

Nina Glasgow
E. Helen Berry *Editors*

Rural Aging in 21st Century America

Rural Aging in 21st Century America

Understanding Population Trends and Processes

Volume 7

Series Editor

J. Stillwell

In western Europe and other developed parts of the world, there are some very significant demographic processes taking place at the individual, household, community and national scales including the ageing of the population, the delay in childbearing, the rise in childlessness, the increase in divorce, the fall in marriage rates, the increase in cohabitation, the increase in mixed marriages, the change in household structures, the rise in step-parenting and the appearance of new streams of migration taking place both within and between countries. The relationships between demographic change, international migration, labour and housing market dynamics, care provision and intergenerational attitudes are complex to understand and yet it is vital to quantify the trends and to understand the processes. Similarly, it is critical to appreciate what the policy consequences are for the trends and processes that have become apparent. This series has its roots in understanding and analysing these trends and processes.

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Editors

Rural Aging in 21st Century America

With technical assistance from Edmund J.V. Oh.

 Springer

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This book is dedicated to the older people in rural communities who are living the lives that we study and write about.

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Chapter 1

Introduction to Rural Aging in Twenty-First Century America

Nina Glasgow and E. Helen Berry

1.1 Introduction

The primary purpose of this book is to investigate demographic and social aspects of aging in nonmetropolitan (nonmetro) areas of the United States (US) in the twenty-first century. Demographic aging refers to the aging of a population whereby the population itself is growing older, not to individual-level aging. Population aging is among the most important worldwide trends in the twentieth and twenty-first centuries, and the trend is occurring more rapidly in rural than urban areas of the US. Rural areas have a disproportionate concentration of older people, with 15% of the nonmetro compared to 12.0% of the metropolitan (metro) population in the 65 years of age and older age group (US Census Bureau 2009). Moreover, within the nonmetro population, the more rural and sparsely populated an area is, the older is its population (Glasgow and Brown 2012). The older age structure in rural and nonmetro areas of the US is similar to other more developed countries. For example, Keating (2008), studying rural aging in Canada and the United Kingdom (UK), and Lowe and Speakman (2006), focusing on aging in rural England, report that the rural population is aging more rapidly than the urban population in those countries as well. The majority of residents of the US, both young and old, live in cities and suburbs; it is simply that older people form a higher percentage of the country's nonmetro than metro population (US Census Bureau 2009).

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The disproportionate concentration of elderly in rural areas relates to two important and contrasting migration flows into and out of rural America. First, the higher concentration of older people is due in part to chronic out-migration of young adults from rural areas, as they seek better educational and employment opportunities in cities. This is particularly the case in the heavily agricultural mid-section of the country, which runs through the Midwest, the Northern Great Plains, down through Texas. While some young adults—who leave home to pursue higher education, start a career and perhaps start a family—eventually return to the rural area they left, the majority of youth do not (Brooks et al. 2010). Further, those who do not return take their childbearing potential with them. Left behind is the parental generation to “age-in-place.”

Second, especially rapid aging is occurring in rural amenity destinations that attract retirement-age in-migrants moving largely from cities (see, e.g., Brown and Glasgow 2008). Rural retirement communities are often characterized by scenic beauty and outdoor recreational opportunities, and they are scattered rather widely across the country. Amenity-rich rural destinations that attract older in-migrants often also attract non-elderly in-migrants, resulting in overall population growth. Older in-migration destinations that do not also attract younger in-migrants eventually become places of natural decrease (more deaths than births). In fact, natural decrease (more deaths than births) has become increasingly common in both aging-in-place and older in-migration destinations in the rural US (Berry and Kirschner, Chap. 2, this volume; Glasgow and Brown 2012; Johnson 2011). Aging-in-place and older in-migration trends have been occurring in rural areas for decades (see, e.g., Beale 1977, 2005).

Rural places have a set of characteristics, including small population size, low density of settlement and lingering historical rural–urban differences in economic structure, income and community capacity, which make aging in rural areas different from aging in urban environments. Urban areas have broader, more complex economies that provide more job opportunities than are typically found in rural areas. For older people who have resided in a rural area most or all of their lives, this often leads to lower lifetime earnings, fewer pension benefits and hence lower incomes during old age. Health and human services are less available, less accessible and often more costly to deliver in rural than urban areas due to lower economies of scale and the greater distances involved in providing services (Krout 1994). The limited range of health care services and the extremely limited availability of public transportation systems in rural areas are added burdens to those who are aging in rural environments. The US is a vast country, however, with some nonmetro counties adjacent to metro counties and others not at all close to metro places (referred to as “nonmetro nonadjacent”). Rural areas vary from growing to declining or stagnant in population size over time, and persistent poverty characterizes some rural communities but not others. It is important to recognize the diversity across rural places in the US and that rural aging will vary based on contextual differences. For example, nonmetro counties adjacent to metro centers give nonmetro residents greater access to services and the possibility to commute to jobs in cities where employment opportunities are better (Brown and Glasgow 2008). It is equally important to

recognize that rural places impose somewhat different conditions on the people aging in them compared to conditions for people aging in urban communities.

Modern communication and transportation systems have in many ways equalized living conditions in rural compared to urban environments. Technological changes such as widespread use of computers, the Internet and mobile phones have, in fact, made the world a smaller place. One often sees reports, however, about the digital divide between rural and urban places, with rural areas being comparatively disadvantaged. Differences between rural people and places versus urban people and places that have persisted over time include the higher poverty rates and lower incomes of rural compared to urban older people (see, e.g., Slack and Rizzuto, Chap. 4, this volume; Glasgow and Brown 1998). Rural older people's lower socioeconomic status relates to the more limited educational and occupational opportunities in rural places, thus limiting the life course trajectories of long-duration rural residents. Other enduring trends include the greater prevalence of chronic and acute diseases and disability among rural versus urban older people, although not necessarily greater mortality (see, e.g., Glasgow et al. 2004; Peterson et al. 2011). The lower health status of rural people, in general, and rural older people, in particular, interacts with and is complicated by the enduring characteristic of lower availability and accessibility of health care services in rural areas (see, e.g., Glasgow et al. 2004). The characteristics of rural people and places are intertwined in ways that disadvantage rural residents.

This introductory chapter provides the above brief overview of enduring and changing trends affecting rural population aging in twenty-first century America. Second, we address the question of why it is important to study population aging in the rural US. Third, we define major concepts used in many of the chapters of the book. Finally, a key purpose of the introduction is to briefly describe major sections of this volume and chapters within each section.

1.2 Why Study Rural Aging?

The disproportionate concentration of elderly in rural compared to urban areas makes the study of rural aging particularly salient. The increasing number and proportion of elderly resulted from declining fertility rates over a long time horizon, except during the baby boom years of 1946–1964. High fertility during the baby boom years is influencing especially rapid population aging currently, as earlier large birth cohorts are beginning their entry into old age. Increases in life expectancy have also contributed to population aging. Further, migration plays a part in how rapidly the age structure in particular places grows older. These demographic processes are the primary determinants of the level of population aging observed in rural as well as urban areas (Siegel 1993).

The aging of the baby boom generation (the 1946–1964 birth cohorts) is a society-wide phenomenon that is poised to affect both rural and urban areas profoundly until about 2050. This is not new news, but it is not clear that places and societies

affected by baby booms have fully dealt with the likely consequences of such rapid aging of the population. The number of elderly in the US is expected to increase from 40-plus million in 2010 to 70 million by 2030 (Werner 2011), by which time all in the baby boom generation will have reached age 65. With the aging of the baby boom generation, the 65 years of age and older population is expected to increase from 12.5% to approximately 20% of the US population (Siegel 1993; Werner 2011). The leading edge of the baby boom generation has already reached age 65, and baby boomers will continue entering the ranks of the 65 years of age and older group through 2030. On several indicators of aging, including median age, percent 65 years of age and older, percent 85 years of age and older, and percent of households having one or more persons 65 years of age or older, the more rural the residence the more aged is the population (Glasgow and Brown 2012). The oldest-old (persons 85 years of age and older) is the fastest growing segment of the elderly population, and nonmetro areas have a higher proportion of population in the oldest-old age group than do metro counties (Glasgow and Brown 2012). Within the older population, the oldest-old are more likely to have chronic diseases, disabilities, to have ceased to drive, to be female and live alone, and to have lower incomes. More advanced old age is associated with cumulative disadvantages.

Rural communities are likely to be especially affected by the aging of the baby boom generation due to the disproportionate concentration of older people and because rural communities are typically deficient in the number and quality of health care, transportation and other types of services (Krout 1994). Yet, it has been almost 15 years since an academic book was published (Coward and Krout 1998) that focused on rural aging in the US. It is important and timely, therefore, to investigate enduring and changing trends affecting aging in rural America. It is only through a better understanding of the situation and the trends affecting rural aging that policy makers can effectively plan for the needs of older rural residents and the disproportionately “old” communities in which many of them live.

As discussed above, aging-in-place, rural retirement migration and entry of the baby boom generation into old age are among the most important trends in aging affecting rural areas. But how different processes play out varies by regional context, differences across race/ethnic groups, and across political, cultural and policy environments. Retrenchment in social welfare programs, such as Social Security and Medicare, is on the agenda of the US federal government, as are similar social welfare programs throughout the European Union, China and other countries (Berry 2012). For the smooth functioning of societal institutions and social relationships, it is incumbent upon researchers, policy makers and practitioners to plan for the rapid aging of society in both rural and urban areas.

This book provides insights into twenty-first century rural aging and contributes evidence-based, policy-relevant information to ongoing discussions about rural aging. The main objectives of this volume are to (1) *improve understanding of what makes the experience of aging in rural places different from aging in urban places* and (2) *increase understanding of how a rapidly aging population changes the nature of rural places*. To accomplish these objectives the book uses comparative frameworks on rural–urban differences, examines diversity within and across rural

communities (e.g., in institutional capacity), compares across regions and compares race/ethnic differences in rural aging.

1.3 Approach of the Book

We, as well as many of the book's chapter authors, are members of W2001, a multi-state research committee titled "Population Dynamics and Change: Aging, Ethnicity and Land Use Change in Rural Communities," which is officially recognized by the US Department of Agriculture (USDA). Study of rural aging is one of three major work objectives of the USDA-sponsored W2001 research committee. The committee is composed of demographers, geographers and sociologists located at several US universities and federal government agencies. Social scientists in these disciplines are concerned with time and space dimensions of population change and the book's chapters have a strong demography, geography and sociology of rural aging orientation. We recruited chapter authors from outside the committee's membership, also, to write about topics for which the committee's membership did not have particular expertise.

Given the scope of the book, no one theoretical perspective was appropriate for all of the topics covered, and thus the author(s) of each chapter made their own decisions about theoretical orientations applicable to various topics. We, however, settled on three themes that we asked authors to consider while writing their chapters. We relate these themes to the objectives of the book. The first theme is: *What are the challenges and opportunities associated with rural aging?* This theme has been explored in other publications (e.g., Glasgow and Brown 2012), but it bears repeating because it gives one a lens through which to consider pros and cons of aging in rural environments and also whether this has changed over time. Often cited examples of positive aspects of rural aging include the lower cost of living, lower crime rates and assumptions about a friendlier, more supportive social milieu. Challenges often noted with regard to rural aging include less access to and availability of services, less access to new technologies and local governments with less capacity to plan for the needs of an aging population. With the severe economic recession that started in 2008, the effects of which are still being felt, new questions have arisen about increased challenges for those growing older in society in general (e.g., can older people afford to retire from the workforce?), and the up-to-date statistical information presented in various chapters of this volume provide a firmer foundation for analysis of the challenges and opportunities associated with aging in rural environments of the US.

Romanticized images of rural areas and rural residents abound in popular culture (e.g., the rural idyll, healthy lifestyles), or people sometimes perceive of rural people and communities as being tradition-bound and backward looking. Thus the second major theme is the question of: *What are the myths about rural aging?* For example, a common perception is that older rural residents have strong social support networks of nearby kin, but the chronic out-migration of young adults from particular rural regions calls that assumption into question. Societal stereotypes about aging, in

general, include images of older people as dependent on others for their well-being, when, in fact, the potential for healthy aging has increased over time, as has the economic status of older people. Another myth about rural older people is that they are largely homogeneous when, in fact, rural racial and ethnic diversity among older rural residents has been increasing.

The third theme addressed in the chapters included in this volume is the *great diversity of aging in different rural contexts*. Rural racial and ethnic, socioeconomic, and regional differences contribute to the diversity. For example, African Americans living in the rural South may experience age and aging very differently from whites in the region, as well as differently from rural blacks living in other regions of the country. The new Hispanic immigrant groups that have moved to rural areas in recent decades have a relatively young age profile, but their movement into rural areas has also altered the composition of the rural elderly population (see Gurak and Kritz, Chap. 18, this volume). The opportunities and lifestyles associated with aging in rural or nonmetro areas adjacent to metro places as compared to aging for people living in remote rural areas are another example of the diversity of aging in rural America. This book's focus on the diversity of rural areas and how that has changed over time could be used by planners, policy makers and practitioners to address needs that emerge with changes in the age structure and composition of the rural population of the US.

1.4 Definitions of Key Concepts

1.4.1 Age

The simplest definition of age is the length of time that a person has lived. Researchers often operationalize age as a continuous variable measured in 1-year intervals ranging from zero or one up to the age of the oldest person in the study population. An age group is a number of people classed together as being of similar age. The upper range of the life span is referred to variously as the older, elderly or elder population (or by other similar terminology). For official statistical purposes, the elderly population of the US is typically defined as the age group comprised of individuals 65 years of age and older.¹ The US Census Bureau, the National Center for Health Statistics and other government agencies that collect data on the characteristics of the US population, typically use the 65 years of age and older age group

¹ Across the various chapters of this book, 65 years of age and older is frequently used to define the elderly segment of the US population. Because authors in different chapters use different data sets for their analyses and because the year or years the data were collected vary, the reader will see small variations in the percent of the population reported to be 65 years of age and older, 85 years of age and older, etc. These slight variations should not be considered errors but rather due to different methods used to collect data, different dates of data collection, and so on.

to demarcate the older population. For decades, 65 was also the age at which people in the US could retire and begin receiving full Social Security benefits, although the age of eligibility to receive full benefits has crept upward for cohorts born in 1945 or later. With increased life expectancy, prolonged healthy aging and other changes in society, finer age group delineations are oftentimes used to present statistics on the characteristics of the older population (e.g., 65–74 years of age; 75–84 years; and 85 years of age and older). Various age groups within the elderly population have different characteristics and profiles.

The beginning age at which researchers and others define a population as older varies, as well, according to the particular topic being studied. For example, researchers studying older migration may choose a lower-age starting point (often 60 years of age and older) to define the age group comprising the older population. The reason is the prevalence with which people retire and move to a new place of residence prior to reaching the age of 65. The oldest-old population, as noted above, is typically defined as the 85 years of age and older age group, and particular chapters analyze data for the older population (65 years of age and older), as well as the oldest-old population, inasmuch as the oldest-old are the fastest growing segment within the elderly population. The oldest-old age group is where health and other problems associated with aging are most common.

In various chapters of this volume, different authors have chosen different age designations for their analyses based on what is most appropriate for the topic that is their focus. Such flexibility in how old age is defined is desirable, as a reflection of different realities among people at the upper end of the age range. For example, younger-old individuals (65–74 years of age) are dominant among those moving to rural retirement destinations, whereas those entering nursing homes are likely to be significantly older, or the oldest-old segment of the population.

1.4.2 Place of Residence

Historically, the terms “rural” and “urban” have been defined in a variety of ways across different studies. In this volume, chapter authors use official US government definitions of rural and urban in the presentation of data findings. The open countryside and places with a population of fewer than 2,500 people are designated “rural,” and places with a population of 2,500 or greater are designated “urban” (US Census Bureau 2011). Chapter authors employing the concepts “metropolitan” and “non-metropolitan” use the official definitions and designations developed by the Office of Management and Budget in the presentation of findings on place of residence and aging. Based on official US government definitions, metro or nonmetro status is generalized to county boundaries. “Metro core” counties are designated as those (1) composed of one or more cities with a population of at least 50,000 or (2) contain an officially designated “urbanized area” and a total county population of at least 100,000. An “urbanized area” has one or more central places with adjacent densely settled surrounding territory (urban fringe) that together have a minimum population

of 50,000. Counties that do not meet the population size requirements to be a metro county but are adjacent to a metro core county and have a high degree of social and economic integration with a metro core county also receive the “metro” county designation. Counties that are neither metro core nor metro fringe are termed non-metro counties, and thus such counties encompass residual territory. Nonmetro counties include small cities, villages and open country, and nonmetro counties are roughly comparable to rural and small town America (Economic Research 2003). The US Census Bureau (2011) also divides nonmetro counties into “micropolitan” and “non-core” counties. Nonmetro micropolitan counties are defined as those with one or more cities with a population of at least 10,000, while non-core nonmetro counties have only places with fewer than 10,000 residents. When presenting data findings, precise place of residence terminology is used throughout each chapter, but, for general discussions, the terms rural and nonmetro are often used interchangeably, as are urban and metro.

We should note that following every decennial census the Office of Management and Budget reevaluates the nonmetro/metro status of each county in the US and reclassifies counties as necessary. When assessing the circumstances of metro and nonmetro populations over time, the set of counties defined as metro and nonmetro are subject to change. One approach to changes in designations of metro or nonmetro status is to assess the circumstances of people residing in conceptually similar settings over time, rather than to assess people in the same geographic units, which may become conceptually dissimilar over the passage of time.² Other researchers, for the purposes of their analyses, may hold constant the metro-nonmetro classifications as defined in a particular year. This removes the effect of reclassification from the calculation of longitudinal population change.³

1.4.3 *County Typology Codes*

Beyond population size and density, nonmetro counties are diverse in other ways as well. The USDA’s Economic Research Service (ERS) has described the economic and social characteristics of nonmetro counties, with classification systems based on either the dominant economies of counties or on policy-related indicators for counties (Economic Research 2005). The economic type codes are referred to infrequently in this volume, but the titles of these county types are descriptive in themselves, e.g., “farming-dependent,” “mining-dependent,” and “federal or state government-dependent” for counties with 15% or more of average annual labor earnings derived from the relevant economic category. Similarly,

² As one example of this approach, see Slack and Rizzuto, Chap. 4, this volume.

³ Johnson and Lichter, Chap. 15, this volume, for example, use this latter approach in their data analysis.

“manufacturing-dependent counties” are those with 25% or more of annual labor and other earnings derived from manufacturing, while “services-dependent counties” are those with 45% or more of earnings based on services in retail, finance, insurance, and the like (Economic Research 2005).

The policy-type classifications are of particular interest to the readers of this text: specifically, nonmetro counties that have 15% or higher net migration of individuals 60 years of age and older during the previous 10-year period are called “retirement destination counties.” A second category in the policy group is “nonmetro recreation” counties, which are classified by using share of employment or earnings in recreation, prevalence of seasonal or occasional housing units, and hotel and motel receipts (Economic Research 2005). The economic and policy categorizations often overlap one with the other. For example, retirement destination counties are often, also, nonmetro recreation counties, as well as services-dependent counties. The intention at ERS in developing the county typology codes was to better understand the dominance of particular economic and policy-relevant activities occurring across the diverse regions that comprise the nonmetro US (Economic Research 2005).

1.5 Plan of the Book

Using a variety of perspectives, we organized this book to provide a portrait and a better understanding of the experience of aging in rural environments. Chapters in the text compare aging in nonmetro/rural versus metro/urban places, as well as the experience of aging across diverse rural places and regions. Following this introduction, the book is organized into six parts, or sections. These include an overview of the older rural population; economic inequalities; race and ethnic inequalities; rural institutional and community structures; older rural migration and aging-in-place; and finally a concluding chapter that recapitulates the book’s major findings and themes and provides policy recommendations relevant to rural aging. Following, we briefly discuss the major parts of the book.

1.5.1 *Part I: Overview of the Rural Elderly Population*

Part 1, which provides an overview of rural aging, does just that. First, the demography of rural aging is discussed, explaining what is meant by population aging, patterns of aging, and explaining in detail how population aging has come to be such an important societal phenomenon. Second, the location of older Americans, where they live now and where their proportions are increasing and decreasing most rapidly, is described in a chapter on the geography of rural aging, with special emphasis on regional context.

1.5.2 Part II: Economic Inequalities

Regional differences in the size and concentration of the elderly population are associated with economic well-being and the workforce status of older people in various parts of the country. The portion of the book that discusses economic issues associated with aging includes a chapter on workforce considerations among older rural Americans. Many older people are extending the years they work into what has traditionally been thought of as the retirement years. In part, this is because of the Great Recession of 2008, in part because of less retirement income available to older people as employer-provided pension benefits have become less generous, and, with increases in years of healthy life expectancy, some are choosing to stay in the labor force longer because that is what they desire. A second chapter in this section of the book examines the impact of the aging population not on individuals, but rather on the labor force and economy of a rural region. These two chapters speak to one another by highlighting, first, the individual-level impacts of older rural residents' economic activities and, second, the likely institutional effect of an aging population on the tax bases of rural areas.

1.5.3 Part III: Race/Ethnic Inequalities

The section on racial and ethnic minorities includes chapters on older rural African Americans, Latinos, Asian Americans and American Indians. All of these groups have historical roots in the US that go back centuries, while the history of Native Americans, who were the indigenous inhabitants of the land that later became the US, pre-dates the formation of the country. Racial and ethnic minority groups in the US have experienced prejudice and discrimination of varying degrees and durations by the majority white population in both rural and urban areas. The chapters in this section overview the historical legacies of each group and how those legacies have persisted over time to affect cumulative advantages and disadvantages of each group into the present. In large measure, being a racial or ethnic minority spells cumulative disadvantages in educational, income and occupational attainment, as well as health status. On the positive side, cultural differences in minority communities compared to the majority "white" culture often include greater respect for older people, higher proportions of intergenerational households, and family caregiving that may exceed what elderly whites can expect to receive from their adult offspring or other kin. Despite continuing disadvantages in economic and social conditions, particularly among elderly members of each group, racial and ethnic minorities have seen improvements over time in their well-being.

A factor of particular importance in rural places in recent decades has been the increasing settlement of Hispanics throughout nonmetro areas of the US. Although historically most highly concentrated in the South and West, particularly California,

Texas, and Florida, since the 1980s Hispanics, especially those of Mexican origin, have been settling in nonmetro counties in the North and East (Kandel and Parrado 2005; Leach and Bean 2008). Typical places of settlement were farming-dependent counties, but many also settled in retirement destination counties or in or near non-metro recreation counties (Kandel and Cromartie 2004; Nelson et al. 2009). The increase in the number and proportion of the Hispanic population in rural America is and has been one of the most interesting changes affecting all aspects of rural life over the past 30 years and is discussed in several chapters of this book.

1.5.4 Part IV: Rural Institutional and Community Structures

Part four of the book examines rural institutions and community structures, with an explicit focus on the challenges and opportunities of rural aging for communities and for individuals. The challenges are examined in particular in three studies of health and health care; long-term care and informal caregiving; and land-use patterns. The opportunities that can be linked to aging in rural places are similarly addressed, particularly with creative land-use planning, the use of elderly volunteers to take on community tasks, and the idea that intergenerational family relationships may result in the migration of younger adults toward their elderly parents—so that older kin may serve as a migration pull for non-elderly adults into rural communities.

1.5.5 Part V: Older Rural Migration and Aging-in-Place

Another major section of the book investigates aspects of why rural America is aging more rapidly than urban America. Specifically, the section examines rural retirement destinations, both conventional and unconventional; natural decrease in rural places, which is stimulated by aging-in-place as well as older in-migration; ethnic and racial differentials in migration to rural places; and origins and prevalence of immigration of elderly people from abroad to the rural US. Internal migration, or in-migration, and immigration from abroad are important factors that explain why particular rural areas have older age structures than other rural areas. Some rural places with high concentrations of older people came to be that way because younger people moved out and older people were left behind to age-in-place. Immigration of Hispanics into new rural migration destinations has had the effect of “younging” the population in those rural areas because Hispanic immigrants tend to be younger and of child bearing age (Johnson and Lichter 2008). We investigate these different demographic processes to better understand the dynamics of aging in rural regions of the US.

1.5.6 Part VI: Conclusions and Policy Recommendations

The final chapter reviews the major findings and themes of the book and reflects on policy implications of the research reported herein. Entry into and advancing old age of the baby boom generation—the cohorts born between 1946 and 1964—portend to have profound effects on both rural and urban areas of the US during the first half of the twenty-first century. We explore why rural areas are likely to be more strongly affected than urban areas by the aging of the baby boom generation. Many of the policy implications we draw and our policy recommendations are based on the knowledge that the country is on the precipice of an explosion in the number and proportion of elderly in its population.

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Part I
Overview of the Rural Elderly Population

Chapter 2

Demography of Rural Aging

E. Helen Berry and Annabel Kirschner

2.1 Introduction

Why care about aging in rural places? Answering this question requires, first, understanding what is meant by population aging and, second, knowing something about people who are aging in rural places. To answer, we organize this chapter into two segments. The first examines the reasons why rural places are aging and why some rural places age faster than others. The second addresses characteristics of rural elders, including their family status and living conditions.

2.2 Population Aging

“Aging” is a term that is used loosely and in broad contexts to refer to physical, psychological and social change. The physical experience of aging differs from person to person and is largely associated with changes in life-course stages and events that begin at birth and continue throughout life, often including marriage, family formation, divorce, remarriage, retirement or widowhood and changes in residence. Each life-stage transition is itself associated with changes in life-style or health.

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Table 2.1 Age characteristics of comparison countries, 2009

Country	Median age	Percent age 65+
United States	36.5	12.6
Australia	37.5	13.5
Canada	40.7	15.2
Germany	44.3	20.3
Italy	43.7	20.2
Japan	44.6	22.2
Malawi	17.2	3.0
Mexico	27.1	6.0
Philippines	22.5	4.1
Poland	38.2	13.4
Russia	38.5	13.7
South Africa	25.0	5.0
United Kingdom	40.5	16.2

Sources: US Census Bureau (2009) and US Central Intelligence Agency (2010)

Population aging, also known as demographic aging, differs from individual aging in that it refers to the average age of the population in a geographic area—e.g., a country, state, or county. Some populations are quite young; others are much older. Researchers use two summary measures to describe the age of a population: the *median age*, that is the age at which half of the population is older and half is younger, and the *percentage of the population 65 years of age and older*.

The Philippines is an example of a country with a young population. As Table 2.1 reports it has a median age of just 22.5 years and only 4.1% of the population 65 years of age and older. On the other hand, Japan is quite old, with a median age of 44.4 and with 21.6% of its population 65 years of age and older (US Census Bureau 2009; US Central Intelligence Agency 2010). The median age and the percentage 65 years of age and older are important measures because they present different portraits of how rapidly an area is aging.

Figure 2.1 shows that in the United States (US) the percentage of the population 65 years of age and older increased slowly since 1870 and subsequently fairly rapidly between 1920 and 1950. The increase reflects the aging of the native born population and that of a large number of immigrants¹ and their children who entered the US between 1870 and the early 1920s. In 1924, US immigration policy changed, effectively cutting off most international immigration so that by 1960 the percentage of the foreign-born population 65 years of age and older had begun to decline, while the total population 65 years of age or older was climbing based on the aging native-born population. Between 1990 and 2000, little or no growth occurred in the percentage 65 years of age and older due to both low immigration and low birth

¹In demography, the terms immigration and emigration refer to movements in and out of countries. In-migration and out-migration refer to movements between areas at the sub-national level, i.e. regions, states, counties.

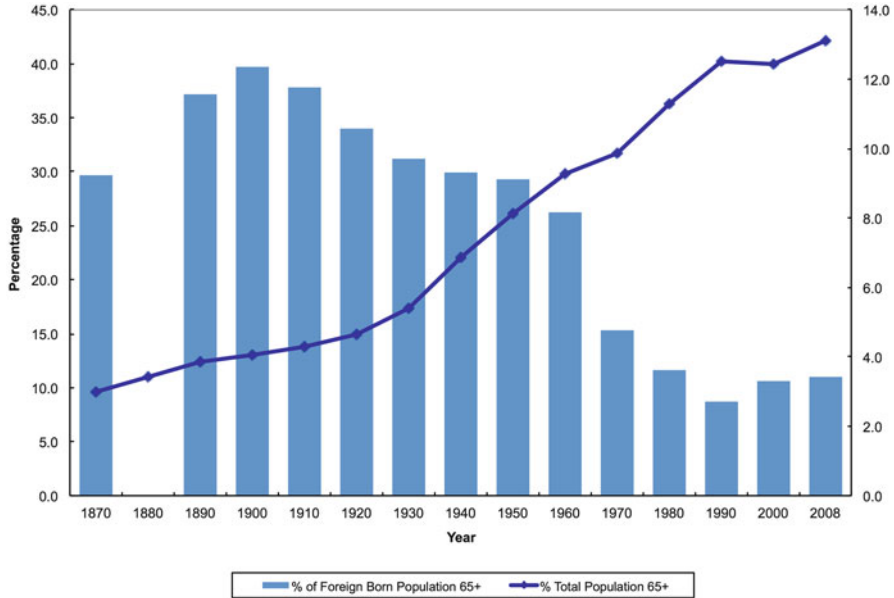


Fig. 2.1 US percentage of total population 65 years of age and older and percentage of foreign-born population 65 years of age and older, 1870–2008 (Sources: US Census Bureau (2009, 2010))

rates between 1929 and 1946. Since 2000 the percentage 65 years of age and older has increased rapidly as the baby boomers, those Americans born between 1946 and 1964, began aging into the 65 and older age group. The median age, reported in Fig. 2.2, on the other hand, decreased between 1950 and 1970 reflecting the large numbers of children born during the baby boom but has increased steadily since then, rising sharply after 2000.

Comparing the pattern of change in the median age of the population to that of the percentage age 65 or older, one can see that aging is not a function of increasing life expectancies, although longer life spans do play a part. Rather, the aging of populations is more a result of decreasing birth rates. When birth rates are high relative to the proportion or numbers of elderly then populations become younger. As fewer infants are born, the median age of the population increases as the relative percentage of the population at older ages increases (Poston 2005; Goldstein 2009). Only when birth rates stabilize at low levels does the impact of advancing life expectancy begin to influence population aging (Goldstein 2009). In the case of the US, the post-World War II baby boom provided only a short interruption in the long, slow decline in birth rates and coincided with steady increases in life expectancy (Poston 2005; Goldstein 2009). The result has been population aging.

Influences on societal aging are similar across metropolitan (metro) and nonmetropolitan (nonmetro) populations. However another factor can also produce different patterns in the aging of urban and rural places. In- or out-migration of individuals in different age groups can change the proportion of a population that is very young or

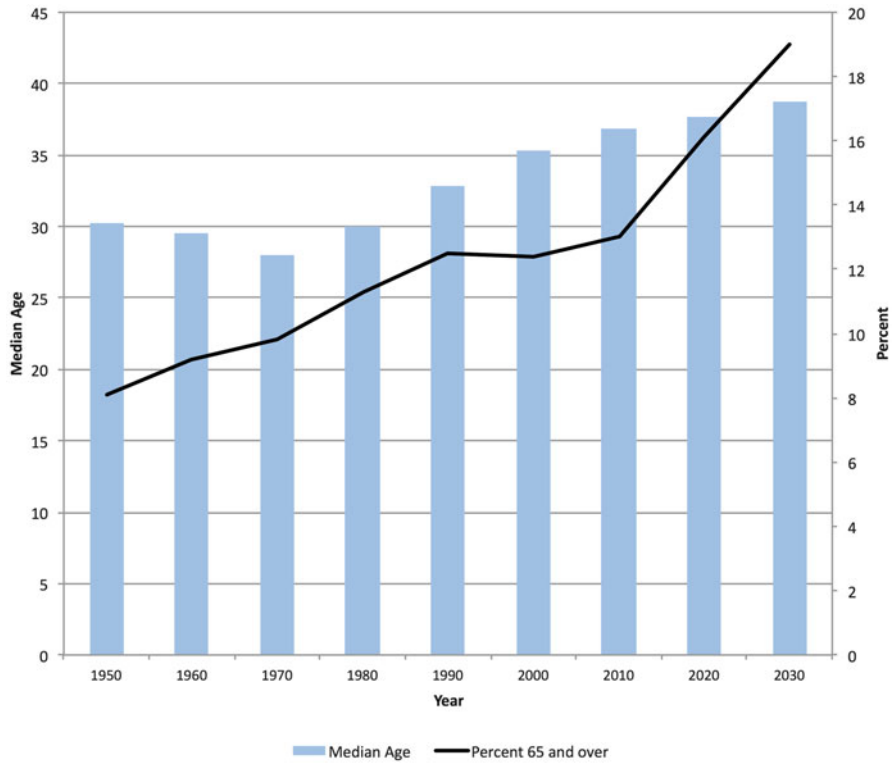


Fig. 2.2 US median age and percentage 65 years of age and older, 1950–2030 (Source: US Census Bureau (1981, 2010))

of retirement age. The age of a region or country at any point in time reflects both recent and historical interactions between birth rates, life expectancy and migration. Of these, birth rates and migration are generally more important than mortality. All three—birth rates, increased life expectancy and migration—have influenced and will influence the variability in aging between rural and urban places in the US in the twenty-first century.

While there is much concern over the aging of the US population, many other countries with similar post-industrial economies are even older. Post-industrial countries, including nearly all of Western and Eastern Europe, Australia, Japan, and several others, are listed in Table 2.1. Much of the difference between these nations and the US is a function of past birth rates and immigration policies. First, the US has had more lenient immigration policies since the mid-1960s than most other countries. Second, a majority of immigrants are young adults who are more likely to have children or to be planning to have children. The arrival of immigrants helps to keep a country or region young (Parrado 2011). In most cases, new immigrants move to urban places, not to rural ones. Gurak and Kritz (Chap. 18, this volume) discuss the issue of international immigrants in rural places, but we note here that

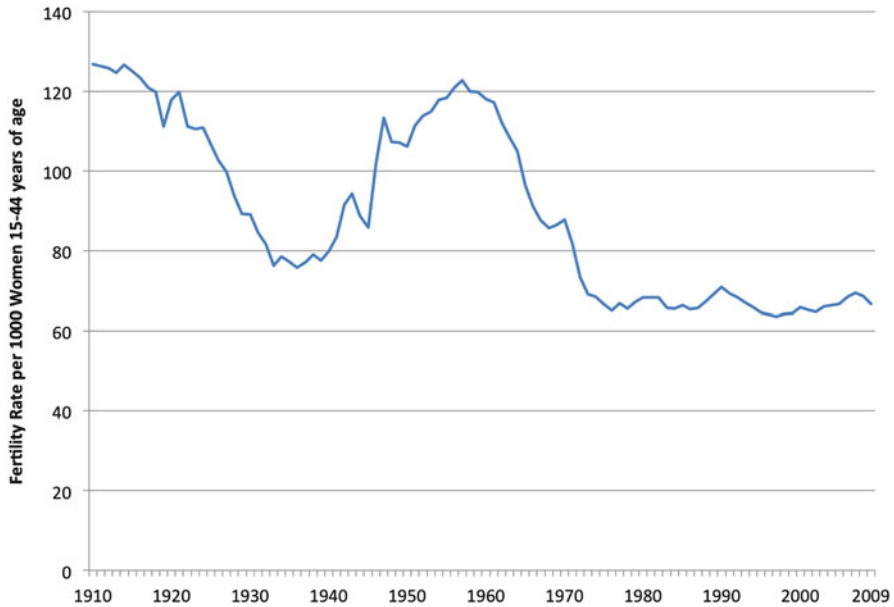


Fig. 2.3 Fertility rates: US 1910–2006 (Sources: Taffel (1977) and Martin et al. (2009))

nations that are net receivers of immigrants are also likely to be countries receiving younger persons in their childbearing years.

There are exceptions to this rule, however. Both Canada and Australia are immigrant nations, though both are older than the US. Post-World War II fertility rates help explain why. The end of the war, in 1945, coincided with a baby boom that was particularly pronounced in the US, Australia, and Canada, although the boom in the US was more distinct and of longer duration than elsewhere (Foot 1997; Linteau et al. 1991; Owram 1996; Salt 2004). This surge was not entirely unexpected and occurred in many countries, not just the US. At the end of wars, births usually increase as men return from the front, marry, and start families—events that have been postponed during combat and which are illustrated prominently in Fig. 2.3 by higher fertility rates and number of births following World War I and, more pronouncedly, following World War II. What was unexpected in the US was the persistence of the higher birth rates (National Center for Health Statistics 2010).

2.3 Nonmetro Areas of the United States Age More Rapidly Than Metro Areas

While the aging of the baby boom means that the US as a whole will age, it does not mean that rural or nonmetro areas will automatically age more rapidly than urban or metro places. Yet nonmetro areas have been aging faster than metro areas in the US since the 1930s and will continue to do so for the foreseeable future

(Clifford et al. 1985; Siegel 1993). Three broad trends account for the more rapid graying of the rural population. Two of these were evident throughout the twentieth century—declining birth rates and young adult out-migration from nonmetro areas. The third—the rural turnaround fueled by retirement migration—has been evident since the 1950s (Beale 1975; Johnson 2006).

2.3.1 Declining Birthrates

Having just discussed the baby boom, it may seem odd to refer to the long-term decline in US fertility rates. Yet as Fig. 2.3 illustrates, the baby boom interrupted, but did not halt, that long-term decline. The downward trend was more dramatic for rural than urban areas because birth rates were historically higher in rural areas but then rural fertility rates declined rapidly. In 1900, fertility rates were about 1.5 times higher in rural than urban places (US Census Bureau 1975, Series B 67–98). By the mid-1970s, fertility rates were the same across urban and rural areas, at replacement level, meaning that just enough children were being born to replace the previous generation (Fuguitt et al. 1991). Fertility rate differentials between metro and nonmetro places varied somewhat over the next several decades, particularly when the age of the mother in metro or nonmetro places was taken into account. Nonmetro mothers tended to have their children at younger ages than metro women so that nonmetro fertility rates for younger women tended to be slightly higher than metro fertility rates, but lower than metro fertility rates for older women (Fuguitt et al. 1991). As a result, in the twenty-first century, most growth or decline in nonmetro places has been and will continue to be determined by migration.

2.3.2 Rural Out-Migration of Young Adults

At the same time that natural increase, the excess of births over deaths, was the primary engine of population growth throughout the twentieth century, out-migration of young adults was the primary engine for population loss in nonmetro areas by the end of the twentieth century (Johnson 2006; Walser and Anderlik 2005). Throughout most of the twentieth century, nonmetro young adults left nonmetro for metro counties, and there was little or no net migration by young adults in the opposite direction (Johnson 1999; Garasky 2002; Brooks et al. 2010). Age-specific net-migration rates for each decade from 1950 through 1990 show out-migration from nonmetro areas for 20–29-year-olds in all decades (Johnson et al. 2005b). Net out-migration of teens 15–19 years of age also occurred in 1950, 1960, and 1980 (Johnson et al. 2005b).

Prior to about 1935, higher fertility rates in nonmetro areas balanced out-migration from rural places. Since then, net outmigration of youth has continued, and many counties are now experiencing natural decrease—i.e., the population of these counties decreases slightly each year (Johnson 2006). On the other hand, metro

Table 2.2 Population age characteristics by US geographic areas, 2005–2009

Geographic area	Median age	Percent age 65 or older
United States	36.5	12.6
URBAN AND RURAL		
Urban	35.6	12.4
Rural	39.7	13.3
METRO AND NONMETRO		
In metropolitan or micropolitan statistical area	36.2	12.3
Not in metropolitan or micropolitan statistical area	41.0	16.5

Source: American community survey (2010)

areas have had two sources of growth: the first through the in-migration of rural young adults, as well as international immigrants who generally target urban areas as their first place of residence.² Migrating young adults from rural places are in their prime childbearing years, adding to the natural increase in urban places. In addition, immigrants tend to have higher fertility rates than the resident population and are primarily young adults who bring their children and/or child-bearing capacity with them; these children, then, become additional sources of population growth for metro counties.

The effects of the declining birth rates and the out-migration of young adults can be seen with a simple comparison of median ages, or of percentages of persons 65 years of age and older in urban/metro and rural/nonmetro places, as shown in Table 2.2. Regardless of the unit of analysis, or of the measure used, whether rural versus urban or nonmetro versus metro, rural and nonmetro places have higher proportions of the population 65 years of age and older and higher median ages.

2.3.3 *Rural Turnaround*

Not all adult migration has targeted metro areas. During the twentieth century, metro counties grew faster than nonmetro counties until 1970. As late as 1969, a major text on urban economics predicted that this trend would continue for the foreseeable future (Thompson 1969). However, in 1973, population estimates for 1970–1973 showed that nonmetro counties were growing faster than metro counties (Beale 1975). At first, many thought that this was a continuation of a long term trend toward suburbanization which had accelerated after World War II with the building of mass produced subdivisions around major urban areas. Further analysis of the data

² This changed somewhat in the 1990s, with some immigrants being drawn directly to nonmetro areas to work in agriculture, food processing, forestry and the retail services that supported immigrant populations. However, the main destination for immigrants continues to be metro areas. Immigration to rural places is further discussed in various chapters later in this volume.

showed that even nonmetro counties not adjacent to metro counties were growing and these trends were termed the “rural turnaround” and the “rural renaissance” (Johnson and Beale 1994). Since that time, researchers have followed the relative growth rates of metro and nonmetro counties closely and have discovered patterns of population growth and decline in rural areas that change based on economic factors, land-use changes and the retirement patterns and preferences of different age cohorts (Johnson 2006).

Specifically, the more rapid growth of nonmetro counties continued throughout the 1970s, slowing toward the end of that decade (Berry 2000). In the 1970s, net migration rates for those 30 years of age and older were higher than for any other age group. Surveys and interviews showed that many were migrating to rural areas for the amenities that rural living offered and were willing to sacrifice some income to achieve that lifestyle (Williams and Sofranko 1979; Jobes 2000; Rudzitis 1999). Specifically, counties with forested areas, lakes, mountains and moderate temperatures grew much faster than those that remained dependent on agriculture (McGranahan 1999).

Persons 55 years of age and older (pre-retirees and retirees) have generally been less likely to move than younger adults. However, the net in-migration rates to nonmetro counties of the older population began in the 1950s and remained higher than that for any other group, acting as a precursor to the rural renaissance. Even when other age groups were moving from nonmetro to metro counties, elders were moving to nonmetro places (Brown and Glasgow 2008; Johnson et al. 2005b).

During the 1980s, the rural turnaround ended. Nonmetro counties grew more slowly than metro counties, and some predicted that the turnaround was a decadal anomaly (Johnson 1989). Between 1980 and 1983 a severe recession (at the time the worst since the Great Depression) caused serious problems in several industrial sectors. The steel and auto industries, primarily located in metro counties in the mid-Atlantic and Northeastern states, declined with increased global competition and the high value of the American dollar. However, nonmetro counties generally experienced problems in all resource-based industries, including timber, fishing, mining and agriculture. Many counties did not begin to recover until 1986 or later (Johnson et al. 2005a). During that decade net out-migration from nonmetro counties occurred for nearly all age groups. A notable exception was for persons between the ages of 60 and 74. While net migration rates of this age group were lower than they had been during the 1970s, they were still positive (Johnson et al. 2005b).

The decade of the 1990s experienced a resurgence of growth for nonmetro counties, with positive net migration rates from all age groups except young adults between 20 and 34 years of age (Johnson et al. 2005b). Net migration rates for 50–74-year-olds were higher than in any of the previous three decades (Johnson et al. 2005b). Nonmetro counties with amenities—both natural (lakes, mountains, forests, oceans) and built (ski resorts, golf courses)—experienced positive net in-migration (McGranahan 1999; Cromartie and Nelson 2009). More important, there was increasing evidence that local entrepreneurship in nonmetro areas helped undergird this growth. But nonmetro counties still tied to resource based industries, especially agriculture, continued to experience net out-migration (Vias and Nelson 2006).

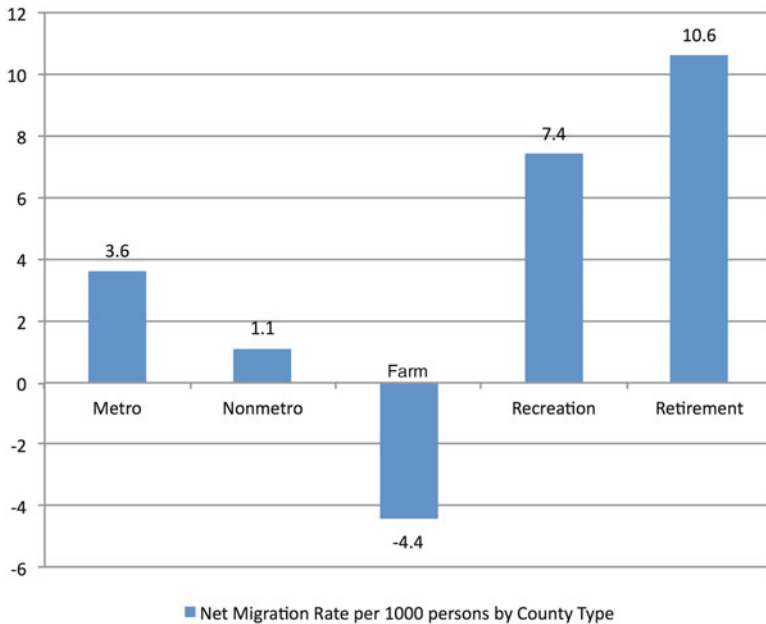


Fig. 2.4 Net migration rate by nonmetropolitan county type, 1990–2009, for the continental 48 states, not by age (Farm, recreation and retirement counties are subsets of nonmetro counties) (Source: US Census Bureau (2010))

Estimates of county growth and net-migration from 2000 to 2009 once again show that nonmetro counties experienced net out-migration. As Fig. 2.4 shows, metro counties had a net migration rate of 72.03, while the rate was -11.21 for nonmetro counties. Out-migration is not unexpected because this decade experienced two recessionary periods—a short one in 2003, and a much more severe one beginning in 2008. Because nonmetro counties have smaller economies than metro counties, they tend to suffer more during a recession.

The Economic Research Service (2007) categorizes nonmetro counties into sub-groups, of which three are of particular interest when discussing migration during this period. One subset, farm counties, experienced notable net out-migration. Another subset, recreation counties, had a net migration rate of 36.1. The rate for retirement counties at 82.1 was substantially higher than that for metro counties (Economic Research Service 2007). Retirement counties are nonmetro counties where the number of residents 60 years of age and older grew by 15% or more between 1990 and 2000 due to in-migration (Economic Research Service 2007). Thus retirement areas continued to experience substantial growth through net in-migration even during this decade.

Other research predicts that baby boomers who are just on the cusp of retirement will target nonmetro counties as destination areas (Cromartie and Nelson 2009). Thus, the very large age group about to enter retirement (the first baby boomers

turned 65 in 2011) could set up nonmetro counties for another period of growth, especially in the older age groups (Brown and Glasgow 2008; Cromartie and Nelson 2009).

2.3.4 Two Types of “Old” Counties

Not all “old” US counties are the same. The historical patterns discussed above have produced two types of counties that are aging. *Population-loss counties* have a high concentration of older adults because of persistent out-migration of young-adults—outmigration that continues even in the twenty-first century. *Retirement destination counties* are aging as retirees and pre-retirees target them as places to live.

These two types of counties overlap with two types of counties classified by their economic base. Farm and population loss counties generally overlap with one another as do retirement destination and recreation counties. Johnson et al. (2005b) have shown that both farm and recreation counties have experienced the loss of young adults each decade from 1950 to 2000. However, in recreation only counties, the 20–29-year olds were out-migrants while 15–29-year-olds had net out-migration rates in agricultural counties. In addition, where there is net out-migration from recreation counties—which is not common—it is slower than in farm counties (Fig. 2.4).

Other characteristics also distinguish these two types of counties. In many population loss counties, businesses and services have declined with persistent out-migration. With these events, the tax base has declined and fewer services for older adults are available. Older adults tend to be poorer in population loss counties than in retirement counties. Thus the lack of services is a particular problem for this older population (Rogers 2002). Most retirement counties, on the other hand, have continued to grow, even during the recession of 2009, although their rates of growth have declined substantially (Pollard and Mather 2010).

2.4 Are Rural Elders Male or Female? Healthy? In Retirement Homes?

In 2010, an estimated 41 million Americans were 65 years of age or older, representing an increase of nearly 19% in the older population since 2001 (National Center for Health Statistics 2010, p. 159). By 2030, that number is estimated to reach 72.1 million, representing 19% of the total population. By comparison, the proportion of the population under 18 years of age was 24.2% in 2010 and is projected to remain at no more than 23.5% by 2030 (National Center for Health Statistics 2010).

2.4.1 Sex Ratio

Summary information provides some insights into older rural people. To begin, they tend to be more female than male. Because women in more developed countries tend to outlive men, as a population ages, the population tends to become “more female.” In the US, men who reach 65 years of age have an average life expectancy of another 14 years; females who reach 65 years of age can anticipate another 19 years of life (National Center for Health Statistics 2010). As a result on average in 2007 there were 85 men for every 100 women 65–74 years of age. Mortality differences mean that by 85 years of age and older, there are fewer than 48 men for every 100 women. Although the proportion of men in each age group, relative to women, has been increasing since 2000 (in 2000 there were 82 men for every 100 women 65–74 years of age and 41 men for every 100 women 85 years of age and older), it is unlikely that a time will come when males outnumber females in the oldest age groups.

Lutz and colleagues (2008) proposed that population aging could more accurately be estimated using life expectancy calculated for persons 60 years of age or older. People who survive to at least 60 years of age are likely to live a fairly lengthy additional number of years. Lutz et al. (2008) estimate that those in North America who have reached 60 years of age in 2010 are likely to have another 23 years of life, if female, and another 15 years, if they are male. Males are estimated to gain as much as another 3 years of life expectancy between 2010 and 2020 but females will gain only two more years by that time. The differential advances made by males relative to females will result in an increase in the sex ratio in older ages.

2.4.2 Family and Health

The differential in the proportion of males to females in the older ages is important for several reasons. First, more widows are in the elderly population than widowers. Divorce has also become more common during the last 60 years, with the older segments of the baby boom more likely to divorce than the younger half (Cohn 2010). As mortality declines, the risk of divorce increases (Kammeyer and Ginn 1986). The declining fertility rate that has contributed to the aging of the population also means that as widowhood occurs, or as persons age while divorced, if not-remarried, the burden of any long-term care for a disabled elder becomes greater for remaining family members, or can mean that elderly are at greater risk of having no familial support in the case of disability.

Second, marital status has long been thought to be associated with longer life and better health status. Although the relationship is complex, numerous studies have shown that married persons tend to live longer than the unmarried and that marriage seems to be something of an inoculation, particularly for males more so than for females (e.g., Lillard and Panis 1996). In rural areas, 26% of males over age 15 have never married; in urban places the percentage is 37%. The corresponding percentages

for women are 20 and 30% respectively (US Census Bureau 2010). The higher marriage rates in rural compared to urban areas tend to result in slightly higher sex ratios among rural older people.

Waite (2009) has said that “Spouses act as a small insurance pool against life’s uncertainties, reducing their need to protect themselves against unexpected events” (p. 691). That is, spouses share and accumulate more economic and social capital than do singles. The effect of having more social capital, or friends and acquaintances, is to provide more contacts one can turn to for support when the need arises. Such individuals can serve as drivers, home health care assistants, house cleaners, and the like but also as sources of information about options available for support of older people.

The loss of a spouse results in the loss of economic assets, and it matters whether the male or female partner dies first. Holden and Smock (1991) showed that widows tend to have fewer economic assets after a husband dies than do widowers, whereas widowers tend to lose more social connections when their wife dies. Still, the higher marriage rate in rural places suggests that the health benefits of marriage will result in older persons remaining relatively healthy (Pienta et al. 2000).

Still, mortality rates in rural places have been slightly higher since 1984 and have been increasing relative to rates in metro places since that date, even with population age, sex, and other variables controlled (Cosby et al. 2008). The differential reverses a century-long trend and the reasons for it are unclear. The pattern may be one of the consequences of simply being in a rural place: rural places are more isolated from health care facilities; persons in rural places are less likely to have health insurance and are more often poor (Bailey 2008). In the poorest rural counties, in contrast to the life expectancy information reported above, life expectancies for women are now lower than or essentially the same as in the 1980s (Danaei et al. 2010). The poorest rural counties tend to be in the South, the southern Great Plains and Appalachia (Danaei et al. 2010). The health differences found in these counties, relative to metro counties, occur largely due to life style factors including, but not limited to, smoking and obesity rates, as well as lack of access to health care services, an increase in the uninsured and increasing income gaps (Bailey 2008). Males living in the western rural US and black low income females living in the rural South had lower life expectancies than males or females elsewhere largely due to differential health risks (Danaei et al. 2010). The same regions just cited as having poorer health outcomes coincide with those where overall population size is declining (Danaei et al. 2010). On the other hand, recent research by Lambert et al. (2010) implies that some growth in health care services and thus improved services for rural elders may follow retirement migrants to places of destination. Thus, for communities that are actively trying to attract retiree migrants, some health care services may follow.

2.4.3 Living Arrangements

Widowhood and/or living alone at earlier ages can often result in changes in living arrangements later in life. Different proportions of males and females are in this situation. The proportion of older women living alone is one in five, which is

about twice that of men (United Nations Department of Economic and Social Affairs 2005). However, the baby boom generation and those cohorts following it have been more likely to marry and divorce, which has meant that, once widowed, older persons have more complex choices as to whether to stay put (remaining ‘in place’), move toward children or step-children, or to choose some other form of living arrangement.

Rates of institutionalization of older persons are surprisingly low, contrary to many people’s beliefs. In more developed countries, the rates range around 10%, although in Japan, the US and the UK rates are only 5–6% for persons 65 years of age or older but increase 2–10 times that for persons 85 years of age and older (Jacobzone 1999). In nonmetro areas, although there are more nursing home beds per capita than in metro places, (Duncan and Radcliff 2004), fewer other types of long-term residential settings are available for older individuals and the responsibilities of day-to-day care often fall to family, friends or other types of networks (Whitener 2005). Fertility decline and the increase in complex kinship ties referred to above as well as the outflow of younger relatives common from rural places make it more likely that an out-migration of older old from rural places occurs, or at least from non-retirement destination rural places (Scharf and Bartlam 2008). This pattern follows Litwak and Longino’s (1987) elderly migration paradigm, wherein they describe the possibility of a move around retirement age to a retirement destination county, for those with the where-withal; then a second migration toward family; and finally a third migration to a health care facility or to live with someone who can provide care.

Nancy Folbre (2010) spoke of the role of family care noting that about 19% of US residents provide care to persons 50 years of age and older. She notes that “this unpaid work saves taxpayers a lot of money every year. However, when families are unwilling or unable to provide enough care, public support programs like Medicare and Medicaid and private long-term care insurance make up the difference. These alternatives are mostly inefficient and expensive” (Folbre 2010). Still, due to the growth in the oldest old population, even if the proportion of those requiring nursing home or other long-term care fell by one third, the estimated number of beds in traditional long-term care facilities would need to increase to meet demand (Sahyoun et al. 2001). As a point of reference, those future oldest old who are likely to inhabit long-term care beds are currently 50–60 years of age, the group that will increase the proportion of elderly so dramatically.

The Population Reference Bureau (PRB) (Stall 2010) has recently reported that the increase in the older population will require more health care services because more health care dollars are utilized at the end of life. At the same time, doctors and nurses are themselves aging and are retiring, as is the rest of the population. The result is to increase demand for health care professionals even as the proportion of the population in the working ages dwindles relative to those in the retirement ages (Stall 2010).

Still, not all elderly should be thought of as requiring health or medical assistance. Glasgow (2004) discussed the increasingly likely potential for healthy living into old age and pointed out that this potential has been much underestimated by the general public. Indeed, health care professionals increasingly comment on the

wellness of older age groups and note that healthy aging is increasingly likely. There are, however, accessibility issues for the healthy aged. These issues are much like those associated with the Americans with Disabilities Act, and remediation may be costly. Sidewalks, walkways, non-slip surfaces, manageable housing, public transportation, libraries and the like must all be adapted to those with the somewhat more limited physical abilities of elderly populations. Such adaptations are expensive but can make healthy aging more likely. Accommodations like these are more expensive in rural places where infrastructure is sometimes older, or where there are fewer dollars available to support upgrades.

2.4.4 Other Characteristics of the Older Population

Beyond the factors discussed above, the older population has other characteristics that differentiate them from the rest of the population. For example, older persons are more likely to vote (Kirschner and Berry 2004). The Brookings Institution's recent report (Berube et al. 2010) on metro America pointed out that the aging population is predominantly white, while nearly 40 % of those under 18 years of age in the US are non-white minorities. The implication of the report is that there is more than a generation gap between older and younger Americans; a diversity gap exists as well. The impact is that those who cannot yet vote are often the children of the foreign-born and may not be well represented in the voting age population, which has implications for property tax revenues and for those who vote for or against those taxes. At the same time, those who care for the older population in assisted living or other health care settings are often non-native born or are non-European descent whites. Indeed, the PRB (Stall 2010) report indicates that more than one in four health care professionals are internationally-trained doctors and nurses.

As a different example, the Iraq and Afghanistan wars, the longest in US history, have had a particular impact on rural people. The soldiers fighting in those wars have come disproportionately from rural and near rural places. Traditionally nonmetro youth have had fewer options for employment and thus often choose military careers just as they have been more likely to move from rural places for jobs. Thus rural, nonmetro families are feeling the impact of war casualties more frequently and more personally than metro families (O'Hare and Bishop 2006) often resulting in rural elders caring for children and grandchildren at higher rates than urban elders (US Census Bureau 2010, not shown).

2.5 What Is Unique About Aging in a Rural Place?

The problem with being rural is largely a problem of infrastructure (Krout 1983). Travel, whether to the doctor, to visit children or to the grocery store is often more difficult because of distance and lack of public transportation. The increased

distances between places may require greater reliance on family and friends, and greater reliance on automobiles (Nemet and Bailey 2000). Access to other infrastructure (health care, elder day care centers, grocery stores, and other shopping) is also more complicated in rural places. The much smaller population base makes support of services more difficult. Poor access forces greater reliance on kin and friendship networks. Many elderly give up their cars only reluctantly but are even more reluctant in rural than urban places because of greater distances (Glasgow and Blakely 2000). A tendency to drive beyond one's ability (whether that is 60 or 90) makes the roads less safe for older drivers themselves, other drivers and pedestrians in rural places. But whether metro or nonmetro, an elder relying on others often goes against the grain.

2.6 Conclusion

Rural and urban communities have known that population aging has been occurring for some time and have had much time to anticipate the impact of an older population. In urban communities, however, small or gradual change in the population has far less impact simply because larger population numbers diminish the influence of change. In nonmetro places, any change can have a profound impact. The small size of the populations of rural places means that even a 5% change in population size or composition dramatically influences tax revenues and the requirement for oncologists or pediatricians, teachers or gerontologists.

The phenomenon known as the second demographic transition (Van De Kaa 1987; Lesthaeghe and Neels 2002) is likely to influence population aging in both metro and nonmetro places. The second demographic transition describes the increasing trend for individuals to marry later in life or to remain single, have one or no children, and focus more on friendship relations than on kinship relationships. The impact of this transition, should it continue, will likely be felt more in future decades, but it emphasizes the reliance of older adults on friendships and institutions rather than on kin. The impact of this second revolution may be mitigated by increases in the foreign-born population of the US who are known to be more family-oriented than the native-born population and who have had larger families than have recent generations of native-born cohorts. If Van de Kaa and Lesthaeghe and Neels are correct, the aging of the population will mean an increased need for formal institutions such as assisted living centers to care for older populations.

From another perspective, one can think of the current boom in the elderly population as a type of elder dividend or, as Brown and Glasgow (2008) call them, "grey gold." Baby boom elders are more likely to have higher levels of education than prior cohorts, even though rural elders generally have less education than their urban counterparts. Individuals just approaching retirement age—those 55–65 years of age—have relatively higher incomes than the younger population, and this group

has more income than earlier cohorts of elders. Because women are now much more likely to be in the labor force than in the past, baby boom elderly are somewhat better off than elders have been in prior cohorts. As Rathge, Garosi and Olson (Chap. 5, this volume) point out, the contribution of this group to taxes over the next several years may serve to ease both nonmetro and metro counties out of the severe recession that began in 2008.

Among the dividends that come from having an older population is the reliability and productivity of older workers. Older workers having already raised their families are known to have less absenteeism, and to be more reliable employees. Older persons are also known to spend large amounts of time in volunteer positions helping other elderly, such as in Meals on Wheels programs or, the eponymously named, Elders Helping Elders (Brown and Glasgow 2008). By comparison, time devoted to voluntary work and care is minimal among those under 35 years of age and is highest among age groups 55 and older and continues to increase to around 70 years of age (Curnow 2000). Such labor tends to be ignored by labor statistics because it is unseen and unaccounted for in the GDP. An interesting study in Australia (Curnow 2000) even suggests that some housework for those under 35 years of age is accomplished by those over 50 years of age. This inter-generational transfer of time and labor goes undocumented and may amount to a surprisingly large amount of household labor and capital. Perhaps the most important thing about rural elders is that, as noted above, they and their families are accustomed to “making do” (Coward et al. 1990). This is not to cast aspersions on metro elders who, similarly, find ways of getting things done. The difference is merely one of scale. For rural elders, the problem of being in a rural place is largely one of distance: the distance between places, whether it is the distance from home to the nearest grocery, gas station, doctor, retirement facility, family member, or, for that matter, the nearest place to get the car repaired. Getting to places makes creativity in management important. Rural elders who cannot manage these functions have fewer options. These options include: (1) having to move away from family and friends in a long-term place of residence toward their children; (2) having their children move toward them; (3) forming informal networks of friends and kin to do one’s driving, as necessary, and to help with cleaning, shopping, or the like; or (4) moving to assisted living.

Regardless, it is in the interest of rural communities to promote the contributions elders can make. Older baby boomers have more money, education, and skills than any generation before them. Their abilities and skills, as well as their economic power, far outweigh that of any generation that has preceded them. Both elders and rural communities benefit when ways are found to keep baby boomer elders from moving away. Indeed, the unpaid work that these boomers can provide to a community, through house repairs for the boomers’ children; child care for their grandchildren; community volunteering; or simple or not so simple volunteering on a complex bridge project or an interesting folklore project, elders can provide so much more to a community than the current fear that “the old folks are coming” has implied.

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Chapter 3

The Geography of Rural Aging in a Regional Context, 1990–2008

Peter B. Nelson

3.1 Introduction

Countries across the globe, especially those with more advanced economies, face unprecedented population aging. By 2050, 37% of the population in Europe is projected to be over the age of 60 compared with only 20% of the population in 2000, making Europe the region with by far the highest concentration of elderly. In the United States (US), the proportion of the population over age 60 will increase from 16% in 2000 to nearly 27% by 2050 (United Nations 2002). Such demographic change has attracted considerable attention from policy makers and scholars as these aging populations will inevitably stress any number of systems including healthcare, labor markets, and Social Security. Moreover, given that the leading edge of the post-second world war baby boomers turned 65 in 2011, questions about aging and its impact on specific places are particularly prescient.

Aging in rural contexts is unique for a variety of reasons, outlined in the introductory chapter and other chapters of this volume. Included among these unique aspects are first, that rural areas are likely to experience considerable growth in their elderly populations in coming decades. Past processes of youth out-migration have resulted in rural communities with increased concentrations of older residents, and these populations provide a large base for natural increase in the elderly population (sometimes referred to as aging in place). In addition to aging in place, migration will also contribute to a growing elderly population in nonmetropolitan (nonmetro) regions. Over the last several decades, nonmetro regions have seen consistent net in-migration of older populations (Brown and Glasgow 2008; Johnson and Cromartie 2006). Currently, nearly 80 million baby boomers are entering a life-course stage in which the likelihood of migrating into rural communities increases (Wilson 1988).

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Projections suggest that rural America is likely to be the destination for nearly three million migrating baby boomers between the ages of 55 and 74 by the year 2020 (Cromartie and Nelson 2009). Therefore, a combination of natural aging in place and differential migration is likely to increase the absolute and relative size of older populations residing in rural areas. Given the sheer size of the post-war baby boom cohort and the overall lower tendency to move later in one's life, natural aging in place is likely to become an increasingly powerful driver of rural aging in the coming decades. Finally, the patterns of and processes behind rural aging have been and will continue to be geographically uneven with certain areas positioned to attract inflows of relatively well-off (physically, socially, and economically) older residents while other areas will see their concentrations of elderly increase as younger populations leave. Thus, this chapter examines rural aging in the US from 1990 to 2008 from a distinctly geographical perspective to answer three principle questions: (1) which counties in rural America are aging most rapidly?, (2) what factors are driving aging in these counties?, and (3) how do these factors vary across regions and types of places?

3.2 Aging in Place Versus Elderly Migration—Through Time and Across Space

The literature review for this chapter focuses on the two processes that contribute to the changing geography of an aging rural population: aging in place and net elderly migration. At the scale of the individual, aging in place typically refers to the process of growing old within one's home or local community. Scholarship in this area often explores the characteristics needed to allow such aging in place to occur (see, for example, Pastalan 1999). Morrill (1995), a prominent population geographer, adopts a broader scale in his use of aging in place as a concept. Rather than focusing on the aging of an individual, Morrill's work identifies places where the resident population is growing older without large levels of net migration. Under such circumstances, the places are getting older through the collective processes of aging in place. He then compares these areas with places with increasing shares of older populations resulting from high levels of net elderly migration. The analysis in this chapter focuses on places (counties) as the units of analysis and therefore employs Morrill's use of aging in place.

Both aging in place and net elderly migration can dramatically alter the demographic landscape of a community, and each source of change has distinct community level implications. "These two sources of change should be identified, because an elderly population that grows due to migration may have very different socioeconomic and demographic characteristics than an elderly population that has primarily aged in place" (Rogers and Woodward 1988, p. 451). Litwak and Longino (1987) provide a seminal work on elderly migration by identifying three developmental stages of elderly migration: when people first retire, when they begin to need periodic but uncomplicated medical care, and when they require more sophisticated and

regular medical attention. From a geographical perspective, migration, especially elderly migration, tends to be a positively selected process. Therefore, areas that are aging due to net elderly migration are likely to be attracting older migrants that tend to be healthier, married, and economically better off. In contrast, regions where aging in place is dominant are more apt to be left with a disadvantaged elderly population lacking important social and economic resources (Rogers and Woodward 1988). Currently, with the baby boomers between the ages of 47 and 65, an increasing number of people will be retiring and entering the first of Litwak and Longino's developmental stages of elderly migration. Therefore, the volume of these positively selected elderly migrants is likely to increase. This increase, however, will most certainly be overshadowed by aging in place, as individual-level mobility schedules show reduced likelihood of migration with age (Pandit 1997).

In addition to the differences between elderly movers versus stayers, the *places* characterized by net elderly migration are likely to be quite different from those dominated by aging in place. Rowles and Watkins (1993) utilize a combination of quantitative and qualitative methods to document the experiences of three different places characterized by different elderly migration patterns. Hendersonville, North Carolina is a prototype retirement destination, attracting the positively selected migrants identified by Rogers and Woodward (1988). Retirees in places like those similar to Hendersonville represent a growth sector, as they stimulate expansion in construction, personal services, and healthcare. Estimates suggest that each additional retiree results in 0.34–0.58 new jobs (Day and Barlett 2000; Deller 1995; Sastry 1992; Serow and Haas 1992), and Hendersonville has seen dramatic increases in these sectors. Yet, despite the influx of large numbers of well-off retirees, Hendersonville has also had to deal with difficult development issues ranging from affordable housing to over-development and environmental degradation (Rowles and Watkins 1993). Thus, aging due to net elderly migration has distinct impacts (both positive and negative) on receiving communities.

By comparison, Hazard, Kentucky is trying to develop as a retirement destination after decades of net elderly out-migration. The years of out-migration and boom-bust swings in the area's primary industry (coal) have left Hazard with few community resources attractive to an elderly population. In places like Hazard with populations in decline or growing more slowly, it is difficult to maintain critical health services such as dialysis or cardiovascular care—two health services often needed by an aging population. Dynamics in real estate markets further stress the elderly populations in areas like Hazard. For most, one's home is their single largest economic resource, yet real estate values are likely to decline in areas without population growth. The elderly populations remaining in such areas are likely to suffer from reduced access to financial resources as their largest single investment decreases in value. While there is some evidence of elderly return migration to Hazard (Rowles and Watkins 1993), aging in place is much more likely to characterize this community's experience for the foreseeable future.

Ebbs and flows in historic birthrates generate significant temporal differences in the relative contributions of aging in place and net elderly migration to the overall growth of the elderly population. Throughout the Great Depression (the 1930s),

births were at historically low levels, averaging approximately 2.5 million live births per year (see Fig. 2.3 in Chap. 2, this volume). As this small birth cohort ages, it will have significant impacts on the relative growth or decline of the older population. In the 1990s, those born during the Great Depression were entering their late 50s and early 60s, resulting in a relatively low rate of natural aging, as well as increasing the importance of net elderly migration. In contrast, the large baby boom cohort born between 1946 and 1964—a period when live births surpassed four million per year—is only now beginning to enter old age resulting in an increased importance of natural aging in place that will continue for the next few decades.

Layered on top of this temporal variation is considerable variability across space and at different spatial scales in both net elderly migration and aging in place. While for the nonmetro US in the aggregate, aging in place and elderly migration were in relative balance with one another during the 1990s, these forces were highly uneven across regions. In the Northeast, there was very little growth in the population over age 65 resulting from net migration (only 1.8%) but a fairly sizeable expansion (6.5%) of those age 65 and older due to natural aging in place (Fuguitt et al. 2002). By comparison, the Mountain West saw a rapid increase in the population age 65 or older (18.4% increase), and nearly two-thirds of this growth is attributable to net migration. At the regional level, the relative contributions of aging in place and elderly migration appear quite stable through time, and aging in place tends to be the larger factor (Rogers and Raymer 2001). Similar variability in age-specific migration exists across types of places with nonmetro commuting counties attracting inflows of younger and middle-aged residents while recreation and retirement destinations attract larger numbers of residents older than age 55 (Fuguitt and Heaton 1995; Johnson and Fuguitt 2000; Johnson et al. 2005).

At smaller spatial scales, however, the relationship between aging in place and net migration is considerably more dynamic and complex. Certain states have long histories of attracting retirees and experience high levels of net elderly migration despite the relative size of any given birth cohort. For example, states like Arizona and Florida have long been seen as retirement destinations, and, for these areas, net elderly migration remains a consistently strong factor contributing to the overall growth of the elderly population. In contrast, states like Illinois and New York do not attract many older migrants, so natural aging in place is a much bigger factor in driving the growth of the elderly population. However, looking to the future as the large baby boom cohort ages into their late 60s and 70s, the relative importance of aging in place will increase substantially in virtually all places, even those with long histories of retirement migration such as Arizona and Florida (Rogers and Woodward 1988; Wiseman 1979).

Finally, distinct age-specific migration ‘signatures’ have come to characterize certain regions, even at the sub-state level which influence the relative importance of aging in place and net migration (Plane and Heins 2003; Johnson et al. 2005). Northern metropolitan (metro) regions such as Buffalo-Niagara Falls or Detroit-Ann Arbor have consistent out-migration of older people which will invariably result in higher rates of aging in place for these areas. Not surprisingly, places like Sarasota, Florida and Asheville, North Carolina are consistent retirement destinations and in turn will be impacted more significantly by elderly migration effects.

The current literature on the relative importance and impacts of aging in place versus elderly net migration contributes important understandings of these processes, yet today nearly 80 million baby boomers sit on the doorstep of retirement. Never before in the history of the US has such a large proportion of the population been poised to leave the labor market. Given the projections indicating a shift in the US toward an increasingly top-heavy age-structure, it is imperative to assess the patterns of and demographic processes behind population aging and its impacts on places. To this end, this chapter adopts a distinctly local-scale approach, focusing on counties as the units of analysis to examine contemporary aging dynamics in non-metro America.

3.3 Data and Methods

Three fundamental questions shape this county-level analysis: (1) which areas in rural America are aging most rapidly?, (2) what factors are driving aging in these counties?, and (3) how do these factors vary across regions and types of places? In order to answer these three questions, I construct a county-level data set with estimates of total population by age. To answer the first research question, I start with county level data from 1990 to 2000 from the US Decennial Census along with population by age estimates for 2008 to construct a time-series data set with total population by age for each county (US Census Bureau 1990, 2000, 2009). From this time-series data set, it is possible to calculate the absolute change in any particular age group (i):

$$\Delta_{i,1990s} = pop_{i,2000} - pop_{i,1990} \quad (3.1)$$

A number of measures can be used when studying age dynamics across space, including median age and percent change in specific age groups. I choose to take a place-based approach by focusing on the age composition of counties and compute the share of each county's total population comprised by each of three age groups: 55–64 year olds, 65–74 year olds and 75–84 year olds.¹

$$share_{i,2000} = \frac{pop_{i,2000}}{pop_{total,2000}} \quad (3.2)$$

Though customarily not considered as part of the elderly population we include 55–64 year olds for two reasons. First, mobility rates tend to rise for populations in their late 50s and early 60s (Cromartie and Nelson 2009; Pandit 1997). Second, areas attracting large numbers of the 'pre-elderly' may be poised for significant

¹ Population estimates for those over age 85 are not terribly reliable. Moreover, net migration rates for nonmetro regions for the oldest populations approach zero (Brown and Glasgow 2008) making aging in place a more powerful factor influencing the concentration of those age 85 and older in any particular county. For these reasons, we exclude those 85 and older from the analysis.

increases in their elderly populations after the ‘pre-elderly’ arrive and then age in place (Bures 1997; Rogerson 1996). We then calculate the change in the share of a county’s population in each of the age groups:

$$\Delta share_i = share_{i,2000} - share_{i,1990} \tag{3.3}$$

Counties where the shares of these age groups are increasing can be said to be getting older, whereas counties where these shares are decreasing are getting younger. Finally, the analysis focuses on those counties where the shares of these age groups are increasing and examine the demographic factors contributing to the rising share of older age groups in the overall county population.

3.4 Results

3.4.1 Which Areas in Rural America Are Aging Most Rapidly?

It is well established that older populations tend to be more concentrated in non-metro regions (Kirschner et al. 2006; Rogers and Raymer 2001), and the most recent data further confirm such concentrations. The nonmetro counties in each of the four US census regions had higher concentrations of populations age 55 and older when compared to their respective metropolitan counterparts. It is evident, however, that the differences between metro and nonmetro America widened more rapidly in the 1990s than in the most recent time period. Table 3.1 presents the changing shares of the nonmetro population age of 55 and older by region, and Figs. 3.1 and 3.2 display these changing concentrations at the county level.

Table 3.1 Changes in relative concentration of population by region and metropolitan status, 1990–2008

		1990s			2000s		
		55–64 year olds	65–74 year olds	75–84 year olds	55–64 year olds	65–74 year olds	75–84 year olds
		Percentage change					
Nonmetro	Northeast	0.55	-0.47	0.67	2.71	0.03	0.02
	Midwest	0.26	-0.81	0.18	2.09	0.10	-0.04
	South	0.62	-0.56	0.06	1.63	0.17	0.23
	West	1.02	-0.57	0.46	2.56	0.41	0.35
	Total	0.55	-0.64	0.21	2.02	0.17	0.13
Metro	Northeast	-0.29	-1.01	0.55	2.64	-0.10	-0.24
	Midwest	-0.09	-0.80	0.46	2.81	0.12	-0.19
	South	0.24	-0.68	0.34	2.41	0.07	-0.08
	West	0.31	-0.74	0.49	2.51	0.26	-0.07
	Total	0.05	-0.81	0.43	2.55	0.08	-0.15

Sources: US Decennial Censuses (1990, 2000) and US Census Bureau Population Estimates (2009)

There are three important elements to note from Table 3.1. First, in the 1990s, in virtually every region, the concentration of population between the ages of 55 and 74 was either increasing more rapidly or decreasing less rapidly in nonmetro than in metro regions, resulting in an overall higher concentration of those ages 55 and older in nonmetro regions. For example, during the 1990s the concentration of 55–64 year olds in the nonmetro Northeast increased 0.55% while the share of this age group in the Northeast's metro population decreased slightly. These differences *may* indicate metro to nonmetro migration of 55–64 year olds occurring within the region. In contrast, concentrations of elderly were increasing more rapidly in metro regions for the oldest age group, those between 75 and 84 years old at the end of the 1990s. Such shifts for the oldest age group examined are likely reflecting migration associated with Litwak and Longino's (1987) third developmental stage of elderly migration, moves prompted by the need for the more extensive medical care found in larger urban centers. Second, the data in Table 3.1 reflect changing migration patterns of the 2000s. For the oldest age group, the 2000s brought relatively more rapid increases (or less rapid decreases) in nonmetro regions, and, while concentrations of those aged 55–74 in 2008 are increasing in most places, they are increasing slightly more rapidly in metro regions. Thus, while the nonmetro concentrations of those between ages 55 and 74 continued to increase between 2000 and 2008, the more rapid increase in metro areas may begin to narrow the gap between metro and nonmetro age structures. Finally, and perhaps most significantly, Table 3.1 shows how the aging of the baby boom is reshaping the age structure of the population in substantive ways. By 2008, the oldest boomers were hitting their early 60s, and the change is seen in the relatively dramatic increase in the share of the population aged 55–64 in 2008. In every region, except the nonmetro south, the share of the population in this age group increased by over 2%. The largest increases in this age group came in the nonmetro Northeast and metro Midwest, indicating that these regions have the most rapid expansion in their populations of those nearing retirement age. As we move toward the year 2020 the oldest boomers will be aging into their late 60s and early 70s, resulting in noticeably increasing shares for the 65–74 year old age group, an age group that had either been stable or in decline for at least two decades.

The regional aggregations reported in Table 3.1 mask considerable intra-regional variation in the changing age-composition of nonmetro America. Figures 3.1 and 3.2 reveal considerably more geographic variation in the changing concentration of populations ages 55 and older and visually illuminate the patterns of nonmetro aging. Taken together, Figs. 3.1 and 3.2 further highlight the ways past fluctuations in fertility are affecting the demographic landscape of rural America. The small birth cohort born during the Depression aged into their mid-to-late 60s during the 1990s, as reflected in the map showing the changing shares of 65–74 year olds from 1990 to 2000. Over 75% of all counties had declining shares of their population in this age group. For many counties, this resulted in a population with a somewhat younger age structure reflected in the decreasing shares of residents 65 years of age and older. In contrast, the aging of the baby boomers really begins to affect



Fig. 3.1 Changing concentrations of populations 55–84 years of age in nonmetropolitan counties, 1990–2000. (*For 65–74 year olds, the top grouping of counties is not a quartile. The top grouping simply shows those counties with an increasing share of their populations in this age group. Sources: US Decennial Censuses (1990, 2000))

nonmetro counties in the period from 2000 to 2008. The oldest boomers aged into their late 50s and early 60s during the first decade of the twenty-first century, and only a handful of nonmetro counties experienced a decline in the share of their

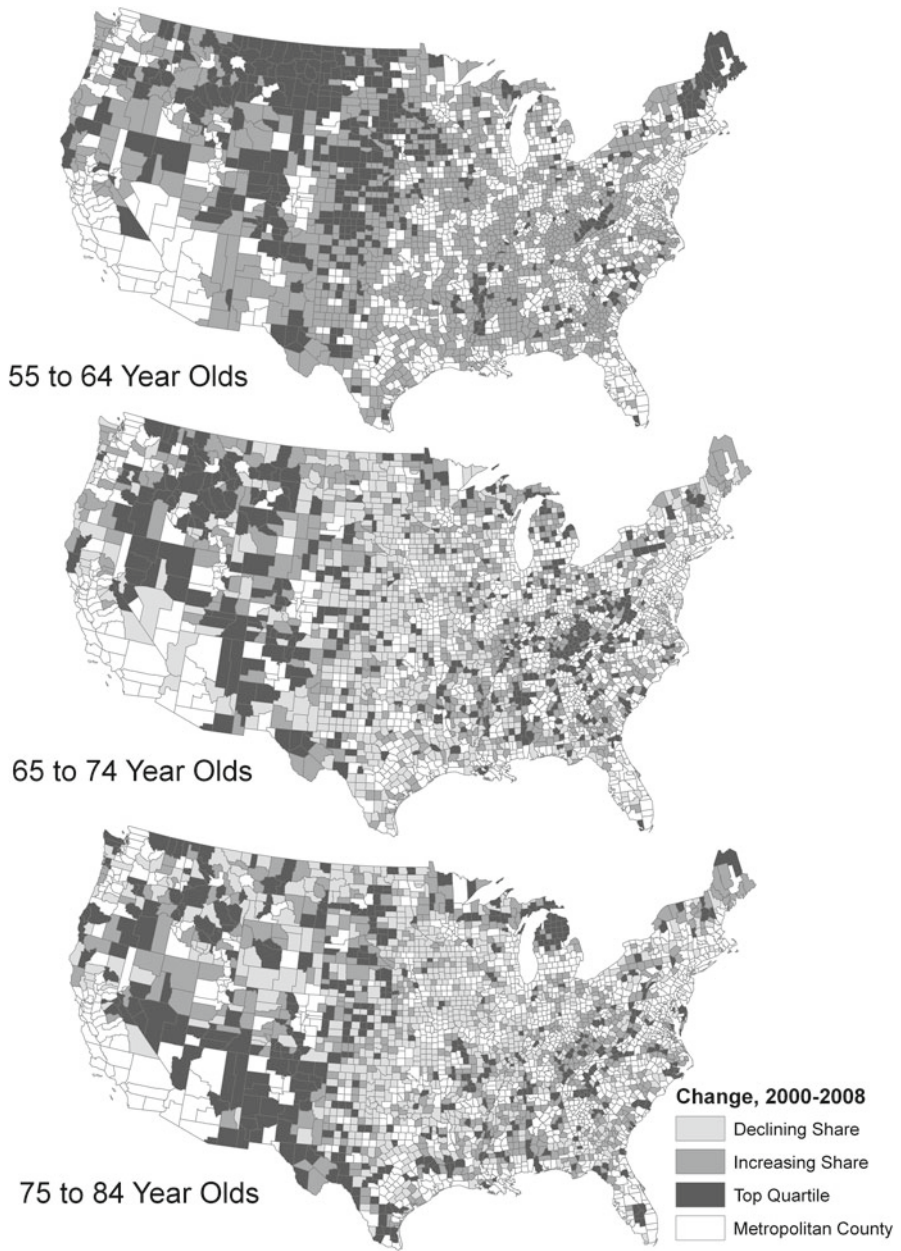


Fig. 3.2 Changing concentrations of populations 55–84 years of age in nonmetropolitan counties, 2000–2008 (Sources: US Decennial Census (2000) and US Census Bureau Population Estimates (2009))

population aged 55–64 during this time period. Because the first baby boomers turned 65 in 2011, in the near future we can expect to see widespread increases in the proportions of nonmetro populations 65 years of age or older.

Table 3.2 Frequencies of counties with increasing concentrations of elderly by select economic research service county classifications

	1990–2000			2000–2008		
	55–64 year olds	65–74 year olds	75–84 year olds	55–64 year olds	65–74 year olds	75–84 year olds
Total	1,434	454	1,136	1,938	1,226	1,186
Farm	185	109	197	388	169	216
Population loss	288	146	329	524	244	250
Service	92	29	84	93	68	82
Recreation	254	101	196	246	195	236
Retirement	239	87	169	203	163	237

Sources: Parker (2005), US Decennial Censuses (1990, 2000) and US Census Bureau Population Estimates (2009)

Comparing the two time periods suggests that we can expect considerable increases in nonmetro aging in the near future. Figures 3.1 and 3.2 distinguish between areas with declining shares of the three age groups and those with increasing shares in each age category. In the 1990s, considerably more nonmetro counties exhibited decreasing proportions in these age groups—especially those over the age of 65, and although these decreasing shares are found in every state, they are heavily concentrated from the Great Plains eastward. In the 2000s, the situation changes considerably. Figure 3.2 shows many fewer areas with decreasing percentages in their older populations. Going forward, the increasing shares of older age groups raise several critical questions for nonmetro counties. Who will fill voids in rural labor markets as aging baby boomers begin to retire? What new residential forms will be needed to house older populations, and how will rural real estate markets be affected? How will communities provide critical services to their increasingly aged population?

Several regions emerge in Figs. 3.1 and 3.2 with consistently increasing concentrations of older populations, and these are the regions where the impacts of aging are likely to be most acute. There are concentrations of counties with increasing shares of older populations in the high Plains (west Texas north through eastern Montana), central Appalachia (eastern Tennessee, eastern Kentucky, western North Carolina, and West Virginia), northern New England, and the Rockies. These are some of the most remote regions in the US, far removed from metro areas that could provide some of the critical services needed for an aging population.

Table 3.2 presents the number of counties with increasing shares of those 55 years of age and older by select Economic Research Service (ERS) typologies.² The information in Table 3.2 further highlights how much more widespread nonmetro aging was in the 2000s compared to the 1990s. With only a few exceptions, the number of

²The USDA developed a set of county typologies grouping counties based on certain characteristics. Initially developed in 1989 and most recently updated in 2004, these typologies identify counties with dependence on particular industrial sectors (farming, services, manufacturing, etc.). For example, counties where 15% or more of earnings are generated through farming are classified as ‘farm dependent’ (Parker 2005).

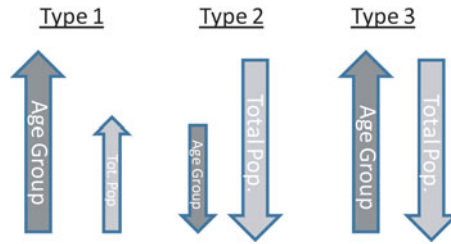


Fig. 3.3 Population dynamics generating increasing shares for older age groups

counties in the 2000–2008 period with increasing percentages of older populations was greater than the comparable number in the 1990s. This increase is most dramatic in the overall number of counties with an increasing share of 65–74 year olds, which increased from 454 counties in the 1990s to 1,226 counties in the 2000s. The increasing percentages of elderly are also common across a wide array of county types ranging from population loss counties to rapidly growing retirement and recreation counties. The number of recreation and retirement counties with increasing shares in the 65–74 year old group nearly doubled over the time period. Although the demographic outcome of increasing concentrations of elderly is common across regions and county types, the demographic mechanisms driving nonmetro aging differ considerably, and these mechanisms are the focus of the second research question.

