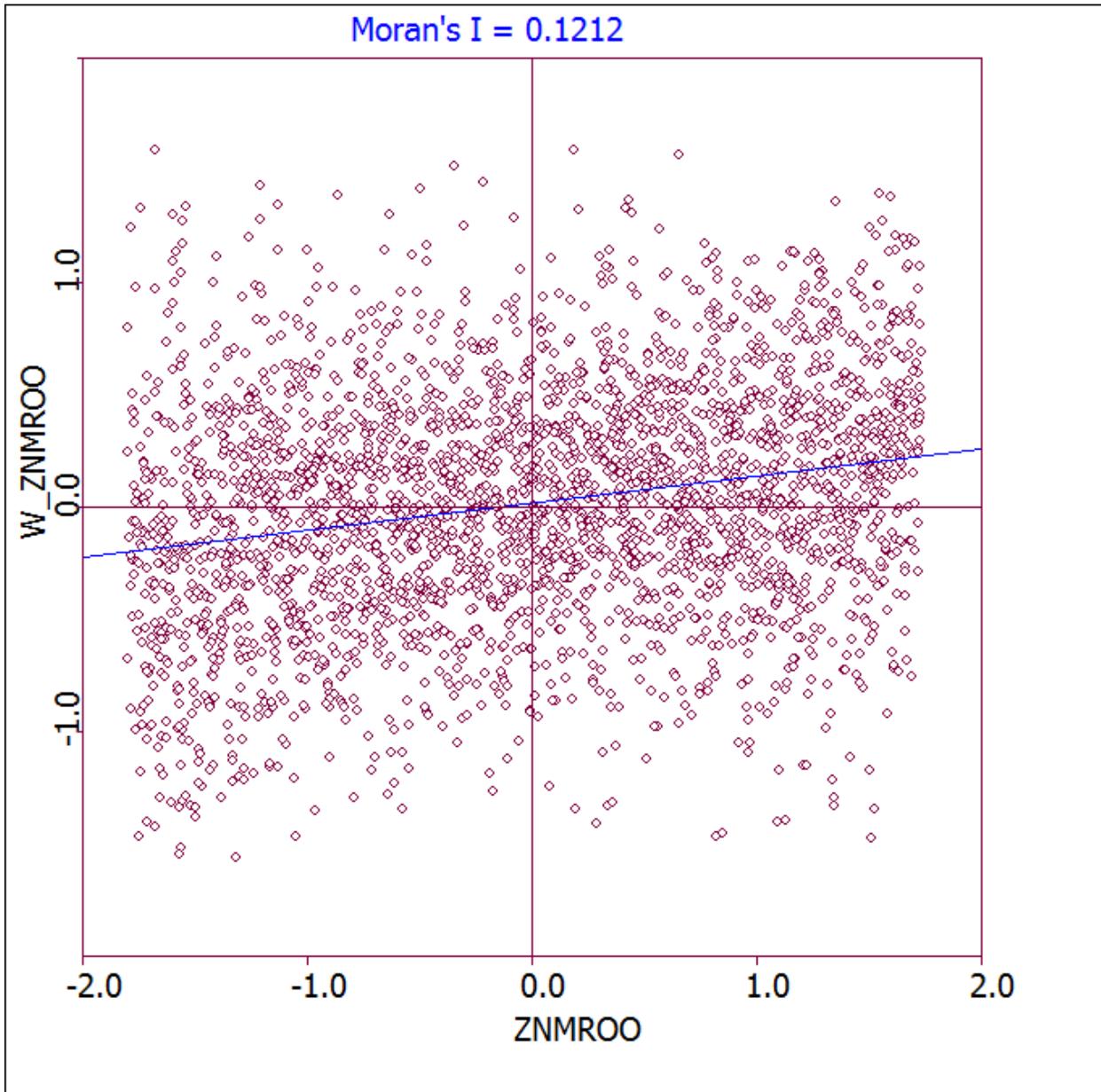
We typically use a test called Moran's I to assess this overall association between spatially contiguous units of analysis. It can be roughly interpreted in a similar fashion to the Pearson's r correlation coefficient that is familiar to many social science researchers. For this analysis, I will once again be using the standardized net migration percentile rank of counties at the 60-64 and 80-84 age group for the total population. Moran's I statistics are .514 for the younger-old group (Figure 7.2) and .121 for the older-old county scores (Figure 7.3). Both are significant at the .001 level. What this means is that, even though spatial autocorrelation is much less of an issue in the older-age groups (again, because of migrations motivated by necessity), it is still a factor that could contribute to problems with typical regression assumptions.

Figure 7.2: Spatial Autocorrelation Net Migration Percentile Rank Age 60-64



Note: ZNMRYO represents the standardized score of counties on their net migration rate at age 60-64. W_ZNMRYO represents the spatially weighted form of ZNMRYO (using first order queen's contiguity rules). Correlation between the two is equivalent to Moran's I.

Figure 7.3: Spatial Autocorrelation Net Migration Percentile Rank Age 80-84

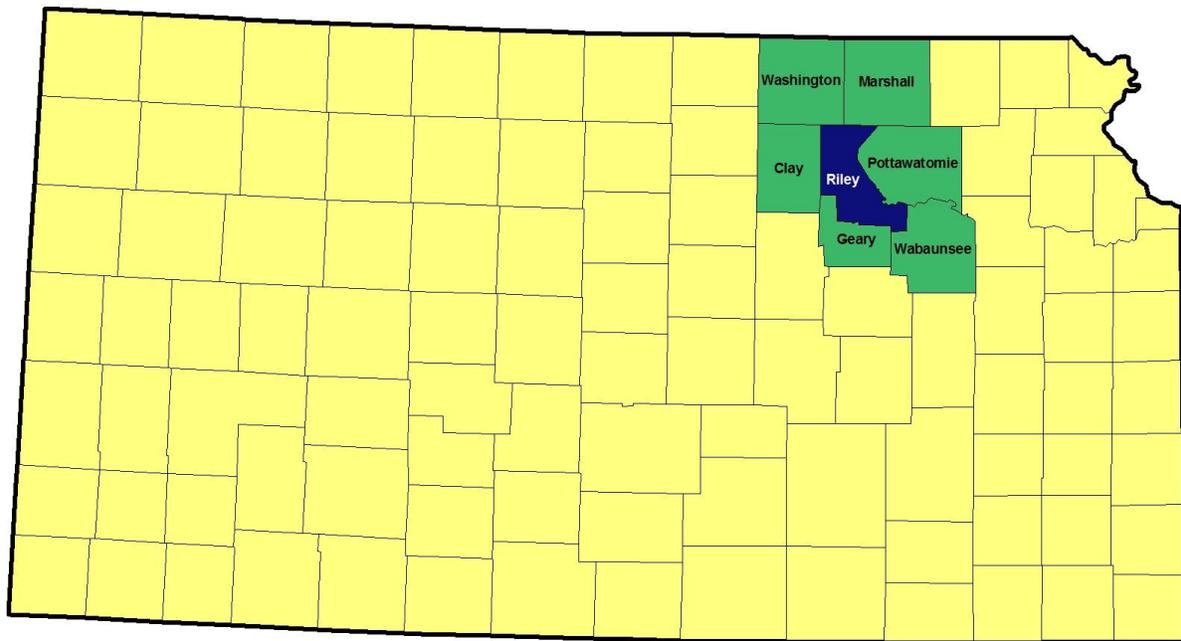


Note: ZNMROO represents the standardized score of counties on their net migration rate at age 80-84. W_ZNMROO represents the spatially weighted form of ZNMROO (using first order queen's contiguity rules). Correlation between the two is equivalent to Moran's I.

There are two ways to correct for this using regression. The first is to use a spatial error model. Spatial error models use a between-county correlation as a statistical control to reduce or eliminate the statistical noise caused by autocorrelated error terms. This is most useful when the researcher suspects spatially intercorrelated independent variables or just non-substantive

statistical noise created by spatially contiguous effects. The second, a spatial lag model, is more intuitive. Here the researcher creates an average (or spatial lag) of adjacent county values on the independent variable. In essence, a new variable is created that represents the average value of the county cluster with the unit of interest at its center. For example, Figure 7.4 demonstrates this using Riley County, Kansas.

Figure 7.4: Spatial Lag Demonstration Using Riley County, Kansas as an Example



While most statistics focus only at the county level, a spatially lagged value would be an average of all the counties whose borders physically touch the county of interest. We should note that several definitions may be used to determine what counties are considered adjacent. This study uses a queen’s first order contiguity definition. This means that all counties touching the border of the county of interest are included in the spatially lagged average. Though there are numerous other definitions that could be used, I argue that factors are likely to have a much greater influence on a county’s attractiveness to older age migrants from only neighboring counties than from any greater distance.

Spatial Extensions

Spatial regression allows us to explicitly account for autocorrelation in the values of our variables across contiguous geographical areas. This is relatively new to retirement migration research. However, I add to this two new formulations of space. First is the idea of micro-regional effects. In essence, I created spatially lagged versions of all of the independent variables in the model. These variables represent the average score on each factor across the county of interest and any county which touches it. Real world examples from the interview analysis support the usefulness of this concept. Several community leaders mentioned attractive amenities that were technically outside their borders. Even though most people in their town considered these areas well within their community, county boundaries separated them statistically from the amenities they enjoy. It is easy also easy to understand how, a person may want to live near a lake, but cannot afford the property costs. If they live a little further away (perhaps in a neighboring county), they may still have access to the amenity they want without having to pay a premium on their living costs. Measuring these micro-regional effects expands the typical county based analysis and allows us to see if there are differences in how people live in the real world, relatively free of administrative boundaries.

Second, I created what I am terming relative spatial advantage measures. These variables were constructed by taking the difference between the county's value on an independent variable and its lagged value (the average value of the cluster). The point is to measure relative advantage or disadvantage compared directly to neighboring counties. A high relative advantage score would mean that the county of interest has a higher value on that factor than in surrounding counties (a raised map would look like a mountain peak). A low relative advantage score would mean the opposite (shaped more like a doughnut). While it is obvious that there are issues with this measure (for example, one very high value county in a cluster could skew the results), this is only a first step toward expanding the role of space and adjacency in the study of retirement migration. Further, it provides a great deal of empirical interest. If relative advantage were to strongly predict migration patterns, policy makers would have a much better frame of reference for their particular competition for attracting movers.

Third, I have taken steps to control the spatial autocorrelation that must inevitably result in these models. The independent variables in both cases now represent characteristics of county clusters that overlap. To diminish this problem, I present both regular OLS models and spatially

nested models. These place the regular, micro-regional, and spatial advantage regression models within a MLE configured combined spatial lag and spatial error model. The nested models include both a spatially lagged dependent variable and the spatial error term. The results of all six models for the age 60-64 group are presented in Table 7.1.

Table 7.1: Regular, Micro-Regional, and Spatial Advantage Models Age 60-64

	<i>OLS</i>	<i>OLS Nest</i>	<i>Regional</i>	<i>Reg. Nest</i>	<i>RelAdv.</i>	<i>RA Nest</i>
Topography	0.129***	0.039***	0.181***	0.003	0.117**	0.032
Water Area	0.083***	0.028**	0.14***	-0.003	0.059*	0.068***
Recreation Score	0.188***	0.152***	0.127***	0.021	0.154***	0.163***
Employees / Establishment	-0.065**	-0.063***	-0.055	-0.063*	-0.037	-0.044*
Farm Employment / 1000 Pop	-0.104***	-0.037*	-0.106**	-0.001	-0.086*	-0.088***
Manufacturing Employment / 1000 Pop	0.103***	0.056***	0.222***	0.031	0.03	0.025
Retail Employment / 1000 Pop	0.018	-0.04*	0.185***	0.019	0.03	0.01
Service Employment / 1000 Pop	-0.038	-0.037*	-0.084	0.001	0.001	0
Government Employment / 1000 Pop	-0.076***	-0.067***	0.115**	0.036	-0.036	-0.062***
Median Household Income	-0.333***	-0.061**	-0.424***	0.059*	-0.242***	-0.209***
Pct Poor	-0.04	-0.007	0.021	0.009	-0.022	-0.043
Pct College Educated	-0.176***	-0.088***	-0.217***	-0.045*	-0.141**	-0.135***
Pct White Non-Hispanic	-0.102***	-0.031*	-0.104***	0.013	0.131**	0.07**
Population Size	-0.031	-0.013	-0.054	0.016	-0.052	-0.034
Population Change	0.368***	0.158***	0.417***	-0.014	0.225***	0.235***
Pct Age 65+	0.261***	0.144***	0.251***	0.017	0.275***	0.264***
Pct Lived Outside of County (5yrs pre)	0.243***	0.089***	0.349***	-0.037	0.135***	0.123***
Pct Urban	-0.216***	-0.133***	-0.183***	-0.001	-0.17***	-0.21***
Lagged Dependent		0.708***		1.09***		1.026***
Spatial Error Term		-0.458***		-0.913***		-0.954***
R-Squared	0.612	0.702	0.437	0.638	0.210	0.799
Log likelihood	-2708.8	-2383.1	-3242.1	-2820.3	-3727.7	-2000.6

p<.001=***, p<.01=**, p<.05=*

The first thing to notice is that all of the models do a reasonably good job of predicting net migration patterns for the 60-64 age group. Based on the regular OLS model, again we note that younger-old migrants are drawn to amenity-rich, poorer, rural areas with a higher proportion of older people and a growing population. Adding the spatial regression coefficients increases the predictive power of the model without drastically altering many of the coefficients. Overall, we can easily see the value of adding standard spatial statistical techniques to the study of retirement age migration as a whole.

Looking at the micro-regional effects model, there are several differences. The first is that the predictive power of the independent variables has dropped somewhat. Now, they only account for about 44 percent of the variation in migration patterns. The effects of some variables has increased dramatically. Much in line with community leader statements, retail employment is able to exert an influence from outside of the county borders. The effects of natural amenities, recreation opportunities, and population change also remain. However, many of these effects are lost when accounting for the spatial statistical noise. This is to be expected, since the independent variables are now directly related across counties. However, this does not detract from the usefulness of technique. The model is presented here as an ideal form. Careful selection of which variables are used as micro-regional and various statistical adjustments may lead to a number of new findings.