3.4.2 What Factors Are Driving Aging in These Areas?

Three different combinations of population dynamics could result in an increasing share for any particular age group in a county, and these combinations are presented graphically in Fig. 3.3. In scenario 1, both the particular age group and the total population are growing at positive rates, with the age group's growth rate exceeding that of the total population. Scenario 2 is the inverse of scenario 1. In scenario 2, both the age group and the total population are declining, but the rate of decline for the total population is faster than that for the age group. Finally, in scenario 3, the older age group's population is growing while the total population is in decline. We label each of these scenarios Type 1, 2, and 3 respectively.

Table 3.3 shows that for most age groups in both time periods, Type 1 counties are most common. The only exception to this is for 55–64 year olds in the 2000s when there is a considerable increase in Type 3 counties. In fact, for each age group there is an increase in the frequency of Type 3 counties between the 1990s and the 2000s, and this is reflective of the overall decline in nonmetro population growth since 2000. In the 1990s, nonmetro population growth was widespread, which contributed to the increased frequency of Type 1 counties during this time period. In contrast, approximately half of all nonmetro counties experienced population loss between 2000 and 2007 (Cromartie 2009). Despite these overall population losses, Table 3.3 indicates that the older population is still growing, which is reflected

Table 3.3 Frequency of typologies for counties with increasing concentrations of elderly

		55–64 year olds	65–74 year olds	75–84 year olds
1990s	Type 1	1,095	275	756
	Type 2	110	70	85
	Type 3	229	109	295
2000s	Type 1	822	573	565
	Type 2	49	255	231
	Type 3	1,067	398	390

Sources: US Decennial Censuses (1990, 2000) and US Census Bureau Population Estimates (2009).

Note: Type 1-Age group and total population are both increasing, but rate of increase for age group exceeds that of total population; Type 2-Age group and total population are both decreasing, but rate of decline for total population is faster than that of the age group; Type 3-Age group is increasing, and total population is decreasing

in the higher frequencies of Type 3 counties. This growth is particularly common for the 55–64 year olds, as 1,067 counties had overall population loss yet growth in this particular age group, reflective of the aging baby boomers entering their late 50s and early 60s and the continued attraction of nonmetro areas for this particular age group. Given that Type 3 counties are defined by changes in specific age groups and the total populations moving in opposite directions, the rising prevalence of Type 3 counties indicates the age structure in nonmetro counties is becoming increasingly top-heavy. The regional distribution of these county types is shown graphically in Fig. 3.4.

Figure 3.4 summarizes the distribution of these county types by region in graphic form and reveals systematically the spatial variability in the dynamics behind nonmetro population aging. Growth is most robust in Type 1 counties—those where both the age group and the overall population are increasing. The other two types of counties have mixed growth experiences, with Type 2 counties struggling more to hold onto both their aging population and their total populations. Type 2 counties tend to be the least common, though their distribution is geographically uneven. In both decades, the Midwest census region has the highest concentrations of Type 2 and Type 3 counties, and these concentrations are becoming more pronounced over time. From 2000 to 2008, between 65 and 75% of the Midwestern counties with increasing shares of elderly populations fell into Types 2 and 3. In these cases, the overall population is in decline while the older populations are either increasing (Type 3) or decreasing less rapidly (Type 2). These divergent trends are likely to result in a somewhat isolated older population left behind after the other age groups have departed. Though not shown cartographically, the traditionally disadvantaged regions of the Rustbelt, Mississippi Delta, and Appalachia have the highest concentrations of Type 2 and 3 counties. In contrast, counties with increasing concentrations of the elderly in the Northeast, South, and West disproportionately fall into Type 1, and this is most pronounced in the nonmetro West, especially in the 1990s.

Figure 3.4 also reveals interesting temporal changes in the dynamics behind aging in nonmetro areas. During the 1990s, Type 1 counties were most frequent across all age groups and regions, and this is consistent with overall nonmetro population

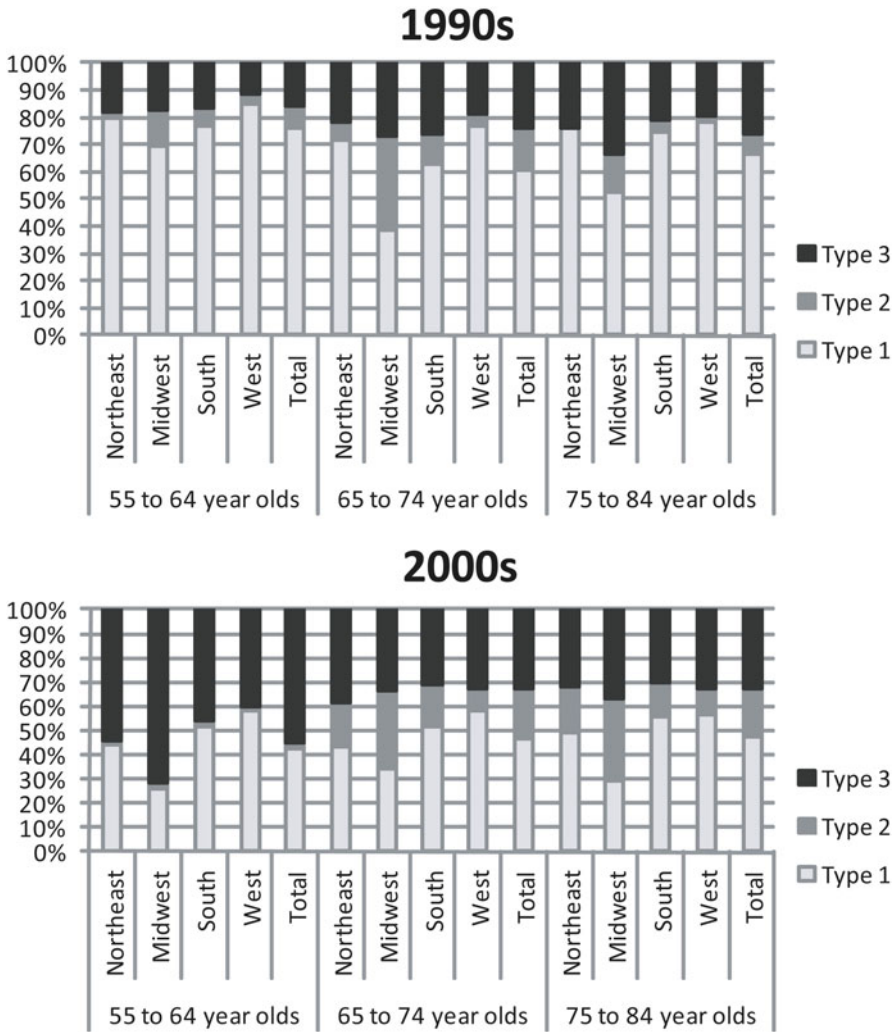


Fig. 3.4 Distribution of typologies for counties with increasing concentrations of elderly populations by census region (Sources: US Decennial Censuses (1990, 2000) and US Census Bureau Population Estimates (2009))

growth of the decade. The slowdown of nonmetro growth since 2000 is reflected in considerable increases in Type 2 and Type 3 counties. Type 3 counties now account for between 35 and 55% of all counties with increasing concentrations of the elderly, a marked increase over the 1990s. Type 3 counties increase in frequency in each region and most dramatically among the 55–64 year olds, reflecting the powerful impact of the large baby boom cohort on nonmetro population change. Type 2 counties show interesting changes across the three age groups. For 55–64 year olds, Type 2 counties decrease from the 1990s to the 2000s, while for the older age groups

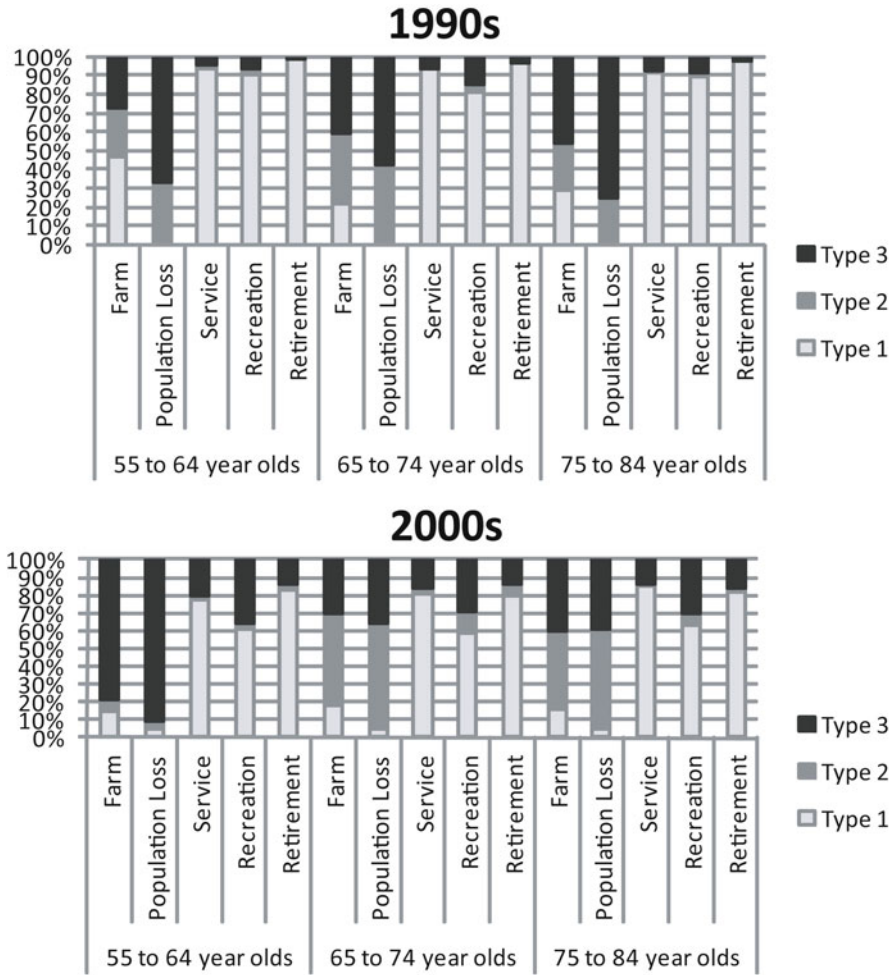


Fig. 3.5 Distribution of typologies for counties with increasing concentrations of elderly populations by select economic research service classifications (Sources: Parker (2005), US Decennial Censuses (1990, 2000) and US Census Bureau Population Estimates (2009))

they increase. The increase in type 2 counties is most pronounced in the Midwest, especially for the oldest age group, the 75–84 year olds.

Figure 3.5 displays the distribution of the three county types for select ERS classifications. In both time periods, Type 1 counties are most common for recreation, retirement, and service dependent counties, suggesting that older populations are leading the growth in these already rapidly growing areas. Farm dependent counties and persistent population loss counties have long suffered from out-migration and disproportionately this out-migration is of younger populations, so it comes as no surprise that farm counties and counties with persistent population loss are those

with the highest prevalence of Types 2 and 3, and these tendencies are quite consistent over time. Though there is an increase in Type 3 counties across all ERS county types in the more recent time period, reflective of the overall drop in nonmetro population growth. The increases in Type 3 counties are most dramatic in the farm and population loss counties, especially for those between the ages of 55 and 64. In the 2000s, between 80 and 90% of farm and population loss counties with increasing shares of 55–64 year olds were experiencing overall population loss but growth in this age group. Such divergent population trends suggest these areas are at risk of developing the myriad socio-economic issues associated with a top-heavy age structure.

In sum, the analysis has shown nonmetro aging to be fairly widespread, with well over half of all nonmetro counties having increasing shares of elderly people in their populations, and with the 2000s witnessing more nonmetro counties with increasing shares of elderly. While aging is fairly widespread geographically, the dynamics contributing to aging vary through time, across space, and by socio-economic structure. Counties in the Midwest census region are aging because total population is in decline and the older populations are growing or declining less rapidly. Similar dynamics are at work in farm dependent counties and those with persistent population loss. Farm-dependent and population loss counties are more concentrated in the Midwest further exacerbating the aging process in this region. In contrast, counties in the other three census regions and those that serve as recreational or retirement destinations are aging because the growth in the older populations tends to outpace that of the total population growth. Finally, since 2000, many more nonmetro counties experienced population losses, although populations 55 years of age and older continued to grow.

3.5 Conclusion

This chapter has provided an empirical and detailed descriptive analysis of nonmetro population aging for the past two decades. From this analysis, it is clear that nonmetropolitan aging is increasing over time and will likely continue to increase into the future. Between the 1990s and the 2000s, there was a sizeable increase in the number of counties with increasing shares of their populations 55 years of age and older, and these increases are present across regions and different county types. Moreover, the large post-war baby boom is just now entering the ranks of the older population, and this demographic bulge will further accelerate aging dynamics for several decades to come. Thus, nonmetro communities must be prepared to make the adjustments necessary to serve their increasing numbers and proportions of older people. And nonmetro counties must serve increasing older populations with relatively smaller shares of their populations at the younger end of the age spectrum.

It is also clear that the dynamics driving nonmetropolitan aging are geographically variable. Many counties in the Midwest, counties with population loss, and farm

dependent counties are getting older while simultaneously experiencing declines in their total populations suggesting that aging in place combined with out-migration of younger populations combine to drive rural aging in these areas. In contrast, other regions as well as retirement- and recreation-based counties are aging while simultaneously experiencing overall population growth, and this combination is indicative of positive net migration and more robust economic opportunities. Prior work on migration versus aging in place emphasizes the differential impacts of these demographic forces at the community level and argues that benefits tend to accrue more in areas where net elderly migration is dominant (Johnson 2006; Frey and Johnson 1998; Rogers and Woodward 1988; Brown and Glasgow 2008; Reeder 1998).

Finally, 2008, the last year included in this analysis, brought on a recession of a magnitude not seen in 70 years, and much of that recession stemmed from overzealous investment in the housing market. Many rural communities participated in the housing boom of the 1990s and 2000s, as urban émigrés flush with home equity cashed out their metro homes and moved to high-amenity and lower-cost nonmetro destinations. Now, with little movement in the housing market, such moves become more difficult, as potential nonmetro in-migrants would face considerable losses on the sale of their devalued metro residences. These macro-economic conditions will likely suppress elderly in-migration to nonmetro counties. Likewise, many workers approaching the twilight of their careers lost substantial amounts of their retirement savings and are forced to remain in the labor force longer than planned, further delaying any migration plans they might have harbored. Thus, it appears that at least in the near future, net elderly migration will play a much smaller role than aging in place in driving nonmetro aging. How age-specific migration dynamics adjust as we come out of this current recession remains to be seen.

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Part II

Economic Inequalities

Chapter 4

Aging and Economic Well-Being in Rural America: Exploring Income and Employment Challenges

Tim Slack and Tracey E. Rizzuto

4.1 Introduction

Over the course of the twentieth century the economic story for older Americans was, on balance, a very positive one. The increased prevalence of private sector income support mechanisms (i.e., retirement and pension programs) combined with an unparalleled public investment in entitlement programs for older Americans (i.e., Social Security and Medicare) created a scenario in which older adults went from being among the most economically vulnerable members of society at the start of the century to being among the economically better-off by century's end. At the beginning of the twenty-first century, however, there are serious questions about whether older Americans will maintain these gains. The risk associated with private sector retirement benefits is increasingly being shifted from employers to employees, as defined benefit plans give way to market-mediated options. And with the financial sustainability of critical entitlement programs dedicated to older people on increasingly shaky ground, the continued existence of these programs will inevitably require reform to ensure their solvency (likely in the form of both increasing the age for benefit eligibility and reducing benefit levels) that will necessitate Americans working at older ages.¹ All of this culminates in important questions about the economic

¹ At the time of this writing, the Social Security program has for the first time paid out more in benefits than was raised via payroll taxes. Due to the current economic downturn, this shortfall occurred years earlier than had been projected (Congressional Budget Office 2011).

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well-being of older Americans at the beginning of the twenty-first century and what population aging implies for the American workplace.

The economic circumstances of older adults are, of course, not uniform across population subgroups, but rather reflect the cleavages of a stratified society. Of particular relevance to this volume, research has shown clear disadvantages for older adults in rural areas in comparison to their urban counterparts (e.g., Dorfman 1998; Glasgow and Brown 1998; Glasgow et al. 1993; Jensen and McLaughlin 1997; McLaughlin and Holden 1993; McLaughlin and Jensen 1993, 1995, 2000; Slack and Jensen 2008). The fact that rural workers consistently earn less than those in urban areas during their prime working years translates into significant economic disadvantages in later life (Dorfman 1998). One result is lower Social Security benefits among rural retirees, an issue that is compounded by comparatively less private pension coverage among those who live in rural areas (McLaughlin and Jensen 1993). In comparison to older adults in urban settings, older rural residents face a higher likelihood of falling into poverty and, once poor, greater difficulty achieving an income that lifts them out of poverty (Jensen and McLaughlin 1997; McLaughlin and Jensen 1995, 2000). Recent research has also shown that among those who continue working at older ages, older adults in rural areas face greater hardship in terms of working poverty and other types of underemployment (Slack and Jensen 2008).

In this chapter, we begin by providing a statistical portrait of the economic well-being of older Americans at the beginning of the twenty-first century. To do so, we explore nationally representative data from the first decade of the century to describe differences between older adults in nonmetropolitan (nonmetro) and metropolitan (metro) areas² in terms of income and income packaging, poverty, labor force participation, and employment hardship. We then turn our attention to the special considerations an aging work force raises for both employers and older workers, with a special focus on the unique challenges faced in rural workplaces. Finally, we conclude with a summary discussion.

4.2 Economic Well-Being Among Older Rural Adults at the Beginning of the Twenty-First Century

In this section we draw on data from the March Current Population Survey (CPS) to describe various dimensions of the economic circumstances of older adults in metro and nonmetro areas. Collected by the Bureau of the Census on behalf of the Bureau of Labor Statistics, the CPS is a nationally representative monthly survey of the civilian, non-institutionalized population, and is the principal source of official US

² As outlined in Chap. 1, we will use the Economic Research Service (2007) definition of metro and nonmetro wherein metro is defined as “(1) central counties with one or more urbanized areas, and (2) outlying counties that are economically tied to the core counties as measured by work commuting. ... Nonmetro ... [is defined as] counties ... outside the boundaries of metro areas.” Rural areas comprise open country and settlements with fewer than 2,500 residents. Urban areas comprise larger places and densely settled areas around them. Although the definitions are distinct, in this chapter we use metro interchangeably with urban and nonmetro interchangeably with rural.

Table 4.1 Median income among households headed by older adults by residence, 1999–2009

Year	Nonmetro	Metro	Metro-nonmetro gap
1999	\$29,491	\$37,832	\$8,342
2000	29,056	37,868	8,812
2001	29,189	37,393	8,203
2002	29,539	37,672	8,133
2003	30,272	37,329	7,056
2004	29,278	38,608	9,329
2005	28,154	38,221	10,067
2006	29,671	39,491	9,820
2007	31,605	40,338	8,733
2008	31,068	40,465	9,397
2009	31,357	41,253	9,896

Source: March Current Population Surveys, 1999–2009

Note: Analysis restricted to households in which the householder is age 55 years or older. Dollar amounts are adjusted for inflation and presented in 2009 dollars

labor force data. The March survey (or Annual Social and Economic Supplement, formerly the Annual Demographic Survey) contains a variety of data that is not collected during other months of the year. These data allow researchers to describe the socioeconomic and demographic characteristics of individuals, families, and households in much greater detail.

4.2.1 *Income and Income Packaging*

Table 4.1 shows the median income for households headed by an individual 55 years of age or older in metro and nonmetro areas from 1999 to 2009. In viewing the numbers, two things stand out. First, median household income among older nonmetro households has remained consistently lower than that of their metro counterparts over the last 10 years, nearly \$9,000 lower on average. Second, the data suggest that the income gap between older households in metro and nonmetro areas has grown over this period. The average metro-nonmetro household income gap for the period 1999 through 2004 was \$8,313, while the comparable income gap for the period 2005 through 2009 was \$9,583. These differences no doubt reflect the disadvantaged work histories of older rural adults noted previously in this chapter, though evidence that these differences may be becoming more pronounced provides cause for concern.

Figures 4.1 and 4.2 illustrate how households headed by older adults package income from various sources. The figures show that, on average, older people in both metro and nonmetro areas draw about three quarters of their income from a combination of wage and salary earnings and Social Security benefits, and the

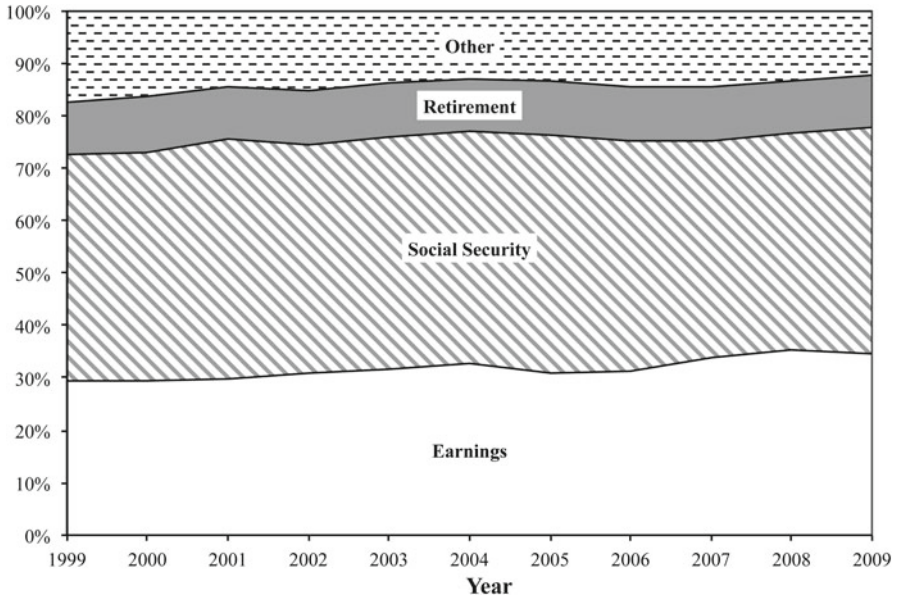


Fig. 4.1 Income packaging among households headed by older adults in nonmetro areas, 1999–2009 (Source: March Current Population Surveys, 1999–2009. Note: Analysis restricted to households in which the householder is age 55 years or older)

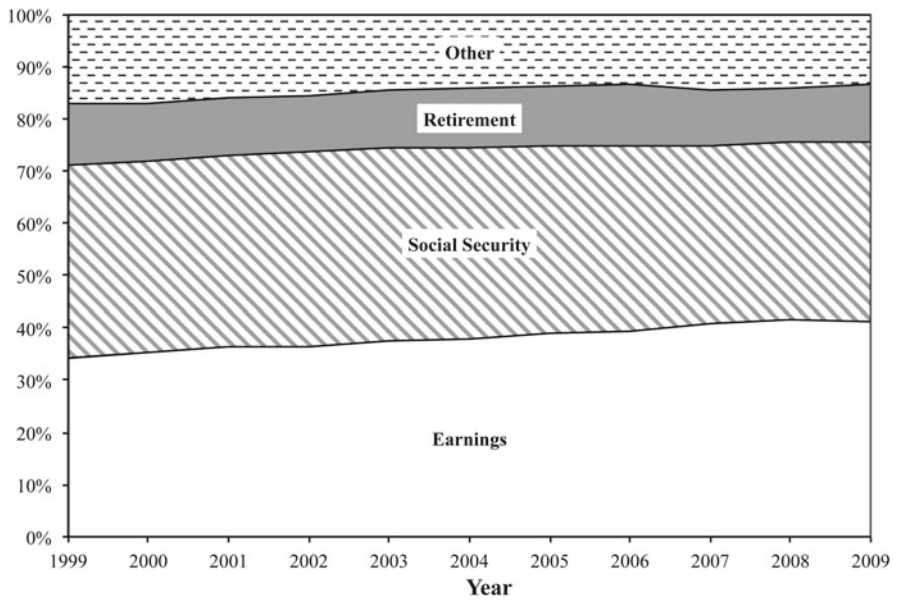


Fig. 4.2 Income packaging among households headed by older adults in metro areas, 1999–2009 (Source: March Current Population Surveys, 1999–2009. Note: Analysis restricted to households in which the householder is age 55 years or older)

remaining quarter of their income from retirement/pension programs and other sources. There is also evidence in both residential settings that the share of income generated from earnings has increased over the last 10 years. In part, this may reflect increasing work effort on the part of older adults, an issue we turn to later in this chapter. One notable difference between the income packaging of households headed by older adults in metro and nonmetro areas is the relative reliance on earnings versus Social Security benefits. The data show that older people in nonmetro areas rely more heavily on income from Social Security than is true in metro areas (an average of 44% versus 36% of household income, respectively), while older metro residents rely more heavily on earnings income (an average of 38% versus 32% of household income, respectively). In part, this difference reflects the joint impact of more constrained labor market opportunities for older workers in nonmetro areas (Slack and Jensen 2008) and the older age distribution found in nonmetro areas (see Berry and Kirschner, Chap. 2, Table 2.2, this volume).

4.2.2 Poverty

Figure 4.3 shows poverty rates (percentage poor) among households headed by older adults in both metro and nonmetro areas.³ The data show clearly that poverty rates are consistently higher among older nonmetro residents compared to those in metro areas. Between 1999 and 2009, poverty among older nonmetro householders averaged 14.1% versus 10.8% in metro areas. Despite the economic downturn, the data show that poverty actually fell slightly among older nonmetro adults over the decade—decreasing from 15.1% in 1999 to 12.9% in 2009—while poverty among older metro residents remained relatively stable over the period, hovering around 11%. Despite the modest improvement in poverty levels, again the data demonstrate the comparative disadvantage realized by older adults living in rural areas.

4.2.3 Labor Force Participation and Underemployment

Table 4.2 provides a descriptive picture of labor force participation and employment adequacy among householders age 55 and older in metro and nonmetro areas from

³The official poverty measure uses a set of income thresholds that vary by family size and composition to determine a family's poverty status. Families are defined as all individuals related by blood, marriage, or adoption who reside in a given household. Family income is calculated as the sum of before-tax money brought into a household by all related members in the form of earnings or cash transfers (e.g., Social Security, public assistance, and unemployment compensation). If a given family's income falls below its specified threshold, then that family (and every individual in it) is defined as poor. In 2009, the poverty threshold for a two person family headed by an individual younger than age 65 was \$14,366, while the threshold for a two person family headed by an individual aged 65 and older was \$12,968 (US Census Bureau 2010).

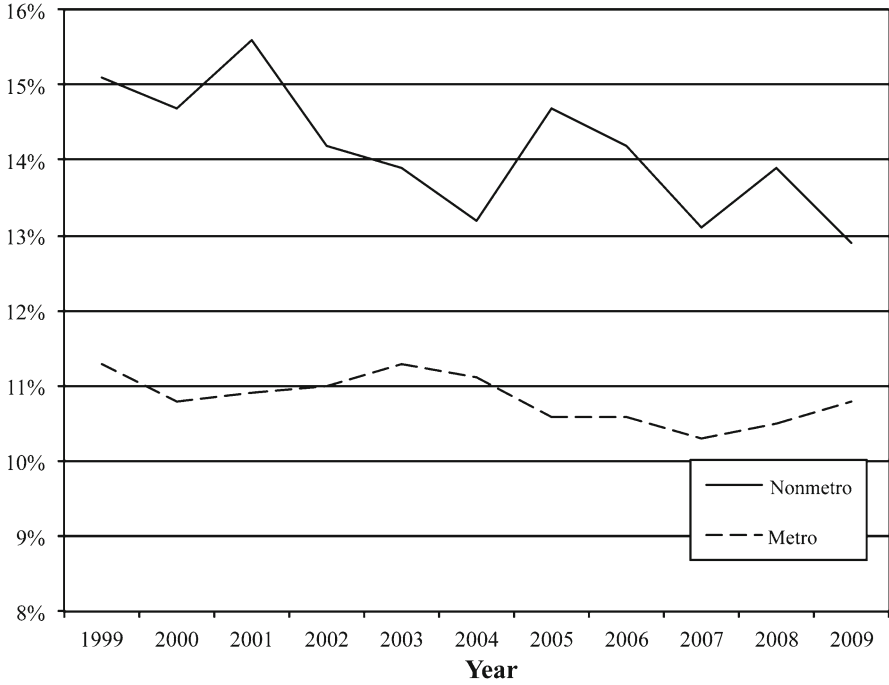


Fig. 4.3 Poverty rates among households headed by older adults by residence, 1999–2009 (Source: March Current Population Surveys, 1999–2009. Note: Analysis restricted to households in which the householder is age 55 years or older)

Table 4.2 Employment status among older householders by residence, 1999–2009

Year	Nonmetro			Metro		
	Adequately employed	Under employed	NILF	Adequately employed	Under employed	NILF
1999	24.9	4.7	70.4	29.2	4.3	66.5
2000	26.1	4.8	69.1	29.6	4.3	66.1
2001	24.5	4.8	70.7	30.7	4.1	65.3
2002	25.6	4.7	69.7	30.9	4.5	64.6
2003	26.3	5.0	68.7	31.5	5.0	63.4
2004	27.7	5.8	66.6	32.2	4.9	62.9
2005	26.0	5.8	68.2	32.9	5.1	62.0
2006	27.8	5.2	67.1	33.5	4.6	61.9
2007	28.6	6.2	65.2	35.0	4.7	60.3
2008	29.2	5.6	65.2	35.6	4.8	59.7
2009	27.8	7.3	64.9	32.9	7.1	60.0

Source: March Current Population Surveys, 1999–2009
 Note: Analysis restricted to householders age 55 years or older

1999 to 2009. One important way to conceptualize employment adequacy is the degree to which workers are employed full-time (or at least the number of hours they wish to be working) at jobs that pay above-poverty-level wages. An important indicator of the absence of such conditions is underemployment. Drawing on the Labor Utilization Framework (LUF) developed by Clogg and Sullivan (Clogg 1979; Clogg and Sullivan 1983; Sullivan 1978), we define underemployment as a composite measure that includes each of the following states of employment hardship:

- *Discouraged* includes individuals who would like to be employed but are currently not working and did not look for work in the past 4 weeks due to discouragement with their job prospects (official measures do not define these workers as “in the labor force,” as they are neither employed nor looking for work);
- *Unemployed* is consistent with the official definition and includes those not employed but who (a) have looked for work during the previous 4 weeks, or (b) are currently on lay off but expect to be called back to work;
- *Low hours* (or involuntary part-time) is consistent with the official definition of those who are working “part-time for economic reasons” (i.e., those employed less than 35 hours more per week only because they cannot find full-time employment); and
- *Low income* (or working poor) includes full-time workers (i.e., those employed 35 or more hours per week) whose individual average weekly earnings in the previous year were less than 125% of the individual poverty threshold.

All workers described by one of the four types of employment hardship outlined above are collectively defined as *underemployed*, while all other labor force participants are defined as *adequately* employed. Finally, those who are neither employed nor looking for work and do not indicate a desire to be employed are defined as *not in the labor force*.

Table 4.2 shows a couple of noteworthy differences in the employment status of older householders in metro and nonmetro areas between 1999 and 2009. First, the share of older householders who are not in the labor force has been consistently higher in nonmetro areas than in metro areas over the past decade, about 5% higher on average. As noted previously, this could be reflective of more constrained labor market opportunities in nonmetro areas, the relatively older aged population in nonmetro areas, or, likely, both. The lower rates of labor force participation are also instructive in terms of informing the statistics presented earlier that showed relatively greater reliance on Social Security income and lesser reliance on earnings among older adults in nonmetro areas. A second noteworthy difference in the employment status of older workers by residence is that among those who are in the labor force, older nonmetro workers are consistently plagued by greater shares who are underemployed (5.4% versus 4.9% on average) and, conversely, lower shares who are adequately employed (26.8% versus 32.2% on average). In both settings there is evidence of increasing labor force participation among older adults.

In sum, descriptive data from the first decade of the twenty-first century show that older adults in nonmetro areas are economically disadvantaged relative to their metro counterparts in a number of important respects. The evidence shows that

older nonmetro residents rely on lower incomes than their metro counterparts and that the gap appears to be growing. Nonmetro residents rely more heavily on the income they receive from Social Security (a program that is currently not on sound financial footing); they suffer from higher poverty rates; and, finally, they have lower labor force participation, and face greater employment hardship when in the work force than those in metro areas. The economic challenges for older rural adults are clear. In what follows, we describe some of the implications of population aging in the rural workplace.

4.3 Workplace Considerations

Adults 55 years of age and older currently account for about 17% of the civilian labor force (US Bureau of Labor Statistics 2007), a proportion that is estimated to climb to nearly 50% by 2020 (Toossi 2007). As the American work force ages, a growing body of literature seeks to examine the workplace challenges suggested by this tremendous demographic shift (e.g., Hedge et al. 2006; Rizzuto et al. 2012). While very little of this research addresses the consideration of rural workplaces explicitly, the economic disadvantages outlined above combined with factors such as youth out-migration and aging in place leave little doubt that work force aging has major implications for rural areas.

4.3.1 Age and Job Performance

Coinciding with the work force aging trend are substantial changes in the requisite knowledge, skills, and abilities of the modern worker. The impact of these changes on the American workplace, however, is not well understood. In fact, less than one-third of all firms report even having age profiles for their work force (Perrin 2005). In the absence of data, myths and false beliefs about aging can shape the perceptions and business practices used to manage the aging transition.

For instance, there is a stereotype that older adults are less competent and less able to handle stress on the job, and thus will exhibit poorer job performance than younger workers (Gordon and Arvey 2004; Hedge et al. 2006; Kite et al. 2005; see also Posthuma and Campion 2009, for a review). However, although the ability to perform cognitive tasks declines as people age, evidence suggests job performance does not always suffer as a result (Jex et al. 2007; Park and Schwarz 2000; Salthouse and Maurer 1996; see Rizzuto et al. 2012, for a review). Over the course of their careers, older workers often cultivate expertise that allows them to adapt well and learn to compensate for declines in cognitive and physical capacities (Ali and Davies 2003; P. B. Baltes and Baltes 1990). Therefore, it is not surprising that meta-analytic investigations show an inconsistent pattern in the employee age and job performance relationship (Ng and Feldman 2008; Sturman 2003). Such complexity and inconsistency in the human capacity and

work performance relationship avails itself to misperceptions about older workers that have real and important consequences, such as ageism and age discrimination in the workplace (Posthuma and Campion 2009). In what follows, we summarize the research on the real and perceived changes in adult functioning in older age, and discuss the implications for rural older workers in particular.

4.3.1.1 Physical and Cognitive Aging

In general, aging is associated with the functional loss of bodily operations that include strength, aerobic, and sensory perception capacities. These declines in physical ability make older adults more susceptible to stress, fatigue, illness, and chronic health conditions (Hansson et al. 1997). Similarly, declines in cognitive functioning with age have also been observed (e.g., Emery et al. 2008; Kliegl et al. 1990; Rogers and Fisk 1991a, 1991b), though some of this effect may be attributable to psychosocial perceptions of age-based performance differences, such as age bias in subjective performance assessment and self-handicapping associated stereotype threat (Colquitt et al. 2000; Sterns and Doverspike 1989). Indeed, such biases are more prevalent when the employee age and occupation type do not fit “correct age” assumptions (Posthuma and Campion 2009). According to Perry and Finkelstein (1999), older adults working in “newer” job roles that involve innovation and computing, for example, are often subjectively viewed as less competent, independent of more objective performance measures. In rural communities where labor market opportunities are often more constrained, such “correct age” biases may further disadvantage older rural workers by making them less likely to pursue and secure employment or training opportunities in emerging occupational areas.

4.3.1.2 Roles and Demands

The flip-side of age-related biases is that employee age is often positively associated with work experience and expertise (e.g., Ali and Davies 2003; Hunter and Hunter 1984; F. L. Schmidt and Hunter 1998). Older workers who have accumulated a career’s worth of experience possess valuable occupational knowledge and skill that organizations may call upon to help train younger work cohorts. However, if these roles are not properly incentivized within the work environment, late-career workers may feel under-appreciated and may even be motivated toward knowledge-hoarding behaviors to preserve the influence and respect associated with possessing unique and valued human capital (Wolfe and Loraas 2008).

In addition to the conflicts and demands that emerge within the workplace, older adults often also experience work-family conflict due to life demands outside of the work environment. For example, mid-to-late career adults often face eldercare and/

or ailing spousal care responsibilities, and may play active roles in raising and supporting grandchildren and “boomerang” adult children who may have fallen out of the workforce and returned to their parent’s home (Marks 1998). The work-family demands on older employees may be even more pronounced in rural communities where assisted living communities, daycare and/or employer-provided childcare services are often less accessible.

To summarize, work force aging introduces real and perceived obstacles that are likely to be exacerbated challenges for older adults who live and work in rural communities. In the section that follows, we review common labor challenges presented by work force aging, and discuss labor management practices that may be helpful to employers in rural communities.

4.3.2 Labor Management Challenges

Many organizations are eager to usher in a new generation of younger and differently-skilled workers and therefore incentivize the voluntary turnover of older workers with early retirement and succession planning initiatives (Beehr and Bennett 2008). However, the knowledge, skill, and expertise shortages that are likely to result from such strategies pose important human resource management dilemmas for employers in rural communities. Constrained employment opportunities and other desirable lifestyle features have led to youth out-migration in many rural communities, creating a “missing generation” in the rural workplace (Economic Research Service 2008). Therefore, employers in these regions are challenged to find skilled replacement and supplementary labor when older workers transition out of the workforce (Rural Assistance Center 2009). This makes voluntary retirement and turnover two major labor management concerns that will significantly impact rural employers in the coming years.

Some of the most difficult labor management challenges are expected to emerge in middle and senior management positions. A national survey of business managers revealed that almost two-thirds report anticipated labor shortages due to retirement, with 70% reporting that the shortage will be most pronounced in middle and senior management positions (Pyron 2008). In addition to these human capital and expertise gaps, Beehr (1986) posits that organizations with higher retirement rates are often viewed by workers as more uncertain and unstable, resulting in negative consequences for the psychological climate and morale in a work environment. On the other hand, position openings in higher organizational ranks do create possibilities for career advancement among younger workers, and may evoke enthusiasm and achievement-striving among newcomers. Indeed, employers in rural regions may be able to leverage the opportunity for upward mobility to recruit and retain early-career adults, and thus curb the incentive to out-migrate.

A second labor management challenge is voluntary turnover. Because individuals who voluntarily turnover typically seek jobs with other firms (Feldman 1994), the loss of good employees can put employers at a competitive disadvantage. In rural

areas where recruitment pools for new employees are more limited, organizations may experience appreciable return on investment by developing labor management strategies that delay retirement and reduce turnover among older workers who possess valued experience and knowledge. Organizations that take steps to effectively manage the human capital represented by older workers will be better able to maintain profitability and competitiveness (Rumelt 1984; Wernerfelt 1984).

4.3.3 Strategies for Retaining Older Workers

When seasoned expertise is in demand and opportunities to hire are limited, businesses look to innovative policies and best practices for retaining top talent in today's multigenerational workforce. Some strategies that organizations can use to retain the human capital possessed by older workers include the use of bridge employment and financial incentives, and finding ways to enhance job engagement. We elaborate on each of these strategies below, and highlight a few businesses that have been recognized for their success in implementing these practices (for a complete listing see AARP 2009).

4.3.3.1 Bridge Employment

Bridge employment is a type of post-retirement work arrangement that allows retirees to continue working for their employer after their official retirement begins. It can be implemented as a means to retain valuable human capital by offering employment roles that can range from part- to full-time shifts, and can accommodate a variety of employment conditions (e.g., self-employment, temporary employment, etc.) (Beehr et al. 2000; Feldman 1994; Zhan et al. 2009). As its name implies, bridge employment is one step in the process of retirement whereby individuals maintain conditions of employment that facilitate a bridge between full employment and full retirement. Firms that recognize that many workers would like to make the transition into retirement a gradual process may be able to offer opportunities that satisfy this preference and in doing so maintain a connection to the human capital possessed by these workers (Beehr et al. 2000; Feldman 1994). Indeed, research suggests that work arrangements that accommodate flexible schedules are associated with positive work outcomes, such as less absenteeism (see Baltes et al. 1999). Organizations that offer flex-time and work-from-home arrangements, shorter workweeks, and fewer hours of work per week may be able to better satisfy older employees who are interested in taking steps toward the bridge to retirement but are not yet ready to disengage from the work force altogether.

One example of an organization that has creatively used bridge employment is the YMCA of Greater Rochester, which has been recognized by AARP as one of the "most friendly" employers for older workers (AARP 2009). Flexible and

compressed work schedules, job sharing, and telecommuting are available to both part- and full-time employees, with the latter group eligible for part-time work on a temporary or permanent basis. Retirement-aged employees are also offered phased-retirement programs that allow them to collect the level of benefits they would receive if fully retired. Another distinctive feature of the YMCA of Greater Rochester is that it maintains connections with retirees through regular communications, invitations to events, access to retirement-planning workshops, and an annual retiree luncheon. Through relationship management, the organization retains a roster of retirees who are available to work full- and part-time, volunteer, or make charitable donations (AARP 2009).

4.3.3.2 Financial Incentives

A second tool for leveraging retention in organizations in rural regions is the use of financial incentives. Many researchers have concluded that the financial situation of an employee is the strongest determinant of her/his decision to retire (Beehr 1986; Beehr et al. 2000; Talaga and Beehr 1995; Taylor and Shore 1995). For this reason, organizations that offer financial incentives such as employee stock option plans, salary increases, or tenure-based bonuses to delay retirement may successfully minimize labor shortages in the near term, affording more time for opportunities to cross-train employees and institutionalize valued expertise. Such financial incentives may be especially powerful in rural areas where older people are financially less well-off.

Health conditions and employer-provided healthcare benefits also influence one's decision to remain active in the work force (Colsher et al. 1988). Not only does good health increase the likelihood of older workers taking on bridge employment opportunities, poor health is associated with major life illnesses (e.g., cancer, heart disease) and functional impairments (e.g., hearing loss, joint diseases) that pose significant barriers to work force participation (Colsher et al. 1988; Kim and Feldman 2000; Muller and Boaz 1988). Organizations have increasingly used Employee Wellness Programs (EWPs) to promote and facilitate health. EWPs offer services that seek to improve employee health behaviors by offering on-site health clubs, access to health screenings, and health coaching (DeMoranville et al. 1998; R. Wolfe et al. 1994). They have been shown to reduce the occurrence of illnesses for employees (Madsen 2003; Reese 1999), and they have been linked to indirect outcomes such as decreased absenteeism, improved employee morale and productivity, increased job and life satisfaction, increased energy levels, and improved stress management (Parks and Steelman 2008; Schafer 1996). Because rural populations have more limited access to convenient, affordable, high-quality healthcare (Economic Research Service 2008), rural employers that provide their employees such resources may realize a special return for doing so.

One company that has been nationally recognized for health and financial benefits that are geared toward older workers is the Lee County Electric Cooperative (LCEC) (AARP 2009). In addition to a choice between a defined-benefit

pension plan and an employer-matched 401(k) defined-contribution plan, full-time employees are given the opportunity to invest in life-cycle funds and catch-up contributions. The latter are particularly helpful to older adults who are late in building retirement savings or who favor a more flexible retirement portfolio. Further, external financial-planning experts are made available to employees for consultations.

In terms of healthcare, LCEC offers full-time employees individual and family medical and prescription-drug coverage, individual long-term disability, vision, and dental insurance, as well as the option of health savings accounts (HSA) and flexible spending accounts (FSA) for out-of-pocket healthcare costs. Retirees hired prior to 1994 are eligible for individual and spousal medical, prescription drug, and vision coverage. Unpaid short- and long-term leave is available to employees with spouse or eldercare responsibilities, while both full- and part-time employees enjoy wellness benefits that include flu shots, health screenings, health-risk appraisals, discounted fees at local health clubs, exercise and weight-loss programs, and stress-management training.

4.3.3.3 Job Engagement

The level of engagement and appeal of a job can also contribute to older workers' decisions to remain active in the workforce. Luchak et al. (2008) show that employees with higher levels of affective commitment to their employer typically plan to retire later, often past the age when it is most financially attractive for them to leave the organization. Similarly, Schmidt and Lee (2008) show that employees who were affectively committed to their workplaces report fewer turnover intentions, while commitment to one's occupation more broadly reduces both retirement and turnover intentions. The way jobs are engineered can affect one's job satisfaction and commitment, as well as the intentions one holds for retirement. According to Beehr et al. (2000), job characteristics such as the degree of task significance, skill variety, task identity, autonomy, and feedback influence organizational withdrawal behaviors (Hayward and Hardy 1985; Schmitt and McCune 1981). Schmitt and McCune (1981) found that retirees were more likely to view their jobs as less engaging and challenging than other members of their cohort who chose not to retire.

How might employers create a more engaging and challenging work environment? Cornell University in Ithaca, New York, AARP's top ranked age-friendly employer of 2009, provides one model. In addition to offering a very popular tuition reimbursement program, it provides leadership training for its technical staff and professional development in the form of temporary job assignments, team projects, supervisory training, and organizational consulting opportunities (AARP 2009). In rural areas, where work force aging is especially pronounced, employers have a particular incentive to be proactive on this front. Organizations that enrich jobs with desired characteristics that enhance employee commitment and engagement stand to reduce retirement rates among workers they value.

4.4 Worker-Perspectives on Career Management

Although there are a number of proactive management practices that employers in rural regions may implement to support older workers and mitigate labor shortages associated with workforce aging, the actual prevalence of such interventions in practice is not well-known. Meanwhile, ageist stereotypes are known to have a profound influence on organizational decision making with regard to hiring, training allocation, and performance management (Hedge et al. 2006), and to hold serious consequences for older employees including lowered performance evaluations, reduced motivation, career stagnation, and job loss (Rosen and Jerdee 1985). With the potential for age discrimination, and in the absence of incentives and resources to support older workers, the responsibility often falls to an individual worker to manage her/his own productivity, health, and well-being during their older working years.

Research on successful aging (Freund and Baltes 1998) has demonstrated that three basic life management skills provide for more positive outcomes and greater resilience across the life span. These strategies have direct implications for career management in later life. First, individuals who are actively involved in the selection of specific life and career goals in later life show greater signs of successful aging. Second, individuals who seek to optimize their own internal and external resources are better able to reach their goals. And third, those who are better able to realize and use compensatory processes to offset declines in other capacities tend to be better-off for doing so. In the workplace, the job performance of older workers can be hampered by job alienation and limited access to training opportunities (Miller et al. 1993; Simon 1996; Wrenn and Maurer 2004). For instance, national labor trends show that 44–54 year olds are two-thirds more likely to receive or participate in workplace training compared to employees in the slightly older 55–64 year age range (Simon 1996). Motivated older workers may be more likely to overcome social barriers and engage in developmental opportunities that stretch and extend learning and achievement on the job. Indeed, researchers have found that older adults who see learning as a continuous process are more inclined to use their skills to develop compensatory strategies for maintaining overall performance (see Kramer and Madden 2008). By taking the initiative to optimize goal-seeking and related behaviors, older workers can mitigate age-related human capacity declines and better maintain, or even increase, their job performance and general prospects for successful aging (Ali and Davies 2003; Avolio and Waldman 1990; Freund and Baltes 1998).

4.5 Conclusion and Implications

Over the course of the twentieth century private and public mechanisms were crafted to help support Americans during old age. The result was a largely positive story in terms of the economic circumstances of older Americans during this period of history. However, as we enter the twenty-first century rapid population aging, a severe

economic downturn, and a persistent lack of political will to make the difficult decisions necessary to shore up public entitlements for older adults present an increasing challenge to maintaining the gains of the last 100 years. These challenges are perhaps especially daunting for older Americans who reside in rural areas, where the legacy of more disadvantaged circumstances for those in their prime working-years translates into economic disadvantages in later life.

In this chapter we provided a broad statistical portrait of the economic circumstances of older Americans in the first decade of the twenty-first century, paying special attention to differences between older adults in rural and urban settings. The evidence shows that older residents in rural areas face clear economic disadvantages relative to their urban counterparts. Specifically, the data show that older adults in rural areas rely on lower incomes and that the rural–urban income gap may be growing. The data also show rural older adults rely more heavily on the income they receive from Social Security, and that they suffer from higher rates of poverty. Last, the evidence shows older adults in rural areas have lower labor force participation rates and face a higher prevalence of underemployment when in the labor force than do older metro residents. These data make the relative economic challenges for older adults in rural areas clear.

With Americans increasingly living to older ages, it also seems clear that society will be faced with renegotiating what constitutes “retirement age.” Both due to personal preferences and economic necessity, increasing numbers of Americans will be working at older ages in the twenty-first century. Therefore, in this chapter we also reviewed the literature regarding the implications that population aging has for the American workplace. While there is a dearth of organizational science that looks at rural workplaces specifically or comparatively, we are able to offer informed speculation given what is known. Specifically, we summarize issues related to physical and cognitive aging in the workplace as well as how the demands placed on workers change in their older years; we describe the challenge that population aging poses in terms of human capital retention and strategies organizations can use to incentivize continued employment in older age; and we outline some of the strategies that workers can undertake in the absence of proactive organizational contexts. We believe that all of the issues discussed are likely of special import in rural communities where the combination of aging in place and youth out-migration make the challenges posed by population aging even more pronounced.

While our chapter raises many challenges regarding the economic prospects of older Americans—and those in rural America in particular—we hope that it is also apparent that these challenges present opportunities. Making investments with the goal of reducing the economic disadvantages of geographic space, a goal that has the potential to be facilitated by technological innovation, would serve to increase economic opportunities for rural residents of all ages and thus ultimately translate into greater financial resources for people in their older years. Further, proactive workplace strategies that explicitly view older workers as a human capital asset can provide opportunities for increased productivity for firms and more secure financial livelihoods for older workers. In light of these considerations, we believe that in many cases rural development efforts in the twenty-first century will need to explicitly

address the needs of and assets presented by older adults. As suggested by other analysts (Moffatt and Glasgow 2009), we also believe that expanding the US discourse on social disadvantage beyond poverty—which privileges income as an outcome—to one centered on social exclusion—the degree to which people are integrated into a much broader spectrum of social relationships—presents a potentially fruitful opportunity for researchers and policy makers to help facilitate positive circumstances for rural older adults. Doing so would help to acknowledge the dynamic interrelationships that exist between the economic circumstances of older adults, their families, work places, and other aspects of institutional life. In sum, while the challenges posed by population aging in rural America are great, so are the opportunities. The question will be whether or not these opportunities are seized during this century.

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Chapter 5

Baby Boomers' Impact on Work Force and Tax Issues in the Great Plains

Richard Rathge, Justin Garosi, and Karen Olson

5.1 Introduction

The baby boom generation, those born between 1946 and 1964, has played an important role in shaping the dynamics of the US work force and the economy in general (Nyce 2007). It ushered in a record number of workers starting in the mid-1960s and it has sustained the strength of the nation's work force ever since. The mere size of this cohort is impressive with over 70 million people born during that period. It is estimated that 65 million boomers are still living, and they account for close to one-fourth of the nation's total population (Rogerson and Kim 2005). The baby boom's dominance of the nation's labor force also is impressive. In 1978, when the trailing edge of the baby boom entered the labor force the cohort represented nearly 45% of the entire work force (Dohm 2000). Currently, the leading edge of this massive cohort is approaching age 65, the traditional marker for retirement. The impact of this seismic exodus from the labor force is heavily debated. Some argue that the retiring baby boomers will create a severe labor market shortage

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(Herman et al. 2003; Nyce and Schieber 2002), welcome in the face of recession and lingering downturn in the economy. Others suggest that only a modest labor slowdown will occur (Little and Triest 2002; Fullerton and Toossi 2001). The disagreement between the two camps largely hinges on the degree to which other factors (e.g., immigrants, technology, and women's increased labor participation) will serve to replace retiring baby boomers and the pace at which baby boomers will retire due to unfavorable economic times. What is less debatable is the differential impact the baby boomers will have based on geography.

Differences in age-specific migration patterns between regions, states, and even intra-state locations will greatly influence the economic impact of the aging baby boom population. Rogerson and Kim (2005) studied the geographic distribution of baby boomers and found distinct variation by location. Contrasting the ratio of baby boomers to total population over two time periods—1990 and 2003—they demonstrated that the demographic importance of this cohort has increased in large portions of the Midwest. They concluded that it is due to a combination of net in-migration among baby boomers and net out-migration of other cohorts. This age-selectivity effect is reinforced by the work of Johnson and Rathge (2006), who demonstrated that decades of population loss among young adults, especially in the rural counties of the Great Plains, dramatically altered the age structure of the region resulting in relatively higher concentrations of seniors. In fact, nearly half of the nonmetropolitan (nonmetro) counties defined as “elderly counties” by the Economic Research Service are in the Great Plains (Reeder and Calhoun 2002). Elderly counties are those that have at least 20% of their resident population ages 60 and older.

The purpose of this study is to examine the economic consequences of the aging of the baby boom generation, specifically focusing on the Great Plains. The economic role this generation will play in the region is extremely important. We will begin by first providing context to the age distribution within the region and demonstrate the stark differences in labor availability between metropolitan (metro) and nonmetro areas within the region. Next, we will center our attention on the changing dynamics of the work force by modeling the predicted change in available labor from 2000 to 2020. We will accomplish this by using North Dakota, among the most rural states within the region, as a case study. Simultaneously, we will examine the impact the aging baby boom will have on the state's income generation through the use of an economic simulation model. Finally, we will specifically address the policy implications of this change by addressing the ramifications of the graying baby boom on state tax collections.

5.2 Graying of the Labor Force

5.2.1 *Defining the Great Plains*

The Great Plains region is an extensive swath of territory stretching from Montana to Minnesota and down to New Mexico and Texas. It accounts for approximately 42%

of all US land area outside of Alaska and Hawaii. Scholars differ on its exact boundaries depending on context (e.g., ecological, agricultural). Nonetheless, it is one of the nation's most agriculturally productive areas. However, its linkage to agriculture—especially large scale farming and ranching—has meant that it also is one of the nation's most sparsely settled areas. Only 14% or 142 of the 1,009 counties within the 12-state region are metro. Moreover, 41% or 358 of the 867 nonmetro counties in the region had a population base of fewer than 2,500 people in 2000. Since our goal is to examine broad-based policy implications of residential change, we will use the more encompassing definition of the Great Plains that includes all 12 states.

Our examination of the consequences of the aging baby boom population on the labor force begins with a contextual overview of the region's population base and what demographers are projecting that its residential profile will be over the next decade. Our baseline population starts with census data from 2000 and extends to the year 2020 using a regional database compiled from population projections from each of the 12 states. Each of the 12 State Demographic Centers provided us with age-specific and county-specific population projections for their state. Although this individualistic approach raises some methodological concerns regarding standardization of assumptions or uniformity of modeling, we felt it provided the most accurate database for our efforts. Commonalities in the technique used by the 12 states (i.e., cohort survival model) increased our confidence.

Table 5.1 is a compilation of age-specific population projections for the 12 states in the Great Plains. We display the regional data by size of county in order to explore contextual variations that may be masked by aggregate statistics. Overall, the population within the region is expected to gain over 12 million people from 2000 to 2020. Even the smallest rural counties (i.e., lacking a city of at least 2,500 people) in the aggregate are predicted to gain 165,372 people. However, 85% of the region's growth is expected to occur in metro areas. The differential growth between metro and nonmetro areas within the region is magnified when one looks at specific age groups. What is most notable is the impact of the aging of the baby boom generation. In 2000, the entire baby boom generation was in the 35–54 age group which is viewed as the prime workforce age group. By the year 2020 the leading edge of that generation will be 74 years of age and the trailing edge will be 56 years of age. The differential impact of this movement within the region is very pronounced when viewing the metro and nonmetro profile. The 35–54 age category is expected to grow, in the aggregate, by more than 1.6 million people in metro parts of the region. In contrast, the overall nonmetro portion of the region is expected to lose nearly 122,000 people in the prime workforce age group. Nearly half of the nonmetro losses in this age group will occur in the most rural counties of the region. It is anticipated that 87% of these rural counties will sustain a net loss in prime-age workers (Rathge 2008). It is noteworthy that projections indicated that nearly one-third of the 142 metro counties in the region also are predicted to suffer a net loss of residents in the 35–54 age group (Rathge 2008).

The greatest concentration of loss among the prime working-age population will be in the northern Plains states (see Fig. 5.1). Few counties in the Dakotas, Montana, and Wyoming are expected to increase their prime working-age population from

Table 5.1 Change in population, by age in the Great Plains by metro and nonmetro status from Census 2000 to the 2020 projections
Population change in great plains by county type: 2000–2020

Age group	All county types		Metro counties		Total		Urban population 20,000 or more		Urban population 2,500–19,999		Rural population less than 2,500	
	Numeric	%	Numeric	%	Numeric	%	Numeric	%	Numeric	%	Numeric	%
All ages	12,162,414	23.7	10,314,465	27.5	1,847,949	13.3	463,501	13.1	1,219,076	14.4	165,372	8.6
Ages 0–4	626,827	16.9	511,059	18.3	115,768	12.7	30,792	12.5	74,151	13.4	10,825	9.6
Ages 5–19	1,440,938	13.3	1,441,786	17.9	-848	0.0	21,750	2.9	15,003	0.9	-37,601	-10.3
Ages 20–34	1,962,247	18.1	1,536,907	18.9	425,340	15.7	89,960	11.4	285,712	17.6	49,668	16.1
Ages 35–54	1,540,684	10.8	1,662,597	15.6	-121,913	-3.4	1,566	0.2	-63,305	-2.9	-60,174	-11.8
Ages 55–64	3,283,204	57.9	2,597,506	65.2	685,698	40.8	158,107	40.8	432,116	41.6	95,475	37.4
Ages 65+	3,308,466	54.6	2,564,662	66.3	743,804	34.0	161,321	34.5	475,295	35.0	107,188	29.6

Source: US Census Bureau, Decennial Censuses; Individual state agencies providing population projections

Note: Metro Status was determined using the 1993 Beale Codes provided by the United States Department of Agriculture, Economic Research Service. The population change for each age group, when summed together, will not equal the total population change due to rounding errors

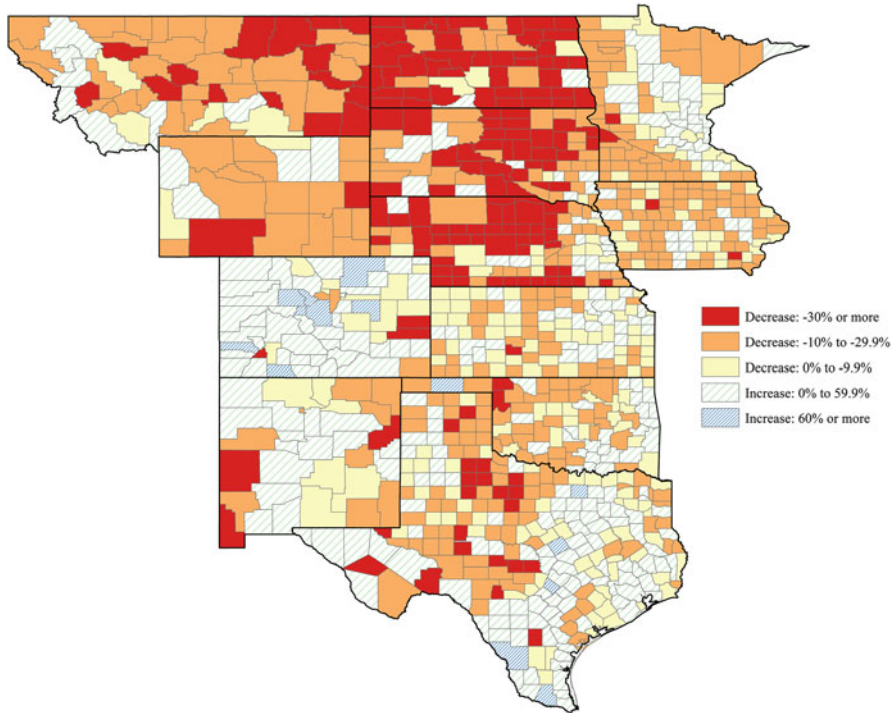


Fig. 5.1 Projected percent change in persons ages 35–54 in the Great Plains states by county: 2000–2020 Sources: US Census Bureau, Census 2000; Individual state agencies providing population projections

2000 to 2020. In addition, the limited net growth of this age group in Minnesota is largely confined to the scenic lakes counties that extend northwest of Minneapolis/St. Paul. This growth in amenity counties is similar to that occurring in Colorado, New Mexico, and parts of Texas.

The aging of the baby boom generation, out of the traditional work force, is reflected in the tremendous expansion in elderly that is predicted for the region. More than half of the aggregate net increase in the region's population from 2000 to 2020 will be comprised of those 55 years of age and older. The growth of 6.6 million people in this age group will be evenly split between pre-retirees (i.e., 55–64 years of age) and those traditionally viewed as retirees (i.e., 65 years of age and older). The magnitude of the change in the traditional retiree pool (i.e., 65 years of age and older) within the region will be universal and dramatic. Nearly 88% of all the counties in the Great Plains will gain residents 65 years of age and older (see Fig. 5.2). Projections indicate that seniors in sparsely populated rural counties within the region will expand by 30% or 107,188 residents from 2000 to 2020. Overall, the region's nonmetro counties are predicted to expand their elderly population by 34%, or nearly three-quarters of a million seniors, during this time period. The region's 142 metro counties will have the greatest influx of elderly—a staggering

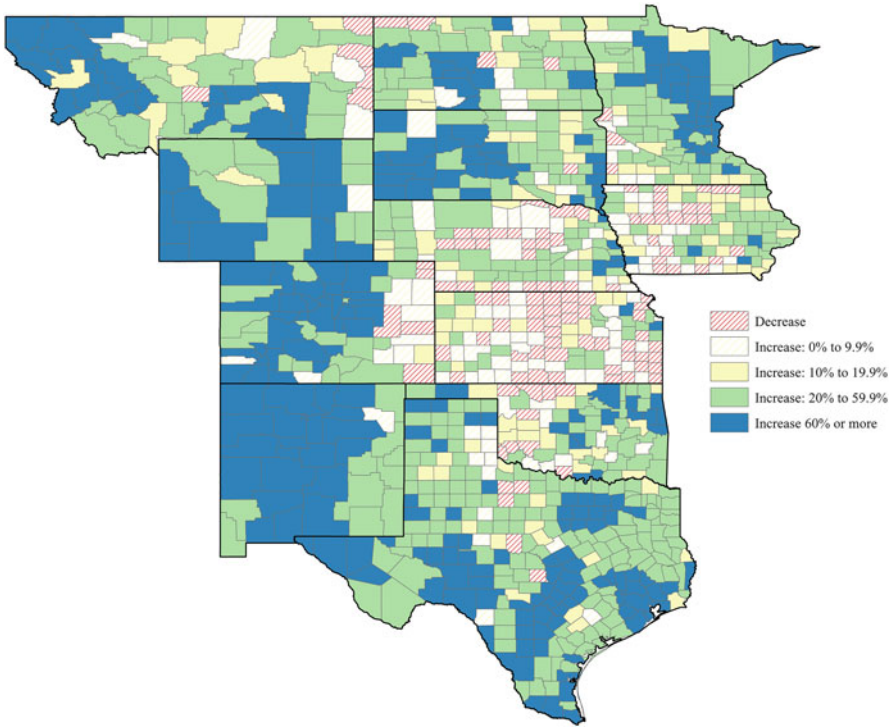


Fig. 5.2 Projected percent change in persons ages 65 and older in the Great Plains states by county: 2000–2020 Sources: US Census Bureau, Census 2000; Individual state agencies providing population projections

66%—which translates into more than 2.5 million seniors from 2000 to 2020. Hence, older people will account for one-fourth of the expected growth in the region over this time period.

5.3 Economic Impacts of Residential Shifts

Population projections demonstrate that baby boomers will be leaving the work force in large numbers as they age into retirement. The consequences of this important age shift on components of income such as wages and salaries are considerable and may have important implications for a range of fiscal issues including tax revenues, expenditure patterns, and venture capital accumulation. Equally important will be the shifts in transfer payments such as Social Security or retirement earnings that pose important concerns regarding the stability of such income (Belt 1999). In an attempt to assess the economic implications of the large exodus of baby boomers from the work force, we developed a model to forecast scenarios of income

generation of residents over time based on historical patterns. In brief, we simulated what the distribution of income over the next 10–15 years will be if the current pattern of age-specific earnings continue into the future unchanged. We used North Dakota as a pilot site because of its relatively large baby boom population, and we wanted to reduce the complexities that a larger regional analysis might introduce (e.g., difference in tax codes).

5.3.1 Method for Modeling Future Wage Earners and Income

The economic simulation model was developed in six stages using data from the US Census Bureau. First, we used the 1% Public Use Microdata (PUMs) files for North Dakota from the 2000 census to classify residents 15 years of age and older into age groups (i.e., 15–24, 25–34, 35–54, 55–64, and 65 and older) by type of income earned. Type of income was based on the eight categories reported in the census: (a) wage and salary income, (b) interest, dividends, or rental income, (c) Social Security income, (d) Supplemental Security Income, (e) public assistance income, (f) retirement income, and (h) all other income. Since the literature demonstrates important shifts in income earnings after age 65 (see Maestas 2004), a more refined grouping of those 65 years of age and older (i.e., 65–69, 70–74, 75–79, 80–84, 85 and older) also was included in the model.

Second, we calculated an aggregate total for each income category using the midpoint of the distribution. Negative income was set to zero. The midpoint for the last category, which started at \$100,000, was set at \$200,000 in order to be conservative in forecasting. There were 9,259 North Dakotans reporting income above \$100,000 in 2000.

Third, we determined the number of earners, by age, in each of the eight income categories by summing the total number of persons reporting earnings in each income category. We evaluated the stability of the distribution of earnings over time by calculating a three-decade portrait from corresponding census files. We found that income generation by age revealed a fairly stable pattern over time. In general, the proportion of wage and salary earners increased modestly over time among those 15–64 years of age and declined steadily among people 65 years of age and older. The proportion of residents 15–64 years of age who drew a wage or salary increased from 68.1% in 1980 to 79.3% by 2000. In contrast, the proportion of seniors earning a wage or salary dropped from 21.1–15.3%. Overall, with the exception of those 15–24 years of age, over 90% of the population in each age group received income in 2000.

Fourth, we generated aggregate income for each age category by multiplying the number of earners in each age category by the midpoint income estimate for each of the income categories reported in the PUMs file. Nearly \$11.5 billion in income was generated in North Dakota in 2000 with seniors contributing nearly \$1.9 billion or 16.5% of all income.

Fifth, we calculated the income earned in each age group per capita. This was done by dividing the aggregate income generated within each age category by the

total earners in that age category. Caution must be taken when using averages for estimating per-earner income, if one attempts to simulate detailed age categories.

Sixth, we applied the per-earner income estimate to age-specific population projections for the state. The population projections were based on a series developed in 2002 using a cohort survival method (see Rathge et al. 2002).

5.3.2 Results from the Economic Model Simulation for North Dakota

In our economic simulation, we compare the profile of North Dakota income earners in the year 2000 with a projected profile for the years 2015 and 2020 given the assumption that the earning distribution is held constant. This assumption might be debated, given the most recent recession; however, North Dakota was largely buffered from the recession. The difference in the profiles, therefore, reflects the impact of changes in the age composition. We interpret these findings as a snapshot of what would exist if the projected population in 2015 and 2020 were overlaid on the income earner distribution found in 2000. For simplicity, no attempt is made to adjust the income for inflation or changes in earnings within each age group (i.e., productivity). Rather, we answer that basic question, “What would the income earner profile have looked like in 2000, if the age distribution projected for 2015 or 2020 existed in 2000?”

The comparisons derived from this modeling offer insight into changes that are likely to occur as a result of the shifting age distribution without some form of intervention. The changes that are illustrated in the profiles, however, only contrast the start and end points. If one wanted to assess the cumulative effect of the shifting age distribution, then portraits for each intervening year would need to be calculated and accumulated.

5.3.2.1 Projected Change in Income Earners

The projected demographic shifts in North Dakota’s population over the next 10–15 years will dramatically reduce the number of income earners; especially those in the young and prime working age population (see Table 5.2). Overall, the losses in the number of earners in the young adult population (i.e., those 15–24 years of age) contrasting 2000 with 2015 is expected to exceed 14,000 and increase to 16,683 by the year 2020. This reflects an estimated drop in earners of nearly 20% for the year 2020 relative to the year 2000. An even more dramatic dip is projected for the prime working age population (i.e., those 35–54 years of age). A total loss of slightly over 29,000 earners is expected when contrasting the year 2015 with the year 2000. This estimate escalates to slightly over 37,000, if one contrasts the year 2020 with the year 2000. In both these age groups, over 85% of the loss will occur among wage and salary earners.

Table 5.2 Projected change in earners and income in North Dakota, by type of income, by age: 2000–2015 and 2000–2020

Age and income type	Total income (in millions of 2,000 dollars)								
	2015			2020					
	2000 Total	Total	Change: 2000–2015	2000 Total	Total	Change: 2000–2015			
Ages 15–24	85,614	71,472	-14,142	68,931	866.0	\$722.9	-143.1	\$697.2	-168.8
Wage and salary	80,681	67,353	-13,328	64,959	\$804.8	\$671.9	-132.9	\$648.0	-156.8
Self employment	2,125	1,774	-351	1,711	\$15.7	\$13.1	-2.6	\$12.7	-3.1
Interest	11,206	9,355	-1,851	9,022	\$8.7	\$15.6	-3.1	\$15.0	-3.6
Social security	1,320	1,102	-218	1,063	\$8.2	\$6.8	-1.4	\$6.6	-1.6
Ages 25–34	72,647	72,698	51	67,422	\$1,779.5	\$1,780.8	\$1.3	\$1,651.6	-\$128.0
Wage and salary	65,725	65,771	46	60,998	\$1,547.8	\$1,548.8	\$1.1	\$1,436.5	-\$111.3
Self employment	7,866	7,872	6	7,300	\$143.5	\$143.6	\$0.1	\$133.2	-\$10.3
Interest	12,981	12,990	9	12,047	\$26.4	\$26.4	\$0.0	\$24.5	-\$1.9
Social security	870	871	1	807	\$4.3	\$4.3	\$0.0	\$4.0	-\$0.3
Ages 35–54	175,521	146,493	-29,028	138,547	\$5,633.9	\$4,702.2	-\$931.8	\$4,447.1	-\$1,186.8
Wage and salary	152,897	127,610	-25,287	120,689	\$4,572.6	\$3,816.4	-\$756.2	\$3,609.4	-\$963.2
Self employment	26,853	22,412	-4,441	21,196	\$651.1	\$543.4	-\$107.7	\$513.9	-\$137.2
Interest	51,370	42,874	-8,496	40,549	\$225.9	\$188.5	-\$37.4	\$178.3	-\$47.6
Social security	4,617	3,853	-764	3,644	\$26.0	\$21.7	-\$4.3	\$20.5	-\$5.5
Retirement	3,981	3,323	-658	3,142	\$54.5	\$45.5	-\$9.0	\$43.0	-\$11.5
Ages 55–64	45,053	78,416	33,363	77,436	\$1,300.6	\$2,263.7	\$963.1	\$2,235.4	\$934.8
Wage and salary	32,581	56,708	24,127	56,000	\$903.4	\$1,572.3	\$669.0	\$1,552.7	\$649.3
Self employment	8,111	14,117	6,006	13,941	\$146.8	\$255.5	\$108.7	\$252.3	\$105.5
Interest	17,218	29,968	12,750	29,594	\$100.1	\$174.2	\$74.1	\$172.0	\$71.9
Social security	9,364	16,298	6,934	16,095	\$66.1	\$115.1	\$49.0	\$113.6	\$47.5
Retirement	4,894	8,518	3,624	8,412	\$47.0	\$81.9	\$34.8	\$80.8	\$33.8
Ages 65 plus	90,561	122,428	31,867	143,841	\$1,888.9	\$2,540.6	\$651.9	\$3,007.1	\$1,118.2
Wage and salary	14,433	19,213	4,780	23,375	\$235.6	\$328.3	\$92.6	\$398.2	\$162.6
Self employment	6,568	9,002	2,434	10,852	\$90.3	\$123.0	\$32.7	\$149.8	\$59.5
Interest	44,794	59,393	14,599	69,976	\$512.9	\$670.0	\$157.1	\$787.7	\$274.8
Social security	85,633	115,647	30,014	135,840	\$726.4	\$984.0	\$257.6	\$1,155.4	\$429.0
Retirement	17,964	23,935	5,971	28,566	\$201.7	\$268.3	\$66.6	\$321.1	\$119.4

Source: US Census Bureau, 2000 PUMs file and the North Dakota State Data Center

A stark contrast in the number of earners is expected among the pre-retirees (i.e., those 55–64 years of age). Projections indicate that from 2000 to 2015 the number of these earners will increase by over 33,000. However, unlike the previous age groups, only 72% of these individuals will be wage and salary income earners using the 2000 baseline profile. Thus, the overall losses in wage and salary earners that are projected to occur among those under age 55 will not be replaced by the growth among the pre-retiree wage and salary workers. Rather, a significant portion of total pre-retiree earners will earn income from sources other than wages and salaries, particularly interest income, retirement income, and self-employment income.

A similar but more dramatic increase among earners is expected to occur in the elderly population (i.e., 65 years of age and older). As noted in Table 5.2, the increase in total elderly earners from 2000 to 2015 is expected to reach 31,867 and jump to 53,280 by 2020. Elderly earners will expand rapidly in both aggregate numbers and percent of total earners over the next 10–15 years at the same time that young and prime wage earners are declining. For example, in 2000, seniors (i.e., 65 years of age and older) represented 19.3% of the total 469,396 income earners in the state. The 90,561 older income earners are expected to expand their ranks to 122,428 by 2015 and represent 24.9% of all earners in the state. The modeling indicates these numbers and proportions are expected to jump to 143,841 elderly earners by 2020 accounting for 29% of total earners. In contrast, earners 15–54 years of age totaled 333,782 in 2000 and accounted for 71.1% of all earners in the state. However, the projections indicate that earners in this age group will decline to 290,663 by 2015 and represent only 59.1% of total earners and further drop to 274,900 by 2020 and account for 55.4% of total earners.

The relative change in income earners, in contrasting the profiles for 2000 and 2020, is graphically illustrated in Fig. 5.3. The most dramatic change that is anticipated will be in the wage and salary earners. Even though the number of elderly earners will increase dramatically, they will represent very few wage and salary earners. In fact, in 2000 seniors accounted for only 4% of all wage and salary earners. Even with the movement of the baby boom cohort into the elderly ranks, if the proportion of seniors who are wage earners remains the same as in 2000, then their relative proportion of total wage and salary earners will expand to only 7.2% by 2020. This is expected to happen even though seniors are expected to account for 29% of all income earners in 2020.

Overall, the model indicates that the number of wage and salary earners is expected to decline by 20,296 people when contrasting 2000 with 2020 even though the total number of earners is expected to increase by 26,782 over the same time period. The difference is accounted for by the significant jump in individuals who are expected to earn social security, interest, and retirement income. The rise in recipients of Social Security from 2000 to 2020 is expected to surpass 55,600 and total 157,450 North Dakotans by 2020. Similarly, residents in the state who are expected to earn interest income will jump by 23,619 from 2000 to 2020 and total 161,188 residents by 2020, 43% of whom will be elderly.

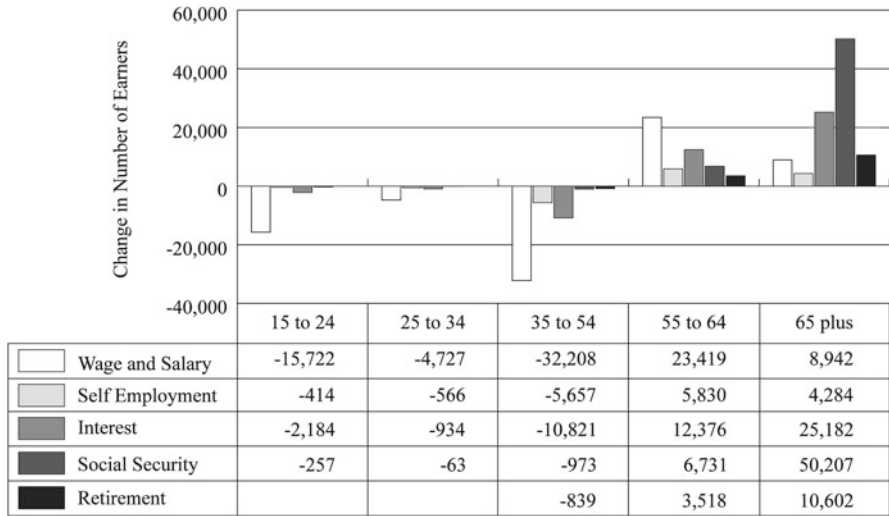


Fig. 5.3 Projected change in income earners in North Dakota, by type of income, by age: 2000–2020
 Source: US Census Bureau 2000; PUMs file and the North Dakota State Data Center

5.3.2.2 Projected Change in Aggregate Income

The consequence of these important shifts in earners likely will have important implications on income generation in the state. The result of the shifting age profile on North Dakota’s future income base is displayed in Table 5.2. The assumption used in the simulation is that the distribution of future earnings by type of income remains the same as in 2000. In brief, the modeling simply applies the age-specific profile of earnings by type of income reported in the 2000 census to the projected population for the years 2015 and 2020. These estimates, in essence, represent the amount of income that would be generated in North Dakota if we were to apply the age-specific population for 2015 and 2020 to the profile of income earners for 2000. This allows us to contrast total income generated in the state for 2000 with what would occur by simply changing the demographic profile of the state. Therefore, these income estimates reflect constant 2000 dollars with no attempt to adjust for inflation or changes in earning power that might occur between 2000 and 2015 or 2020.

Results of the income simulation indicate that the demographic shifts expected to occur in the next 10–15 years will result in an overall net increase in income. If we were to apply the state’s age profile projected for the year 2020 onto the earnings profile for the year 2000, the results show a net gain of nearly \$570 million. However, where this income is generated has important implications. For example, as noted in Table 5.2, loss of wage and salary earnings from the prime working age population (i.e., those 35–54 years of age) is expected to exceed \$963 million. Additional wage and salary losses of \$111 million and \$157 million are forecast for

the 25–34 and 15–24 age groups, respectively. These losses will be partially offset by gains from the pre-retirees and seniors, forecast at \$649 million and \$163 million, respectively. Nonetheless, the combined net loss in wages and salaries across all age groups is expected to exceed \$419 million.

The simulation model indicates that the losses in wages and salaries will be offset by significant gains in income generated through Social Security, interest, and retirement benefits. The majority of these gains will be produced by seniors. For example, the aging of the baby boomers from 2000 to 2020 will place them in the age bracket eligible for Social Security. The net change in income derived from social security as a result of using the 2020 age profile compared to the 2000 age profile is \$429 million. In addition, a significant difference in the number of elderly from 2000 to 2020 is forecast to result in a net gain of nearly \$275 million from interest income and \$119 million from retirement income. In total, the difference in the profile of seniors contrasting 2000 and 2020 is forecast to translate into a net gain of more than \$1.1 billion. Thus seniors in the year 2020 are expected to generate 25% of the state's total income compared to 16.5% in 2000.

The consequences of this shift are best understood when one recognizes that the bulk of elders' income comes from Social Security, interest, and retirement income. In 2000, these three categories accounted for 17.6% of total income generated in the state, or about \$2 billion of the state's \$11.5 billion. The simulation model suggests that this proportion will increase to 24.3% of total income, or nearly \$3 billion of the state's projected \$12 billion in income by the year 2020.

The simulation model's forecast of net income losses for the prime work force (i.e., those 35–54 years of age) is dramatic. The demographic shift in this age group is forecast to produce 32,000 fewer wage and salary earners in 2020 relative to 2000. The corresponding consequence of this loss in earners translates into a net loss of nearly \$1 billion in wage and salary income. Similar losses among wage and salary earners in the 25–34 and 15–24 age groups are forecast to result in corresponding net losses of \$111 million and \$157 million, respectively. It is important to reiterate that these net losses correspond to only 1 year; the profile of 2000 compared to 2020.

5.4 Implications for Taxes

North Dakota's changing age distribution will also affect the state government's budget. The most pronounced effects will likely be on the spending side (more demand for long-term care, less for schools and prisons) but the state's revenue will be affected as well. This section examines the impact of the state's aging population on its two biggest revenue sources, income and sales taxes. As in the previous section, the analysis here will focus narrowly on age demographics and will not attempt to account for other factors that might change between now and 2020.

Table 5.3 Average state tax liability in North Dakota, by age (Dollars)

Age group	2004	2005	2006	2004–2006 Average
15–24	\$0.00	\$0.00	\$0.00	\$0.00
25–34	\$60.40	\$77.00	\$65.30	\$67.57
35–44	\$231.40	\$349.20	\$488.00	\$356.20
45–54	\$297.40	\$650.90	\$590.20	\$512.83
55–64	\$440.40	\$1,074.30	\$785.00	\$766.57
65–74	\$444.20	\$996.60	\$754.20	\$731.67
75+	\$268.10	\$521.90	\$364.70	\$384.90

Source: US Census Bureau, Current Population Survey, March Supplement

5.4.1 Individual Income Tax

Our estimates for North Dakota income tax revenue are not derived from our internal estimates for the amounts of different types of income (wages, Social Security, private pensions, dividends/interest/rent) in the state in 2020. Data on the ratio of taxable income to total income for each of these income types were unavailable as the state tax form (unlike the federal tax form) starts with federal adjusted gross income and does not require taxpayers to report these different types of income separately.

Instead, we used data from the Census Bureau's Current Population Survey that show state income tax revenue broken out by age group. North Dakota had an especially small sample, and the year to year variation in average state income tax paid by the census sample is almost certainly much bigger than the year to year variation for the whole state (see Table 5.3).

Using the 3-year average from 2004 to 2006, North Dakota can expect income tax revenues to increase by about 6.7% from 2005 to 2020. This number considers only projected changes in the age distribution, and ignores future income growth. This figure seems high, given that the state's population will be much older in 2020. However, much of the growth in the older population will be in the 55–64 age bracket (the tail end of the baby boom, born between 1956 and 1965) which pays about as much income tax as the high-earning 45–54 bracket. Growth in the low-earning 65–74 bracket is offset by decline in the low-earning 25–34 bracket.

Are these figures reasonable given the small sample size in North Dakota? We examined that question by exploring four larger populated states that have relatively similar income tax structures to North Dakota. Arizona, New Jersey, Ohio, and Wisconsin are similar to North Dakota in that their income tax rate structure is gradual with the top tax rates kicking in at a relatively high income level (i.e., above \$100,000). Averaging the 2004–2006 CPS state income tax data for these four states suggests that 35–44 year olds in the North Dakota sample may have had unusually low income (see Table 5.4).

Data from the 2000 census support this interpretation. In North Dakota, households in the 35–44 age group had an average income 89.1% as high as the 45–54

Table 5.4 Tax liability, by age, as a fraction of the 45–54 age group’s liability, 2004–2006 3-year average

Age group	ND	Four large states with income tax structures relatively similar to North Dakota				Average
		AZ	NJ	OH	WI	
15–24	0.088	0.146	0.063	0.101	0.119	0.107
25–34	0.465	0.561	0.494	0.639	0.684	0.594
35–44	0.669	0.976	0.865	0.957	0.920	0.929
45–54	1.000	1.000	1.000	1.000	1.000	1.000
55–64	0.954	1.122	0.843	0.957	0.777	0.925
65–74	0.502	0.436	0.332	0.529	0.351	0.412
75+	0.159	0.131	0.138	0.213	0.151	0.158

Source: US Census Bureau, Current Population Survey, March Supplement

group, which was almost identical to the national figure of 88.5%. The 89.1% figure is also very close to the 92.9% ratio for the two age groups’ average tax liability in the four big states. Suppose, then, that North Dakota’s true tax-liability-by-age distribution is the average distribution for the four big states. In that case, the changing age distribution in North Dakota—again, holding all other factors constant—will produce an increase of 0.3%: almost exactly the same revenue in 2020 as in 2005.

North Dakota will have a smaller work force in 2020 than it had in 2005, and a much older population. However, the big growth in the high-earning 55–64 age bracket and the moderate-earning 65–74 bracket will not cause a sharp drop-off in income tax revenue. The picture may be very different by 2030, when the entire baby boom will be in the 65–84 age bracket, but the state will have 10 more years to deal with that issue.

5.4.2 Sales Tax

The federal Bureau of Labor Statistics’ (BLS) annual Consumer Expenditure Survey (CES) (2000) estimates the annual spending on different types of consumer goods and services by US households. The CES has separate tables breaking out the US population using a number of measures, including household size, region, and age of householder. For our purposes, age of householder is the variable of interest for projecting the effect of the changing age distribution on North Dakota’s state budget.

We assume that North Dakota households are similar to national average households of the same age (of the householder) in terms of the fraction of their income spent on different income categories. This is an oversimplification: North Dakota households almost certainly spend more than the US average on home heating, for example. However, the only geographic breakout in the CES is by the four broad regions (northeast, Midwest, south, west) and there are no age breakdowns below the national level.

North Dakota's average income is below the national average, and we assumed that North Dakota incomes are proportionately lower across the age distribution. Census data from 2000 indicate that the ratio of North Dakota mean household income to US mean household income was very consistent across age groups, and it is unlikely that anything has happened since 2000 to fundamentally change this. The 2004–2006 American Community Survey (ACS) data (US Census Bureau 2004–2006) give a slightly different picture of the income distribution than the census data do, but the census sample is far bigger.

For each CES spending category, we estimated the fraction of spending within the category that would be taxable under current North Dakota law. In some cases, the data were very limited.

Our population projections estimate numbers of individuals, not households. As such they do not match up perfectly with the CES data, which are based on households. For 2005, we used our own estimates for the number of people in each age group and the 3-year average for 2004–2006 from the ACS data for the number of households in each age group. The ACS uses relatively small samples that show considerable variation from year to year, so we concluded that a 3-year average would be more reliable than data from the single year 2005. The ACS methodology changed in 2006 to include households in group quarters that were previously excluded. These households are included in the CES, so the data for households in the 15–24 age bracket in 2004 and 2005 were adjusted upward. In the 2000 census, over 90% of North Dakota's householders in group quarters were in college dormitories, with most of the others on military bases. As such we determined (as a first approximation) that the householders included in 2006 but excluded in 2004 and 2005 were all in the 15–24 age bracket.

We then assumed that the fraction of householders within the total population of each age group would stay constant from 2005 to 2020. This gives us the number of households in 2020. For each age group in 2020, we multiplied the number of households by the average projected household income to get total income. Finally, we assumed that households would spend the same fraction of their income on the different spending categories in 2020 as they did in 2005: under-25 s would spend 9.9% on vehicles, 4.9% on education, etc.