The relative advantage model is also empirically fascinating. By themselves, differences between central counties and their associated clusters on these variables accounts for 21 percent of the variation in migration choice. Again, adding the nested spatial effects greatly increases the predictive power of the model. It appears as though, when selecting a living area with a region, younger-old people are drawn to areas with greater topographic variation, more water area, and greater recreation opportunities. They also show tendencies toward areas that are growing faster, have higher rates of immigration, a higher proportion of older people, and lower rates of urbanization within the counties of the area. These patterns in themselves are not surprising. However, it is substantively significant that they are showing tendencies toward these things within a micro-regional area.

Table 7.2 presents the same models for the 80-84 age group. Older-old migrants again show preference for areas that are low in recreation, higher in retail and service employment, less racially diverse, and a lower proportion in the older age categories. The predictive power of the

model is relatively lower than for the younger-old group. However, it is significantly enhanced by the addition of the spatial statistics. For this group, the micro-regional effects are much less significant. This could be because the transportation options of people at this age tends to be fairly limited. For example, it does not matter as much if there is a wonderful lake in the next county if you have no way to get there. Addition of spatial factors here improves the fit of the model, but they also completely overpower any other effect. Looking at the relative advantage models, there several strong effects. This further supports the idea that when older-old people are looking to relocate, spatial proximity is a very important concern.

Table 7.2: Regular, Micro-Regional, and Spatial Advantage Models Age 80-84

	<i>OLS</i>	<i>OLS Nest</i>	<i>Regional</i>	<i>Reg. Nest</i>	<i>RelAdv.</i>	<i>RA Nest</i>
Topography	-0.029	-0.017	-0.045	-0.01	0.015	0.05
Water Area	-0.019	0.001	-0.008	-0.011	-0.051	-0.043
Recreation Score	-0.243***	-0.176***	0.006	-0.017	-0.178***	-0.243***
Employees / Establishment	-0.129***	-0.089***	0.037	-0.016	-0.12***	-0.146***
Farm Employment / 1000 Pop	-0.111***	-0.079***	0.146**	0.013	-0.148***	-0.148***
Manufacturing Employment / 1000 Pop	0.085***	0.034	0.063	-0.012	0.049	0.062*
Retail Employment / 1000 Pop	0.142***	0.101***	-0.084	-0.06	0.04	0.098***
Service Employment / 1000 Pop	0.09**	0.081***	-0.022	0.029	0.103***	0.124***
Government Employment / 1000 Pop	-0.035	-0.032*	0.015	-0.035	-0.04*	-0.05*
Median Household Income	-0.01	-0.083**	-0.005	-0.069	0.26***	0.167**
Pct Poor	-0.108**	-0.015	-0.172*	-0.044	-0.041	-0.017
Pct College Educated	0.044	0.041*	0.035	0.026	-0.02	-0.009
Pct White Non-Hispanic	0.144***	0.051***	0.075*	-0.003	0.217***	0.262***
Population Size	-0.035	-0.048*	0.116	0.041	0.103*	0.069
Population Change	0.19***	0.085***	0.153**	-0.003	0.072*	0.095**
Pct Age 65+	-0.182***	-0.074***	-0.187***	-0.027	-0.126***	-0.138***
Pct Lived Outside of County (5yrs pre)	-0.007	-0.003	-0.011	0.004	0.035	0.047
Pct Urban	0.027	0.03	-0.091	0.004	0.032	0.047
Lagged Dependent		0.981***		1.097***		1.04***
Spatial Error Term		-0.982***		-0.994***		-0.992***
R-Squared	0.240	0.426	0.072	0.376	0.187	0.514
Log likelihood	-3673.7	-3516.2	-3959.1	-3644.4	-3769.4	-3285.8

p<.001=***, p<.01=**, p<.05=*

These models are not meant to “explain” all the variation in retirement migration. However, taken together, they clearly demonstrate that there is much to learn about older people’s migration behavior from expanding our horizons in terms of spatial analysis. The fact that results differ dramatically across age groups show that not only are spatial differences important, they also vary across migrant type. Younger-old migrants have the health and resources to seek out more remote, rural areas that most closely match their ideal amenity-rich destination. Older-old movers, in contrast, not only move toward areas with different kinds of amenities, they also seem to relocate so that the things they need are physically closer. Not only does space matter in a statistical sense, it also matters in terms of real world location patterns. This points to the utility of adding spatial factors not only empirically to our models, but also substantively to our theories. Space may really be the next frontier.

CHAPTER 8 - Discussion and Conclusions

What does this all mean? This chapter is an attempt to summarize and discuss the concepts and findings presented in the rest of the book. The first section will briefly recount the major ideas, models, and results. I will then move on to discuss how these relate to broader theoretical themes, policy implications, and suggestions for future research.

Summary of Key Findings

Current literature on retirement migration argues that older people as a whole move to areas because they are rich in natural and recreation amenities. This is because, with older movers' weak ties to the labor market, standard work-related theories of migration make very little sense. A pleasant climate and recreation opportunities also make intuitive sense as we think about the kind of places that we would like to retire. However, many empirical works on the subject focus only on these kinds of explanations. Given county level binary definitions of retirement migration based on a particular proportional threshold, available secondary data on other kinds of motivations can be limited. As such, many retirement migration studies either focus on surveys of older people's motivations, community case studies, or amenity based modeling using appropriate, but limited measures.

At the same time, other literature shows that older people move for a variety of reasons. Further, these reasons are likely to change significantly across groups and over the life course. Younger old, white people are much more likely to have the resources and preferences to move toward natural and recreation amenity-rich areas. In some ways, this supports a number of studies on retirement migration, since these younger, better-off movers make up the numerical majority of older people who are actually able to move. However, focusing in on only the activities of the young and relatively wealthy diminishes our understanding of the process of retirement migration as a whole. Not only do we lose the knowledge of diversity inherent in the older age migration process, we also do a kind of symbolic violence to older movers and retirement destinations that do not fit into our pre-defined category. There are several other stories to be told, and ignoring them not only limits our understanding of the process as a whole, but also prevents us from exploring useful methodological avenues that could be of benefit to migration and other kinds of research.

I have argued that we may label these other stories as “unconventional” because they do not fit into the prescribed conventional mold. Older old age migrants, for example, are much more likely to be moving for need based reasons. They seek healthcare services, reduced transportation issues, and family help. While they may still show preference for amenity rich locations, their desires may often be put aside in favor of necessity. Minorities too, are much less likely to have access to the resources to make long distance moves. Further, it is very probable that people from varying personal and cultural backgrounds will be drawn to different types of features when looking for a place to spend their later years.

Shifting the scale somewhat, we should also look at destinations that attract migrants without the usual complement of conventional amenity draws. Places may draw retirees based on access to medical service, relatively cheap cost of living, historical attractions that eventually produce migration networks, and adjacency to more amenity rich locations among a variety of other factors. Further, the economic and demographic situation in these places may vary. Conventional retirement destinations tend to be rapidly growing (not only due to the jobs created by retirees, but because amenity-rich areas are faster growing in general). Population and economic growth present a great deal of hope for a community’s future. While it is possible that older migrants will eventually need medical or other assistance, there are strong reasons to believe that these growing places will be able to attract and maintain the kinds of services and infrastructure that is necessary without placing an unusually large burden on other residents. Unconventional destinations, on the other hand, tend to be much smaller and their growth rates are slower. Also, they attract generally older migrants who will need assistance sooner. They face a possible future of population turnover (as migrants cycle in and out) or the difficult provision of services with already unstable economic and demographic conditions. The differences in these places’ stories are lost if we continue to cling to conventional thinking on migration patterns.

This book attempted to remedy the situation by exploring unconventional retirement migration processes. In terms of unconventional migrants, it showed that not all stories are the same. Using innovative, net migration percentile rank measures of retirement migration, both graphical and statistical results demonstrate that younger, white old people do in fact move toward tightly clustered counties in areas with a great deal of environmental and recreational potential. In this sense, conventional theories of retirement migration are strongly supported.

However, there is little support that this model should be extended to all older migrants. Both visual and statistical methods reveal that relocation processes vary dramatically at the age of the migrant group increases. Older old people are drawn to very different places for very different reasons compared to their younger counterparts. As age advances, people are drawn towards more urbanized areas with cheaper cost of living where they may obtain the kinds of services they need.

Though the data is somewhat incomplete in regards to race and ethnic characteristics, there are strong reasons to believe that the same kinds of places and draws do not apply well to any group other than whites. Hispanics and blacks are drawn to very different areas, and models that strongly predict county desirability to whites do almost nothing for either minority group. These difficulties further increase when looking at racial-ethnic categories at higher ages. In essence, then, this chapter concludes that the conventional theory of retirement migration, while it does apply to the majority of movers, does not adequately fit the patterns of migrants who are non-white or older than 75.

The next section moved to a descriptive analysis of unconventional retirement destinations (URDs) versus their more conventional (CRD) counterparts. URDs were selected through qualified residual analysis. I operationalized a URD as any county that had a 15 percent or more net migration rate at ages 60+ (similar to the Economic Research Service measure) and that were in the top five percent of positive, studentized residuals from a regression model fitted focusing on natural and recreational amenities with a few demographic controls. This created a pool of 108 URD counties that were spread across the country (primarily because natural amenity scores were re-centered based on their individual regions).

Descriptive analysis showed that URDs are similar to their CRD counterparts in a variety of ways. They both tend to have smaller populations and be more rural than non-retirement destination counties. They were also similar in terms of size, some industrial sector distribution of employment opportunities, and general immigration. However, there are measurable differences between them. First, URDs have, on average, much smaller and slower growing populations than CRD counties. This may lead to community capacity issues in some areas with limited economic growth and future service provision. Second, URDs are attracting a much older group of migrants. Younger movers still favor natural amenity rich locations found in typical CRD areas. However, this difference again may lead to very different social and service

provision issues in their respective receiving counties. Third, they tend to have economies that have been more focused on service industries for a longer period of time. Though this is difficult to interpret (due to “services” being used as a residual category), it may mean generally weaker and less stable economies, compounding the issues discussed above. In addition, a limited logistic regression model was created to predict county membership based on the same model used for migrants in the previous chapter. Results show that the model is much better at predicting a county will be a CRD than a URD. What this means is that the kinds of factors conventionally associated with retirement migration do, in fact, apply to CRDs, but the lack of predictive power and significant coefficients demonstrate that URDs are very poorly described by these kinds of factors. They are, in essence, very different places and should be studied accordingly.

As such, I then moved to examine some of these communities more closely. Out of the pool of 108 URD counties, eight were selected for a more in-depth approach. Each of these areas received surveys and community leader telephone interviews. Though these methods were not sufficient to generate statistically rigorous results, they did provide a wealth of exploratory information and new ideas. In general, people in these areas credited their older age immigration to a variety of causes. Some locations cited their award winning hospital services. Others touted the historical significance of landmarks in their immediate area. Still others focused on culturally significant activities that made their counties stand out to tourists and, by extension, migrants.

This chapter also presented my attempts to formulate these factors into a useable regression model. Results indicate that factors such as health services, cultural recreation in the area, historical landmarks, and additional natural amenities like national forests were, in fact, strong predictors and added to the validity of the model. While the initial goal of this process was to see if these factors were strong enough to create a new typology of retirement migration destinations, limitations in the data (both in terms of variables and number of cases) prevented me from accomplishing this. However, this exercise did provide strong support for the idea that alternative amenities exist and that a typology would, in fact, be possible with more complete data.

The most common response I received from the community, however, was that they were physically proximate to natural or recreation amenities. In other words, their county did have access to natural and recreation amenities. However, they would not officially show in secondary

data focused at the county level. This means, first, that some URDs are not necessarily unconventional as I have defined them. Places in counties immediately adjacent to a popular lake are still taking advantage of the amenity situation, but national statistics would not pick up on their presence. Second, it means that some retirement destinations are so because they are providing additional amenities, services, or economic conditions that prompt people to live a little farther away from the environmental features that initially drew them to the area.

The next chapter took these spatial adjacency theories and performed empirical tests. Results indicate that space is a necessary factor to consider in terms of retirement migration. The easiest application is through spatial regression procedures. Alone, adding spatially lagged dependent variables and spatial error terms greatly improved the fit of the various models. However, the analysis went beyond traditional spatial applications to forge new ground in spatially oriented regression procedures. I proposed and evaluated the use of both micro-regional effects and relative advantage scores in migration modeling.

Spatially lagged independent variables formed the basis for the micro-regional effects models. This means that (using queen's first order contiguity rules) these factors were averaged across the county of interest and any neighboring counties with which it shared a border. In substantive terms, these variables were equivalent to the effect of that particular factor in the immediate county cluster, thus expanding the area of reference. In the standard micro regional model for younger old migrants, several coefficients were strong and significant, though they followed a very similar pattern to the standard model. This strongly indicates that several factors may exert influence from across county boundaries. However, nesting the micro-regional model in a spatially adjusted framework greatly reduced the explanatory power of many factors. While this indicates issues with building in a great deal of spatial overlap into a model, it does not detract from the finding that micro-regional effects may be very useful, if used in a limited and controlled fashion.

Spatial relative advantage scores represented the difference between the central county of interest and its cluster's average. High scores would mean that the central county has a greater level of the factor, while negative scores would be interpreted as the opposite. These scores were able to explain a surprising amount of the variation in county migration attractiveness, regardless of their relative nature. It is plain from the analysis that people are making choices within these multi-county areas, and that their acceptance of distance from what they seek is strongly related

to the age of the group in question. While younger migrants seem to favor similar factors as the other models, they are less inclined to require them to be within the county boundaries. Older old migrants, on the other hand, show stronger preference for keeping attractions at a very short distance. This makes intuitive sense given the relative abilities of each group to travel.