For each category of goods and services, multiplying the total estimated North Dakota household consumption by its tax rate gives us estimated sales tax revenue attributable to North Dakota households. This is not the same thing as total sales tax revenue. Some fraction of the sales tax is paid by businesses and another fraction is paid by out-of-state households. For now we assume that the ratio of estimated collections to total collections stays constant from 2005 to 2020.

The number of children in North Dakota is projected to drop between now and 2020. The national CES data include the estimated number of children 0–17 years of age in the average household in each age group. If North Dakota resembled the national average, it would have had about 169,000 children 0–17 years of age in 2005 and about 153,000 in 2020. Our data indicate that the state had about 121,000 children 0–14 years of age in 2005 and will have about 112,500 in 2020. The ratio of 0–14 s (from internal data) to estimated 0–17 s (from the CES breakout) increases

Table 5.5 Estimated sales taxes as a percent of income and total population, by age, in North Dakota

Age group	Sales tax as a percent of household income	Population		
		2005	2020	Percent change
15–24	2.61	103,800	85,842	–17
25–34	1.86	75,239	70,924	–6
35–44	1.63	84,132	73,648	–12
45–54	1.61	97,345	73,069	–25
55–64	1.70	60,729	85,683	41
65–74	1.84	44,231	76,308	73
75+	1.63	53,540	73,258	37

Sources: US Bureau of Labor Statistics (2000) Consumer Expenditure Survey; US Census Bureau (2004–2006) Current Population Survey, March Supplement; US Census Bureau (2004–2006) American Community Survey, Public Use Microdata Sample

from 0.716 in 2005–0.735 in 2020. We think that this is close enough to make it unnecessary to make any adjustments to the estimated 2020 consumption data. All else being equal, a household with more children would consume more.

Preliminary results assuming no generalized income growth within age brackets:

Combined household income in North Dakota increases from \$13.56 billion in 2005 to \$14.03 billion in 2020 (3.5% growth) primarily due to an increase in the total number of households as the population gets older. Our estimates show 276,600 households in 2005 and 297,300 (7.5% growth) in 2020. Average household income drops from about \$49,000 in 2005 to \$47,200 in 2020 (3.8% decline).

North Dakota households are estimated to pay 1.7% of their total income as state sales taxes in both 2005 and 2020. Projected total collections rise from \$235.65 million in 2005 to \$244.2 million in 2020, a 3.6% increase entirely due to the estimated increase in total income. This result seems surprising. The young households who typically pay a lot of sales taxes relative to their income will become more scarce. However, the 65–74 age group that is projected to grow significantly, pays as big a fraction as the 25–34 group (see Table 5.5).

Overall, the evidence suggests that the aging of North Dakota’s population will not have a major impact on the state government’s revenue collections, and, if anything, the state can expect to collect slightly more revenue from its major taxes.

5.5 Summary and Discussion

The economic consequences of the aging of the baby boom generation, especially within the Great Plains, will be significant. Our analysis of the dynamic shifts in the age distribution within the region indicates that the most immediate impact will be on labor availability. The greatest impact will be in the nonmetro areas of the region as the primary labor pool, those 35–54 years of age, declines dramatically. Between

2000 and 2020, more than 87% of the rural counties in the region will lose primary workers. The hardest hit will be the small population based counties (i.e., those with less than 2,500 in population) which are projected to lose nearly 12% of their primary labor pool. In contrast, the metro counties in the region will expand their primary labor pool by an estimated 15.6% during that period. It is uncertain to what degree the current economic recession will alter the population projections upon which these conclusions were based. Nonetheless, the overall trends are compelling and demonstrate an immediate need for policy and decision makers to explore solutions for the potential rural labor crisis that appears imminent.

Our analysis indicates that in addition to the significant loss of human capital in the region's rural areas, the shifting age distribution will simultaneously impact the distribution of earnings and income. A focused analysis of the impact in North Dakota reveals that the aging of the baby boom into retirement translates into a significant loss in wage income. We conducted an economic simulation of the difference in wage earners between the year 2000 and the year 2020, based solely on the projected shift in age-specific population. Our findings indicate that the state's primary labor pool in 2020, which is expected to be 21% smaller than it was in 2000, will generate nearly \$1 billion dollars less in comparable wages in 2020 than they earned in 2000. Much of that lost wage earnings will be made up by those baby boomers who age forward into the age category 55 years and older and remain in the labor force. However, historical trends demonstrate a dramatic decline in labor force participation after age 55, thus the economic impact will significantly increase over time.

We further explored the consequences of lost wages, especially on income and sales tax revenues. We were surprised to find that in spite of lost wage earnings, in the short term, North Dakota will increase its tax collections. This is largely due to the aging of the baby boomers into a higher earnings age group who spend more of their disposable income. Thus, they pay a disproportionately higher share of income tax, and they make up a larger fraction of sales tax revenues. However, this situation will exist only in the short-term. A sharp decline in tax revenues is expected as the baby boomers continue to age, outpacing both their earnings potential and their taxable sales consumption.

This research poses some important policy concerns. The most immediate need that should be addressed is labor, especially in rural areas. Rural communities, in general, already have a labor disadvantage because of skills mismatch (Greengard 1998), chronic low wages (Gibbs and Cromartie 2000), and decades of out-migration among young adults (Rathge 2005). Innovative strategies need to be explored to mitigate the projected labor shortfalls within the rural sector. Delays in finding appropriate solutions will devastate already fragile rural economic systems and accelerate the further demise of these rural communities.

Responses to labor shortages, especially by employers, have typically followed three courses. First, employers often replace scarce or expensive labor with capital such as equipment, labor-saving technological substitutions, or improved organizational efficiency (Little and Triest 2002). This is best illustrated by advancements in robotics, computerization, and increased reliance on out-sourcing. A second typical response is to tap the international labor market. Congress's recent increase in H-1B

non-immigrant visas illustrates this trend. For fiscal years 2001–2003, the number of available H-1B visas increased from 65,000–195,000 annually. However, there is much debate regarding the value of substitution of labor between immigrants and domestic workers because of initial limited skill sets (see Hamermesh 2001). Third, a growing focus has been on expanding labor participation among older workers. Survey findings suggest that baby boomers expect to be engaged, active, and working long after age 65 (Stum et al. 2002). Moreover, the view of “traditional retirement” has been reshaped, both by desire and by economic practicality (Cahill et al. 2006). Workers are “bridging jobs” before they fully exit the labor force as well as reentering the labor force after they retire (Maestas 2004). Intriguing simulation estimates by Toder and Solanki (1999) indicate that luring about 13% of persons 55 years of age and older back into the work force would keep the ratio of effective labor force to total population constant until 2040. Numerous barriers exist, however, that deter seniors from reentering the labor market including limitations to flexible employment, legal issues with pension programs, and health care premium constraints (see Penner et al. 2002).

A second key policy concern highlighted by this research is the need for leaders to understand the dynamic interplay between elderly demographics and fiscal policy. In addition to labor force issues, the graying of the population will have significant effects on tax revenues and public service demands. However, our initial research in North Dakota demonstrates that the consequences may not be intuitive. For example, we found the existence of a short-term aging dividend. We anticipated that the state would face significant budget shortfalls because of large reductions in personal income tax due to reduced wage income from retiring elderly. What we did not anticipate was a counteracting increase in sales tax from those same retirees because their taxable expenditures outpaced younger age groups. This latent economic consequence reinforces the important need for decision makers to better understand the complexities of a shifting age distribution due to aging baby boomers.

Economic and fiscal pressures will require leaders to engage in “cost-benefit” analyses in an attempt to assess the impact of aging demographics (see Sjoquist et al. 2007). For example, states and local areas may need to revisit the value of age-specific income and property tax exemptions as a result of the aging of the baby boom generation. One should not automatically assume, however, that incentives geared to the elderly are negative. The aging dividend we discovered highlights this seemingly contradictory view. If tax reductions for seniors increase migration of retirees, who on balance spend more on taxable sales than they ask of government, the net result is a revenue increase. In short, the growing senior population can be an economic development tool. Alternatively, one must also factor in the increased longer term demand for public services, especially health care. Rural areas especially will need to be aware of the expanding cost of such services and the complexities of delivery modes (see Goins and Krout 2006). Johnson, and Morton and Weng, address this issue more fully in Chaps. 10 and 11, respectively, in this volume.

The unique demographic shifts that will occur over the next 15 years will be transformative for many rural areas of the country. Unfortunately, few areas are positioned for the dramatic changes that are likely to occur. This research demonstrates

both the magnitude of impact expected in the Great Plains and the complexity of challenges policy makers will face. The two dominant themes that will need to be addressed by state and local governments are labor issues and revenue structure. Our research suggests that an investment in a long-term “cost-benefit” assessment of the impact of aging demographics will pay big dividends.

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Part III
Race/Ethnic Inequalities

Chapter 6

Place and Race: Health of African Americans in Nonmetropolitan Areas

Marlene Lee and Joachim Singelmann

6.1 Introduction

Disability measures are increasingly used to measure population health as public officials recognize that the demand for health care services and health expenditures for aging populations depend on both the size of the elderly population and its health status. Planning for the health needs of the older population is particularly important in rural America where fewer services are available than in metropolitan (metro) areas. A better understanding of geographic differences in the prevalence of disability across racial groups can help national and local policymakers anticipate service needs. This chapter examines population health of African Americans ages 65 and older living in nonmetropolitan (nonmetro) areas, using disability measures and comparing results both to metro residents and to whites. In addition, the chapter examines regional differences comparing Southern residents to others. The analyses are based on data from the 2009 American Community Survey. We compare African American elderly to nonmetro elderly whites to provide insight into the roles of race. For insight into the role of place, we compare nonmetro blacks to metro blacks, as well as compare Southern blacks to other blacks. The chapter is organized as follows: first, we discuss how characteristics of the rural and urban environment influence health and disability; then, we present descriptive analyses of disability data on difficulties with physical and cognitive functioning, activities of daily living, and instrumental activities for people age 65 and older from the 2009 American Community Survey.

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6.2 Disability

The black health disadvantage, including old-age disability, is well-known and persists over the life course, although it is smaller in the older population (Fuller-Thomson et al. 2009; Adler and Rehkopf 2008). In nonmetro areas, as in the United States (US) as a whole, health disparities between African Americans and non-Hispanic whites emerge in early adulthood and continue to widen through middle age (Peek and Zsembik 2004). Both race and place of residence play a role in shaping health status and disability, and some would argue that these effects are cumulative in a way that ages African Americans prematurely, resulting in onset of functional limitations and disability at earlier ages (Geronimus et al. 2001) and resulting in elderly African Americans, particularly those in rural areas, spending a greater proportion of their remaining life disabled (Laditka et al. 2005).

Disability in older adults is most often the result of chronic diseases and geriatric conditions. The latter include loss of mental sharpness, falls, incontinence, dizziness, and vision or hearing problems, all of which fall generally outside of a disease model. Chronic diseases include heart disease, chronic lung disease, diabetes, cancer, musculoskeletal conditions, stroke and psychiatric problems. Disability occurs when physical or cognitive limitations inhibit people's ability to perform essential activities such as personal care, walking short distances, or managing their medications or routine day-to-day finances. Environmental conditions and access to resources play a role both in the risk of losing physical and cognitive abilities and in determining whether physical or cognitive limitations lead to a loss of independence or social isolation.

Rural populations are generally older than urban populations (see Berry and Kirschner Chap. 2, this volume) and, not surprisingly, they have higher rates of limitations in daily activities (Institute of Medicine Committee on the Future of Rural Health Care 2005). Difficulty in performing activities of daily living (ADLs, e.g. eating, grooming, and bathing) or more complex instrumental activities of daily living (IADLs, e.g. meal preparation, shopping, and managing money) increases with age (Manton et al. 2006). In addition, such limitations in old age tend to be the result of chronic conditions that are related to health behaviors, and rural populations tend to exhibit poorer health behaviors, including higher rates of smoking and lower rates of exercise relative to most urban populations (Institute of Medicine Committee on the Future of Rural Health Care 2005).

Access to resources also affects health. For older Americans, the most important resources are often health insurance, availability of and access to health care,¹ savings and social support. These may vary across urban and rural communities. Although Medicare coverage is nearly universal among persons age 65 and older,

¹ We distinguish between availability and access because mere availability does not assure access. For example, the availability of free health care is of limited use for people if they do not have transportation to the clinic or it is only open during their work hours.

occupational histories affect whether older individuals have employer-based supplemental insurance coverage, and state regulations determine eligibility for non-institutionalized long-term care coverage under Medicaid.

Income level and type of employment, both components of socioeconomic status, have a significant influence on the health status of rural residents. In rural regions, predominance of lower-wage jobs, limited availability of year-round work, and lower education levels generally mean that individuals frequently go without health insurance or have little or no income to spend on health care. Urban–rural differentials in rates of health insurance coverage are related to the structure of employment associated with rural places (Institute of Medicine Committee on the Future of Rural Health Care 2005). Rural areas have a higher share of smaller employers than do urban areas, and smaller employers may not offer health insurance. Low-wage jobs may not pay enough to cover insurance costs, and the self-employed may forgo insurance because of the high cost. For long-term elderly residents of rural areas, these factors help shape their health histories. Of course, other factors such as genetics or help-seeking behavior also influence those histories.

While some attributes of urban environments such as air pollution, traffic, and weak community (neighborhood) institutions make it more difficult for older adults to maintain and promote good health (Fried and Barron 2005), other facets of the urban environment provide needed support. For example, modifications, such as access ramps for someone with difficulty climbing stairs, medications, or social support may mitigate the effects of any limitations. In urban areas, public transportation, buildings with elevators, community transport vans, and increased density help older adults to maintain greater mobility, promoting independence and health care access. These attributes of urban areas also facilitate social engagement and mental stimulation.

In rural areas and similarly less densely populated places, the built environment, when it does not have the modifications described above, has health consequences that determine which physical limitations raise to the level of disability. In comparison to younger adults, elderly in both urban and rural communities rely more on private vehicles than on public transportation for their daily transportation needs (Glasgow 2000; Glasgow and Blakely 2000; Carp 1988; Rosenbloom 2004). However, as peripheral vision decreases and reaction times slow with aging, driving becomes more difficult. In urban areas, public transportation and taxis are more viable alternatives to driving oneself. In rural communities, when older adults can no longer drive themselves, they have fewer alternatives. As a result, physical impairments that affect driving may be especially isolating in rural communities.

6.3 Racial and Nonmetro Disadvantage

Healthy life expectancy, or the number of years one may expect to live disability-free, varies by race and gender as well as socioeconomic status (Geronimus et al. 2001). At the end of the twentieth century, individuals age 70, on average, could expect to

live an additional 14 years, and about 80% of those years would be disability free (Crimmins et al. 2009). Residents of nonmetro areas appear to be in worse health than those living in metro areas (Braden and Beauregard 1994; Laplante and Carlson 1996; National Center for Health Statistics 1984, 1995), even though rural residents also appear to have a mortality advantage (Elo and Preston 1996; Geronimus et al. 1999; Hayward et al. 1997; Kitagawa and Hauser 1973; Miller et al. 1987). These findings have been confirmed by Morton (2004), although her research showed that the rural mortality disadvantage does not hold in all US regions. For example, infant mortality rates in the 1980s in central city counties in the Northeast and Midwest were higher than in rural counties in those two regions, but the reverse was the case in the South and West (Morton 2004).

Educated men and women with some college live longer, on average, and a greater proportion (over 80%) can expect to live their remaining years being active (as contrasted with inability to live independently or provide for their personal care) (Crimmins et al. 1996). At the same age, educated black men and women are more likely to live inactive lives than even whites who dropped out before high school.

Rates of disability appear to be a major component of the growing disparity in health between older blacks and whites. Earlier analysis (Geronimus et al. 2001) of active life expectancy at age 16 among select black and white populations in the US also showed that rural populations outlive urban populations, but these additional years of life in rural populations are not disability-free. In some poor African American populations in the rural South and in inner city areas in the North and Midwest, disability rates at age 55 approach those of 75-year-old whites nationwide. By age 55, black residents of poor urban or poor rural areas in the study (Geronimus et al. 2001) had more than double the rate of functional limitations—measured by limitations in work, mobility or personal care—as did white residents nationwide, although black residents of poor rural areas had a somewhat smaller rate of functional limitations than black residents of poor urban areas. White residents of poor urban or poor rural areas were also more likely to have functional limitations than whites nationwide by age 55, but only white residents of rural Appalachian Kentucky had disability rates as high as black residents in poor areas. Economically better off white populations not only live longer lives, but the additional years of life are, on average, healthier ones. On the other hand, better-off black populations have substantially longer life expectancies than poor black populations, but only small gains in the number of healthy years. This research by Geronimus et al. (2001), however, does not take into account the difference in blacks' duration of residence in more affluent areas.

A recent analysis of black-white differences in old-age disability finds that most of the black-white differences in disability from ages 55 to 64 can be explained by differences in income and education (Fuller-Thomson et al. 2009). For the elderly population in general, the disadvantage of not having a college education has become increasingly important in recent decades (Freedman et al. 2007).

Geronimus (2010) has hypothesized that “weathering” is the reason why the most pronounced differences in health between blacks and whites are observed in middle-age rather than at younger ages. According to this hypothesis, repeated

efforts to cope with social and environmental stressors affect health and may make blacks biologically older than whites of the same chronological age (Geronimus 1992, 2001; Geronimus et al. 2010). By extension, blacks (or whites) living in places where they are exposed to more stressors—communities that are characterized by high levels of residential segregation and neighborhoods with limited access to education, jobs, social services, and health care—are likely to exhibit poorer health and other signs of biological aging than those residing in less stress-ridden environments.

In the US, black-white health inequalities, including disparities in life expectancy and the prevalence of chronic diseases, persist and may be worsening (Flegal et al. 2002; Geronimus 1996; Geronimus et al. 2010). The weathering hypothesis suggests that not only might individual behavior and material deprivation contribute to premature health deterioration but so might hard work and fulfilling family obligations. Individuals exposed to persistent stresses such as chronic financial strain and overt or subtly racial remarks expend a great deal of cognitive and emotional effort on those problems and develop adverse health outcomes (James 1994). Other mechanisms through which weathering may work include exposure to physical environmental hazards, and social stressors in residential and work environments. In addition, the early development of chronic conditions, themselves an outcome of weathering, can add to an individual's stress, further increasing weathering effects. The impact of these conditions may be exacerbated by being medically underserved, a problem that is often especially acute in rural areas (Institute of Medicine Committee on the Future of Rural Health Care 2005). Other possible mechanisms for weathering include the internalized effects of stigma, or frustration and anger at racial injustice.

Blacks are more likely than whites of a similar age to experience stressful situations. Blacks more consistently encounter interpersonal discrimination, discrimination in housing and employment, material hardship, and unpaid care giving. Rural Southern blacks in the US tend to be more socioeconomically disadvantaged—due to lower education rates, concentration in low-prestige occupations and low-paying jobs—and to face greater discrimination than their counterparts in the North and in more urban settings. However, the response to these environmental conditions may be mitigated by expectations and adaptation. Long-time residents might expend less energy on coping with daily stressors in the environment, and this might affect the results seen in cross-sectional comparison of groups.

6.4 Analytic Approach

The above review of past findings guided the analytic approach outlined in this section. Our descriptive analysis focuses on regional (South and non-South) and metro/nonmetro differences in the disability status of the elderly population ages 65 and older, asking what is the extent of these differences. When considered in the context of the history of discrimination, the South, and residential segregation,

the weathering hypothesis suggests that blacks are likely to age faster in certain places than in others, and thus be likely to exhibit higher rates of disability in certain places than others. We examine the data with a view to assessing whether:

1. A significantly greater proportion of blacks than whites are disabled at ages 65 and older.
2. A significantly greater proportion of Southern residents (ages 65 and older) than non-Southern residents are disabled.
3. A greater proportion of metro blacks are significantly more likely to be disabled than nonmetro blacks and metro whites.
4. The “severity” of disability, as measured by number of impairments, is greatest among metro Southern blacks than any other race-place group examined, as the disadvantages of residential segregation and historical remnants of racism may compound stress.

6.4.1 Data

The American Community Survey (ACS) is conducted as part of the 2010 Decennial Census Program and provides current demographic, socioeconomic and housing information about America’s communities every year. Such data had previously only been available once each decade. The ACS is a nationwide survey that was fully implemented in 2005 with an annual sample of approximately three million addresses. In 2006, the survey was expanded to include group quarters—nursing homes, dormitories, correctional facilities, and military barracks among others. For these analyses, we use the ACS 5% Public Use Microdata Sample (PUMS) and include only data for those Public Use Microdata Areas (PUMAs)² in which 100% of the population could be classified as residing in either metro or nonmetro areas, as based on data from the 2000 Census; we thus leave out mixed metro/nonmetro PUMAs.

6.4.2 Variables

- *Disability Status.* In the 2009 ACS, people are identified as having a disability on the basis of whether or not they exhibit difficulty with specific daily functions. In the absence of any accommodations, difficulty with these functions may result in individuals facing limitations in activities and restrictions on full participation

² PUMAs are the smallest geographical unit available for the use of micro data. They include as many counties as is necessary to reach the threshold level for data confidentiality of 100,000 population.

at home, work, or in the community. This definition provides information relevant to program development and implementation in federal agencies. Prior to 2008, the ACS asked questions about long-lasting sensory and physical disability, about shorter-term physical, mental, and emotional difficulties, and about whether these conditions affect activities. In 2009 the ACS assessed four basic functions including hearing, vision, cognition, and ambulation. In addition, respondents were asked about difficulties with selected activities from the Katz (1983) Activities of Daily Living (ADL) and Lawton and Brody (1969) Instrumental Activities of Daily Living (IADL) scales: including difficulty bathing, dressing and difficulty performing errands such as shopping (see [Appendix Tables](#) for a list of questions associated with each concept).

- *Race.* The racial categories in the ACS reflect a social and historical definition of race recognized in the US. Data in the tables we present are based on black and white respondents who report only one race. Blacks and whites may be Hispanic or non-Hispanic. Analyses not shown here looked at non-Hispanic blacks and non-Hispanic whites, but results did not differ substantively when Hispanics were excluded in the analysis. For simplicity, we chose to present results for all blacks vs. whites.
- *Geography.* Metropolitan Statistical Areas are Core-based Statistical Areas (CBSAs), or a core area containing a substantial population nucleus together with adjacent communities. The metropolitan statistical area comprises the central county or county equivalent containing the core, plus adjacent outlying counties that have a high degree of social and economic integration with the central county or counties, as measured through commuting. They have at least one urbanized area with a minimum population size of 50,000. PUMAs may be comprised of both metro and nonmetro counties. These analyses use only PUMAs that may be wholly classified as either metro or nonmetro. The states in the census Southern division are Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia, Alabama, Kentucky, Mississippi, Tennessee, Arkansas, Louisiana, Oklahoma, and Texas.
- *Other Socioeconomic Characteristics.* The ACS is a cross-sectional survey that provides no information on the past history of older people aside from place of birth and immigrant status. We focus on key characteristics by which disability varies in old age. These include gender and educational attainment.

6.5 Findings

In this section, we examine race and metro/nonmetro differentials in disability. Overall and for both blacks and whites, persons in nonmetro PUMAs (40.5%) are more likely to be disabled than those in metro PUMAs (36.4%). The metro-nonmetro difference holds for both blacks and whites and is statistically significant (at the 0.10 level), with the difference somewhat greater for blacks than for whites. In both metro and nonmetro PUMAs, greater proportions of blacks than whites are

Table 6.1 Types of disability for persons age 65 and older by metro/nonmetro status and race (in percent)

Types of disability	Metro		Nonmetro	
	Black	White	Black	White
Self-care	12.1*	8.3	15.3*†	8.5
Hearing	9.9*	15.2	12.8*†	18.3†
Visual	9.6*	6.4	15.0*†	7.6†
Independent living	21.3*	15.7	25.6*†	15.4
Ambulatory	31.6*	22.7	39.0*†	25.0†
Cognitive	12.9*	8.7	18.4*†	9.3†
Any of six difficulties	42.7	35.5	53.2	39.7

Source: Authors' Estimate, US Census Bureau (2009), American Community Survey, non-institutionalized population

Note: Metro and nonmetro designations based on 5% PUMAs where 100% of sample may be classified as residing in metro or 100% in nonmetro areas

*Significantly different from white at 0.10 level: the comparison here is between black and white in either metro or nonmetro areas

†Significantly different from metro at 0.10 level: the comparison here is between metro and non-metro areas for either blacks or whites

disabled, although the black-white differential in metro areas is not statistically significant. In nonmetro PUMAs, over one half of all blacks report at least one form of disability.

Disability can take on different forms, and not all disabled persons suffer from all types of disability. Table 6.1 displays the six measures of disability identified in the ACS based on difficulties experienced in: self-care, hearing, vision, independent living, walking (ambulatory), and concentrating/remembering/ making decisions (cognitive). The findings presented in Table 6.1, for persons ages 65 and older, show that blacks differ from whites in all forms of disability. Moreover, rates of disability by type differ by metro status for blacks and, with two exceptions (self-care and independent living), also for whites. With the exception of hearing disability, which is more prevalent among whites (15.2% in metro areas and 18.3% in nonmetro areas) than blacks (9.9% in metro and 12.8 in nonmetro), blacks show higher proportions of specific disabilities than whites do in both metro and nonmetro PUMAs, in many cases close to 50% higher (e.g., self care, ambulatory and cognitive). In nonmetro PUMAS, the percent of disabled blacks is almost twice as high as that of whites for some disabilities, such as self-care (15.3% vs. 8.5%), visual (15.0% vs. 7.6%), and cognitive (18.4% vs. 9.3%). For both blacks and whites, independent of metro/nonmetro status, ambulatory difficulties are the single most frequent form of disability.

The longtime disenfranchisement of blacks in the South makes it important to examine possible South-non-South differences in the proportions of blacks and whites who report disabilities. We present the prevalence of disability for the South and the non-South in Table 6.2. Our findings show (see panel A) that for both blacks and whites, Southerners have higher proportions of disabilities than non-Southerners

Table 6.2 Types of disability for persons age 65 and older in the United States, by region, nonmetro status, and race (in percent)

Types of disability	Blacks		Whites	
	South	Non-South	South	Non-South
	A. Metro			
Self-care	12.9*†	11.9*	9.0†	7.9
Hearing	10.8*†	9.8*	16.7†	15.7
Visual	10.5*	9.9*	7.4†	6.2
Independent living	22.4*†	21.2*	16.5†	15.1
Ambulatory	33.6*†	31.4*	25.2†	22.2
Cognitive	14.3*†	12.6*	9.8†	8.2
Any of six difficulties	45.4	42.3	38.5	35.5
	B. Nonmetro			
Self-care	15.5*†	13.9*	10.3†	7.5
Hearing	13.1*†	10.0*	19.2†	17.7
Visual	15.2*†	3.2*	9.4†	6.6
Independent living	25.3*	25.7*	18.1†	13.8
Ambulatory	38.9*†	40.2*	29.1†	22.6
Cognitive	18.3*	18.7*	11.5†	8.0
Any of six difficulties	52.9	56.0	43.6†	37.4

Source: Authors' Estimate, US Census Bureau (2009), American Community Survey, non-institutionalized population

Note:

*Significantly different from white at 0.10 level

**Significantly different from non-South at 0.10 level

(the sole exception is visual disability among blacks where the South/non-South differential is not significant). Overall, 45.4% of Southern blacks have any one of the six disabilities listed in Table 6.2, compared with 42.3% for non-Southern blacks. The corresponding figures for Southern and non-Southern whites are 38.5–35.5%, respectively. In both the South and non-South, blacks have higher rates of disability than whites for most types of disability. Except for cognitive disability, the race differential in disabilities is slightly smaller in the South than in the non-South, contrary what one might have expected from the history of race relations in the South. Possibly, lower incomes and higher poverty in the South take their toll to a relatively greater level of disability.

The findings for nonmetro PUMAs differ in a number of ways from those for all PUMAs (see Panel B of Table 6.2). As is the case with all PUMAs, nonmetro blacks in both the South and the non-South are more likely than their white counterparts to have disabilities. Similarly, more Southern whites than non-Southern whites report disabilities. But for blacks in nonmetro PUMAs, two disabilities (independent living and cognitive functioning) are less prevalent in Southern than in non-Southern PUMAs, and ambulatory disability is the only case in which the prevalence is higher for blacks in nonmetro non-Southern PUMAs than in nonmetro Southern PUMAs.

Table 6.3 Characteristics of aged 65 and older population by metro/nonmetro and disability status (in percent)

Characteristics	Disabled		Not Disabled	
	Metro	Nonmetro	Metro	Nonmetro
Age	78.2*	77.2*†	73.1	72.8
Female	60.0*	55.7†	55.7	56.5
Black	10.9*	5.6*†	8.4	3.4†
White	81.0*	90.5*†	84.2	93.5†
South	34.8*	43.1*†	33.2	36.3†
<i>Disability difficulties</i>				
Self-care	24.2	21.9†	–	–
Hearing	40.0	44.7†	–	–
Visual	18.7	20.0†	–	–
Independent living	45.7	39.4†	–	–
Ambulatory	65.2	63.9†	–	–
Cognitive	25.7	24.4†	–	–
<i>Education</i>				
No high-school diploma	30.7*	35.8*†	17.0	18.8†
High-school grad	53.9*	54.3*	56.4	62.6†
More than high school	15.4*	9.8*†	26.6	18.5**

Source: Author's Estimate, US Census Bureau (2009), American Community Survey, non-institutionalized population

Note: Metro and nonmetro designations based on the 5% PUMAs, where 100% of sample can be classified as residing in either metro or nonmetro areas

*Significantly different from non-disabled at 0.10 level

†Significantly different from metro at 0.10 level

As we discussed in the review of previous findings, disabilities vary by socioeconomic characteristics and race. Table 6.3 presents selected socioeconomic characteristics, age, and race by disability and metro/nonmetro status. With only one exception (percent female in nonmetro PUMAs), the characteristics of disabled persons ages 65 and older in both metro and nonmetro PUMAs differ from their non-disabled counterparts. In comparison to the non-disabled, disabled persons in both metro and nonmetro PUMAs are older, more likely to be female (except in nonmetro PUMAs), black and living in the South. Disabled persons also tend to have substantially lower educational attainment than the non-disabled.

The characteristics of the disabled also differ significantly between metro and nonmetro PUMAs. Disabled persons in nonmetro PUMAs, compared to their metro counterparts, are slightly younger, less likely to be female and black, more likely to be white and living in the South, and less educated. All forms of disability are more prevalent in nonmetro PUMAs. Similar metro/nonmetro differences are found for the non-disabled population, except that age and percent female do not differ by metro status.

The results from Table 6.3 suggest compositional differences that might account for differences in disability between elderly blacks and whites as well as between metro and nonmetro residents. We explore this possibility further in Table 6.4, which provides some support for the suspicion that differences in the

Table 6.4 Characteristics of persons aged 65 and older by metro/nonmetro status (in percent, except age is in years)

Characteristics	Metro		Nonmetro	
	Black	White	Black	White
Age	74.0*	75.1	74.3	74.7
Female	61.3*	57.0	61.8*	55.9†
South	46.8*	33.6	91.0*,†	37.1†
<i>Education</i>				
No high-school diploma	35.5*	18.6	52.6*,†	23.8†
High-school grad	51.1*	57.7	40.3*,†	60.6†
More than high school	13.4*	23.7	7.0*,†	15.5†
Any of six forms of disability	45.0*	36.0	53.2*,†	41.0†

Source: Authors' Estimate, US Census Bureau (2009), American Community Survey, non-institutionalized population

Note: Metro and nonmetro designations based on 5% PUMAs, where 100% of sample may be classified as residing in metro or 100% in nonmetro areas

*Significantly different from white at 0.10 level

†Significantly different from metro at 0.10 level

distribution of socioeconomic characteristics are determinants of differences in disability status across race and place. Nonmetro blacks and metro blacks are more likely than whites to have at least one of the six disabilities measured in the ACS. Among all four race-place groups, nonmetro blacks are the most likely to have one of these disabilities. The characteristics of the four groups are somewhat consistent with results from Table 6.3—nonmetro blacks are disproportionately more female, more concentrated in the South, and have lower education than metro blacks or whites. Nonmetro blacks are not, as might be expected, older than metro blacks or whites. This finding would tend to support the hypothesis that social factors, more so than chronological age, contribute to physical and cognitive disabilities among metro and nonmetro blacks. Metro blacks are significantly younger than the other three race-place groups yet have disability rates almost 10% higher than metro whites. While the age difference between blacks and whites appears small (but it is significant), one must remember that at age 65, a 1-year difference is substantial in terms of the life expectancy remaining at that age. The discrepancy in disability rates for nonmetro blacks and nonmetro whites is even greater, despite similar age profiles. But the nonmetro black-white gap in education and concentration in the South is much greater than the metro black-white gap.

6.6 Summary and Conclusions

In general, over the past 20 years, results from analyses of metro/nonmetro health depend on the outcome assessed. Studies of mortality, as measured by life expectancy, generally find that nonmetro residents have an advantage, but those studies

that examine chronic illness and limitations stemming from difficulties with physical or mental functions find that nonmetro residents are in worse health (see review in Geronimus et al. 2001). Comparisons of metro/nonmetro health and disability still find some specific nonmetro health disadvantages, once race and age are taken into account. For example, Peek and Zsembik (2004) found that nonmetro elderly African Americans were more likely to report physical, visual, and memory limitations than were elderly metro blacks.

Our results support and extend those previous findings. Blacks have higher rates of disability of all types than do whites, regardless of metro/nonmetro status. Persons in nonmetro areas tend to have more disabilities than metro residents; but nonmetro status increases the likelihood of disability much more for blacks than it does for whites. For both blacks and whites, residence in the South is associated with more disability compared with non-South residence. But as we noted earlier, continued migration into the South—especially among blacks—might reduce the South-non-South differential in the future.

A limitation of the present study is the lack of information about migration. While the American Community Survey includes information on an individual's state or country of birth and place of residence one year ago, these data only allow comparison of disability between lifetime non-mover and movers or between those who have moved recently and those who have not. Having histories of migration and health histories in the same data set would be useful in identifying people with disabilities who might have chosen to live in urban areas because of amenities in those areas that make it easier to live a more independent life. In that case, our observed metro-nonmetro differentials would be even greater if it were not for migration. Being able to compare disabilities among non-movers, long-term residents, and recent movers might also provide a clearer picture of the effect of place on elderly disability.

The findings show that, in the aggregate, comparison of the disabled and non-disabled, the disabled are more likely to be older, female, less educated, and residents of the South. In aggregate comparisons of race-place groups, older age is not associated with higher disability rates, but the proportion female, lower disability rates, and concentration in the South are. This set of findings suggests that it is not compositional differences in age that are driving higher disability rates for blacks, especially nonmetro blacks. Findings are less clear with respect to metro and nonmetro differences for whites: despite disadvantages in education and a higher concentration in the South than white residents of metro areas, nonmetro whites have lower disability rates than metro whites.

These findings support the premise of the weathering hypothesis that social stress stemming from poverty and discrimination produce cumulative health disadvantages for blacks. As with other studies, we measure education rather than poverty or income which tends to fluctuate but which over the life course are highly associated with educational attainment. We do not have actual measures

of discrimination but consider that the historical differences between the South and non-South suggest more embedded forms of discrimination. Our findings, particularly the effect of Southern residence, suggest that decomposition of the elderly disability rate might be a useful future exercise, particularly with data that might tease out other factors related to place of residence and disability, such as occupations. Today's elderly in the South might disproportionately represent those who worked in physically demanding jobs, which could contribute to high disability rates.

Geographic differences in disability rates for older African Americans have implications for the distribution for national and local health resources. In addition, earlier onset of disability and higher rates of disability among nonmetro African Americans have implications for the cost of Social Security because people who are disabled start receiving benefits earlier and tend to have lower lifetime earnings, thus contributing taxes for shorter amounts of time. The impact of disability on Social Security net costs would lend support to spending more on improving access to medical services in nonmetro areas. The higher rates of disability among elderly African Americans in nonmetro and southern areas also suggest that greater attention to services in places where these groups are concentrated would not only provide medical assistance for elderly disabled who may have greater needs, but might also augment preventative and treatment services for younger and middle aged African Americans. Such targeted services could contribute positively to strategies that would reduce projected Social Security spending as the number of workers paying into the system shrinks.

Appendix Tables

Table 6.A1 Disability: functional limitations and difficulties with activities

Concept	Questions
Hearing difficulty	"deaf or ... [had] serious difficulty hearing"
Vision difficulty	"blind or ... [had] serious difficulty seeing even when wearing glasses"
Cognitive difficulty	"serious difficulty concentrating, remembering, or making decisions"
Ambulatory difficulty	"serious difficulty walking or climbing stairs"
Self-care difficulty	"difficulty dressing or bathing"
Independent living difficulty	"difficulty doing errands alone such as visiting a doctor's office or shopping due to physical, mental, or emotional condition"
Disability status	For people age 15 years and older, difficulty with any one of the six items above

Table 6.A2 Relevant census geographic area definitions

Concept A	
<i>Core-based statistical areas</i>	Population of Urban Core
Metropolitan	50,000+
Micropolitan	10,000–49,999
<i>Not core-based statistical area</i>	
Not metropolitan or micropolitan	<10,000
Concept B	
Urbanized area or urban cluster	>1,000 (and densely populated)
Rural area (not urban area or urban cluster)	n/a

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Chapter 7

Latino Elderly in Nonmetropolitan America

Rogelio Sáenz, Amber Fox, and San Juanita García

7.1 Introduction

Latinos represent the fastest growing segment of the population of the United States (US). The Latino population is concentrated in metropolitan (metro) areas, but its historical roots—especially in the case of Mexican Americans (the largest Latino subgroup)—extends back centuries to nonmetropolitan (nonmetro) areas of the Southwest. In attempting to understand elderly Latinos, we critically examine the historical realities of colonialism and oppression that Latino groups have experienced. The historical chronicles of groups like Mexicans and Puerto Ricans, who are products of colonialism and oppression, are stories often left untold when examining social and economic outcomes for these populations (Acuña 2000). This glossing over is a disservice in explaining the aging process and related issues for Latino groups, because it fails to acknowledge historical social inequalities Latinos have experienced. Understanding the inequalities that people of color experience helps explain life outcomes of minority elderly. Thus we critically examine how race/ethnicity, racism, poverty, geographical residence, and other structural sources of oppression, or potential sources, affect life outcomes of Latino minority elderly (see also Minkler 1996).

Beginning in the early twentieth century, Mexican farm workers migrated outside of the traditional area of the Southwest to follow the crops, especially to the

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Midwest and Northwest (Sáenz 1991; Torres 2000). Today Mexicans and other Latino groups represent an essential part of agricultural labor. Over the last few decades, Latinos have expanded their settlement beyond traditional areas. They have increasingly found their way to nonmetro communities in the Midwest and South (Kandel and Cromartie 2004; Sáenz and Torres 2003; Stull et al. 1995; Zúñiga and Hernández-León 2005; Sáenz 2005). From 1990 to 2000, the nonmetro Latino population increased more rapidly than did the metro Latino population (Kandel and Cromartie 2004), with one-fourth of the growth in nonmetro areas between 1990 and 2000 from growth in the Latino population. Indications are that Latino movement to and settlement in new destinations will continue (Ricketts et al. 1999; Sáenz 2006). In 2008 3.4 million Latinos lived in nonmetro areas of the US,¹ accounting for 7% of Latinos in the country (Sáenz 2008). It is projected that, by 2025, Latinos will constitute nonmetro areas' largest minority group (Kandel and Parrado 2005).

While the Latino population continues to be one of the youngest racial/ethnic groups in the US, the Latino elderly population is also growing rapidly. The Latino elderly population nearly quadrupled from 674,000 in 1980–2.5 million in 2006–2008 (US Census Bureau 2008a). Recent trends indicate that growth in the Latino elderly population was nearly five times more rapid than in the nation as a whole, 51.7–10.9%. Population projections point to continued rapid growth among Latino elderly. Similar to the US population as a whole, the elderly are the fastest growing segment of the Latino population (Angel and Whitfield 2007). Projections are that the number of elderly Latinos 65 years of age and older will surpass the number of elderly African Americans by almost one million by 2030. Estimates for 2050 are that older Latinos will number over 12 million (Angel and Hogan 2004). While the Latino population is expected to nearly triple between 2010 and 2050, its elderly population is projected to increase more than five-fold (US Census Bureau 2008b). Despite the rapid increase, the nonmetro Latino elderly population is rarely considered in the literature (Krout 1994).

Latino elderly face unique challenges in nonmetro areas due to the more isolated nature of these places compared to metro settings. Challenges among nonmetro elderly Latinos include high poverty rates, limited access to services (including healthcare), cultural and linguistic issues, social and geographical isolation, racial and ethnic health disparities, and housing and transportation problems (Glasgow and Brown 1998). In general, nonmetro residents experience social, cultural, and economic disadvantages that typically increase their risks for unfavorable health outcomes compared to metro residents (Glasgow et al. 2004). The need exists to develop culturally adept systems of care and to recruit service providers culturally able to provide health services for the Latino population.

¹ This estimate is obtained from the 2008 American Community Survey (see Sáenz 2008 for a description of the methodology used to obtain the estimate).

7.2 Perspectives on Latinos

Two hypotheses have received considerable scholarly attention with regard to elderly minorities—the “double jeopardy” hypothesis and the “age as a leveler” hypothesis. The “double jeopardy” hypothesis argues that minority elderly are doubly disadvantaged in society, given their race/ethnic background, lower socioeconomic status and poorer health (Bane 1991; Brooks et al. 2007; Dowd and Bengtson 1978; Ferraro and Farmer 1996). The double jeopardy hypothesis acknowledges that minority elderly are discriminated against based on group membership as a minority and as elderly in an ageist society. A competing perspective is the “age as leveler” hypothesis which argues that differences in status between minority and white populations are significantly reduced over the life course, because all elderly experience similar problems during old age (Kent 1971).

Scholars in the field of minority aging have found both hypotheses problematic, particularly because they ignore experiences and the effects of cultural factors. Researchers have moved toward a new theoretical formulation in which they consider “diversity in aging” (Bass et al. 1990). This new approach was developed in order to move away from traditional theoretical frameworks that use whites as the standard comparison group from which all other ethnic groups are evaluated. To move away from such approaches, diversity is included not only as a multi-ethnic perspective but also to incorporate individual and social differences related to the aging process. Latinos potentially suffer not only from a double jeopardy but also from a triple jeopardy phenomenon. The triple jeopardy extends to not only examining racial/ethnic inequalities and low socioeconomic status but also to including factors particular to living in nonmetro areas. Being elderly creates a disadvantage of its own due to increased risk of health problems and possible dependence upon others as a result of disabilities. Minority status compounds risks because of concurrent lower socioeconomic status, poor housing quality, greater likelihood of illnesses and disabilities, racial/ethnic discrimination, and lower levels of education (Dowd and Bengtson 1978). For Latinos, the possibility of being foreign-born is often associated with language and other cultural barriers that place them at a unique disadvantage (Applewhite and Torres 2004; Riffe et al. 2008; Valdez and de Posada 2006). In summary, nonmetro elderly Latinos are disadvantaged due to their geographical location, and, compared to their metro counterparts, they are relatively poorer; less educated; more likely to encounter cultural barriers; and have less access to the limited range of healthcare services in nonmetro areas (Bane 1991; Glasgow et al. 2004; Mockenhaupt and Muchow 1994; Scott 2001).

The field of critical gerontology allows social scientists to focus on issues related to ageism (exclusion and discrimination against the old). Ageism comes in many forms and is commonly portrayed as viewing older people as the “gray tidal wave” of dependent elders who will be a social burden and drain on the US economy (King and Calasanti 2006). Ageism stigmatizes the elderly population as dependent and burdensome (Townsend 2007). Later life dependence may be defined in the economic or social realm (i.e. lack of employment, dependence on social support, etc.)

(Townsend 2007). Critical gerontologists focus on the ways in which the larger society portrays older people, and they work to change stereotypical and stigmatizing views of them. Critical gerontologists also bring scholarly attention to the cumulative disadvantages that elderly, particularly women, people of color, and lower socio-economic elderly face across the life course.

By situating this chapter on nonmetro Latino elderly in their demographic, social, economic, and health patterns, we highlight the important contributions of critical gerontologists and focus on how social inequalities affect the lives of nonmetro Latino elderly. Critical perspectives on aging question the ways in which the aging process has been constructed at both micro- and macro-levels of analysis. Estes et al. (2001, p. 31) acknowledge that: “the association of age with disease and inevitable decline is better reframed so that aging is seen as a *social* rather than *biological process*. This alternative view of aging is central to the critical perspective because many experiences related to aging result from socioeconomic conditions and inequalities experienced (and compounded) over the life course.” Critical gerontologists examine how power structures in society construct the aging process and serve to stigmatize older people.

This chapter has four purposes. First, we provide a demographic, social, and economic profile of the nonmetro Latino elderly population using data from the pooled 2006, 2007 and 2008 American Community Surveys (ACS). Second, we provide a health-related profile of nonmetro Latino elderly using data from the 2008 ACS. We use the profiles to examine differences between nonmetro Latino elderly and African American and white comparison groups, and to focus on the diversity within the nonmetro Latino elderly population. Third, we overview the existing literature on the nonmetro Latino elderly population and highlight major themes found in this body of scholarship. Finally, we outline major research and policy needs of the nonmetro Latino elderly population.

7.3 Demographic, Social, and Economic Profile of Nonmetro Latino Elderly

We use data from the pooled 2006–2008 1% ACS to profile the US nonmetro Latino elderly population. One shortcoming associated with the data set is that metro/nonmetro residence can be obtained for only a segment of the population. Residential status was not identified for 7.8% of the pooled 2006–2008 samples. For the total elderly population of the US, metro/nonmetro residence of approximately 2.9 million persons 65 years of age and older was not identified. This portion of the sample was deleted from our analysis of metro and nonmetro groups, and thus the data we analyze are based on a somewhat smaller sample than one would expect. With this caveat, we estimate that Latino elderly comprise 2.7% of the nonmetro elderly population of the US. The large majority of nonmetro elderly are white, accounting for 89.2% of all nonmetro elderly, and African Americans constitute 5.7% of the total.

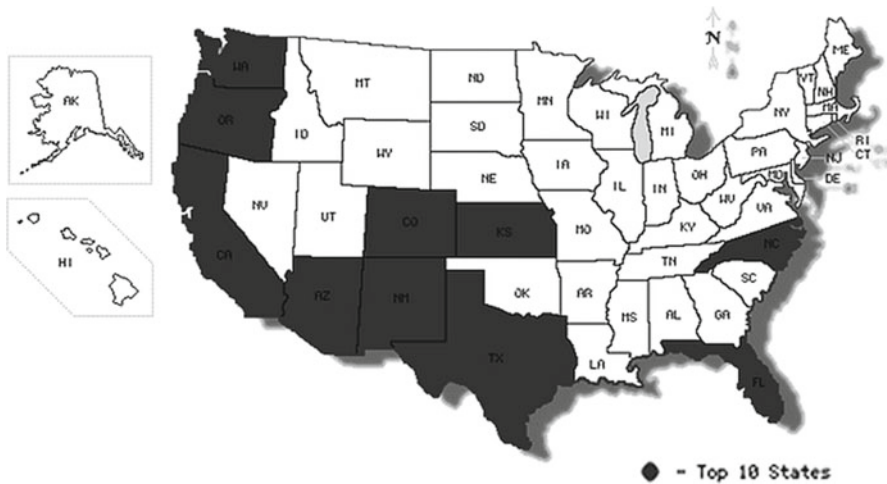


Fig. 7.1 Ten states with the most nonmetro Latino elderly, 2006–2008 (Source: 2006–2008 Pooled 1% American Community Survey)

The nonmetro Latino elderly population is concentrated in a few states. The ten states with the most nonmetro Latino elderly account for four-fifths of the population's total (Fig. 7.1). These states are primarily located in the Southwest and West coast regions. Slightly more than half (51.4%) of all nonmetro Latino elderly live in just two states—Texas and New Mexico—with 35% living in Texas alone. A few of the states constitute new destination areas, e.g., Kansas, North Carolina and Oregon. The nonmetro Latino elderly population constitutes a small share of the nonmetro elderly population overall, but this is not the case in three states: New Mexico (10.2%), Arizona (9.6%), and Texas (8.1%).

The nonmetro Latino elderly population in country of origin does not exhibit a great amount of diversity from within. The large majority (70.3%) are of Mexican origin, with an additional one-sixth (16.6%) classified as “Other” (Fig. 7.2). The Spaniard and “Other” categories are driven mainly by nonmetro Latino elderly in New Mexico. A near majority (46.9%) of nonmetro Latino elderly in New Mexico classify themselves as “Other” (likely preferring an identity of *Hispano*) and an additional 7.3% say they are “Spaniard” (Montgomery 2001; Nostrand 1992).

7.3.1 *Intergroup Variations*

Here we examine differences between nonmetro Latino elderly and their white and African American counterparts (for additional racial/ethnic comparisons, see Chap. 16 by Fuguitt and Chap. 18 by Gurak and Kritz in this volume). As noted earlier, nonmetro Latino elderly (70.0%) are much more likely than nonmetro white (9.7%) and African American (6.7%) elderly to live in the Southwest region

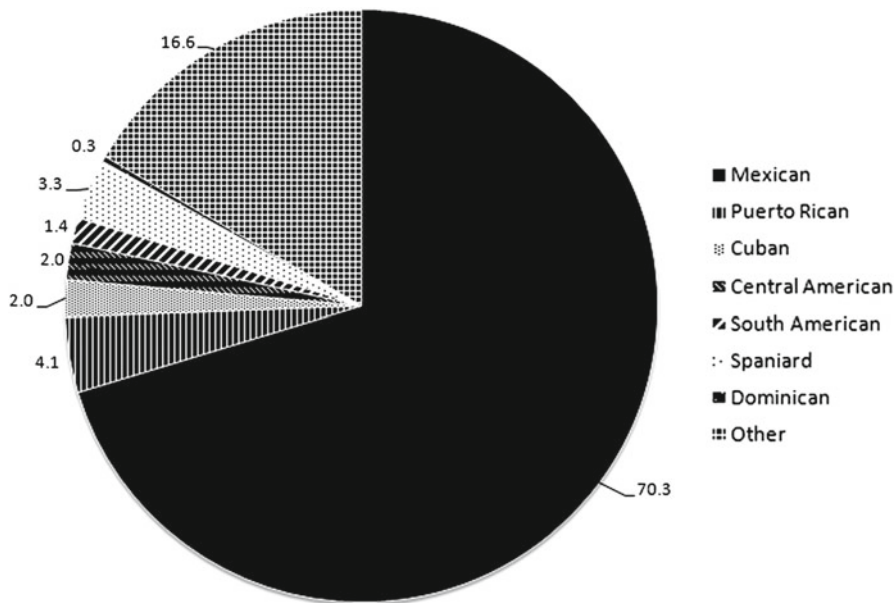


Fig. 7.2 Rural latino elderly by specific group (Source: 2006–2008 Pooled 1% American Community Survey)

(Arizona, California, Colorado, New Mexico, and Texas) where Mexican Americans have been concentrated historically (Table 7.1). Nonmetro African Americans are most likely to live in the South and whites in the South and Midwest.

Latinos tend to be viewed as an immigrant group, but only one-third of nonmetro Latino elderly are foreign-born. Research has shown that immigrant nonmetro Latinos who move early in life are more likely to move to nonmetro places. Further, those who initially lived in nonmetro areas and later moved are likely to return to nonmetro areas (Wilson et al. 2009; Ortiz et al. 2010). Nonmetro Latino elderly likely have lived much of their lives in the nonmetro areas they inhabit presently. Whites and African Americans are almost exclusively born in the US and, when moving within the US, are less likely than Latinos to move to nonmetro places (Wilson et al. 2009; Ortiz et al. 2010).

Differences in the median age of the three groups of nonmetro elderly are small, with Latinos being slightly younger (Table 7.1). Their age-sex structure is shown in Fig. 7.3 in age-sex pyramids for the three nonmetro groups of elderly. Overall, for Latinos—as is the case for the other two groups—younger-old individuals (younger than 75) account for greater portions of elderly, and females outnumber males in each age category, reflecting lower death rates among females. Not surprisingly, the age-sex structure of the nonmetro elderly Latino population shows them to be younger than their white and African American counterparts. The sex ratio for the nonmetro Latino elderly population is 78.9 (signifying 78.9 males per 100 females in the group) compared to 75.8 among whites and 61.3 among African Americans (Table 7.1).

Table 7.1 Selected demographic, social and economic characteristics of nonmetro Latino, White, and Black elderly, and metro Latino elderly

Selected characteristics	Nonmetro			Metro
	Latino	White	Black	Latino
<i>Region</i>				
Southwest	70.0	9.7	6.7	53.0
Northeast	2.6	10.3	1.1	16.8
Midwest	9.5	34.5	5.0	6.3
South	10.7	36.9	86.8	21.2
West	7.2	8.6	0.4	2.7
Pct. Foreign-born	32.9	1.7	0.6	55.9
Median age	73	74	74	73
Sex ratio (males per 100 females)	78.9	75.8	61.3	73.9
<i>Pct. married spouse present</i>				
Female	36.8	42.9	21.4	31.8
Male	62.9	71.5	49.7	62.7
Pct. in group quarters	3.6	5.6	7.1	5.3
Pct. in multigenerational household	34.0	13.8	32.8	46.3
Pct. without phone in household	3.1	1.1	3.5	2.0
Pct. without vehicle in household	13.4	6.8	21.2	19.1
Pct. in linguistically isolated household	29.3	0.3	0.1	32.7
<i>Language spoken</i>				
Monolingual non-English	31.1	0.2	0.1	43.4
Bilingual	49.6	2.3	0.8	42.9
Monolingual English	19.3	97.5	99.2	13.7
Pct. high school graduate	38.1	75.4	42.8	45.8
<i>Pct. in labor force</i>				
Female	10.4	10.3	9.3	10.1
Male	19.6	18.3	14.1	21.0
Pct. in poverty	23.2	9.9	30.3	18.7
Pct. females in poverty	25.6	12.4	34.5	20.9
Pct. males in poverty	20.2	6.9	23.4	15.9
Pct. with social security income	84.6	92.5	87.5	76.0
Pct. with supplemental security income	10.6	3.1	13.0	10.6
Weighted N	193,015	6,474,908	411,347	2,240,586

Source: 2006–2008 Pooled 1% American Community Survey (ACS)

Due to differences in mortality rates favoring females and their greater longevity, men are more likely than women to be married at the elderly stage of life. Sixty-three percent of Latino elderly men and 37% of Latina elderly women are married, but their marriage rates are lower than those of white elderly (Table 7.1).

Nonmetro Latino elderly differ from the other two groups in their patterns of household living arrangements. Consistent with the view that Latino families resist institutionalizing elderly relatives, only 3.6% of nonmetro Latino elderly live in group quarters, the lowest rate of any of the three groups of nonmetro elderly (Table 7.1). Approximately one-third (34.0%) of nonmetro Latino elderly live in

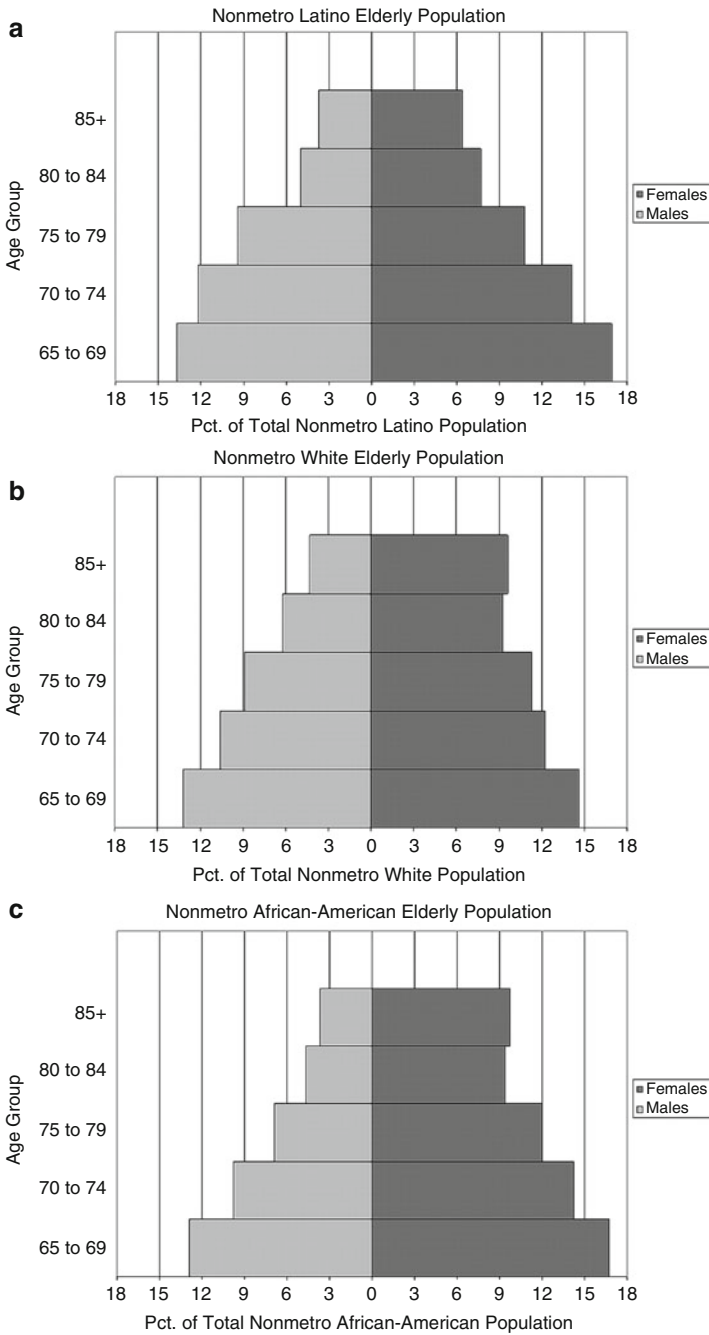


Fig. 7.3 Age-sex pyramids for the nonmetro Latino, African American, and White elderly populations, 2006–2008 (Source: 2006–2008 Pooled 1% American Community Survey)

multigenerational households, often living in the home of an adult child. African American elderly also exhibit a tendency to live in such households, but it is much rarer among white elderly. The high level of multigenerational households among Latinos and African Americans partially reflects their limited economic resources.

Latino and African American elderly are less likely than whites to have a vehicle or a telephone in their households (Table 7.1). Many consider automobiles and telephones basic necessities, the lack of which places elderly at risk in medical and other types of emergencies, as well as participation in daily activities. Further, three in ten nonmetro Latino elderly live in linguistically isolated households.² Combinations of a lack of basic resources and poor English fluency place a segment of Latino elderly in a vulnerable and isolated position.

Almost a third of nonmetro Latino elderly are monolingual Spanish speakers, i.e., they speak a language other than English at home and speak English “not well” or “not at all” (Table 7.1). Half of the nonmetro Latino elderly population speak both languages (i.e., speak a language other than English at home and speak English “well” or “very well”), and close to one-fifth (19.3%) speak only English at home. This variation in language use reflects the great diversity among Latino elderly.

Low economic resources of Latino elderly are reflected in educational attainment, work activities, and sources and amount of income. Latino elderly have the lowest levels of education among older people in nonmetro settings, with only 38% holding a high school diploma. In contrast, three-fourths of white elderly have this level of education (Table 7.1). While the large majority of elderly are not part of the labor force, about one-fifth and one-tenth of Latino men and Latina women, respectively, are active in the workforce. In general, labor force participation rates are similar across the racial/ethnic groups.

Overall, 23% of nonmetro Latino elderly have incomes below the poverty level, a rate lower than that of African Americans (30.3%) and significantly higher than that of whites (9.9%). Latino elderly are more than twice as likely to be poor compared to nonmetro white elderly. About one-sixth of Latino elderly do not receive Social Security income (the highest level among the three groups), likely reflecting the foreign-born status of a segment of the population. About one in ten receive Supplemental Security Income (SSI) (Table 7.1).

Nonmetro Latino elderly exhibit unique demographic, social, and economic characteristics compared to their white and African American counterparts. In many ways, they are similar to African American elderly. Issues related to foreign-born status and lack of English proficiency, however, make Latino elderly unique. The triple jeopardy that nonmetro Latino elderly experience disadvantages them in a variety of ways that lower their quality of life.

² The [US Census Bureau \(2008\)](#) defines linguistically isolated households as those in which no individual 14 years of age or older speaks only English or speaks a language other than English but speaks English very well.

7.3.2 *Intragroup Variations*

Variation within the nonmetro Latino elderly population is evident based on nativity. Individuals born in the US have an asset—namely, US citizenship—that provides access to societal resources. Among foreign-born Latinos, those who have been in the US longer are more likely than those of shorter duration residence to have become naturalized citizens and to have greater familiarity with the country.

Here, we overview the nonmetro Latino elderly by nativity status and, for the foreign-born, years since first coming to the US. The foreign-born are categorized into three groups based on the number of years since they first entered the country: 40 or more years; 20–39 years; and less than 20 years. As already noted, the majority of nonmetro Latino elderly (63.2%) were born in the US. Among those born outside of the US, half first came 40 or more years ago, 31% arrived 20–39 years ago, and 19% first entered less than 20 years ago (Table 7.2).

Nonmetro Latino elderly are most likely to live in the five southwestern states (Arizona, California, Colorado, New Mexico, and Texas) traditionally inhabited by persons of Mexican origin (Table 7.2), particularly native-born Latinos. Foreign-born Latinos are more likely to reside in the new destination regions of the South and the Midwest. Those with the shortest duration of residence in the US are most likely to live in the South and Midwest; 31% live in the two regions.

As expected, possessing US citizenship is tied to length of residence in the country. Latino elderly who first came to the country less than 40 years ago are the most likely to lack US citizenship. Four-fifths of those who came less than 20 years ago and half of those who came 20–39 years ago lack US citizenship (Table 7.2).

We also find differences in the age and sex composition of the four groups of nonmetro Latino elderly. Older nonmetro Latinos who immigrated to the US less than 40 years ago are the youngest, with a median age of 71 compared to 74 among native-born and foreign-born who have lived in the US 40 plus years (Table 7.2). While women outnumber men across all four groups of nonmetro Latino elderly, the sex ratio is highest among foreign-born older nonmetro Latinos (87 males per 100 females) who came to the US 20–39 years ago (Table 7.2).

Consistent with general trends in mortality differentials by gender, Latino elderly men are more likely than women to be currently married (Table 7.2). Foreign-born Latinos who entered the US less than 20 years ago are the least likely to be married, with only one-third of Latinas and slightly more than half of nonmetro elderly male Latinos being married (Table 7.2). Data are not available to determine whether the death of a spouse resulted in the immigration of a surviving spouse to join children in the US, but 42% residing in the country less than 20 years live in the home of a child or a child-in-law (data not shown).

Living arrangements of nonmetro Latino elderly are driven by a set of factors including nativity status, length of US residence among the foreign-born, marital status, and socioeconomic status. Few nonmetro Latino elderly live in group quarters, especially foreign-born with less than 40 years residence (Table 7.2). Shorter duration residents are also more likely to live in multigenerational households; three-fifths of

Table 7.2 Selected demographic, social and economic characteristics of nonmetro Latino by nativity status and years in the United States

Selected characteristics	Native-born	Foreign-born		
		40+ years	20–39 years	<20 years
<i>Region</i>				
Southwest	74.3	62.3	64.0	61.7
Northeast	1.4	6.6	3.3	1.5
Midwest	9.7	7.6	10.3	11.2
South	7.2	16.8	15.1	20.1
West	7.4	6.7	7.3	5.5
Pct. not a U.S. citizen	0.2	21.5	49.8	80.4
Median age	74	74	71	71
Sex ratio (males per 100 females)	76.9	81.5	87.0	77.4
<i>Pct. married spouse present</i>				
Female	36.6	38.7	37.1	33.5
Male	62.5	66.4	65.6	52.5
Pct. in group quarters	4.0	3.4	2.3	1.5
Pct. in multigenerational household	28.8	32.7	48.4	60.8
Pct. without phone in household	2.5	2.6	4.6	7.4
Pct. without vehicle in household	12.8	13.6	16.6	13.2
Pct. in linguistically isolated household	17.7	42.0	54.8	56.7
<i>Language spoken</i>				
Monolingual English	25.0	12.7	5.8	6.2
Bilingual	62.2	39.6	18.9	12.5
Monolingual non-English	12.8	47.7	75.3	81.3
Pct. high school graduate	44.7	33.9	20.8	18.3
<i>Pct. in labor force:</i>				
Female	12.0	7.8	6.8	8.6
Male	16.2	17.1	31.9	35.9
Pct. in poverty	20.2	24.2	30.9	34.9
Pct. females in poverty	22.7	26.2	37.7	31.3
Pct. males in poverty	16.9	21.8	22.9	39.6
Pct. with social security income	90.3	86.5	73.1	47.0
Pct. with supplemental security income	9.5	11.6	17.0	7.3
Weighted N	121,890	35,802	21,788	13,535

Source: 2006–2008 Pooled 1% American Community Survey (ACS)

the less than 20 years of residence group and nearly half of those in the US 20–39 years live in a home with multiple generations. These two nonmetro Latino elderly immigrant groups also have limited resources, as suggested by the somewhat greater absence of a telephone or vehicle in the household and the greater likelihood of living in households without any person 14 years of age or older who speaks English well (Table 7.2). Slightly more than four-fifths of nonmetro Latino elderly who have lived in the US less than 20 years and three-fifths who arrived 20–39 years ago said they speak English “not well” or “not at all.”

The two groups of foreign-born nonmetro older Latinos who have been in the US the shortest duration (i.e., less than 40 years) have more limited socioeconomic resources than longer duration foreign-born or native Latino elderly (Table 7.2). While all nonmetro Latino elderly (including the US-born) have low levels of education, persons who have lived in the US less than 40 years have the lowest levels; only about one-fifth have a high school degree (Table 7.2). Foreign-born nonmetro Latino men resident in the country less than 40 years have relatively high rates of labor-force participation, with 36% in the US fewer than 20 years and 32% of males who arrived between 20 and 39 years ago still in the labor force. These two groups of males are twice as likely as their native-born Latino counterparts, or those who have lived here 40 or more years, to be active in the labor force. Given the limited resources of the two most recent groups of male arrivals (including less health insurance coverage, as discussed below), economic necessity is likely responsible for continuing to be part of the labor force. Among women, native-born older Latinas have a somewhat higher labor force participation rate than nonmetro foreign-born elderly Latinas (Table 7.2). While all groups of nonmetro elderly Latinos have high rates of poverty, those who have resided in the US the shortest duration have the highest rates of poverty (Table 7.2). Poverty rates are the most elevated among three foreign-born groups: men who have been here less than 20 years (39.6%), women who have been here 20–39 years (37.7%), and women who have been in the US less than 20 years (31.3%) (Table 7.2).

Foreign-born nonmetro Latino elderly with fewer than 20 years in the US have the lowest levels of receipt of Social Security income (47.0%) and Supplemental Security Income (7.3%) (Table 7.2). These low levels reflect their relatively short duration of residence in the US.

7.3.3 *A Contrast with Metro Latino Elderly*

Because of variations in the settlement patterns of different Latino groups and between native- and foreign-born groups, nonmetro Latino elderly differ noticeably in various respects from metro Latino elderly. Below is an overview of differences (data not shown).

- Nonmetro Latino elderly are more homogeneous with respect to ethnicity than metro Latino elderly. In particular, 70% of nonmetro Latino elderly are of Mexican origin compared to 49% of metro elderly.
- Nonmetro Latino elderly (70%) are more concentrated in five Southwestern states than metro Latino elderly (53%). They are also somewhat more likely than metro Latino elderly to live in the South and Midwest regions.
- Nonmetro Latino elderly (67%) are more likely to have been born in the US than metro Latino elderly (44%).
- Nonmetro Latino elderly (34%) are less likely to live in multigenerational households than their metro counterparts (46%).

- Nonmetro Latino elderly (69%) are more likely to be fluent in English—i.e., speak English at home or speak a language other than English at home and speak English “well” or “very well”—compared to metro elderly Latinos (57%). This corresponds with nonmetro Latino elderly being more likely to be US-born.
- Nonmetro Latino elderly have lower levels of education (38% are high school graduates) than metro Latino elderly (46%).
- Nonmetro Latino elderly (23%) are somewhat more likely to be poor than their metro counterparts (19%).
- Nonmetro Latino elderly (85%) are more likely to receive Social Security Income than metro Latino elderly (76%).

The profile of US nonmetro Latino elderly indicates that this population has unique demographic, social, and economic characteristics, as well as particular needs. Nonmetro Latino elderly differ significantly from their white and African American counterparts in characteristics related to foreign-born status, and concomitantly a greater lack of US citizenship and English fluency. Nonmetro Latino and African American elderly possess limited socioeconomic resources, making them vulnerable to a variety of issues including healthcare access. Among nonmetro Latino elderly, individuals with less time in this country face the greatest linguistic, social and economic challenges. Finally, nonmetro Latino elderly differ substantially from their metro Latino counterparts in social isolation and limited socioeconomic resources, important components that make the double jeopardy of being an elderly minority into a triple jeopardy of also living in a nonmetro area.

7.4 Health-Related Profile of Nonmetro Latino Elderly

The profile of nonmetro Latino elderly presented above has important implications for the health status of this population. Nonmetro areas face major challenges in providing healthcare, especially for its older and even more specifically minority elderly population. Morbidity and mortality data to assess the health status of nonmetro Latino elderly are sparse. But here we draw on the 2008 1% ACS to develop a general profile of the health-related conditions of nonmetro Latino elderly. We tap information from the ACS on the prevalence of a variety of physical and cognitive difficulties and on health insurance coverage.

7.4.1 Intergroup Variations

From a set of six conditions (cognitive difficulty, ambulatory difficulty, independent living difficulty, self-care difficulty, vision difficulty, and hearing difficulty), we assess the extent to which nonmetro elderly have at least one physical or cognitive difficulty. Among Latino, white, and African American nonmetro elderly, 53.8% of African

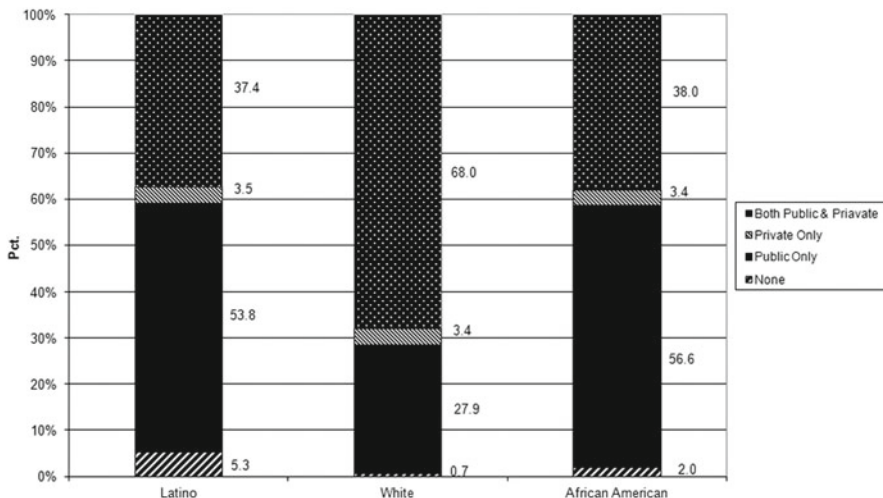


Fig. 7.4 Health insurance coverage among nonmetro elderly by race/ethnic groups, 2008 (Source: 2008 1% American Community Survey)

Americans, 53.1% of Latinos and a considerably smaller 44% of whites report at least one difficulty (data not shown). The ACS findings indicate health disparities between nonmetro minority elderly and their white counterparts.

We also determined the degree to which nonmetro elderly possess combinations of private and public health insurance (Fig. 7.4). Among nonmetro elderly, Latinos are the most likely to have no health insurance, with 5.3% lacking insurance compared to 2.0% of African Americans and 0.7% of whites. Among those with health insurance, a racial/ethnic divide exists in which minority elderly are more likely to depend exclusively on public health insurance and white elderly more likely to possess both private and public health insurance (Fig. 7.4). Latino and African American elderly have the most health-related needs but also more limited health insurance coverage.

7.4.2 *Intragroup Variations*

Given that physical or cognitive difficulties are associated with factors such as age and occupation, variations in these conditions within the nonmetro Latino elderly population are likely. US-born Latino elderly have the highest prevalence of physical or cognitive difficulties, with 57% reporting at least one difficulty (data not shown). In contrast, foreign-born Latinos have lower rates hovering around 47%, a level close to that of nonmetro white elderly (data not shown). The favorable health and mortality conditions that foreign-born Latino elderly experience are discussed below relative to the “epidemiological paradox.”

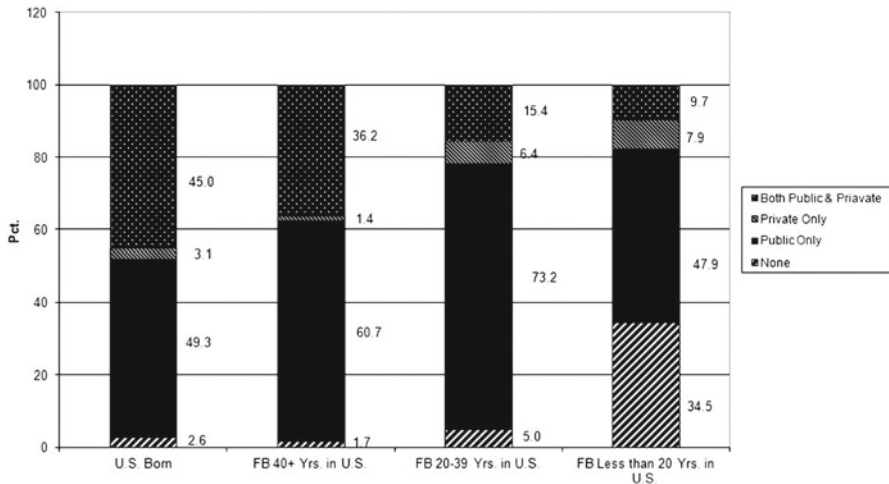


Fig. 7.5 Health insurance coverage among nonmetro Latino elderly by nativity and time in the United States, 2008 (Source: 2008 1% American Community Survey)

While native-born nonmetro Latinos are more likely than nonmetro African Americans and whites to lack any form of health insurance, an even higher level of foreign-born Latino elderly lack health insurance (Fig. 7.5). Slightly more than one-third of those who came to the US less than 20 years ago do not have any health insurance. They are also the Latino group with the highest levels of isolation, including a greater likelihood of lacking US citizenship, poorer English fluency and more limited socioeconomic resources.

7.4.3 A Contrast with Metro Latino Elderly

In addition to demographic variations among nonmetro and metro Latino elderly, we find significant differences between nonmetro and metro Latino elderly on the following two health-related dimensions (data not shown).

- Nonmetro Latino elderly (53%) are more likely to have at least one physical or cognitive difficulty than metro Latino elderly (43%).
- Nonmetro Latino elderly (5%) are slightly less likely to lack any form of health insurance than metro Latino elderly (7%).
- Nonmetro Latino elderly (37%) are somewhat more likely to have both private and public health insurance than metro Latino elderly (30%).

The health-related profile indicates unique health-related characteristics of the nonmetro Latino population, especially the foreign-born segment that has lived in the US the shortest duration. The isolated nature of nonmetro areas, the third

component of the triple jeopardy hypothesis, and limited socioeconomic resources make life difficult for nonmetro Latinos, particularly those who lack health insurance, US citizenship, and/or English proficiency. The accumulative disadvantages that nonmetro elderly Latinos face create a unique set of problems that researchers and policy makers should address.

7.5 What Do We Know About Nonmetro Latino Elderly?

We examined the sociological literature to assess the state of sociological knowledge about the nonmetro Latino elderly population. In particular, we used Sociological Abstracts with the following sets of keywords: (1) “Latino,” “Latina” or “Hispanic;” (2) “elderly,” “aged” or “aging;” and (3) “rural,” “nonmetropolitan” or “nonmetro.” The search, conducted on 6 June 2010, resulted in 11 entries including eight journal articles, one book, one book review and one paper presented at a professional meeting. The earliest result was dated 1990, though the search ranged from the earliest possible time to 2010. This data source is incomplete because it does not include publications not abstracted in Sociological Abstracts, but we believe it approximates overall knowledge about nonmetro Latino elderly. Put simply, little research has been published on this population. Only four of the eight articles focused specifically on nonmetro Latino elderly, while this population is more tangential in the other four articles.

Health is the major topic covered in the eight articles. Two articles (Coughlin et al. 2008; Tejada et al. 2009) focus on the utilization of mammograms among women. Coughlin et al. (2008) observe that nonmetro women are less likely to have had a mammogram than their metro counterparts. In their study of nonmetro Latina women 50 years of age and older living in Washington, Tejada et al. (2009) found that the major barriers preventing mammogram screening include a lack of health insurance, perceived pain associated with mammogram screening, and fear of discovering cancer. Tejada et al. (2009) also noted that foreign-born Latina women who have been in the US a shorter period of time are the least likely to have had a mammogram. But daughters and female friends are the most influential in persuading Latina women to get a mammogram.

Three other studies (Baxter et al. 1998; Baxter et al. 2001; Magilvy et al. 2000) use data from the San Luis Valley Health and Aging Study, a study conducted in southern Colorado (Alamosa and Conejos Counties) that includes 792 nonmetro Latino elderly and 596 nonmetro white elderly. Baxter et al. (2001) examined health care utilization and found that, while white elderly are more likely to reside in nursing homes, Latino elderly are more likely to use professional home nursing services. They also found that a lack of health insurance and transportation difficulties are important factors impeding healthcare utilization among Latino elderly. Baxter et al. (1998) found that Latino elderly with lower incomes and those who are more isolated tend to report lower perceived quality of life. Magilvy et al. (2000) observed that language and cultural barriers, as well as limited economic resources exacerbate

healthcare difficulties among Latino elderly, and they highlighted major struggles Latino families face in caring for elderly family members. A majority of nonmetro Latino disabled elderly lives at home and receives care from family members, a finding deserving further investigation (Goins et al. 2006). The finding illustrates costs that Latino families bear when elderly relatives are not placed in nursing homes due to cultural or economic constraints.

Two studies focused on cardiovascular disease and chronic liver disease (including cirrhosis mortality). In a study on cardiovascular disease among women, Eyler et al. (2002) discovered that poor, minority women are the most at risk of cardiovascular disease and physical inactivity. Further, Singh and Hoyert (2000) noted that Native Americans, Latinos, socially isolated individuals, and those in poverty are the most vulnerable to chronic liver disease and cirrhosis mortality.

The literature review based on Sociological Abstracts identifies health as the major theme in the small number of research articles found there. We now turn to a more general literature review to highlight additional themes found in relation to nonmetro Latino elderly. Health-related issues are the primary themes in this literature as well.

7.5.1 Language Barriers and Health Care Delivery

One of the most important problems associated with healthcare delivery for Latino elderly concerns language barriers. According to Valdez and de Posada (2006), an estimated one-third of Latinos have difficulty communicating with their physicians, including reading and understanding written instructions from them. Latinos who speak Spanish as their first language are more likely to receive better healthcare and to be more satisfied with doctors' visits, if their physician also speaks Spanish. Language concerns extend to different types of services in which not sharing a common language can create problems and discourage Latinos from seeking assistance (Riffe et al. 2008). Applewhite and Torres (2004) noted that elderly Latinos experience pronounced problems with language barriers when receiving health-related services. Such problems are aggravated in nonmetro settings where caregiving services are not readily available and Latino elderly are more likely to live in poverty (Applewhite and Torres 2004). Mockenhaupt and Muchow (1994) recommend more culturally appropriate programs to promote health awareness to nonmetro minorities, including Latinos.

7.5.2 Socioeconomic Status and Occupation

Socioeconomic status is a primary indicator of access to healthcare. Latinos are disadvantaged in accessing health services, given their low socioeconomic status (Pickett and Pearl 2001; Probst et al. 2004). The problem is particularly acute among

Latinos in nonmetro areas because of health disparities and limited healthcare, especially a shortage of health professionals (Mueller et al. 1999; Slifkin et al. 2000). Nonmetro counties are much more likely than metro counties to be designated health professional shortage areas (HPSAs) (Probst et al. 2004). The combination of nonmetro location, low socioeconomic status, and minority status results in significant disadvantages in health and healthcare for minority poor in nonmetro areas (Probst et al. 2004; Redford and Severns 1994).

Moreover, low educational attainment, poor English language skills, and undocumented status force some Latinos into the secondary labor market. In new destination areas, Latinos tend to be concentrated in meatpacking, agricultural or unskilled manual labor and service sectors (Sáenz and Torres 2003; Suro and Lowell 2002). These low-paying, labor-intensive, physically demanding jobs provide, at best, limited health insurance, pension plans and other job benefits. The long-term physical costs of working in hazardous conditions with little pay and few benefits have a negative effect on the health outcomes of Latino elderly.

7.5.3 Latino Elderly Uninsured

Health insurance coverage is the most important determinant of access to quality and timely healthcare (Institute of Medicine 2001). For people aged 65 or older, inadequate health insurance is associated with previous employment and economic conditions (Applewhite and Torres 2004). Private health insurance coverage is directly associated with socioeconomic status, and more specifically with employment history. Given Latinos overall low socioeconomic status and greater employment in the secondary labor market, elderly Latinos are vulnerable to having inadequate healthcare insurance (Sáenz and Rubio 2007). Moreover, access to health insurance is limited by place of residence and place of birth. Some states have very restrictive Medicaid eligibility requirements which contribute to Latinos being uninsured (US Department of Health and Human Services 2004). Several conditions may also prevent older Latinos from Medicare eligibility, such as employment histories in occupations not originally covered by Social Security legislation or undocumented resident status (Applewhite and Torres 2004).

7.5.4 Paucity of Healthcare Facilities

Nonmetro elderly Latinos are also challenged by poor access to healthcare facilities. The limited number of healthcare facilities are major challenges for Latino elderly in meeting their healthcare needs (Angel et al. 1996). To compound matters, public transportation is often inadequate or unavailable (Applewhite and Torres 2004). Healthcare services in new destinations of Latino settlement tend to be less equipped with service providers who speak Spanish. Results for locales not prepared for

linguistically different populations (Applewhite and Torres 2004) may include increased dissatisfaction between patient and healthcare provider, miscommunication, misinterpretation of patients' concerns, misdiagnosis, poor patient compliance, inappropriate follow-up scheduling, too much testing, and an increase in health disparities (Torres 2004).

7.5.5 Health Patterns and the Epidemiological Paradox

Latinos have relatively higher rates of infectious diseases and chronic conditions than whites, including higher rates of diabetes, hypertension, and liver disease (US Department of Health and Human Services 2004). Such health outcomes are associated with socioeconomic status. According to the epidemiological paradox, also known as the Latino health paradox, the traditional socioeconomic-health model does not predict Latino health accurately. The Latino health paradox suggests that Latinos, specifically Mexican immigrants, have more favorable health outcomes than their socioeconomic profile would predict (Hayes-Bautista 2002; Rogers et al. 2000). This is framed as a paradox because Latinos, despite their immigrant background, low educational attainment, high levels of poverty, and limited resources available for healthcare, have health outcomes that are similar or even surpass those of whites (Markides and Coreil 1986; Scribner 1996).

The Latino health paradox first gained popularity because of the unexplainable healthier birth outcomes among Latina than white females (Markides and Coreil 1986). Further, foreign-born Latinas have healthier birth outcomes than native-born Latinas. No common explanation has been given for why foreign-born Latinas have this advantage, but some researchers credit healthy social behaviors such as good nutrition, lower rates of risky behaviors like smoking and drinking, lower levels of stress, a supportive Latino culture, migration selectivity (i.e., the healthy migrant hypothesis) (Aranda and Miranda 1997; Jasso et al. 2004; Palloni and Morenoff 2001; Tucker et al. 1997), and the salmon bias perspective explained below (Palloni and Arias 2004).

Protective cultural traits appear to dissolve with acculturation. The longer Latinos live in the US, participate in mainstream social institutions such as education, the labor market, and religion and acculturate, the more they increase risky behaviors and lose their health advantage. This is particularly evident with the younger Latino population, which is highly influenced by popular media and peers in the educational system (Torres 2004). Lee and Cassidy (1985) observed that nonmetro older people have fewer kinship interactions than metro elderly, which suggests that the supposed benefit of kinship networks in the Latino population, which contribute to the Latino health paradox, may be less accessible to nonmetro Latino elderly. Another explanation is migration selectivity, or healthy migrant hypothesis, which suggests that the healthiest Latinos from their country of origin self-select to migrate to the US, and hence have lower mortality rates (Jasso et al. 2004; Palloni and Arias 2004). The healthy migrant hypothesis suggests that Latino immigrants to the US

are healthier than the people who remained in their country of origin. The salmon bias explanation suggests a return migration to country of origin among sick and elderly immigrants. This return migration of Latino immigrants causes inconsistencies whereby lower numbers of deaths are captured in US statistics than actually occur (Abraído-Lanza et al. 1999; Franzini et al. 2001).

7.6 Research and Policy Needs Related to Nonmetro Latino Elderly

Our literature review demonstrates limited research on and knowledge of nonmetro Latino elderly. Due to unique characteristics of the nonmetro Latino elderly population, we cannot simply rely on the larger literature on nonmetro elderly to understand and meet the needs of the nonmetro Latino elderly population. Four major areas require research and policy development to better understand and meet the needs of this population.

7.6.1 Data Development

The most basic research need for the nonmetro Latino elderly population is the development of data sources on the group. This problem affects nonmetro areas in general. Indeed, due to their small populations and issues of confidentiality, the American Community Survey requires multiple years of data to provide a statistical profile of nonmetro counties and places. Furthermore, as seen with the ACS data used in our analyses, nonmetro/metro residence is not identified for a segment of the population.

Large-scale national health data sets also tend to contain a relatively small number of cases to study nonmetro elderly in general and nonmetro elderly Latinos in particular. Greater attention needs to be paid to oversampling in order to provide sufficient cases of nonmetro elderly, including Latino elderly, to conduct analyses. Because aging is a process best understood from a life-course perspective (Elder and Giele 2009), it is important to develop longitudinal data sets to gain an understanding of the aging process among nonmetro Latino elderly. By using a life-course perspective, researchers are able to highlight and focus on people's location in the social system, the historical period in which they live, and how personal biographies shape the experiences of older people (Stoller and Gibson 2001).