Implications

What can be learned from this examination of unconventional retirement migration? First, there is a great diversity in retirement migration patterns. While it is true that a majority of movers are younger, white, and economically secure, focusing only on this group is inappropriate. Different kinds of people move to different places for different reasons. This research has demonstrated that there is very little in common in terms of area choice and motivations between these conventional migrants and their black, Hispanic, or older counterparts. Areas that are considering promoting themselves as a retirement migration destination need to look not only at their resources, but also at the kinds of people they may attract in the future. Given the diversity of people involved, a myriad of social, cultural, or economic issues may spring to light following the movement particular groups of people into particular areas. This is not to say that these issues would necessarily be bad or good. It would simply be helpful to be aware that not all retirees look like those in popular brochures.

Related to this, I recommend that research on retirement migration begin to rely less on binary county typologies. While these work very well for particular purposes, assigning such broad labels without qualifications obscures the processes that are actually occurring in the counties in question. For example, there would be strong economic, demographic, and social differences between a county that is attracting younger old, relatively wealthy migrants to its higher priced environmental hotspots and another that is drawing primarily older, poorer migrants to its hospital and urbanized community. One case paints a picture of economic and demographic growth while the other situation could speed economic decline and create a number of challenges to community capacity. However, both cases look the same under a binary threshold measure of growth in the total population age 60+.

Instead, we should move (when available) to more quantitative measures of migration. I have used, and would suggest using, percentile rank measures of net migration. These are intuitively scaled from 1-100 and are easily interpretable by a wide variety of audiences. In this

case, they represent a “desirability score” with counties receiving the greatest proportion of migrants ranking very high while those losing the most rank very low. While there are some issues related to regression assumptions in using these measures, I argue that along with their interpretability, they also allow us to easily compare patterns across geographic, temporal, and migrant characteristic factors of interest. To gain these insights without having to resort to complex power transformations and other means that make our models unintelligible to all but the most esoteric readers is worth the cost in terms of meeting assumptions.

Second, I would like to propose a preliminary typology of retirement migration communities to expand upon the conventional cases. Though I do not yet have the empirical evidence to make “strong” statements about the classification of URDs, I believe that the lessons contained in this work at least allow me to conjecture about their likely characteristics. Based on my work, I argue that retirement migration destinations may be divided into four categories: natural/recreation amenity, healthcare amenity, cultural/historical amenity, and amenity adjacent. Within each of these categories, economic conditions take a leading role both in terms of business structure that supports particular goods and services and in terms of the cost of living available to particular kinds of migrant groups. In addition, these are not hard, mutually exclusive classifications. Few if any retirement destinations would fit solely into one category or another. Like most typologies, I only wish to highlight the most exaggerated features by which we could differentiate between types for policy recommendation purposes.

Natural/Recreation amenity locations are the most conventional in nature. These are counties that have striking climatological, topographical, and/or outdoor activity features. They attract younger old movers with a greater amount of resources than average. They also tend to benefit from these migrants in terms of spending at recreation locations, stimulation of the housing market, and other things such as volunteer activity. These places will also tend to be more expensive, given their widely known pull. As such, it is possible that health services may not be preeminent in the local economy as people may be forced to leave as they age. Additionally, the positive effects of retirement migration may be obscured by the generally positive trends caused by overall population growth, which is common in these areas.

Healthcare amenity locations look very different from their natural/recreation counterparts. Because healthcare is not geographically constrained to any particular area of the country, these tend to be much more widespread. Like Nemaha County, these places attract

people at the upper end of the age distribution primarily through access to the health services that they need. In addition, they are more likely to be receiving migrants from shorter distances. This is because good health services are available in a greater number of areas and because the social networks and resource pool of their migrants will tend to be smaller, thus discouraging longer distance moves. Given the quality of health services in these areas, accommodating the older population would not be as much of an issue in this sense. However, there still could be problems as the community adjusts to transportation and demographic changes.

Cultural/Historical amenity locations look similar to natural/recreation amenity locations. The difference is the primary method of attracting migrants. Natural/recreation areas may draw potential movers through earlier life tourism or through national reputation. Cultural/Historical locations, on the other hand, depend much more on tourism and a sense of heritage. In general, they have a feature, festival, or historical legacy that draws potential migrants to the area. This may also include movements toward areas dominated by a particular ethnic background (such as whites moving highly religious Midwest towns or blacks moving to the South). It would also contain movements to areas surrounding historical sites that people had visited in their earlier years.

Amenity-adjacent locations could be in reference to any of the other three. However, in practice, they are most likely to be adjacent to natural/recreation amenity locations. These are places that draw people because they are physically proximate to a feature of interest. For example, a lake in a central county could theoretically attract migrants to itself or any of its neighbors (assuming the county is not extremely large). In this instance, especially, economics and political boundaries make a great deal of difference. Given an interest in being close to a particular amenity, people are then relatively free to choose between locations all around that feature. That choice is often influenced strongly by the cost of living, business, and social conditions in each of the surrounding areas. Given enough resources, people may choose to live closer to the amenity or in a neighboring area with the best access to shops and cultural activities. Those lacking a great deal of financial independence, on the other hand, will seek out the cheapest acceptable area that is still within transportation distance from the amenity of interest.

What does this typology mean in terms of real world policy situations? It means that community leaders should be cautious and examine their area's allocation of particular resources before embarking on a project to create or promote a retirement destination. Natural amenities

are generally not built (excluding features like dammed lakes or reservoirs). This limits their application to particular geographic areas. Outdoor recreation amenities may be created or promoted, but this would only generally be effective if in close proximity to certain kinds of natural features. Historical monuments and cultural richness have a much wider applicability as they may occur anywhere in space. However, they are inextricably linked to historical trajectories. It is difficult to “build” culture (with the largest exception being religious organizations, which tend to be somewhat portable). We could imagine the problems trying to recreate the feeling of New Orleans in the Rocky Mountains or the Great Plains.

Healthcare amenities, in contrast to these, are relatively amenable to change. Developing the local hospital, adding nursing and assisted living services, and promoting home care agencies is probably the quickest way to create retirement migration in the area. However, given the previous discussion, policy makers should always be aware of the kinds of people that their attractions will draw. The younger, wealthier retirees that promise economic growth are not drawn to areas with health services. Instead, migrants will most likely consist of older old people with reduced access to economic resources. While still viable as economic and cultural resources, these kinds of people are likely not as similar to their big-spending younger counterparts as policy makers may hope.

The existence of amenity-adjacent counties adds something unique to this discussion. The fact that people are willing to travel across county boundaries between their home and activities creates a number of issues for potential migration destination planners. The main concern revolves around the fact that efforts to promote retirement migration in one area may actually impact the migration future of an adjacent county that never had that intention. The results of this could be either positive or negative for the promoting county and its neighbors. If younger, wealthier migrants are attracted to a neighboring county, then a great deal of their potential spending will be lost to the adjacent area. In this case, property taxes, staple purchases, and services required may all be supplied by the adjacent county. The only money flowing into the originally promoted destination would be through people’s interactions with the attractive feature (e.g. spending money around the lake a few weekends per year).

If the older movers do not have such positive characteristics, they could create an aging burden on a county with little to no resources to support them. For example, an excellent hospital at the edge of a county may encourage older and more physically disabled migrants to settle in

the adjacent area. In this case, the hospital and promoting county would benefit from increased healthcare business. However, the neighboring area would have to find a way to incorporate a larger and growing number of older adults without the additional resources or community plan to create these changes.