Ethnographic studies could capture the dynamics of aging and develop a better understanding of the needs of nonmetro Latino elderly. One such study that can serve as a model is the San Luis Valley Health and Aging Study, a long-term project focusing on two counties in southern Colorado (Baxter et al. 1998; Baxter et al. 2001; Magilvy et al. 2000).

7.6.2 Health Insurance Coverage

Inadequate healthcare insurance is the major obstacle to nonmetro Latino elderly in obtaining healthcare. We showed above that a noticeable portion of this population lacks any form of health insurance. Without adequate health insurance, elderly may have to forego routine healthcare that helps prevent the onset of more serious health problems, with preventive and maintenance healthcare being limited. Many Latino elderly suffer from hypertension, high cholesterol, heart disease and diabetes, all of which require ongoing treatment, monitoring, and medication. Inadequate health insurance can have catastrophic economic consequences for Latino elderly and their families who are just getting by economically. Even with the passage of a universal healthcare system, a portion of Latino elderly will be excluded because they do not hold US citizenship. Policymakers need to craft programs to help this population deal with its healthcare needs.

7.6.3 Family Stress

The Latino population is commonly portrayed as a group that places a high premium on family. Relatively few Latino elderly are institutionalized, and a high share lives in multigenerational households. This “taking care of their own” places a great amount of stress—economic and emotional—on the families of Latino elderly with limited socioeconomic resources. This is likely most problematic for Latina women, who, due to differential sex role expectations, are viewed as caretakers of elderly parents and other relatives. This suggests a need for affordable adult daycare and nursing home care for nonmetro Latino elderly.

7.6.4 New Destinations

One of the most interesting demographic shifts in the Latino population occurring over the last few decades is the movement of Latinos to areas that have traditionally had few Latinos. These areas, commonly referred to as “new destinations,” are located in the South and Midwest regions (Gouveia and Sáenz 2000; Kandel and Cromartie 2004; Kandel and Parrado 2005; Sáenz et al. 2003; Stull et al. 1995; Torres 2000; Walker et al. 2007; Zúñiga and Hernández-León 2005; Sáenz 2005). Many of the new destinations are nonmetro communities where Latinos have filled meatpacking jobs. As time has passed and Latinos have planted roots in new destination areas, we have seen rapid growth of the Latino elderly population in these locations. Of the ten states with the most nonmetro Latino elderly in the country (Fig. 7.1), two are considered new destination states in the South (North Carolina) and Midwest (Kansas). But we do not fully understand how well Latino elderly are

integrated into these communities and how well their needs are being met because these places have traditionally not had large Latino elderly populations. Further, many of the elderly in new destination areas likely worked in meatpacking or poultry plant jobs, which tend to be dangerous and take a toll on the well-being of the body.

7.7 Conclusions

Due to the youthfulness of the Latino population, discussions of the needs of the elderly segment of the population are often overlooked. Yet, we know that the Latino elderly population is growing rapidly and will expand significantly in the coming decades, particularly in nonmetro areas. Latino elderly already account for at least 8% of the nonmetro Latino population in three southwest states—Arizona, New Mexico, and Texas. But little research is available to advance understanding of this population and its needs. Our chapter developed a profile of the nonmetro Latino elderly population, and what we found is a diverse group of elderly with unique needs associated with geographic and social isolation, limited socioeconomic resources and, for many who are immigrants, lack of US citizenship and English fluency. Problems nonmetro Latino elderly experience are compounded by high levels of physical and cognitive disability and inadequate health insurance coverage.

Sociologists and other social scientists must engage in research to inform needed public policies to assist nonmetro Latino elderly live their lives. The isolated nature of nonmetro areas and limited availability of healthcare professionals and facilities places Latino elderly in vulnerable positions. They face health disparities across numerous dimensions—due to their race/ethnicity, age and geographic location. The conceptualization of race and ethnicity and its impact on health need to be broadened to take into consideration life stressors, such as racism and discrimination, associated with minority groups in the US, and how these social ills affect health outcomes (Villa and Torres-Gil 2001). Studies need to be conducted that critically explore the impact of institutional racism, segregation and bad health practices and how experiencing such injustices negatively affect the health of the Latino population.

Research should consider the triple jeopardy hypothesis and the broader implications structural inequalities have on Latino elderly and their families. It is also critical to note recommendations from critical gerontologists that encourage social scientists to move beyond solely a research agenda to a practical, life-changing, activist approach. As quoted in Holstein and Minkler (2007, p. 13), Chris Phillipson and Alan Walker have stated: “a more value-committed approach to social gerontology – a commitment not just to understand the social construction of ageing but to change it” is needed.

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Chapter 8

Elderly Asian Americans in the Nonmetropolitan and Rural United States

Dudley L. Poston, Yu-Ting Chang, and Lei He

8.1 Introduction

This chapter focuses on aging Asian Americans in nonmetropolitan (nonmetro) and rural America. We use recent data from the United States (US) Bureau of the Census to describe their demographic structure. According to data from the US Census Bureau, an estimated 4.9% of the US population in 2005, i.e., 14.4 million people, were Asian (US Census Bureau 2010), the largest relative and absolute number of Asians ever present in the US. We will present a brief historical review of Asians in the US but will first present a series of definitions of the key concepts and terms used in this chapter. Our historical review discusses their emergence in the US over time. Finally, we will discuss elderly Asian Americans in nonmetro and rural America.

8.2 Terms and Concepts

We first define what we mean by “elderly.” We use two terms, the “old” and the “oldest old.” The “old” are persons of age 65 or greater; and the “oldest old,” persons of age 85 or greater. The literature on aging is mixed with respect to the definitions of the old and the oldest old. Some follow our definitions (Poston 2005), while others use the age of 60+ to define the old, and 80+ to define the oldest old (Velkoff and Lawson 1998; Poston and Min 2008). Another reason we use the ages of 65+ and 85+ is that the authors of many of the other chapters in this book also use these definitions.

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A second issue of concern is the definition of Asia, and by implication, Asian American. First we ask, what is Asia? Asia is usually meant to represent a separate continent. However, this is not really true. Strictly speaking, Asia is not a separate continent, i.e., a distinctive landmass of the world. Asia is a part, the largest part, of the continent of Eurasia; Europe is the other part. The terms Asia and Europe were first used by the ancient Greeks. The Greeks knew well what was meant by Asia; it was land to their east “where they had established small colonies but which was inhabited by people who were often their enemies” (Bowring 1987, p. 30). The Greek definition of Asia was limited primarily to the Persian Empire. Today, Asia refers to a much larger part of the Eurasian landmass, the part that is bounded by the Arctic, Pacific and Indian oceans. Its western boundary with Europe runs roughly north/south from the eastern Ural Mountains to the Caspian Sea to the Black Sea to the Aegean Sea and finally to the Mediterranean Sea.

This geographic definition of Asia includes East Asia (e.g., China and Japan), Southeast Asia (e.g., Vietnam and Indonesia), South Asia (e.g., India and Pakistan), and West Asia (e.g., Iraq, Turkey and the Gulf countries). For many reasons, this is too broad a definition of Asia for our analysis of Asian Americans. Lee has noted, for instance, that “for most non-Asian Americans, ‘Asian’ means Chinese, Japanese, or ‘oriental.’ ... Today the largest Asian American ethnic groups include not only East Asians such as Chinese, Japanese and Koreans, but also Filipinos, Asian Indians and Vietnamese” (Lee 1998, p. 4). In this chapter we include as Asian American the above groups along with all other Southeast Asian groups such as the Cambodians, Thais and Laotians, and all other South Asian groups such as Sri Lankans.

Our analyses in this chapter use data from the decennial censuses and American Community Surveys. In many of our analyses, we present demographic and socioeconomic information about Asian Americans for the 2 years of 1990 and 2009. The 1990 data are mainly drawn from the 1% Public Use Microdata Samples of the 1990 Census. Our 2009 data are drawn from the 2009 American Community Survey. In recent years the US Census Bureau has redesigned its decennial “long form” questionnaire into an ongoing “continuous measurement” survey, known as the American Community Survey (ACS). Every year since 2005, about 1 in 40 addresses, or 2.5% of the US population, is included in the ACS. The annual sample size of the ACS is around three million addresses. In many of the tables reporting information for 1990 and for 2009, since the numbers are based on samples and not on complete counts, we refer to them as “estimates,” even though in several of the tables we have used person weights to inflate the sample counts to reflect the total population.

The next issue is the definition of Asian Americans. The census and ACS use four distinctive ways to define Asian Americans. One way is to use person data from the race question (entering one of the Asian racial responses); this is the approach we use to identify Asian Americans. In the social science literature dealing with Asian Americans, this is by far the most common approach (Barringer et al. 1993; Lee and Edmonston 1994; Min 1995; Lee 1998; Poston et al. 2001). Also, “Asian” is a broad racial category officially recognized by the US Office of Management and Budget

(OMB). Asians are defined by the OMB as “persons with ethnic origins in any of the original peoples of the Far East, Southeast Asia [and] the Indian Subcontinent” (Lee 1998, p. 5). The Asian racial categories in the decennial census and the American Community Survey include Chinese, Filipino, Korean, Vietnamese, Japanese, Asian Indian, and Other Asian. “People from countries west of Pakistan – Afghanistan, Iran, and Turkey, for example – are considered white, and not Asian” (Lee 1998, p. 8). The peoples of West Asia are thus not included in our analyses.

In our chapter we include as Asian any person who identified as belonging to any of the above Asian racial groups by itself or in combination with any other races. In the US censuses and the American Community Surveys, since 2000, respondents have been permitted to identify themselves as belonging to one or more races. In 2005, single race Asians comprised 4.3% of the US population (14.4 million people), whereas, as already noted above, single-race Asians plus those in combination with one or more other races, represented 4.9% of the population (US Census Bureau 2010).

This chapter is concerned with portraying Asians in the rural and the nonmetro areas of the US. We mainly restrict our analyses to nonmetro Asian Americans (the nonmetro category consists of micropolitan areas and the residual category of neither metropolitan (metro) nor micropolitan), and much less so, to rural Asian Americans. This decision is due almost entirely to the availability of data. We turn next to a brief discussion of the history of Asians in the US.

8.3 Brief History of Asians in the US

According to Bartlett, the first Asians to enter the territory of what would later be the United States were most likely “Filipino sailors who jumped ship and fled into a cypress swamp [near] the Spanish provincial capital of New Orleans in 1763” (Larry Bartlett, quoted in Barringer et al. 1993, p. 21). However, the history of Asian Americans really began about 1849 with the immigration of large numbers of Chinese to work in the gold mines in California. These early immigrants were mainly from a few counties in Guangdong Province in southern China. The discovery of gold in California provided them the opportunity “to make money on the one hand, and ... to escape civil unrest and a set of disasters and poor situations in China” (Barringer et al. 1993, p. 21). An estimated 288,000 Chinese entered the US between 1849 and 1882. Also included in this number were the thousands of Chinese who helped build the transcontinental railroad in the 1860s. However, many eventually returned to China (Black 1963). Like most immigrants, the Chinese first came to the US as laborers in search of work and wages, with San Francisco being the primary port of entry. To this day, the Chinese name for San Francisco is 舊金山 (*Jiu Jin Shan*), translated as “Old Gold Mountain” (Poston and Luo 2007).

During the rapid growth period of the frontier economy in the US between 1850 and 1880, thousands of Chinese immigrated mainly to the western US under the

indenture system as miners, railroad workers, and agricultural laborers. They also came as cooks, laundrymen and in other jobs that American workers did not want. Later they were instrumental in building the western part of the trans-continental railroad. During this period, the US needed workers. Asian immigrants to the US were almost exclusively from China. Owners of factories and vineyards preferred Chinese workers because they were perceived to be docile, amiable, and capable (Black 1963). Few students emigrated to the US from China during these years (Poston and Luo 2007).

But because of both real and imagined competition of Chinese immigrants with native-born white workers, and also because of extensive racial propaganda, the US Congress passed the Chinese Exclusion Act of 1882, essentially prohibiting the further immigration of Chinese to the US (Poston 1988). Japanese workers were then substituted for Chinese workers. The numbers of Japanese in the US increased accordingly, so that the Census of 1900 counted about 86,000 Japanese, along with 119,000 Chinese. Like the Chinese who preceded them, the “Japanese immigrants were mostly males, laborers from areas of Japan where agriculture was suffering hard times” (Barringer et al. 1993, p. 22).

The Chinese Exclusion Act of 1882 was originally meant to last for only 10 years. However, it was renewed in 1892, and in 1904 it became a permanent part of US immigration policy. Under special provisions, small numbers of Chinese continued to come to the US during the early decades of the 1900s. The Chinese Exclusion Act was not repealed until 1943, and it was done so “in part because China was a war-time ally of the United States” (Wong 1986, p. 152).

The increasing numbers of Japanese workers also incurred the wrath of white workers in America, and this antagonism was resolved by the Gentlemen’s Agreement of 1907–1908 in which Japan agreed to limit the US-bound immigration of its citizens to non-laborers. Before the turn of the century, a small number of Koreans were recruited to work in Hawaii, but in 1905 Koreans were prohibited by the Japanese from immigrating to the US. Filipinos were also recruited in the early 1900s to work in the sugar plantations in Hawaii. Until 1934 they were permitted to move freely to the US as nationals, because the US had annexed the Philippine Islands in 1898. Indeed in 1930, there were more Filipinos in the US than Chinese (Wong 1986; Poston 1988).

The restrictive immigration laws of the 1920s essentially halted Asian immigration into the US. These immigration policies consisted of a series of quota acts designed to reduce immigration from Eastern and Southern Europe, in favor of immigration from Northwestern Europe, and to allow virtually no immigration from Asia. Indeed, under these laws, China, Japan and Korea received no quotas.

In 1965, during the administration of President Lyndon B. Johnson, US immigration policy was liberalized. The new law, which became effective in 1968, abolished quotas based on national origins. Each country of the world was more or less put on an equal footing and allowed a maximum of 20,000 immigrants.

In subsequent years, a number of special provisions have also been enacted allowing immigrant admissions over and above the numerical restrictions stipulated by law.

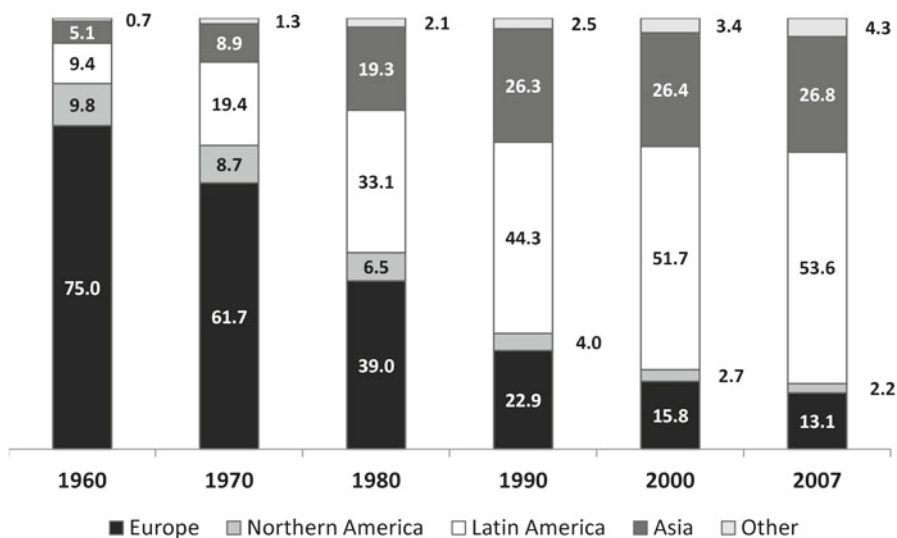


Fig. 8.1 Percent distribution of the foreign-born population by region of birth, United States: 1960–2007 (Sources: US Census Bureau, Decennial Census of the United States, 1960–2000, and the American Community Survey, 2007)

For example, the Chinese Student Protection Act of 1992, a bill sponsored by Representative Nancy Pelosi of California, granted permanent resident status to Chinese immigrants who were in the US after June 4, 1989 and before April 11, 1990. Its stated purpose was to prevent the political persecution of Chinese students in the aftermath of the Tian An Men demonstrations and protests in China of 1989. One of its provisions was that permanent residency status slots granted to Chinese nationals under the act would be subtracted from the immigration spaces available in later years. It resulted in large numbers of Chinese temporary immigrants becoming permanent immigrants between 1992 and 1994. Ironically, the primary beneficiaries of this act, reportedly, were undocumented immigrants from Fujian Province who were not students at all (Luo 2005).

Gardner and his associates (1985) have estimated that as early as 1981, over 60% of Asian immigrants were admitted outside the numerical restrictions. The 1965 law and subsequent special provisions have been responsible for the dramatic increase in the number of Asians in the US. The Asian increase may be illustrated by examining the countries of origin of the foreign-born populations residing in the US (see Fig. 8.1). In 1960, just over 5% of the US foreign-born population hailed from an Asian country. By 2007, the Asian representation of the foreign-born had increased almost five-fold, to nearly 27%. The major changes illustrated by Fig. 8.1 in the representation of Asian and Latin American immigrants in the US are due in large part to President Johnson's Immigration Act of 1965. In the next section we turn to a discussion of elderly Asian Americans in the nonmetro US and their changing demographic dynamics between 1990 and 2009.

8.4 Trends of Population Aging of Asian Americans in Nonmetropolitan America

8.4.1 *Population Change Time: 1990–2009*

We first examine changes in the Asian population over time, from 1990 to 2009. In the year 2009, the six largest Asian American groups were the Filipinos, Chinese, Japanese, Asian Indians, Koreans and Vietnamese. Although the number of Asian Americans more than doubled in size between 1990 and 2009, from about 6.8 million to 15.7 million, an increase of around 130% (see Table 8.1), Asians living in nonmetro areas increased by only 70% (from 375,000 to 636,000). Filipinos and Japanese were the two largest Asian American groups in nonmetro areas in 1990, but the numbers of Chinese and Filipinos grew so rapidly in the next two decades (at 36 and 34%, respectively) that by 2009 Filipinos and Chinese had become the largest Asian American groups residing in nonmetro areas. Nonmetro Vietnamese grew the fastest (71%), but they were still ranked sixth in 2009 among the six major groups because of their small number. Japanese were the only group with a nonmetro rate of change between 1990 and 2009 that was not positive.

The numbers of nonmetro Asians aged 65 years and older increased among all Asian groups between 1990 and 2009. The estimated 58,000 older Asian Americans in nonmetro areas in 2009 comprised about 9% of all nonmetro Asians. They almost doubled in size in the two decades; indeed the elderly populations of all the major Asian American groups, except for the Japanese, grew rapidly. Korean nonmetro elderly increased dramatically by 1,045%, and Asian Indian, Filipinos, Chinese and Vietnamese by 192, 125, 118 and 100% respectively; older Japanese increased only by 19% (Table 8.1).

8.4.2 *Age and Sex Composition*

We now examine the age and sex structure of the Asian American population in nonmetro America. We present two population pyramids, which are graphic representations of the age and sex distributions of populations. Figure 8.2 shows two sets of superimposed pyramids, one for all Asian Americans in the US, and a second for Asian Americans living in the nonmetro US, for the years of 1990 and 2009. In each of the two pairs of pyramids, the 1990 age-sex distribution is stacked with the 2009 age-sex structure; the 1990 pyramid is shaded. Population pyramids require data on males and females in 5-year age categories; since the age-sex-specific sample numbers from the 2009 ACS are too small for even the largest of the Asian American groups living in nonmetro areas, we have restricted the pyramids in Fig. 8.2 to all Asian Americans.

Table 8.1 Estimated^a population growth rates of Asian Americans living in nonmetropolitan areas in the US: Six major Asian Groups and a Residual Asian Group, 1990 and 2009

Asian group	1990			2009			1990-2009 Percent change		
	<65	65+	Total	<65	65+	Total	<65	65+	Total
	Number (%)	Number (%)	Number (%)	Number (%)	Number (%)	Number (%)	Number (%)	Number (%)	Number (%)
Chinese	44,605 (11.88)	2,103 (0.56)	46,707 (12.44)	59,054 (9.28)	4,581 (0.72)	63,636 (10.00)	32.4	117.8	36.2
Japanese	72,276 (19.25)	16,783 (4.47)	89,059 (23.72)	42,700 (6.71)	20,045 (3.15)	62,745 (9.86)	-40.9	19.4	-29.5
Filipino	82,113 (21.87)	7,021 (1.87)	89,134 (23.74)	103,409 (16.25)	15,782 (2.48)	119,127 (18.72)	25.9	124.8	33.6
Asian Indian	41,338 (11.01)	919 (0.24)	42,258 (11.26)	49,318 (7.75)	2,680 (0.42)	51,991 (8.17)	19.3	191.6	23.0
Korean	39,048 (10.40)	308 (0.08)	39,356 (10.48)	38,691 (6.08)	3,526 (0.55)	42,254 (6.64)	-0.9	1,044.8	7.4
Vietnamese	19,787 (5.27)	676 (0.18)	20,463 (5.45)	33,727 (5.30)	1,349 (0.21)	35,064 (5.51)	70.5	99.6	71.4
Other Asians ^b	47,270 (12.59)	1,209 (0.32)	48,479 (12.91)	251,490 (39.52)	10,054 (1.58)	261,481 (41.09)	432.0	731.6	439.4
Total nonmetro Asians	346,437 (92.27)	29,060 (7.74)	375,460 (100.00)	578,389 (90.89)	57,973 (9.11)	636,362 (100.00)	67.0	99.5	69.5
Total Asians	6,429,481 (93.88)	419,135 (6.12)	6,848,616 (100.00)	14,337,366 (91.17)	1,388,604 (8.83)	15,725,969 (100.00)	123.0	231.3	129.6

Sources: 1990 Census 1% sample and 2009 American Community Survey

Notes: ^aEstimates are adjusted for survey design effects by using sampling weights

^bAll other Asian American ethnic groups and all combinations

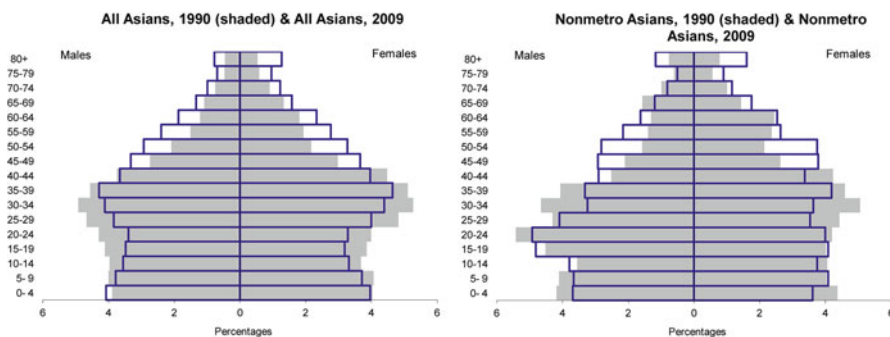


Fig. 8.2 Age-sex composition of all Asian Americans and Asian Americans in nonmetropolitan areas: 1990 (*shaded*) and 2009 (Sources: 1990 Census 1% sample and 2009 American Community Survey sample)

Let us look first at the left pyramid, the one for all Asian Americans. The shape of the 2009 pyramid portrays a growing elderly Asian population, and in this respect it is different from the 1990 pyramid, with its broad distribution of young adults. The excess numbers of females at the oldest ages is indicative of better female compared to male life expectancy.

Turning next to Asian Americans living in nonmetro areas (the right pyramid in Fig. 8.2), we first observe that the shapes of the 1990 and 2009 pyramids show greater numbers of males versus females at ages 15–19, 20–24 and 25–29, but larger numbers of females versus males in the latter age groups, namely ages 30–34 and older. The 2009 nonmetro pyramid, however, shows a larger number of older Asians (80+) than the 1990 pyramid. And once again, the excess numbers of Asian females at the oldest ages reflect the better life expectancy of females compared to males.

The pyramids show by the year 2009 a much greater presence of elderly Asian Americans. Hence, we turn next to a discussion of aged dependency.

8.4.3 Aged Dependency

A discussion of aged dependency is particularly important when appraising the extent to which the aged members of the population depend on younger people for economic, social and physical resources. One way to operationalize the concept is with the aged dependency ratio, i.e., the ratio of the older-age population (persons 65 years of age and over) to the working-age population (persons 15–64 years of age), multiplied by 100. The ratio indicates the number of supposedly aged dependents in the population per 100 potential producers. The higher the ratio, the more people each worker needs to support. The assumption behind this ratio is that most people of the ages 15–64 comprise the economically producing population, and most people of the age 65+ comprise the elderly dependent population (Poston and Bouvier 2010).

Table 8.2 Estimated^a aged dependency ratios, parent support ratios, and potential support ratios of Asian Americans living in nonmetropolitan areas of the US: Six Major Asian Groups and a Residual Asian Group, 1990 and 2009

Asian group	Aged dependency ratio		Parent support ratio		Potential support ratio	
	1990	2009	1990	2009	1990	2009
Chinese	5.79	9.74	1.88	17.39	17.29	10.26
Japanese	29.01	51.47	17.97	54.65	3.45	1.94
Filipino	11.29	17.92	21.65	13.93	8.86	5.58
Asian Indian	3.18	6.34	5.56	4.81	31.47	15.78
Korean	1.26	11.00	0.00	8.07	(**)	9.09
Vietnamese	4.84	5.33	0.00	5.38	20.67	18.77
Other Asians ^b	3.89	6.26	18.27	7.91	25.72	15.98
Total Asians	11.38	13.34	13.89	17.77	8.79	7.50

Sources: 1990 Census 1% sample and 2009 American Community Survey

Notes: ^aEstimates are adjusted for survey design effects by using sampling weights

^bAll other Asian American ethnic groups and all combinations

**Denominator too small for calculating a ratio

Table 8.2 shows the degree of the elder dependency burden for each of the six major Asian groups in nonmetro America in 1990 and in 2009. The aged dependency ratio not only increased between 1990 and 2009 for all nonmetro Asians by about 2/100, but also increased for each of the six major Asian groups. The Japanese had the highest aged dependency ratios in both 1990 and 2009 of all the Asian American groups, 29.0 and 51.5, respectively. This means that in nonmetro America in 2009, for every 100 working Japanese American, there were 52 aged dependents. This is a ratio almost twice as large as it was in 1990. It shows that nonmetro Japanese Americans are experiencing a very rapid aging of its population.

One way to place the Japanese ADR of 52 in 2009 in perspective is to recognize Rowland's (2003) statement that the developed world is projected to have an ADR of 41 by the year 2050. The Japanese living in nonmetro areas of the U.S. had a much higher ADR in 2009.

Relatively speaking, the ADRs are lower for the other Asian American groups. The Vietnamese had the lowest ADR of 5.3 in 2009. Overall, between 1990 and 2009, the aged dependency ratios of nonmetro Asian Americans increased, reflecting the result of both aging in place, and retirement in-migration from metro areas along with the out-migration of young adults from nonmetro areas, especially those areas focusing on agriculture and mining (Siegel 1993; Swanson 1996, p. 48).

Another index that demographers use to measure old-age dependency also endeavors to capture the degree of elderly support, and is known as the Parent Support Ratio; it is the ratio of persons 80 years of age and older per 100 persons aged 50–64 (Velkoff and Lawson 1998; Wu and Wang 2004; Poston and Bouvier 2010). It shows the relative burden of the oldest-old population, namely, the elderly parents, on the population aged 50–64, namely, the children of the elderly parents. The parent support

ratio provides a rough estimate of the amount of family support required for the oldest-old members of the population (Kinsella and Taeuber 1993, p. 58).

Table 8.2 provides data on the degree of elderly parental support among the six major Asian groups in nonmetro America for 1990 and 2009. The parent support ratio has increased from 14 to 18 for all nonmetro Asians from 1990 to 2009. For all nonmetro Asians in 2009, there are about 18 persons aged 80 and older per 100 persons aged 50–64. In comparison, the projected parent support ratio for the year 2050 in the more developed countries is 28 (United Nations Population Division 2002).

As was the case with ADRs, nonmetro Japanese have the highest parent support ratio of all the nonmetro Asian American groups, a ratio that is about twice the size of the projected ratio for 2050 of the more developed countries of the world. For Chinese, Koreans, and Vietnamese, the burden of elderly persons on their children also increased between from 1990 to 2009; and for Filipinos and Asian Indians, it decreased.

In 2001, the United Nations developed still another way of measuring elderly support; it is known as the Potential Support Ratio. It is the inverse of the aged dependency ratio. That is, it represents “the extent that persons of working age [15–64] can be seen as supporting the older population [65 years or older], and is the ratio between the two” (United Nations Population Division 2001, p. 7). The PSR value stands for the number of working persons in the population who “support” every one older person in the population. Table 8.2 shows the potential support ratios for the six major Asian groups, plus the residual “other” Asian American group, in nonmetro America in 1990 and 2009. The potential support ratio decreased by about 15%, from 8.8 in 1990 to 7.5 in 2009 for all nonmetro Asian Americans. For the past 20 years, the six major Asian American groups have seen declines in their potential support ratios. Vietnamese and Asian Indians had the higher ratios, 18.8 and 15.8, respectively; this means that in 2009 there were about 19 “supporting” Vietnamese for every one older person, and about 16 “supporting” Asian Indians for every one older person. Relatively low ratios are found for the Japanese (1.9) and the Filipinos (5.6).

In our examination of the aging dynamics of the Asian American population in nonmetro areas of the US, it is clear that by 2009, nonmetro Asian Americans have aged very rapidly. The Asian population ages 65 and older increased by 231% overall between 1990 and 2009, and by 100% in nonmetro areas. In addition, the levels of dependency have increased considerably between 1990 and 2009. This has especially been the situation for nonmetro Japanese Americans; they by far report the highest aged dependency ratio and parent support ratio in 2009, and the lowest potential support ratio. In an aging population, the number of persons at risk of disability greatly increases, creating an increased need for medical and social services, among other requirements (Rogers 1999). In a later section, we discuss some of the health and health-related issues for Asian Americans residing in nonmetro areas of the US. We turn now to a discussion of the geographic distribution of Asian Americans.

8.5 The Geographic Distribution of Asian Americans

Asian Americans make up a very small fraction of the total US population, and this is especially the situation in rural and nonmetro areas. According to sample data from the 2009 American Community Survey, respondents self-identifying only as Asian, i.e., the so-called “Asian alone” category, accounted for but 1.6% of the rural US population, and only 0.4% of the nonmetro population (Table 8.3). Although there are no group-specific available data in the census samples and American Community Surveys for “rural” Asians, the data do allow us to distinguish Asian Americans by metro and nonmetro residency.

The Asian American population is heavily concentrated in metro areas. In 2009, only 4% of Asian Americans were identified as living in nonmetro areas (Table 8.4). Similarly, in 2009, 4% of Asians aged 65 and over, and 6% of Asians aged 85 and over, resided in nonmetro areas. Despite the fact that by far the majority of older Asian Americans reside in metro areas, the metro/nonmetro distributions of the Asian elderly vary among the different Asian groups. As the smallest population of the six major Asian groups, Japanese Americans have the highest percentage of their elderly living in nonmetro areas in 2009, namely, 11% of older Japanese Americans, and 15% of oldest old Japanese Americans. Among the remaining five major Asian American groups, Filipino Americans have the next highest percentage of elderly in nonmetro areas, 5%; the Chinese, Asian Indians, Koreans, and Vietnamese Americans all have less than 3% (Table 8.4).

With regard to the oldest old population (persons 85+), Asian Americans were even more concentrated in metro areas, especially Asian Indians and Koreans, with less than 1% of their oldest old populations located in nonmetro areas. Almost 15% of the oldest old Japanese were in nonmetro areas in 2009, which is by far the highest percentage of the major Asian groups (Table 8.4).

Table 8.3 Percent of the total population who are Asian alone: 2009

Geographic area	Percent	Margin of error (\pm)
United States	4.5	0.1
<i>Urban and rural</i>		
Urban	5.4	0.1
Rural	1.6	0.1
<i>Inside and outside metropolitan and micropolitan statistical area</i>		
In metropolitan or micropolitan statistical area	4.8	0.1
In metropolitan statistical area	5.2	0.1
In principal city	6.7	0.1
Not in principal city	4.2	0.1
In micropolitan statistical area	1.2	0.1
In principal city	1.7	0.1
Not in principal city	0.9	0.1
Not in metropolitan or micropolitan statistical area	0.4	0.1

Sources: US Census Bureau, 2009 American Community Survey, Table-GCT0204

Table 8.4 Estimated percent of Asian Americans living in nonmetropolitan areas of the US: Six Major Asian Groups and a Residual Asian Group, 2009^a

Asian groups	All ages		65+		85+	
	Nonmetro areas (%)	(n) ^b	Nonmetro areas (%)	(n) ^b	Nonmetro areas (%)	(n) ^b
Asian	4.05	(146,341)	4.18	(14,577)	5.74	(1,509)
Chinese	1.99	(31,262)	1.31	(3,622)	1.01	(451)
Japanese	8.23	(7,582)	11.06	(2,258)	14.75	(413)
Filipino	4.79	(23,397)	5.24	(3,112)	6.61	(269)
Asian Indian	2.00	(23,897)	1.64	(1,584)	0.07	(77)
Korean	3.14	(12,110)	2.77	(1,288)	0.27	(91)
Vietnamese	2.38	(13,746)	1.12	(1,186)	2.74	(100)
Other Asians ^c	6.78	(34,347)	7.04	(1,527)	7.44	(108)

Sources: US Census Bureau, 2009 American Community Survey

Notes: ^aEstimated percentages are adjusted for survey design effects by using sampling weights

^bNumber of observations in the sample

^cAll other Asian American ethnic groups and all combinations

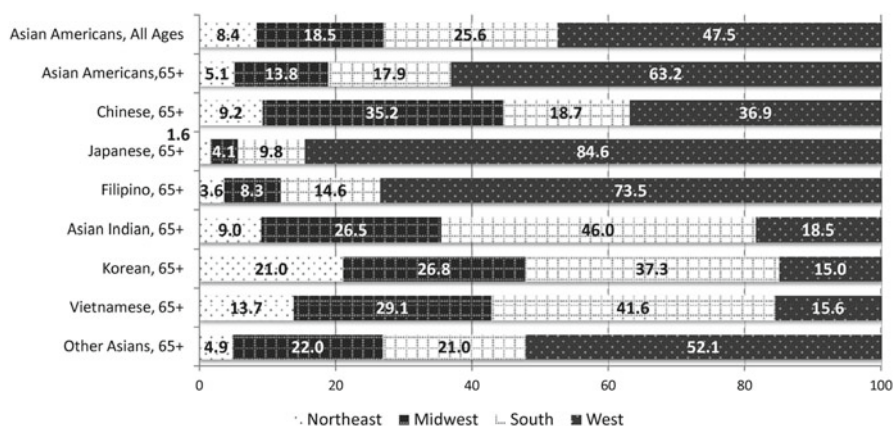


Fig. 8.3 Regional distribution of Asian Americans in nonmetropolitan areas: 2009 (Notes: Percentages are adjusted for survey design effects by using sampling weights. Source: US Census Bureau, 2009 American Community Survey)

We next consider the regional distribution of the elderly Asian American population. Most nonmetro Asians were located in the West, especially those aged 65 and over. Almost two-thirds of old nonmetro Asians lived in the West (Fig. 8.3); the figure is 80% for oldest old nonmetro Asians (data not shown). Concerning the regional distributions of each major Asian group, the West accounts for the majority of old Japanese, old Chinese, and old Filipinos, while the South accounts for the majority of old Asian Indians, Koreans, and Vietnamese Americans (Fig. 8.3).

According to 2009 ACS data, the oldest old nonmetro populations in the specific Asian groups are even more concentrated. To illustrate, 100% of Asian Indians and Vietnamese aged 85 living in nonmetro areas in 2009 were located in the South,

and over 90% of the oldest old Japanese, Filipinos and Vietnamese resided in the West (data not shown). In contrast, oldest old nonmetro Chinese Americans were more evenly distributed with 56% in the West, 23% in the South, 22% in the Northeast, and none in the Midwest (data not shown). However, we remind the reader that these are estimates based on small samples, with not inconsequentially large confidence intervals.

Despite the uneven distributions of the nonmetro Asian populations in the four regions, the metro and nonmetro distributions of the Asian populations also vary across the regions. For instance, 13% of Japanese aged 65 and over in the South lived in nonmetro areas, while less than 1% of Chinese, Korean and Vietnamese in this age group in the West lived in nonmetro areas (data not shown). Almost one-third of the oldest old Japanese in the South resided in nonmetro areas. However, the 2009 ACS data also show that none of the oldest old populations of several other major Asian groups in some regions were living in nonmetro areas, although, again, we note that these are estimates with rather large confidence intervals. While we know of no detailed discussions about why in the South older Japanese were more likely to live in nonmetro areas compared to older populations of other Asian groups, this tendency could result from their migration histories and distinct life styles.

8.6 Family Support of Elderly Asians in Nonmetropolitan America

Despite their several dissimilarities, many Asian Americans share strong traditions with respect to extended families and kinship ties. To illustrate, Chinese, Japanese, Koreans, and Vietnamese all derive their basic familial norms and values from Confucianism, including obedience to and responsibility for parents, patrilineality, patriarchy, and a degree of interdependence (Barringer et al. 1993). These characteristics are often regarded as essential adaptive mechanisms for immigrant survival in the US and other host countries, and all stress the importance of family support for the elderly. American Community Survey (ACS) data do not provide direct information on family support, but, fortunately, they do provide excellent information on marriage, family and household structure, and childcare provided by grandparents, the topics to which we now turn.

8.6.1 Marriage

The ACS data pertaining to marriage do not distinguish first marriages from remarriages. They do indicate, however, the high prevalence of marriage among older Asian Americans living in nonmetro areas. As of 2009, over 95% of nonmetro Asian males aged 65 and older have been ever-married, and the figure is over 87% for females. Owing to mortality differences between males and females, males will have an advantage over females in being married, given that their spouses almost

always outlive them. Among Asians living in nonmetro areas, 41% of elderly females were widowed, versus only 7% of elderly males (Table 8.5). Elderly Asian Indian females in nonmetro areas reported the highest percentage married (75%) and the lowest percentage widowed (6%). As noted, the percentages of the widowed for males are decidedly lower than those for females.

8.6.2 *Family Structure*

The dynamics of family support may be inferred from data on family structure. Asian Americans are more likely than other major racial and ethnic groups in the US to be living in the supportive environments of a family household, despite the fact that older Asian Americans are often more likely to be living alone or in non-family households than younger Asian Americans (Lee 1998). The 2009 ACS data show that Asians aged 65 and older residing in nonmetro areas are characterized by an extended family structure with relatively large family size and co-residence with children; these characteristics are essential for family support, especially for the older members of the population. Among elderly Asians living in nonmetro areas, 17% lived in two generation-households, and 18% in households with three or more generations (data not shown). Most Asian populations have been highly influenced by Confucianism, which advocates multi-generational and patrilocal residence. Of particular interest, however, is the fact that the two Asian groups that historically and culturally have not been influenced by Confucianism, namely, Filipinos and Asian Indians, have the largest percentages of their nonmetro populations living in three-generation households, 39–27%, respectively (data not shown). We had expected one of the Confucian-based Asian groups to have the largest percentage living in three generation-households, but this is not reflected in the ACS data.

Among most Asian populations in most Asian countries, adult children traditionally have a high responsibility for the care of their older parents and relatives. Asian immigrants in particular have maintained this tradition, and children are hence very important for the family support of older people. ACS data indicate that in 2009, 29.3% of old Asians in nonmetro areas were living with their own children (Table 8.6). But there is significant variability among the various Asian populations, ranging from 55% for nonmetro elderly Vietnamese to only 3% for Koreans.

Among elderly populations, given the vagaries of mortality, migration, and marriage, it is not common to find many older peoples living with their siblings. The Vietnamese stand out in their violation of this tendency; almost 11% of nonmetro elderly Vietnamese were living with their siblings (Table 8.6). This anomaly is likely due in part to the unusual and unique immigration history of the Vietnamese to the US. The group's immigration largely began in the mid- and late-1970s when South Vietnam fell to North Vietnamese forces and extended families in their entirety immigrated to the US, including many unmarried adult members who have remained unmarried.

Table 8.5 Marital status for Asian population living in nonmetropolitan areas, by sex and Major Asian Group, aged 65 and older, United States, 2009^a

Asian groups	All ages						65+					
	Married (%)	Separated or divorced (%)	Widowed (%)	Never married or single (%)	(n) ^b	(n) ^b	Married (%)	Separated or divorced (%)	Widowed (%)	Never married or single (%)	(n) ^b	
<i>Male</i>												
Asian	36.37	5.85	0.76	57.02	(3,286)	79.30	9.35	6.56	4.79	(342)		
Chinese	43.12	4.66	0.37	51.85	(315)	72.12	23.53	1.24	3.11	(28)		
Japanese	51.09	10.85	3.89	34.16	(344)	75.52	4.51	12.30	7.68	(111)		
Filipino	48.77	6.53	0.45	44.25	(519)	91.83	5.36	2.45	0.37	(89)		
Asian Indian	48.69	4.61	0.00	46.71	(301)	87.48	5.65	0.00	6.88	(18)		
Korean	37.33	6.30	1.10	55.27	(184)	91.31	4.50	4.19	0.00	(19)		
Vietnamese	38.71	6.23	0.15	54.90	(171)	74.92	7.69	4.35	13.04	(6)		
Other Asians ^c	24.33	4.99	0.49	70.19	(1,452)	68.96	16.53	8.38	6.14	(71)		
<i>Female</i>												
Asian	44.31	6.66	6.27	42.76	(3,860)	31.75	14.19	40.90	13.16	(473)		
Chinese	43.69	4.55	5.52	46.24	(396)	46.01	8.61	42.83	2.56	(28)		
Japanese	52.26	9.55	16.95	21.25	(429)	45.22	6.92	42.62	5.24	(175)		
Filipino	57.70	7.73	7.93	26.65	(833)	64.16	0.00	35.84	0.00	(124)		
Asian Indian	57.24	1.73	3.43	37.59	(263)	74.79	19.46	5.76	0.00	(17)		
Korean	52.18	7.55	4.39	35.88	(289)	67.11	0.00	24.04	8.85	(36)		
Vietnamese	46.58	4.88	4.55	43.98	(189)	40.45	20.59	38.80	0.16	(9)		
Other Asians ^c	30.55	6.78	3.78	58.88	(1,461)	47.08	10.50	38.97	3.46	(84)		

Source: US Census Bureau, 2009 American Community Survey

Notes: ^aEstimated percentages are adjusted for survey design effects by using sampling weights

^bNumber of observations in the sample

^cAll other Asian American ethnic groups and all combinations

Table 8.6 Percent living with own children or own siblings in the household, Asian Americans in nonmetropolitan areas: By Major Asian Group, total and aged 65 and older, United States, 2009^a

Asian groups	Total			65+		
	With own children (%)	With own siblings (%)	(n) ^b	With own children (%)	With own siblings (%)	(n) ^b
Asian	27.63	26.89	(7,146)	29.30	2.29	(815)
Chinese	22.79	18.84	(711)	14.25	3.26	(56)
Japanese	24.76	10.60	(773)	18.80	1.21	(286)
Filipino	40.51	22.19	(1,352)	49.05	4.81	(213)
Asian Indian	33.20	16.38	(564)	30.42	0.00	(35)
Korean	19.66	16.03	(473)	3.49	0.00	(55)
Vietnamese	31.09	29.88	(360)	55.28	10.70	(15)
Other Asians ^c	23.33	38.35	(2,913)	31.52	0.32	(155)

Source: US Census Bureau, 2009 American Community Survey

Notes: ^aEstimated percentages are adjusted for survey design effects by using sampling weights

^bNumber of observations in the sample

^cAll other Asian American ethnic groups and all combinations

Asian families are also known to be characterized by a respect for the authority of older people and, concomitantly, children's obedience to them. We may appraise this dynamic by examining 2009 ACS household data pertaining to the relationships of persons to the householder, i.e., the person in the household also known as the household head. In households where Asian nonmetro elderly co-resided with their children, 29% of the households identified the old person, or the spouse, as the householder, rather than one of the children who would quite likely be the one providing the economic support and service to the older person or persons in the household (data not shown). On the other hand, there was also a tendency for older nonmetro Asians to provide childcare services to the children of their children. According to the 2009 ACS data, 12% of Asian elders residing in nonmetro areas had grandchildren co-residing with them; this figure was as high as 13% for Japanese and 16% for Filipinos; the zero percentages for four of the Asian groups are likely a function of very small samples. We turn in the next section to a consideration of the health status of elderly nonmetro Asians.

8.7 Health Conditions of Elderly Asians in Nonmetropolitan America

The 2009 American Community Survey has several questions pertaining to the health conditions of the respondents, including whether each person in the household has difficulties in any of the following areas: cognition, ambulatory activity, independent living, self-care, vision, and hearing. Nearly 9% of Asians living in nonmetro America in 2009 had at least one health difficulty, whereas one-third of

Table 8.7 Estimated^a percentages of nonmetropolitan elderly Asian Americans with “Any Health Difficulty” or holding “Any Health Insurance”: Six Major Asian Groups and a Residual Asian Group, United States, 2009

Asian group	Health difficulty				Health insurance			
	65+		Total		65+		Total	
	Yes	No	Yes	No	Yes	No	Yes	No
Chinese	7.6	92.5	6.4	93.6	90.0	10.0	86.9	13.1
Japanese	42.8	57.2	11.5	88.5	99.6	0.4	92.7	7.3
Filipino	35.8	64.2	8.3	91.7	90.6	9.4	89.0	11.0
Asian Indian	14.6	85.4	4.6	95.4	88.2	11.8	88.2	11.8
Korean	26.2	73.9	5.5	94.5	99.4	0.6	75.2	24.8
Vietnamese	17.1	82.9	7.9	92.1	72.0	28.0	80.9	19.1
Other Asians ^b	31.5	68.5	6.4	93.6	99.1	0.9	85.8	14.2
Total Asians	33.2	66.8	8.5	91.5	95.1	4.9	86.1	13.9

Source: 2009 American Community Survey

Notes: ^aAll estimates are adjusted for survey design effects by using sampling weights

^bAll other Asian American ethnic groups and all combinations

elderly Asians (age 65+) had at least one health difficulty (Table 8.7). As one might expect, the data show that older nonmetro Asians are more likely to have health difficulties than younger ones. Overall, the health situation of elderly Japanese was poorer than that of other elderly Asian groups. Older Japanese had the highest percentage with any type of health difficulties (43%), and older Chinese the lowest (8%).

Health conditions are relatively important for nonmetro elderly populations because the typically low-density nonmetro areas are limited in their ability to provide health care services, which tend to be concentrated in metro centers (Rogers 1999). Older populations are more likely to have health problems; therefore, they are more likely to need health insurance, the topic we next consider.

Around 5% of the nonmetro elderly Asian population did not have any health insurance, public or private, in 2009, compared to almost 14% of all nonmetro Asians (Table 8.7). We showed above that of all the elderly Asian nonmetro groups, the Japanese had the highest percentage with one or more health difficulties. We show in Table 8.7 that, of all the Asian groups, the elderly nonmetro Japanese have the lowest percentage without any health insurance (0.4%). Koreans also have a very low percentage without health insurance. Apparently, elderly Japanese and elderly Koreans, and/or their families, know well how important health insurance is to them. Older Vietnamese have the highest percentage without health insurance, namely 28% in 2009.

Overall, 95% of nonmetro elderly Asians had some type of health insurance in 2009, compared to the 99% of all elderly persons in the US (Siegel 1993). Nonmetro elderly Asians are slightly less insured than the general elderly population, an issue certainly deserving of additional research. Is this difference due to the greater amount of family support received by Asians compared to the general population, or are there other factors and issues involved?

8.8 Summary

We began this chapter with a brief presentation of key terms and concepts. We noted first the specific population we would categorize as “elderly,” we next defined what we would mean by the Asian population, and then we specified the geographic categories to be employed. In this chapter the “elderly,” i.e., the “older” population, refers to persons aged 65 and older, and the “oldest old” to persons aged 85 and older. Asians are defined as persons who themselves or whose ancestors hail from countries in East Asia (e.g., China, Japan, Korea), Southeast Asia (e.g., Vietnam, Thailand), or South Asia (e.g., India).

Asian Americans are persons self-identifying their race on the census or American Community Survey questionnaires as Asian. Finally, owing to data limitations, the majority of our analyses pertained to the nonmetro population, that is, persons not residing in metro areas. We ended the first part of the chapter with a discussion of the history of the Asian population in the US.

We then turned to some of the demographic dimensions of population aging among Asians in the US. We showed that Asian Americans overall increased by 70% in nonmetro areas of the US between 1990 and 2009, while the number of elderly nonmetro Asian Americans increased by 99.5%. Older Japanese had the lowest nonmetro growth rate among the six major Asian groups, but the largest population.

The population pyramids for nonmetro Asians showed two particularly significant characteristics. First, the 2009 pyramid showed an increase in oldest old Asians compared to the 1990 pyramid. Also, older Asian females greatly outnumbered their male counterparts. These two observations are not unique to Asians. They confirm that life expectancy is better for females than for males in nonmetro areas, but they also highlight the importance of aged dependency.

We then showed that the burden of “aged dependency” increased for all nonmetro Asians between 1990 and 2009. Japanese Americans have the highest aged dependency ratio and parent support ratio, and the lowest potential support ratio, all a result of their relatively large numbers of elderly. The aged dependency burden of Asians has increased in nonmetro areas, due in part to aging in place, retirement in-migration, and the outmigration of young adults. With the dramatic growth rate of older Asians, the population aging of Asian Americans in nonmetro areas will continue to be an important issue.

Asian Americans comprise a very small fraction of the total US population, and this is especially the situation in rural and nonmetro America. According to data from the 2009 American Community Survey, respondents identifying themselves as “Asian alone” accounted for but 1.6% of the rural population, and only 0.4% of the population not residing in metro or micropolitan areas.

The Asian American population is heavily concentrated in metro areas. In 2009, only 4% of all Asians were identified as living in nonmetro areas. Similarly, only 4% of Asians aged 65 and over, and 6% of Asians aged 85 and older, lived in nonmetro areas. However, the metro/nonmetro distributions of the elderly population

differ quite a bit among the various Asian groups. With the smallest population of the six major Asian groups, Japanese Americans report the highest percentage of elderly persons residing in nonmetro areas.

The majority of nonmetro Asians live in the West, particularly those ages 65 and older. The West accounts for most of the Chinese, Japanese and Filipino nonmetro elderly, while the South accounts for the majority of older Asian Indians, Koreans, and Vietnamese Americans. We showed that the oldest old nonmetro Asians (those ages 85 and older) were even more concentrated regionally.

Despite their many other dissimilarities, many Asian Americans share strong traditions of extended kinship ties, and this is especially true for Chinese, Japanese, Koreans, and Vietnamese. For older Asians living in nonmetro areas, marriage is the prevalent marital status, but with increasing age, widowhood becomes much more prominent, particularly for females. Therefore, older Asian males are more likely to receive spousal support than their female counterparts. Extended families, large family size, and co-residence with children also characterize Asian families. However, their importance and prevalence have decreased in past decades, and they vary among the major Asian groups. On the other hand, a significant number of Asian elders living in nonmetro areas reported that they provided childcare for their grandchildren. It seems that Asian families have pretty much maintained their traditions with regard to respecting the old; this is seen in the fairly interesting finding that elderly Asians, more so than non-Asians, are frequently identified in the census questionnaires as the householders.

Finally, with regard to health status, we showed that 95% of nonmetro Asian elders hold some form of health insurance, although slightly less than the elderly population as a whole. Asian elders are likely to demonstrate one or more health difficulties. The high percentage of Asians holding health insurance, therefore, is particularly important in nonmetro areas, given the limited availability there of health services. Although a relatively small number of Asian American elderly resided in nonmetro America in 2009, their characteristics, their geographic distributions, and the differences among the major Asian groups, differ widely and deserve our continued attention.

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Chapter 9

Aging on Indian Reservations: The Ugly, the Bad, and the Good

Gundars Rudzitis, Nicolas Barbier, and Diane Mallickan

9.1 Introduction

Reservations are a unique part of the North American landscape, and the status of older Indians on those reservations is similarly unique. Using data from the 2010 census, we found that 32.9% of American Indians and Alaska Natives (one race only) live on reservations, or American Indian statistical areas, (30.7%) and Alaska Native village statistical areas (2.2%) (US Census Bureau 2010). Approximately 15% live off of but near reservations, while 64% live outside Indian areas, of which 45% live in urbanized areas (Norris et al. 2012). Despite the large number of Native Americans living in urban areas, American Indians display a loyalty to their home community that is uncommonly intense and is exemplified by recent trends of growing population densities on reservations (Harvard Project on American Indian Economic Development 2007).

We begin by examining how conditions for the older population on Indian reservations compare to the non-Indian population. We will examine how and why theories of location and mobility differ in their application to older Indians on reservations. The discussion opens at a national level, though the primary focus will be on tribes in the Western United States (US). Finally, we will present interviews with older Indians living on the Nez Perce reservation in Idaho.

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Throughout, we keep in mind that growing old is a common human condition, but retirement is not. Retirement, prior to the twentieth century, did not exist for Indians. Certainly, there was nothing like Social Security. Retirement, even for non-Indians is a relatively new idea. Until relatively recently, in Europe and elsewhere, retirement as such did not really exist, with workers shifting from demanding to less physically or cognitively demanding work as they neared the end of life. Few could afford ever to give up work voluntarily. In many countries, the advent of state and personal pensions has changed the situation and has allowed men and women to cease working without fear of destitution (Boyle et al. 1998). The same cannot be said for Indian tribes in the US.

In addition to Indians being the poorest group in the US, they also have a myriad of health problems, including diabetes, heart disease and obesity. American Indians have been called the “invisible minority” because their conditions and needs are ignored or not recognized in proportion to the attention focused on other minority populations. Older Indians on reservations age in a society where they are an almost invisible part of rural America.

Reservations represent a major feature of the landscape of the American West. However, they are not centrally featured in rural policy discussions. Many Indian reservations have extreme levels of poverty, poor health care access, unemployment rates that exceed 50%, and the highest suicide rates in the country. By most economic indicators, American Indians rank among the most disadvantaged groups in the US (Rudzitis 2006; Young 1990). Present-day Indian reservations too often are landscapes of despair. Their levels of poverty, unemployment, illness and societal breakdown match those of any drug and crime infested inner-city neighborhood, or even those of the poorest Third World countries (Rudzitis 1996). These circumstances are compounded as Indians become older.

The terms Indian and Native American are used to refer to the original, indigenous inhabitants of what came to be called the United States of America in North America. Although we focus on the American West and the Nez Perce tribe, in particular, these terms are also used to refer to different indigenous societies including native Hawaiians, Samoans and other Pacific Islanders. We mention this because the American Indian population is heterogeneous, with nearly 300 federally recognized reservations and about 500 recognized tribes.

Unfortunately, we find little public awareness or understanding of the diversity of tribes, or of the cultural variations among tribes. The public image is too often based on Hollywood movies such as “Dances with Wolves,” wherein a specific tribal culture has been generalized, such as northern Plains Indians like the Lakota, and other tribes identified with commercial products such as Navajo weaving or Southwestern Pueblo pottery. The different sub-regions of the American West, in particular, have a variety of diverse indigenous Native American societies where over 100 native languages continue to be used, especially by older Indians.

There is no single Indian cultural tradition. Instead, distinctive cultural traditions and values provide specific sources of Indian identity. No simple stereotype of American Indians, whether young or old, is accurate or warranted. Before discussing the conditions of older Indians, we provide a theoretical discussion of the determinants of where older people live and what happens as they enter retirement.

9.2 Location and the Older Population

Indian and non-Indian populations differ in residential, as well as mobility and migration patterns. Almost all of the research on locations of older persons has been based on non-Indians, and we summarize some of that literature here. Older non-Indians, in one view, look upon retirement as a stage in life to which many look forward (Law and Warnes 1976). Because ties to employment have been cut and no longer serve as locational constraints, retired non-Indians have more freedom and greater choice in where they live. This derives from the theoretical construct of the lifecycle model of location, as discussed below. It is important to note, however, that older people are not as migratory as non-elderly adults (Brown and Glasgow 2008).

The lifecycle model posits that where a person lives is determined by the demographic configuration of the household, measured jointly by (1) marital status and the age of the household head, (2) presence of children in the household, and (3) the age of the youngest child. The demographic stages through which a family passes contain events and transitions that seem to determine locational patterns (Glick 1947; Golant et al. 1978; Lansing and Kish 1957; McCarthy 1976; Rossi 1955; Rudzitis 1982; Yee and Van Arsdol 1977).

For example, the lifecycle of location typically begins when young unmarried individuals leave the parental home to form separate households, marry, have children, and advance in employment and income as they age. At some point due to age or disability, retirement from the labor force causes a sudden and often drastic drop in household income. Disruptions can occur by separation, divorce or the death of a spouse. Household income and employment can also be influenced at various stages by spouses and children, contributing substantially to the earnings of many households. The lifecycle model is based on various assumptions that lead to a statement that housing needs change as individuals pass through different stages and that these changes are reflected in their locational patterns. When older persons retire they have more leisure time at their disposal. If leisure time has value for older persons, where can it be best fulfilled? An individual or household can remain at the present location, move near family or friends, or move to some other location. The decision will be influenced by how people want to use leisure time (Litwak and Longino 1987).

Overall, older persons as a group are not very mobile. One reason may be social and cultural ties to an area. The longer people have lived in an area, the more time they have to form relationships and friendships, and the more likely they are to want to remain in the area. Another reason, as Brown and Glasgow (2008) point out, may be because older persons, in a cost-benefit sense, have fewer years over which to realize the gains or returns from moving.

It should come as no surprise that when asked about their desires to live closer to certain groups, older persons are most likely to choose children, relatives, and friends as a reason for either remaining where they are or moving elsewhere. However, retirement migration is not something that older persons take lightly, because to move means pulling up stakes after living in a community oftentimes for many years and poses the challenge of becoming socially involved in a new location. Once a decision is made to move, alternative destinations are carefully considered (Brown and Glasgow 2008).

Much of the research has been aimed at investigating which older persons move, where they move, and why they move. Much retirement migration is related to trying to improve one's quality of life. Other motivations might be to seek companionship or to be near someone who might care for them in the future (Rudzitis 1982). In addition to family, older persons who move to rural areas often cite amenities, recreation, a slower pace-of-life, landscape, and a small town atmosphere as reasons for moving. Those older migrants who move to places where they do not have friends or relatives, nevertheless, say that they quickly become integrated into their communities, develop a sense of place, and the majority report that they will not move from their new communities (Brown and Glasgow 2008; Carlson et al. 1998; Litwak and Longino 1987).

Hypothetically, Indians can also move where they want. In practice, this may not be so, especially if they have lived on a reservation most of their lives. Many older Indians remember when formal and informal segregation restricted their movements to the reservation, and their forefathers told stories of being warned they would be killed if they left the Reservation (Rudzitis 2005). Indeed, in states such as Idaho it was not considered murder for a non-Indian to kill an Indian or a person of Chinese descent (Blank 1988). Times have changed, but the psychological impact of racial and ethnic prejudice continues to affect older Indians' well-being.

9.3 The Ugly

Most people in the US now live longer. In 1900 life expectancy was only 47 years. Life expectancy had increased to 60 years of age in 1930; to 70 in 1960; and in 1980 to 73, an overall gain of 26 years (Brown and Glasgow 2008). The continued aging of the population among non-Indians has been accompanied by a drop in the percentage of persons under 18 years of age and a rise in the proportion 65 years of age and older. By 2000, on the other hand, life expectancy among Native Americans was just over 71 years, but had reached 77 for the general population of the US. Life expectancy is a measure of the overall health of a population, and increased longevity not only indicates more years, but more healthy years. Along with increased longevity, health among older non-Indians has increased during recent years and chronic disability has declined (Brown and Glasgow 2008). This is further demonstrated by comparing the percentage of Indians ages 65 and older to the national average.

In 2000, just 6% of American Indians and Alaska Natives in the US were 65 years of age and older, only half the national average of 12.4% among non-Indians. Some of the largest tribes (see Table 9.1) of the Great Plains region (Sioux, Cheyenne, Blackfeet and Crow) have some of the lowest percentages of their members 65 years of age and older (between 2.3 and 4.3). At the other end of the spectrum are Eastern tribes (part of their members live in Oklahoma), including the Cherokee, Choctaw, Creek and Seminole Indians, which have larger proportions of the population 65 years of age or older.

The tribes living in the Pacific Northwest and the Southwest, including the Ute, Puget Sound Salish, Pueblo, Nez Perce, Shoshone, and Navajo show a significant range

Table 9.1 Percentages of the population 65 years of age and older, 75 years of age and older, and 85 years of age and older among select American Indian tribes in the Western US

Tribe	Percentage 65 years of age and older	Percentage 75 years of age and older	Percentage 85 years of age and older
Northern Arapaho alone (Wind River reservation)	3.2	1.2	0.2
Assiniboine and Gros Ventre (Fort Belknap reservation)	6.3	1.8	0.4
Blackfeet	4.3	1.6	0.2
Northern Cheyenne	3.9	1.3	0.3
Cœur D'Alene	6.6	2.1	0.9
Colville	6.2	2.3	0.5
Crow	3.1	1.3	0.2
Flathead (Salish and Kootenai)	4.3	1.4	0.3
Nez Perce	6.8	2.4	0.5
Quinault	4.6	2.2	0.4
Shoshone-Bannock (Fort Hall reservation)	5.1	1.3	0.2
Sioux and Assiniboine (Fort Peck reservation)	2.3	0.9	0.1
Spokane	4.9	2.1	0.1
Umatilla	4.6	1.5	0.6
Warm Springs	2.5	1.1	0.3
Yakima	4.7	1.7	0.5
National average for the American Indians and Alaska Natives	5.6	2.1	0.5
Average for the total population in Idaho, Montana, Oregon, Washington and Wyoming	11.9	5.8	1.5
National average in the US	12.4	5.9	1.5

Source: US Census Bureau (2000a, b)

in the percentage of their population 65 years of age and older (Table 9.1 illustrates the percentages of elderly in some of these tribes). Whatever the percentages for individual tribes, compared to non-Indians, older Indians live shorter lives and thus do not live up to their potential to contribute their experience and wisdom to younger Indians. This also raises a question about the extent to which their earlier deaths are the result of historical factors rooted in colonialism, inequality and discrimination, the weathering factors described in the chapter by Lee and Singelmann in this volume (see also Banner 2005; Blackhawk 2006; Deloria 1969; Frantz 1999; Josephy 1965, 2006; LaDuke 1999; Rudzitis 2005).

On reservations, individuals ages 18 or younger are a greater proportion of the Indian population than are older people. The situation is similar for the total population,

but the youthfulness of the Indian population is more pronounced than that of the majority of residents of the US. The median age is 31 years for American Indians, which is more than 5 years younger than the national median age of 36.4 years (US Census Bureau 2007).

In the non-Indian population, a person is generally considered older at age 65. Neugarten (1974, 1975) has broken down the aging process into two phases. The “young-old” are comprised of persons who are healthy and able to fend for themselves and the “old-old” are those who are disabled and not doing well. Given that Indians do not live as long as non-Indians, on reservations a person generally attains “senior” or elder status a full 10 years earlier at age 55 (Harvard Project on American Indian Economic Development 2007). And, even at that age, an older person faces a greater risk of having a larger number of health and medical problems than a non-Indian (Jorgensen 2007).

9.4 The Bad

Older Indians suffer from a wider range of medical problems than the non-Indian population. Thirty-eight percent of Native elders are obese compared to 18% of the general population ages 55 and older (Jorgensen 2007). Obesity itself has been identified as a factor in the prevalence of arthritis, asthma, diabetes and high blood pressure among older Native Americans (Harvard Project on American Indian Economic Development 2007). Other chronic diseases older Indians suffer from at higher than average rates include congestive heart failure, lung/colorectal cancer, and stroke.

A significant number of Indian elders also suffer from multiple chronic diseases. Although the health of American Indians has generally improved over the last several decades, the results are discouraging when compared to the general population. In particular areas, especially suicide, alcoholism, and diabetes, health indicators are extremely negative. In the past, infectious diseases were the greatest threat to Native health, but, in the twenty-first century, chronic diseases are the primary threat. Type 2 diabetes although preventable and, as recently as the 1940s, rare among Indians, is now epidemic in some tribes, reaching twice the US general population rate (Jorgensen 2007). American Indians have also experienced rapid increases in rates of chronic diseases such as cardiovascular disease, hypertension, obesity, and cancer (Harvard Project on American Indian Economic Development 2007; Jorgensen 2007; Rhoades and Cravatt 2004).

We find significant gender differences among the Indian population. For non-Indians, as for Indians, older males have higher death rates than females, especially between ages 55 and 74. For American Indians, males are more likely to die before reaching age 55, with nearly one-half of all male deaths occurring by age 54, while the comparable age for females is 64. Conversely, a third of female deaths occur after age 75, compared with only 21% for Indian males. Males are more likely than females to die from heart disease followed by cancer, chronic liver disease, suicide, diabetes, and pneumonia (Rhoades 2003).

The medical issues are compounded by lack of good access to medical care, hospitals, or home or community based long-term care options. One study found that access to health care services (e.g., hospitals, clinics, and health care providers) was related to several chronic diseases. In addition, rural elders described their unmet health needs as “unavailable services” in their area (Zuckerman et al. 2004). Services frequently described as difficult to access included physicians, nurses, dentists, prescription medication, nursing homes, medical facilities, pharmacies, and senior centers. A major factor in access to health care is further complicated by the lack of health insurance. Only 49% of Indians have private health insurance coverage versus 83% among non-Indians (Zuckerman et al. 2004).

Native elders living in rural areas frequently have incomes in the lower income brackets. Thirty-six percent of them have an annual income below \$5,000, and 40% of rural elderly Indians have an annual income between \$7,000 and \$14,999 (Harvard Project on American Indian Economic Development 2007). Socioeconomic factors significantly contribute to negative health outcomes over the life course. Native elders with the lowest income and lowest educational levels were the most likely to suffer from high blood pressure, which is a precursor for many other health problems (Taylor and Kalt 2005).

Indian elders living in reservation communities are among the poorest in the US, and they have a long way to go to catch up with the rest of the country’s population (Snipp and Sandefur 1988). In 2000, the inflation adjusted median household income of Native Americans on reservations in the lower 48 states was just 58% of median household income of the total population, at \$24,239 versus \$41,994 (Taylor and Kalt 2005). Therefore, improving socioeconomic conditions is critical to improving health status and access to health care. All Native Americans, including current and future elders, would benefit from improved socioeconomic status.

9.5 The Good

Many non-Indians who move do so to be nearer family or to seek out places where they feel wanted and respected. Elders on a reservation would not have to move, given that extended families and many native cultures consider it a responsibility to take care of older people. Elderly who have lived on the reservation for most of their lives typically have left only periodically, such as for military service or to seek employment, with many returning to the reservation after those periods, successful or not, were concluded. A majority of Indians live off-reservations as part of previous government programs to resettle them in cities. However, we know little about the number of off-reservation older Indians who may want to return to the reservation or how many are able to act on such preferences.

Despite the poor socioeconomic conditions on many Indian reservations, reservations represent home and a place for Native Americans to come back to. Both a strong cultural commitment to place and Native people draw them back. Reservations have become places, islands, if you will, where tribal culture and religion are protected

to some extent from the encroachment of the dominant society, and they serve as the last outposts against a debilitating racism that shows few signs of abating (Rudzitis 1996; Wilkinson 2005).

The worldview of Indians is acknowledged as being different from that of their European colonizers (Boag 1992; Harvard Project on American Indian Economic Development 2007; Jorgensen 2007; Josephy 2006; Rudzitis 1996; Suzuki and Knudtson 1992). Rundstrom et al. (2004) cite research on an “ecological sensibility” in Indian thought that is different from that of non-Indian North Americans.

The significance of place, land, landscape, and of tribal members to a shared spiritual relationship sets up different worldviews, different ways of knowing, and being that still endure in the Indian world (LaDuke 1999, 2005; Rudzitis 1996, 2009).

For Indian elders, return migration to the reservation to be close to children and other relatives is one way to insure greater access to informal helper networks that contribute to maintaining independent living for the longest possible time. This is something that Indians on reservations already have and that non-Indians often try to achieve through their geographic mobility and expectations of help from children (Coward et al. 1990; Peek et al. 1998). We can ask: Who is better off? In which setting is the social welfare of older persons higher? Where is one more likely to find a caring economy and society that some researchers are focusing on and raising questions about (Folbre 1995, 2006; Lawson 2007)? It is hard to answer such questions when health issues are discounted, and the focus is on the social, cultural, and support aspects of growing older.

Many older non-Indians who move want to become part of the communities to which they move (Carlson et al. 1998). They want to create and maintain a variety of formal and informal ties with a variety of people and organizations. This is easier to do if one has children, now themselves adults, living within a reasonable distance. In a sense, non-Indian older people try to achieve what elders living on a reservation already have.

9.6 Elders on the Nez Perce Reservation

We include the voices of some Indian elders to gain insights into how they perceive being elderly. We focus on the Nez Perce Reservation located 40 miles south of Moscow, Idaho. Visitors driving through the reservation can be forgiven if, with the exception of the recent Indian casinos, they imagine that they are passing through a largely non-Indian landscape. We begin by providing some historical context for the reservation and the people who have gone through various life course stages and become elderly.

The historical context is important because the Nez Perce Tribe has recently re-asserted its treaty rights and sovereignty over its lands on and off the Nez Perce Reservation, especially rights over water, fishing, hunting, and of jurisdiction on their reservation. These rights and debates over sovereignty are derived from the treaties that the tribe signed with the US Government in 1855.

The historical territory of the Nez Perce, which included more than 300 villages, ranged over 13 million acres extending from the valleys of the Salmon and Clearwater Rivers in central Idaho to adjoining areas in Washington and Oregon. The arrival of horses in the early eighteenth century increased the range of the Nez Perce and allowed them to conduct trading, hunting and fishing activities across an even larger portion of the inland northwest (Landeem and Pinkham 1999).

The arrival of the Lewis and Clark expedition in 1805 prefaced the era of “Manifest Destiny” which would soon separate the Nez Perce from their traditional lifestyles and territory (Joseph 1965, 2006; Rudzitis 2005). Under the Treaty of 1855, the federal government designated a 7.5 million acre reservation for the Nez Perce spanning northeastern Oregon and central Idaho, which represented a 44% loss of Nez Perce territory.

Between 1805 and 1905, the Nez Perce population decreased from an estimated 6,000–1,500, mostly because of European-introduced diseases. “In the 1830s, a smallpox epidemic killed 500 Nez Perce in different villages near Kooskia, on the Clearwater River. The story was passed through generations, and [it is] said that 30 to 40 people died each day” (conversation between Nicolas Barbier and the Nez Perce, John Wasson, May 9, 2007). Waves of smallpox epidemics wiped out about 40% of the Native peoples of the Plateau in the Pacific Northwest between 1774 and 1805, including the Nez Perce. A smallpox pandemic struck the Indian tribes of the Pacific Northwest as early as the 1520s (Sturtevant and Walker 1998). The Nez Perce population before Columbus probably exceeded 15,000 people. By 2004, the Nez Perce numbered only 3,400, which includes 2,000 on the Reservation (Rudzitis 2005).

The discovery of gold within the original reservation boundary and subsequent illegal migration and squatting on Indian lands by settlers resulted in a renegotiation of the treaty boundaries in 1863 and reduced the reservation to one-tenth its original size, to 750,000 acres. The 1863 treaty is still referred to by tribal members as “the steal treaty.” This brief historical context is important to keep in mind when considering some of the comments of older Nez Perce who addressed various issues in response to semi-structured questions.

We conducted informal interviews with a group of elders who either responded to questions given to them in written form at the tribal community center or orally to Diane Mallickan, herself a tribal member and historian. A total of 22 persons responded. The interviews cannot be generalized to all Nez Perce and certainly not to all American Indians, but rather the purpose is to provide insights into how different tribal elders perceive their status and how it has or has not been affected by changes that have taken place on the reservation. Nez Perce elderly interviewees were encouraged to speak freely and were assured that we would not use their names or any other means by which they could be identified.

We posed general questions about how they felt the situation and roles of Nez Perce elders have changed over their lifetimes. We asked what makes them feel good and what makes them worried about the way of life of the younger generation of Nez Perce. We asked what differences exist in how they and younger generations of Nez Perce perceive their relationship with their homeland. We also asked Nez Perce elderly to respond to open-ended questions about issues or concerns they felt

were important. Our intention was to let Nez Perce elderly speak for themselves so we could garner an indication of the type of deeply felt concerns they have.

Earlier, we noted that older Indians live shorter lives than non-Indians. However, one elder remarked that, while this is very true in modern times, it was not in historical times. She said that “Native or indigenous people are, and were very healthy before the introduction of western foods and medicines.” A number of interviewees commented on how the life of elders has changed. For example, one older Indian said that, in the past, life was “very good, but when white men came here everything went to hell.” Another elder commented that “in the first half of the 1900’s when we were uneducated and unemployed consider how good of a diet we had. People were hunting, fishing and gathering, while at the same time they had their garden and fruit trees, which did not have pesticides all over them. Historically we lived to be old [and] were physically fit, as we did a lot of physical work.”

A tribal elder said that salmon was a preferred food because, unlike other fish, salmon could be dried and stored. “We stayed alive with dried foods, and dried salmon could also be traded, and salmon used to be so common in the rivers.” Another commented that today “the Snake River is among the most polluted rivers in the United States due to the agricultural vastness of the area and the use of pesticides, herbicides, and fertilizers by farmers that affect the fish.”

Another elder said that a fundamental difference between Indians and non-Indians is “respect for the land and respect for each other.” He stressed respect both for people and place, where place is the relationship of things to each other. In a similar vein, a male elder argued that identity is tied to tribal lands, and said “Identity is about connection with the land. We were taught to only take what is necessary.” Another pointed out that “doing traditional things helps connect us with the ancestors, and pass on to the next generation....If we don’t take care of the animals, they don’t take care of you.... Hunting and gathering were spiritual activities.” However, an elderly male said “Unfortunately, we learned the white man’s way. Traditionally, we don’t kill animals [just] to kill, unlike the non-Indian hunters of today.”

An elderly woman commented that “Our house was our tipi with the camas fields and other root fields as the gardens. The mountains were our churches. These were and are the veins of Mother Earth that hold the life-blood for us all. We, like the salmon, know when it is time to come home. When it’s time to return, nothing can stand in the way. We followed the foods up from the lower elevations to the higher ones. We were outdoors almost all the time, even 40 years ago or less. Grandparents were employed teaching their apprentices—the selected grandchildren or grandnieces their specialty. This ‘mobility’ lasted through the recent generations and can be seen in those who follow the powwow trail across the nation.” These interviews suggest that a different value system and worldview opens the possibility that different types of approaches can be taken, and different kinds of questions asked about how to live among the resources that nature provides.

These quotes also illustrate how elders see changes in lifestyle and culture that were negatively affected by non-Indian intrusion and domination in their lives. Some negative comments continued when the topic turned to changes that have occurred more recently. One elder said “Everything can be going right, but young

people a lot of the time don't listen about the things I learned, and that are real important. The loss of language and kinship has also broken up the support mechanism normally associated with the extended family." Another elder responded in the same vein, saying that as opposed to today's elders, "Most elders spoke Nez Perce. In education today people want just to get by. In the past, they always listened. Today, they are not trained to listen. When I was a child, the elders had a role and status, and they used it. Children listened to them. Now, it is sometimes 25 percent to 75 percent [of the time] that the elders have a role of giving lessons. The country's youth is of the 'buy me' mentality."

Another elderly woman reported that people say: "Young people don't know much about the roots and so forth. I know that the other half of that picture is that young people say there is no one to teach them, as many families are very tight with that knowledge. In the past, however, knowledge was not free but young persons had to show themselves worthy of being taught. Today, most people that I know are careful with who they teach because, if it gets out to white people, it will be exploited for money and notoriety."

Nez Perce elderly also commented on more positive aspects of change that have taken place. One elder recounted how, until the 1980s, the native religion was not allowed or practiced in the tribal community. "Then some tribal members became active in asserting their right to fish, and [they] participated in protests. They were arrested, went to court and won their fishing rights." Around the same time, the Seven Drum native religion was revived and is practiced today. Younger Nez Perce are taught their spiritual heritage, and the tribe is building a longhouse in which to perform ceremonies. In terms of numbers, however, Christianity remains the dominant form of religion on the reservation.

A tribal elder commenting on the poverty on the reservation says, "Yes, there is extreme poverty, but poverty is a state of mind that is beyond not 'keeping up with the Jones.' It is when you don't take care of yourself, your families, or your surroundings. Like being wasteful, buying the things for your consumption, or even buying things you could make or create yourself. There are many forms of poverty, but [it is] usually man made. You can be very plain and simple, and be rich, rich in stories, rich in morals, rich in culture, rich in ideals, and rich in love."

She continued: "Here is where we are poor; in continuing to eat the white man's food. If we'd go back to the Indian foods, we would be healthier. We are poor when we use the white man's religion, or medicines, or morals, or money, or thinking, and so on. We are wiser and richer if we use both perhaps, but certainly if we would let go of the ones that are not good for us. Easier said than done, no doubt."

An interesting comment on retirement was that "In the Indian world there is no such thing because you have had ingrained in you from the time you were small that in your elder years, there would be status and prestige but only because of the foundation you laid with your children, grandchildren and other youth who would be your real and only true caregivers when the time came for such a need. Today, the fear of no such retirement comes from the loss of the extended family." Unlike many of the tribes who were resettled in urban places, however, on the Nez Perce reservation, extended families are still the norm.

9.7 Discussion

Several major themes come through in the comments of the Native elders. One is that their lives have changed dramatically and are still influenced as a result of colonization. Native societies at the time of European contact had knowledge and practices that addressed their own health problems (Boag 1992; Josephy 1965; LaDuke 2005; Suzuki and Knudtson 1992). They lived relatively healthy lives. Over time, as the comments indicate, with the history of dispossession, impoverishment, the denial of sovereignty, and the confinement on reservations, Native Americans experienced stress and deprivation comparable to any other discriminated against people in history (Harvard Project on American Indian Economic Development 2007; Jorgensen 2007).

The Nez Perce witnessed the destruction, attempted or realized, of their places, and associated lifestyles, and they were confined to “spatial prisons” called reservations. They were pushed off their lands, confined, made to give up their language and religion and made dependent on laws and policies not of their own making. In effect, the cumulative impact of such actions was to try and destroy or replace a place-based culture and erase historical memory. Native Americans had their traditional economies taken away; economies with which Indian people had flourished for thousands of years. They have endured genocidal and termination policies over the past several hundred years, which have been amply documented (Deloria 1969; Josephy 1965; Snipp 1991; Trahant 2010; Wilkinson 2005). They signed treaties with the federal government that implied that, in exchange for their lands, the federal government would provide for the health, education and welfare of the tribe. And despite legislation and Supreme Court decisions that reaffirmed this federal responsibility, the elicited comments suggest that the federal government has not adequately met agreed to responsibilities.

The comments also illustrate the difficulties in trying to maintain traditions, especially when surrounded by a rapidly changing society. Native cultures, however, have changed in the past, and especially so over the last century. Indian elderly expressed dismay in the sometimes extreme cultural differences between themselves and younger tribal members. Elders have a deep knowledge of history, language, foods, and other cultural traditions, while the younger generation is often consumed with shopping and surfing the Internet. Nonetheless, despite such cultural diversity, young and old share various elements of identity and traditional habits of how things should be done. Elders also acknowledged that, at times, younger tribal members complained that they were not being taught the traditional ways embedded in their tribal culture. One example of tribal efforts to better link past and present traditions has been the re-initiation of the buffalo hunt, where younger tribal members go off the reservation into Montana as their elders once did.

9.8 Concluding Thoughts

We have shown how, despite years of rhetoric and government programs, being an older or a younger Indian, for that matter, affects one’s life chances, health, and life span and that Indians are still far “behind” the non-Indian population. On some

reservations, such as the Nez Perce, efforts to affirm sovereignty, self-government, and more recently to operate casinos provide some hope of development. The Nez Perce, for example, have built a health center medical building to assist all members of the tribal community. However, many tribes in small towns or remote locations do not benefit from having casinos, nor does the presence of a casino necessarily translate into higher tribal incomes (Gonzales 2003; Gonzales et al. 2007; Rudzitis 2006).

It is frustrating to have to say that to make life healthier and longer for elders on reservations a need exists to reduce barriers to Indian health care; provide more health screening and programs on reservations; target chronic diseases such as diabetes, high blood pressure, and others that hit Indians at higher than average rates and at younger ages. Continuing needs exist for innovative programs to train and attract doctors, as well as to create home and long-term cares options; fund and increase medically oriented senior centers on reservations and generally increase access to services, especially on more remote reservations.

Mark Trahan (2009, 2010) provides hopeful news in what he calls the Indian Health paradox. The Indian Health Service (IHS) provides comprehensive health care for nearly two million American Indians living on Indian reservations and in rural communities. Trahan (2009) points out that the IHS is the closest thing we have to a single-payer health system. It operates hospitals and clinics, funds various tribal facilities and manages programs ranging from sanitation to diabetes care. However, the IHS is seriously underfunded but, even under those conditions, Trahan (2009) argues that it provides an example of a potentially holistic and sustainable model.

The IHS funds initiatives designed to improve overall Indian health rather than just to provide medical care. For example, it has funded rural water systems, as well as sewage and solid waste facilities because they contribute to reducing various diseases. If sufficient funds were available, the IHS could do much more. The IHS spends about \$2,130 per capita annually on American Indians, which compares to prison inmate funding of \$3,242, \$4,653 for veterans, and \$7,784 for Medicare beneficiaries (Trahan 2009, 2010). The IHS has been starved, but it is not broken.

Still, much of what is needed in Indian country is related to low incomes, with Indians still earning about 30% less overall than non-Indians (Jorgensen 2007). We should stress that these recommendations are not welfare related nor suggestions for handouts but what was promised to tribes in treaties. Non-Indians need to be educated on their responsibilities to tribes, and how non-Indians benefit, unjustly, by ignoring these obligations, both legal and moral.

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Part IV
Rural Institutional and Community
Structures

Chapter 10

Health and Healthcare Among the Rural Aging

Lois Wright Morton and Chih-Yuan Weng

10.1 Introduction

Mary Parsons, 97, stepped carefully but firmly, lifting each foot deliberately as she walked to the front door of the tidy two-storey white house where she has lived most of her life to welcome her 85-year-old cousin and 59-year-old daughter. Mary, her slender frame neatly attired in a navy corduroy skirt and crisp blue-and-white striped shirt-blouse, was prepared for company despite receiving no notice that she might have visitors on this gray winter day. She gestured her guests into a living room of antiques collected from generations of family who had already passed on: gleaming glassware, overstuffed chairs and family pictures. Cautiously seating herself in a chair by the fireplace, she engaged her cousin in an animated sequence of current events, enumerating kin and friends struggling with heart disease, diabetes, disabilities and mobility challenges, as well as a neighbor who had died earlier that month. Her sharp mind detailed events of the past and current trials of being winter bound by January's persistent ice and snow. Having recovered from a fall last winter, she was cautious to prevent a second injury to her hip.

The lively and articulate gray-haired widow has lived alone for many years in this small rural town of 6,500, with backup support from her son who lives and works a half hour away in a small city on the Ohio River. She is but one of the many residents of rural places who has chosen to age in place in familiar surroundings

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rather than move to a large urban community. Growing older in rural America offers a high quality of life but also presents unique challenges for those with chronic diseases and limited social support.

Rural quality of life and the experience of aging are directly related to the rural physical and social infrastructure as well as individual health and well-being. Longer life spans are generally thought to be desirable; however, the increasing prevalence of chronic diseases, disability and limitation of activities associated with aging pose difficult issues for those living in rural places. Health and life expectancy within rural categories and between rural and urban can be quite different as Murray et al. (2006) demonstrate in their analyses of Eight Americas.¹ They show that demographics and spatial location (region, median county income by race, rural versus urban status of a county, and urban homicide risk) are strongly associated with the overall observed disparities in life expectancy.

Health and well-being are mediated by age, geography and socioeconomic status (Jones et al. 2009), as well as social support and access to transportation to meet daily needs (Cvitkovich and Wister 2001; Glasgow 2000; Glasgow and Arguillas 2008). Further rural aging, health and well-being are deeply affected by national and regional economics, health policies and politics. A rapidly aging U.S. population and the increasing costs of three entitlement programs—Social Security, Medicare and Medicaid—are urgent concerns in the provision of rural and urban health care that does not bankrupt the U.S. economy. Although Social Security is a major part of the fiscal issue, spending on Medicare and Medicaid represent a large, faster growing, and more immediate problem according to the U.S. Government Accountability Office (2008). The GAO reports that over the past several decades, health care spending per capita has grown on average about 2.5% faster than average annual GDP per capita, and consumes an increasing portion of national resources. These costs will only grow as baby boomers retire and per capita medical expenditures continue to outpace inflation and federal revenues affecting future capacity to meet rural and urban population health needs (Hartman et al. 2010).

In this chapter we offer an overview of the health and mortality rates older rural Americans are facing. Metropolitan (metro) and nonmetropolitan (nonmetro) patterns of mortality are compared, with special attention paid to variations within rural locations, and contributing factors such as poverty, inequality, and race and ethnicity. Of particular concern to rural elders aging in place is a supportive rural community infrastructure that addresses physical and mental health and well-being. This includes availability and access to affordable high quality medical services, grocery stores with fresh fruits and vegetables, pharmacies and retail goods, sidewalks and trails that encourage routine physical activity, and transportation to essential services and entertainment.

¹ Asians; northland low-income rural whites; Middle America; low-income whites in Appalachia and the Mississippi Valley; western native Americans; black Middle America; low-income southern rural blacks; and high-risk urban blacks (Murray et al. 2006).

10.2 Health and Mortality

10.2.1 Mortality

The leading causes of death in the U.S. in 2005 were heart disease, cancer, stroke, chronic respiratory diseases, accidents and diabetes (Jones et al. 2009). Heart disease is the number one cause of death for those aged 65 and older. Deaths from motor vehicle related injuries are higher at ages 15–24 and 75 years and older than for any other age groups (National Center for Health Statistics 2009). The suicide rate for non-Hispanic white men 65 years of age and older were two to three times higher than for all other groups of older men and eight times the rate for non-Hispanic white women in 2005 (National Center for Health Statistics 2009).