Related to these spatial concerns, the third major implication of this work is that we need to explicitly take space into account both in terms of substantive and empirical means. People in the US are not constrained by arbitrary administrative boundaries. In other words, we live across county lines. Retirement migration research projects that focus only on the county level miss micro-regional and relative advantage effects. This study clearly shows that factors may attract or repel migrants from across county lines and within county clusters. As such, we should begin to look for the relative distance at which factors take effect. The qualitative portion of this work suggests that natural, historic, and medical amenities should be within approximately a 30 minute drive from the location. Other kinds of activities, like shopping, may be much further away (from one to one and a half hours). The point is that the focus on within-county natural amenities prevents us from developing a more complete theoretical interpretation of the factors which drive older age migration at the macro level.

We should also approach these spatial topics explicitly in our empirical modeling. Spatial regression analysis provides a powerful tool for partitioning the observable effects of various factors regardless of their geographical proximity. However, spatial lag and spatial error models are only the beginning. We can further our knowledge of older age migration patterns through developing new measures like micro-regional and spatial relative advantage scores. Though there are methodological limitations to their use, these measures are a first step toward promoting the development and use of more advanced, distance based associations. My measures serve both as a first step toward applying these concepts to older age migration as a call for the development of much more precise and less statistically troublesome variables.

In general, future research should build on the findings presented in this work. We should move away from an undifferentiated understand of retirement migration processes and focus more in-depth work on the processes that promote older age and minority migration patterns. Given the limitations of the data in some instances, this may necessitate a more qualitative approach. However, rigorously collected qualitative information on the movements and

motivations of these populations would greatly enhance our understanding of migration patterns and help to alleviate the stereotyping associated with older age relocations.

Further, we should expand the list of amenities that we believe are attractive to the older population. The typology presented above is a good beginning, but it lacks the data necessary to test the hypotheses. In this sense, I suggest that future work on this topic focus on finding and compiling a wider range of data. In some cases, there may be much better measures already available for the kinds of amenities that I examined. In others, primary data collection may have to occur. In either case, it is important to develop a working typology that can be disseminated to community leaders in the coming years. With retirement age quickly approaching the Baby Boom generation, many areas may soon consider promoting themselves as retirement destinations. They need to be aware of the possibilities and precautions associated with the kind of migration location that they have the potential to become.

Finally, it is vital to continue to expand our understanding of the spatial processes in older age migration patterns. Spatially oriented data, measures, and methods should be compiled and/or developed to enhance our understanding of geographically distributed processes. The techniques developed here provide a starting point and an example of the explanatory power that may come from explicitly adding space to our theories and calculations. This work will be of benefit not only to the study of older age migration processes, but to a variety of topics and fields. It is likely that younger age migration patterns, crime, and inequality issues are also amenable to similar spatial associations.

To conclude, this work has shown that unconventional retirement migration is a topic worthy of study. Conventional approaches to this topic, while convenient for broad explanation, do not account for the diversity that exists in the real world. While not detracting from the general applicability of the natural and recreation amenity explanations, we may gain a great deal of additional understanding from looking at other kinds of movers, various types of attractive amenities, and variations in spatial effects. Further, given the coming retirement of the Baby Boom and the focus on attracting older movers, these insights present an untapped possibility to assist policy makers in their goal of appropriately planning their areas' futures. If we make the effort to move beyond conventional understandings, we may be able to discern if these places are really buildable fields of dreams, or accidental diamonds in the rough.

References

- Beale, Calvin and Glenn Fuguitt. 2006-08-10. "Migration of Retirement-Age Blacks to Nonmetro Locations." Paper presented at the annual meeting of the Rural Sociological Society, Louisville, Kentucky.
- Bolender, Benjamin C. 2010. "Boom or Bust: Opportunities and Challenges of Aging in Rural Kansas." *Online Journal of Rural Research and Policy*, 5(1). (<http://ojrrp.org/journals/ojrrp/article/view/180/101>)
- Bolender, Benjamin C. 2009-05-02. "Taking Different Paths: Diversity in Retirement Migration Patterns." Presentation given at the annual meeting of the Population Association of America, Detroit, Michigan.
- Bolender, Benjamin C. 2010. "Boom or Bust: Opportunities and Challenges of Aging in Rural Kansas." *Online Journal of Rural Research and Policy*. (Forthcoming).
- Bolender, Benjamin C. and László J. Kulcsár. 2008-04-18. "No Business Like Boomer Business: Industry, Business, and Retirement Migration in the US." Poster presented at the annual meeting of the Population Association of America, New Orleans, Louisiana.
- Bowles, Gladys K. and James D. Tarver. 1965. *Net Migration of the Population, 1950-60, by Age, Sex and Color*. Washington, D.C.: U.S. Department of Agriculture, Economic Research Service.
- Bowles, Gladys K., Calvin L. Beale, and Everett S. Lee. 1975. *Net Migration of the Population, 1960-70, by Age, Sex and Color*. Washington: U.S. Department of Agriculture, Economic Research Service and Athens: University of Georgia.
- Brown, David L. and Nina Glasgow. 2008. *Rural Retirement Migration*. Dordrecht: Springer.
- Brown, David L., Benjamin C. Bolender, László J. Kulcsár, Nina Glasgow, and Scott R. Sanders. 2010. "Inter-County Variability of Net Migration at Older Ages as a Path Dependent Process." Population Association of America Annual Meeting, Dallas, TX April 15-17 – Presentation.
- Brown, David L., Benjamin C. Bolender, László J. Kulcsár, Nina Glasgow, and Scott R. Sanders. 2009-08-18. "Inter-County Variability of Net Migration at Older Ages as a Path Dependent Process." Presentation at the European Society for Rural Sociology 23rd Congress, Vaasa, Finland.
- Dillman, Don A., Jolene D. Smyth, and Leah Melani Christian. 2009. *Internet, Mail, and Mixed-Mode Surveys: The Tailored Design Method*. (3rd ed.). Hoboken, NJ: John Wiley and Sons, Inc.