About 17% of the U.S. population live in nonmetro areas (U.S. Environmental Protection Agency 2009). Although farmers only comprise about 6% of the rural population, agricultural occupations have one of the highest fatality rates in the U.S. at 38.4 per 100,000 compared to 3.7 per 100,000 among other workers (Jones et al. 2009). This is particularly relevant to older rural populations as about 60% of all farm operators² and 70% of farm occupation principal operators are 55 years of age or older (Jones et al. 2009). The fatal injury rate for those 55 years and older in the period 1995–2002 was 47.9 per 100,000, twice that of younger agricultural workers (Jones et al. 2009; Meyer 2005).

Despite these statistics, there has been a steady decline in U.S. mortality over the past three decades which is mirrored in decreasing mortality rates of those aged 55 years and older (Fig. 10.1). Life expectancy of the U.S. rural and urban population has risen from 75.4 years in 1990 to 78.1 years in 2006 with an increase of 3.6 years for males and 1.9 years for females (National Center for Health Statistics 2009). Further, the gap between black and white life expectancy narrowed to 4.9 years during this same time period (National Center for Health Statistics 2009).

Reporting national average health and mortality data can mask variations between rural and urban areas and among rural populations. Since 1990, declines in metro and nonmetro age-adjusted mortality per 100,000 have diverged, with metro rates dropping almost twice the annual rates of nonmetro areas (Jones et al. 2009). Harvard University researchers report that life expectancy for women living in mostly rural counties declined between 1983 and 1999 (Murray et al. 2006). Rural West counties have the lowest mortality rates and rural South counties the highest. The metro-nonmetro mortality gap is greatest in the South; the Midwest reveals no gap between metro and nonmetro counties (Bishop 2009). Danaei and colleagues' (2010) findings

²The farm operator is the person who runs the farm, making the day-to-day management decisions. The operator could be an owner, hired manager, cash tenant, share tenant, and/or a partner. If land is rented or worked on shares, the tenant or renter is the operator. In the recent Census of Agriculture and in the Agricultural Resource Management Survey (ARMS), information is collected for up to three operators per farm. In the case of multiple operators, the respondent for the farm identifies who the principal farm operator is during the data collection process (Economic Research Service 2010).

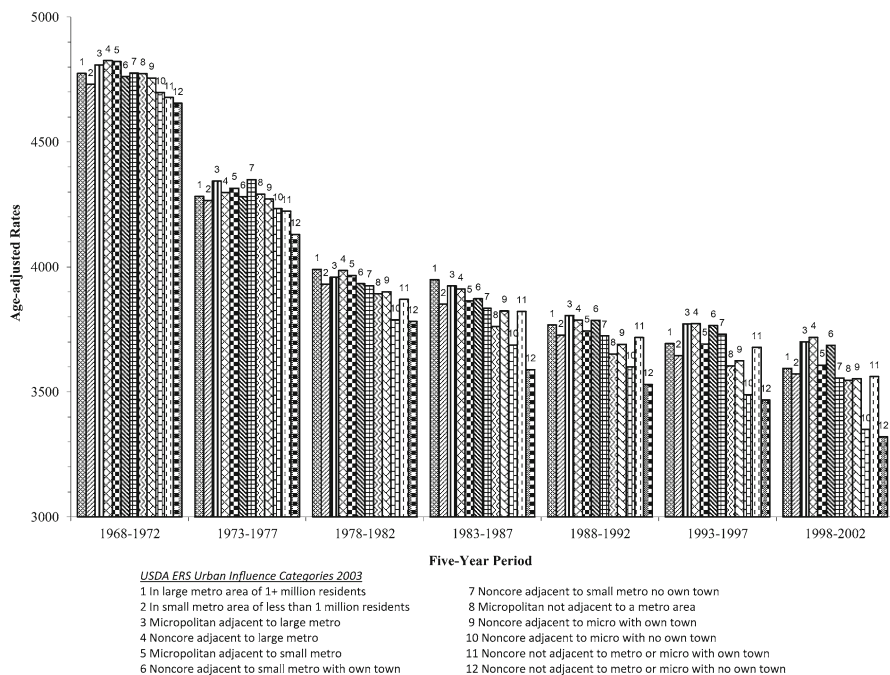


Fig. 10.1 U.S. Counties: age-adjusted elderly (55+) mortality rates 1968–2002 (per 100,000 population)

on spatial-demographic variations of preventable risk factors such as high blood pressure, BMI,³ high blood glucose and smoking patterns strongly suggest these are underlying causes for differences among regions. They report that both male and female Southern low-income rural Blacks (America 7)⁴ aged 60 and older have

³ BMI (Body Mass Index) is an estimate of body fat, based on height and weight. The CDC define BMI from 25.0–29.9 as overweight and 30.0 and above as obese (Centers for Disease Control and Prevention 2011). A BMI of 40 or above is considered morbid or severe obesity. In 2009, 28% of the US population older than 20 were considered obese and 5% morbidly obese (Centers for Disease Control and Prevention 2010a).

⁴ America 1 are Asians living in counties in which Pacific Islanders make up less than 40% of the total Asian population; America 2 are whites in the northern plains and Dakotas with 1990 county-level per capita income below \$11,775 (national median for whites) and population density less than 100 persons/km²; America 3 are all other whites not included in Americas 2 and 4, Asians not in America 1, and Native Americans not in America 5; America 4 are whites in Appalachia and the Mississippi Valley with 1990 county-level per capita income below \$11,775; America 5 are native American populations in the mountain and plains areas, predominantly on or near reservations; America 6 are all other black populations living in counties not included in Americas 7 and 8; America 7 are blacks living in counties in the Mississippi Valley and the Deep South with population density below 100 persons/km², 1990 county-level per capita income below \$7,500 (national median for blacks) and total population size above 1,000 persons (to avoid small numbers); and America 8 are urban populations of more than 150,000 blacks living in counties with cumulative probability of homicide death between 15 and 74 years of age greater than 1.0% (Murray et al. 2006).

higher rates of systolic blood pressure, higher body mass index, higher blood glucose and higher rates of smoking than Northland low-income rural whites (America 2). When 2005 nonmetro mortality is decomposed into micropolitan and non-core categories, as described by Glasgow and Berry, Chap. 1 this volume, non-core age-adjusted rates (880.0 deaths per 100,000) are higher than micropolitan counties (857.1 per 100,000) and metro counties (784.2 per 100,000) (Jones et al. 2009).

Historically, researchers have referred to the urban mortality penalty, as cities experienced higher rates of mortality than rural places due to high density populations spreading contagious diseases, poor water quality and inadequate sanitation (Cosby et al. 2008). However more recently, a nonmetro mortality penalty has emerged with metro-nonmetro differences averaging 71.7 excess deaths per 100,000 nonmetro population in 2000–2004 compared to an average of 6.2 excess deaths per 100,000 nonmetro population in the 1980s (Cosby et al. 2008). Researchers posit this nonmetro disadvantage that began in the 1990s may be attributed to inadequate access to health care.

Our own research suggests a more finely differentiated picture of mortality when those aged 55 and older are examined by geographic locations with different population densities and adjacencies to population concentrations. The metro-nonmetro dichotomy masks the within nonmetro variation, yielding a rural average that does not well represent the extremes of rural mortality. Even the two nonmetro categories, micro and non-core, smooth over rural variations by lumping together counties that have differential mortality rates within the same coarse rural label. Our focus on those 55 years and older yields a distinct pattern in nonmetro mortality. Figure 10.1, showing 5-year averaged age-adjusted elderly (55+) mortality rates between 1968 and 2002, demonstrates this point using the USDA, ERS 2003 urban influence categories (UIC)⁵ and longitudinal mortality data from the Centers for Disease Control and Prevention (CDC). The aggregation of all nonmetro non-core counties (UIC 4, 6, 7, 9, 10, 11, 12) places those counties with the lowest mortality rates (UIC 10 and 12) with nonmetro non-core counties recording the highest mortality rates (UIC 4 and 6), thus masking non-core variation. A closer examination reveals that UIC nonmetro non-core counties 4, 6, 7, 9 and 11 have urban characteristics such as adjacent to large metro, adjacent to small metro, adjacent to micropolitan with own town, and not adjacent to metro or micropolitan but with own town.

Further, nonmetro non-core counties UIC 4, 6 and 7 are more accurately described as suburban counties in 2003 because of their adjacency to large metro and small metro counties. We suggest that nonmetro UIC 8, 9 and 11 counties are

⁵Economic Research Service Urban Influence Categories 2003: (1) In large metro area of 1+ million residents; (2) In small metro area of less than one million residents; (3) Micropolitan adjacent to large metro; (4) Non-core adjacent to large metro; (5) Micropolitan adjacent to small metro; (6) Non-core adjacent to small metro with own town; (7) Non-core adjacent to small metro no own town; (8) Micropolitan not adjacent to a metro area; (9) Non-core adjacent to micro with own town; (10) Non-core adjacent to micro with no own town; (11) Non-core not adjacent to metro or micro with own town; (12) Non-core not adjacent to metro or micro with no own town (Economic Research Service 2003).

Table 10.1 U.S. age-adjusted mortality 1998–2002 across two levels (county and state)^a

Variable predicting age-adjusted mortality	
County-level	Random slope predictor
Nonmetro rural hubs (UIC 8, 9, 11)	−5.07 NS
Nonmetro rural isolated (UIC 10 and 12)	−26.32**
Inequality of income distribution (Gini)	22.03**
Per capita personal income	−25.47***
% aged 65 year and older in year 2000	−13.51*
Ratio of hospitals to county population	11.11**
Ratio of medical doctors to county pop	−3.01 NS
% Black	24.68**
State-level	
% counties in a state that are rural hubs (UIC 8, 9, 11)	4.74 NS
% counties in state that are rural isolated (UIC 10,12)	−10.02*
State income inequality distribution (Gini)	24.14*
State level per capita personal income	−38.88***
State level % elders aged 65+	−.24 NS
State level % black	54.63***
Interaction county level % 65+ and state % rural hub counties	2.90 NS
Interaction county level % 65+ and state % rural isolated counties	−11.27*

NS not significant

Significance levels: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

^aMultilevel model predicting county level 5 year average U.S. age adjusted all cause mortality, 1998–2002

rural hubs, micropolitan centers not adjacent to metro counties and non-core counties not adjacent to metro with their own towns. UIC nonmetro counties 10 and 12, which have the lowest age-adjusted mortality among nonmetro counties in all five periods from 1978 to 2002, are rural isolated counties—non-core adjacent to micro with no own town and non-core not adjacent to metro or micro with no own town.

The pattern of low mortality in the most rural isolated counties (UIC 10 & 12) persists in multilevel models of all cause U.S. mortality for the whole population controlling for income inequality, per capita personal income, percent black, medical infrastructure at the county level and other state-level characteristics (Table 10.1). Compared to the metro and nonmetro with urban adjacency reference counties (UIC 1 to 7), nonmetro rural isolated counties are associated with lower rates of age-adjusted mortality, while there is no such significant contrast between non-metro rural hubs. Income and percent Black, well-known demographic predictors of mortality, are significant at both county and state levels. Similarly, across levels, low per capita incomes and high income inequality (large gaps between low income and high income households) are more likely to have higher mortality rates. Other things being equal, counties with a higher percent of those aged 65 and older are significantly associated with lower mortality, and this negative association is even more pronounced in states with a high percent of rural isolated counties, as

evidenced by a significant cross-level interaction. Is this because only healthy rural elders can function in rural isolated places with limited access to retail goods and services needed for daily survival? Are elders with diseases more likely to relocate to more highly populated centers with a greater access to medical services and social support? Future research is needed to further investigate why state rurality as defined by the percent of rural isolated counties could have moderated the relationship between mortality rates and percent of elderly 65 years of age and older at the county level.

10.2.2 Chronic Disease

Longer life spans and an aging population have resulted in an increasing total prevalence of chronic diseases and associated conditions of disability and limitations of activities (National Center for Health Statistics 2009). Chronic diseases such as heart disease, stroke, diabetes and cancer are influenced by lifestyle and in some instances are preventable. Danaei et al.'s (2010) examination of the Eight Americas shows linkages among race-county interactions, life expectancy disparities and preventable risk factors. They find that mean body mass index (BMI), fasting plasma glucose, systolic blood pressure and smoking are key predictors of life expectancy. Analyses of rural older people and chronic disease data are sparse, but we can get a general pattern of rural elders' health by looking at those 65 years of age and older and then at those living in nonmetro areas.

Hypertension, diabetes and end stage renal disease are associated with aging. Eighty percent of women and 65% of men aged 75 and older had high blood pressure or were taking antihypertensive medication in the 2003–2006 period compared with 36% of adults aged 45–54 years (National Center for Health Statistics 2009). Comparisons among large metropolitan statistical areas (MSAs), small MSAs, and the residual nonmetro areas in 2006 show nonmetro residents were statistically more likely to smoke, be obese and never do vigorous exercise compared to their urban counterparts (Jones et al. 2009). Nonmetro residents had higher incidences of chronic diseases in 2006, including hypertension, stroke, heart disease and emphysema compared to those living in large and small MSAs. The incidence of chronic joint pain, chronic low back pain and other physical difficulties, such as difficulty walking a quarter of a mile, climbing ten steps without stopping or standing/sitting for 2 h were also higher for nonmetro residents (Jones et al. 2009).

A comparison of farm and non-farm workers 1997–2003 yields a slightly different pattern, with farmers having higher rates of overweight but lower rates of smoking and obesity compared to non-farm workers (Jones et al. 2009). Farmers also report lower incidence rates of cardiovascular disease, asthma and emphysema (Jones et al. 2009). In 2006, farmers' incidence of chronic joint pain was higher than for other U.S. workers, but other chronic injuries and physical limitations were comparable to workers in other occupations (Jones et al. 2009).

Forty-two percent of community-dwelling Americans aged 75 and older had a limitation in usual activity due to a chronic condition in 2006 (National Center for Health Statistics 2009). This compares to 13% of the 45- to 54-year-old U.S. population having one or more limitations in usual activities. Of concern is the future generation of elders, those now in the 45–64 age range. This group currently has the highest rates of obesity (National Center for Health Statistics 2009), with significant implications as they approach their older years. Excess weight appears a critical risk factor for disability and excess mortality. Obesity is associated with increased risk of diabetes, heart disease, osteoarthritis and disability (National Center for Health Statistics 2009). “Among the near-elderly (ages 50–69) medical care spending among the severely obese (body mass index, or BMI, 35.0 or higher) is 60% higher than for [sic] those of normal weight” (Thorpe et al. 2004, p. W4-480).

10.3 Availability and Access to Rural Services that Support Health and Well-Being

10.3.1 Health Care

In addition to individual genetics and personal behaviors, healthy aging in rural places is influenced by availability and access to health care resources, the community physical and social infrastructure and individual social support (Cvitkovich and Wister 2001; Ziller et al. 2003; Morton et al. 2004b; Jones et al. 2009). Growth in chronic diseases and a decrease in acute conditions, combined with increased medical specialization and technologies, as well as changes in private health insurance, and the increasing cost of public health insurance (Medicare and Medicaid) have complicated health care politics and regulation. Extensive public debate and legislative attempts to restructure the U.S. health care system have been going on since the failed Health Care Reform Act of 1993. As an increasing number of baby boomers move from private health coverage into Medicare, public spending is projected to increase while private costs decrease (Truffer et al. 2010). National health expenditure as percent of GDP (gross domestic product) was 7.2% in 1970 and is predicted to top 19% by 2019 (Hartman et al. 2010; Truffer et al. 2010). Further, public spending (Medicare and Medicaid) is projected to account for more than half of all U.S. health care expenditures by 2012 (Truffer et al. 2010). One of the largest areas of public health care growth is spending on post-acute services in Medicare and Medicaid long-term care services (Ng et al. 2010).

Medicare is the public U.S. health insurance program for people age 65 or older and those under age 65 with certain disabilities including end-stage renal disease, the fifth stage of chronic kidney disease.⁶ Medicare Part A hospital insurance is

⁶ More information available at <http://www.medicare.gov>.

premium-free to all eligible individuals and provides hospital, hospice, skilled nursing care and home health care. Medicare Part B helps cover medically-necessary services like doctors' services, outpatient care, home health services and other medical services as well as some preventive services. Depending on year of enrollment Medicare eligible individuals pay a monthly premium based on income, are likely to have a deductible of \$110–155 and pay 20% of the Medicare approved amount for service once the deductible is satisfied. Additional Medicare insurance can be purchased (Medicare Part C) to cover gaps in Part A and Part B coverage. Medicare part D insurance helps pay for prescription drugs.⁷

The Patient Protection and Affordable Care Act (PPACA) signed into law by President Obama on March 23, 2010 included provisions for expanding Medicaid (health care coverage for low income individuals, whether elderly or non-elderly) eligibility, subsidizing insurance premiums, incentives for business to provide health care benefits, establishment of health insurance exchanges and support for medical research (see Wikipedia 2010). In addition to increasing medical coverage for the uninsured, a key motivator of the legislation was to slow medical expenditures and reduce the portion of public debt associated with Medicare and Medicaid entitlement programs. Although the goal was reduction in the federal deficit in the next 10 years, it is not yet clear how this legislation will impact older Americans and whether it can slow spiraling medical costs. Efforts to address rural uninsured, small business employment and employer-provided benefits will have spillover effects on the economic development of rural communities and the kinds of medical services offered to rural populations, including rural elders (Center for Rural Affairs 2009).

Loss of rural hospitals over the last 30 years and shifts in the rural medical infrastructure have increased the difficulty of recruiting physicians and medical personnel for routine care and assuring rural health service access for elderly and low income individuals (Morton 2003). However, outpatient procedures have replaced many inpatient hospitalizations with shorter inpatient hospital stays since 1995, especially among persons 65 years of age and older (National Center for Health Statistics 2009). Specialized health care facilities, including imaging centers, outpatient surgical centers, dialysis centers and physician specialties and subspecialties (National Center for Health Statistics 2009) are more frequently available in urban than rural areas. For many rural elders, transportation to distant services available only in large cities is a critical need.

While the overall rate of office-based physician visits increased from 1995 to 2006, many of those doctor visits were for specialty care, an increase of 34% since 1980 (National Center for Health Statistics 2009). General and family practice doctor visits decreased during this same time period. Despite the proliferation of outpatient services, hospital spending is 31% of national health expenditures and continues to increase (National Center for Health Statistics 2009). General U.S. health care infrastructure trends have left many rural areas without easy access to general and family practice physicians, as well as emerging networks of specialty care (Center for Rural Affairs 2009).

⁷ More information available at <http://www.medicare.gov>.

An increased understanding of the incremental stages of disabilities associated with chronic disease and aging has led to a decrease in the number of nursing homes and an increase in assisted living facilities that help people retain as much independence as possible as they age. Most long-term formal care services are paid for by a combination of Medicare and Medicaid (67% in 2007); most long-term informal care services are provided by unpaid family caregivers (Ng et al. 2010). Formal long-term care for the elderly consists of two main types of services: (1) home and community based services, and (2) institutionalized care in nursing homes. Those who are white and 65 years and older are twice as likely as the black elderly population to be nursing home residents (National Center for Health Statistics 2009). When rural elders move to a nursing home or assisted living facility, it often means leaving their home town and losing a familiar community environment, as well as friends and family who provided social support.

Access to pharmaceutical services is an important medical service chronically ill rural elders need. Xu's (2003) analysis of the 1998 Medical Expenditure Panel Survey reveals that the elderly spent \$537 out-of-pocket dollars for prescription drugs, \$345 more than non-elderly who spent \$192. Much of this difference is explained by differences in health and well-being between elderly and non-elderly. In 2006, 60% of those 65 years of age and older had three or more drugs prescribed in the past month, with older women more likely to use prescription drugs than older men (National Center for Health Statistics 2009). According to Xu (2003), elderly consumers in the middle and high income groups are as disadvantaged related to the cost of prescription drugs as their poor and near-poor elderly counterparts. He suggests that public assistance programs for prescription drugs help the poor and near poor elderly and may explain why there is little difference among elderly categories in prescription spending.

Well-established diet and disease relationships (Morland et al. 2002) have motivated many elders to modify their diets and add nutritional supplements to mediate disease risks. As early as 1961, the American Heart Association recommended reduction of total fats, saturated fats and cholesterol and an increase in polyunsaturated fats (Morland et al. 2002).

Inadequate nutrient intakes are common among rural elderly individuals, which are associated with low diet variety (Marshall et al. 2001). Elderly age 60 and older have been found to have inadequate dietary intake of folate, Vitamin D, Vitamin B-6, calcium and zinc (Marshall et al. 2001). Marshall and colleagues' (2001) study of elderly (mean age 85.2 years) living in rural communities reported that 75% had inadequate intakes of folate, 83% inadequate Vitamin D and 63% inadequate calcium. They note that "deficiencies of energy and individual nutrients are associated with decreased cognition with Vitamin B-12 deficiency being particularly problematic in the elderly," and they recommend supplements (Marshall et al. 2001, p. 2192).

A random mail survey of rural residents in an Iowa county with more than 19% of residents age 65 or older found 56% of all respondents daily used a vitamin or mineral supplement, 23% a fiber supplement, 16% herbs/botanical

and 6% a protein or energy supplement (Morton et al. 2004c). While the sample size was too small to analyze older respondents only, the general rural pattern of purchasing revealed almost 46% of these supplements were purchased out-of-county at a superstore such as Wal-Mart. Thirty-one percent reported purchasing them from a supermarket; 27% from a drugstore, 9% by mail order/telephone, and 7% via the Internet (Morton et al. 2004c). Access to various supplements may require transportation of substantially long distance, which may contribute not only to inadequate nutrient intakes among older people but also to other risk factors.

10.3.2 Community Infrastructure

Rural elders experience both availability and access challenges in purchasing not only medical services but also the essential elements of every day well-being such as food, exercise and developing new and maintaining existing social relationships. While often access is affected by individual income and conditions of poverty, community infrastructure is a critical aspect of assuring elderly independence and well-being. Researchers have found that local resources and social support in the environment can compensate for some age-related declines (Cvitkovich and Wister 2001). Older people's access to high quality affordable foods may be limited by the proximity of a local grocery store and/or easy, affordable transportation to larger supermarkets and super stores such as Wal-Mart.

A 2003 Iowa random sample mail survey ($N=707$, response rate 60%) of two high poverty rural counties (19.5% and 18.1% age 65 or older), with two stores per county, revealed that more than 25% of respondents were 12–25 min away from their regular grocery store and another 25% were more than 25 min away (Morton et al. 2004a). Although 97% of all residents used their own car to travel to their regular grocery store, 11% of those aged 70 and older did not use their own car but depended on others to get to the store. Those over age 70 regularly shopped fewer stores than the younger population, and only 6% traveled out-of-county to shop at a discount or wholesale food store compared to 15% under age 70 (Morton et al. 2004a). While 12% of those aged 70 and older rated the nutritional quality of their diet as fair or poor, only 41% reported eating the recommended daily servings of vegetables, and 63% reported eating the recommended daily servings of fruits. Furthermore, 43% were overweight (BMI 25–29.9) and 26% obese (BMI over 30). Compared to younger respondents, those 70 years of age and older were likely to weigh less. However, both groups were on average overweight (Morton et al. 2004a).

Food insufficiency for older men and women is defined by Wooden and Oakland (2003) as being when elders shop for food once a month or less, use food assistance and have income at or below 130% of the poverty threshold. Morton et al. (2004a) found that of the respondents aged 70 and older in the Iowa survey, 9.3% were food

insecure and 3.6% were food insecure with hunger.⁸ These rates were lower than for the age 70 and younger population in these high poverty counties (12% and 6.7%) but were above the Iowa 2000–2002 rate of 9.1% food insecure and food insecure with hunger rate of 2.8%.

When asked where they got food, in addition to the grocery store, 43% reported getting food from a personal garden, 31% from family or friends' gardens, 20% from family or friends, 16% got meat from family or friends' farms and 18% got food from the local senior meal program. Very few reported receiving food stamps (less than 5%) or using a food pantry (less than 0.05%), despite being income eligible.

Rural elders' good health and high quality of life are also affected by access to physical recreation opportunities, mental stimulation, social engagement and social support. Glasgow (2004) and others argue that the potential for healthy aging has been underestimated. Social integration, the array of social relationships, has a strong positive influence on health (Berkman et al. 2000; Glasgow 2004). Rural elders who are able to stay connected to friends, neighbors and community institutions such as church, community meal programs and service clubs are likely to have better physical and mental health. Disability and limitations in Activities of Daily Living (ADLs) associated with aging can be mediated by community infrastructures that help elders maintain connections in the community. Effective transportation systems within the community and across communities are essential for minimizing social isolation (Cvitkovich and Wister 2001; Glasgow 2000), and yet they are woefully inadequate in many rural communities. Silverstein and Wu (1997) found an increase in participation levels at senior centers when transportation access was improved.

Transportation is a pivotal element in rural elders' capacities to maintain health and well-being. When transportation-dependent individuals have unfulfilled transportation needs, it is more difficult for them to maintain positive well-being (Cvitkovich and Wister 2001). Cvitkovich and Wister (2001) found that seniors with mobility limitations were also likely to be transportation dependent (91%) and more than half (52.6%) had unfulfilled transportation needs. Further, they report that transportation-dependent elders were on average 82.2 years of age, in poor/fair health (70.8%), experienced mobility limitations (91%), required help with ADLs (83.3%), required help with Instrumental Activities of Daily Living (IADLs) (68.8%), and experienced moderate to high levels of stress.

⁸ Measures of household food insecurity are based on the following definition of food security: "Access by all people at all times to enough food for an active, healthy life, which includes at a minimum: (a) the ready availability of nutritionally adequate and safe foods, and (b) the assured ability to acquire acceptable foods in socially acceptable ways (e.g., without resorting to emergency food supplies, scavenging, stealing or other coping strategies)" (Anderson 1990, p. 1598). Hunger is the extreme range of severity of food insecurity. USDA researchers have developed two instruments (18- and 6-item core food security modules) for documenting prevalence of household food insecurity and household food insecurity with hunger in the United States (Bickel et al. 2000).

10.4 Living in Rural Places and Healthy Aging

Rural health policies that focus on healthy aging and well-being should target maintaining elders in their homes as long as possible and develop a social and medical infrastructure that addresses chronic illness and disability as well as mental and physical stimulation that encourage well-being. Obesity and the diseases associated with overweight and obesity are major health issues with one in every three adults categorized as obese (see Centers for Disease Control and Prevention 2010b). Obesity is also a major concern for rural elders and near elders requiring both individual and community structural actions primarily related to healthy food choices and increased exercise decisions. This has implications not just for national policy, such as how the Patient Protection and Affordable Care Act of 2010 is implemented but also the collective efficacy of local communities to undertake an assessment of their infrastructure and act on their findings.

Collective efficacy is “the willingness of community members to look out for each other and intervene when trouble arises” (Cohen et al. 2006, p. 769). Rural transportation infrastructure is a key concern involving financing and appropriate linkages that will require partnerships among local, state and national decision makers. Issues both local and national leaders should examine include environmental factors which make it easy to over consume calories and difficult to expend them in daily routine physical activities.

Rural poverty rates exceed urban poverty rates, and rural elders are not exempt. Strides have been made in increasing low income Medicare beneficiaries’ access to prescription medications. A 2006 report on Medicare Part D, the prescription medication coverage, found that those who did not get prescription drugs they needed due to cost declined from 12% in 2005 to 8% in 2006 (National Center for Health Statistics 2009). This is an encouraging trend, suggesting that access to prescription drugs has increased in the elderly population.

Twenty-seven percent of real per capita medical spending between 1987 and 2001 is attributed to an increase in spending on three chronic medical conditions: diabetes, hyperlipidemia (high blood cholesterol and triglycerides) and heart disease (Thorpe et al. 2004). Underlying this increase is the rising prevalence of obesity and higher relative per capita spending, as new medical technologies have become available to treat obese patients. The combination of an aging population and the rise in disease-specific risk factors, such as obesity and poverty, have led to an increase in the prevalence of chronic conditions (Bodenheimer et al. 2009). The age 85+ group have the highest proportion of people with multiple chronic conditions, and these are projected to grow from five million in 2005 to 21 million in 2050 (Bodenheimer et al. 2009). The physician specialization trend is seen in the cost of treating multiple chronic conditions in individuals. Seventy-six percent of Medicare expenditures in 2002 were attributed to those with five or more chronic conditions (Bodenheimer et al. 2009).

Bodenheimer et al. (2009) report the average Medicare patient with one chronic condition sees four physicians a year. The average Medicare patient with five or more chronic conditions sees 14 different physicians a year. Health care policy

interventions must address who should deliver this chronic care and how can we best balance quality of care and costs. What is the mix of specialist physicians, generalist physicians and multidisciplinary teams needed for rural health and well-being, where should they be located, and how do we pay for this care? Rural America has a shortage of both primary care and specialty care physicians. Public policies that offer physicians incentives to practice in rural locations, provide support for rural hospitals that employ specialty care physicians, and provide better transportation infrastructure to give rural elders increased access to rural hubs and metropolitan specialty care can mediate some of the rural health care access issues.

Today's elders are healthier in many ways than the near elderly. However, studies have shown a much higher prevalence of obesity and inactive lifestyles in nonmetro than metro areas, and obesity disproportionately affects rural residents of certain demographic characteristics, such as racial/ethnic minorities, low educational achievers, and those in specific adverse contexts, such as elevated county unemployment rates and states in the South (Borders et al. 2006; Jackson et al. 2005; Patterson et al. 2004). Programs and policies aimed at promoting healthy aging in rural places through curbing obesity and inactive lifestyles should effectively target risky populations as well as risky structural factors repeatedly identified across relevant studies.

10.5 Conclusion

Central to aging in place are infrastructure and attitudes that support the physical and mental well-being of rural people as they grow older in the communities where they have built work and social relationships. Fading eyesight, diabetes, osteoporosis, heart disease and cancer are common chronic diseases experienced by rural and urban people as they age. These health challenges for rural elders, however, are exacerbated by rural infrastructure, including little or no public transportation, few and poor quality grocery stores, distant medical clinics, shortages of doctors and nurse practitioners and loss of retail businesses that offer the services and products of daily living. To the rural person accustomed to driving whatever distance is needed to meet friends or purchase needed supplies, living in a rural place is no big deal. It offers a natural landscape, quiet and comfortable quality of life. To elderly advancing in age, with chronic illnesses, familiar and favorite places where they have entertained friends and family, experienced life and death and celebrated life's events, living in their rural home can be a daily challenge.

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Chapter 11

Rural Long-Term Care and Informal Caregiving

Nan E. Johnson

11.1 Introduction

Rural Americans have long endured a higher poverty rate than urban Americans. In 2005, 15.1% of rural residents versus 12.5% of urban residents lived below the federal income poverty line (Jensen 2006). A major reason is structural: compared to urban labor markets, rural labor markets are smaller, less diverse, and more often dependent on a single industry (Jensen 2006).

The resulting lower tax base in rural than urban communities makes it harder for the former to fund such services as licensed child care facilities, public transportation, strong public schools, solvent public hospitals, and information technologies that create local jobs and allow rural citizens to avoid poor health and poverty or to overcome these disadvantages. Moreover, the lack of such infrastructures makes it harder for rural than urban communities to recruit physicians. This is a major reason why there are fewer physicians per capita in nonmetropolitan (nonmetro) counties than in small or large metropolitan (metro) counties (Rogers 2002).

The higher rural than urban poverty rate, however, is a greater hindrance to the chances that rural residents will find ways to pay for their health care. Indeed, nonmetro adults are more likely than their metro counterparts to depend on Medicaid and less likely to have private health insurance (Hummer et al. 2004). This litany of disadvantages in accessing and paying for local health care weighs more heavily on older adults, since they are more likely than younger people to face chronic health challenges. Thus, it is unsurprising that a higher percentage of nonmetro than metro elders rate their health as poor (36.6 versus 31.7%, respectively; Rogers 2002) and experience higher prevalence rates of mental health

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problems, arthritis, hypertension, heart disease, and diabetes (Coward et al. 1996; McAuley et al. 2009). Consequently, one would expect a higher incidence rate of nonmetro than metro elders entering nursing homes; and this expectation was borne out in a 6-year (1984–1990) longitudinal analysis of adults 70 years of age or older (Coward et al. 1996).

However, one puzzling finding from a 1980 survey of nursing homes in Arizona (Greene 1984) was that older adults enter nursing homes at a younger age and a less disabled state when the nursing homes are in rural rather than urban places. Greene concludes that the “premature” entry of rural elders into nursing homes is due to the relatively greater absence of formal, supportive services in rural than urban communities that would otherwise enable older adults to manage mild disabilities independently in their own homes. Examples of the frequently missing services are adult day care, respite care, Meals-on-Wheels, and in-home health services. Consistent with Greene’s findings from the 1980 survey in Arizona, the more recent 1999 National Nursing Home Survey (NNHS) shows that nursing home residents were less likely to receive skilled nursing care (e.g., mental health services, occupational and physical therapy) and more likely to be given only custodial care, if the facility was in a nonmetro rather than a metro county (Coburn et al. 2006; Duncan and Radcliff 2004).

For at least three reasons, elders living in metro nursing homes are typically expected to be more disabled than their counterparts in nonmetro nursing homes. First, metro nursing homes are better located to admit, and offer sub-acute care to, elderly patients being discharged from acute care at nearby hospitals (Duncan and Radcliff 2004, p. 254). Second, the 1997 Balanced Budget Act (BBA) and the 1999 Balanced Budget Refinement Act (BBRA) changed the Medicare reimbursement schedule in ways that penalize home health-care services more heavily in nonmetro counties and accelerate the entry of nonmetro elders with only mild disabilities into nursing homes (Zimmerman et al. 2004). Third, the continuing growth in the number of senior apartment complexes and assisted living centers is providing alternatives to nursing home residency for older people who need some oversight but for whom assistance does not require intensive, hands-on care. Yet the rent at these expensive residential alternatives to nursing homes is usually not covered by Medicare, Medicaid, or private health insurance; hence, metro elders are better able to afford them. It is unknown how these three factors have changed the characteristics of nursing homes and nursing-home residents in ways that sustain or modify metro versus nonmetro contrasts. Thus, it is time to update Duncan and Radcliff’s (2004) analysis of the 1999 National Nursing Home Survey.

A final puzzle comes from the popular image of nonmetro communities as places where formal and informal social networks composed of spouses, children, other relatives, and friends provide unpaid assistance to older adults. This conception presumes that these networks keep elders out of nursing homes until their disabilities become severe. If this stereotype is true, then nonmetro older adults ought to enter nursing homes at older ages and greater levels of disability, when compared to older adults in metro nursing facilities.

But is the stereotype true? Coward et al. (1996) estimated the odds (incidence rates) of nursing home admission at any time during 1984–1990 and controlled several factors related to the “convoy of support” (Stoller and Pugliesi 1991, p. 181) for disabled people 70 years of age or older: number of children, the existence of any paid or unpaid helpers, and the living arrangements (whether with the spouse, only with non-spousal others, or alone). All else being equal, a disabled senior living in metro areas faced a lower risk of nursing home admission than nonmetro elders. The greater risk that nonmetro elders went into nursing homes persisted despite controls for their level of disability. One strength of the Coward et al. (1996) study was its longitudinality, but the observation period ended well before the 1997 BRA and 1999 BBRA.

11.2 Four Research Questions

The limitations identified in the literature review invite four research questions that require answers from more recent data:

- Question 1 (Q1): What are the organizational differences between nursing homes in metro versus nonmetro counties?
- Question 2 (Q2): What are the demographic differences between nursing-home residents in metro versus nonmetro counties?
- Question 3 (Q3): Which risk factors for nursing-home residency are greater for older adults living in nonmetro than metro counties?
- Question 4 (Q4): After the risk factors identified in Q3 are held constant, do older adults in nonmetro counties have a higher net risk of nursing-home residency than their metro counterparts?

Comparing answers to Q1 versus answers to Q2 will invite conclusions on whether the nursing homes are geared to serve the needs of their patients better in metro counties than elsewhere. The answer to Q4 will show whether nonmetro residents-at-large face a uniquely greater risk of living inside rather than outside a nursing home. An affirmative answer to Q4 will be consistent with a larger failure of informal caregiving to keep nonmetro older adults out of nursing homes.

11.3 Methods

11.3.1 Data

The data to answer Q1 and Q2 are from the 2004 National Nursing Home Survey (NNHS), conducted by the National Center for Health Statistics (NCHS) between August 2004 and January 2005. This chapter analyzes two levels of the NNHS: the data from the nursing-home questionnaire and on the nursing-home residents.

In order for a nursing-home facility to qualify for inclusion in the 2004 NNHS, it had to have at least three beds and a certification by Medicare or Medicaid or a state license to operate as a nursing home. Of the 16,628 nursing homes, 1,500 nursing homes were selected by a stratified, multi-stage sampling plan with a probability proportional to their bed size and presence in a metro or nonmetro area. The response rate was 78% (1,174 nursing homes). The items of data from this source have been weighted to take the sampling-design characteristics into account (see Table 11.1).

The second stage of the NNHS was the resident-level data collection. Residents on the rolls as of midnight on the day before the facility was interviewed were listed and numbered in a directory. If the facility had at least 12 residents, then 12 were randomly chosen from the directory; if fewer than 12 residents, then all were chosen. None of the chosen residents was directly interviewed. Instead, facility staffers completed the residents' questionnaire mainly by using each selected individual's medical records. This strategy yielded data on 13,507 nursing-facility residents. The data in Table 11.2 have been weighted to make them representative of all US nursing-home residents on any given day between August 2004 and January 2005.

To answer Q3 and Q4, I used the 2004 wave of the longitudinal US Health and Retirement Study (HRS), a complex probability sample of US residents 51 years of age or older (see Juster and Suzman 1993 for details). If the respondent lived in a nursing home or other residential facility, two separate questions were asked to gauge the presence of potential unpaid caregivers: whether they had any kin or any friends "living in or near the facility." HRS respondents living outside a residential facility were asked if they had any relatives or any good friends "living in the neighborhood." Knowledgeable proxies who were the next-of-kin or close friends were sought as informants when the respondents were too ill or unavailable to participate directly. In addition, proxy respondents were used to get data on all study respondents in nursing homes so as to preserve confidentiality. As such, the 2004 HRS is especially well-suited to answering Q3 and Q4 (see the data in Tables 11.3 and 11.4, which are not weighted because the weights would have excluded the nursing-home residents).

11.3.2 Measures

The definitions of most factors analyzed here are presented in the row labels of the tables. However, it is important to understand how "urbanity" and "rurality" are classified. In the 2004 NNHS, urbanity is symbolized by a nursing facility's location in a metropolitan statistical area (METRO). METRO status refers to a core county containing an incorporated area of at least 50,000 residents and any fringe counties economically connected to the core county by significant commuting.

All counties outside a METRO area are nonmetro counties. In accordance with an Office of Management and Budget designation, however, I break down nonmetro counties into two finer groupings: Nonmetro Micropolitan Counties (MICRO) and Other Nonmetro Counties (ONCs). MICRO means a core nonmetro county that contains

Table 11.1 US nursing home characteristics by metro classification of county

Characteristics	County type of nursing home location		
	Metro	Micro	Other nonmetro
Total (%)	67.7	16.2	16.1
% facilities in chain	56.5	49.9 ^a	48.4 ^b
% for-profit owners	63.5	62.7	51.2 ^{b,c}
Average no. of beds/nursing home*	118.5	92.9	76.3
% beds occupied*	87.4	83.4	82.5
No. of registered nurses/100 beds**	7.0	6.0	7.0
No. of licensed practical nurses/100 beds**	11.0	11.0	10.0
No. of certified nursing assistants/100 beds**	35.0	35.0	34.0
% with any specialty units***	41.0	37.8	29.1
% of facilities with dental services	74.5	52.2 ^b	38.6 ^{b,c}
% provided only outside facility****	24.6	46.8	61.0
% of facilities with mental-health services available	84.5	69.3 ^b	57.7 ^{b,c}
% provided only outside facility*****	38.1	44.4	48.8
% with at least 1/5 of residents having Medicare as main payment source	17.8	13.3 ^a	4.3 ^{b,c}
% with at least 3/5 of residents having Medicaid as main payment source	59.8	64.0	70.8 ^{b,d}

Source: 2004 National Nursing Home Survey

Note

^adiffers from metro statistic by $p < 0.10$

^bdiffers from metro statistic by $p < 0.05$

^cdiffers from micropolitan statistic by $p < 0.05$

^ddiffers from micropolitan statistic by $p < 0.10$

*From Table 1 at www.cdc.gov/nchs/data/nnhsd/nursinghomefacilities2006.pdf#01. Accessed on 12 Apr 2010

**From Table 3 at same web address as Table 1

***From Table 14 at www.cdc.gov/nchs/data/nnhsd/nursinghomefacilities2006.pdf#11. Accessed on 12 Apr 2010

****From Table 11 at same web address as Table 14

*****From Table 12 at same web address as Table 14

an incorporated urban area of 10,000–49,999 residents or any fringe nonmetro county connected to this core county by having at least 25% of the labor force commuting to work there, or *vice versa*. The nonmetro counties lying outside micropolitan statistical areas are categorized as “other nonmetropolitan counties” (ONC). The ability to classify nonmetro counties as MICRO or ONC is new as of the 2000 US Census and allows nonmetro counties to be broken down more finely than was possible for Duncan and Radcliff (2004) when they analyzed the 1999 NNHS.

For the geographic data for Q3 and Q4, I used the Federal Information Processing Standards (FIPS) codes that uniquely identify the county and state where the Study Respondent to the HRS was interviewed in 2004. I used the same county designations as in the 2004 NNHS to break these counties down into METRO, MICRO, and ONC groupings.

Table 11.2 Description of nursing home residents by metro classification of nursing home location

Demographic variables	County type of nursing home location		
	Metro	Micro	Other nonmetro
Sample size	7597.0	2995.0	2915.0
Average age (years)			
At admission	77.7	78.5 ^a	78.5 ^a
At interview	80.1	81.3 ^b	81.4 ^b
Average no. of days, admitted—interview	805.9	899.8 ^b	967.3 ^{b,c}
% Female	70.7	71.3	74.0 ^{b,d}
% White	83.9	91.2 ^b	91.1 ^b
% Married	20.0	20.7	20.6
% Widowed	52.0	57.4 ^b	57.7 ^b
Where staying before entering this facility?			
% Private home	27.2	33.0 ^b	37.5 ^{b,d}
% Acute-care hospital	36.4	37.1	30.4 ^{b,d}
% In living arrangement before entry			
% Alone	10.5	15.1 ^b	18.2 ^{b,d}
% With spouse	5.9	6.5	7.8 ^b
% With child	5.2	5.2	5.4
% Assigned bed in specialty unit	11.3	9.8	6.3 ^{b,d}
% Now receiving special service			
Hospice	2.6	1.8 ^a	2.2
Pain	5.8	6.3	8.7 ^b
Behavior	5.6	4.8	6.0
Skin/wound	6.2	5.8	5.9
Incontinence	5.4	6.6	7.2
Dementia	5.8	4.9	5.0
Rehabilitation	17.0	20.2 ^a	21.0 ^b
Other	5.8	5.7	4.2 ^b
% With ADLs*			
Transferring	78.9	74.3 ^b	73.1 ^b
Walking	83.0	79.3 ^b	77.7 ^b
Dressing	89.1	87.6	86.0 ^b
Eating	58.8	55.2 ^b	53.3 ^b
Toileting	83.7	79.9 ^b	78.6 ^b
Bathing	96.4	97.0	96.6
Average no. of ADLs*	4.9	4.7 ^b	4.7 ^b
Average no. of medications	8.8	9.1 ^b	9.4 ^b
Financing care: average daily charge (\$)			
At admission	254	228	198
At interview	161	145	152
Primary diagnosis at admission			
% Circulatory disease (ICD-9-CM codes 390–459)	23.3	24.1	26.5 ^{b,c}
% Mental disorder (ICD-9-CM codes 290–319)	16.7	15.3	15.9

(continued)

Table 11.2 (continued)

Demographic variables	County type of nursing home location		
	Metro	Micro	Other nonmetro
% Disease of nervous system or sense organ (ICD-9-CM codes 320–389)	13.5	16.3 ^b	16.4 ^b
Primary diagnosis at survey			
% Circulatory disease (ICD-9-CM codes 390–459)	24.7	25.4	27.6 ^b
% Mental disorder (ICD-9-CM codes 290–319)	22.8	18.1 ^b	21.2 ^d
% Disease of nervous system or sense organ (ICD-9-CM codes 320–389)	15.6	21.0 ^b	18.3 ^{b,d}

Source: 2004 National Nursing Home Survey

Note

^aDiffers from metro statistic by $p < 0.10$

^bDiffers from metro statistic by $p < 0.05$

^cDiffers from micropolitan statistic by $p < 0.10$

^dDiffers from micropolitan statistic by $p < 0.05$

*Activities of Daily Living (ADLs) are the total number of the following six activities that the respondent has difficulty in doing or is unable to do: dress, walk across a room, bathe/shower, feed oneself, get in/out of bed, use toilet

11.4 Findings

11.4.1 Q1: What are the Organizational Differences Between Nursing Homes in Metro Versus Nonmetro Counties?

Nursing homes differ according to their geographical location. Most nursing homes in METRO counties are owned by a chain or operated for a profit. A much smaller share of nursing homes in ONC has either of these two characteristics (Table 11.1, rows 2–3). MICRO-county nursing homes are in an intermediate position on these two characteristics.

The different structures of ownership in the three county types are accompanied by some important differences in the sources of payment for care. Although Medicare is not the main source of payment, it is a much more common source for residents of METRO than MICRO or ONC nursing homes (respectively, 17.8, 13.3, and 4.3% have at least 20% of their residents with Medicare as the main source of payment; Table 11.1, row 14). This is consistent with the possibility that METRO nursing homes have the highest component of short-term residents recuperating there after dismissal from an acute-care hospital. I return to this point in the next section.

Medicaid dependency by at least 60% of the nursing-home residents increases in stepwise fashion from METRO to MICRO to ONC facilities (59.8 to 64 to 70.8%; Table 11.1, row 15). Given the greater diversity in sources of funding for METRO nursing homes, it can be expected that the kinds of care given there would be more complex and on a larger scale.

Table 11.3 Description of US adults 51 years of age or older by metro/nonmetro status

Characteristics	Metro	Micro	Other nonmetro
Sample size	15,497.00	2,482.00	1,955.00
Age (years)	67.04	66.29 ^a	67.99 ^{a,b}
% Female	58.77	58.10	56.57 ^c
% White	78.91	83.92 ^a	89.21 ^{a,b}
% Married	62.17	66.20 ^a	66.65 ^a
% own home	71.41	69.26 ^a	64.81 ^{a,b}
Net worth (assets minus liabilities in dollars)	443,027.10	348,662.30 ^a	301,051.80 ^a
Average no. of ADLs*	0.41	0.41	0.43
Average no. of ADLs for which receives personal help	0.22	0.23	0.23
Average self-rated health (1=excellent; 5=poor)	2.85	2.98 ^a	2.96 ^a
Average self-rated vision (1=excellent; 5=poor)	2.83	2.90 ^a	2.91 ^a
Average self-rated hearing (1=excellent; 5=poor)	2.61	2.76 ^a	2.78 ^a
% with kin living in/near the facility (for those living in a facility)/% with relatives living in neighborhood (besides people living with R)	26.17	37.23 ^a	44.96 ^{a,b}
% with any good friends living in/near facility (for those living in a facility)/% with any good friends living in the neighborhood	62.13	71.27 ^a	75.70 ^{a,b}
% in nursing home	2.21	2.22	2.76

Source: 2004 Health and Retirement Survey

Note

^aDiffers from metro statistic by $p < 0.05$ ^bDiffers from micropolitan statistic by $p < 0.05$ ^cDiffers from metro statistic by $p < 0.10$

*Activities of Daily Living (ADLs) are the total number of the following six activities that the respondent has difficulty in doing or is unable to do: dress, walk across a room, bathe/shower, feed oneself, get in/out of bed, use toilet

These expectations are met in the 2004 NNHS data. For example, regardless of county type, most nursing homes arrange mental-health care. However, care for depression and/or senile dementia is more prevalent in nursing homes in METRO counties than in either type of nonmetro county, MICRO or ONC (Table 11.1, row 12: respectively, 84.5, 69.3, and 57.7% of nursing homes). If mental health care is arranged at all, the provision by nursing homes for only-off-site services increases in step-wise fashion from facilities in METRO to MICRO to ONC counties (Table 11.1, row 13: respectively, 38.1 to 44.4 to 48.8% of nursing homes). Obviously, the convenience of on-site mental health services gives the greatest advantage to elders with mental-health needs in METRO nursing homes.

Table 11.4 Logistic regression of nursing-home residency (1 = yes; 0 = no) on predictor variables

Predictor	Odds ratio	Standard error of beta	95% confidence interval
Age (years)	1.10***	0.007	1.08–1.11
Female (1 = yes; 0 = no)	0.87	0.128	0.65–1.17
White (1 = yes; 0 = no)	1.45**	0.244	1.04–2.02
Married (1 = yes; 0 = no)	0.35***	0.060	0.25–0.49
Own home? (1 = yes; 0 = no)	0.23***	0.035	0.17–0.31
Net worth	1.00	0.002	0.99–1.00
No. of ADLs	0.88	0.070	0.75–1.02
No. of ADLs for which help received	2.48***	0.202	2.12–2.91
Self-rated health	1.13*	0.075	0.99–1.28
Self-rated vision	1.00	0.060	0.90–1.12
Self-rated hearing	0.93	0.054	0.83–1.04
Proximate kin (1 = yes; 0 = no)	1.07	0.148	0.82–1.40
Proximate friends (1 = yes; 0 = no)	0.62***	0.081	0.48–0.80
Micropolitan co. (1 = yes; 0 = no)	1.10	0.221	0.74–1.63
Other nonmetro co. (1 = yes; 0 = no)	1.38	0.279	0.92–2.05

Source: 2004 Health and Retirement Survey

Note

Likelihood ratio chi-square = 2,305.2, 15 degrees of freedom

*** $p < 0.001$; ** $p < 0.05$; * $p < 0.10$

Another way in which METRO nursing homes offer services superior to those available from nonmetro counties is by arranging dental care. Declining in sharp, stepwise fashion, dental services are arranged by about three-fourths of nursing homes in METRO counties, about half of those in MICRO counties and merely 40% in ONC (Table 11.1, row 10). Dental services can be provided on-site, both on-site and off-site, or off-site. About one-fourth of METRO nursing homes arrange only off-site dental services; and this fraction increases to almost half of the MICRO-county nursing homes and about three-fifths of the ONC facilities (Table 11.1, row 11). For older people with difficulty walking and/or other disabilities, off-site dental care is inconvenient or may be impossible to obtain.

The number of beds per nursing home drops in stepwise fashion across the three county types (Table 11.1, row 4). Even so, the number of Registered Nurses (RNs), Licensed Practical Nurses (LPNs), and Certified Nursing Assistants (CNAs) per 100 beds hardly varies across these geographical locations. Nevertheless, the *bed-occupancy rate* declines from a high of 87.4% in METRO nursing homes to a low of 82.5% in ONCs (Table 11.1, row 5). This restores some advantage to MICRO and ONC nursing-home residents in gaining access to RNs, LPNs, and CNAs.

The higher occupancy rate in METRO counties is accompanied by a higher percentage of beds in specialty units (designated for skilled nursing care) in METRO than in other areas (Table 11.1, row 9). This statistic may be affected by the regular but short-term admission of older adults being discharged from nearby hospitals into temporary, sub-acute care at nursing homes, especially when the latter are in

METRO counties. Duncan and Radcliff (2004, p. 254) alluded to this possibility but did not present data on the place from which someone entered a nursing home. I address this issue in the next section.

11.4.2 Q2: What are the Demographic Differences Between Nursing-Home Residents in Metro Versus Nonmetro Counties?

In 2004, there were 1.5 million residents of nursing homes, down from 1.8 million in 1999 (Duncan and Radcliff 2004; Jones et al. 2009). The downward trend reflects the increase not only in other housing options for senior citizens needing oversight (for example, in senior apartments and assisted living centers) but also in disability-free life expectancy for people reaching age 70 (Crimmins et al. 2009).

Contrary to Greene's (1984) report about Arizona, residents of nursing facilities in the US-at-large in 2004 were somewhat *older* at admission and at interview if they lived in a MICRO or ONC facility than in a METRO facility (Table 11.2, rows 2–3). The percentage of nursing-home residents who had lived alone or in a private home immediately before admission increases in stepwise fashion as we compare residents in METRO facilities to those in MICRO and in ONC facilities (Table 11.2, rows 9 and 11). Those admitted to nursing facilities in METRO or MICRO counties were more likely to go there from acute-care hospitals than from private homes, but the opposite is true for those admitted to nursing homes in other nonmetro counties (cf. rows 9 and 10, Table 11.2).

Greene (1984) concluded that nonmetro elders in Arizona nursing homes in 1980 were less disabled than their metro counterparts. Similarly, I find that residents in MICRO or ONC nursing homes in 2004 had fewer limitations in the Activities of Daily Living (ADLs) than their metro counterparts (respective averages of 4.7, 4.7, and 4.9; Table 11.2, row 29).

Nevertheless, residents in MICRO and ONC nursing homes took a significantly larger average number of medications ($p < 0.05$) than their metro peers (9.1, 9.4, and 8.8, respectively; Table 11.2, row 30). A likely reason is that the most common primary diagnosis upon admission and at the time of the interview was a circulatory disease (e.g., angina, heart disease, hypertension, or cerebrovascular disease) or a disease of the central nervous system or a sense organ (e.g., cerebral palsy, Parkinson's disease, or multiple sclerosis). These diagnoses were most prevalent among those in ONC nursing homes at both times (Table 11.2). Also, it may explain why patients in ONC nursing homes were the most likely of the three residential groups to be receiving rehabilitation and treatment for pain (Table 11.2, rows 16 and 21).

Finally, the category of "mental disorders" is among the top three primary diagnoses on admission to a nursing home. The prevalence rate was equivalent across the three county types at the time of admission (Table 11.2, row 34) but was lowest for those in MICRO county nursing homes at the time of the survey (row 37). Even so, regardless of county type, the percentage of residents receiving special services

for behavioral problems or dementia remains far below the percentage diagnosed with mental disorders (Table 11.2, rows 17 and 20). It suggests an unmet need in facilities in all three county types.

11.4.3 Q3: Which Risk Factors for Nursing-home Residency are Greater for Older Adults Living in Nonmetro than Metro Counties?

A social risk factor for nursing-home residency is the absence of an informal helping network of relatives and friends whose hands-on help can keep the older disabled adult living in a private residence. To contrast this risk across county types, we now turn to the 2004 HRS, which covered 19,482 community-dwelling adults and 452 adults living in nursing homes.

For those living in group quarters (which include nursing homes), the HRS asked whether they had any kin living in or near the facility; otherwise, whether they had any kin living in the neighborhood (besides people living with them). Marital status was also obtained. The percent of older adults with proximate kin rose steadily and significantly from 26.17% of those in METRO counties to 37.23% of those in MICRO counties to 44.96% of those in other nonmetro counties (Table 11.3, row 13). In addition, those living in MICRO or other nonmetro counties (ONC) were much more likely to be married currently than those in METRO counties (66 and 67 versus 62%, $p < 0.05$; Table 11.3, row 5). Thus, it appears that the “convoy of support” is smallest in METRO counties and largest in ONCs.

The convoy of support might also consist of good friends. Older adults in group quarters were asked if they had any good friends living in or near their facility, and those living outside group quarters were asked if they had any good friends living in the neighborhood. Affirmative replies rose from 62.13% of respondents in METRO counties to 71.27% of those in MICRO counties to 75.70% of those in ONCs (Table 11.3, row 14). Again, these statistics are consistent with a greater proximity of familial and friendship networks in more sparsely populated places.

These results are contrary to what has been reported in many earlier studies. For example, Bultena's (1969) analysis of a 1966 sample of non-institutionalized elderly people in Wisconsin showed that urban elders saw their children more often than did rural elders, because the former were more likely than the latter to have children living in the same community. Greene (1984) concluded from his study of nursing home patients in Arizona that the rural patients had entered the nursing home at a younger age than the urban patients precisely because the former were more likely than the latter to have been living alone immediately prior to admission. Pillemer and Glasgow (2000) concluded from their literature review that the historic and contemporary rural-to-urban net migration of young adults makes it less probable that older rural (than urban) adults will obtain the informal care they need to remain outside nursing homes. My finding that a greater proportion of nonmetro

(than metro) elders had proximate kin and friends in 2004 may have arisen partly from the net in-migration of older adults (50 years of age or older) into nonmetro counties since the 1960s (Brown and Glasgow 2008; Johnson et al. 2005; Johnson and Cromartie 2006, p. 33). Some of these older adults may have been selected for “provincial return migration” (Longino 2001, p. 117) to nonmetro places of birth in order to re-establish proximity to relatives and friends. This possibility merits future research, since most members of the oldest baby boom birth cohorts (born in 1946–1964) will retire from the labor force over the next decade.

11.4.4 Q4: After the Risk Factors Identified in Q3 are held Constant, do Older Adults in Nonmetro Counties have a Higher net Risk of Nursing-home Residency than their Metro Counterparts?

Although the personal social networks should be better able to retain nonmetro (than metro) older adults in their private residences, other demographic disparities should put nonmetro elders at greater risk (than metro elders) of nursing-home residency. For four examples, Coward et al. (1996) found that nonwhites, homeowners, younger senior citizens and those who rated their health as excellent had a much lower propensity for nursing-home admission than did others. Scanning across the rows of Table 11.3 from METRO counties to MICRO counties to residents of ONCs, we see a steep rise in the percentage of whites (from 79 to 84 to 89%), a steep fall in the percentage of homeowners (from 71 to 69 to 65%), an oldest average age of 68 in the ONCs (from 67 years to 66 to 68), and a somewhat poorer self-rated health in the two kinds of nonmetro counties than in the METRO counties (from 2.85 to 2.98 to 2.96). In addition, older adults in the two kinds of nonmetro counties have poorer (higher) scores on self-rated vision and hearing functioning, when compared to those in METRO counties (Table 11.3). Plausibly then, older adults in nonmetro counties face more frequent hardships in driving cars and answering telephones vis-à-vis METRO older adults; and these vulnerabilities can raise the odds of nursing-home residency. The question becomes: Does the net sum of the risk-factor set balance towards a higher propensity for nonmetro senior citizens (than metro seniors) to be a resident of a nursing facility?

I used a logistic regression (Table 11.4) to control confounding risk factors in order to answer Q4. Odds ratios that are much larger than 1.0 mean that a higher score on the predictor variable represents a greater chance that an older person resides in a nursing home than outside one; odds ratios that are much smaller than 1.0 mean that a higher score on the predictor variable reduces the chance that an elder resides in a nursing home. Thus, senior citizens who are older, white, rate their health more poorly, or have more limitations in the Activities of Daily Living for which they receive personal help, face this higher chance. Also, those who own their own home are less likely to confront this higher risk. The power of social networks

to prevent nursing-home residency is shown by the much lower odds that an older individual will live in a facility if he/she has a spouse (Odds Ratio=0.35, $p<0.001$) or has friends living close by (Odds Ratio=0.62, $p<0.001$). The net result is that older people living in all three county types have the same net risk of living in a nursing home (Table 11.4, rows 14 and 15).

11.5 Conclusions

This analysis of the 2004 National Nursing Home Survey and the 2004 Health and Retirement Survey holds several implications for rural health policy. First, an older adult's residence in a nonmetro rather than a metro county, *per se*, does not raise the odds that he/she lives in a nursing home. Instead, the odds are shaped by such other demographic factors as age, race, marital status, home ownership, self-rated health, and the proximity of good friends (Tables 11.3 and 11.4). The conclusion is incongruent with the results from an earlier analysis based on the 1984–1990 Longitudinal Study of Aging (Coward et al. 1996). A reason may lie in the popularity of metro nursing homes as destinations for older adults being discharged from metro hospitals.

Second, older adults appear more likely to have a “convoy of support” nearby to help them manage their chronic disabilities outside nursing homes, if they live in nonmetro counties. This could have emerged from the nonmetro net in-migration observable for adults 50 years of age or older since the 1960s (Brown and Glasgow 2008; Johnson and Cromartie 2006; Johnson et al. 2005). Likewise, it may explain why nonmetro elders in long-term care facilities have an older age at admission than their metro counterparts (see Table 11.2).

Third, when nursing homes fall short of meeting demands for services, the short-fall lies in specialty services. Older residents of nursing homes in nonmetro counties are more likely than their metro counterparts to suffer from, and to need special care for, a primary diagnosis of circulatory and central nervous system diseases. Thus, whenever rural hospitals can meet the requirements to become Critical Access Hospitals, they could profitably use the enhanced Medicare funding to dedicate as many swing-beds as possible to these two categories of primary diagnoses. Critical Access Hospitals (CAHs, a designation available only to rural hospitals) appear to be a successful result from the 1997 Balanced Budget Act, if we measure success by the jump in the number of CAHs from over 500 in early 2002 to 1,305 as of July 2009 (Rural Assistance Center 2009; Zimmerman et al. 2004).

This chapter raises several unanswered questions for future comparative work on long-term and informal care in METRO counties, Nonmetro Micropolitan Counties (MICRO), and Other Nonmetro Counties (ONC). First, it was beyond the scope of this chapter to trace the incidence and duration of short-term stays in nursing homes for sub-acute health care for older adults being discharged from hospitals. Were exits from recuperative stays more probable when the nursing facility was metro? Were exits due to death more probable when the nursing home was nonmetro?

How did the “convoy of supporters” change before the admission of an older adult to a nonmetro versus metro nursing home? The answers to these questions can be sought from the longitudinal Health and Retirement Study.

While this chapter is based on a quantitative analysis of national survey data, the field of rural gerontology will also be advanced by qualitative ethnographic case studies of nursing homes, combined with in-depth interviews of their residents, staff, and community leaders. An excellent example is provided by Rowles and colleagues’ (1996) 2-year-long case study of “Mountain View Nursing Home” (a pseudonym) in the Appalachian city of “Stillman” (population, 2,800) that yielded almost 300 interviews with residents, their relatives, nurses, and the administrator. The picture that emerged of Mountain View was an institution that was integrated with Stillman “from the inside out” and “from the outside in.” The internal-to-external links are forged by the regular visits by Mountain View residents to local restaurants, hairdressers, and the senior center. The external-to-internal links are maintained by: the local churches that provide worship services at Mountain View; the local businesses that sponsor open-to-the-public summer picnics, birthday parties, and Christmas gifts for the residents; local relatives who come to visit their kin also visit other residents who are long-term friends and former neighbors; and the staff who are often related to the residents they serve. These bilateral linkages have blurred the social and psychological boundaries between the community and the residents of Mountain View; the latter are not banished to a life of segregation and isolation while awaiting death. Is this permeability of boundaries between the community and its nursing home possible only in small Appalachian cities, or can it also be created in metropolitan neighborhoods inside and outside Appalachia? Qualitative research in diverse ecological settings can offer answers (Rowles 1988), which if affirmative, will dispel the popular stereotype of the nursing home as a graveyard for the living.

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Chapter 12

Aging Populations and Rural Places: Impacts on and Innovations in Land Use Planning

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12.1 Introduction: Aging in Rural America

Rural areas across the globe are home to higher proportions of elderly, as a share of their total population, as compared to urban places. In the US, Canada, Australia, and Japan, the rural elderly dependency rate exceeded rates in urban and intermediate regions in 2003 (OECD 2007).¹ Even in countries such as China, India, and many countries in Latin America (Jackson and Howe 2004; Xu and Ji 1999), the distribution of elderly across the rural-exurban-urban landscape is similar to those in developed countries. The demographic determinants of this trend include strong out-migration trends of the young from rural places to urban centers, greater longevity of the total population, lower fertility rates and increased retirement migration to rural areas (Brown and Glasgow 2008). While in absolute terms many

¹ The elderly dependency rate is the ratio of the elderly population to the working age population (OECD 2007).

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of the world's elderly are concentrated in urban places, rural areas face the twin challenges of a population more likely to be elderly and low population density which enhances difficulties in meeting the needs of this population (McLaughlin and Jensen 1998; Scharf and Bartlam 2006).

The intent of this chapter is to describe how the physical environment of rural communities—manifested specifically through landscape design and community services—affects the experience of aging. We first describe the distribution of aging populations within the United States, focusing specifically on how this varies across the urban-suburban-rural gradient. We also briefly summarize research examining trends that affect the distribution of older adults across the US. We then move from this spatial analysis to a focus on place—or what aging in a place (especially rural places) might look like and mean for the experience of aging. We specifically describe the community and land use planning issues associated with an aging population by drawing on literature that highlights how particular aspects of the built environment and social integration within a community can facilitate improved quality of life for older adults (Gilroy 2008; Lui et al. 2009; Phillipson 2007; Pillemer et al. 2000). We conclude with a discussion of the unique challenges associated with aging in rural places. These challenges arise from the characteristics and processes associated with rural areas (such as population density, increasing devolution and privatization of service provision) and global economic restructuring.

12.2 Demographic and Residential Characteristics of Older Americans

Classification methods of residential locations can have significant influence on the interpretation of demographic patterns of older adults (McLaughlin and Jensen 1998). For example, McLaughlin and Jensen (1998) find that differentiating between classification of metropolitan (metro) and nonmetropolitan (nonmetro) *counties* and classification of rural and urban *places* yields a complex pattern in the distribution of older Americans and their associated demographic characteristics. In particular, they find differences among the characteristics of older Americans living in rural and urban places *within* nonmetro counties.

For our purposes, we use the 2003 Rural-Urban Continuum Codes Economic Research Service (2004) to describe the population of older Americans across counties differentiated by population size and proximity to population centers.² Over all, less than 13% of the population in the US was age 65 or older, according to the 2000 Census. As shown in Table 12.1, the most rural and remote counties in the

²The Rural-Urban Continuum Codes Economic Research Service (2004) classify counties based on a combination of population size and adjacency to metropolitan and micropolitan areas. They do not directly address the concern related to sub-county differences but do provide a more nuanced picture of the population of older adults across the rural-suburban-urban gradient.

Table 12.1 Percent of elderly population by Rural-Urban Continuum Code, 1990 and 2000

Rural-Urban Continuum Code 2003	Percentage of population over age 65	
	1990	2000
1. Counties in metro areas of one million population or more	11.72	11.45
2. Counties in metro areas of 250,000–1 million population	12.46	12.65
3. Counties in metro areas of fewer than 250,000 population	12.53	12.80
4. Urban population of 20,000 or more, adjacent to a metro area	14.32	14.57
5. Urban population of 20,000 or more, not adjacent to a metro area	13.28	13.43
6. Urban population of 2,500–19,999, adjacent to a metro area	15.25	14.89
7. Urban population of 2,500–19,999, not adjacent to a metro area	15.56	15.50
8. Completely rural or less than 2,500 urban population, adjacent to a metro area	16.77	16.37
9. Completely rural or less than 2,500 urban population, not adjacent to a metro area	17.83	17.69
Total	12.54	12.43

Sources: US Census Bureau (2000) and Economic Research Service (2004)

US (category 9) have the highest percentages of older adults, nearly 18% in both 1990 and 2000. The percentage of the population that is age 65 and older decreases as one moves through the categories from more remote counties to more metro counties. The 1990 Census figures show a very similar distribution pattern.

Demographic characteristics of older adults, particularly as the Baby Boom generation reaches age 65, raise concerns about the availability of informal support and formal services, especially in rural areas. Current demographic trends include “larger numbers of persons living alone without the benefits conferred by a spouse, with fewer adult offspring, and with few siblings” (Glasgow 2003; see also Pillemer and Glasgow 2000; McLaughlin and Jensen 1998).

The combination of demographic characteristics—such as living arrangements, marital status, race and ethnicity, gender, fertility rates, proximity to family and friends—and the characteristics of the places in which they live can place “elders in a more vulnerable position with respect to access to formal services and to the availability of networks of informal support” (McLaughlin and Jensen 1998, p. 39). As a result, older adults in general have decreasing availability of kin and non-kin networks to provide informal caregiving options, and will need to rely more on formal caregiving services. Other research has documented a greater level of need for such services in nonmetro counties because older adults in these areas are more likely to experience poor health and physical and cognitive problems (Coward et al. 1995). Yet formal service availability and accessibility tend to be more limited in rural areas (Coward et al. 1995; Glasgow 2003; Ham et al. 2003; Krout 1998).

12.3 Places Where Aging Populations Reside

The ‘aging in place’ movement focuses on creating policies that support independent living among older adults and encourage older Americans to stay in their homes as long as is feasible (Black 2008; Lui et al. 2009). The World Health Organization, as part of their Global Age-Friendly Cities Project, calls it ‘active ageing,’ which is “...a lifelong process shaped by several factors that, alone and acting together, favour health, participation and security in older adult life...” (WHO 2007b, p. 1). This movement has occurred in response to a growing older population and a shift in the conception of aging: “Instead of conceiving of older people as a social problem or burden, the new discourse constructs ageing as a positive process and emphasizes the active roles older people continue to play in society” (Lui et al. 2009, p. 119). From this perspective, any place in which an aging population resides (in independent living situations) qualifies as ‘aging in place’.

However, attention to the characteristics of place is important for considering the resources with which these places can approach community planning for an aging population. Further, because ‘place’ is an important influence on the subjective meaning and experience of aging (Rowles 1998; Keating 2008), it is important to understand the types of places in which older adults are aging. As Hodge (2008, p. 69) states, “The community ... provides a setting for the lives of seniors; it is the context for their everyday geography.”

‘Places’ in rural America vary significantly and are affected by processes such as migration patterns, demographic attributes of the local population, community relationships, local culture and norms and economic transformations within local areas. Drawing from work by Glasgow (2003) and Brown and Glasgow (2008), we differentiate between areas that are experiencing ‘aging in place’ and places experiencing in-migration of older adults. We do so to illustrate that ‘places’ with aging populations are heterogeneous, and consequently face different challenges related to community planning for the older residents.

‘Aging in place’: From a demographic perspective, communities experiencing ‘aging in place’ have an age structure with an increasing proportion of older adults (age 65 and older). This results from both survival of the cohort age 55–64 to 65 and beyond and because “a relatively small proportion of their population is in the child bearing or rearing ages and because they are not attracting in-migrants at either the older or working ages” (Brown and Glasgow 2008, p. 56). As Johnson and Rathge (Johnson and Rathge 2006, p. 207) note, this kind of “natural change” of the demographic structure has a “more gradual, though sometimes more profound, impact on the population of an area.”

Migration-Influenced Places: Rural places that are experiencing increased migration of older adults have been termed “rural retirement destinations” (Brown and Glasgow 2008). More specifically, Brown and Glasgow (2008, p. 24) define rural retirement destinations as “nonmetropolitan counties with 15% or higher net in-migration at

ages 60 and older” (italics omitted). Litwak and Longino (1987) identify three stages of migration in response to major events or transitions in the life course, such as retirement, loss of a spouse, movement of family or close friends, or onset of health problems. In the first stage, retirees and/or pre-retirees make leisure-oriented moves to amenity-rich communities. The second stage often returns older migrants to their previous communities or to places where their children live. The final stage occurs when older persons move from independent living to an institutional setting. Brown and Glasgow (2008) suggest that the first two stages may be conflated, as older adult in-migrants tend to move to amenity-rich places and places where they have family ties, have visited before as tourists and/or have social network connections to other current residents (Brown and Glasgow 2008).

Among rural retirement destinations, Brown and Glasgow (2008) differentiate between planned communities (those residential facilities built specifically to accommodate older persons) and ‘unplanned retirement destination communities’ (places with net in-migration of older persons that also include long-term older residents). Among the unplanned rural retirement destination communities, they further distinguish between those that are experiencing overall economic and population growth and those that, even with in-migration, experience natural decrease within the population (Brown and Glasgow 2008). The latter are caused by long-term in-migration of older adults contributing to higher death than birth rates, and are largely concentrated in the Upper Midwest and South.

12.4 Implications for Rural Community Planning

Communities experiencing population aging due to the net loss of younger cohorts (aging in place) and those communities experiencing in-migration of older adults but an overall declining population (Brown and Glasgow 2008) are likely to face significant challenges to community planning (Green 2001). The economic and social restructuring occurring in these communities suggests that they experience other challenges for community planning, such as a limited tax base, declining economic activity, labor force shifts, decreasing median incomes, decreasing service availability, smaller and older volunteer base and decreasing local government capacity (Green 2001; Johnson and Rathge 2006; Krout 1998).

Rural retirement destinations, where the population is increasing not only among older adults but potentially also across younger age cohorts have a different set of challenges to community planning. Research on such communities have identified concerns related to the real estate market (Brown and Glasgow 2008; Walters 2002) similar to that found in general among high-amenity communities experiencing rapid growth (Green 2001; Marcouiller 1997; Reeder and Brown 2005; see also the annotated bibliography of Marcouiller et al. 2002). New housing construction and rehabilitation of older housing to accommodate population growth can lead to speculation

and increased housing values. The availability of affordable housing may become limited, causing the displacement of younger persons and families (with subsequent impacts on school systems, transportation systems, and labor force) (Loeffler and Steinicke 2007). Because in-migrants tend to have higher socio-economic status, the potential for increased inequality and displacement of longer-term residents also exists (Brown and Glasgow 2008). Research has not yet addressed what is happening in the housing market and economies of such places due to the recession of 2008 and the continuing lagging US economy.

In addition, there is also the potential for political tension as newcomers bring new ideas or values or give voice to views that were previously a minority in the community (Brown and Glasgow 2008, although empirical findings related to differences between newcomers and long-term residents in such growth communities have been mixed; see, for example, Fortmann and Kusel 1990; Nelson 1997; Smith and Krannich 2000). These differences may be manifested in terms of cultural and political conflict—especially over public spaces and future economic and physical development of the region. Further, Brown and Glasgow (2008, p. 166) find that the combination of greater socio-economic resources, previous experiences living in urban areas, and service needs and expectations of older in-migrants may “set the stage for differences of opinion over the community’s public agenda.” The potential cultural and value differences between long-term residents and recent in-migrants can create tension, particularly when making decisions about public activities related to economic development, growth and land use planning (Brown and Glasgow 2008; Rowles 1998). Finally, rural retirement destinations are likely to have significant recreation and tourism activity (Kulcsár et al. 2008; McGranahan 1999). As a result, rapid population growth in high-amenity areas, potentially reliant on tourism for an economic base, raises concerns related to community planning (Beale and Johnson 1998). How can communities accommodate this growth, especially for a population that might have needs different from the resident population, and still maintain the amenities that draw tourists (and related economic activity) to the area (Marcouiller 1997)?

Another concern relates to how the current patterns of development that cater to in-migrant needs will affect the ability of these in-migrants to continue to age in these places (Brown and Glasgow 2008). As Coward (1979, p. 277) reminds us, “the ‘aging life span’ incorporates 30 or 40 years and this span is not a static period but one of growth. Therefore, community services must reflect the changing needs of advanced aging.” Brown and Glasgow (2008) find in their study of rural retirement destinations a lack of awareness among community leaders of the need to plan for an aging population. Rural retirement destinations tend to grow to reflect the needs of current in-migrants, and reflect a suburban, car-centric pattern of development. However, as the in-migrants age, and cease driving, their ability to access needed services, retail centers, and opportunities for social interaction will become limited. Community planning approaches need to recognize that the needs of an aging population will vary across the life course and that community planning needs to consider service provision across a ‘continuum of care’ (Coward 1979; Hodge 2008).

12.5 Age-Friendly Community Planning: Physical and Social Attributes of Place

Research using an ecological model of well being of older adults emphasizes the interplay between the person and his or her environment (Hodge 2008) and how the individual ‘fits’ the environment (Brown and Glasgow 2008; Rowles 1998; Keating and Phillips 2008). A lack of fit forces some level of adaptation by the individual. The environment may be conceptualized in two general realms, the psycho-social and the physical (Windley and Scheidt 1988). Others have labeled these two realms as the social embeddedness (or social integration) of place and the physical or material aspects of place (Gilroy 2008; Pillemer et al. 2000).³

The physical environment associated with place refers to the material attributes of the built environment: “The physical environment includes the home and objects in the home, the built environment of buildings, roads and other amenities, and the natural environment including climate and topography” (Keating and Phillips 2008, p. 4). The physical environment significantly influences the opportunities and constraints individuals face for realizing and securing an adequate degree of well being (Keating and Phillips 2008) across multiple dimensions, including cognitive, emotional and physical health (Chapman and Peace 2008; Hodge 2008; Lui et al. 2009).

Land use decisions are significant influences on the well being of older persons. Concomitant with the aging process are several changes related to physical ability, social relationships and cognitive ability (WHO 2007b). These changes often make older people more reliant on ‘place’. For example, as mobility becomes more limited, older people may become more dependent on their local physical and social environments for their daily needs (Gilroy 2008). The loss or out-migration of friends and family and neighbors over time can disrupt existing social relationships. This disruption may require older persons to change the places they visit and the activities they pursue that help them develop and maintain social connections. Cognitive decline can result in the need for familiarity in their surroundings. Transportation networks and corridors, transportation options, recreational opportunities, service centers, design of outdoor spaces, housing options/characteristics, community aesthetics, density, connectivity of different areas within the city, microscale elements (such as sidewalks, visual complexity, etc.) and land use patterns and diversity are all elements of the physical environment that influence the well being and quality of life of older persons—and indeed, all age groups (Gilroy 2008; WHO 2007b; Cunningham and Michael 2004). The design of the physical environment can actually construct a disability by diminishing access to needed accommodations or services (Daly and Grant 2008).

³ Hodge (2008, p. 19) identifies five types of environments: “the personal environment, the group environment, the suprapersonal environment, the social environment and ... the physical environment.” For our purposes, we focus on the distinction between the social and physical, knowing that they are highly inter-related.

Likewise, from a social embeddedness of place perspective, quality of place has been equated with access to family and non-family social networks, a responsive local government, the opportunity to participate meaningfully, and a supportive community. ‘Age-friendly’ communities can enhance independent living and connections to communities, families and neighbors (Black 2008). These connections are essential to mitigating problems related to isolation and feelings of loneliness and vulnerability (Gilroy 2008; Pillemer et al. 2000). While this chapter emphasizes the physical aspects, both the physical and social aspects of place need to be addressed to facilitate a high quality of life for the population aging in any place.

12.6 Best Practices in Community Planning for Aging Populations

Facilitating the well-being of an aging population requires “supportive and enabling living environments to compensate for physical and social changes associated with ageing” (WHO 2007b, p. 4). A supportive environment can be facilitated by ‘age-friendly’ (WHO 2007b) or ‘Senior-Smart’ (Hodge 2008) community planning. These approaches are subsumed under the description of ‘designing for diversity’ (WHO 2007b), or the intentional composition of the landscape to accommodate multiple types of people, to meet their needs and to enhance their potential contributions to place (Lui et al. 2009). Many of the principles identified below also reflect ‘Smart Growth’ or ‘New Urbanism’⁴ planning that stress mixed land uses, high density development, walkable communities, access to public transportation and creation/preservation of open and green space (Aging in Place Initiative 2009).

Among the most visible of efforts to identify how community planning can contribute to quality of life of older adults has been the World Health Organization’s Global Age-Friendly Cities Initiative (WHO 2007b). This project encompassed 33 cities in 22 countries and used a series of focus groups to identify factors most crucial to older adults’ well being. The project created a ‘checklist’ that allows cities to rate their conditions and provides a process through which community leaders might work toward becoming more ‘age-friendly’ (see WHO 2007a). In the US, a series of related projects under the name of the ‘Aging in Place Initiative’ has identified essential concerns of older adults (Aging in Place Initiative 2006), a ‘blue print’ for addressing these concerns (Aging in Place Initiative 2007), examples of successful efforts and a checklist for assessing communities (i.e., Aging in Place Initiative 2008).

⁴Smart Growth is an approach to planning that emphasizes concentration of housing and infrastructure as opposed to the spread of urban settlements leading to urban sprawl. New Urbanism incorporates some of the ideas of Smart Growth into the design of urban space. It stresses the importance of ease of connectivity (in transport and walkways), compact design and diverse communities, and accessibility of public spaces among other principles. Note, however, that some Smart Growth principles may contradict the design principles for planning for older adults (Hodge 2008).

Hodge (2008) provides a picture of the aging population in Canada as well as guidelines for community planning that focus on creating enabling and supportive environments for older adults. Although most of this work has been conducted in urban environments, the principles of design are found to be relevant for rural areas (Federal/Provincial/Territorial Ministers Responsible for Seniors 2006; Mishkovsky et al. 2010).

The WHO (2007b) identified eight areas of concern for older adults which encompass both the physical, or built, environment and social embeddedness: outdoor spaces and buildings, transportation, housing, social participation, respect and social inclusion, civic participation and employment, communication and information, and community support and health services (for similar lists, see Gilroy 2008; Federal/Provincial/Territorial Ministers Responsible for Seniors 2006; Michael et al. 2009; Lui et al. 2009). Here we summarize findings related to the first three factors (related to the built environment), but we also comment on elements of the others as they relate to land use planning. Hodge (2008) identifies four main dimensions of older adults' environment that are essential for meeting the needs of older adult populations: availability, accessibility, and location of housing and facilities and personal safety and security associated with the use of these facilities.

12.7 Spatial Arrangements, Outdoor Spaces and Aesthetics

The physical space and its organization, aesthetics and features significantly affect older adults' quality of life, their access to services and activities, their personal and physical safety and the ability to maintain their mobility. Buildings and outdoor spaces need to provide appropriate safety and accessibility features that minimize the likelihood of falls and enhance the ability of older adults to move about. For example, buildings should provide ramps and elevators in addition to steps, non-slip flooring, stairs with railings, and hallways and passages wide enough for wheelchairs or motorized carts. Buildings and other public spaces need to have signage that is easy to read and public restrooms that are accessible. 'Adaptive reuse' of existing buildings can preserve spaces familiar to older adults as well as link historic buildings to modern facilities and accommodations (Mishkovsky et al. 2010).

Sidewalks and walkways help older people access buildings and other public spaces, as well as facilitate recreation, exercise and transportation. As such, sidewalks need to be present and be safe, have an even, non-slip surface, and be free of obstructions (such as snow and cars). They also need to be wide enough to accommodate wheelchairs and have tapering curbs to prevent falls. Pedestrian street crossings need to be marked, offer pedestrian activated signals and extended walk times. Traffic control structures that slow and calm traffic (e.g., stop and yield signs, speed bumps and diversions) as well as improved street lighting and buffer zones between pedestrians and cars can improve safety and enjoyment of walking. Separate lanes for cars, bicycles and pedestrians also improve safety. A continuous network of safe

pedestrian-friendly pathways is an essential component to enhance older adults' mobility, safety, connection to their communities, physical health and ability to fulfill daily needs.

Another important element relates to the design of the streetscape. For example, mixed land uses, building heights and building types provide an interesting experience of being on the street. Greenery and other physical structures (porches, walkways and seating) can make a street inviting. Of particular importance to many older adults are benches, which offer the opportunity to rest and talk with others. Buildings that are in good repair, without bars on windows, and that are designed to be inviting are particularly important for encouraging pedestrian traffic. Streetscapes that are free of litter and have minimal noise levels are also desired. Streetscape improvements can ensure accessibility to retail and service areas using multiple modes of transportation.

Age-friendly communities provide a variety of types of destinations that are accessible through multiple means (public parking, public and private transportation, walking and bicycling). Some communities are seeking to develop 'service centers' that provide multiple services, including health, recreation, retail, educational and gathering spaces (Aging in Place Initiative 2006). An alternative to senior centers are areas with mixed land uses that cluster together housing attractive to older adults and relevant businesses and service providers.

The ability to exercise, especially walk, is linked to positive health outcomes for older adults. Characteristics of the built environment influence the safety and desirability of walking (Amarasinghe et al. 2009; Nagel et al. 2008). The neighborhood environment—especially the connectivity of streets, mixed land use design, increased residential density, and access to green and open space—can significantly increase the likelihood of walking and other forms of exercise in older adults (Brownson et al. 2006; Li et al. 2008; Sallis et al. 2006) and delay disability (Freedman et al. 2008). Both of these outcomes lead to better overall health, decreased risk (or successful management) of chronic diseases (Brownson et al. 2006). Sprawling landscapes in particular are associated with increased car travel and increased likelihood of obesity (Amarasinghe et al. 2009; Frank et al. 2004). This is particularly an issue for rural areas where key destinations (work places, retail outlets, grocery stores and other services for daily needs) are at some distance from homes and require automobiles (Amarasinghe et al. 2009).

12.7.1 Transportation

Mobility is essential for older adults, as it facilitates well being related to social integration and physical and mental health (Glasgow 2000c; Glasgow and Blakely 2000; Hodge 2008). Mobility is essential because it allows older adults the ability to fulfill needs related to "life maintenance" as well as "higher order needs, such as social interaction, contributing to the community through volunteering, recreation, and religious participation" (Glasgow and Blakely 2000, p. 98). The ability of older

persons to fulfill these needs has a public benefit as well: “The inability of older people to get out into the neighbourhood and beyond is therefore a costly business for society, leading not only to pressure on the voluntary and statutory services but loss of social capital as well as the silencing of mature voices in debates about how places work or might work” (Gilroy 2008, pp. 156–157).

Creating and supporting options for transportation are essential for age-friendly communities (Suen and Sen 2004). Ideally, there should be a mix of public transportation, community-provided transportation, volunteer provided transportation, private transportation and walking/bicycling options. The availability, viability, attractiveness, and acceptability of each of these options is determined by public choices but also by the life stage and functional abilities of the traveler, the flexibility of the schedule, safety and protection from the elements, and freedom of choice and personal control the option provides to the traveler (Glasgow and Blakely 2000; Suen and Sen 2004).

Private vehicles: Licensing has been growing among older Americans. Rosenbloom (2004, p. 5) states that “Licensing is close to universal among those who will become 65 years old in the next 15 years. By 2012, almost every US man and more than 9 out of 10 US women will enter their retirement years as drivers.” This dependence on cars creates a particular problem for older adults as they reach the age when driving becomes physically difficult or unsafe. As reported by the National Institute on Aging: “600,000 people around age 70 or older stop driving each year” primarily due to concerns over safety and health (Aging in Place Initiative 2009, p. 7). Personal transportation options—specifically the automobile—are important for older adults physically capable of driving. “The cessation of driving appears to be a watershed event and transition in older people’s lives that is dreaded and postponed as long as possible. Ceasing to drive is viewed by many older people as a profound marker of the realities of aging” (Glasgow and Blakely 2000, p. 106). In many rural communities, lack of public transportation may lead older adults to drive longer than is safe (Federal/Provincial/Territorial Ministers Responsible for Seniors 2006), so programs that ensure older drivers are safe and have alternative transportation options are essential (Glasgow 2000c).⁵ In addition, older drivers often list concerns related to aggressive drivers, traffic speed and road conditions as major difficulties to driving safely (Glasgow and Blakely 2000).

To support driving as a viable transportation option, age-friendly communities can monitor traffic conditions, enforce traffic laws and install road signs and markings that are easily read by older drivers (Staplin 2004). Staplin and Hunt (2004) describe a coordinated approach to programs that can assess driver capacities; provide education specific to older drivers’ needs; and counseling services that work with the driver, his/her family and caregivers, and medical, social service and law enforcement personnel to address concerns and develop driving alternatives. Other programs might also include options for limited licenses that, for example, limit

⁵ See Staplin and Hunt (2004) for a summary of such programs in the US.

older adults to driving during daylight hours. In addition, age-friendly communities create public parking options that are accessible and convenient, have drop-off bays and monitor legal use of handicap spaces.

Sharing rides with family members, neighbors, friends and community volunteers can provide social integration opportunities (Glasgow and Blakely 2000; Glasgow 2000c). In some studies, older adults report reluctance to ask family members for assistance, seeing the request as an imposition on their time, and as a reminder of their dependency on others (Glasgow and Blakely 2000). Consequently, public and volunteer-provided transportation services need to be a crucial component of the transportation options in a community.

Public transportation: The ‘car-centric’ culture that has dominated American transportation planning over the past century has led to a lack of investment in public transportation as an alternative for drivers. About half of all Americans (especially those in rural and suburban areas) lack access to public transportation (Aging in Place Initiative 2009).

Where public transportation is available, fear of crime, poor signage and timetable information, as well as concerns over the accessibility of buses/trains are key determinants of use among older adults (Gilroy 2008; Suen and Sen 2004). Physical limitations that older adults might have also pose barriers (Suen and Sen 2004). To accommodate the needs of older adults (as well as others with physical limitations), buses should be equipped with ‘kneelers’ or ‘low-floors’ that provide easier access (Glasgow and Blakely 2000; Suen and Sen 2004). Buses/trains need to provide adequate space for older adults and any walking aids they might have. Discourteous drivers and other passengers can also significantly deter older adults from using public transportation.

Older adults use the transportation system differently than younger and working age adults. Older adults tend to travel at all times of the day and on weekends, so schedules with less frequent routes during ‘off-peak’ times do not serve older adults well. Older adults tend to visit multiple destinations on trips, so routes need to cover a wide area and provide easy connections (Glasgow and Blakely 2000). Stops for public transportation need to be convenient, safe and provide some measure of comfort (protection from the weather, benches). Suen and Sen (2004) identify potential revisions that can be made to existing public transportation systems that can make them more accessible, such as on-call service for buses on fixed routes and flex route options.

In addition to traditional mass transportation, many older adults rely on community-provided vans or shuttles for transportation. However, the availability and affordability of these services varies significantly from one community to another. Their limited availability on evenings and weekends can deter older adults’ travel. These services may also prioritize ‘high-priority’ activities such as doctor visits, diminishing access for fulfilling routine life maintenance and social integration needs (Glasgow and Blakely 2000). Age-friendly communities develop programs with a combination of public transportation, volunteer programs, paratransit services and escort services that provide varying levels of subsidized assistance to older adults.

In addition, interventions that provide space for older adults to explore transportation options and work through challenges in small groups can reduce the barriers to using public transportation (Glasgow 2000a).

Walking/Bicycling: Walking/bicycling is a transportation option for older adults with significant health benefits. Walking is the “second most used travel mode for seniors, after the private automobile” (Suen and Sen 2004, p. 101). However, this option is significantly less attractive and feasible in rural areas where distance, accessibility and safety are major concerns (Glasgow and Blakely 2000).

12.7.2 *Housing*

Housing affordability, design, condition, options and location affect the ability of older adults to stay in their homes and communities (Hodge 2008). The quality and quantity of space influence the ability of the older adult to interact with others, maintain social roles in the family, pursue hobbies and other activities that maintain cognitive health, and participate in family and community life (Gilroy 2008). As adults age, financial and physical limitations increase and affect their ability to stay in their homes. Limited incomes may make it difficult to pay basic costs of housing, such as mortgages, property taxes, and utilities. In addition, home maintenance costs may be prohibitive, particularly for older homes and for older adults whose physical needs require home adaptations. Some research indicates that housing quality is particularly low in rural areas, especially in the Southern and Midwestern regions of the US (Golant and La Greca 1994), suggesting a heightened need for rehabilitation assistance in rural areas.

For those no longer wishing or able to remain in their homes, it is essential that communities offer a range of housing options that match differing needs, capabilities and financial means (Hodge 2008). These options can include independent apartments, smaller homes in high density housing developments, “active adult communities, smaller ‘universally designed’ multi-unit dwellings, congregate housing developments, assisted living facilities, continuing care retirement complexes, as well as shared housing options such as accessory dwelling units (i.e. independent housing units within existing single-family homes or an attached or separate cottage on the lot of existing homes)” (Aging in Place Initiative 2006, p. 11).

Land use planning, especially zoning ordinances, and building codes, can significantly influence housing options, design, availability and affordability. Land use zoning codes and ordinances affect the density of development; requiring higher densities can create more compact and affordable units for smaller households. Higher density development that includes mixed land uses (such as traditional neighborhood development) can create more walkable communities. Zoning can also require developers to build some percentage of units that are affordable for older adults. Building codes can also influence the design of homes, to make them more accessible for older adults. For example, some communities are incorporating

“Universal Design” principles in building codes that allow access and use of the home’s features by those with a variety of abilities/disabilities to increase the range of housing stock available (Aging in Place Initiative 2008).

12.7.3 *Social and Civic Life*

Existing social institutions, gathering places, places of worship and community centers are particularly important for providing essential services, familiarity, recreational opportunities, and socializing opportunities that can reinforce older adults’ attachment to place. Formal and informal social contact can lead to improved health and well being (Pillemer et al. 2000) and can provide “social support and buffer them [older adults] from difficult situations such as the onset of disability, cessation of driving or financial reversals” (Brown and Glasgow 2008, p. 185). Coward (1979) emphasizes the need to strengthen established social organizations as an important strategy for service delivery in rural areas. Consequently, age-friendly places will reinvest in social institutions of local, cultural importance to maintain connection to place and create opportunities for engagement of older adults (Aging in Place Initiative 2007; Gilroy 2008; Hodge 2008; WHO 2007b).

12.8 Community Planning Challenges in Rural Areas

Relatively little research has been conducted on unique needs and opportunities related to making rural areas age-friendly (Lui et al. 2009), with the exception of the Canadian project described above (Federal/Provincial/Territorial Ministers Responsible for Seniors 2006) and distinct analyses for rural areas in Canada by Hodge (2008).⁶ As such, the conceptualization of place both from a physical and social perspective has been largely influenced by (and is perhaps more reflective of) the experience of vulnerable populations living in urban rather than in rural areas.

As described above, older adults living in rural areas may be faced with increasing challenges and constraints related to the built environment and the social embeddedness of place. Geographic characteristics of rural areas—especially size and density of population, location relative to population centers and topography—will shape the community context with regard to the built environment, transportation and housing (Hodge 2008). The dispersal of service provision and social and advocacy networks as well as the sparseness of institutions in rural areas makes identifying and financing options to overcome barriers even greater (Ham et al. 2003; Krout 1998).

The diversity of rural areas also makes ‘one-size-fits-all’ solutions unlikely to succeed (Seroka 1989). Larger processes of economic global integration and restructuring have particularly affected some rural and remote areas by encouraging economic decline and the out-migration of younger populations, which often

⁶For a general guide to smart growth planning in rural areas, see Mishkovsky et al. (2010).

constitute the very economic base and social and advocacy networks upon which the elderly depend in rural areas. Rural retirement destinations are challenged by the new and diverse needs of a growing and diversifying local population (Brown and Glasgow 2008).

In general, the history of and regulatory structures for land use planning in the United States provide significant barriers to planning for the needs of a changing population. The lack of coordination of land use and development plans and the predominance of private interests in land use decisions at the local scale in the US represent an obstacle for the creation and implementation of plans that take into account long-term social and environmental needs of rural communities, and older adults in particular. That is, while high-density development may promise to achieve social and environmental goals for rural communities, these initiatives often come into conflict with the economic aims of private developers and long-established planning practices and visions of what is desirable.

The propensity to land speculation and the inability of land use planners to exert control over land markets prevent planners from using zoning and infrastructure planning in ways that more effectively meet the needs of the population as a whole. Also, the trend toward the prioritization of development strategies that focus on attracting private investment lead to conflicting uses of space that may not meet the traditional lifestyles and character of rural communities, and which may elicit tensions within a diversifying population. New approaches to land use planning and development may have limited purchase in established communities; in situations where there is openness to new planning approaches, their implementation may require resources and expertise which may not be readily available in rural communities. A haphazard approach to land use planning that encourages dispersed and disconnected growth of the built environment places strain on local finances and the environment. An approach to land use planning that favors the concentration, mixed use and accessibility of a variety of resources often depends on the capacity and resources of planners to balance the interests of developers and private investors with the public good.

In addition to staffing capacity, we highlight two additional roadblocks to the application of smart growth principles in rural communities. First, planning tools may not allow planners to effectively balance short-term growth and investment desires with the long-term visions of residents. Appropriate tools to discern the short and long-term benefits but also the costs of implementing alternative development strategies are necessary to manage growth in a more efficient and sustainable manner. The second shortcoming is related to the lack of explicit future visions for rural communities. This lack of vision is problematic for the implementation of smart growth principles in rural communities because this indicates little understanding on the part of the community and of planners regarding what are the assets and possibilities of rural communities. That is, in order to make the future vision of a community explicit, this requires that communities, private interests and planners engage in a process of evaluation of the communities' internal resources and assets, as well as its place within a broader regional and even national context (Mishkovsky et al. 2010). In this process of "locating" a rural community within its internal and

external context to formulate a vision for the future, the assets, resources, geographic uniqueness, human and historical characteristics and the way it is connected to other communities becomes explicit. Making these particular characteristics explicit, communities can then engage in a process of visioning to formulate policies and planning procedures that reflect the ways in which a particular community aims to manage change in accord with the intrinsic characteristics of the community and the needs of its population, now and in the future.

12.9 Conclusion

From a policy and planning perspective, attention to the needs of an aging population in rural areas is significant as the proportion of the older population both in industrialized and underdeveloped countries is due to increase significantly. Aging in place is a viable and attractive option at both the individual and societal level. Individuals who stay in their homes are better able to maintain relationships, family and community roles and physical health, as well as contribute to their local communities, if the social and physical environments are conducive to 'active aging.'

To encourage active aging in rural areas, policies and programs that encourage a multi-pronged (state, market and civil society) approach will need to be examined. In rural areas, private networks (family, friends and neighbors) continue to be critical sources of social, economic, and physical support. Financial assistance and programs that provide respite, education and social and emotional support can provide critical assistance to sustain these networks (Krout 1998; Glasgow 2000b). Market-based approaches are also needed as a means of building sustainable models for providing critical services to an aging population (such as housing adaptation and maintenance, in-home medical or personal services and private transportation). Programs that create incentives for private businesses to serve older adults in rural areas, such as tax credits and other payments can encourage the development of such businesses. Nonprofit and civic organizations can fill important gaps for older adults and can play a particularly important role educating local businesses, agencies, governmental representatives and older adults themselves about the needs and opportunities related to an aging population.

Public agencies and state and local government have significant roles to play creating programs and enforcing regulations to encourage a high quality of life for older adults. Elected officials and government agencies have a critical role in governing the development and design of local places that significantly affect the physical infrastructure, access to services and transportation issues of highest concern to older adults. The community planning process includes documenting demographic change, encouraging discussion of the needs of the local aging population, developing a vision and related goals for the community that reflects the needs of diverse segments of the population, and identifying integrative approaches and strategies for developing and supporting these programs (Hodge 2008; Marcouiller 1997). The community plan, and programs resulting from the plan, needs to recognize

diversity among older adults, their changing needs over the life course and how the needs of older adults interact with the needs of younger cohorts (Hodge 2008). The development of the community plan should incorporate all sectors of society—state, market and civil society—and especially older adults themselves. Such deliberative, collaborative processes enhance the likelihood of success, level of accountability and available resources for improving the physical infrastructure and social conditions for older adults—and indeed, all residents—of rural areas.

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Chapter 13

Volunteerism and Social Entrepreneurship Among Older In-migrants to Rural Areas

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13.1 Introduction

The purpose of this chapter is to examine the social entrepreneurship and volunteerism of older in-migrants to rural communities of the United States (US). “Rural retirement migration,” which more accurately might be termed “older in-migration to rural amenity destinations,”¹ has been an ongoing and important trend affecting rural areas of the US since the 1970s. Research on older in-migration to rural areas has shown that receiving communities are often characterized by scenic beauty and outdoor recreational opportunities and that most retirement communities have also developed recreation and tourism infrastructure (Brown et al. 2011)—hence the designation “amenity migration destinations.” Past research has concluded that older rural in-migration benefits rural destination communities economically; older in-migrants are relatively affluent and bring with them pensions and investments earned elsewhere to spend locally (Crown 1988; Glasgow and Reeder 1990; Longino and Crown 1990). Such studies have emphasized the *consumption behavior* of older in-migrants as a stimulus to economic development. In contrast, this chapter examines their productive contributions to destination communities.

¹ We refer to the phenomenon not as “retirement migration” but as “older migration,” because about a third of the people 60 years of age and older who moved to rural amenity areas never retired or became re-employed after retirement from an earlier career (Glasgow and Brown 2006).

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Older in-migrants often possess skills and expertise acquired in urban areas, which many of them use to enhance the civic engagement and quality of life in rural destination communities. We argue that voluntary social participation and social entrepreneurship among older newcomers promote community development in rural amenity destinations. Yet longer-term residents also identify some downsides to newcomers' social participation, which we also discuss. Research focused on the volunteer activity of older in-migrants has shown that they start actively volunteering in the communities to which they move within a relatively short period of time after their arrival (Brown and Glasgow 2008; Glasgow and Brown 2006; Le Mesurier 2006). The "social entrepreneurship" of older in-migrants to rural areas has only recently been investigated (Bosworth and Glasgow 2012), thus making it a new topic pertaining to the dynamics of older in-migration to rural amenity destinations. By "social entrepreneur" we mean someone who uses entrepreneurial principles such as leadership, management skills and team building to improve social, environmental, educational, economic and other conditions in communities (Zahra et al. 2009). In case study evidence from the Cornell Retirement Migration Study, Brown and Glasgow (2008) found that older in-migrants became engaged in activities that went beyond merely doing volunteer work for worthy causes. Older in-migrants were instrumental in forming new, and reshaping already existing, organizations and institutions in rural destinations.

Accordingly, the primary objective of our research is to provide an in-depth examination of the volunteerism and social entrepreneurship among older in-migrants in a select number of rural amenity migration destinations in the US. We use 2002–2006 survey data, first from the Cornell Retirement Migration Study (see Brown and Glasgow 2008) to establish the level of volunteerism among older in-migrants compared to their non-migrant counterparts living in rural retirement destinations of the continental US. Hawaii is home to one nonmetropolitan (nonmetro) county that is a rural retirement destination, and we add to the research literature by also focusing on the level of volunteerism among older in-migrants and longer-term residents in that county, which is Hawaii Island or the Big Island.

The data on social entrepreneurship activities among older in-migrants are from four in-depth case studies conducted in 2006 in each of the four major regions of the continental US. We use those data to examine similarities and differences across different rural areas in the social entrepreneurship and voluntary social participation of older in-migrants, examining both types of and level of activity.

13.2 Background

Tocqueville (1945), upon visiting the US, noted a high level of voluntary association participation among Americans. More recently Putnam (1995), in an essay entitled "Bowling Alone," argued that Americans in recent history have become more individualistic and that volunteerism and civic association memberships have declined. Data on older persons collected during the 2000s, however, show a

year-to-year steady and slightly increasing rate of volunteerism among the older population of the US (Corporation for National and Community Service 2011).

Attention in the social science literature to participation in volunteerism has increased largely because it is a key indicator of the social integration of members of society, and social integration has been shown to have a positive effect on health and longevity. In a 30-year longitudinal study, Moen and colleagues (1989) found that participation in volunteer roles compared with other social roles had an especially salutary effect on longevity. Musick and colleagues (1999), similarly, found that volunteering had a protective effect against mortality. Studies have also shown a positive relationship between volunteering and physical and emotional health (Glasgow and Arguillas 2008; Young and Glasgow 1998).

The increased attention on the volunteerism of older people, in particular, has partially resulted from older people being identified as a promising source of potential volunteers due to their greater available leisure time (Pillemer and Glasgow 2000). Prior to the 1980s when a smaller share of women was engaged in the formal economy, women were seen as the mainstays of volunteer labor. But, with most women of working age now in the paid labor force, older people are looked to as a primary source for recruitment of volunteers. Volunteerism is seen as having positive outcomes for both society and older individuals.

13.3 Theories of Social Engagement of Elderly

The gerontological literature on voluntary social participation among older people is shaped by three theories (a) “disengagement theory” (Cumming and Henry 1961), (b) “activity theory” (Havighurst 1964), and (c) “continuity theory” (Atchley 1989). The primary tenant of disengagement theory is that older people withdraw from social roles, including volunteer roles, before it is necessary for them to do so due to incapacity. Proponents of disengagement theory argued that the withdrawal process is natural, universal and mutually satisfying both to older people and to society. Disengagement theory has been criticized as being too simplistic because it does not take into account the diversity among older people, many of whom appear to remain engaged in a wide variety of activities during later life.

Havighurst (1964), activity theory’s main proponent, argued that older people maintain active engagement in a variety of social roles, and he provided evidence that continued social engagement, rather than disengagement, predicts higher morale among older people. Others have argued that, when older people do disengage from social roles, they do so more due to a lack of societal opportunities for older members to perform meaningful roles than to a universal functional process (Riley et al. 1994). Riley and colleagues argued that disengagement from societal roles is accounted for by society’s negative attitudes toward older people and to structural lag more so than to older people’s preferences. Structural lag, they proposed, is a situation in which opportunities for older people to participate in social roles have not kept pace with the increasing competencies of older people.

Continuity theory proposed that people who actively perform volunteer and other social roles during non-elderly stages of the life course are likely to continue at a high level of participation during old age, whereas those who were not actively engaged in social roles earlier are not likely to become active once they reach old age (Atchley 1989). Some substitution in social roles is likely to occur among older people, however, if they leave the workforce for the ambiguously defined “roleless” role of retirement (Rosow 1967). Later in the chapter, we address which of these theoretical perspectives best helps us understand and interpret the descriptive findings and evidence from the case studies.

A focus on the social participation of older in-migrants in rural destination communities is especially illuminating because many believe that it takes time to establish new social networks and community attachments (Marans and Rogers 1975; Rozanova et al. 2008), and hence that older in-migrants will not participate as actively as longer-term residents in volunteer and other community roles. But there is little empirical evidence on how much time it takes for older newcomers to become engaged, and of how likely they are to become involved in the affairs of their new community. We address these questions in our analyses.

Most discussions of entrepreneurship are in reference to business entrepreneurship, but *social entrepreneurship* is receiving increasing attention in the academic literature and in society generally. The word “entrepreneur” was derived from French in the 1750s, and originally it was used to refer to someone who was a “go between” or “broker” to buy products at a known price to resell at an uncertain price in the hopes of making a profit (Cantillon 1931). The theme of risk-taking is inherent in the concept of entrepreneurship. In order to take risks, entrepreneurs must be alert to opportunities and have the desire and capabilities to act upon them (Chell and Baines 2000). The interface between an individual’s skills and his or her environment is an important component of entrepreneurialism. The chance that older in-migrants to rural destination communities engage in social entrepreneurship and volunteerism are high because such in-migrants are generally more affluent and better educated than the long-term older rural residents they join. Many older in-migrants held executive and professional career positions in cities prior to the move to a rural area, and they possess numerous skills, talents and forms of expertise they may choose to employ in their new communities (Brown and Glasgow 2008). Given their professional skills, prior experiences and responsibilities, and greater than average financial resources, older in-migrants are good candidates for leadership roles in organizations and campaigns to bring about social and environmental change, thereby enhancing the quality of life in their new communities.

Social entrepreneurs invest human and social capital to enhance their quality of life and augment the collective social capital of their community.² In doing so, they

² Social entrepreneurs may focus their efforts at the societal or transnational level, as well, but in this study we focus on social entrepreneurship in particular rural locales. See Bornstein (2007) for a discussion of international organizations, such as Ashoka, that engage in social entrepreneurship.

increase the potential for ongoing, sustainable development of rural communities. Accordingly, in our focus on rural communities, we explore social and community development outcomes of social entrepreneurship among older in-migrants. We use case study data to investigate the extent to which older in-migrants can be characterized as social entrepreneurs. Again, we define a social entrepreneur as someone who uses entrepreneurial principles such as leadership, management skills and team building to improve social and other conditions in communities (Zahra et al. 2009).

13.4 Data and Methods

The Economic Research Service (ERS) of the US Department of Agriculture has identified rural retirement counties each decade for several decades, using the criteria that nonmetro US counties with 15% or higher net migration of persons 60 years of age and older are designated as such. Approximately 270 nonmetro counties were identified as rural retirement counties by ERS after the 1990 census, and the Cornell Retirement Migration Study chose 14 counties from the total for study. Cornell's study on older rural in-migration was initiated prior to the release of migration data from the 2000 census, and thus counties selected for the Cornell study were from the pool of rural retirement counties identified using the 1990 census and the criteria developed by ERS (Cook and Mizer 1994). The Cornell Retirement Migration Study (see Brown and Glasgow 2008) used a multi-methods approach to examine micro and macro aspects of older rural migration. A two-wave panel survey was conducted by telephone in 2002 and 2005 with older in-migrants and longer-term older residents of 14 purposefully selected rural retirement migration destinations. Areas were purposefully identified to ensure representation from all regions of the US in which significant older in-migration was occurring. Data were collected from matched, randomly drawn samples of in-migrants and longer-term residents ages 60–85. The rationale for the upper limit on age was to avoid a large problem with attrition due to death and illness between Waves 1 and 2 of the panel survey.

In 2002, Cornell's Survey Research Institute interviewed 788 respondents by telephone, and 638 of those respondents were re-interviewed by telephone in 2005. Attrition between Waves 1 and 2 accounted for the smaller number interviewed in 2005 compared to 2002.³ Approximately the same number of interviews was conducted in each of the 14 counties selected for study (about 60), and an approximately equal number of older in-migrants and longer-term residents was interviewed in each of the 14 high growth older rural migration destinations.

³ Attrition was due to death, illness, being unable to re-contact and refusals. An analysis of the characteristics of those who continued in the study versus those who dropped out showed no significant differences.

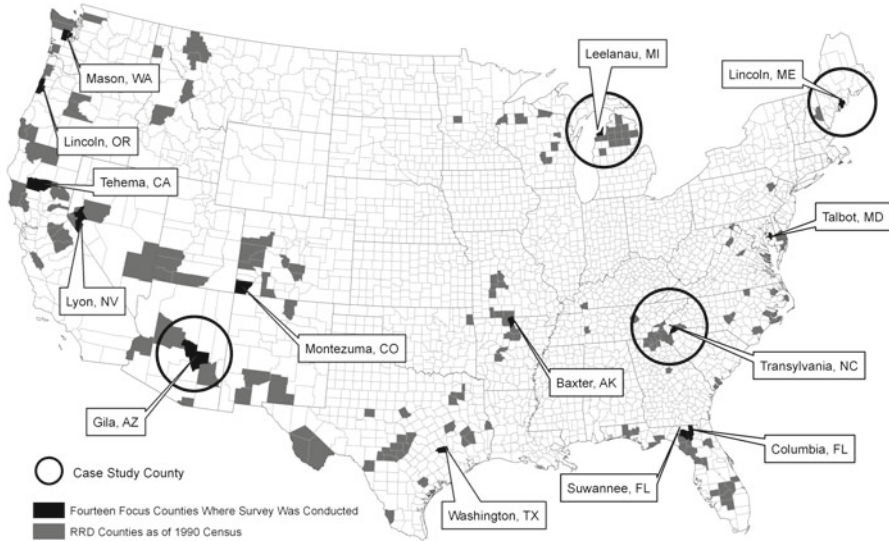


Fig. 13.1 Rural destinations of older in-migration, including designations of 14 survey counties and four case study counties (Sources: Cook and Mizer (1994), and Cornell Retirement Migration Study)

Case studies in four of the 14 survey sites—one in each major region of the country—were conducted in 2006 to examine how older in-migration was affecting destination communities. The principal investigators of the Cornell study (Glasgow and Brown) spent approximately 1 week in each of the four case study sites. During those visits they conducted face-to-face interviews with 64 public officials, community, business and organizational leaders and service providers. They also conducted face-to-face interviews with 6–7 older in-migrants in each case study area who had previously responded to both waves of the panel survey. Three different interview guides were prepared to shape the interviews—one for public officials/community leaders, another for service providers and a third for older in-migrant survey respondents. All of the questions were open ended, and conversations were free flowing. The researchers moved back and forth among the questions in the guides, taking notes in the appropriate spaces. This method helped organize the questioning, assured that each respondent was asked similar questions, and provided a structure for organizing responses. The case studies were conducted in Lincoln County, Maine (Northeast); Transylvania County, North Carolina (Southeast); Leelanau County, Michigan (Midwest); and Gila County, Arizona (West). We use Cornell Retirement Migration Study data from the 2002 Wave 1 and 2005 Wave 2 surveys for descriptive purposes and 2006 case study data for an in-depth analysis of older in-migrants' volunteerism and social entrepreneurship in their new communities (Fig. 13.1).

The data for Hawaii are from the Hawaii Health Survey (HHS) conducted in 2005 and 2006, with data for those 2 years merged (Hawaii Department of Health

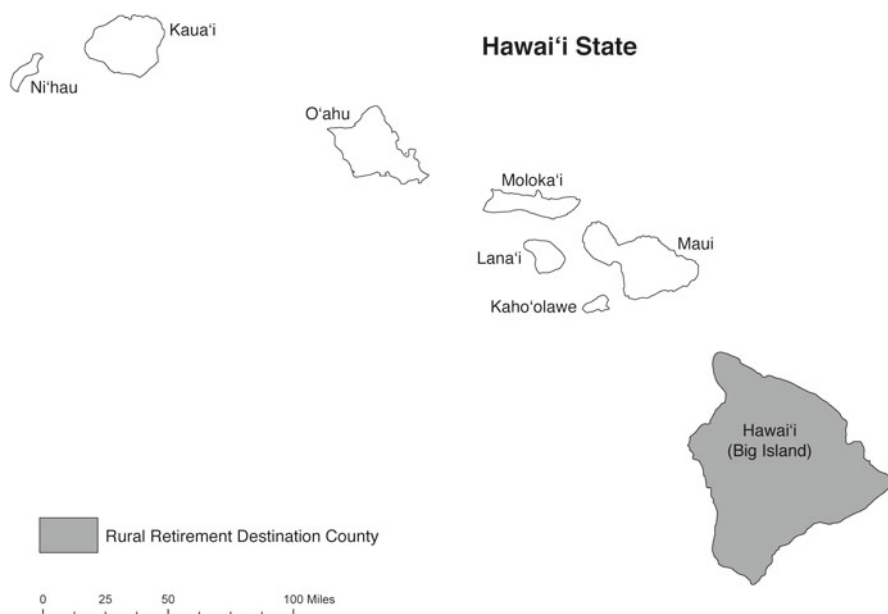


Fig. 13.2 Rural destination of older in-migration in Hawaii (Source: Economic Research Service (2005))

2005, 2006). Only residents of Hawaii Island, also known as the Big Island, in the state of Hawaii were selected for this study. That is because Hawaii Island is the only nonmetro county in Hawaii that is designated a rural retirement county, with 15% or higher net migration of persons at 60 years of age and older between 1995 and 2000 (Economic Research Service 2005). The N for the Big Island in the Hawaii Health Survey was 565 respondents between the ages of 60 and 85. The weighting procedures used in the HHS resulted in estimates of 19,872 non-migrants and 2,319 in-migrants ages 60–85 residing on Hawaii Island at the time of the survey. Respondents who had lived on the Big Island 5 or fewer years were defined as in-migrants and those with over 5 years' duration of residence were defined as non-migrants. This definition is consistent with the in-migrant/non-migrant definition used in the Cornell study, and it is how the US Census Bureau defined migrants and non-migrants in decennial censuses.⁴ In both the Cornell study and in Hawaii, counties were designated as rural retirement destinations if they had 15% or higher net migration of persons 60 and older in either 1990 or 2000 (Cook and Mizer 1994; Economic Research Service 2005; Fig. 13.2).

⁴ Starting with the 2010 decennial census, migration is no longer examined in decennial censuses, but rather in the American Community Survey (ACS). In the ACS, migration is defined as living in a different place 1 year prior.

Data for Hawaii and for the Cornell study were collected in different surveys, and thus we cannot make strict comparisons of findings, but rather our purpose is to examine similarities in the *pattern* of findings. The data analyses for this chapter consist of descriptive statistics from surveys, with a focus on level of volunteerism, and qualitative findings from the Cornell case studies, which are used to expand knowledge about volunteerism and social entrepreneurship among older in-migrants to rural amenity destinations.

13.5 Findings and Discussion

Before presenting analyses of our own studies, we place them in a national context by discussing findings from a national-level study of voluntary participation among older people. The Corporation for National and Community Service (2011), a federal government organization, provides data showing that each year from 2002 to 2009 the volunteer rate was higher among all US adults than among people ages 65 and older. In 2009, US adults of all ages had a volunteer rate of 26.8% versus a rate of 23.9% for adults 65 and older. Volunteer rates for US adults overall declined between 2002 and 2005 and leveled off from 2006 to 2009. The volunteer rates for US adults 65 and older, on the other hand, held steady throughout the 2002–2009 period. The gap in rates of volunteerism between elderly and non-elderly age groups appears to have narrowed during the past decade, and it appears that differences in rates of volunteering between elderly and non-elderly age groups are relatively small (Corporation for National and Community Service 2011).

The pattern of lower volunteerism among elderly compared to non-elderly age groups no doubt relates to increases in health problems and disability with increasing age. It may also relate to declining income over time among older individuals. Previous research by Chambré (1993), for example, found that younger-old are more likely to volunteer than older-old individuals. Older in-migrants to rural areas typically fall into the younger-old category when they initially move to a rural amenity destination (Brown and Glasgow 2008). This suggests that, at least initially, they are capable of voluntary social participation and social entrepreneurship at relatively high levels.

13.6 Survey Evidence on Volunteerism of Older In-migrants

Keeping in mind that the sampling procedures for the Cornell Retirement Migration Study and the Hawaii Health Survey were different and that the wording of questions on each also differed, we now present findings on the level of volunteering among older in-migrants versus older non-migrants in rural retirement destinations in the Continental US and Hawaii. In the Cornell survey conducted in 2002, 38.1% of older in-migrants compared to 42.6% of older non-migrants reported participation in organized volunteer activity (Table 13.1). By 2005, 47.2% of in-migrants versus

Table 13.1 Percent of in-migrant and non-migrant volunteers, ages 60–85, in rural retirement destinations of the continental US and Hawaii

	In-migrants	Non-migrants
<i>Continental US</i>		
2002	38.1	42.6
2005	47.5	42.4
<i>Hawaii</i>		
2005–2006	45.1	53.7

Sources: Cornell Retirement Migration Survey and Hawaii Health Survey

Note: The findings for the Continental US and Hawaii are not strictly comparable because the data are from different surveys

42.5% of non-migrants in the Cornell panel survey reported that they were volunteers. These findings suggest that a relatively high proportion of in-migrants, soon after moving to a rural retirement destination, become volunteers and that, over a slightly longer time period, older in-migrants become even more likely than longer-term older residents to volunteer.

The Hawaii data present a similar picture, with 45.1% of older in-migrants and 53.7% of older non-migrants reporting being volunteers (Table 13.1). We have only one time point of data for Hawaii Island, and, unlike the Cornell panel survey, the Hawaii Health Survey is cross sectional rather than longitudinal. Accordingly, we are unable to evaluate change over time in level of volunteerism among older in-migrants versus non-migrants on Hawaii's Big Island. It appears, however, that older rural in-migrants (ages 60–85) volunteer at similar and relatively high levels in both rural Hawaii and the Continental US.

13.7 Case Study Evidence on Volunteerism and Social Entrepreneurship of Older In-migrants

Each of the four case study communities included in the Cornell Retirement Migration Study (see Fig. 13.1) has its own history, and the communities vary on characteristics such as region of the country, length of time each has been an older in-migration destination, and the origins of the streams of older in-migrants. In-migrants to all four rural destinations originate primarily from urban areas. They, however, differ in distance moved. In-migrants to Lincoln, Maine and Leelanau, Michigan are largely from *intraregional* origins, whereas Transylvania, North Carolina and Gila, Arizona attract *interregional* streams of older in-migration. The latter two locales are in the Sunbelt. The topography in two—Gila, Arizona and Transylvania, North Carolina—is mountainous, and two—Lincoln, Maine and Leelanau, Michigan—have water and shoreline amenities. For more in-depth descriptions of each of the case study sites, see Brown and Glasgow (2008), which include information on their past and current economic structures.

Before discussing findings for each case study in turn, it is important to note that *all* of the local leaders, public officials and service providers interviewed in the four different locations expressed the opinion that older in-migrants play important roles as volunteers in their destination communities. Community leaders also recognized the social entrepreneurial activities of older in-migrants (although they did not specifically label them as such). Community leaders and public officials were unanimous in perceiving older in-migrants as movers and shakers in starting new, or expanding the capacity of, already existent, non-profit organizations. Public officials, leaders and older in-migrants also identified areas where tensions between newcomers and longer-term residents had at times developed, and we interweave discussions of tensions with our discussions of volunteerism and social entrepreneurship among older in-migrants. The four case studies provide interesting contrasts in the kinds of volunteering and social entrepreneurship older in-migrants engage in across the different communities we studied.

When choosing six to seven respondents from the panel survey for face-to-face interviews in each case study site, we examined survey data on the level of volunteer participation each reported in the two survey waves. We stratified our choices for face-to-face interviews by whether older in-migrants had reported high or low levels of participation. It was easier to identify older in-migrants who were participating at relatively high rather than low levels, which resulted in greater discussion of activity and engagement rather than inactivity and disengagement.

It is important to note, however, that not all older in-migrants had become actively engaged in volunteerism and/or social entrepreneurship in their new communities. The face-to-face interviews revealed that those who were low participators tended to be older-old individuals with substantial health problems. A few others identified “shyness” as the reason they had not become actively involved in their new community. For another few, it seemed they had spent their working lives heavily focused on work, which often included membership in professional organizations but not community organizations. Following retirement and a move to a rural amenity destination, those few individuals had not replaced work and former professional memberships with volunteerism or social entrepreneurship in their new communities. Among those with significant health problems, it appeared that their “disengagement” was not by choice. For other low participators, “continuity theory” seemed to best explain their low level of participation. They had not participated actively in not-for-profit community organizations in earlier stages of their life course, and that low level of participation carried over into their new communities. Now we turn our discussion of the case studies to investigation of activities among older in-migrants who were making a difference in their new communities.

13.7.1 Gila, Arizona Case Study

Among the four case studies, Gila County, Arizona had most recently become a rural destination for older migrants (within the previous 10 or so years), and older in-migration was occurring primarily in the small city of Payson in the northern part

of the county about an hour north of Phoenix. In Gila, older in-migrants were volunteers in a number of aging services and other social service organizations. The retired senior volunteer program (RSVP) had 200 volunteers in Payson alone working in the hospice program, as school tutors, in the library, in a family advocacy agency, in the senior center kitchen and thrift shop, delivering meals-on-wheels and providing rides to older persons without access to transportation. In Lincoln, Maine, on the other hand, older in-migrants were volunteering primarily in arts and cultural organizations, in local hospitals and the YMCA, but they were not likely to volunteer at the senior center or to deliver meals-on-wheels. A status hierarchy of sorts had developed in Lincoln, Maine but not in Gila, Arizona with respect to volunteer activity, e.g., participation in some activities and organizations was seen as more prestigious than involvement in others. According to a service provider interviewee, funds for social service programs had recently been cut in Gila County, which may have been a factor accounting for older in-migrants volunteering in a broader range of social service organizations. Perhaps in areas where social services are inadequate, older in-migrants step up as volunteers to fill gaps in the provision of needed services. In communities where social services are more adequately provided by the public sector, older in-migrants may tend to focus their volunteer participation on activities provided by organizations they perceive as being more prestigious.

The Payson Regional Medical Center (the local hospital) has an active hospital auxiliary, and the hospital runs a health and wellness program called Senior Circle, which depends heavily on older volunteers. Findings from the Gila case study indicate that “healthy aging” characterizes many older in-migrants who volunteer their time to help less healthy older people, as well as non-elderly persons who are less fortunate than themselves.

Although Gila County had been a rural retirement destination for the shortest duration of time of any of the case study sites, we found evidence even here that older in-migrants not only volunteered but were also social entrepreneurs. In Gila this took the form of older in-migrants gaining elective public office. Most notably, an older in-migrant—a retired business executive from Michigan—became discontented with the established political establishment’s positions on development and was elected mayor on an anti-incumbency platform. He persuaded other older in-migrants to run for public office in the same election cycle, which resulted in a few of them being elected to positions on the city council. The election of older in-migrants to public office in Payson caused political tensions within the community. The newcomers were in favor of planning and growth management, and they espoused “smart growth” principles. By contrast, the established power elite favored a less regulatory environment. Some longer-term residents interpreted actions by in-migrants as anti-growth, while in-movers themselves saw their actions as promoting sustainable development. Affordable housing for modest income workers had been identified as a key problem in Payson, and the mayor and other newly elected, older in-migrant officials vowed to work actively to solve the problem. Whether one agreed with their political positions or not, based on their visions, a number of older in-migrants were working in a social entrepreneurial fashion to improve the community of Payson.

Another example of social entrepreneurship among older in-migrants in Payson was their establishment of an artists' cooperative. This gave local artists a venue to sell their artwork, and older in-migrants were among the volunteer sales clerks in the cooperative. Arts and cultural organizations were underdeveloped in Payson, and this was one attempt by older in-migrants to improve the community's cultural offerings.

13.7.2 Leelanau, Michigan Case Study

Leelanau County, Michigan has been a summer home destination of long standing (since 1910, according to one interviewee), attracting wealthy people from Midwestern cities such as Chicago, Detroit, Cleveland, and Cincinnati. Even with the more recent and widespread growth from older in-migration, local leaders in Leelanau reported that it is not a year-round residence for the majority of older in-migrants. The Upper Midwest has severe winters, and several local leaders remarked that Leelanau County empties of many of its older in-migrants during the winter months. On the other hand, key informants in Lincoln, Maine also a vacation destination of long standing with cold, snowy winters reported that the in-migration of older people has transformed coastal communities to year-round residences. Perhaps winters in northern Michigan are more severe than winters along the coast of Maine. It is not entirely clear, however, why one rural retirement destination with cold winters had become an all-year residence for older newcomers whereas the other had not.

As in the other case study areas, older in-migrants in Leelanau County had become active volunteers in their communities, where they were particularly likely to do volunteer work for advocacy groups, such as the land conservancy. This advocacy, however, had become a source of tension with some longer-term residents. One interviewee remarked that older in-migrants were "more interested in preserving rural landscapes than agricultural land." Leelanau County is one of the country's major cherry producing areas, and some of the cherry growers were considering selling their property to affluent newcomers for conversion to residential use. But older in-migrants wanted to preserve the rural ambience, including the county's farmland, and they favored restricting residential development to the county's towns and villages in order to avoid spillover into the rural countryside. This created tensions with farmers looking to cash in on the "last crop."

The homestead laws in Michigan are such that older in-migrants were unable to vote in local elections, if their residence in Leelanau County was identified as their second home. Hence, as a result of their part-year residence in Leelanau, many older in-migrants were unable to vote in local elections. Not to be deterred, older in-migrants sought other ways of influencing Leelanau's public agenda. Public officials in Leelanau reported that, to influence public decision making, older in-migrants actively pursued membership on committees and task forces in their communities in order to have "voice" in local political issues. This type of participation

among older in-migrants indicates that, among the three theoretical perspectives put forth earlier in this chapter, their behavior is most closely represented by the tenets of *activity theory*.

Older in-migrants in Leelanau also volunteered as unpaid consultants to local governments (this type of volunteer work was also especially high in Lincoln, Maine). For example, a part time lawyer—a survey respondent who had entered staged retirement, resided in Leelanau County and worked in Traverse City in an adjacent metro county—estimated that he provides \$10,000 per year in free legal services to local governments in Leelanau County. Similarly, when a task force was formed on septic tank design to address the issue of wastewater seepage into Lake Michigan, which borders Leelanau County, most of the expertise came from older in-migrants. Older in-migrants on the task force included a PhD geologist, two PhD chemical engineers and two retired municipal waste managers.

One community leader interviewee was himself an older in-migrant to Leelanau County, but he was not among the randomly selected participants in the Cornell older in-migrant survey. We encountered him as a local leader in his capacity as head of the economic development committee in Suttons Bay, a village in the County. His participation on the committee was valued because he had been an executive in a multi-national corporation before retiring and had become a business entrepreneur with several interconnected businesses after moving to Leelanau County. Older well-educated, highly trained in-migrants are able to provide local governments with levels of expertise they could not afford, if they had to pay for the services. The free consultations provided by older in-migrant lawyers, accountants, architects, engineers, etc., however, may reduce the need for paid jobs that young professionals could fill.

Distinguishing where volunteerism ends and social entrepreneurship begins can be difficult. The older in-migrants who were providing free consultations to local governments often had a social entrepreneurial spirit about them. Older in-migrants consulting for local governments were not creating new institutions, but they often proposed creative and innovative solutions to community problems. They were instrumental in re-shaping existing institutions. A new organization called Care Share was one example of social entrepreneurship among older in-migrants in Leelanau County. Care Share is a member organization of older people in which healthier older persons provide personal services, such as lawn care or rides, to ill or disabled older individuals. The notion of reciprocity is inherent in the organization's structure, wherein well older individuals volunteer their services to older people with specific needs and have the expectation that similar tasks will be performed for them in the future, should the need arise. Members of the organization pay modest annual dues, and two hired staff members act as brokers to match those requesting assistance to members willing and able to provide the kind of assistance needed. All of the community leaders we interviewed felt this organization was a valuable resource in the county, especially since the only hospital in the county closed a few years earlier. The hospital in nearby Traverse City in an adjacent county currently serves as the primary hospital for Leelanau County residents, but the hospital is 30 miles away from residents, including a considerable number of recent

in-migrants, who live in the northern part of the county. Community leaders viewed any organization that might delay the need for hospital or long-term care services as an asset. In fact, a stated purpose of Care Share was to help older people live in their own homes for as long as possible.

A second example of social entrepreneurship was the active role older in-migrants played in forming an organization whose goal was to preserve the docks and buildings associated with Fishtown, one of the county's original Lake Michigan fishing communities. The society, in fact, purchased Fishtown specifically to promote preservation of the county's cultural heritage as a fishing community. Older in-migrants who led this project demonstrated a high level of civic engagement in their new community.

13.7.3 Lincoln, Maine Case Study

Volunteerism and social entrepreneurship were especially high among Lincoln County, Maine's older in-migrants. Lincoln has been a popular summer home destination for a century or more, with summer residents coming predominantly from New England and the Northeast. The attraction of summer residents to Boothbay Harbor and other coastline communities in Lincoln County was similar to the situation in Leelanau, Michigan. Lincoln and Leelanau Counties are also similar in that older in-migrants are largely *intraregional* in-movers. The rural retirement destinations are dissimilar in that older in-migrants in Lincoln County have largely become year-round residents, whereas, as indicated earlier, older in-migrants in Leelanau are primarily seasonal residents.

Perhaps because the majority of older in-migrants in Lincoln County are year-round residents, many have become heavily invested in volunteerism. One Lincoln County survey respondent, with whom we conducted a face-to-face interview, listed participation in a dozen volunteer activities. He was a retired architect who was providing free consultations to local governments in the county, while also volunteering in a wide variety of other organizations (e.g., he was the volunteer chess coach in a public school near his home). The retired architect was an outlier among volunteers in his very high level of volunteerism, but many other older in-migrants in Lincoln also reported multiple volunteer roles. The architect's wife had been a paid church musician where they lived prior to moving to Lincoln, and she was doing essentially the same job in her current church but as a volunteer. A key informant in Lincoln referred to older in-migrants as a "voluntary work force."

Older in-migrants were volunteering in a diverse group of community organizations, including theatres, libraries, new botanical gardens, environmental groups, the Lincoln Arts Festival and churches. Miles Hospital, one of two hospitals in the county, reported having 200 volunteers in their hospital auxiliary, with both longer-term residents and older in-migrants coming together as volunteers. On the other hand, personnel at the local aging services agency reported that their organization

was low on the totem pole of organizations for which older in-migrants chose to volunteer. They felt a *hierarchy of volunteering* had developed among older newcomers and that, while arts and cultural organizations had expanded and were prospering with the volunteer participation of older in-migrants, their organization was not. In fact, the aging services agency's volunteers were drawn mostly from longer-term residents. We are not sure whether the migrant/non-migrant difference in the choice of organizations in which to volunteer is associated with migrant status per se, or with the socioeconomic differences between in-migrants and longer-term older residents. Longer-term residents are less educated and less well off than migrants, and thus differences in volunteer behavior could be explained by SES rather than by length of residence in the community.

Further, older in-migrants were key fund raisers for a number of local organizations—some new and some of long standing. Local leaders reported that St. Andrews, the county's smaller hospital, would now be closed were it not for the volunteer efforts of older in-migrants. Older in-migrants were fund raisers and contributors to the two hospitals, with both hospitals expanding and improving their services since Lincoln County became a rural destination of older in-migration.

We found many examples of social entrepreneurship in Lincoln County, Maine. For example, the YMCA in Boothbay Harbor, Maine enjoyed huge support from older in-migrants. The YMCA had a new state-of-the-art gym, which was largely built through the fund raising efforts and donations of older in-migrants. And an older in-migrant couple was co-chairing the YMCA's annual fund drive during the year we conducted our case studies. An elected public official in Lincoln County commented that "The new YMCA would not be there without the in-movers." Similarly, older in-migrants raised a large portion of the money for, donated money to and provided volunteer gardening and other types of volunteer labor to establish the new 250 acre Coastal Maine Botanical Gardens, the largest of its kind on the east coast. To illustrate the importance of participating in the development of the botanical gardens, an older in-migrant survey respondent with whom we conducted a face-to-face interview reported that volunteering at the botanical gardens allowed her passion for gardening to flourish. She expressed great enthusiasm and satisfaction with the volunteer labor she provided in the development of the botanical gardens, and she planned to continue indefinitely in the role of volunteer gardener. Her volunteering at the botanical gardens also led to a part time paid job at a local plant nursery, and the post-retirement job was another source of satisfaction to her.

The social entrepreneurship of older in-migrants had resulted in land trusts being started; money being raised for a new library in the town of Damariscotta; and the founding of a new theatre company. Older in-migrants were also involved in the development of an eco-conscious co-housing complex, which was still in the planning and development stages when the case studies were conducted. One community leader commented that a "culture of volunteering" had developed in Lincoln County. Based on our observations, older in-migrants' community participation often spilled over from merely volunteering into social entrepreneurship.

13.7.4 Transylvania, North Carolina Case Study

Transylvania County is located in the mountains of western North Carolina. The county seat, Brevard, is home to Brevard College, a small liberal arts college, and Blue Ridge Community College, a more technically oriented school. The Brevard Music Center for many years has hosted a summer music camp, which presents about 80 concerts annually that showcase the talents of students from Brevard College. Transylvania, with its many waterfalls and forests, has been a summer vacation spot for years, and early in the twentieth century it became a place of second residences for wealthy industrialists. For many years, the county has been home to numerous summer camps for children. Manufacturing, however, was the main driver of the local economy until about 2000 when most of the county's plants closed. Deindustrialization within the county coincided with Brevard and Transylvania County flourishing as a retirement destination for older in-migrants. One public official referred to older in-migrants as "grey gold" due to the money and spending they brought to the local economy.

Similar to findings in the other case studies, older in-migrants in Transylvania were active volunteers. Volunteering in arts and cultural organizations was popular in Brevard, but older in-migrants were engaged in a number of different types of volunteering. Older in-migrants were drawn to the volunteer opportunities at the Brevard Music Center where they served on the music center's board of directors, worked as ushers, sold tickets for concerts, etc. Older in-migrants were among the volunteer members of the Art League's board of directors. In addition, a number of older in-migrants volunteered for such organizations as the United Way, meals-on-wheels, churches, the library, condominium boards and the local hospital. The older in-migrant survey respondents with whom we conducted face-to-face interviews frequently remarked that the communities in Transylvania County were friendly places to live, but they also acknowledged that in-movers were sometimes referred to as "Yankees" by longer-term residents (regardless of the regional origins of older in-migrants) and that some resented them because of the active roles they were playing in a number of community organizations. Some longer-term residents considered the relatively well off and often cosmopolitan in-movers to be cultural snobs who foisted their aesthetic tastes on the community.

In the course of interviewing local leaders and older in-migrants, three examples of social entrepreneurship among in-migrants in Transylvania stood out. Older in-migrants were the driving force behind raising money for and donating to a new public library in Brevard. One community leader commented that "The first million dollars in funds raised for the new library came from retirees." Second, through their own interests but also to improve the collective offerings in Transylvania, older in-migrants were heavily involved in the creation of an arts cooperative. The purpose in starting the arts co-op was to give local artists and crafts makers a venue for displaying and selling their work. Third, an older in-migrant who was a retired corporate executive founded a local chapter of the Senior Corps of Retired Executives (SCORE), an organization with chapters throughout the US. The founder and several

other older in-migrants who were retired executives had become members of the local chapter of SCORE. They provided free consultations to anyone in the community who wanted to start their own business, and the SCORE chapter in Transylvania was working with the Chamber of Commerce to identify potential avenues for business entrepreneurship in the county.

13.8 Conclusions

Older in-migrants to rural amenity destinations are playing significant roles in restructuring rural communities through volunteering and through their roles as social entrepreneurs. All of the case study sites showed visible signs of new development in the non-profit sector (e.g., public libraries in new buildings with up-to-date equipment and improved collections; an impressive new YMCA; a large and beautiful new botanical gardens; a new theatre company; artists' cooperatives located in renovated buildings in downtown areas of small towns and villages receiving older in-migration; public art installations; and hospital expansions). The efforts of older in-migrants who have the time, money and energy to engage in the non-profit sector have enhanced the wider communities in rural amenity destinations. Indirectly, the volunteerism and social entrepreneurship of older in-migrants have promoted economic development in rural retirement destinations. For example, tourists are attracted to the new botanical gardens in Lincoln, Maine, with consequent increased tourist spending in local businesses.

We have not directly tested the tenants of disengagement theory (Cumming and Henry 1961), activity theory (Havighurst 1964), and continuity theory (Atchley 1989), but our analyses of survey data and the qualitative analysis of case studies suggest that *activity theory* and *continuity theory* better explain older in-migrants' participation in their new communities than disengagement theory. Of course, one might point out that in no instance, in rural Hawaii or rural areas of the Continental US, did volunteering exceed 50% of older in-migrants. We might have found more support for a somewhat tempered view about levels of participation, had we more concertedly sought out older in-migrants with low levels of participation. The evidence we have from key informant interviews, survey data and face-to-face interviews with survey respondents, however, indicates that activity theory and continuity theory help to explain how older in-migrants often conduct their lives in their new social settings. For some, if they were volunteers prior to reaching old age, they were likely to continue to volunteer once they reached older age, even though they had to develop such roles in new places where they lacked volunteer experience. Especially among some who had very active careers, it seemed that, upon retirement, they replaced their work roles with new roles as community volunteers and/or social entrepreneurs. If we compare our data to other sources (Chambré 1993; Corporation for National and Community Service 2011), older in-migrants appear to reach the level of volunteerism exhibited throughout the US or perhaps even exceed it. Due to the lack of comparability of different data sources, however, we cannot make

definitive statements about older in-migrants' rates of volunteerism compared with rates of volunteerism among the US elderly population in general.

We can say that the volunteerism and social entrepreneurship of older in-migrants to rural amenity destinations of the US are making a difference in those communities. Asheville, North Carolina is a *metropolitan* retirement migration destination, and like Transylvania County, Asheville is located in mountainous western North Carolina. Some years ago the University of North Carolina-Asheville developed the Center for Creative Retirement. Similar to the older in-migrants in rural amenity destinations generally, many older in-migrants in Asheville are well-educated, comparatively well-off, talented and skilled former professionals and executives (Haas 1990; Longino 1990). Realizing that older in-migrants in Asheville could contribute to the social capital and collective quality of life of the city, city officials and university personnel developed the Center for Creative Retirement in order to provide formal opportunities for older in-migrants to follow their interests, provide leadership, volunteer, and contribute to their new community more generally (North Carolina Center for Creative Retirement 2011). This is important because being a volunteer requires not only personal motivation and resources (time, money, skills, and experience), but also facilitating social structures that are inclusive and supportive.

One should not forget that older in-migrants and longer-term residents are sometimes at odds with regard to what they want for their communities. Regardless of their intentions, older in-migrants sometimes displace longer-term residents, older and younger, from cultural, political and economic roles, and sometimes in-migrants have different social and political agendas than their new neighbors. Finding solutions to such tensions may be difficult, but, if proposals for new organizations or re-shaped already existent organizations are introduced, public discussions conducted transparently may be a way to deal with tensions and potential conflicts between older in-migrants and longer-term residents. Based on interviews with community leaders, on balance, older in-migrants have been a boon to the level of civic engagement and the quality of life in their new communities.

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Chapter 14

Intergenerational Relationships and Rural Return Migration

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14.1 Introduction

In the rural United States (US), where roughly one in five Americans live, elderly are overrepresented, with 14.6% of the population versus 12% for the nation (US Census Bureau 2009a). Additionally, the proportion of elderly is growing faster in rural than in urban places due to persistent outmigration of rural youth (Cromartie 2007; Brown and Glasgow 2008). The shrinking proportion of younger cohorts represents a serious challenge for many rural communities. Especially in geographically isolated areas where elderly make up 18% of the population, prolonged and persistent out-migration of youth goes hand in hand with natural population loss (McGranahan and Beale 2002). The vitality and long-term sustainability of many rural places is called into question. Concern for these issues sparked our research.

When embarking on this project, we did not plan to study aging in rural places. Instead, we set out to explore return migration to rural communities. We wanted to understand what motivates people to move back to rural places they left shortly after graduating from high school. In the process, we discovered that concern for family and an appreciation of intergenerational relationships were important in influencing people's decision to move back to their rural home town. The presence of aging parents residing in the rural community turned out to be a critical element for promoting rural return migration.

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The motivations for rural return migration can be understood from perspectives on intergenerational relationships and migration over the life course. Existing studies on intergenerational relationships tend to, as pointed out by Rossi and Rossi (1990), either focus on the relationship between parents and young children (*alpha stage*) or between adult children and their aging parents (*omega stage*). Studies involving aging parents typically explore these relationships from the perspective of the parent. The literature on intergenerational, familial relationships further tends to focus on relationships that involve support between generations, whether altruistic support or exchange relationships of giving and receiving (Hogan et al. 1993; Eggebeen and Hogan 1990). To examine intergenerational support relationships, many studies employ survey and quantitative methodologies.

Our work differs from and supplements prior studies on intergenerational relationships and on age-related migration in several ways. Instead of using a quantitative, survey-based approach, this work relies on interviews and employs a qualitative approach. Given our qualitative methodology, we did not focus a priori on support and exchange relationships. Instead, our interviews about return migration were open-ended and focused on reasons for returning. Responses revealed the complexity of return migration decisions and strong connections to intergenerational and kinship relations among those who returned. Further, our work explored intergenerational relationships from the perspective of adult children, not of aging parents. Because many of the individuals whom we interviewed also have children, the impact of a third generation of young children and teenagers could also be considered. We examined not only the parent-child connection but also the grandparent-grandchild connection, which turned out to be relevant for return migration as well.

Favorable intergenerational relationships may more easily be sustained in closer geographic proximity between generations, and migration can either increase or decrease the geographic distance between generations. Migration research involving the relationship between adult children and their aging parents tends to focus on aging parents who move to be closer to their adult children (Litwak and Longino 1987; Rogerson et al. 1993, 1997). Some migration studies are based on aggregate data for regions, making it difficult (and inappropriate) to uncover individual motivations for migration. Other studies are based on surveys where respondents are specifically asked about reasons for migrating. Qualitative studies on elderly mobility, such as the work of McHugh and Mings (1996), are relatively rare. In contrast to the move of elderly parents nearer to their adult children, the move of adult children to be closer to their aging parents is rarely examined (Michielin et al. 2008; Pettersson and Malmberg 2009). However, this type of move is exactly what we repeatedly encountered in our conversations with rural return migrants.

The following section establishes the background for understanding intergenerational relationships and return migration (1) by introducing concepts and empirical findings on intergenerational relationships and (2) by highlighting elements from the migration literature that help to understand these relationships and life course migration. A brief methodology section introduces study population and study area, and outlines our approach to gathering data. Our findings section demonstrates that relationships between generations and especially the location of aging parents are

important for understanding why people move back or do not move back to the rural community where they graduated from high school. Finally, we offer a summary of findings and discuss the implications of this work for rural aging and rural communities.

14.2 Background: Intergenerational Relationships and Migration

14.2.1 Intergenerational Relationships: Concepts

Relationships between generations are often expressed as relationships of solidarity (Mangen et al. 1988; Rossi and Rossi 1990). The literature on intergenerational relationships refers to different, partly overlapping types of intergenerational solidarities (see Krause 2009; Bengtson 2001; Rossi and Rossi 1990). We are singling out functional solidarity (support or aid) as the most commonly addressed and affective solidarity (emotion or affect) as very infrequently addressed types of solidarity. Both are important for understanding rural return migration.

14.2.1.1 Functional Relationships

Functional intergenerational solidarity, or support relationships involving the giving and receiving of help between generations, have perhaps been more closely examined than any other type of intergenerational relationships (Hogan et al. 1993). They are most often used to explain relationships between adult children and their aging parents. Intergenerational support or aid may be in the form of advice and comfort, caregiving, help during illness and crisis, regular or ad-hoc help with household maintenance, financial help, special gifts, and the like (modified from Rossi and Rossi 1990, p. 30). In rural areas, where services tend to be less available, providing transportation is another important way of aiding elderly and, with that, enabling them to access services (Prosper and Clark 1994; Krout 1994). While some forms of support are relatively independent of proximity and distance, such as advice or financial help, many other forms of support, such as caregiving, help with household tasks and repairs, and transportation services greatly rely on proximity between giver and recipient (Hogan et al. 1993).

Help given and received in intergenerational relationships can be altruistic or reciprocal (exchange), and studies on reciprocity or the social exchange between generations are common. Social exchange may occur roughly at the same time or alternatively be distributed across the life course. For exchange over the life course, Rangel (2003) distinguishes between forward and backward intergenerational exchange. Forward exchange involves a transfer from prior to next generations, such as parents taking care of their young and adolescent children. Backward

exchange is a transfer from next to prior generations, such as adult children offering support to aging parents.

Interest in backward intergenerational support from adult child to aging parent has been growing (Kingson 1989) as the number and proportion of elderly among the population increased from 12 million or 8% of the US population in 1950 (US Census Bureau 1952) to 35 million or 12% of the US Population in 2000 (US Census Bureau 2002). By 2040, the number of elderly is expected to reach 80 million (US Census Bureau 2008). This is a result of longer life expectancies and the aging of the large cohort of baby boomers, which is beginning to reach retirement age. Due to rural aging and in-migration of elderly, many rural areas will be especially affected by the growth of elderly cohorts (Cromartie and Nelson 2009). With the growth in number and proportions of elderly, issues of aging and intergenerational support relationships have become more and more relevant for policy. Older people desire to stay in their own dwelling as they age, and public policy trends have shifted by de-emphasizing institutional care (Prosper and Clark 1994). This creates a greater need for informal caregiving, which is often reliant on family. However, the role of kinship and support relations is thought to have diminished due to the rise of the core family (Burgess 1960). Yet, members of extended families were found to be available to help one another in times of need (Bengtson 2001; Michielin et al. 2008; Connidis 2001). Connidis (2001), for instance, points out that one third of elderly persons requiring help receive it from an adult child. Family, therefore, makes up part of the social capital that elderly can draw on as a personal resource (Hendricks and Hatch 2009). The strength of the relationship between adult children and aging parents seems to further depend on the presence of grandchildren (Hogan et al. 1993). Aging parents and adult children often seek to live nearer to each other if there are grandchildren (Pettersson and Malmberg 2009). Greater proximity between grandchildren and grandparents allows for more social contact which can promote closer affective bonds.

14.2.1.2 Affective Relationships

While many studies on intergenerational relationships emphasize intergenerational dependence and support given or received, relatively few studies—such as Bengtson (2001), Merz et al. (2009), and Rossi and Rossi (1990)—also explore affective and emotional relationships between generations.

In their study of three generations Rossi and Rossi (1990) found that affective relationships between parents and their children are strong during childhood, but then weaken during adolescence. After the often troubled and stormy teenage years, affective relationships recover. Affective relationships reach a new peak when adult children are between 30 and 40 (Rossi and Rossi 1990). At this age, many adult children are themselves parents in the child-rearing phase and therefore have more interests in common with their own parents. Additionally, their children are their parents' grandchildren, allowing for grandparent–grandchild interaction. The bonds between adult children and their aging parents are particularly strong, if the now

adult children held fond memories of family relationships during their childhood years (Hogan et al. 1993; Rossi and Rossi 1990). The nature of affective relationships appears to be shaped by past patterns rather than by the maturing and aging process (Connidis 2001). As people move through the aging process, however, they tend to assign greater meaning to emotional bonds with family and friends (Krause 2009).

Affective relationships also influence the linkages between exchange and well-being. Merz et al. (2009) found that the strength of affective relationships influences how support between adult children and their aging parents is viewed by both. If affective bonds are strong, adult children find it easier to give support, and aging parents find it easier to accept support. On the other hand, if affective bonds are weak, both giving support and receiving it is more challenging and less gratifying. Merz et al. (2009) conclude that well-being of both adult children and aging parents in support and exchange relationships is enhanced by strong affective bonds.

14.2.2 Migration, Family Relationships, Dependence, and Aging

For decades, migration research focused more on economic than other reasons for migration: on employment, income, or both (Greenwood 1975; Hicks 1932; Lowry 1966; Sjaastad 1962). In response to the metro-nonmetro migration turnaround (Beale 1975), quality of life reasons, especially as related to amenity migration, received greater attention (Shumway and Otterstrom 2001; Brown and Glasgow 2008; McGranahan 1999; Nelson 1999; Rudzitis 1999; von Reichert and Rudzitis 1992). Although family-motivated moves have long been and continue to be important in understanding geographic mobility (Brown and Glasgow 2008; Rossi 1955; Leistriz et al. 2000; Litwak and Longino 1987), family reasons and family relationships have been studied to a much lesser extent.

14.2.2.1 Migration and Family Relations

In his classic work, *Why Families Move*, Peter Rossi (1955) demonstrated that geographic mobility is often linked to family reasons. The needs of children, for instance, strongly induce or inhibit residential mobility (defined as moves within the same activity space, typically within the same county). Quite a few survey-based studies also point toward the importance of family reasons for migration (defined as moves to a different activity space, typically to a different county). A survey of migrants to North Dakota and Nebraska, for instance, showed that over 50% of migrants quote being closer to family as one of the reasons for moving there (Leistriz et al. 2000). A survey of Montana migrants similarly revealed that roughly one third of both new and returning migrants to the state primarily moved for family reasons (von Reichert 2002).

The relatively recent 'reasons for moving' question included in the Current Population Survey (CPS) shows that family (excluding change in marital status

or establishing a new household) accounts for 14% of all moves, and 18% of inter-county moves. For people 75 and older, these proportions are 27% and 35%, respectively (US Census Bureau 2009b), showing that elderly are the most inclined to make family-oriented moves. Older persons, if retired, are largely free of work obligations, giving them greater flexibility in making relocation decisions when compared to their adult children in the labor force and family stage. Aging parents can more easily migrate for familial reasons, and CPS data show that they do.

To shed more light on elderly migration, Litwak and Longino (1987) proposed a three-stage model of aging and migration: People in their late-50s to mid-60s move to rural areas in search of natural amenities and a slower pace of life (Stage 1). However, as rural-bound migrants move through the aging process, they may not stay in rural communities as increasing age and concomitantly declining health may result in a greater need for assistance in everyday life. Unless they have support groups already nearby, they seek greater proximity to and support from family. Not surprisingly, when elderly (in their 70s) move, they commonly move to live closer to adult children (Litwak and Longino 1987; Plane and Jurjevich 2009; Rogerson et al. 1993, 1997). Closer proximity to family can provide them with support of daily activities and companionship (Stage 2). When the need for support grows beyond a family's capacity to care, a third elderly move toward a care facility may occur (Stage 3).

Stage 2 of the Litwak-Longino model is very useful for understanding the high incidence of family-oriented moves among elderly. Seemingly less common and also less studied is the move of adult children to live closer to their aging parents. For adult children in the labor force (and often in the family stage), job constraints and obligations toward their own children can explain the reduced propensity to move to be closer to parents. However, the move of adult children back to rural communities they left after high school is exactly the type of move discovered in the process of our research and considered here.

14.2.2.2 Aging, Intergenerational Dependence, and Migration

One of the most enduring phenomena of geographic mobility is how mobility changes with age: People make decisions about moving (or not moving) as they progress through life. During transitions into different life course stages, mobility may rise sharply, drop off quickly, or stay fairly constant. Figure 14.1 shows the well-known age migration schedule, derived from the 2007 American Community Survey (ACS, US Census Bureau 2009c). The strong age dependence in mobility is connected to approximate life course stages, which are highlighted in the chart.

We elaborate on the themes of age, family and career life course stage, and intergenerational dependence as they are helpful for understanding rural return migration. We refer to commonly observed, yet simplified life course stages while fully recognizing their greater complexity and the social contexts that affect migration decisions over the life course (Geist and McManus 2008).

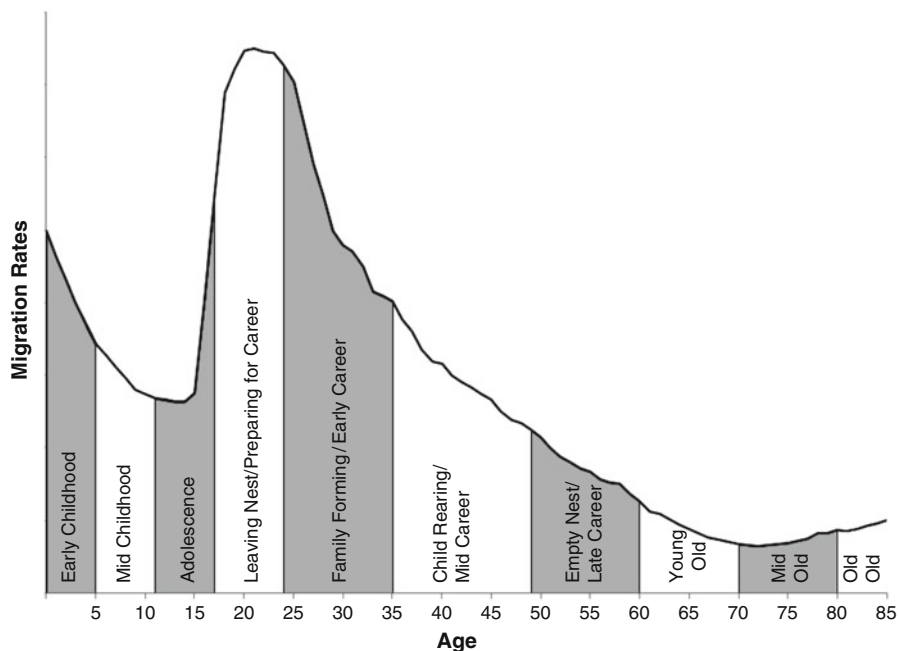


Fig. 14.1 Migration by age and approximate life course stages (Source: Derived from ACS 2007 migration expectancy data (US Census Bureau 2009c); approximate life course stages added by authors)

Young children, as family members heavily dependent on their parents, are found to move a good deal. This is because their parents, as young adults in the early stage of building a career and forming a family, move to meet the objectives of their career, as well as housing goals of their family. Parents make those moves because they often directly benefit both their own career and the well-being of their young children, while not greatly disrupting their children's upbringing. Families with teenage children, however, especially if in high school, move very little, as relocations at that age are thought to negatively affect adolescents. Parents of teenagers are usually in their late 30s to late 40s or early 50s. The low mobility during this child-rearing phase coincides with the mid-career stage when people settle down for the sake of their family as well as their career. Following the low mobility phase characteristic of adolescents, mobility spikes sharply for people in their late teens to early 20s as young adults move away from the parental home and 'leave the nest' for college, a job, or other personal reasons. This 'launch' is often associated with establishing and demonstrating independence from the previous generation (Plane and Jurjevich 2009). Indeed, moving after high school has long been a rite of passage in the US. The parents left behind by their grown-up children become 'empty nesters' as early as the late 40s but more commonly in the mid- to late 50s. With the next generation 'launched' and the 'nest empty' parents experience an increased independence from the next generation, their children. At the beginning

of this stage, late 40- to 50-year olds are also relatively independent from the previous generation, their parents, as their aging parents are typically among the ‘young old’ to ‘mid old,’ in their late 60s and early 70s. Young-old and mid-old parents tend to enjoy good physical health and relatively good financial health. As a result, recent ‘empty nesters’ have a window of greater independence from both next and prior generations (Plane and Jurjevich 2009). Plane and Jurjevich further suggest that this intergenerational independence could increase locational flexibility. Indeed, the move of pre-retirees and early retirees to amenity destinations may be a result of this greater locational and intergenerational flexibility. As time passes, however, adult children (in their 50s and early 60s) may feel greater obligations toward their aging parents, who gradually—or in some instances abruptly—experience a decline in health and have a greater need for support. To the extent that this support is provided by their adult children, elderly parents become increasingly dependent on the next generation (Wenger and Keating 2008).

Opportunities for intergenerational support often hinge on close geographic proximity because geographic proximity allows for more frequent interaction. Most older parents and adult children show a preference for living not far from one another, and the majority of aging parents live within an hour or less of an adult child (Connidis 2001; Lawton et al. 1994). Geographic proximity, in turn, allows for giving or receiving support and for maintaining and growing affective bonds between generations (Michielin et al. 2008). Distance, on the other hand, limits exchange relationships (Hogan et al. 1993; Rogerson et al. 1993, 1997). If people left their parents’ home as young adults, and moved away, greater geographic proximity could be achieved by two types of ‘corrective’ moves. Aging parents could either move closer to adult children or, alternatively, adult children could move closer to aging parents. While the first option seems to be more common in general, the second option describes the situation we often encountered when exploring rural return migration.

14.3 Methodology

14.3.1 Study Population

In exploring rural return migration, we focus on people in their late 20s to late 40s. These are adults in the early stage of their career, in mid career, or approaching the late stage of their career. The study participants span family life course stages from family-forming to child-rearing phase and the onset of the empty-nester phase. Members of the younger cohort usually have strong obligations to the next generation (their small children), but they do not yet have obligations to the prior generation (their parents). The older cohort typically has diminishing obligations toward the next generation (teenage children or young adults) but increasing obligations toward the prior generation (aging parents). Importantly, most people in these age

groups need to have employment, which consequently affects where they choose to live.

Table 14.1 provides a generalized description of the study population (ranging in age from the late 20s to late 40s), the corresponding life course stages, and intergenerational context. Intergenerational context includes the life course stages of children, of aging parents, and forward and backward relationships between study population and other generations.

14.3.2 Study Area

The communities we targeted were of small to moderate size, with populations ranging from 800 to over 10,000. Our focus is on geographically isolated nonmetropolitan counties (von Reichert 2008) in regions with relatively low natural amenities, as identified in a US comparison (Economic Research Service 1999). The communities considered here face challenges in a variety of ways, as places of production (with small and isolated labor markets) and places of consumption (with lower levels of natural amenities). As places of production, smaller communities tend to have small local labor markets and are limited in the range and diversity of locally-available employment opportunities. In contrast to communities close to metropolitan areas, workers in isolated communities cannot readily tap into metropolitan labor markets by commuting. As places of consumption, many lower amenity counties, especially if isolated, tend to lose population through out-migration. This contrasts with many high amenity counties, which have gained population through in-migration (McGranahan and Beale 2002). Consequently, the study communities considered here represent neither employment magnets nor amenity-rich leisure locations, making the question of what draws returning migrants to them particularly intriguing.

14.3.3 Collecting Interview Data

In summer and early fall of 2008 and 2009, we traveled to 21 communities in geographically isolated areas to interview people at 10- to 30-year high school reunions. Reunions were chosen because they are the only venues that allow one to simultaneously connect with stayers (who never moved away), with out-migrants (who moved away and now live elsewhere), and with return migrants (who moved away and later returned).

Visits to high school reunions in rural communities were the result of a lengthy process of identifying high schools located in the study communities, selecting and contacting schools, finding reunions, and targeting classes to capture a range of ages (people in their late 20s at 10-year reunions to people in their late 40s at 30-year reunions). We obtained permission from reunion organizers to attend reunion events

Table 14.1 Study population, life course stages, and intergenerational context

Attributes and life course stages		Cohorts of the study population		
Study population	Age at interview	Late 20s	Late 30s	Late 40s
	Demographic cohort (year born)	Baby boom echo (born early 1980s)	Baby bust (born early 1970s)	Baby boom (born early 1960s)
	Career stages	Early career	Mid career	Mid to late career
	Family stages	Family forming	Child rearing	Approaching 'empty nest'
Intergenerational context	Aging parents' life course stages	Labor force or 'young old' (late career or retiring)	'Young old' to 'mid old' (early to mid retirement)	'Mid old' to 'old old' (mid to late retirement)
	Children's life course stages	Early childhood	Mid childhood	Adolescence
	Relationship to next or prior generation	Mostly forward solidarity toward young children	Mostly forward solidarity toward children	Increasing backward solidarity toward aging parents

and interview classmates. In several communities, we attended more than one reunion for a total of 27 reunions: seven 10-year reunions, one 15-year reunion, ten 20-year reunions, one 25-year reunion, and eight 30-year reunions. With approval, we digitally recorded the conversations, transcribed them, and identified themes using NVivo, a software program that is helpful for organizing text data.

This chapter focuses on interviews with returning migrants but also takes into account responses from out-migrants and people who stayed in their community after high school. Over the course of two summers, we had the opportunity to speak with over 300 individuals at class reunions for conversations that lasted from a few minutes to a half hour. While visiting communities, we also spoke with dozens of community leaders and return migrants outside of high school reunions for lengthier conversations ranging from 20 minutes to over an hour.

High school reunions are both suitable and limited as research venues. High school reunions are not a representative sample of a graduating class, as participants are self-selected. Not everyone attends their class reunion, and people who come to class reunions tend to have relatively strong ties to their classmates and other childhood friends. One would expect such ties to develop more easily in rural schools with relatively small classes. This could explain why the tradition of holding and attending class reunions is strong in many parts of rural America, as we learned in the process of locating and attending reunions. Even with overall high participation rates at rural high school reunions, a self-selection bias nonetheless remains, making reunions problematic for representing a graduating class. On the other hand, the appeal of reunions for people who maintained ties to the people and the place where they graduated from high school makes them suitable as sites to learn about the attraction of rural communities. The self-selection bias of high school reunions is therefore an advantage for answering our overarching research questions about the draw of rural places.

14.4 Findings

The large number of conversations reveals recurring themes related to intergenerational relations: people move back to rural places for their children and for their parents. Both functional solidarity between generations and affective bonds play a role. The following sections elaborate on these themes in more detail.

14.4.1 *Moving for Their Children*

In speaking to people in their late 20s to their late 40s, we found that many people had moved back to their rural community for their children's sake. They wanted to raise them in an environment with which they as parents were familiar and comfortable: *I would not have known my children had we raised them in Houston.* They also

wanted to raise their children in an environment they thought of as safe: *Where else can you tell your little one, go out and down the street, and not worry about them?* Many also expressed appreciation for the rural school systems being supportive of their children and for providing academic and athletic opportunities: *The school system is awesome.* Often, to achieve these benefits, parents accepted sacrifices in their own careers by taking jobs that required lower qualifications than they possessed, by settling for lower pay, or by foregoing opportunities for promotions: *If it were not for my children, I would be living somewhere else making a lot more money.*

In many instances, the move back to the rural town was associated with obligation towards children, and therefore occurred in a phase of great intergenerational dependence. Plane and Jurjevich's (2009) proposition that people who move down the urban hierarchy toward rural places are in the empty-nester stage and are relatively independent of intergenerational obligations does not describe the rural return migrants we encountered. While the return migrants we spoke with typically move down the urban hierarchy, the returnees in their late 20s to late 30s are typically in the stage of family formation or child rearing, and not the empty-nester stage. Very few of the interviewees in their late 40s had adult children who had already left the home (although a number were approaching that phase). Most returnees we encountered were in a period of great intergenerational dependence with forward obligations toward the next generation. The rural-bound moves observed in this research cannot therefore be explained as having high levels of intergenerational independence.

14.4.2 Presence of Parents and Other Relatives

Although the commitment to their children was important for moving back to their rural high school community, in practically all instances, return migration hinged on parents and other family still living in the rural home town. Many of the return migrants had a spouse who also grew up in the region or grew up in a similar type of community. Our interviews revealed that, if the parents had moved away, the incentive and inclination to return was greatly diminished and practically eliminated, as out-migrants repeatedly stated: *There is nothing here. My parents don't live here, and there are no jobs.* The town where people grew up and graduated from high school no longer has a draw, if the parents do not live there anymore, which highlights the importance of intergenerational relationships.

However, we also spoke with many out-migrants who left and did not move back although their parents still live in town. In those instances, ties to parents and the community are maintained through visits. These out-migrants often commented favorably on the town—without expressing a strong desire for moving back. At 30-year reunions, quite a few out-migrants mentioned one of the following or both scenarios that could motivate them to move back: (1) A return move upon retirement when they leave the labor force and become free of employment constraints.

They point out that limited rural labor markets have barred them from moving back; (2) A return move if their parents' health diminishes and parents need their help. They feel an obligation to the previous generation that is sufficiently strong to induce a move when necessary: *Well, your family is always number one. Especially if your mom and dad are old and can't take care of themselves, then you would have to put a hold on your life to take care of them, or they would have to come and move with you.*

More commonly, however, out-migrants interviewed at 30-year reunions (in their late 40s) expressed little desire to move back: *I actually enjoy where I live and there is just not a lot that I miss.* They had either put roots down where they now live and did not plan on moving any time soon, or, if they were to move away from their current location, they would move to be closer to their own children.

The presence of parents seems to be practically a requirement, but not a sufficient condition for people to move back to their rural home town. Additional conditions must fall into place for a return move to occur. In many instances, out-migrants without return intentions expressed a preference for urban or suburban life styles for themselves as well as their children.

14.4.3 *Functional Solidarity*

The literature on intergenerational relationships between adult children and aging parents stresses functional solidarity and the exchange of support through giving and receiving. For the age groups considered here, backward exchange (help given to aging parent) clearly exists but does not play an exclusive role. This is not surprising, as the parents of people in their late 20s to late 30s tend to be in their 50s and 60s or early 70s, and parents of people in their late 40s are typically in their 70s or early 80s. Except for the last group, aging parents are relatively young—even of working age, and of good health with limited need for receiving support from their children in their daily lives.

A few of the younger returnees with small children as well as other relatively young parents mentioned functional solidarity as forward exchange (from aging parents to adult children and grandchildren) in the form of child care: *My parents are about 15 miles and so are his parents, so we have baby sitters on each side. My kids can grow up with their grandparents and grow up in the country and the small town.* Those instances, however, were relatively rare. Some out-migrants lament not having access to family support networks for their children where they currently live. *It's hard to raise a family [without your family there]. I have three children of my own and it's really difficult with no help [from parents].*

In terms of backward linkages, we repeatedly spoke with people who returned to help their parents with a farm or a business: *When my grandfather died, dad needed help with the farm. Or: We came back to keep the land in the family.* Another returnee explained: *I came back to help my father in his insurance business. Or: My father had a bunch of rentals and I came back to help him with those.* These statements

tend to come from people in their late 30s and late 40s but not the younger cohort in their late 20s. The return move of adult children in mid life to support the family enterprise seems to be triggered by the needs of the prior generation owning local businesses and farms. Because local businesses and especially farms are place bound and tied to a particular locale, support for them generally requires close geographic proximity to them. While a return move to assist with a family business tends to help the parents and the business, it also positions adult children to take the place of aging parents. Consequently, return moves can facilitate the transitioning of rural businesses, which otherwise can be challenging in rural areas, as a conversation with a community leader revealed.

Return migration to aid aging parents outside of farm and family businesses occurs under two scenarios: to aid with routine affairs and to aid in crisis. Parents in need of assistance with everyday chores or transportation to services largely coincide with the age group of Stage 2 of the Litwak-Longino model (1987): aging parents experience diminished health and at times are widowed. With limited support, they can often function well in a living environment to which they are accustomed. Thanks to the return migration of some adult children, aging parents can stay in a familiar environment. Interestingly, we encountered relatively few instances where returning moves were primarily to offer routine help.

One person who moved back to be closer to parents and other family members described her choice as more desirable for the aging parents. She prefers that elderly stay and age in place over moving because staying allows for continuity in social networks. Referring to others, she states: *When their parents' health fails, they move their parents closer to them. But they and their kids are so busy! The old people are often really alone because they don't know anyone there except for their children and grandchildren. If the parents had stayed here, there would be someone to take them shopping, and someone else to take them to the doctor. They have lived here all their lives and have friends and a support network in the community. They (adult children) mean well, but it's often not in the best interest for the old people.*

Return in response to a crisis, mentioned more frequently than returns to help with daily routines, usually occurs as the health of a parent (or grandparent) abruptly deteriorates. The effect on the return migrant's life is equally abrupt, as the following examples of a highly-successful professional attests. She had worked in one of America's mega-cities and her career trajectory came to a sudden halt: *I was in my 40s and my mother took a very severe turn for the worse. My father, at that point, was in his 80s and not able to care for someone... I left that office, and it was the best office I had ever worked for.... But I just felt a commitment to them.*

The health crises described to us were often temporary, although quite commonly return migration was more permanent. A lawyer who moved back from New York and continues to live in his home town explained: *I moved back for my family. My dad was diagnosed with a serious heart condition and was given limited time. But he is fine now—and that was several years ago.* Another returnee who moved in response to a crisis but then stayed on explained: *I was raised by my granddad and I moved my family back here to help him... I am glad I did, as he passed away within a couple of months after we moved back. We decided to stay because my boys love it here.*

Functional solidarity between generations shifts, as expected, with the life course stage. The concept of forward functional solidarity (toward the next generation) helps in understanding the return of young parents who move for their children's sake. Backward functional solidarity toward aging parents is more useful for understanding return migration to support the family enterprise and in response to aging parents' or grandparents' crises than for routine-type help.

14.4.4 Affective Relationships and Beyond

Functional support relationships between generations, while often stressed in the literature, help us understand some but not all aspects of rural return moves. Quite often interviewees spoke of affective bonds between generations and how such bonds influenced their decision to move back. Frequently we heard: *We moved back to be closer to family. Or: I simply wanted to be closer to my mom.* People with fond childhood memories especially, spoke strongly of affective bonds: *I grew up in a big family, always surrounded by siblings, aunts and uncles, cousins. I never had a babysitter.* Never having a hired babysitter attests to familial support. It says much about the strength of the social network between members of the same as well as different generations. However, people portray family support not necessarily through a pragmatic lens; they express pride and speak fondly of strong affective relationships.

All but a few return migrants we spoke with had children of their own. And the welfare of their children was an important consideration in the return move. Especially if individuals held favorable memories of growing up in their rural home town, they felt nostalgic about their upbringing and wanted to replicate their own experiences for their children. *I want my child to grow up like I did,* was repeatedly stated.

Many return migrants also strongly value interpersonal relationships, especially relationships with their own parents: *I want my children growing up knowing their grandparents.* People who moved back to support a sick or dying parent also made the move to allow for intergenerational bonding: *We also moved back for our children: to make some memories with our parents.*

Other family members, especially siblings, were frequently also mentioned, and their presence added to the reasons why people move back to rural places: *My mom is here, and I got two brothers and sisters here.* Theories of intergenerational functional support suggest that the presence of siblings diminish the need to return to aid aging parents, as obligations toward the parents can already be met by the nearby sibling. Indeed, a few individuals who had moved away expressed relief that one or more siblings lived near their parents and could assist them as they age: *I am really thankful that my sister is here to help with my parents as they age. I think that's very admirable. I count on her to do that so I don't have to feel the responsibility.*

More commonly, the opposite was the case. Siblings, especially if they had children, added to what drew people back to their home town: *When I moved back*

I could be near nieces and nephews and everything. We encountered several returnees who moved back because one or several siblings had moved back as well. This further suggests that affective relationships are important in motivating return migration and that intergenerational support obligations toward aging parents alone are not sufficient to understand rural return migration. Our interviews with returning migrants indicate that affective bonds to both parents and other family are a critical element in rural return migration.

The remarks of several return migrants suggest that they viewed the grandchild-grandparent linkage as more than an affective relationship but an important piece of their children's socialization and upbringing. They stressed that interactions between their children and their parents provided opportunities for their children to adopt values and acquire skills from their parents, a sort of 'social inheritance' or 'social transmission': *My kids are with their grandparents right now. Being with them on a farm, they learn about hard work and they pick up some skills—and stay out of mischief. Or: My three boys want to be around grandma, so we gotta be where grandma lives... My wife's grandmother used to pick cotton when she was a child. You know that kind of thing that is done by machine now. That is hard work and you learn from those experiences, even though you didn't have them personally... We bale hay around here for horses and cows and what not; hard labor, that everybody kind of gets together and does as a group... You want your kids to have the values that you grow up with.*

Returnees expect that through the relationship with their grandparents, their own children gain greater appreciation of a rural life style, stay connected to their rural heritage, and adopt small-town values: *If we would have been raised on Long Island, we would not have moved here. It's not for the place: We moved back here for the people—for the people and for the values.*

14.5 Summary and Implications

Familial and intergenerational relationships are important for understanding rural return migration. When people move back to geographically isolated rural communities with limited natural amenities, they relocate partly for the place as such, but more commonly for the people and the relationships they have with them. The family is at the core of these interpersonal relationships.