- Fagin, Mark and Charles Longino. 1993. "Migrating Retirees: A Source for Economic Development." *Economic Development Quarterly*.7.1:98-106.
- Fuguitt, Glenn V., Calvin L. Beale, and Paul R. Voss. County-Specific Net Migration Estimates, 1980-1990 [United States] [Computer file]. ICPSR26761-v1. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2010-04-02. doi:10.3886/ICPSR26761
- Glasgow, Nina and David L. Brown. 2006. "Social Integration Among Older In-Migrants in Nonmetropolitan Retirement Destination Counties: Establishing New Ties." Pp. 177-196 in William Kandell and David L. Brown (eds.) *Population Change and Rural Society*. Dordrecht: Springer.
- Haas, William and William Serow. 1993. "Amenity Retirement Migration Process: A Model and Preliminary Evidence." *The Gerontologist*. 33.2: 212-220.
- Johnson, Ken and John Cromartie. 2006. "The Rural Rebound and its Aftermath: Changing Demographic Dynamics and Regional Contrasts." pp. 25-50 in William Kandell and David L. Brown (eds.) *Population Change and Rural Society*. Dordrecht: Springer.
- Johnson, Kenneth and Calvin Beale. 2002. "Nonmetro Recreation Counties. Their Identification and Rapid Growth." *Rural America*, Vol. 17, no. 4.
- Johnson, Kenneth M., Paul R. Voss, Roger B. Hammer, Glenn V. Fuguitt, and Scott McNiven. 2005. "Temporal and Spatial Variation in Age-Specific Net Migration in the United States." *Demography* 42(4):791-812.
- Kulcsár, László J. and Benjamin C. Bolender. 2006. "Home on the Range: Aging in Place in rural Kansas." *Online Journal of Rural Research and Policy*, 2006(3). (Invited).
- Litwak, Eugene and Charles F. Longino, Jr. 1987. "Migration Patterns Among the Elderly: A Developmental Perspective." *The Gerontologist* 27, pp. 266-272.
- Longino C. F. and K. J. Smith. 1991. "Black Retirement Migration in the United States." *Journal of Gerontology: Social Sciences* 46(3):S125-32.
- Longino, Charles F. Jr. and Don E Bradley. 2003. "A First Look at Retirement Migration Trends in 2000" *The Gerontologist* 43, pp. 904-907.
- McCracken, Kevin and David R Phillips. 2005. "International Demographic Transitions." Pp. 36-60 in *Ageing and Place: Perspective, Policy, Practice*, edited by Gavin J. Andrews and David R. Phillips. New York: Routledge.
- McGranhan, D. 1999. "Natural amenities drive rural population change." *Agriculture Economic Report No. 781*. Washington, D.C.: U.S. Department of Agriculture, Economic Research Service.

- Reeder, Richard and Nina Glasgow. 1990. "Nonmetro Retirement Counties Strengths and Weaknesses." *Rural Development Perspectives*. 6: 12-18.
- Reeder, Richard. 1998. "Retiree-Attraction Policies for Rural Development." *Agriculture Information Bulletin No. 741*. Food and Rural Economics Division, Economic Research Service, U.S. Department of Agriculture.
- Serow, William. 2003. "The Economic Consequences of Retiree Concentrations: A Review of North American Studies." *The Gerontologist* 48, pp. 897-903.
- Stack, Carol. 1996. *Call to Home: African Americans Reclaim the Rural South*. New York: BasicBooks.
- Voss, Paul R., Scott McNiven, Roger B. Hammer, Kenneth M. Johnson, and Glenn V. Fuguitt. COUNTY-SPECIFIC NET MIGRATION BY FIVE-YEAR AGE GROUPS, HISPANIC ORIGIN, RACE, AND SEX, 1990-2000: [UNITED STATES] [Computer file]. ICPSR4171-v1. Madison, WI: University of Wisconsin-Madison, Department of Rural Sociology [producer], 2003. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2005-05-23.
- Voss, Paul R., Scott McNiven, Roger B. Hammer, Kenneth M. Johnson, Glenn V. Fuguitt. 2004. County-specific net migration by five-year age groups, Hispanic origin, race and sex 1990-2000. CDE Working Paper No. 2004-24. Center for Demography and Ecology, University of Wisconsin-Madison. Madison, WI.
- Walters, William H. 2000. "Assessing the Impact of Place Characteristics on Human Migration: The Importance of Migrants' Intentions and Enabling Attributes." *Area* 32(1):119-123.
- Walters, William H. 2002. "Later-Life Migration in the United States: A Review of Recent Research." *Journal of Planning Literature* 17:37-66.
- Ward, Michael D. and Kristian Skrede Gleditsch. 2008. *Spatial Regression Models*. Series: Quantitative Applications in the Social Sciences (155). Thousand Oaks, CA: Sage Publications, Inc.
- Warnes, Anthony M. 1992a. "Age-Related Variation and Temporal Change in Elderly Migration." Pp. 35-55 in *Elderly Migration and Population Redistribution: A Comparative Study*, Andrei Rogers (ed.). London: Belhaven.
- Warnes, Anthony M. 1992b. "Migration and the Life Course." Pp. 175-187 in *Migration Processes and Patterns, Vol 1, Research Progress and Prospects*. Tony Champion and Tony Fielding (eds.). London: Belhaven.
- White, Michael J., Peter Mueser, and Joseph P. Tierney. 1987. Net migration of the population of the United States 1970-80, by age, race and sex. (Computer file with documentation.) Ann Arbor, MI: Inter-university Consortium for Political and Social Research.

Appendix A - Mixed Mode Survey Instrument

Unconventional Retirement Migration Project

Survey Description

Hi,

My name is Ben Bolender. I'm a PhD student in demography at Kansas State University. I study population aging and migration issues, and I'm looking for your help with my dissertation. I'm looking into why older people move into particular places, and I have some questions about your community.

This survey is part of a larger project to investigate retirement migration patterns in what are called "unconventional retirement destination" counties. In essence, statistical analysis has shown that your area attracts a fairly high number of older people without having many of the usual things we think of in places like Florida or Arizona.

This is where you come in. I would like to get your impressions about certain things in your community that I think might be contributing to making it a desirable retirement destination. The goals of this work are to accurately describe unconventional retirement migration patterns and see if planning models can be created to take advantage of the economic growth that often accompanies retirement migration.

Also, there should be no risk or discomfort for participants in this research. Corresponding with the general principles of social science, your participation is voluntary and you are free to refuse to answer any questions. All information you provide will be kept strictly confidential. Your identity will not be revealed on any documents or written reports associated with this research.

Finally, please do not forget to enter the code from the back of your postcard in the space provided on the survey. Not only will it validate your answers and let you submit the survey, it will allow you to enter a drawing to win one of three prizes of \$50 as a thank you for your participation. If you have any questions, feel free to contact Ben Bolender at bolender@ksu.edu or 785-539-6813.

Opening Instructions

In order to help figure out why older people are moving to your area, I want to get general information about certain features and services in your place. The following 7 pages will present a few questions that try to get at the quality and availability of these kinds of things in your area. The survey should only take about 10 minutes to complete, depending on the speed of your internet service. Also, be sure to have the number from your postcard, or you will not be able to complete the survey.

The primary issue to keep in mind for the first few sets of questions is: To the best of your knowledge, how do the following things impact your community in terms of attracting new people? In other words, if an outside person were considering moving to your community, how do you think your community would rate on availability, types, and costs of these kinds of features and services compared to other places? Remember to let your answers reflect how you think most people would feel when considering moving into your area.

Amenities/Recreation:

Using the scale shown and the clickable bubbles, please tell me how much you think the average person would like the feature or service when considering moving into your community.