Family reasons are remarkably important in motivating rural return migration. Concern for their children and the desire—or need—to live closer to their parents greatly matter to people who return. The presence of parents thus is critical in influencing the decision to move back. If the parents have moved away from the rural community, the incentive to return is greatly diminished. On the other hand, if parents still live in a rural home town and especially if siblings also live nearby, the desire to return is often strong.

Returning moves can be understood through intergenerational solidarity of both functional relationships and affective bonds. The interviews affirm that shifts in the

nature of these solidarities occur as people progress through the life course. For people in their late 20s to late 30s, intergenerational obligations and dependence are focused more on forward solidarity toward the next generation (their own children) than backward solidarity toward the prior generation (their aging parents). But strong affective bonds to parents and other family members and fond childhood memories increase the propensity to move back. Such bonds and memories also encourage parents to seek out environments that enable their children to have childhood experiences that resemble their own upbringing in a rural place. The presence of their own parents in the rural hometown and the grandparent-grandchild relationship can play a critical role in promoting and replicating that experience for their children.

The return moves of people from their mid-30s to their late 40s are often motivated by backward solidarity in the form of obligations to their parents (or other family). Interviewees often cite this for return moves that already occurred or for return moves they would consider in the future should the need arise. Backward solidarity motivates adult children to move back to: (1) help with or take over a family business, (2) assist aging parents with routine activities, and (3) especially to respond to parents' or grandparents' health crises. For some returnees, the move back to help family in crisis meant a dramatic adjustment in their own career path, putting their career abruptly on hold. Our interviews suggest that the crisis situations were commonly temporary. After a resolution to the crisis, several return migrants nonetheless opted to stay. This suggests that the rural community exerts a draw above and beyond immediate family needs.

14.5.1 Implications of Return Migration for Rural Aging and Rural Communities

This research on return migration has implications for the aging of individuals in rural places. Additionally, it offers insights rural communities can use to understand and be pro-active regarding rural aging and return migration of adult children.

14.5.1.1 Relevance to Rural Aging

People age in rural places when they live continuously in rural communities, and when they move there later in life. The literature on elderly migration tells us that older migrants to rural places tend to move as empty nesters (Plane and Jurjevich 2009) and/or upon entering retirement (Litwak and Longino 1987).

While some elderly move, the majority do not, as they are among the least mobile of any population group. Whether or not rural people can age in place as they progress through the aging process is partly dependent on the migration decisions and residential choices of their adult children. If their children stayed into adulthood and beyond, aging parents are well positioned to receive support from them as they age.

When children move away as young adults, geographic distance between aging parents and adult children can act as a barrier to exchange of family support. If these adult children move back at a later time, however, aging parents can again benefit from proximity to family support networks.

Returning migrants in their 20s and early 30s usually move back to benefit their own children and to maintain affective bonds with their parents and other family members. This allows their children to connect with their aging parents and for their parents to enjoy the grandparent role. For a grandparent, opportunities for close and regular contact with grandchildren may take the place of natural amenities that more footloose elderly migrants seek out with a Stage 1 elderly move suggested by Litwak and Longino (1987).

Return migrants in their late 30s and 40s tend to move back to assist their aging parents, mostly in their business but also in their daily lives. This substitutes for aging parents moving closer to them (as suggested as a Stage 2 move in the Litwak-Longino model.) Quite a few conversations revealed that adult children moved in response to a health crisis, and not to offer routine support. Their returning move is, at times, a substitute for the Stage 3 move to a care facility proposed by Litwak and Longino. Whether adult children's return is a substitute for a Stage 2 or 3 elderly move vis-à-vis Litwak-Longino's model, adult children's move back to rural communities improves their parents' quality of life. Their return move replaces the need to uproot and relocate their aging parents and allows elderly parents to live through the aging process in a familiar environment.

14.5.1.2 Relevance for Communities

Returning migrants revealed that the presence of parents in rural places is critically important in drawing adult children back to rural towns, even in the instances where return moves are primarily motivated by concerns for children. Rural communities should become cognizant of how important aging parents are for re-attracting the next generation of adult children and even the subsequent generation.

Towns that are well positioned for their older population to age in place may also be positioned to draw in a younger generation of adults and their children. Favorable conditions for elderly include access to private and public services, especially health care, housing, and transportation. Other mechanisms that support aging in place evolve around long-term friendships and social networks that are often extensive and strong in rural communities. While addressed here only in the context of adult children moving back to take over a farm or business, other adult children in the labor force also need to find or create employment upon moving back.

Once elderly have moved away from small towns, the chance of towns re-attracting adult children and their families is greatly diminished. Out-migration of older people adds to the cycle of rural out-migration commonly found among younger cohorts. Therefore, sustaining infrastructure and services for elderly allowing them to age in place can yield important benefits for a rural community by drawing in younger generations of return migrants. Adult children who move back so that they

and their children live closer to aging parents can counter, to some extent, the population loss so widespread in many rural regions.

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Part V
Older Rural Migration and Aging-in-Place

Chapter 15

Rural Retirement Destinations: Natural Decrease and the Shared Demographic Destinies of Elderly and Hispanics

Kenneth M. Johnson and Daniel T. Lichter

15.1 Introduction

The United States (US) population is aging rapidly, especially in many parts of America's heartland, where persistent net out-migration of the native-born population has contributed to population decline and natural decrease (Johnson 2011). At the same time, the Diaspora of America's Hispanic population from immigrant gateway communities in the Southwest to new rural destinations represents one of the most significant emerging demographic trends of the past two decades (Johnson and Lichter 2008; Lichter and Johnson 2009; Massey 2008). Hispanic in-migration also has brought new life to many dying rural communities. Indeed, in *Immigrants and Boomers*, Dowell Myers (2007) describes the shared destinies of America's elderly population and new Hispanic immigrants and their children, who represent a new generation of future workers and taxpayers. His analyses focused on California, a bellwether state with a majority-minority population that supports and serves the largely white elderly retirement population, but it also depends on the elderly to reciprocate by supporting education for their children and strengthening the welfare safety net (e.g., childhood nutrition programs, ESL, etc.). This is the new social contract Myers visualizes between America's elderly and Hispanic immigrant populations. Yet, the potential for generational conflict is

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exacerbated if an aging non-Hispanic white population and a growing population of minority children must compete for the same resources and tax dollars (Johnson and Lichter 2010; Torres-Gil and Treas 2009).

This chapter documents recent demographic trends in nonmetropolitan retirement destination counties, which provide a natural laboratory for understanding the intricate interplay between population aging, natural decrease, and new Hispanic growth. In retirement destinations, the heavy reliance on in-migration—especially of older adults—brings short term demographic and economic benefits to retirement counties, but it also has long term demographic implications. Over time, the growing concentration of older adults at higher risk of mortality in retirement counties significantly increases the likelihood that deaths in a county will exceed births. Natural decrease occurs when the number of deaths in an area exceeds the number of births. This once rare phenomenon has become increasingly common in rural America, including some retirement destination counties with large and growing elderly populations. In some retirement areas, however, new Hispanic in-migration and high fertility have served as demographic counterweights to incipient natural decrease. Like California (Myers 2007), many rural retirement counties have benefited from recent demographic synergies created by new Hispanic in-migration.

For our purposes, retirement counties are delineated by the Economic Research Service of the US Department of Agriculture (USDA) based on whether they received a substantial stream of migrants over the age of 60 (Economic Research Service 2004, see also Chap. 1). These 277 counties represent a distinct subset of all rural counties with a demographic profile that differs from most of rural America. With growth fueled almost entirely by net in-migration, retirement destination counties have grown faster than other rural counties over the last several decades (Johnson and Stewart 2005). But, as we show here, the population growth in retirement counties also reflects the excess of deaths over births among whites, which has been more than offset by the heavy influx of in-migration and high fertility among new Hispanic immigrant groups (Frank and Heuveline 2005; Parrado 2011). Growth and decline processes in retirement counties are being reshaped by widely divergent demographic patterns among native-born and new immigrant populations.

15.2 Background

15.2.1 *Nonmetropolitan Population Growth*

Throughout most of the twentieth century, net out-migration diminished rural population growth rates. People left because they were attracted by the economic and social opportunities in the nation's booming urban regions. The mechanization and consolidation of agricultural, mining and timber production reduced the demand

for labor and cut employment opportunities. To be sure, the magnitude of rural net out-migration varied from decade to decade and from place to place, but the overall pattern was consistent: more people left rural areas than came (Johnson 1985, 2006). Retirement destination counties have been an exception to these overall trends (Johnson and Beale 2002).

By the mid-twentieth century, overall rural population gains were fueled entirely by natural increase, which more than offset population losses from out-migration. At first, high rural fertility—helped along by the post-World War II Baby Boom—meant that the surplus of births over deaths more than made up for migration losses to urban areas. With the end of the Baby Boom in the mid-1960s, the historically large surplus of births over deaths that sustained modest non-metropolitan population growth ended. Continuing net out-migration of young adults, coupled with aging in place among the older cohorts that remain in their communities, contributed heavily to the rising proportions of older residents in rural areas (Lichter et al. 1981).

The 1970s brought a respite from migration losses for much of nonmetropolitan America. The growing importance of net migration to nonmetropolitan growth was clearly reflected in the remarkable rural demographic turnaround which resulted in population gains in nonmetropolitan areas exceeding those in metropolitan areas for the first time in at least 150 years (Beale 1975). Nonmetro areas grew at the expense of metropolitan areas, as more people left metropolitan areas than arrived from rural areas. The emergence of retirement destination counties exemplifies this rural rebound, but migration gains were spatially widespread. Net migration gains in rural counties were fueled by rural restructuring associated with rural retirement migration, natural resources (e.g., coal and gas), and recreational development as well as by residential preferences (Brown and Wardwell 1980; Fuguitt 1985).

The 1970s rural-urban turnaround was short-lived, however. Rural population growth slowed in the 1980s with the return of widespread net out-migration. But just as unexpectedly, rural population growth rebounded in the 1990s as migration to rural areas accelerated (Johnson and Beale 1994). As the 1990s came to an end, however, there was evidence again that nonmetro population gains were slowing (Beale 2000; Johnson and Cromartie 2006; Cromartie 2001). Population aging, in general, and the aging of the Baby Boom cohort, in particular, also diminished the number of new births while slowing historically high rates of rural natural increase.

After 2000, nonmetro population growth slowed precipitously. Between 2000 and 2009, rural counties gained only 1.4 million residents (2.9%) to reach a population of 50.2 million in July of 2009. Most of this rural population growth (77%) came from natural increase. In non-adjacent nonmetropolitan counties—those remote from metropolitan areas—natural increase accounted for all of the population increase; it even offset a net migration loss. In adjacent nonmetropolitan counties, those contiguous to metropolitan counties, natural increase accounted for 56% of population gain. Since 2000, nonmetropolitan migration gains were less than 13% of what they were during the 1990s.

15.2.2 Rural Natural Decrease and Hispanic Population Growth

Migration historically has fueled rural population growth and decline processes. But, with the aging of the population and declining fertility rates nationwide, the demographic impact of natural decrease has grown substantially. Demographers understand that population change reflects the balance between natural increase (i.e., births minus deaths) and net migration (in-minus out-migration). Natural decrease may result from low fertility (Dorn 1939). But age structure distortions (e.g., population aging) caused by protracted age-specific migration also contributes to natural decrease (Beale 1969). Most research supports Beale's findings regarding the importance of age structure shifts in accounting for post-war natural decrease (Adamchak 1981; Chang 1974; Johnson 1993, 2011; Johnson and Beale 1992; Johnson and Purdy 1980). Areas with a deficit of young adults and a surplus of older adults are at greater risk of natural decrease. Eventually, even with fertility rates at the national average, diminishing numbers of young adults produce births insufficient to offset the rising number of deaths in the larger, older cohorts (Beale 1969; Johnson 1993; Johnson and Beale 1992).

The new influx of Hispanics in many nonmetro counties, including retirement counties, also has rewritten conventional demographic accounting equations of population growth and decline. Indeed, much of the recent rural migration gain was fueled by immigration from Mexico and Latin America (Johnson and Lichter 2008). Without immigration, nonmetropolitan counties would have experienced an overall migration loss between 2000 and 2009. Any analysis of demographic trends in rural America must consider the growing demographic impact of Hispanics. Our previous research documents that America's Hispanic population—both native- and foreign-born—is rapidly diffusing spatially, especially into rural areas (Johnson and Lichter 2008; Lichter and Johnson 2006). The fact that Hispanic in-migrants also have large secondary demographic effects on fertility and natural increase in new destinations is less well appreciated. The growing number of births to new Hispanics has dampened or even offset recent natural decrease and population declines among native-born whites.¹

The demographic implications of rapid Hispanic in-migration and high fertility are likely to be especially large in nonmetropolitan retirement destination counties. The economic growth fueled by a substantial influx of retirees has heightened the demand for labor, including low-wage workers in service industries, where Hispanics have made significant inroads over the past two decades (Kandel and Cromartie 2004). In addition, the demographic profile of retirement destination counties, including a large and growing older population with higher mortality levels and fewer adults of child-bearing age, means that even a modest inflow of young Hispanics could significantly alter the magnitude of natural increase in particular areas.

¹Of course, these secondary effects of natural increase will presumably dissipate with cultural and economic incorporation of Hispanics and aging in place. Fertility rates among native-born Hispanics are substantially lower than rates among foreign-born Hispanics, although age at first birth is much earlier among native-born than foreign-born Hispanics. Like other immigrant populations, fertility rates among Hispanics also tend to decline over successive generations; first generation Hispanics have much higher fertility rates or parities than second- or third-generation Hispanics (Carter 2000).

15.2.3 *Current Study*

This chapter outlines changing patterns of population growth and natural decrease in nonmetropolitan retirement counties over the past several decades. We have four specific objectives. First, we document changing population growth rates in nonmetropolitan retirement vis-à-vis other kinds of counties (e.g., recreational, agricultural, or manufacturing counties). Second, we show how these population trends have been shaped by age-differentials in patterns of in-migration across different kinds of counties, including retirement counties. For many nonmetro counties, persistent out-migration of young adults has gone hand-in-hand with aging-in-place. Third, we evaluate changing patterns of natural decrease, which reflects both population aging and low fertility due to persistent out-migration of populations of reproductive age. Finally, we show how incipient natural decrease in many rural counties, including retirement counties, has been delayed or offset by new Hispanic population growth and high fertility, which has counterbalanced the high death rates of the white (and mostly native-born) elderly population.

15.3 Data and Methods

Counties are the unit of analysis. They have historically stable boundaries and are a basic unit for reporting fertility, mortality and census data. Counties are also appropriate units of analysis because metropolitan areas are built up from them (county-equivalents are used for New England). Counties are designated as metropolitan or nonmetropolitan using criteria developed by the US Office of Management and Budget. We use the constant 2004 metropolitan-nonmetropolitan classification (described in Chap. 1) which removes the effect of reclassification from the calculation of longitudinal population change. Metro areas include counties containing an urban core of 50,000 or more population (or central city), along with adjacent counties that are highly integrated with the core county. There are 1,090 metro counties. The remaining 2,051 counties are classified as nonmetro. For ease of exposition, we use the terms metro and urban (and nonmetro and rural) interchangeably.

We use a typology developed by the Economic Research Service of the USDA which groups counties along economic and policy dimensions (Economic Research Service 2004). Retirement destination counties are defined as those where the population aged 60 and older grew by 15% or more in the 1990s through net in-migration (Economic Research Service 2004). Some retirement destination counties are metropolitan. We focus, however, on the 277 retirement destination counties that were nonmetropolitan in 2004. We also use the county classification developed by Johnson and Beale (2002) to identify 300 nonmetropolitan counties where recreation is a major factor in the local economy.

County population data comes from the decennial Census of Population and from the Federal-State Cooperative Population Estimates (FSCPE) program. This FSCPE program estimates the population on an annual basis as of each July 1.

Here, we consider the period from April 1, 1990 through July 1, 2009. The FSCPE also provides data on the number of births and deaths in each year. The estimates of net migration used here were derived by the residual method. Net migration is what is left when natural increase (births minus deaths) is subtracted from total population change. For some analyses, we also report net international migration and net domestic migration as reported in the FSCPE, these elements do not sum to net migration because of residuals and differences in coverage in the various censuses. We also use Census Bureau annual estimates of the population by age, sex, race and Hispanic origin from April of 2000 to July of 2008 released in May of 2009 (US Census Bureau 2009) to examine contemporary patterns of change.

Age data are supplemented with decennial age-specific net migration estimates for 1950–1960 (Bowles and Tarver 1965), 1960–1970 (Bowles et al. 1975), 1970–1980 (White et al. 1987), 1980–1990 (Fuguitt and Heaton 1995) and 1990–2000 (Johnson et al. 2005). Each set of age specific net migration estimates was generated using similar techniques employing the forward census survival method (Shryock et al. 1973), though some of the details of the procedure changed from decade to decade (Voss et al. 2004). This method estimates net migration by comparing the actual population of an area to the population that would be expected in the area assuming no migration occurred during the interval. Differences between the actual and expected distributions are attributed to migration.

For our analysis of natural decrease, we use historical data from a number of sources. Calvin Beale provided data on the incidence of natural decrease from Vital Statistics from the National Center for Health Statistics (NCHS) for 1950–1966. Published data on births and deaths from Vital Statistics are used to determine the incidence of natural decrease in 1967 and 1968 (National Center for Health Statistics 1969a, b, 1970a, b). Births and deaths from 1969 to 1989 are from a special tabulation by the Estimates and Projections Branch of the US Census Bureau. Data on births and deaths from 1990 through July of 2009 are from the Federal-State Cooperative Population Estimates series (US Census Bureau 2010).

15.4 Results

15.4.1 *High Growth Rates in Nonmetropolitan Retirement Counties*

Rural America is diverse. With 75% of the land area of the US and over 50 million residents, it is not surprising that demographic trends vary across this vast region. Retirement counties represent one end of a demographic continuum, whereas traditional extractive counties (e.g., agriculture or mining) represent the other extreme. Indeed, rural retirement counties have enjoyed the largest population gains in rural America for decades. They thrived during the nonmetro turnaround of the 1970s, when they enjoyed a 3.2% annual population gain—far greater than the annual gain of 1% for all nonmetropolitan counties (Fig. 15.1). Migration accounted

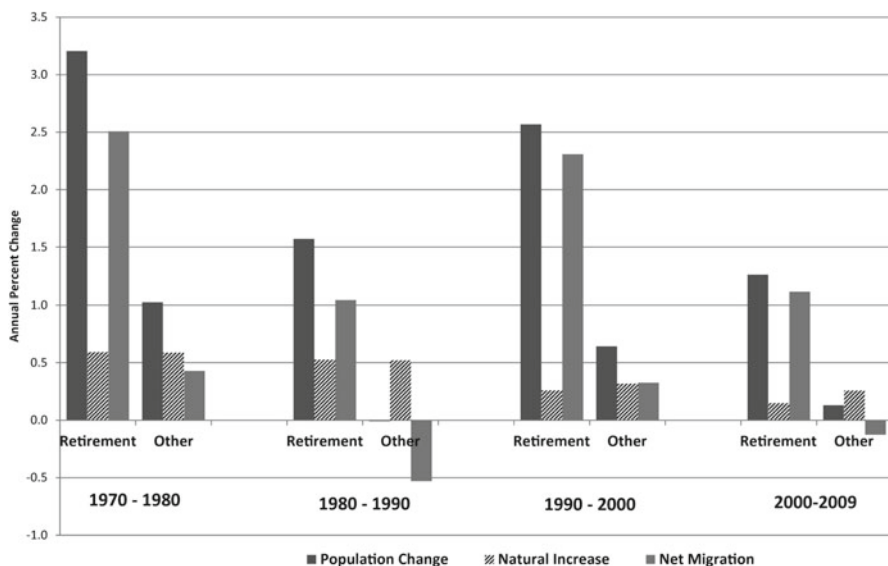


Fig. 15.1 Demographic components of change in nonmetropolitan retirement and other nonmetropolitan counties, 1970–2009

for nearly 80% of retirement counties’ population growth. Many of these retirement destination counties include significant scenic and recreational amenities that attract younger adults, as well as retirement age migrants both because of the scenic appeal of the area and because of the economic opportunities afforded by the influx of amenity and retirement migrants (Johnson et al. 2005).

Population gains in retirement counties lessened during the 1980s, as in-migration slowed. The population gain of 1.6% annually in retirement counties nonetheless surpassed the rest of rural America, where growth was stagnant. Demographic gains in retirement destination counties have continued in recent years. Both during the rural rebound of the 1990s and in the first decade of the twenty-first century, rural retirement destinations registered the largest population gains of any rural county type. With the renewed net in-migration in the 1990s, retirement growth accelerated to 2.6% annually. Net in-migration accounted for nearly 90% of the growth. Since 2000, however, migration has again slowed. Retirement counties nevertheless continued to attract new migrants on balance while other nonmetropolitan counties experienced a net loss. The gain of 1.26% annually in retirement counties was nearly ten times larger than the rest of rural America.

The only type of county with growth comparable to retirement counties historically is recreational counties. Retirees are important contributors to rural growth in some recreational areas. Most retirees do not move, but if they do, they often migrate to places with attractive scenery and opportunities to engage in a variety of recreational venues (Brown and Glasgow 2008). Retirement-age migrants are drawn to the major concentrations of recreational counties located in the mountain and coastal regions of the West, in the upper Great Lakes, in coastal and scenic areas of the Northeast, in the

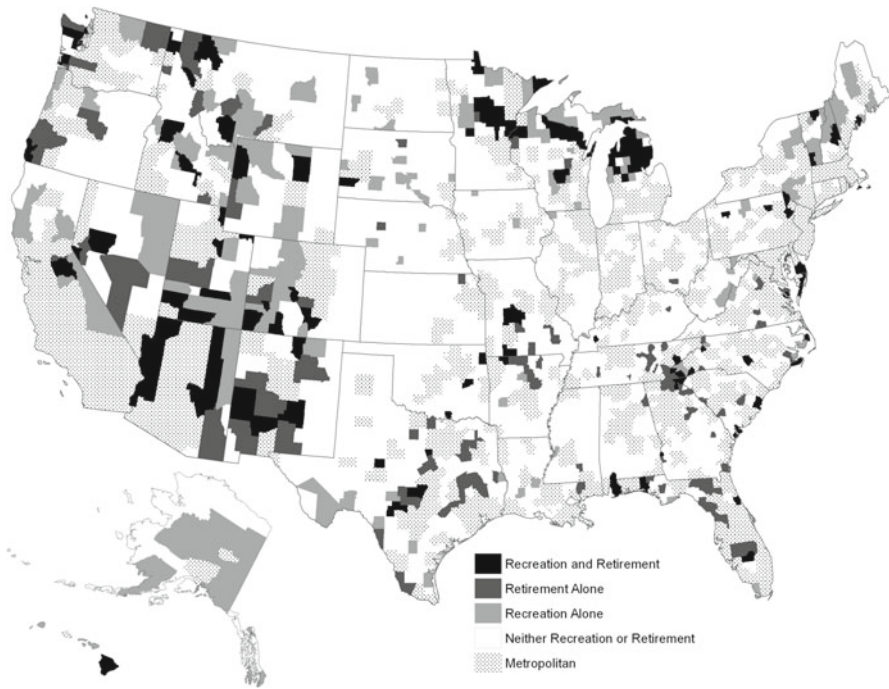


Fig. 15.2 Recreation and retirement status for nonmetropolitan areas (Sources: US Census, FSCPE Estimates, 2009 and Economic Research Service (2004))

foothills of the Appalachians and Ozarks and in coastal regions from Virginia to Florida (Economic Research Service 2004; Johnson and Beale 2002; McGranahan 1999).

In all, 137 of the 277 retirement destination counties are also recreational counties (Fig. 15.2). Retirement counties have consistently been the fastest growing counties in rural America, but recreational counties are close behind. Retirement counties grew by more than 11.7% between 2000 and 2009; recreational counties grew by 8.8%. Net migration was responsible for virtually all the growth in these counties.

The contrast is striking between the substantial population gains in retirement and recreation counties and the minimal gains in the traditional extractive industry counties that once dominated rural America. Farming still dominates the local economy of over 400 rural counties. Mining (which includes oil and gas extraction) is a major force in another 113 counties. Between 2000 and 2009, the population of farming dependent counties diminished by 2.1% (see Fig. 15.3). The populations in farm counties declined because the natural increase gain of 2.7% was insufficient to offset a net migration loss of 4.9%. In contrast, natural increase and net in-migration in the 1990s contributed to population gains. Mining counties also suffered a net migration loss, but it was offset by natural increase, producing a minimal population gain. In all, 83% of farming counties and 66% of mining counties lost population between 2000 and 2009.

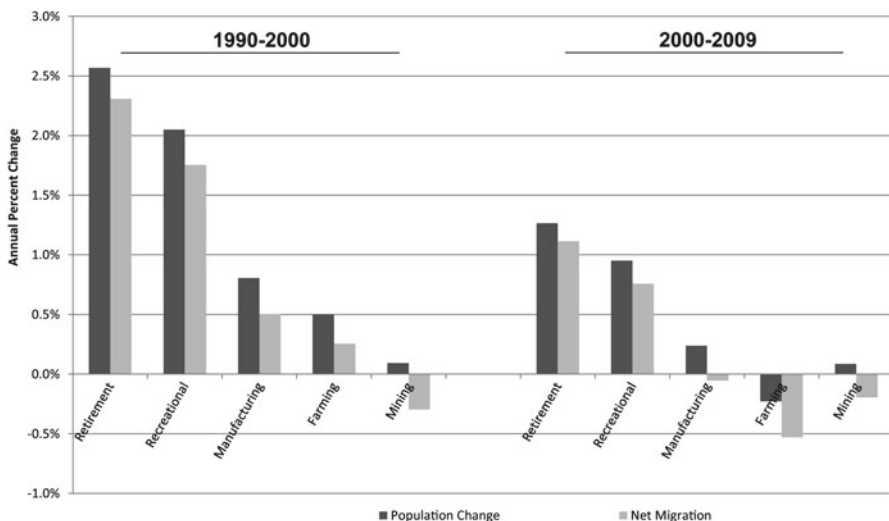


Fig. 15.3 Demographic change by nonmetropolitan county type, 1990–2009 (Sources: US Census 1990–2000, US Census 2010 and Economic Research Service (2004))

Manufacturing counties have traditionally been a bright spot for rural population growth. In fact, rural development strategies have traditionally focused on expanding the manufacturing base. Manufacturing counties enjoyed significant population and migration gains during the 1990s, but growth slowed dramatically thereafter. The net population gain was 1.7% between 2000 and 2009, and most manufacturing counties lost population. Natural increase continued in the vast majority of non-metropolitan manufacturing counties, but net migration losses became widespread. The globalization of manufacturing, coupled with the recent economic downturn, has adversely affected the rural manufacturing sector, which includes low technology, low wage jobs that are increasingly shifted offshore (Johnson and Cromartie 2006; Johnson 2006).

15.4.2 Age Selective Migration Streams to Retirement Destinations

Older adults comprise a disproportionate share of all in-migrants in retirement counties. As shown in Fig. 15.4, age-specific net migration rates in retirement destination counties highlight the large concentrations of older in-migrants in such counties. Indeed, retirement destination counties received substantial inflows of older migrants in each decade from the 1970s to the 1990s. In part this is a function of how retirement counties are defined—they must have a population gain of at least 15% among those 60 years of age and older between 1990 and 2000. However, longitudinal

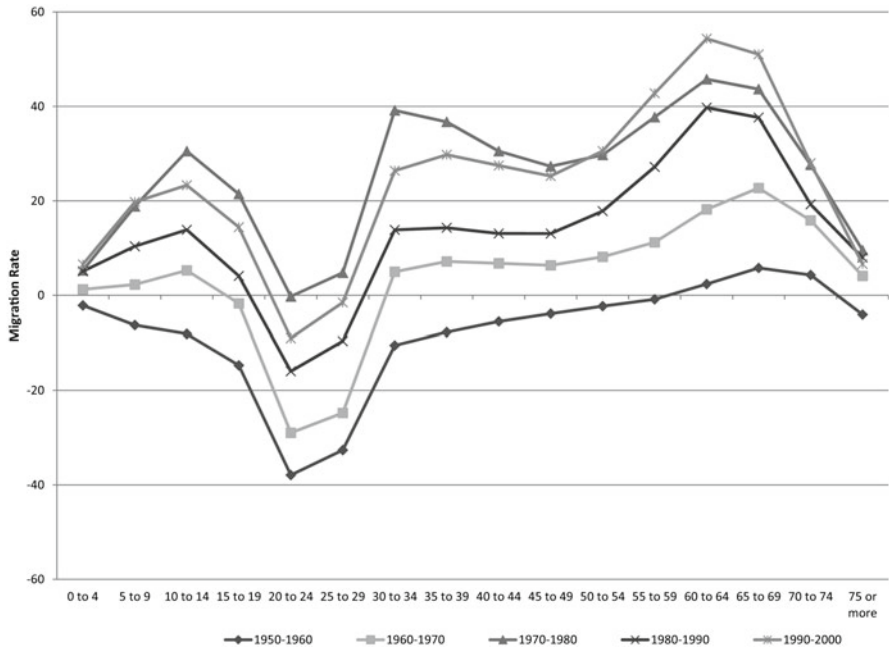


Fig. 15.4 Age specific net migration to nonmetropolitan retirement destinations, 1950–2000 (Sources: Johnson et al. (2005))

data demonstrate that such counties were already receiving substantial streams of older migrants prior to the 1990s (Fig. 15.4). The migration rate for older adults was highest in the 1990s, but it was also substantial during the 1970s, when the rural population turnaround was underway. Elderly migration gains during the 1980s were somewhat more subdued. Given the much larger size of the Baby Boom cohorts now approaching retirement age, the continuation of current migration trends will bring substantially larger cohorts of older adults to retirement destinations.

An important point often lost in the analysis of retirement destination counties is that older adults are not the only ones moving to these counties. As data in Fig. 15.4 suggest, there are also significant inflows of migrants in their 30s and 40s, along with their children. The appeal of retirement destinations to younger migrants is partially due to the economic activity generated by the large inflows of affluent retirement-age migrants. Such an inflow produces a significant demand for the construction of housing and infrastructure as well as considerable retail and service activity. Spending by tourists also stimulates economic growth, which creates additional opportunities for the working age population. The fact that some economic development strategies now identify retirement age migrants as an important clientele underscores their economic influence (Brown and Glasgow 2008; Reeder 1998).

Migration flows to retirement destination counties tend to peak among those in their 50s and 60s. Over time, these migrants age in place. The long-term

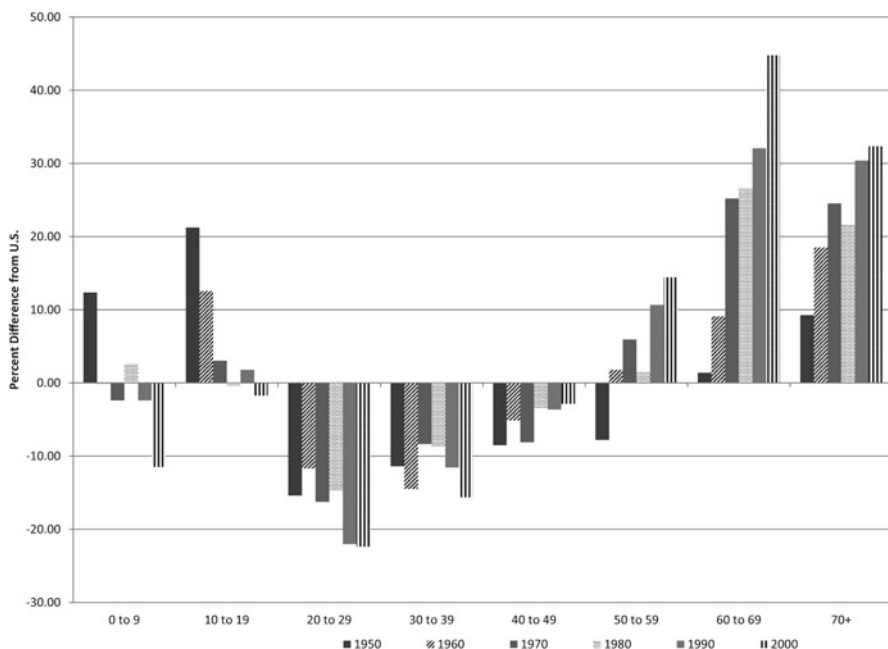


Fig. 15.5 Age structure differences between nonmetropolitan retirement destinations and total US, 1950–2000

effects are reflected in the age structure of the population, i.e., increasing proportions of the population concentrated in the oldest age groups. As shown in Fig. 15.5, retirement destination counties in 1970 already had 27% more people aged 60–69 and 22% more residents over the age of 70 as a proportion of their populations than the US as a whole. This difference increased from 1970 to 2000. By 2000, nonmetro retirement destinations had 45% more 60–69 year olds and 32% more residents 70 years of age and older than the US as a whole. In contrast, while retirement destination counties do quite well at attracting and retaining young adults, the proportion of those in their prime child-bearing years remains modest compared to the overall US population. By 2000, there were 22% fewer people aged 20–29 and 16% fewer aged 30–39 than in the US as a whole.

The cumulative demographic effect of these two trends is clear: a large concentration of older adults and a diminishing proportion of those in prime child-bearing age in retirement destination counties. Because older populations have higher mortality, the death rate (10.8) in nonmetropolitan retirement counties is considerably higher than in the US as a whole (8.1). The demographic consequences of disproportionately older populations also are revealed in low birth rates. Indeed, the US birth rate was 13.9 in 2008 compared to 12.3 in retirement destination counties. Nonmetro counties and retirement destination counties in particular are vulnerable to natural decrease.

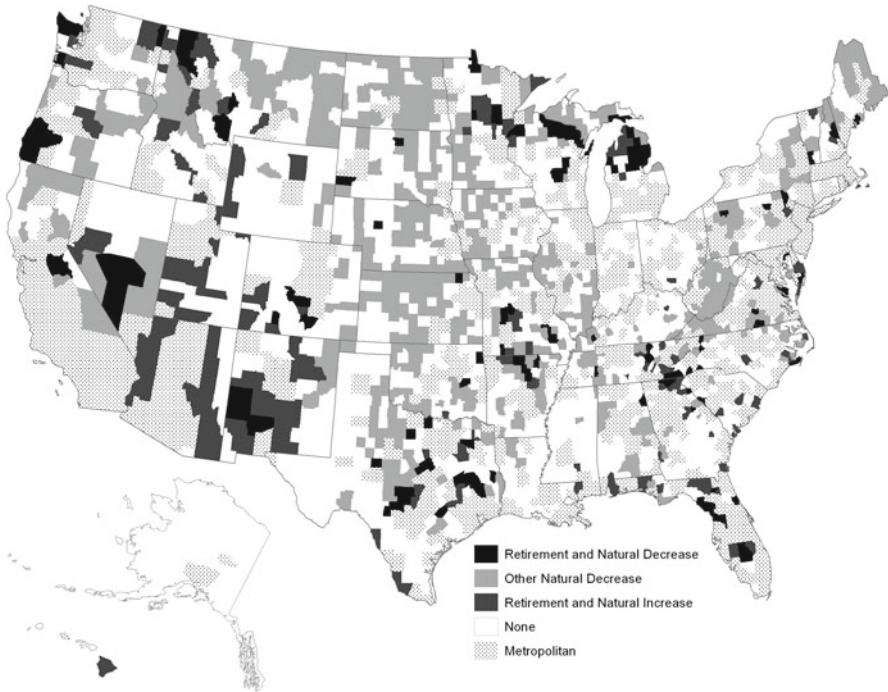


Fig. 15.6 Retirement status and natural increase for nonmetropolitan areas (Sources: US Census, FSCPE Estimates (2009) and Economic Research Service (2004))

15.4.3 *Natural Decrease in Rural America*

Natural decrease clearly is on the ascendancy in rural America (Fig. 15.6). Over 1,600 counties have experienced at least 1 year of natural decrease since 1950. Natural decrease counties are mostly located in nonmetro areas. The annual incidence of natural decrease also has shifted upwards since 1990; each year, between 600 and 800 counties experienced more deaths than births. For the period between 2000 and 2008, 750 nonmetro counties (36%) experienced overall natural decrease (data not shown).

Natural decrease counties are regionally concentrated. The earliest occurrences of natural decrease were in the Great Plains, the Western and Southern Corn Belt, East and Central Texas, as well as in the Ozark-Ouachita Uplands. This reflects the linkage between dependence on agriculture and persistent out-migration and low fertility. The large concentrations of early natural decrease in Florida reflect the first destinations to receive retirement migrants, but similar clusters of natural decrease caused by retirement migration also exist in the Upper Great Lakes, in the Southeast, Ozarks and portions of the West. Natural decrease also was observed early in some

mining and timber-dependent rural counties of the Upper Great Lakes. Later, natural decrease spread to other rural areas of the South, New York and Pennsylvania, the Upper Great Lakes, parts of the West in the 1990s, and eventually to Indiana and Ohio (Johnson 2011).

Natural decrease has been even more prevalent in retirement destination counties where 47% of the 277 counties had overall natural decrease from 2000 to 2009 (data not shown). Only farming counties are more likely to have natural decrease than retirement counties (Fuguitt et al. 1989; Johnson et al. 2005; Johnson and Fuguitt 2000). Retirement counties experiencing natural decrease are widely scattered geographically, although concentrations are evident in traditional retirement areas in Florida and Arizona (see Fig. 15.6). Additional clusters exist in the Ozarks, Great Smokies and in the Upper Great Lakes, all areas with considerable overlap between recreational and retirement counties.

Natural decrease is not a recent phenomenon in retirement destination counties. Between 1990 and 2000, nearly 38% of retirement destination counties experienced natural decrease compared to 30% of other nonmetropolitan counties. Even when natural decrease was much less common (during the 1980s), nearly 17% of the retirement destination counties were already experiencing natural decrease compared to only 11% of other nonmetro counties.

In most areas, age structure distortions associated with natural decrease reflect persistent outmigration of young adults. As we have seen, migration patterns in the retirement destination counties differ somewhat from this general nonmetropolitan trend. Though retirement destination counties experienced modest migration losses of young adults, losses have been much less pronounced than those in agricultural counties (Johnson et al. 2005). The rising incidence of natural decrease in retirement destination counties is primarily a function of the persistent inflow of older adults, rather than the outflow of young adults in their 20s.

Retirement destination counties have significantly fewer 20- to 40-year-olds than the US as a whole. But the most significant reason for the age structure distortions that cause natural decrease in retirement destination counties is the disproportionately large share of persons aged 50 and older. Because age-specific mortality rates are much higher for older adults, their concentration in these counties accelerates natural decrease by increasing the number of deaths.

Prolonged age-specific migration patterns have produced the age structure shifts evident in retirement destination counties. For decades, migration diminished the number of young adults in their 20s, while the older generations similarly grew through migration. The diminished number of young adults and growing older population are not unique to retirement destination counties; it is common in all natural decrease counties and in much of nonmetro America (Fuguitt and Heaton 1995; Johnson 2011; Johnson et al. 2005). What differs is its magnitude. In retirement destination counties the influx of older adults fueled by migration has been much more substantial than elsewhere in rural America. The demographic impact of this inflow of older adults is magnified by the aging in place of the existing population of these retirement destination counties and by the exodus of younger migrants.

Thus, for several decades the older population in retirement destination counties has grown while the young population has declined.²

Natural decrease is the ultimate demographic consequence of dwindling numbers of young adults and growing older populations. The recent rise in natural decrease in retirement destination counties may be a harbinger of future trends. The retirement age cohorts of the last decade and a half were born in the low fertility era of the 1930s and early 1940s. Now, the large Baby Boom era cohorts are poised for retirement, and the specter of natural decrease is raised for the foreseeable future.

15.4.4 Hispanic Population Growth in Retirement Destination Counties

Not all retirement destinations face a bleak demographic future. Although natural decrease will likely continue in some areas, this is not a demographic certainty in light of the recent influx of Hispanics into nonmetropolitan areas (Lichter and Johnson 2006; Kandel and Cromartie 2004). This influx of Hispanics to rural retirement counties is already having a profound impact on natural increase. Because Hispanic in-migrants tend to be young and because Hispanics tend to have higher fertility, they bring with them the potential for a significant number of births in the near future. These additional births offset the diminishing number of non-Hispanic white births and increase the likelihood of future natural increase (Johnson and Lichter 2008; Lichter and Johnson 2006).

Hispanics have made significant contributions to the growth of nonmetropolitan retirement destinations. Between 2000 and 2008, the Hispanic population in non-metro retirement counties grew by 209,000 (34.1%) to 822,000. In contrast, the non-Hispanic population grew by 9.2% (Fig. 15.7). Thus, although Hispanics represented only 7.8% of the population in nonmetropolitan retirement destinations in 2000, they produced 24% of the overall population gain between 2000 and 2008. Hispanics play a particularly important role among the young population (under age 20) in retirement destination counties. The youth population grew by less than 1% in nonmetro retirement destination counties between 2000 and 2008. All of this gain was due to Hispanics, with the population of non-Hispanic children and youth actually declining by 2.5% over the same period. Though modest in absolute numbers, the substantial Hispanic youth percentage gain (27.1%) offset the non-Hispanic youth decline. Among adults, the inflow of migrants resulted in an adult population gain of 14.9%. Hispanics were a significant factor here, as well. The adult Hispanic population grew by 38.0% compared to a gain of 13.2% for non-Hispanic adults. Thus Hispanics accounted for the entire youth population increase, as well as for a disproportionate share of the adult population gain between 2000 and 2008.

² Though it would be extremely valuable to have post-2000 age specific migration data, it is calculated as a residual. Therefore, decennial Census data is required at both of the beginning and end of the period for which age specific migration is calculated.

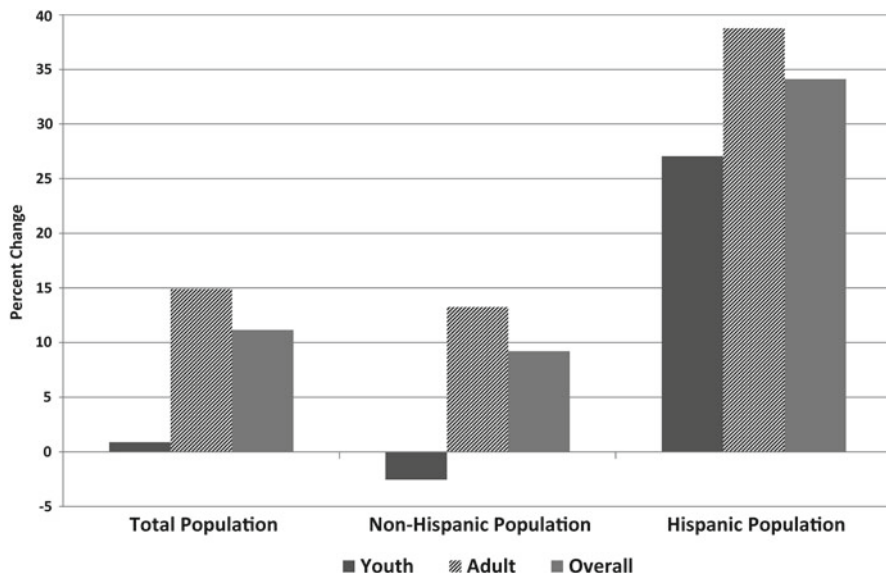


Fig. 15.7 Population change for youth, adult and total population by Hispanic origin in nonmetropolitan retirement destinations, 2000–2008 (Sources: US Census Bureau, FSCPE Estimates (2009) and Economic Research Service (2004))

This Hispanic population growth in retirement destination counties has been fueled both by natural increase and net migration. From 2000 to 2005, the Hispanic population in retirement destination counties grew by 132,000.³ The 21.6% increase was the result of a gain from natural increase of 9.4% and a net migration gain of 12.2% (Fig. 15.8). Net migration accounted for most (57%) of the Hispanic population gain.

The sources of non-Hispanic and Hispanic population growth are strikingly different. Net migration accounted for all of the growth in the non-Hispanic population between 2000 and 2005. In retirement counties, nearly 6,600 more deaths than births were observed in the non-Hispanic population during the period. In stark contrast, Hispanic births exceeded deaths by more than 57,000. Without the contribution of Hispanics, retirement destination counties would have experienced overall natural decrease between 2000 and 2005. Hispanics accounted for 14% of all the births in retirement destination counties, but for only 3% of the deaths. We estimate that in 10% of all retirement destination counties, Hispanic natural increase was sufficient to offset non-Hispanic natural decrease between 2000 and 2005.

³ We use data from 2000 to 2005 here because we have detailed birth and death data from NCHS for this period which allows us to calculate Hispanic and non-Hispanic births and deaths and also net migration by the residual method. These data are discussed in more detail in Johnson and Lichter (2008).

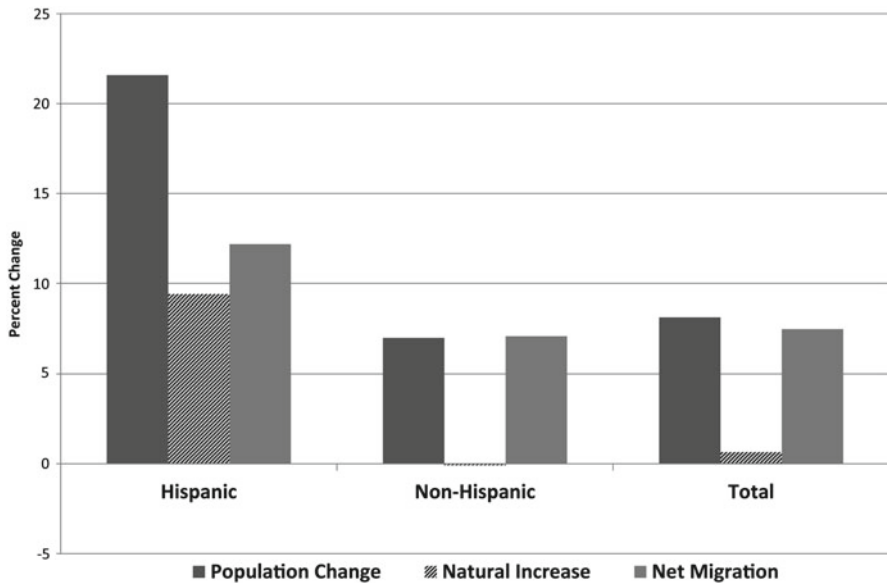


Fig. 15.8 Demographic components of change in nonmetropolitan retirement destinations for Hispanics and non-Hispanics, 2000–2005 (Sources: US Census, Population Estimates by Race/Ethnicity 2005; National Center for Health Statistics (2010))

The growing demographic impact of Hispanic natural increase results from extremely high birth to death ratios. Between 2000 and 2005, there were 5.2 births for every death to the Hispanic population in nonmetro retirement destination counties (data not shown). In contrast, the birth-to-death ratio for non-Hispanics was 0.99—indicating more deaths than births. The pronounced difference between Hispanic and overall birth to death ratios reflects three interrelated factors. First, the Hispanic population in retirement counties is much younger than the overall population (median age of Hispanics was 25.5 compared to 40.3 for the total population in 2000). Thus disproportionately more Hispanic women were of childbearing age. Second, age specific fertility levels are higher for Hispanic women at every age from 15 to 29.⁴ Finally, the Hispanic population produces a paucity of deaths because proportionately fewer Hispanics are in age groups at high risk of mortality. A large secondary effect associated with the growth of the Hispanic population in retirement destinations is now revealed in natural increase.

⁴ Differential fertility rates are another important driver of the growing Hispanic contribution to natural increase in retirement destination counties. If current fertility patterns persist, Hispanic women will have 2.99 children during their lifetimes. In contrast, if current fertility rates are sustained, non-Hispanic white women are likely to have 1.87 children. African-American fertility rates are higher than those for whites, but they had declined to 2.13 by 2007. In sum, low non-Hispanic white fertility combined with higher mortality clearly exacerbates the demographic impact of Hispanics on natural increase in retirement areas.

15.5 Discussion and Conclusion

The US population is aging rapidly. Increases in life expectancy (especially at older ages), low rates of fertility over the past four decades, and aging of the Baby Boom generation out of the prime reproductive ages has shifted America's age structure dramatically upward. As we have shown here, population growth and decline processes—those that are now fueling population aging—are distributed unevenly over the US landscape. Many rural counties are now experiencing natural decrease and population decline (Johnson 2011). Persistent rural out-migration has decimated the population of reproductive age, while aging in place has placed upward demographic pressure on death rates. Natural decrease has been especially prevalent in America's heartland, extending from North Dakota to the Texas panhandle, which has lost young people to out-migration for decades (Johnson 2011; Johnson and Beale 2002).

As we have argued here, rural retirement areas provide a natural laboratory for better understanding the demographic implications of an aging population. In California, Myers (2007) has described the new "social contract" between generations and the unprecedented demographic synergies between a rapidly aging, largely white population and younger cohorts of Hispanics who are replacing them in the labor force and in schools. Our results, in fact, showed that rural retirement destinations are substantially older than the US population overall, and that nearly half of these counties experienced natural decrease. Perhaps not surprisingly, the prevalence of natural decrease today is higher in rural retirement counties than in other kinds of rural counties. The heavy influx of elderly in-migration, however, has offset losses from high mortality (and low fertility). Rural retirement counties have, on balance, grown more rapidly than nonmetro America overall during the past several decades. However, the influx of older migrants, which has fueled much of this rapid population gain, has accelerated the aging process. Thus, rural retirement areas arguably provide a window to America's demographic future.

As with California (Myers 2007) and the nation as a whole (Johnson and Lichter 2010), population aging and natural decrease in many rural retirement destinations have been muted by the influx of Hispanics of prime reproductive ages. Indeed, incipient natural decrease in many rural retirement counties has slowed with the growth of high-fertility, low-mortality Hispanic populations. Our analyses showed that population growth rates among Hispanics exceeded white rates by a factor of four during the 2000s. Hispanics accounted for roughly one quarter of overall population growth in retirement counties. Our results showed that retirement destination counties would have experienced overall natural decrease in the absence of the Hispanic fertility (less mortality). The elderly population and recent Hispanic in-migrants clearly share a common demographic destiny in many rural retirement communities.

Brown and Glasgow (2008) characterize elderly in-migrants in rural communities as "grey gold." Indeed, rural retirement migrants are often highly educated, with professional backgrounds and work histories. They bring discretionary money and intellectual resources to many rural retirement communities, and they contribute

positively to civic life. New elderly residents also stimulate economic and population growth, while increasingly attracting low-wage, low-skill Hispanic workers and their families to fill the labor vacuum. Hispanics may help revitalize many rural communities, but they also may bring new demands for community services (Crowley and Lichter 2009; Parrado and Kandel 2010). Others have expressed concerns that generational conflict may arise when the growing demands of a largely non-Hispanic white older generation are matched against the needs of an increasingly minority child population (Johnson and Lichter 2010; Torres-Gil and Treas 2009). That is, will America's older, largely white population—through the ballot box and collective self-interest—support young people who are now much different culturally from themselves and their own children? Will they vote, for example, to raise taxes for schools that serve young people that do not look like they do (Hernandez 1993; Poterba 1997; Preston 1984)? Clearly, the social and economic interests of the elderly and Hispanic in-migrants in rural retirement communities are closely intertwined. As Myers (2007) argues, America's growing ethnic diversity can be viewed with optimism if emphasis is placed on mutual self-interest rather than conflict and despair. Rural retirement communities may provide lessons forward.

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Chapter 16

Comparisons Across Three Race/Ethnic Groups in Rural Retirement Counties

Glenn V. Fuguitt

16.1 Introduction

By 1950, the independent migration of the elderly, particularly to amenity-rich areas, began to be noticed. In one example, a 1951 report considered the retired people living in St. Petersburg, Florida, the majority of whom had moved after spending their career in other locations (Webber 1951; a related study is Fuguitt 1952). Since those early years the study of older people has developed rapidly, much of it related to retirement migration. Yet overall, there has been little work focusing on rural and small town America, and almost none examining or comparing different race/ethnic groups.

This chapter is an effort to compare and contrast the migration of elderly Blacks, Whites and Hispanics living in nonmetropolitan (nonmetro) areas. We utilize a national-level net migration file for 1990–2000 (Voss et al. 2004). The file is the latest in a now 50-year series of 10-year county net migration estimates by age and sex. Most sets of estimates in this series include a separate consideration of Blacks (or Nonwhites) but this is the first to also show results for the Hispanic population.

In 2000 Blacks were only 9% of the nonmetro population, and Hispanics were 6%. Asians and Native-Americans were together less than 4%, so they were not included in this analysis, and the balance here was very predominantly the White population. Nevertheless, most of the total growth in the decade just prior to 2000 was found in the Hispanic population, and, to a lesser degree, the Black population. The Hispanic group grew from 1.5 to 3.2 million over the previous 20 years (Kandel and Cromartie 2004). After 2000, Hispanics emerged as the largest

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minority group in the nation, and continue to be the most rapidly growing, through both natural increase and internal as well as international migration (Johnson and Lichter 2008).

My objectives are to (1) identify and map counties with high elderly net migration rates for each race/ethnic group; (2) consider the overlaps of high elderly net migration counties in one race/ethnic group with other groups, and with younger persons (0–59 years) in the same race/ethnic group; (3) examine the association between each race/ethnic group with levels of urbanization and socioeconomic status; and (4) associate elderly net migration gain with the presence of recreational activities in the county.

Despite their small population size, Blacks and Hispanics have had important and unique places in the settlement history of the United States (US). Brought to this country as slaves, most Blacks and their descendents originally worked on larger farms and plantations in the rural Southeast prior to the “Great Migration,” a major movement North between World War I and the 1960s (Tolnay 2003; Wilkerson 2010). A return movement to the South, the “Second Great Migration” (Frey 2004), began in 1965 and continues to this day. Much recent research has focused on the latter movement, with the South serving as a setting for new economic opportunities, and as a “Call to Home,” particularly for many older people who may have participated in both the first and second movements (Stack 1996; Falk et al. 2004; Brown and Cromartie 2006).

Large swaths of the West and Southwest were originally part of Mexico so that when these regions were ceded to or conquered by the US, many Mexicans became US citizens. As Hispanic migrants came to the US, the largest group, Mexicans, settled primarily in the rural areas of the Southwestern states, which continue to include the largest proportion of this ethnic group (Ennis et al. 2011). As with Blacks, some analysts have referred to these settlement areas as “Heritage,” “Homeplace” or “Core” areas, with much of the Hispanic migration gain there representing a kind of return migration, particularly for older people. (For analyses of the spread of Hispanic settlements, see Saenz 1991; Johnson and Lichter 2008.) When examining the geographic spread of Blacks and Hispanics via maps, I will consider return migration as a possible explanation of the location patterns of both Blacks and Hispanics.

16.2 Methods and Data

County net migration estimates have been produced for each decade since 1950. (These data files are available from the Interuniversity Consortium for Political and Social Research, University of Michigan). For 1990–2000 the estimates were prepared at the Applied Population Laboratory, University of Wisconsin, Madison by Voss et al. (2004) using more detailed data than were available for earlier decades. The population “expected” for each county in 2000, in the absence of migration into or out of the county was obtained by projecting forward to 2000 from the 1990

population for each age group 10 years or older in 2000. (For the first decade of life, data for births as well as deaths were utilized.) But unlike those preparing estimates for previous decades, Voss et al. (2004) were able to subtract from the base population the number of deaths (by 5-year age groups and sex) as recorded in National Center for Health Statistics records, separately for race groups and for the Hispanic population. For the population aged 65 and older in 1990, mortality numbers were reconciled to numbers in the Medicare system. Because the numbers of deaths by 5-year age groups for those 65 and older are often very small for individual counties, they were adjusted using the national-level numbers based on the Medicare system through an indirect standardization procedure (see McGehee 2004, p. 293). The difference between the expected number of people in each group and the 2000 census results (adjusted for under-enumeration) provides an estimate of the net amount of movement into and out of any group considered here. A migration rate of change is obtained by dividing the net migration number by the population expected in 2000 in the absence of migration. The percentage would simply be this number multiplied by 100. I have followed the tradition of the USDA Economic Research Service, that a “retirement destination county” has a net migration gain for those aged 60 and older of 15% or more (Beale 2005). But, because these numbers are small for Blacks and Hispanics, I also consider those counties having a net migration rate ranging from 10 to 14.99% for the three groups. Although not all persons 60 years of age or older are retired, analysis by Beale in our earlier article (Beale and Fuguitt 2011) showed that in the 1990s the age-group 60–64 was the youngest in which the majority of the population was not in the labor force.

Here we are dealing exclusively with nonmetro counties, and we have used a constant definition of metropolitan (metro), that prevailing at the beginning of the 1990 decade. Allowing the metro-nonmetro classification to change would confound changes in net migration with inter-decade shifts of counties between metro and nonmetro status. Included in the study are the 2,275 US counties or county equivalents that are outside of metro areas, and are thus termed nonmetro. Other counties were classed as metro as of the 1990 census.

In order to consider only counties having meaningful numbers of the race/ethnic group in question, I have included those having at least a total of 1,000 or more members of the group (counties are distinguished in the maps in Figs. 16.1, 16.2 and 16.3). In addition, in calculating the net migration rates and percentages for a race/ethnic group, I included only those counties having an expected population base of 100 or more. This is to include only percentages having a base large enough to provide meaningful numbers.

To avoid overlap, the Voss et al. (2004) file used here was prepared allowing the Hispanic category to include Hispanics of any race. Thus, the White or the Black (African-American) category includes no Hispanics in this study. Using these data it is only possible to consider *net* migration (in-migration minus out-migration). Because net migration incorporates both decisions to move out and decisions to move in, the implications for individual behavior are not clear. A positive net migration rate for an area may be the result of more persons moving in, or fewer persons moving out, but in most all cases it is some combination of the two. Critics like to

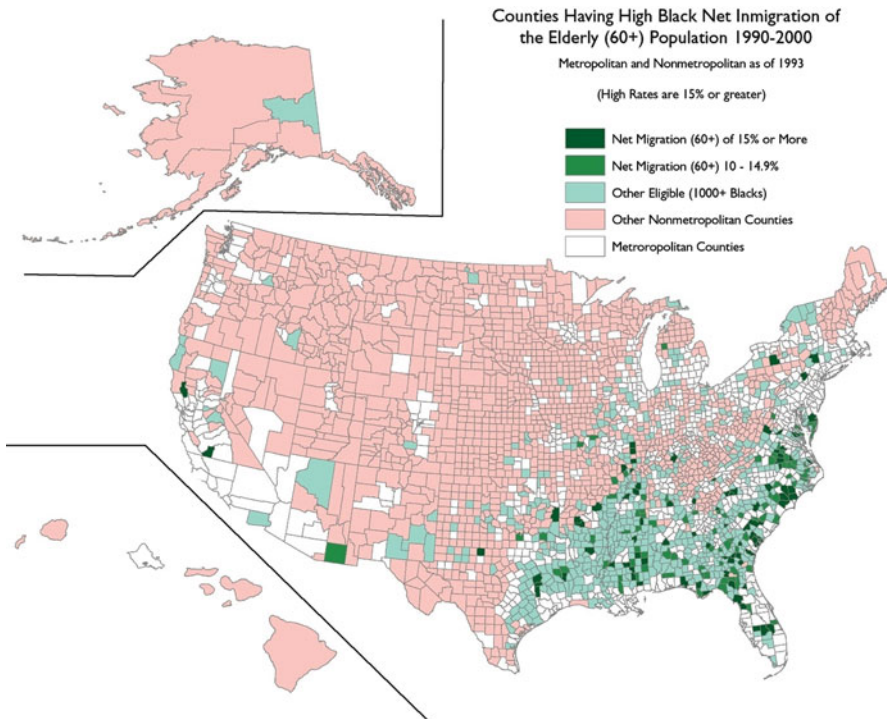


Fig. 16.1 Counties having high Black net migration gain of the elderly (60+) population (Source: Voss et al. 2004)

note that “there is no such thing as a net migrant.” As a macro-variable, however, net migration numbers or rates can provide valuable insights, because they reflect the effects of the overall migration process on counties or communities (Plane and Rogerson 1991).

16.3 Results

16.3.1 *The Geographic Distribution of High Elderly Net Migration Counties*

As expected, the three race/ethnic groups differ considerably in incidence and location. Almost all (98%) of the nonmetro counties had more than 1,000 Whites. Most exceptions were a few very small counties having less than 1,000 people and those with high proportions of Native Americans. One-third of the counties had more than 1,000 Blacks, and one-fourth had more than 1,000 Hispanics.

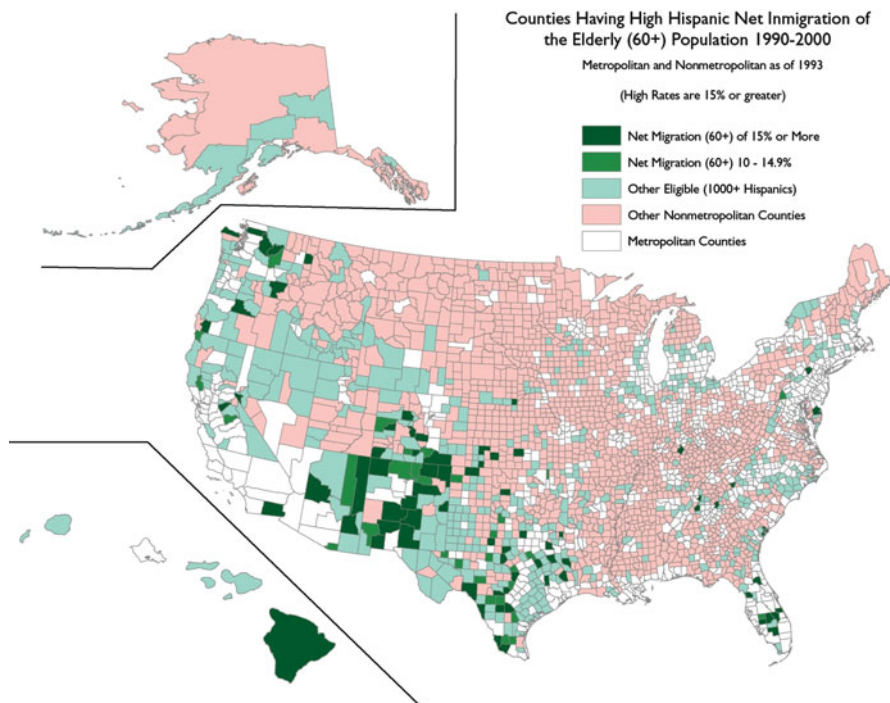


Fig. 16.2 Counties having high Hispanic net migration gain of the elderly (60+) population (Source: Voss et al. 2004)

It turns out, however, that across the three groups there is little difference in the likelihood that a county with more than 1,000 population in a race/ethnic group will have a high positive elderly net migration rate for the group. Counties with an elderly net migration growth of more than 15% (the USDA definition of the “retirement destination county”) make up 12 out of 100 eligible Black counties, 13 out of 100 eligible Hispanic counties and 14 out of 100 eligible White counties, with total county numbers for each group of 87, 75 and 318. Results for the counties that have elderly net migration growth of between 10 and 14.99% growth rates are also included, and these are not very different from each other, at 23, 19, and 24 out of 100 eligible counties.

The overall locations of the three ethnic groups are shown in detail in Figs. 16.1, 16.2, and 16.3. Figure 16.1 gives the results for Black counties. Almost all of the nonmetro counties with more than 1,000 Blacks are located in the Southeast region, and this is where nine out of ten of their retirement destination counties are located. Most of these counties are scattered across the traditional areas of Black settlement in the South, from Southern Virginia to East Texas. Much of this migration gain may be due to the movement of elderly people back to their places of origin prior to leaving the South, usually considered a “return migration.” (The return migration concept, however, can be interpreted more broadly to include those born outside the

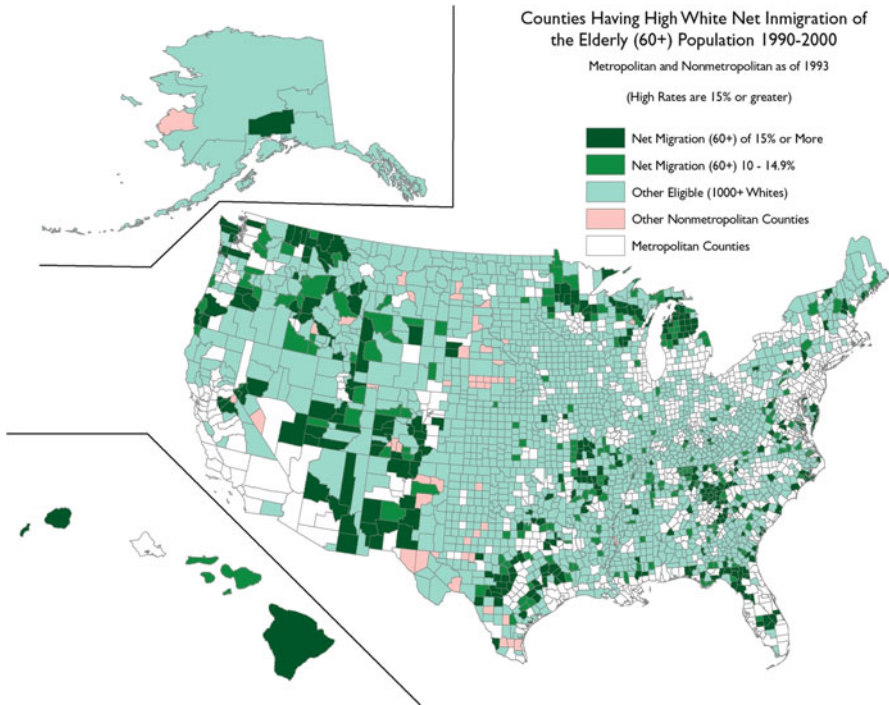


Fig. 16.3 Counties having high White net migration gain of the elderly (60+) population (Source: Voss et al. 2004)

South, but with familial ties in the area (see Cromartie and Stack 1989). Although some rapidly-growing Black migration counties are in amenity and/or recreation-based retirement areas chosen by many Whites, many of these counties are also agricultural, and such activities may be the draw for elderly Blacks and perhaps also elderly Hispanics, rather than recreational opportunities. For all ethnic groups, amenity-based retirement areas typically attract workers of younger ages, and older residents of any race/ethnic group who may be there primarily to be with or near children (for Blacks and Whites the importance of family factors in migration is explored by Liaw et al. 2002, among others).

Elderly Hispanics are also concentrated in one section of the country, as seen in Fig. 16.2. They are scattered through Texas and the Pacific-coast states, but more focused in New Mexico, and parts of the surrounding states of Colorado and Arizona. Many counties with rapidly growing numbers of elderly Hispanics are found in these states, and to a lesser extent also in eastern Oregon and Washington. Much of this area has a history of long-term Hispanic settlement, and could be included in the Hispanic heritage designation referred to earlier, just as most Southeastern Black counties with high elderly net migration gain might be included in a “Black heritage” designation.

A second, much smaller group of counties having Hispanic net migration gain, however, is found in areas of new Hispanic settlement beyond their heritage areas (Johnson and Lichter 2008; Kandel and Cromartie 2004; Saenz 1991). These destinations are scattered across East Texas, Oklahoma, and Florida and increasingly also in other Southern and Northern states. Research, including that cited here, has shown the attraction of jobs, usually in manufacturing, construction, or agriculture, but perhaps most important for an older population would be family considerations, to live with or near children who have moved to these counties to work. Perhaps the most dramatic changes have been in the rural Great Plains, a formerly homogeneous White region of long-time population decline. A number of growing counties there recently would have declined were it not for Hispanic growth. The trend has received attention in the press, most recently in an article by Sulzberger (2011). Although rapid growth through elderly migration of Hispanics in the Great Plains is barely evident in the map here for 1990–2000, we should certainly expect more evidence when the migration estimates for 2000–2010 become available.

Figure 16.3 shows nonmetro White retirement destination counties for the 1990–2000 decade. Since most all U.S. nonmetro counties are primarily White, it is not surprising that the pattern is very similar to that of the total elderly population. These counties are widely scattered across rural America, but mostly in the South and West. Also, most seem to reflect the importance of compatible recreational activities and/or climate and scenic amenities in destination selection. In discussing total population trends (which apply also to the White population considered here as it is predominant in the total), Calvin Beale and I noted (Beale and Fuguitt 2011) that today's retirement areas are widely scattered across Rural America. Warm winter areas have their appeal, (including parts of Florida, New Mexico and Arizona) but so too do many counties in the cold winter climate of the Upper Great Lakes, or the uplands of the Ozarks and the southern Blue Ridge Mountains. Other destinations are the Texas Hill Country, both the Atlantic and Pacific coasts, and many parts of the inland Mountain West from Montana to New Mexico. Though together they are widely scattered, most of these counties share opportunities for recreation and/or scenic and cultural amenities (Brown and Glasgow 2008; McGranahan 1999).

16.3.2 *Overlaps*

I considered the extent to which nonmetro counties that had rapid positive rates of elderly net migration (10% or more) for one race/ethnic group also had rapid rates for one or more of the other race/ethnic groups. Only ten counties had high rates for all three groups, with five of these in Florida, and the other five in different states. The Florida counties, however, do not necessarily signal amenity retirement migration for all race/ethnic groups, since many large Florida counties can be both attractive for retirees and for those seeking jobs in agricultural production.

The two-way overlaps were between Blacks and Whites (62 counties) and Hispanics and Whites (46 counties), with only four counties having both Black and Hispanic growth. Of those counties having greater than 10% Black elderly migration growth, four of ten had rapid migration growth for either Whites or Hispanics, and most of these were counties with rapid growth of 10% or more in the net migration of both Blacks and Whites. An even greater proportion of counties having rapid Hispanic net migration growth, almost six out of ten, were overlap counties, and again almost all were counties of rapid elderly net migration for both Hispanics and Whites.

16.3.3 Growth of Older and Younger Populations

An important distinction for counties having high in-migration for a race/ethnic group is whether or not the county also is experiencing high growth for the younger population of each group. That is, to what extent does a situation of general growth for this group exist, as contrasted with growth just for older people? I found that only one quarter of rapidly growing elderly Black counties have similar levels of growth for the younger as for the older population, whereas three-quarters of Hispanic counties, and six out of ten White counties have similar levels of in-migration. The proportions are almost the same using 15% or more or 10% or more as the definition of “rapid” growth. The considerable difference between Blacks and the other race/ethnic groups is parallel to the lower degree of overlap with elderly migrants of other ethnic groups found in the preceding section. That Black retirement destination counties are more likely to stand alone among the three groups in both analyses suggests a greater likelihood that Black destination selection is based upon previous ties. A possible scenario would be that many Blacks have a unique settlement history, with large numbers of those who were born in the South taking part in the so-called “Great Migration” to the North during their working years. Some, now of retirement age, have returned to the South, and a number of them chose to move to counties in which they had prior personal ties but that might not have been so attractive to elderly migrants of other ethnic groups or younger Black migrants moving to the South (e.g., Brown and Cromartie 2006). Others who did not previously live in these areas of origin also may have made this move on the basis of close personal ties at the destination.

In contrast, although most older Hispanics were also found in their heritage areas, the fact that they were more likely to be in more diverse counties having high net migration rates for younger Hispanics and/or for older members of other race/ethnic groups suggests a somewhat different basis of attraction for this group than a more traditional “Call to Home.” We might well expect that often Hispanic elders would be moving to these counties in order to join or live near their children or other relatives, for example. All of the above are interesting speculations, of course, but require comparative field research and survey data for verification.

Table 16.1 Elderly migration growth associated with selected county characteristics

Characteristic	Black	Hispanic	White
Commuting	–	–	(+)
Size largest place	–	–	(–)
Persistent poverty	–	(+)	(–)
Farm function	–	–	(–)
Recreation	(+)	(+)	(+)

Note: = no association, (–) negative association, (+) positive association

Turning to Whites, recall that results for this group in the 1990s are very similar to those for the elderly total population, and although, as with Blacks and Hispanics, many of them must have moved primarily for family reasons, perhaps a larger proportion than the other race/ethnic groups could choose to live more independently, and often selected attractive counties with amenities, which have also attracted younger migrants (Johnson and Cromartie 2006). Some of this younger White increase also is very likely due to employment created by the increases in demand for goods and services created by older people.

Family reasons must be important in explaining these and other distributional patterns for all race/ethnic groups. Some elderly movement appears to be influenced by a desire to live near or with children, parents or other relatives. Thus Brown and Glasgow (2008), in their recent book, *Rural Retirement Migration*, reported that almost one-fourth of the respondents in their sample gave family factors as a main reason for choosing their destination. Brown and Glasgow also noted a movement of younger persons to be nearer their parents. I reported similar findings earlier in a survey of a Florida community with one-third of the post-retirement migrants moving primarily to live near or with children or other relatives (Fuguitt 1952).

16.3.4 Factors Associated with Rapid Elderly Migration Gain

Next, I consider several properties of counties associated with higher elderly net migration gain (shown in Table 16.1. Here bivariate associations are reported if chi-square is significant at the 0.05 level). The first two variables are concerned with county location with respect to urban and metro areas, variables which have often been considered in examining patterns of nonmetro county population growth or net migration gain. For whites, high levels of commuting to metro areas are positively associated with elderly net migration gain, whereas size of largest place in the county is negatively associated with gain. The results are consistent with the findings of many residential preference surveys (for example, Brown et al. 1997; Zuiches 1980). That is, in such surveys most respondents say they want to live in more rural areas, but near big cities. For Blacks and Hispanics, no association is found between net migration gain and location with respect to larger places. Lack of an association, of course, indicates that the level of urbanization is neither positively nor negatively associated with growth for Blacks and Hispanics.

The next variable is the USDA measure of persistent poverty in the county. Persistent poverty counties are those in which 20% or more of the population was below the official poverty line in each of the years 1960, 1970, 1980 and 1990. In this case, for Whites, counties classed as having persistent poverty are less likely to be those with high elderly net migration gain, but for Hispanics, persistent poverty counties are more likely to have high gain, and there is no association for Blacks. If return migration toward place of origin is quite important, and, if the place of origin is disadvantaged, one might expect a population with a history of poverty to show the pattern of Hispanics here. But this circumstance seems to better fit the Black population, which shows no association. Note, however, that the finding simply illustrates that this scenario is not the *predominant* one for Blacks. It seems likely that the positive association of poverty areas with elderly net migration growth for Hispanics is related to the types of employment opportunities available there for these elders and their younger relatives.

Whites are less likely to have high elderly net migration gain in counties classed as economically dependent on farming than those living in other counties (for the definition of farm dependent, see Cook and Mizer 1994). For both Blacks and Hispanics, however, there is no association between this variable and elderly net migration gain. For both Blacks and Hispanics, then, there is at least not an aversion to living in farm-dependent counties and regions. One might have expected some elderly in-migration of the two groups to farm-dependent areas, both because of return migration and farm labor opportunities for both the elderly and their children.

Finally, the great importance of the recreation variable (Johnson and Beale 2002) is demonstrated by the fact that high levels of net migration gain are more likely to be found in recreation counties than other counties for all three race/ethnic groups. The association appears to be highest for Whites. Of course, I should note again that with county-level data, this finding does not demonstrate that elderly individuals moving to recreation counties are necessarily motivated by a search for amenities.

16.4 Summing Up

16.4.1 What We Learned

1. I compared counties having high elderly net migration rates for Blacks, Hispanics and Whites, and I found a number of differences as summarized below. Yet, the relative frequencies of occurrence of high rates for counties were very similar for the three race/ethnic groups (about one in five of the counties having 1,000 or more residents of the group).
2. The locational “footprint” of rural elderly migration destination counties is quite different for the three groups, as is their settlement history.
 - *Blacks* having high elderly migration rates are found almost exclusively in counties in the South, with many in the traditional areas of Black settlement.

- Similarly, counties with rapidly growing elderly *Hispanic* populations are largely in the Southwest, where many areas have a long history of Hispanic settlement.
 - Rapidly growing elderly *White* counties follow the pattern of the total elderly population: locations widespread, but notably a net movement to counties having recreational, scenic, and other amenities.
3. Counties with rapidly growing elderly Blacks are less likely to have rapidly growing elderly Whites or Hispanics, as well, than are other pairs of race/ethnic groups. Similarly, they are less likely to have rapidly growing elderly Black populations along with Black populations aged 0–59 than is true for either Hispanics or Whites. These findings are consistent with the view that elderly Blacks are more likely to move independently of other types of migrants (Wilson et al. 2009), with a number of Black return migrants from the North responding to a kind of “Call to Home” based on prior residence or family connections (Stack 1996; Brown and Cromartie 2006).
 4. In considering locational and other factors associated with elderly net migration growth, race/ethnic differences pointed to the lower socioeconomic status of Blacks and Hispanics and their unique settlement histories. The predominant White moves follow the now-familiar findings of the total population, characteristic of a more affluent population choosing destinations more desirable to them in rural America.

16.4.2 *What We Need to Learn*

1. This net migration analysis is based on the 1990–2000 period, as the latest time such information is now available for Whites, Blacks and Hispanics. The UW-Madison Applied Population Laboratory is preparing county net migration estimates which will be similar to the set which we used for 1990–2000. This would extend the series started in 1950–1960 through the first decade of the twenty-first century. This new source would make possible a study comparing my results with those for the 2000–2010 time period – a quite different time in many ways.
2. In addition to replicating some of the results of this 1990–2000 analysis, several additional steps could be taken for both decades. Aspects of county employment status could give more insights on elderly net migration gain. This is important in interpreting the results here, especially because of the relative increase in the employment of older people (Gendell 2006). We would expect that counties providing employment in jobs that would be attractive to older people and/or to their children would have higher elderly net migration gain for a race/ethnic category. The overall level of education is an important related variable, often considered in migration studies. Are higher levels of elderly net migration gain found in counties having higher levels of education for these race/ethnic groups? Unfortunately, this question will be more difficult to answer in the future, without a long form in the decennial census.

3. Elaboration of the retirement process comes from distinguishing different age groups. There is a body of research confirming that the migration of elders to attractive settings is much more likely to come at younger-old ages, whereas these same people often return to their prior locations or otherwise to locations near their children and/or those having good medical care for their declining years. This phenomenon also has been integrated into a “developmental theory of older migration.” Litwak and Longino (1987) provide a discussion relating migration to stages in the aging process of the elderly. On a personal note, this migration process has been confirmed for me living in a retirement center in Madison, Wisconsin. Most of the residents have family ties and/or a history of prior residence in the area, and some have lived in attractive leisure areas such as those in Florida or Arizona during early retirement.

We could extend the analysis of net migration data in several other directions, but greater insight into the migration process for retirement-age persons of different race/ethnic groups would surely come from research based on individuals and their moves rather than on counties. This requires a different organization of census-type files (Public Use Microdata Files) or other sources of survey data on individuals, rather than data on small geographic areas. (Brown and Glasgow 2008, in a study of the general trend in rural retirement migration, used a multiple methods approach that would be a useful reference for designing studies to compare race/ethnic differences in older rural migration.) Individual-level studies could help us to verify some things we have speculated about here. Of particular interest in comparing race/ethnic groups would be differences in the importance of return migration of persons to their areas of origin however widely or narrowly “return” was measured. Such a study was done recently for Blacks, Hispanics and Whites in the working years (Wilson et al. 2009) using the National Longitudinal Survey of Youth in a panel study begun in 1979. In this work the likelihood of return migration to prior residence was determined for different time intervals. A number of control variables were also considered, including metro-nonmetro residence, and the study showed that Blacks and Hispanics were more likely to return to their county of residence than were Whites. But I could find no comparable study that included the elderly. (Perhaps such a study could be done using the Census Public Use Samples of 1990 or 2000, or, if sample size allowed, an ACS national sample for the post-2000 period.) Another major question would be the importance of family factors in migration across the three race/ethnic groups. Elaborating on the findings of Brown and Glasgow (2008) and others, this would include learning more about the movement toward relatives in the return migration process, but also to the place of migrating family members such as children in the movement to almost any destination. Undoubtedly, part of the movement to recreation counties results from younger people being attracted there for jobs, followed by their parents across the elderly life span, who could provide assistance to their children, and/or receive assistance from them in their declining years. And, as Brown and Glasgow (2008) found, children may also move to be closer to their parents. In making comparisons between race/ethnic groups, we also need to know to what extent there are differences in the age of

retirement, and how this may affect differences in the likelihood and origin–destination patterns of migration of different race/ethnic groups.

16.5 Where Are We Headed?

The latest data available for this research extended to the end of the twentieth century, and yet we are now more than 10 years into the 21st. What can we say now about the future? I will start by making a contention, based on some years of following nonmetro population trends: researchers have a natural and strong interest in being able to herald any new trend as fundamental, as a “clean break with the past,” and yet fundamental change seldom occurs. There appears to be a momentum to trends that makes them change slowly. Yet recent decades have seen some important transitions and trends that must have an impact on elderly migration patterns, which may well be long-lasting.

The most significant current trend is the recession that continues, albeit with signs of a very slow recovery. Kirschner (2010), using county population estimates, gives evidence that this has had a very important impact on nonmetro net migration levels. Beginning in 2006, these estimates showed a sharp decline through the remainder of the decade even in nonmetro retirement destination counties.

How rapidly the economy improves remains to be seen, though all present signs point to it being a slow, multi-year process. Regardless, long-term changes in the nature of retirement surely will have a lasting impact. (A popular discussion of current retirement trends is found in Hampson 2010.) Other fundamental changes include the decline in defined benefit pensions in favor of more tailored investment plans. Changes in benefit plans could result in more affluence after retirement for some wise investors, but at the very least, the experiences since 2006 must lead many to far more wariness concerning their financial future, and that may well impact decisions to move. Given the financial problems facing the nation, and the large numbers expected to reach retirement age over the coming decades, government benefits could well be cut. Already there appear to be related changes in the retirement process, with more people retiring later and/or continuing to work part time after retirement (Gendell 2006). Another important change is the major increase in the long-term employment of women, with two-career families already the norm among working age couples. As retirement decisions become more egalitarian, will this result in fewer decisions to move to areas specializing in activities more favored by one spouse, for example, hunting and/or fishing? These are no doubt just some of the considerations adding to the uncertainties faced by retirees and by those seeking to understand retirement migration and make studied speculations about its future.

This chapter has been concerned with retirement migration patterns of Blacks, Hispanics and Whites, and often general trends such as those discussed in the last paragraph best fit Whites. It is probably safe to assume that few Blacks and Hispanics had defined-benefit pensions when they were most common. For Black and Hispanic households also the contribution of women’s income has always been very important.

The results of this research lead to positing different future scenarios of retirement for Blacks and Hispanics. For many Blacks, migration to the South has been a major trend based both on economic opportunity and family factors. We would expect, however, that the extent to which it is family-driven would decline as fewer of these movers have initially lived in the South. Similarly, we have seen that high rates of elderly migration for Hispanics have been primarily in their “core” located in the US Southwest. To the extent that this return has been to the place of previous residence, it may help to explain why Hispanics, and to a lesser degree Blacks are “attracted” to poverty counties. A major distinction of nonmetro Hispanics, however, has been their rapid growth through both migration and natural increase, and dispersal across the nation (Johnson and Lichter 2008). By 2000 this was reflected in high rates of elderly migration by only a small number of counties. Since 2000, however, the spread of Hispanic populations has become quite evident (Cromartie 2011) so that the migration of Hispanics of working ages seems to have continued apace. Some of these newcomers are settling in previously declining nonmetro Anglo counties, as in the Great Plains (Sulzberger 2011). So it appears very likely with some economic recovery that elderly growth will be more evident in the following decades in many of these new Hispanic outposts, both through migration and aging in place. Note that in the 1990s Hispanic and White elderly destinations are most often to counties that also have high in-migration of younger people of the same race/ethnic group. The parallel between elderly and youth migrations points to the importance of elders joining younger relatives at destination, previously discussed, and in the current economic downturn we would expect such family assistance to have become more important across generations.

Since Blacks and Hispanics are overall less affluent than Whites, interpretations of race/ethnic differences should take into account socioeconomic status. It appears, however, that little research on elderly migration has explicitly taken socioeconomic status into consideration. How similar are the findings of low-SES Whites to those of Blacks and Hispanics? Answering this question directly should make use of survey data using individuals as the unit of analysis.

There is much more that could be said on the future of retirement migration, but I shall end by making two observations. First, Calvin Beale and I (Beale and Fuguitt 2011) made the point that for Blacks, return migration to the South must slow down as fewer Blacks in other parts of the country have any special attachment there. We would expect this to become true for the other race/ethnic groups as well, as “old home” attachments become less viable for everyone, especially those in later generations. Second is the established fact that the numbers reaching retirement age are beginning to increase markedly, as members of the baby boom reach this age. Therefore, even if the considerations discussed here lead to relatively fewer older people in different race/ethnic groups moving to nonmetro areas, the absolute number, with its community impacts, may nevertheless increase.

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Chapter 17

Retirement Migration to Unconventional Places

Benjamin C. Bolender and László J. Kulcsár

17.1 Introduction

Some places spend considerable public and private money in attempts to attract older migrants. The progressive aging of the baby boom generation has led us to a period where the potential stream of retiree movers and their proportional wealth are greater than at any point in history. However, our understanding of retirement migration is still limited. Most research focuses only on a binary definition of a retirement destination, using an arbitrary population growth threshold. Counties are classified simply as a retirement destination or not based on whether they meet a threshold of 15% or more growth in the population age 60 or older due to the effects of migration. While this type of classification may be useful for a variety of applications, it fails to account for the underlying diversity in retirement migration patterns and destinations.

Conventional theories of retirement migration focus almost exclusively on retirees' attraction to natural and recreational amenities. This study intends to expand this universe by looking beyond sunny skies, warm temperatures, and simple classification schemes. To this end, we aim to explore and research unconventional retirement destinations (URDs). We define these as any place which has a high rate of in-migration at older ages, yet does not empirically conform to the conventional understanding of fun-in-the-sun or by-bodies-of-water destinations as described in the literature. URDs are places that drew considerable amounts of older age in-movers, but could also be considered statistical outliers in a regression model using primarily natural

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and recreation amenities (along with a few population controls) as predictors. This look at URDs is unique both because it departs from conventional understandings and also because little research has explored these kinds of issues.

Our chapter has two primary goals: (1) identify and describe “unconventional retirement destinations” that do not fit the current theoretical or methodological mold and (2) explore whether the factors that lead to being an unconventional retirement destination are historical accident or whether it might be possible to develop a model (or several models) for policy makers who wish to promote this kind of development in their area. We have presented much of the work on patterns by migrant characteristics in other places (Bolender 2009; Bolender and Kulcsár 2008). As such, this chapter will focus primarily on the community level processes in URD locations and will briefly explore how these findings may be applied to our empirical understanding of retirement migration patterns as a whole.