Question 1

1 - Dislike it a lot | 2 - Dislike it a fair amount
3 - Dislike it a little | 4 - No preference | 5 - Like it a little
6 - Like it a fair amount | 7 - Like it a lot

	1	2	3	4	5	6	7
1.1 Landscape/Water areas	<input type="radio"/>						
1.2 General climate/weather	<input type="radio"/>						
1.3 Severe weather/disaster potential	<input type="radio"/>						
1.4 Amount of insects and pests	<input type="radio"/>						
1.5 General outdoor activities (e.g. golf/hiking/fishing/skiing)	<input type="radio"/>						
1.6 Movies/Cinema	<input type="radio"/>						
1.7 Shopping	<input type="radio"/>						
1.8 Casinos	<input type="radio"/>						
1.9 General indoor activities (e.g. bowling/gyms/recreation facilities)	<input type="radio"/>						
1.10 Sporting events for spectators (e.g. high school/college/professional)	<input type="radio"/>						
1.11 Public areas (e.g. parks/trails/playgrounds)	<input type="radio"/>						

Social/Cultural:

Using the scale shown and the clickable bubbles, please tell me how much you think the average person would like the feature or service when considering moving into your community.

Question 2

1 - Dislike it a lot | 2 - Dislike it a fair amount
3 - Dislike it a little | 4 - No preference | 5 - Like it a little
6 - Like it a fair amount | 7 - Like it a lot

	1	2	3	4	5	6	7
2.1 General local culture/residents' values	<input type="radio"/>						
2.2 Museums/Art exhibits/Zoos	<input type="radio"/>						
2.3 Performances/Concerts/Theatre	<input type="radio"/>						
2.4 Bars/Nightclubs/Restaurants	<input type="radio"/>						
2.5 Interest groups (e.g. clubs/leagues)	<input type="radio"/>						
2.6 Celebration activities (e.g. festivals/parades)	<input type="radio"/>						
2.7 Religious organizations	<input type="radio"/>						
2.8 Traffic/Roadway congestion	<input type="radio"/>						
2.9 Crime rate/Public safety	<input type="radio"/>						

Economics/Costs:

Using the scale shown and the clickable bubbles, please tell me how much you think the average person would like the feature or service when considering moving into your community.

Question 3

1 - Dislike it a lot | 2 - Dislike it a fair amount
3 - Dislike it a little | 4 - No preference | 5 - Like it a little
6 - Like it a fair amount | 7 - Like it a lot

	1	2	3	4	5	6	7
3.1 Average prices for things you buy	<input type="radio"/>						
3.2 Cost/Availability of housing (rental or to own)	<input type="radio"/>						
3.3 Cost/Availability of entertainment	<input type="radio"/>						
3.4 Cost of utilities	<input type="radio"/>						
3.5 Level of taxation	<input type="radio"/>						
3.6 Job opportunities	<input type="radio"/>						

Healthcare Services:

Using the scale shown and the clickable bubbles, please tell me how much you think the average person would like the feature or service when considering moving into your community.

Question 4

1 - Dislike it a lot | 2 - Dislike it a fair amount
3 - Dislike it a little | 4 - No preference | 5 - Like it a little
6 - Like it a fair amount | 7 - Like it a lot

	1	2	3	4	5	6	7
4.1 Hospitals	<input type="radio"/>						
4.2 General doctors	<input type="radio"/>						
4.3 Specialist doctors/services (e.g. MRI, physical therapy, dialysis)	<input type="radio"/>						
4.4 Nursing homes/Assisted living facilities	<input type="radio"/>						
4.5 Homecare	<input type="radio"/>						
4.6 Hospice	<input type="radio"/>						

Demographics:

Please tell me a little about yourself. Fill in the bubble next to the answer that most closely represents you or type in a short response. Remember, you have the option to leave any question blank.

Question 5

Location/State:

Question 6

Age:

- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65-74
- 75-84
- 85+

Question 7

Sex:

- Male
- Female

Question 8

Primary Race/Ethnicity:

- White
- Black
- Hispanic
- Asian/Pacific Islander
- American Indian/Alaskan Native
- Multi-racial
- Other

Question 9

Number of years you have lived in this community:

- Less than 5 years
- 5 to 10 years
- 10 to 20 years
- More than 20 years

Question 10

Current Marital Status:

(Note: Re-married would be considered "Married")

- Never married
- Married
- Widowed
- Divorced
- Separated

Question 11

Highest degree of education completed:

- Less than high school
- High school
- Associate's
- Bachelor's
- Graduate or Professional

Question 12

Approximate Annual Household Income:

- Up to \$10,000
- \$10,001 to \$20,000
- \$20,001 to \$40,000
- \$40,001 to \$80,000
- More than \$80,001

Question 13

What is the longest distance (in minutes) that you are generally willing to drive for shopping or leisure reasons?

Characters Remaining:

Question 14

How many times do you make a drive like that in an average six month period?

Characters Remaining:

General Perceptions About Your Community:

For questions 14 and 15, please fill in the bubble that represents where you think your community falls on the scale between the two types. For 16 and 17, please type your answer in the space provided.

Question 15

Do you think the people in your town are:

Liberal	<input type="radio"/>	Conservative						
Religious	<input type="radio"/>	Non-religious						
Individualistic	<input type="radio"/>	Community-oriented						
Less well off financially	<input type="radio"/>	More well off financially						

Question 16

In general, what do you think the public perception is of how good your community is as a place to live?

Very bad Very good

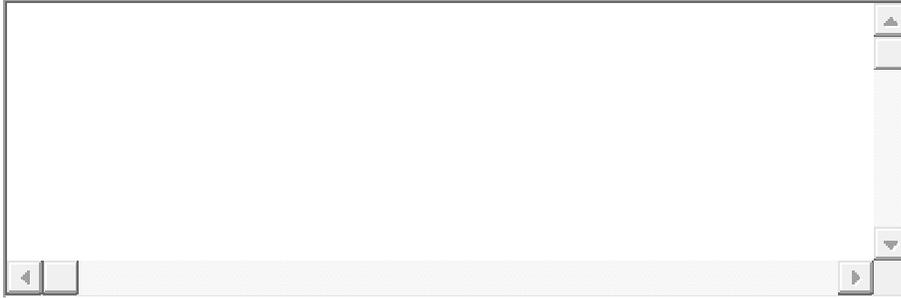
Question 17

What other kinds of things do you think make your town a great place to live?

Characters Remaining:

Question 18

What other kinds of things do you think make your town a bad place to live?



Characters Remaining:

Wrap Up:

Here is your chance to enter validate your survey responses, enter the prize drawing, and make any comments or suggestions. Please note that without a valid postcard number, you will not be able to submit data or be entered into the drawing.

Question 19 **** required ****

Please enter the 4-digit verification number from the back of your postcard to validate your survey and be eligible to enter the drawing for a chance to win a prize of \$50.

Characters Remaining:

Question 20

Do you wish to be entered into the drawing?

(Note: Responding no or leaving this answer blank will not enter you into the drawing)

- Yes
- No

Question 21

If you have any questions, comments, or would like me to contact you for any reason, please enter your thoughts and/or your contact information into the box provided:

Characters Remaining:

Closing Message

Thank you for taking the time to help with the project. If you selected "Yes" on the previous page, you will be entered into the drawing for a chance to win a prize of \$50. The drawing will be held and prizes distributed sometime in September. If you have any questions, comments, or concerns, please feel free to contact me, Ben Bolender, at bolender@ksu.edu or 785-539-6813.

- End of Survey -

© 2010 Axio Learning. All Rights Reserved.