17.2 Background

Retirement migration to nonmetropolitan (nonmetro) areas in the United States (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 life course model argues that migration occurs in response to people reaching certain life course stages, events, and transitions (Warnes 1992a, b). By this view, retirement migration may be a response to relinquishment of job-based ties, declining income, loss of a spouse, or need of assistance, all of which are more likely to affect people in certain age groups. Relative to elderly migrants, younger-old 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 white people, for example, 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 the model to cover the relationship between amenities in an area and the “rent” that it costs to live there.

Normally, local wages, rent, and amenities are in relative balance or equilibrium. However, changes in the value of amenities or in the population of possible migrants (such as an aging population) can move faster than wages and rents, thus creating motivation for migration.

The first set of theories focus on age-specific migration flows, with particular factors said to affect older migration. In the second set of theories, the same drivers are present for migrants at any age, except that their impacts are different. In any case, retirement migration has become progressively more important for policy makers. This is because it tends to be selective of people with greater resources, and many researchers view it as contributing to economic growth and development in destination communities (Glasgow and Brown 2006; Haas and Serow 1993; Reeder 1998; Serow 2003). Growth may occur for a variety of reasons. First, middle and upper-middle class older people moving into a community may bring resources to spend without taking up jobs (Fagan and Longino 1993; Haas and Serow 1993). Second, younger people are believed to follow the old, moving into service and care industries which are bolstered by increased retiree demand (Reeder and Glasgow 1990). Third, the relationship could be spurious because it has been argued that 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, many studies on retirement migration reach the same conclusions. The conventional story is that older people move to a place to gain access to local amenities. Specifically, a majority of recent studies cite the correlation between binary retirement destination counties, as defined by the Economic Research Service (ERS) (2005) and either natural amenity scales or recreation county classifications (Johnson and Beale 2002; Johnson et al. 2005; McGranahan 1999). A number of “official” retirement destination counties, however, do not conform to this pattern.

One example is Nemaha County, in northeast Kansas (KS). There are no palm trees, babbling brooks, beautiful mountains, casinos, or extensive shopping opportunities; yet it is still a retirement migration destination. Our previous case study research determined that 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. The continued presence of manufacturing plants and healthcare service centers in the area allow younger couples to find semi-skilled and skilled employment. The importance of religion (primarily Apostolic Christian in one main town and Catholicism in the other) not only encourages larger families with tighter family and community ties, but also contributes to the presence of several nursing homes in the county that provide services emphasizing spiritual characteristics. Together, economic stability, cultural particularity, and community ties are able to draw retirees from several states away (Kulcsár et al. 2008). In fact, in other cases, the economic structure can be shown (through quantitative modeling) to create an even broader contribution to rural retirement migration more directly (Bolender and Kulcsár 2008). For example, younger retirees look for places with larger businesses, less farm employment, less

urbanized settings, higher natural amenities, and fewer health services. While these younger-old movers primarily follow the amenity migration pattern described above, those in more advanced age categories seem to move for a completely different set of reasons. They are attracted to smaller businesses, greater economic concentration in service industries, more highly urbanized areas, lower natural amenities, and a higher presence of health services (Bolender and Kulcsár 2008).

Places like Nemaha County, KS challenge our understanding of retirement migration. Of primary interest is the question of whether these places are simply exceptions to the rule of classic amenity driven migration or whether heretofore uncharted structural patterns explain the existence of these kinds of area. In other words, what does “unconventional” really mean? Recognizing that migration decisions are driven by many individual factors, the conceptual question still remains whether outliers have certain characteristics in common that may help scholars and policy makers understand the emergence of such unusual retirement migration destinations. URDs may be part of a larger overall pattern that has yet to be investigated, or they could simply be an unexplained variation on a more traditional theme.

17.3 Data and Methods

Again, this study is part of a larger project with three major phases. The first phase consisted of large scale secondary data analysis. The purpose of this was to explore county level older age migration patterns across the US and to identify counties where more conventional theories of older age amenity migration do not fit. The second phase, presented here, selected eight counties out of this pool of URDs to provide a more detailed view than can be found in national statistics. These areas were then surveyed in a limited fashion. The primary use of these surveys was to inform community leader interviews in the case study locations. This final portion of the work 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.

Unconventional retirement destinations were selected both through statistical and purposive methods. Theoretically, we define them as places that attract relatively large proportions of older in-migrants while lacking obvious conventional draws like natural and recreation amenities. The methodology we used to select URD counties attempted to mirror this substantive position. Using data from sources such as US Censuses of Population, Regional Economic Information Systems, County Business Patterns, the Census of Agriculture, and the county age/sex/race-ethnicity specific net migration file (1990–2000) compiled by Voss et al. (2004), URD counties were identified through qualified residual selection. An ordinary least squares regression model was fitted using the total net migration rate at 60 years of age and older as the dependent variable. Independent variables included: McGranahan’s

(1999) six-point natural amenity scale, a recreation dependence score provided by the ERS (2005), along with controls like population size (logged to account for drastic skewness), 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.

Given conventional theories of retirement migration, this model should fit the data well. However, as is often the case with modeling procedures, we can consider some counties to be outliers. These places seem to have a much greater degree of older in-migration than we would expect based on their natural and recreational attributes. Empirically, these outliers took the form of studentized residuals from the regression analysis. These residuals were converted to percentile ranks within region. Counties that were in the top 5% of positive residuals were included in the pool from which cases could be selected. Further, in order for counties to be eligible for selection, they needed to also be one of the ERS (2005) retirement destination counties (meaning they had a net in-migration rate at ages 60+ of 15% or more in the 1990s). In other words, URDs, as here defined, have both generally high rates of older in-migration and much higher rates of older in-migration than would be predicted by conventional theory. In substantive terms, URDs attract a large enough proportion of older movers to be considered a retirement destination, yet they are able to do it without relying on climatological, topographic, or recreational amenities that receive the bulk of attention in the literature.

The result of this analysis was the identification of 108 URD counties (76 non-metro and 32 metro). The analysis includes both metro and nonmetro counties because academic focus is shifting to defining both kinds of counties as retirement destinations. (This is seen in the ERS classification of both metro and nonmetro retirement destinations in 2005). Moreover, given that counties may be classified as metro simply because of commuting zones, it is possible that a number of seemingly “rural” counties are classified as metro when adjacent to core city areas. The 108 URDs were also examined in a county level map to ensure their geographic diversity. Using this map, county level data on various characteristics, and online content analysis of information on the local areas, the pool was progressively trimmed to eight counties that could be studied using the survey and subsequent methodology. These counties may be seen in Fig. 17.1. Areas were purposively selected primarily for geographic diversity, but relative levels of income, racial-ethnic composition, proportion of the population 65 years of age or older, and various other indicators also played a role.

The survey used a mixed-mode approach to attempt to reach a random sample of the general population living in these unconventional retirement destinations (Dillman et al. 2009). The goal of this approach was to obtain an “on-the-ground” view of the general community life and cultural environment from the “average” resident’s perspective. The survey, which used a combination of mail and Internet techniques, was conducted in 2007 and 2008. Participants were initially recruited through a post card mailing based on addresses obtained from the Kansas State University Office of Educational Innovation and Evaluation (OEIE). Though the places for this phase of the study were selected

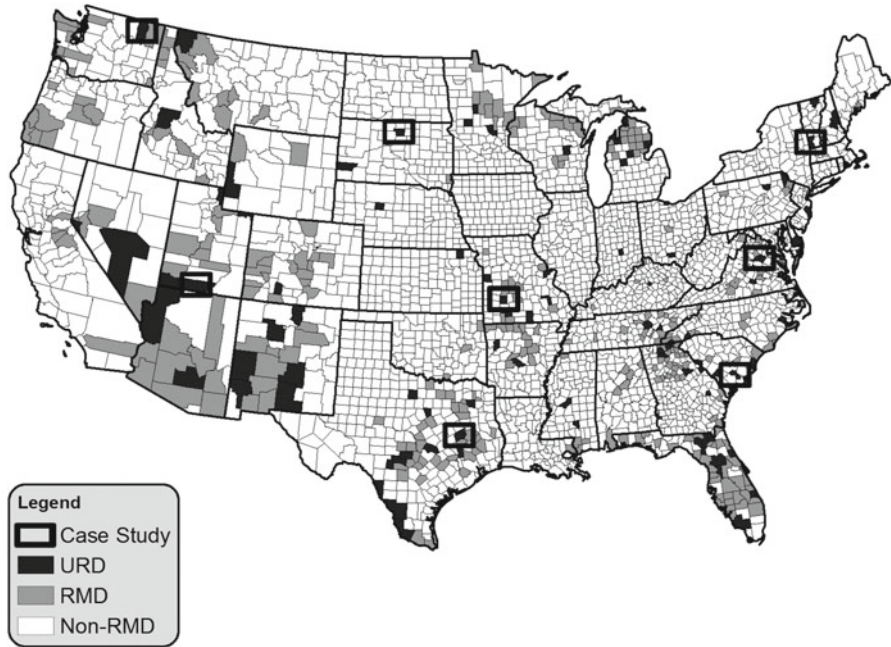


Fig. 17.1 URD county and eight study county locations (*circled* for emphasis) (Sources: ERS County Typology (2005) and Unconventional Retirement Migration Project, Kansas State University (2007–2008))

purposively, the addresses that received post cards (and could therefore participate) were selected at random. Theoretically, this would allow a representative picture of people's attitudes about individual areas, even without randomization at the place level. The post card contained a brief description of the study and a link to follow to get to the online survey. The instrument contained a list of closed ended questions relating people's attitudes and perceptions on activities, availability of services, local culture, politics, economic development, and other factors of community life in their area. Several open ended questions were also included to gain more general feedback on other kinds of migration attractions not captured by the response categories.

Within each of the eight counties, a list of randomly selected addresses was generated based on zip codes, and each address received an initial and a follow-up post card. Approximately 3,000 addresses received postcards. Generally, online surveys have several negative aspects. Namely, disadvantaged social groups tend to be underrepresented in such surveys. Respondents to online surveys are more likely to be young, male, white, urban, educated, and to have greater financial resources (Dillman et al. 2009). Such people generally have better access to and familiarity with computers and Internet usage. Though researchers debate the relative quality of the outcomes of online and mixed-mode surveys, given the time and financial constraints of the project, this provided the best mixture of practicality and usability

of results. Unfortunately, the response rate was very low, even though three steps were explicitly taken to combat these issues.

First, the recruitment was through the mail, ensuring that everyone on the respondent list had an equal chance to participate. This eliminated issues regarding invalid email addresses, spam filters, or limiting initial participation to only computer owners. 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 encourage participation from people in economically disadvantaged 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 guarantee that only one response was returned from each address. Validating the codes would also allow us 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.

Further, telephone interviews were conducted 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. Efforts were made to conduct at least one interview with a central political figure, an economic representative, and someone who specifically works with the older population in each area. Questions were similar to those put to the general population but were also adapted due to the particulars of that area and by previous project findings. Many of the discussions centered on service availability, business trends, development, and top-down impressions of the area’s older population. We also discussed whether leaders are actively promoting particular retirement migration and how national statistical trends (such as natural amenities or migration rates) were expressed in the area. Our findings are based on 69 completed online survey forms, 9 telephone interviews with respondents from the general public, and 25 community leader discussions across the 8 case study sites.

17.4 Descriptive Analysis of Unconventional Retirement Destinations

The first question to ask is whether unconventional retirement destinations are in actuality different from more conventional retirement destinations (CRDs) or from other counties that are not retirement destinations. This section will present a basic descriptive analysis of the differences among them. To clarify, URDs are the 108 nonmetro counties selected through the procedure described above. They have 15% or higher net in-migration rates of those 60 years of age and older, and would be included in the retirement destination classification created by the ERS (2005). Here they will be compared with what we have temporarily re-labeled “conventional retirement destinations” (CRDs). These are the remainder of ERS retirement

Table 17.1 Average population size and growth: URD, CRD, and non-RMD counties

	URD	CRD	Non-RMD
Average Population Size			
1950	15,829	20,388	53,999
1960	18,499	26,437	63,677
1970	22,570	33,701	71,626
1980	32,155	49,533	77,981
1990	41,564	65,810	82,423
2000	55,165	83,342	91,742
Average Population Growth			
1950s	12.6%	10.2%	5.7%
1960s	16.0%	15.7%	3.7%
1970s	38.5%	41.4%	12.4%
1980s	22.0%	22.1%	0.7%
1990s	28.9%	32.9%	7.7%

Source: US Census Bureau, Censuses of Population (1950–2000)

destinations that do not fit the requirements of the URD residual analysis. For comparison, we have also included all other counties (non-RMDs) that are not retirement destinations by the official classification.

The most obvious question is whether URDs are actually lower in natural and recreational amenities. The answer is not 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 regional in their distribution. Ranking regions by natural amenity scores, we find the West in the lead (3.60) followed by the South (0.37), Northeast (−0.01), and the Midwest (−1.75). The ordering is slightly different if we look at recreation counties. Again, the West leads (29%) with the Northeast (15%), Midwest (9%), and the South (5%) following behind. URD counties were selected 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 shown previously in Fig. 17.1). As such, they will appear to have very similar mean scores as CRDs when looking at an overall summary measure. However, we do note a variety of differences between the two groups. First, URDs tend to have smaller populations than either CRDs or non-RMDs. This can be seen clearly in Table 17.1, which may indicate a migration stream that is not driven by conventional amenity factors but rather by local particularities. In essence, a more typical draw would be likely to attract a relatively larger number of people.

Further, both kinds of retirement destinations have experienced population growth at much higher rates than non-RMDs (Table 17.1). This follows closely with findings in the literature which state that retirement destinations in general tend to be smaller, fast growing areas. This also supports the idea that being a retirement

Table 17.2 Percent change through net migration: older age groups

	URD (%)	CRD (%)	Non-RMD (%)
At ages 65–74			
1950s	7.3	15.9	–1.9
1960s	23.8	31.0	2.3
1970s	44.2	48.6	4.6
1980s	35.8	34.2	1.5
1990s	54.1	41.7	4.5
At ages 75+			
1950s	–3.4	0.0	–5.3
1960s	5.9	5.8	–1.7
1970s	12.3	9.9	–0.2
1980s	10.2	6.6	–0.2
1990s	24.1	8.5	–2.3

Source: Voss et al. (2004)

destination can coincide with other kinds of demographic and economic development. URDs and CRDs also have generally higher rates of in-migration at older ages. Here, their differences become more apparent (see Table 17.2). While both kinds of destinations have attracted, and still do attract, a high proportion of older people, URDs have drawn a greater proportion of older people (relative to their current stock) since the 1970s and 1980s. This is especially true for the 1990s. URDs also attract a relatively higher proportion of people in advanced age categories relative to younger-old retirees. What this means is that URDs are rapidly increasing their population of older adults, especially those most likely to require healthcare and social services, even without many of the capacity advantages that growing populations and recreational economies may offer to more conventional destinations.

Table 17.3 presents additional descriptive information for comparison. Here, we 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 further 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 US actually became proportionally younger during this period. This could be due to a number of things, such as a cohort effect. The generation prior to the baby boom, for example, was actually somewhat smaller than previous birth groups. 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 in-migration that often occurs in retirement migration destinations, as growing recreational and healthcare industries draw younger workers from surrounding areas.

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 percent of the population that is urban. This relates to the migration preferences of

Table 17.3 Additional descriptive statistics: mean scores for the 2000 period in URD, CRD, and non-RMD counties

Statistic	URD	CRD	Non-RMD
Population density (per sq. mi)	83	102	256
Area (sq. mi)	1,352	1,281	1,119
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 in poverty	13.00%	12.54%	13.84%
Median household income	\$36,561	\$37,090	\$35,111
ERS: farming county	5.56%	4.50%	15.50%
ERS: manufacturing county	11.11%	17.12%	30.97%
ERS: mining county	6.48%	1.20%	4.33%
ERS: government county	13.89%	11.71%	12.13%
ERS: services county	29.63%	23.42%	8.51%

Source: ERS County Typology (2005), ESRI Geographic Data (2006), US Census Bureau (2000)

people in very advanced ages. Previous research has shown that those in very old age categories tend to move toward more urbanized areas where access to health care services is greater (Bolender 2009). URDs are very similar to CRDs in attractiveness to the general population, as suggested by the percentage of people who lived outside the county in 1995. All three groups are fairly similar in terms of the population in group quarters, education, poverty rate, and median household income.

Several of the other ERS (2005) classification codes are also presented for comparison. URDs, in general, have a higher probability of being a farming, mining, government or services dependent county compared to CRDs. They are much less likely to be manufacturing dependent, however. What this indicates is that URD locations may possess a less diverse economic structure. Combined with already higher rates of older age migration and smaller overall size, this could be a recipe for future difficulties (Bolender 2010; Kulcsár and Bolender 2006).

URDs appear similar in some ways to more conventional retirement destinations but with real differences. They are physically larger with lower population density. The fact that they are also more urbanized indicates that they tend to either contain larger sized small towns or they may be adjacent to a metropolitan (metro) area that is experiencing sprawl. Statistics reflect this, as they are more likely than CRDs to be nonmetro but adjacent to a metro area. At the same time, they are proportionally older, aging more rapidly, experiencing greater growth in older age categories through migration, less economically diverse, and have lower relative natural amenity and recreation scores than other places in their region. This means that URDs may be gaining older people without many of the same positive benefits

associated with being a conventional retirement destination. In essence, they may be experiencing many of the community level challenges of retirement migration, without the associated benefits.

17.5 Survey Results

Results in this section will be somewhat limited. Regardless of the steps taken to avoid problems, the survey suffered from a poor response rate. The data collected was not sufficient for more complex statistical analyses. A total of 69 people responded to the survey instrument. However, 68% of the sample was older than age 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.

Further, 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 higher concentration of responses in Utah and Washington, with very few from South Carolina. Responses were fairly evenly divided between males (45%) and females (55%). Racial diversity was somewhat lower than would have been representative of the local populations (with whites making up 89% of the respondents). However, there were both black and Native American respondents. We found an interesting distribution in length of time people had lived in the community. About 19% had been there less than 5 years, 41% had been present for 5–20 years, and 40% had lived in the area over 20 years. Further, all education categories were represented, with 30% having a high school degree or less, 16% an Associate's degree, 30% a Bachelor's degree, and 25% a graduate or professional degree. Respondents were represented in many income categories, with the largest number falling in the \$20,000–\$40,000 range.

The bulk of the survey asked people to rate a variety of natural, recreational, economic, social, and cultural amenities. It also asked respondents to rank their communities on a variety of social and economic characteristics (on a scale from 1 to 7 with 7 being the most desirable). Though it is difficult to draw inferences, we found strong differences in the rank orderings, depending on location. For example, people in Utah rated their community highest on lack of traffic, general outdoor activities, and public safety while ranking job opportunities, general indoor activities, and casinos low. Missouri residents, 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 low. In general, people's responses varied by location (see Table 17.4). Due to the small sample and the lack of representativeness, however, we will not expand on these relationships here.

Finally, while engaged in the survey, several telephone interviews were conducted with survey respondents who could not or did not want to use the online form. During the course of those conversations, both the survey was filled out and the local situation was assessed in a more general fashion. The results from those conversations are in the interview data presented below.

Table 17.4 Significantly different ratings on amenities and community by URD location

Amenity	Significant
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/coos	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 (1-Cons and 7-Lib)	0.000
Community is non-religious vs. religious (1-Not and 7-Religious)	0.001

Source: Unconventional Retirement Migration Project Survey, Kansas State University (2007–2008)

17.6 Community Leader Interviews

Community leaders in URDs seem to know that they are retirement destinations. This is contrary to what one might 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 get their county classified 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 immediately apparent to most participants.

Regarding economic factors, respondents agreed that each area's strength included its moderate to lower cost of living. However, participants 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 available. At the

same time, these areas had limited access to national chain stores, and therefore had to pay higher prices at local shops. It was fairly common 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 closely connected to what was often cited as a local advantage. Participants often proudly proclaimed that they were “halfway between X and Y.”

Relative isolation raises a number of new questions. First, how much distance is required before a place can no longer be considered “adjacent” to a metro area by the people who live there? This is especially salient in rural areas where people are used to regularly driving long distances. Participants said that a majority of residents were willing to drive up to an hour and a half to reach the better shopping opportunities of metro areas. 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. People in Washington noted that they had easy access to metro areas unless the weather was bad. Unfavorable weather could easily block the roads and limit outside interaction.

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 proximate 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 to a neighboring town 20 miles away. This bus, however, only ran four hours a day. Further, this could be considered a “best case” situation. Several other communities complained that transportation was a very big problem in their area. By inference, then, the concentration of older in-migrants measured at the county level may mask important, localized, spatial distribution trends driven by transportation patterns, especially if there is a tradeoff between the cost of living and the presence of amenities, broadly defined.

Regardless of a community’s relative position on the natural amenities scale (McGranahan 1999), respondents in several locations proclaimed the scenic beauty of the area. However, the “beauty” took many forms, from the mountains of Washington to the deserts of Utah to the historical sites of Virginia. The residents’ perspective on their town was often further enhanced by tourism promotion and local activities in the area. For example, the architecture in the Washington community purposely resembles an “Old West” town. Every year they hold a festival that includes period clothing, dancers, and a re-enactment of a gunfight. The strategy is not unique. The site in Utah is known as the filming location for several very popular Western and science fiction movies featuring desert areas and has been host to a variety of film festivals.

We can draw two conclusions. First, conventional measures of natural amenities may be incomplete. Each location had much higher rates of older in-migration than would have been predicted from their region-specific natural amenity and recreation opportunity scores. High in-migration, in conjunction with local leaders’ claims to

great natural beauty, implies that the very concept of natural amenities should be expanded or reformulated to include more 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 in attracting tourists who may choose to relocate later in life. Participants in Virginia stated that many people visited the area to see and experience Civil War memorials and other US historical sites. Once there, they realized they liked other aspects of the community and the local environment. This, respondents said, then provided the impetus for future migrations.

For elders, access to health services matter. Here, too, stories varied widely. Residents of several communities seemed much less interested in the natural beauty of their area and instead cited their award winning hospitals, doctors, or nursing homes. The hospital in the Missouri community, for example, has a long list of awards. One participant in Vermont expressed surprise when she stopped to think presence of healthcare of some kind was a fairly consistent finding across the counties. Often health care services were not located directly in the town. In fact, people in several places needed to drive about 20 minutes to get to higher quality medical care. In all cases, though, there was both medical care in the vicinity and specialized medical care for the aged (either through assisted living, home care, or other means).

The fact that some “amenities,” like healthcare, may influence a place’s attractiveness even from a distance brings us to what we believe is one of the most important findings of this research. We 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. This means that important real-world relationships would not be found in the standard county level statistical analyses. Steps have been taken recently to expand methods of retirement migration research by controlling for the spatial autocorrelation present in migration destination research (Brown et al. 2011). In fact, 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 community was attractive, the biggest tourism sites (the most popular lakes, rivers, or historic tourist attractions) were often in adjacent counties. Hospitals could be up to a 30 minute drive away, possibly across county borders. Shopping opportunities had the longest reach, being mentioned as a local amenity even though they may be over an hour away. Healthcare and natural/cultural sites were only draws for relatively short distances (approximately 30 minute). In contrast, towns’ attractiveness seemed to increase substantially by virtue of being on a major road between metro shopping areas over an hour distant in each direction. 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. At the same time, these are not distinctions that are easily grasped through standard analyses based on county level data. Our findings indicate that the characteristics of a place and its surrounding areas can be far more impor-

tant and revealing than what is officially contained within the same administrative boundary.

17.7 Conclusions

Unconventional retirement destinations (URDs) are places that draw older movers yet do not seem to possess standard characteristics that one would expect to attract retirees. Some are actually rather similar to typical retirement destinations. For example, while descriptive analysis shows statistical differences between URDs and CRDs, many of these differences are not large. Survey respondents in each case study location rated several of these characteristics similarly. Several URD traits are often found in more conventional destinations: e.g., 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. Respondents in URDs tended to rank job opportunities, indoor activities, and the availability of shopping low, which would be an unusual response in a typical retiree destination. Residents also indicated that access to healthcare was fairly good in their URD locations, whereas conventional, fun-in-the-sun models say very little if anything about access to health services. Because of the rural and sometimes secluded nature of conventional retirement areas, in fact, health services may be somewhat limited. Further evidence for this is the fact that URDs are attracting a much older migrant group, on average. Since the need for medical and social assistance increases with age, if younger-old movers are drawn primarily to naturally and recreationally rich areas, then older-old movers may be moving to URDs to seek the services they need at prices they can afford. While the survey results have limitations, such findings reflect expected differences between retirement migration flows based on elderly stages of the life course (i.e., younger-old versus older-old).

Interviews with community leaders and residents helped to further clarify our picture of the situation. They did not describe an abundance of amenities within the county borders. Instead, they painted a picture of access to amenities by physical adjacency to an area that did have these characteristics. Some factors were often present in the county itself. 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. This is also true for shopping. Places could still be attractive if they were within an hour and a half of a metro area, provided that high quality transportation was also present.

Based on our results, we can say that URDs may be categorized into three thematic groups. First are Proximate URDs that are more or less 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 to locate closer to or further away from desirable amenities. Thus, Proximate URDs may not necessarily qualify as

unconventional destinations in the purest sense. The distinction encourages 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.

The second group is comprised of Need-based URDs that attract older migrants based on access to medical services and low local cost of living. Need-based URDs 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-old people who place a high priority on quality healthcare). Need-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 infrastructure will induce older in-migration. However, two important caveats should be mentioned. One is that this kind of migration flow will be different from what is generally perceived about retiree migrants. Migrants of more advanced age generally have fewer resources. As such, their contribution to local economic growth will be more limited. In fact, their healthcare or long-term care needs may outweigh their economic contributions. Retirees moving for healthcare may not be migrants driven by preferences but rather to seek assistance. Need-based URDs 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's drive. Need-based retirees may be attracted by lower living costs and quality healthcare, but they probably would like to remain in close proximity to their origin communities.

Finally, the third group consists of Unique URDs that became retirement migration destinations based on local peculiarities, including the historical location of certain cultural amenities or a particular type of natural environment. Given that these places owe their draw to historical accident, they can be considered outliers. Because of the historically specific nature of their attractions, their success would be very difficult to reproduce from a social engineering or community development perspective. On the other hand, the existence of Unique URDs may encourage local decision makers to look for place-specific characteristics capable of inducing retirement migration. In short, while there is no guaranteed prescription for success, neither is there an automatic recipe for failure. Unique URDs often have a decent amount of health services and fairly solid local business structures, but it is more likely that these things emerged as a response to the unique characteristics which made the place attractive to migrants in the first place. Further, processes which lead to attractive cultural characteristics generally need to have been in motion for quite some time. Policy makers would have to focus on capitalizing upon current characteristics as opposed to actively creating some new impetus to future migration. Conceptually, this is a different causal mechanism. Therefore, it would require a different policy approach, possibly more in the vein of marketing than community planning.

The future of retirement migration as a whole, and URDs in particular, is somewhat questionable. Though research has shown that retirement migration patterns remain roughly spatially consistent across time, recent economic, social, and cohort changes could drive very different retirement migration patterns in the future. Further improvements in life expectancy or shifts in the economy can also change the current typical ages when people move for amenity or Need-based reasons. If we are correct about URDs, however, several implications could be made regarding the relative outlook for each of the different types of retirement destination. For conventional retirement destinations, an examination of historical patterns shows that the same kinds of amenity rich areas have been receiving older migrants since at least the 1970s. The recessions of the 2000s decade, as well as later retirement ages and better health of older adults, may slow retirement migration in the near future. At the same time, the increase in the number of people reaching retirement age will likely offset this. In other words, similar to the phenomenon of population momentum, the unique impact of baby boomers' retirement may support the current trend in numbers, even though the relative rates of movement may change.

Future possibilities for unconventional destinations also vary. Proximate URDs may fare similarly to more conventional retirement areas, as the forces that create them are more or less a spatial extension of those that drive typical retirement migration. However, this will be strongly mediated (in both positive and negative ways) by future changes in the economy. Future recessions could force people to locate at a greater distance from the kinds of amenities they wish to enjoy during older age or hinder geographic mobility entirely. In this case, relocation to conventional destinations may decline, while movement to Proximate URDs increases. On the other hand, economic or policy changes that impact road construction, road maintenance, and transportation may negatively alter this trend. If local transportation infrastructure begins to suffer, the economic benefits of living farther away from amenities may be outweighed by the difficulties in gaining access to them. In this case, people would tend to move more toward the amenities themselves and, therefore, to more conventional destinations.

Need-based URDs probably will see the most volatile future in the coming years. Their attractiveness is tied to community development plans, demographic changes in the population, the presence and willingness of medical professionals to live and work in these areas, the general state of the economy, political decisions regarding healthcare and insurance, and changing social/cultural norms about familial care and responsibility. Changes in any of these factors may result both in altered trends and actual tertiary migration streams, as people who have already moved for necessity seek to move again in response to changing costs and access to services. While, as stated, we believe that these are the most likely kind of URDs to lend themselves to community planning and creation, they may also be among the most transient. In fact, given that people who move to these areas are most likely to be in more advanced stages of the aging process, attracting such in-migrants may also raise community capacity issues that are usually associated with areas that are aging in place. In sum, though there is the potential for economic gain by creating a Need-based URD, there is also a fair amount of risk.

Unique URDs, in contrast to the other two types, may be quite stable. Nemaha County, KS easily fits into this group. Their success in the presence of significant difficulties in the surrounding area points to the stability and peculiarity of unique URDs. The pull factors of these Unique URDs may be “recession-proof,” as their attractiveness may lie outside the realm of conventional migration streams. At the same time, though, we must acknowledge that idiosyncrasy does mean that the fortunes of URDs in this group may be extremely hard to predict. While a convergence of factors has seemed to create retirement migration where it is unexpected, an unexpected change in any one of those factors could lead to the collapse of the entire infrastructure. In this case, it would be difficult to tell without knowing the peculiarities of the local situation.

In the end, the definition of outliers always depends on how one specifies what is considered conventional. 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. Further research may expand our knowledge of retirement migration, however, by focusing on expanded spatial boundaries, different kinds of “amenities,” and differences in location decisions by migrant characteristics.

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Chapter 18

Elderly Immigrants in Rural America: Trends and Characteristics

Douglas T. Gurak and Mary M. Kritz

18.1 Introduction

United States (US) immigrants are typically viewed as newcomers living separate lives from Americans in their ethnically concentrated communities in large metropolitan (metro) areas. Although many immigrants who arrived in recent decades do indeed live in ethnic enclaves and most live in a few of the nation's largest metro areas—half lived in just 17 metro areas in 2000¹—historically a large share of America's immigrants settled in rural areas where immigrant numbers are again on the increase. In this chapter we focus on that growing subgroup within the foreign-born population, namely older immigrants living in rural areas,² and examine how they differ from their metro counterparts. It is well recognized that the elderly are the fastest growing population cohort in the US but not much attention has been given to the group of older Americans within that population who have the fastest

¹ The 17 metropolitan areas each had populations over 2.5 million and included Los Angeles, New York, Chicago, Philadelphia, Detroit, Washington D.C., Houston, Atlanta, Dallas, Phoenix, Boston, Orange County, San Diego, Nassau County, Riverside-San Bernardino, Minneapolis-St Paul, and St. Louis.

² We use the terms “foreign-born” and “immigrants” interchangeably. While the older foreign-born include some elders in the country on non-permanent visas who will leave eventually, it is reasonable to assume that the vast majority of them are legal residents of the US and thus can be considered permanent immigrant equivalents.

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growth rates, namely the foreign-born elderly (Passel and Cohn 2008; US Census Bureau 2004; He 2002). In general, older immigrants have been ignored by researchers with the exception of a few studies that have looked at their living arrangements and selected other demographic characteristics (Kritz et al. 2000; Greenwood et al. 1991; Kim and Lauderdale 2002; Wilmoth et al. 1997; Bogue and Kozloski 2009; Wilmoth 2001; Gurak and Kritz 2010). In addition, gerontologists have done research on the health, welfare and psychological well-being of elderly immigrants in the US (Binstock and Jean-Baptiste 1999; Angel 2003; Gorospe 2006) and Europe (Warnes et al. 2004). Other studies focus on older Asian and Latino or Hispanic ethnic groups, which include elders of both foreign- and native-born origin (Poston et al., Chap. 8 and Saenz et al., Chap. 7, this volume).

Given reports that immigrants are dispersing at a rapid pace to new destinations throughout the country, including to rural areas³ (Durand et al. 2000; Godziak and Martin 2005; Massey 2008; Zúñiga and Hernández-León 2005), it is timely to look closely at older immigrants who are moving to those places and assess how their origins, settlement patterns, health, and socioeconomic characteristics differ from their counterparts in metro areas. Most new immigrants now come from Asia and Latin America and, therefore, in this chapter we examine how they differ from Europeans who accounted for the majority of older immigrants in the past and who still are numerically large. In addition, the chapter highlights the diversity of the older immigrant population in its origins, settlement patterns, human capital, and health outcomes and describes how many of those differences stem from group differentials in immigration stage and entry modes. We also consider some of the challenges confronting older immigrants in rural areas and discuss how they differ from those faced by their counterparts in metro areas.

Before turning to these tasks, it is important to put US immigration into historical context. The US is currently experiencing its fourth immigration wave, which has been dubbed the Globalization Wave.⁴ The current Wave started soon after Congress passed the Immigration and Nationality Act in 1965 and differs greatly from earlier immigration waves in dynamics and composition. During the Colonization (1600–1820) and Frontier Expansion (1820–1870) Waves, most immigrants came from England, Germany, and Ireland and settled permanently on farms in rural America. As demand for workers increased in urban areas in the second half of the 1800s, immigrants from southern and eastern European countries were recruited to work in steel, meatpacking, construction and other industries in Northeastern cities. That immigration period (1880–1925) became known as the

³ Nonmetropolitan (nonmetro) areas are defined as “rural” in this chapter. This Census Bureau category includes both rural and urban places.

⁴ The current immigration wave is dubbed the Globalization Wave because the economic, social and policy factors that are connected to contemporary international migration flows are closely related to the improved international transportation and communication systems, capital flows, and other linkages that now bind countries together in an interdependent global system (Kritz and Gurak 2004). In contrast to earlier US immigration waves, contemporary international migration flows include large numbers of “temporary” migrants who spend a few years in the country before returning to their homelands or moving elsewhere. In addition to large numbers of unskilled migrant workers, globalization flows also include large numbers of students, businessmen, technocrats, artists, retirees, and others whose stays are usually temporary or seasonal.

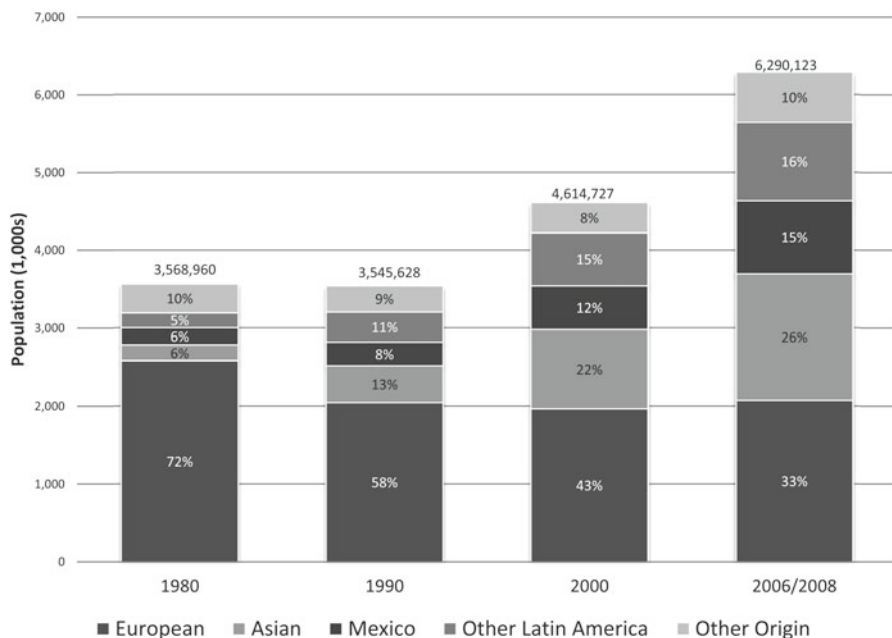


Fig. 18.1 Origin Composition of Older Immigrant Population, 1980 to 2006–2008 (Source: For 1980, 1990 and 2000, 5% US Census Public Use Microdata Samples (PUMS) were used. The merged 3-year American Community Survey is the source of the 2006–2008 data. All data files were obtained from IPUMS (Ruggles et al. 2010))

Industrialization Wave (Martin and Midgley 2003). Thousands of Chinese, Japanese and Asians from other countries also immigrated during this period to work in mining and building the Western railroads. About 25 million immigrants arrived in the decades at the turn of the twentieth century before anti-immigrant xenophobia led Congress to pass immigration acts in 1917, 1921 and 1924 that effectively shut down most immigration from eastern and southern Europe and Asia (Kritz and Gurak 2004; Martin and Midgley 2003).

Immigration slowed to a trickle from 1920 to 1965, which led Congress and others to assume that the era of large-scale immigration to the US had ended and that future immigration could be effectively controlled by policy.⁵ However, after passage of the 1965 US Immigration Act in response to calls that civil rights should be extended to immigrant selection, the numbers of immigrants from Asia, the Caribbean, Latin America, and elsewhere started to increase and continue increasing today due in large part to family reunification provisions stipulated under that Act. As a result, the numbers of elderly immigrants rose from 3.6 million in 1980 to 6.3 million in 2006–2008 (see Fig. 18.1). In addition, the composition of older immigrants started to shift away from their historic European origins⁶ toward a population that is highly diverse in

⁵ The idea that large-scale inter-continental migration had ended or could be effectively controlled by immigration policies was widespread in the post-World War II period (Davis 1947; Livi Bacci 1974).

⁶ We included elders from Europe as well as Canada, Australia and New Zealand in the “European” population.

origins. Today's older immigrant population has comparable numbers of European and Latin American elderly (33 and 31%, respectively); Asians, too, constitute a large share (26%) of that population and smaller numbers of older immigrants come from the Caribbean and Africa. Because Mexicans account for almost half of all older Latin Americans and are the largest group of older immigrants from a single country, they receive particular attention in this chapter.

In the 1990s, the older foreign-born population increased at a faster pace than native-born elders—30 versus 8%, respectively (Gurak and Kritz 2010; Passel and Cohn 2008). These differential growth rates, in turn, increased the foreign-born share of the elderly from 8.5% in 1990 to 12% in 2006–2008 (see Box 18.1 for information on Methodology and Data). Most of that growth occurred in metro areas, where 13%

Box 18.1 Methodology and Data

Statistics in this chapter are based on data from the 1980, 1990 and 2000 US Censuses, 5% Public Use Microdata Samples (PUMS) and the 2008 and 2006–2008 American Community Survey (ACS) PUMS files. Design and sample differences between the decennial and ACS PUMS files could affect sample estimates. Whereas the decennial samples are period estimates as of April 1 in the year of the census, the ACS single and multiyear samples have data collected continuously across time, including over a 3-year period for the latter. Therefore, ACS statistics are average values over the full data collection period and decennial census statistics are point-in-time values. For small populations and geographic areas undergoing change, ACS statistics may over or under represent trends. The Census Bureau administered the decennial long-form questionnaires to a 16% sample of the population and the ACS questionnaires to 2.5–3.0% samples annually; however, the largest decennial PUMS file only covers 5% of the population and the 2006–2008 ACS covers an estimated 4–5% of population housing units. Sample size differentials between the two sets of files can affect sampling error and estimate reliability, particularly for small population subgroups such as immigrants who come from different countries and live in dispersed geographic locations. Residence rules for the decennial censuses and ACS surveys also differ. The decennial census uses the “usual place of residency” rule but the ACS uses a 2-month residency rule. For the ACS, this means that estimates for population subgroups can vary widely depending upon the month when people are interviewed and whether the survey area has seasonal populations.

Neither the decennial nor ACS PUMS samples have information on specific rural and urban places in nonmetro areas where people live. The smallest geographic unit in PUMS files with individual data is the Public Use Microdata Area (PUMA). Although the county composition of PUMAs can be constructed and counties can be classified as rural or urban, it would be a time-consuming exercise to prepare a data file that classified all PUMAs

(continued)

Box 18.1 (continued)

as predominantly rural or urban. Even if that exercise were undertaken, one still could not determine the actual county in which people live. Metropolitan areas include at least one urbanized area with a population of at least 50,000 but outer parts of metro areas could be rural. In this chapter, we define elders living in nonmetro areas as “rural” based on the assumption that people living in urban areas with populations under 50,000 have characteristics that are comparable to those of surrounding rural residents rather than to those who live in metro areas.

Given the chapter’s focus on the characteristics of the older immigrant population in rural areas and origin diversity in that population, the analysis had to be limited to immigrant groups with sufficient sample numbers of elders in 2000 and 2006–2008. Eleven foreign-born origin groups satisfied that condition, including Europeans, Filipinos, Japanese, Indians, Koreans, Chinese, Other Asians, Mexicans, Cubans, Other Latin Americans, and Others. For each of these groups the sample sizes for rural elderly exceeded 100 in both 2000 and 2006–2008. Although European elders from different origins also have sufficient sample sizes (5,704) to permit further disaggregation, that is not done because they are highly assimilated and have characteristics comparable to native-born non-Hispanic whites. The European category also includes elders from Canada, Australia, and New Zealand. For Latin American origins, sample sizes range from 117 for Cubans to 2,397 for Mexicans; and, for Asians, from 137 for Chinese to 589 for Filipinos. The Other Origin category, which makes up 3.7% of the rural elder immigrant population, is a heterogeneous set of origins from the non-Hispanic Caribbean and South America, Africa, the Middle East, and Oceania. Ten origins constitute 60% of the Other Origin rural elderly category. In order of descending size, these origins are: Jamaica, Egypt, Haiti, Lebanon, South Africa, Trinidad and Tobago, Turkey, Brazil, Iraq, and Guyana. Statistics in the chapter were calculated for elders aged 60 and older. Elders living in group quarters are included in the sample but they are dropped for estimates of income characteristics.

of the population aged 60 and older was foreign-born in 2006–2008. Older immigrants in rural areas also increased by 26% but still only 3% of all rural elderly were foreign-born in 2006–2008.⁷ Whether older immigrants lived in rural areas, however, depended on where they came from. Twenty-one percent of European elders and 9% of Japanese and Mexican elders lived in rural areas. Filipinos and Koreans also had relatively high shares in rural areas, 4 and 3%, respectively, but only 1–2% of older immigrants from other origins lived in rural areas.

⁷ There were 228,191 older foreign-born in rural areas in 2000 and 288,130 in 2006–2008.

18.2 The Older Immigrant Population: Who They Are and Where They Live

Growth in the older foreign-born population has accelerated in recent decades for two reasons, namely many immigrants who arrived decades ago have aged into that population and growing numbers of immigrants are now arriving at older ages. The older immigrant population still includes many Europeans who came to the US during the Industrialization Wave or its subsequent decades as well as growing numbers of Globalization Wave immigrants who arrived after the mid-1960s and have now reached 60 years of age. Many of the latter have been admitted under family reunification provisions that allow citizens aged 21 and older to bring their parents to the US. While this provision is only available to foreign-born who have become naturalized citizens, permanent immigrants can apply for citizenship after 5 years of US residence and immigrant families increasingly use this provision. American Community Survey (ACS) data indicate that 24% of all older foreign-born in the 2006–2008 period arrived after reaching 50 years of age; the comparable figure from the 1990 decennial census data was 21%. Immigrant groups from some origins, however, are more likely to arrive at older ages than others. For instance, 37% of older Asians and 24% of older Latin Americans entered the US after age 50 compared to 14% of Europeans. The higher arrival ages for Asians could be related to the relatively high naturalization rates and resource levels that characterize older immigrants from that region. Asian societies also have cultural norms that dictate that children should care for their elderly parents (Burr and Mutchler 1993; Martin 1988; Kamo and Zhou 1994; Tsuya and Martin 1992; Domingo et al. 1993).

The compositional shift of elderly immigrants away from their historic European roots toward the Latin American and Asian origins of Globalization Wave immigrants is occurring in rural as well as metro areas but to a lesser extent in the former. As recently as 2000, 58% of older rural immigrants were from Europe, Canada, Australia or New Zealand (henceforth referred to as European), but by 2006–2008 the share of rural elderly from those origins had declined to just under 48%. In metro areas, in contrast, only 32% of older immigrants were of European origin in 2006–2008. During the same interval the share of older rural foreign-born from Latin America increased from 26 to 33%, and the share from Asia increased from 13 to 15%. Mexicans constitute the largest share of older rural Latin Americans followed by Cubans and Colombians; however, Dominicans are not to be found in rural areas. Among older rural Asians, Filipinos are the most numerous (5.3%) followed by Japanese, Indians and Koreans.

There are also sharp differences across older immigrant groups from different origins in the number of years they have lived in the US and in their age structures. Not surprisingly, elderly from Europe have deep historic roots and have lived in the country longest, while most Asian and Latin American elders have shorter residence histories. In addition, older rural immigrants from all origins except Mexico have lived in the country longer than their metro counterparts and some arrived decades ago. For instance, older rural immigrants from Europe, Japan and Cuba

have lived the most years in the US, 49, 44, and 41 years, respectively, have the lowest average ages at arrival (24, 29, and 31 years, respectively), and have the highest percentages of elders older than 70 years of age (54, 64, and 49%, respectively). Because immigrant age structures reflect immigration timing and dynamics, these patterns are consistent with the fact that Europeans, Japanese and Cubans started immigrating to the US decades before other groups and were more likely to immigrate in family units rather than as individuals.

Immigrant groups differ in their settlement patterns within the US (Kritz and Gurak 2001). In the 2006–2008 period, most rural native-born elderly lived in the South (45% of them) but among older immigrants percentages there ranged from a high of 71% for Cubans to a low of 19% for Filipinos. The latter lived mainly in the West (69%), particularly California (49%), as well as Hawaii, Illinois and New York. Given the large size of the Mexican immigrant population—11.5 million in 2006–2008—small pockets of Mexicans have sprung up in rural places throughout the country in recent decades but most Mexican foreign-born still live in Texas (27%) and California (46%). Older Mexicans in rural areas, on the other hand, are more concentrated in Texas (39%) than they are in California (17%) (Saenz et al., Chap. 7, this volume). The composition of older immigrants also varies across states. For instance, almost all older rural immigrants in Texas were Mexicans—84% of them, while in California 55% were from Mexico and 30% from Europe. Older immigrants in New York, on the other hand, were primarily Europeans (72%) or from other countries in the aggregated elder categories (Others, Other Latinos). Only 0.3% of New York's rural elderly were from Mexico. In Florida, 11% of all older rural immigrants were from Cuba followed by ones from Other origins (10%), Other Latin Americans (8%) and Mexicans (7%).

18.3 Living Arrangements of Rural Elderly Immigrants

A rich literature documents large differentials in living arrangements between native and foreign-born elderly (Gurak and Kritz 2010; Burr and Mutchler 1992, 1993; Kamo and Zhou 1994; Kritz et al. 2000; Wilmoth 2001; Wilmoth et al. 1997; Blank and Torrecilha 1998; Lubben and Becerra 1987; Mutchler and Frisbie 1987). A principal finding of that literature is that older Asians and Latin Americans are more likely to live in extended family households than older Europeans or natives. While ethnic group differentials hold up across generations, extended living is far more common among immigrants, particularly for those from Asian origins, than it is among their native-born ethnic counterparts (Gurak and Kritz 2010). We are unaware, however, of any studies that have examined whether living arrangements also differ for elderly from different origins who live in rural versus metro areas. Spatial assimilation theory suggests that independent living should be more common in rural areas because immigrants living in dispersed areas will have adopted socio-cultural patterns similar to those of natives (Alba and Nee 2003; Gordon 1964; Massey and Mullan 1984). In the case of living arrangements, this means that older

immigrants in dispersed areas should be more likely to live independently with spouse only or on their own than their metro counterparts. In support of those ideas, Gurak and Kritz (2010) found that levels of extended living among older immigrants were lower among foreign-born who lived in dispersed areas, immigrated at younger ages and spoke English fluently.⁸

The classification employed in the Gurak and Kritz study (2010) was based on a detailed assessment of relationships among all persons living in households that had any person 60 years of age or older; households were classified as extended if they had adult relatives other than spouses or, in addition to spouses, young adult children, grandchildren, or others. We used that same classification in this analysis and found that both foreign- and native-born in rural areas are less likely to live in extended households than those in metro areas (Table 18.1). At the same time, older Asian and Latin American immigrants are more likely to live in extended households in both areas than Europeans or natives. There are also sharp differences across Asian and Latin American groups in levels of household extension. Extension levels range from 41% for rural Indians and 37% for rural Filipinos to only 10% for older Koreans and Japanese. Among older Latin Americans, Cubans have the lowest extension levels (18%) while older Mexicans have the highest levels (33%).

18.3.1 *Assimilation*

The observed group differences in household extension are consistent with spatial assimilation theory. Immigrants who have spent more time in the US should be more assimilated because they have had more time to learn English and pick up other knowledge about the US way-of-life. The low extension patterns for older Koreans and Japanese fit this pattern well in that relatively few of the elderly in those two groups arrived at older ages. In contrast, other immigrant groups such as Filipinos that have higher extension levels also have more elderly members who immigrated after age 49. However, if older Filipinos did arrive after reaching 50 years of age, they were more likely to live in extended households. A similar pattern was found for other origin groups, including Europeans who have relatively few elderly who immigrated at older ages; but if Europeans did arrive after age 49, they were more likely to be in extended households. Cubans are another example. They started arriving in the 1960s, shortly after the Cuban Revolution, and they too have relatively low household extension levels except for the small numbers of older Cubans who came more recently. Older immigrants who arrive at older ages are probably more likely to live in extended households because they are usually admitted under the family reunification provisions in US immigration law, which stipulate that families who sponsor parents or other aliens have to support them financially for several years after they arrive (Angel 2003; Gorospe 2006).

⁸ Dispersed areas were defined in that study as metropolitan areas with small numbers of co-ethnics or as nonmetro areas.

Assimilation, on the other hand, is associated with independent living arrangements because elders who live on their own need to manage their daily affairs without the assistance of family members and to do so requires English language skills and some basic knowledge about who to call and where to go for health, social, and transportation services. Language skills are particularly important for older immigrants living on their own in rural areas because they are unlikely to have access to bilingual and other language services. While there are a large number of non-governmental organizations (NGO's) including churches, legal aid societies and other organizations that assist immigrants in metro areas, similar NGOs, with the exception of churches, are largely absent in rural areas. Consistent with expectations, the statistics in Table 18.1 show that older immigrants in rural areas are more assimilated than their metro counterparts but that pattern depends on their national origins. Although older rural immigrants as a whole are indeed more likely to speak English only or very well, defined here as fluent—59% of them versus 44% of metro elderly—fluency levels ranged from a low of 14% for Mexicans to a high of 89% for Europeans; over half of older Filipinos, Japanese, and Indians were fluent but only 36% of Other Asians.⁹ Many of the non-English speaking Mexicans live in southern Texas and other counties along the USA/Mexico border where a large proportion of the total population speak Spanish at home (Kritz and Gurak 2004).

Spatial assimilation theory leads us to expect higher naturalization rates among immigrants in rural areas. That pattern indeed occurs for older immigrants from Japan, India, Korea, China, and Other Latin American countries, but overall naturalization rates are lower for all older immigrants in rural areas—67% of the latter are naturalized in rural areas versus 71% in metro areas. The discrepancy between the averages for all foreign-born elders and those from different origins occurs because older Mexicans in rural areas are considerably less likely to be naturalized than older immigrants from other origins or compared to their metro counterparts. Only 44% of older Mexicans in rural areas are naturalized compared to more than 66% of elders from other origins. The low Mexican rates in combination with their large population size pulls down the total foreign-born average.

18.3.2 *Intergenerational Households*

Another dimension that differentiates older immigrants in rural and metro areas is the prevalence of mixed generation households or households that have one or more native-born members in addition to a foreign-born elder. In the 2006–2008 period, almost two-thirds of older rural immigrants lived in households that had at least one native-born member compared to just 51% of those who live in metro areas. Fully 87% of older rural Japanese lived in mixed generation households, followed by 60–67% of Koreans, Filipinos, Other Latin Americans, and Others. Older rural

⁹ Most immigrants in the rural Other Asian group are from Vietnam, Laos, Indonesia, Iran and Thailand.

Table 18.1 Descriptive statistics for older immigrant population (age 60 and older), 2006–2008

	Demographic					Region					Assimilation					Socioeconomic							
	Population (000s)	% Metro/non-metro	Age	% Older than 70	Years in US	Age at arrival	% Arriving after age 49	Northeast	Midwest	South	West	% in extended households	% Mixed generation households (HHs)	HHs, spouse-only	% English fluent	% Naturalized citizens	% no high school degree	% 4 years college	% Receiving social security	Mean household income	% with household income in poverty	Mean number of disabilities (0–5)	
Nonmetropolitan																							
Total foreign born	288	5	71	46	41	30	15	3	13	17	38	33	21	64	55	59	67	40	17	67	56,072	15	0.67
Europe	137	21	73	54	49	24	7	4	20	21	31	28	12	71	66	89	76	18	21	77	57,991	9	0.68
Philippines	15	4	70	38	33	37	26	3	4	10	20	66	37	64	44	51	76	37	26	60	78,128	4	0.67
Japan	7	9	73	64	44	29	4	3	10	27	27	37	10	87	88	52	73	25	10	84	50,912	6	0.62
India	5	2	69	35	29	40	27	3	16	23	50	10	41	43	20	61	75	12	64	43	144,261	7	0.60
Korea	5	3	68	28	34	34	13	1	6	31	41	22	10	66	61	49	81	24	24	61	66,564	10	0.27
China	4	1	69	36	35	34	21	1	18	16	26	40	27	52	44	45	85	13	53	54	80,897	4	0.46
Other Asia	9	2	69	33	28	41	31	4	12	34	34	20	30	49	35	36	70	42	23	50	76,254	19	0.44
Mexico	81	9	70	40	34	36	24	2	1	9	48	43	33	57	29	14	44	83	3	58	38,669	29	0.97
Cuba	4	1	72	49	41	31	14	8	13	8	71	8	18	48	35	53	77	40	20	66	65,420	15	0.58
Other Latin America	11	2	70	36	35	35	20	2	14	15	49	22	30	61	46	48	67	36	19	53	59,113	18	0.48
Other	11	2	69	38	37	33	16	4	18	16	46	20	12	67	59	81	75	25	36	56	73,350	14	0.39
Native born	9,496	21	72	50	72	0	-	5	9	32	45	14	11	2	2	99	-	25	15	78	49,299	11	0.76

Panel 2	Demographic										Region										Assimilation										Socioeconomic									
	Population (000s)	% Metro/non-metro	Age	% Older than 70	Years in US	Age at arrival	% Arriving after age 49	% in group quarters	Northeast	Midwest	South	West	% in extended households	% Mixed generation households (HHS)	% Mixed generation HHS, spouse-only	% English fluent	% Naturalized citizens	% no high school degree	% 4 years college	% Receiving social security	Mean household income	% with household income in poverty	Mean number of disabilities (0-5)																	
Metropolitan																																								
Total foreign born	6,004	95	71	45	35	36	25	2	26	10	28	36	33	51	30	44	71	36	22	56	71,450	14	0.68																	
Europe	1,941	79	73	54	44	29	14	3	36	16	22	25	16	53	42	68	79	23	24	69	70,869	11	0.58																	
Philippines	361	96	70	40	28	42	37	2	12	8	13	66	48	50	19	55	77	17	44	48	98,527	6	0.54																	
Japan	70	91	72	56	42	30	9	2	11	9	19	60	19	75	67	46	71	16	20	71	73,608	8	0.42																	
India	196	98	68	31	24	44	41	1	30	18	28	24	50	48	7	52	68	21	53	36	125,689	6	0.57																	
Korea	164	97	69	36	29	41	26	2	20	9	21	50	27	33	15	20	74	24	35	50	71,468	17	0.52																	
China	334	99	72	50	27	45	44	2	31	7	10	52	43	41	9	18	72	38	29	48	82,022	17	0.62																	
Other Asia	451	98	69	37	24	45	39	1	14	8	23	55	46	44	14	23	75	35	24	41	81,824	14	0.74																	
Mexico	859	91	69	37	35	35	21	2	1	9	29	60	45	64	27	17	50	75	4	52	52,222	20	0.77																	
Cuba	354	99	73	55	35	38	22	3	11	2	81	6	34	30	9	23	79	40	17	68	52,305	20	0.87																	
Other Latin America	641	98	70	39	30	40	29	1	37	4	32	26	44	51	21	26	62	43	14	47	61,271	16	0.64																	
Other	632	98	69	37	30	39	27	2	44	8	33	15	36	51	22	67	72	31	21	49	72,892	14	0.64																	
Native born	36,623	79	72	48	72	0	-	4	21	22	36	21	14	4	4	98	-	17	23	73	68,251	8	0.65																	

Source: 2006-2008 American Community Survey (ACS) and 2008 ACS PUMS file (for disabilities only)

Cubans, Other Asians, and Chinese were least likely to live in households with one or more native-born persons (Table 18.1). Because this statistic was calculated for all foreign-born elders, regardless of when they arrived, some of the native-born members could be their own children who were born in the US. Another possibility is that some of the mixed generation households could involve intermarriages between native and foreign-born elders. This second possibility was assessed by examining households in which the only other resident was the respondent's spouse. In those households, more than half (55%) of the total older foreign-born were married to natives in rural areas compared to just 30% in metro areas. The origin intermarriage levels in rural areas ranged from highs of 88% for older Japanese and 66% for older Koreans to lows of 20% for Indians, 29% for Mexicans, and 35% for Cubans and Other Asians. In general, older immigrants from all origins including Mexico have higher intermarriage rates in rural than in metro areas.

18.4 Education and Socioeconomic Characteristics of Older Rural Immigrants

Insights into older immigrants' social well-being can be gleaned by examining their human capital resources. Education and income are standard indicators of human resources that reflect knowledge about how people face daily living challenges, including whether they are able to take advantage of community resources and services as well as whether they can purchase needed goods and services. In general, natives living in rural areas have lower levels of education and income than their metro counterparts. Given that housing and cost-of-living are lower in rural areas, they are attractive places to live for people with limited socioeconomic resources. At the same time, large differentials in socioeconomic resources between rural and urban residents and across immigrant and other ethnic groups do have implications for living standards and quality of life.

Although elderly immigrants in rural areas are less likely to have completed high school than native rural (40 versus 25%, respectively) or metro elders (40 versus 36%, respectively), that pattern does not hold for older immigrants from Europe, India and China, which suggests that group-specific sorting mechanisms are at work which channel low-skilled immigrants from some origins to metro areas and others to rural areas. For instance, older Indians and Chinese who lack high school degrees are disproportionately concentrated in metro areas and probably dependent on employment in restaurants or other businesses located in ethnic enclaves while their compatriots in rural areas are more educated and probably drawn to those areas for professional employment. On the other hand, low-skilled Mexicans are concentrated in rural areas, and many of them were drawn there to fill low-skilled employment niches in agriculture and food processing (Kandel and Parrado 2004, 2005; Zúñiga and Hernández-León 2005).

Other education patterns are of interest. For instance, while older natives are disproportionately clustered in mid-level education categories in that they have

completed high school, attended some college but lack a 4-year degree (60%)—only 43% of all older foreign-born had that education profile. Instead, a bifurcated education profile characterizes older immigrants in both geographic areas. Nonetheless, there are some groups such as Indians and Chinese in which the majority of the older population hold a college degree and others such as Mexicans in which the majority lack even a high school degree. Older Indians have the highest levels of college education in both rural (64%) and metro (53%) areas. Rural Chinese elderly also have high levels of college completion (54%) but not their metro counterparts (29%). Mexican elderly, on the other hand, stand out as a particularly disadvantaged group, given that only 3% have a college degree and 83% lack a high school degree.

Immigrants' education profiles are shaped by their age and immigration period. Because European elderly are older on average than Asian and Latin American elderly, they have fewer college-educated than many of the Asian and Latin American groups whose immigrations started more recently. That pattern occurs both because education levels have increased considerably in Asia and Latin America from what they were three to four decades ago and because of positive selection from most Asian countries. Nonetheless, most foreign-born who arrived at older ages have lower education levels than those who arrived as children or during their early productive years because they come from countries that have lower literacy rates and education levels than the US. Among rural foreign-born elderly who immigrated later in life, 58% do not have a high school degree compared to 36% of the elderly who arrived at younger ages. At the other end of the educational distribution the story is the same: 18% of rural foreign-born elderly who immigrated prior to the age of 50 have 4-year college degrees, but only 12% of those who arrived at older ages. This pattern holds for all origin groups with two exceptions: age at arrival makes little difference for the educational attainment of Mexicans, and Europeans who arrived at older ages have higher percentages with college degrees (26 versus 20%).

18.4.1 Income and Poverty

Reports on the income status of older immigrants typically mention that “the poverty rate is higher for the older foreign-born than for the native population” (He 2002, p. 9). Binstock and Jean-Baptiste (1999) and Nam and Jung (2008) argue that because older immigrants have lower income, they need access to US welfare assistance. However, the analyses on which those reports were based drew on national level data and did not discriminate between older immigrants from different origins. In order to assess availability of economic resources to older immigrants from different origins, we calculated group differences for three income measures: Social Security income, total household income and poverty status. Social Security income is measured at the individual level and indicates the percentages of older immigrants receiving it. The other two income measures are calculated at the household level in

order to avoid problems of “hidden” income which occur when one person in the household is dependent on the income of others.¹⁰ Household annual income specifies the total cash inflow from all sources but is vulnerable to bias due to variations in household size. The poverty rate takes family size into consideration and measures the percentage of family groups who were in poverty in the past calendar year. Families were classified as in poverty if their income was lower than the poverty threshold set by the Census Bureau based on cost-of-living, household size and place of residence.

Many immigrants arrive at older ages, never enter the labor force, and thus are not eligible for Social Security. This pattern occurs more frequently in metro than rural areas—67% of older rural immigrants receive Social Security income compared to 56% in metro areas. National foreign-born averages, however, disguise sharp origin group differentials. For instance, older Japanese are more likely than older natives to receive Social Security in rural areas, 84 and 78%, respectively, while older Europeans have rates comparable to natives (77 and 78%, respectively); in contrast, only about half of Chinese, Other Asians and Other Latin Americans receive Social Security. Older rural Indians are least likely to receive Social Security income—43 versus 36% in metro areas.

Given that many older immigrants have no Social Security income, it is important to look at other household income resources because they often live in extended households with other adults. The statistics in Table 18.1 indicate that older immigrants are more likely than natives to live in households with higher incomes in rural areas, \$56,072 versus \$49,299, respectively, and that pattern holds for elders from all origins except Mexico. The rural Mexican household income of \$38,669 is considerably below the household incomes of natives and other immigrants. There are also large income differentials among Asians. For instance among older rural Asians, average household incomes ranged from a low of \$50,912 for Japanese to a high of \$144,261 for Indians. Asian origin groups with high incomes also tend to have an education advantage over older immigrants from other origins because many of them came to the US as university students and then stayed on after receiving their degrees. Some Asians also completed their studies abroad before migrating on work-related visas which tend to be granted to scientists, technical workers, engineers, and mathematicians. Rural Cubans and Other Latin Americans also have relatively high household incomes, \$65,420 and \$59,113 respectively, as do European immigrants (\$57,991). As expected, the average household income for all older foreign-born is higher in metro than rural areas, \$71,450 versus \$56,072.

These rural household income statistics do not provide much support for the disadvantaged immigrant thesis except for older Mexicans. But, given that Mexicans are the second largest origin group of older immigrants in rural areas, that finding is worrisome. The percentage of older Mexicans living in families below the poverty

¹⁰ We cannot be certain that all household members have access to household income but the assumption is that they do.

threshold reinforces this concern, given that 29% of them fall within that category. While older rural immigrants are more likely than natives to live in poor households (15 versus 11%, respectively), if Mexicans are removed from that category, the percentage falls to 10% for older immigrants from other origins. Older Other Asians, Other Latin Americans, and Others also have higher percentages in poverty in rural areas than natives. Consistent with the household income statistics, older Asians from most origins are less likely to live in poor households. It is clear based on the income and poverty threshold statistics (see Table 18.1) that it is important to calculate economic indicators for older immigrants from different origins or, at the least, to differentiate between levels for Mexicans and other older immigrants because Mexican averages lower the total foreign-born average.

The statistics examined provide some support for the idea that the foreign-born and natives may find it advantageous to live in rural areas because housing costs, including those for nursing homes, are lower there, which means their household incomes stretch further than they do in metro areas. Although the differentials are small, Table 18.1 statistics indicate that the elderly, native and foreign-born are slightly more likely to live in group quarters in rural than metro areas. In addition, that pattern holds for 8 of the 11 origin groups. Older Cubans in rural areas have the highest group quarter presence (7.8%). Older Koreans and Chinese, on the other hand, are the least likely to live in group quarters (only 1% do so). Although census data do not permit us to evaluate why people live where they do or to determine whether they have relatives nearby, it would be important to explore those issues further.

18.5 The Health Status of Older Immigrants¹¹

Studies of the health of older immigrants have generally found that they are positively selected in terms of health conditions but Bogue and Kozloski (2009) found that more recent arrival cohorts have lower health status. They speculate that this may be due to compositional shifts in immigrant origins as well as to socioeconomic differentials between recent and more established immigrants. Because origin and socioeconomic diversity within the older foreign-born population has already been discussed, we focus in this section on origin differentials in health status and how those patterns vary by place of residence. A five-item additive scale is used to measure physical or cognitive limitations. The scale items indicate whether older persons had difficulties in cognitive functioning, ambulatory movement, independent living, daily self-care, or vision acuity (Cronbach's alpha for the 6 value scale is .79).

In 2008, the health limitation statuses of foreign- and native-born elderly in rural areas were comparable but that pattern masked substantial origin differences among

¹¹ The 2006–2008 ACS PUMS file is used for most statistics in the paper but due to changes in the measurement of health status across ACS years, the multiyear file does not include measures of health status. Consequently, the 2008 ACS is used in this section to describe health status.

immigrants. While there was a 0.16 point spread between foreign- and native-born elderly on the health status scale in 2000 (.75 for foreign-born and .91 for native-born elderly), by 2008, health scores for both populations had improved and the gap had decreased (.67 for foreign-born versus .76 for native-born). That finding is consistent with research showing that health conditions are improving among the elderly and that fewer have disabilities (Crimmins et al. 2009). However, caution is advised in interpreting these trends due to the substantial differences in sample design and size in the 2000 decennial and 2008 ACS files that are used here. Of interest is the finding that, except for Mexicans, older rural immigrants had fewer health limitations than natives in both 2000 and 2008. However, that pattern did not hold for Mexicans. In rural areas, older Mexicans had nearly twice as many limitations as immigrants from other origins. While older Mexicans in metro areas have fewer health problems (0.77) than their rural counterparts (.97), they still have more than older Asians or natives.

Network migration theory suggests that immigrants who come to the US under family reunification provisions may be less positively selected with regard to health because their migration is facilitated and buffered by the resources of earlier migrants (Fussell and Massey 2004). We explored this possibility by examining the health status of older immigrants who arrived in the US for the first time at age 50 or older and found that older rural immigrants who arrived at younger ages did indeed have fewer limitations, 0.62 on average compared to 0.90 for those who arrived at older ages. The differentials were comparable in metro areas (0.57 for pre-age 50s versus 0.99 for older arrivals). The poorer health status of those who immigrated at older ages holds for all immigrant groups in metro areas and for all but three groups in rural areas—older Indians, Japanese and Cubans who immigrated after age 49 have fewer disabilities than their counterparts who arrived at younger ages. These exceptions may stem from their different socioeconomic profiles and migration histories. For Asian Indians the explanation may have to do with their high education and income levels and their very high tendency to utilize family reunification to bring elderly parents to the US (Gurak and Kritz 2010). Given that Indians have one of the highest socioeconomic profiles, it is likely that most of the older Indians brought by their children to the US are from India's large and growing upper middle classes. While that is not necessarily the case for Japanese who come at older ages, those elders come from a "developed" society that has better diet and health services than the US. Older Cubans too come from a country that has relatively good health indicators.

18.6 Discussion

Older immigrants are now the fastest-growing subgroup of America's elderly population but given that they come from different countries that have distinctive socioeconomic, health, assimilation, and living arrangement profiles, they defy simple description. Although most older immigrants continue to live in metro areas, their

numbers in rural areas are growing rapidly. Older Europeans¹² are still the largest subgroup of rural elderly, albeit a rapidly shrinking one, and include many immigrants who grew older in America, as well as immigrants who arrived in recent decades. The Asian and Latin American segments of the rural elderly, in contrast, are mainly recent arrivals. Mexicans and Filipinos constitute the two largest groups of older immigrants from those regions followed by Japanese, Indians, Koreans, Chinese and Cubans. There is considerable heterogeneity in social and economic characteristics among older Asians and Latin Americans from different origins but the major cleavage occurs between Mexican and other immigrant elderly. Undoubtedly, some older immigrants from Central America, the Caribbean, and elsewhere who are included in the “Other Asia,” “Other Latin America,” and “Other” aggregated categories used in this analysis may have socioeconomic profiles comparable to Mexicans, but to examine their characteristics in detail would require more sample cases than are available in ACS files.¹³

Our analysis supports spatial assimilation perspectives which hold that immigrants who settle in suburbs, smaller metro areas, and nonmetro areas or away from the major metro gateways such as Los Angeles, New York, and Miami will possess more of the characteristics typical of the native-born population, namely English language fluency, independent living arrangements, and middle class education and income levels (Massey and Denton 1987; Iceland 2009; Alba and Nee 1999). Among the 11 immigrant groups examined in this chapter the rural elderly are more assimilated than their metro counterparts on most indicators, particularly if they came to the US when they were relatively young. Our analysis indicates that, with the exception of Mexicans, the rural elderly are more likely than their metro counterparts to have lived longer in the US, to speak English only or very well, to live in households that had at least one native-born member, and to be married to a US citizen. In addition, older rural immigrants from non-Mexican origins have higher levels of college completion and income and lower levels of health limitations than their metro counterparts or rural natives. Except for Mexicans, most Older Asians and Other Latin Americans have higher naturalization rates, if they live in rural areas.

While aging in place is the major mechanism that has contributed to the growing numbers of older immigrants in rural America, two policy modes—family reunification and refugee admissions—have also been important in that growth. For instance, the bifurcated education profiles of older rural Filipinos, Other Asians, and Other Latin Americans likely occur because 20–31% of them came to the US at older ages to join their adult children who immigrated years earlier. Permanent immigrants are eligible to apply for naturalization after 5 years and then, once naturalized, they can petition to have their parents admitted as immediate relatives. Our analysis indicates that Filipinos, Indians, Other Asians, Chinese, Mexicans, and other Latin Americans have

¹² In order of population size, 64.3% of rural European elders are from Canada, Germany and Great Britain.

¹³ Other elderly that are believed to have lower socioeconomic status include Guatemalans, Salvadorans, Nicaraguans, Haitians and Dominicans.

relatively high shares of older immigrants who arrived after age 49, most of whom have lower education levels than their counterparts who arrived earlier. Filipinos, for instance, are a relatively well educated and prosperous group of older immigrants but if they arrived at older ages, 50% have no high school degree and 65% live in extended households. In addition, small numbers of Vietnamese, Cambodian and Laotian refugees of lower socioeconomic status were settled in rural areas by refugee resettlement agencies. Refugees are generally less positively selected than other immigrants because they are fleeing persecution in their homelands.

The growth of the older Mexican population in rural areas, on the other hand, has probably been fueled by the fact that Mexico and the US share a highly permeable land border and a long history of unregulated cross-border movements. Because it was relatively easy to cross that border in the past, Mexican immigrants as a whole are less positively selected than other US immigrants. Older Mexicans share their compatriots' lower socioeconomic characteristics and stand out as a disadvantaged population relative to natives or other older immigrants. On every indicator examined, older Mexicans compared unfavorably. They were less likely to speak English, to live in mixed generation households, or to be naturalized than their metro counterparts. They also had relatively low levels of educational attainment, low household incomes, and high poverty levels. Because older Mexicans are more likely than older Asians and other Latin Americans to live in rural areas and they are less assimilated than older Europeans who constitute the largest number of older immigrants in rural areas, they should be monitored closely.

That monitoring effort should pay greater attention than we have here to state variations in the characteristics of older rural Mexicans, given that the latter are largely concentrated in Southwestern States, particularly Texas and California. In Texas, where 39% of older rural Mexicans live, 36% lived in households with incomes below the poverty threshold, but, in California where 17% of them live, only 19% fell below the poverty line. Moreover, older rural Mexicans residing in new destination states differ considerably in their exposure to poverty with the percentage below the poverty line ranging from 50% or higher in the Carolinas to under 10% elsewhere (Nebraska, 5.4%; Colorado, 5.4%; and Oregon, 9.8%). These differentials in poverty levels for older rural Mexicans suggest that it would be ill-advised to utilize national level poverty indicators and assume that they can be applied equally to all parts of the country. Given that states and counties are the major government units that administer poverty, health and welfare programs for the elderly, Texas, California and other Southwestern and Western states will ultimately have to address the needs of older Mexicans in their states because that is where the majority of older Mexicans live. If those states can do a better job of meeting the needs of elderly Mexicans, then that group's national indicators will improve significantly.

Although older immigrants from other origins have relatively advantaged national profiles that compare favorably to those of their metro counterparts and older natives, their socioeconomic profiles also vary across states and thus should be closely monitored. For instance, older rural Filipinos who live in Hawaii have lower education and income levels than Filipinos living elsewhere in the country. This pattern is likely due to the unskilled labor recruitment that brought many Filipinos

to Hawaii prior to the Globalization era and also to Hawaii's high degree of spatial isolation from the rest of the US. Other smaller immigrant subgroups that are highly concentrated in 1–2 states could be a source of concern. Dominican immigrants, for instance, are heavily concentrated in New York City (33%), have higher poverty rates than other groups, and are less assimilated (Gurak and Kritz 1996).

National level analyses of the older immigrant population often point to their disadvantages relative to natives (Nam and Jung 2008; Binstock and Jean-Baptiste 1999; He 2002). However, our analysis shows considerable national origin diversity within that population in social, economic, health and other characteristics. While older Mexicans and many other older immigrants fit the disadvantaged profile, that pattern is most likely to hold for those who came to the US at older ages. Our analysis indicates that immigrants who arrive at older ages, regardless of origins, are less assimilated and more dependent on their families for social and economic support. For most extended immigrant households, that should not be a problem because of their strong family bonds and cultural heritages that encourage families to support their elders. Concerns have been raised, however, that immigrant elders with few or no social ties to Americans or communities can be exploited by their families who may expect them to be fulltime caregivers or housekeepers (Lee and Shin 2010; Bains 2006). Agencies that provide services to seniors should be vigilant to reports of elderly abuse.

If immigrant families need assistance in caring for parents they have brought to the US to live with them, they will receive less assistance from the Federal government than they did in the past. In 1996, Congress passed the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) which changed the eligibility of noncitizens for public assistance. Although PRWORA cut off Supplemental Security Income (SSI), Medicaid, Temporary Assistance to Needy Families (TANF), and food stamps for all legal permanent residents (LPRs), the Balanced Budget Act of 1997 restored SSI and Medicaid for LPRs who met program eligibility criteria; it did not restore LPRs eligibility for food stamps (Nam and Jung 2008; Binstock and Jean-Baptiste 1999; Angel 2003). Older immigrants who were naturalized citizens before PRWORA were not affected by these changes because naturalization had already given them access to the same benefits that natives receive. Although LPRs who had lived in the US for 10 years were also not affected, many LPRs who met the 5-year residency requirement became naturalized citizens after PRWORA was passed. Because PRWORA legislation also gave states the right to restore or top up Medicaid, TANF and Food Stamp benefits to LPRs or selected groups such as older immigrants, several states, including California, New York and Florida (53% of total foreign-born elders lived in those three states in 2006–2008) continued to provide elderly immigrants with health, cash, nutrition, and other assistance. Nonetheless, the amount and type of assistance provided by states varies widely and some states such as Texas provide limited support. How this situation will change once the US National Health Care Act is fully implemented remains unclear but if states continue to have the mandate to deliver health and welfare assistance to their residents, the fiscal problems they are now confronting could well limit their willingness to expand assistance to disadvantaged older immigrants.

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Part VI
Conclusions and Policy Recommendations

Chapter 19

Conclusions and Policy Implications for Aging in Rural Places

E. Helen Berry and Nina Glasgow

19.1 Introduction

Aging in rural places is not like aging in urban or metropolitan (metro) places. We have been making the argument that old age in rural and nonmetropolitan (nonmetro) areas is unique because rural places are themselves distinctive. For different ethnic and racial, in-migrant, immigrant and native-born, income, and health groups there are reasons why growing older in nonmetro areas will differ from aging in metro areas. Rural places are, by definition, more isolated geographically, have smaller populations, fewer services and businesses, and lower financial resources to support institutions that are available in urban locales and that ease the aging process in cities.

Population aging—defined as the overall aging of the population, or an increase in the proportion of people 65 years of age and older relative to people in younger age groups—is affected by the character of rural places. As Brown and Schafft (2011) comment, rural areas are primarily distinguished by the nature and number of their economic activities. The limited diversity of businesses and institutions and the limited ability of nonmetro places to raise funds to support services for the elderly population place a greater public burden on rural governments and/or require

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more private resources. The small size of the labor force in rural places may even restrict the availability of workers to care for less healthy elders. And yet, as has been shown earlier (Berry and Kirschner, Chap. 2, this volume; Nelson, Chap. 3, this volume), older people are more concentrated in rural than urban places.

In 2012, not quite 13% of the total US population and 16.5% of the nonmetro population is 65 years of age and older (see Table 2.2, this volume). By 2050, assuming current trends continue, about 1 in 4 Americans will be 65 years of age and older, while nonmetro places will have 1 in 3 people 65 years of age and older (Jacobsen et al. 2011). By comparison, at the height of the baby boom in 1960, the percent of the US population 65 years of age and older was 9.2% or less than 1 in 10, and persons younger than age 15 were 31% or 1 in 3 (US Census Bureau 2003). The changing proportions in each age group suggest that the first several decades of the twenty-first century may be an era that is far less youth oriented than was the last half of the twentieth century. Regardless, the proportion of population in each age group will sway the economies, institutions, and socio-cultural life of rural places more than non-rural places because of the simple fact that the effect will be greater in smaller sized places.

19.2 Impact of Age and Gender Composition

Two of the most central components of population change are the age and sex structure of a population. The interaction of these two, throughout the life course, are key to family formation, childbearing, the size and composition of the labor force, school age and military populations, as well as the elderly population. Age and sex have been similarly central to many of the discussions in this volume. The parental generation that produced the 20-year-long baby boom was a product of the Great Depression and the depression generation was small by comparison to the baby boom. In turn, baby boomers had lower fertility rates than did their parents, producing a baby bust. The higher fertility rates of baby boomers' parents and the lower fertility rates of baby boomers themselves produced an uneven age distribution, which dramatically influenced economic and social life through much of the twentieth century. Baby boomers' strong influence on society will continue during the first half of the twenty-first century, especially as they enter and advance into older ages. As they have aged, the baby boom has become a sort of "senior boom." At whatever age baby boomers happen to be as they progress through the life course, the generation's impact on societal institutions is felt due to its sheer size.

For example, the demand for housing created by new families during the 1950s was in part a function of the baby boom, as well as the increased prosperity that followed World War II (Myers and Ryu 2008). The echo of this demand was seen in the increased demand for housing and the rise in housing prices beginning in the 1970s as boomers themselves began to seek housing for their own families. The smaller size of younger cohorts, the children of the boomers, has been associated

with a lessening demand for housing beginning in the 1990s (Myers and Ryu 2008). But demand for housing continued into the 2008 recession when the US housing bubble burst. Still, housing researchers have long suggested that the retirement of the baby boom, when they have become the senior boom, means that many are forecast to sell houses and move to smaller homes. The sale of so many homes is likely to result in a glut of older homes on the market, producing a new housing bust (Gist et al. 2012).

19.2.1 Impact of Gender Composition

Women live longer than men, with life expectancy for US women currently at age 80.5, and, for men, age 75.5 (Miniño et al. 2010). By default, both urban and rural elderly are more female than male. There is nothing either good or bad about more males or females being older, but in rural areas the impact of the life expectancy differential between males and females is likely to be felt more acutely than in urban areas. Specific social and economic outcomes result from this differential.

Because women outlive men, and because men are more likely to remarry after a divorce or widowhood (Carr and Bodnar-Deren 2009), elderly men are more likely to be married than are elderly women. Further, women in 2010 were somewhat less likely to have ever been married than they were, as a group, in 1960 (Jacobsen et al. 2011). Smith and Mattingly (2012) note that rural women are more likely than urban women to marry at younger ages although rural women are increasingly unlikely to marry at all. As a result, there have been declines in widowhood and increases in the proportion of single women between 1970 and 2009.

The decline in marriage and the greater likelihood of divorce, particularly among rural people, has implications for policy. First, women's wages historically and continuing to the present, have been lower than men's and one result is that older women receive lower Social Security benefits when they retire. For women who receive private pension plan benefits these, too, are lower than men's. As of 2009, women's Social Security benefits were just 71% of men's, and women's pension plan benefits were substantially lower than men's—between 48 and 60% of men's on average (Employee Benefit Research Institute 2012). The 2009 median income for women 65 years of age and older was just \$15,209 as compared to men's \$25,409 (Employee Benefit Research Institute 2012), and despite the gains of the women's movement, that was itself pioneered by baby boomers, it is unlikely that the incomes of the senior boom women will be as high as men's.

The effects of women outliving men and lower lifetime earnings limit women's subsequent retirement resources. Slack and Rizzuto (Chap. 4, this volume) documented that rural women have lower economic resources than do urban women during retirement and old age. Incomes are generally lower in rural compared to urban areas, and the increasing proportions of women in older rural populations may exacerbate the challenges of supporting elderly women on a smaller economic tax base.

19.2.2 Impact of Age Composition

On the other hand, the majority of the rural elderly population are currently under the age of 75, including baby boomers who are only just retiring or have just retired (Cromartie and Nelson 2009). These young-old baby boomers are described as being human capital resources, “grey gold” (Brown and Glasgow 2008), or economic resources (Rathge et al., Chap. 5, this volume). If communities take advantage of the surge in retirees, the retirement momentum can provide both a human capital and economic expansion for a period of about 20 years. Nonmetro areas who take advantage of these human and economic assets may be ready for the demands of a population with approximately 25% 65 years of age and older in the year 2030.

By 2030, all US baby boomers will have passed age 65, and the fastest growing group of aged in rural places will be those 75 years of age or older. The rapidity of the change in the distribution of the old-old within the older population will challenge both metro and nonmetro resources, but the tension will be higher in rural areas. The strain will come because there is less community capacity and infrastructure, including less access to and availability of transportation, shopping, medical services, parks, and entertainment (Morton and Weng, Chap. 10, this volume). Current trends suggest that some proportion of the oldest-old, those 85 years of age and older, will leave nonmetro places, draining away the “grey gold” that has been a positive impact of baby boomers for rural places. With increasing life expectancy and retrenchment in welfare state programs such as Social Security and Medicare, larger proportions of individuals are likely to become financially insolvent as they reach the oldest-old stage of life.

In their model of elderly migration, Litwak and Longino (1987) predicted the out-migration from rural areas of the oldest-old, who would move to cities where medical services are better or to be nearer adult offspring. As people reach the oldest-old category, illness and disability tend to increase, and larger proportions of that population require care. Although the reasons that these oldest-old may move have not yet been fully explored, it is just as likely that they will not migrate. Morton and Weng (Chap. 10, this volume) comment that the oldest elders who do require more specialized care may move closer to family. On the other hand, being healthy and not requiring care may be a reason to move closer to family while one is still healthy enough to make a move closer to family. Glasgow et al. (Chap. 13, this volume) indicate that rural retirement migration is often a migration toward family and friends. And von Reichert et al. (Chap. 14, this volume) suggest that family will move toward elders who reside in rural areas, in which case older people may serve as rural magnets to draw younger, former residents back to rural places. If the latter becomes a more prominent trend, rural population aging might stimulate in-migration of younger age groups and become something of a new economic development option for rural areas. The suggestion seems optimistic, but, given that the number of persons 85 years of age and older will multiply by 3.3 times and the percent of the oldest-old population will increase from 1.8 to 4.3% by 2030, many things seem possible (Jacobsen et al. 2011).

19.3 Impact of Racial and Ethnic Minorities in Rural Places

Rural places, by definition, have smaller populations. Any change in population composition will have a greater impact on a smaller than a larger population. The change of the overall US population has been from a majority non-Hispanic white population throughout the last half of the twentieth century to what will be a 50% minority population by 2040 (Passel et al. 2012). The change in the US population from majority non-Hispanic white to a majority minority population structure has been slow but inexorable in its process and has been described in part in several chapters in this volume, but here we consider it *in toto*.

19.3.1 Changing Racial/Ethnic Composition of the US Population

Immigration from all countries, whether Europe, Asia, Central and South America, or Africa, was essentially stopped between the 1920s and 1964 (Massey 1999). During those decades the numbers of foreign-born persons declined, but some Central Americans, particularly Mexicans, immigrated to fulfill the need for agricultural labor in the US (Massey 1999). Beginning with the Immigration and Nationality Act of 1965 and with subsequent immigration and naturalization reform, immigration increased from Central and South America, particularly in response to family reunification. Immigration from the Americas has intensified steadily thereafter, concurrent with Asian immigration that resulted from political change and war during the 1970s and 1980s and the economic globalization that has increasingly knit the Pacific Rim nations together since 1990 (Population Reference Bureau 2009).

The flows of legal immigrants from Mexico and Asia were accompanied by smaller streams of undocumented immigrants, many of whom became documented through legalization programs in the 1990s (Massey 1999). Others did not intend to become legalized citizens but saw themselves as temporary migrants to the US, coming to the US as either a rite of passage (Kandel and Massey 2002) or for short periods of time to earn remittances and then return home. Regardless, by the mid-1990s, the majority of the increase in the Hispanic population of the US was through natural increase—more births than deaths—and not through immigration. Natural increase is now the major source of the increase in the Latino population (Johnson and Lichter, Chap. 15, this volume). A recent Pew Hispanic Center report (Passel et al. 2012) has shown that more undocumented Hispanics have left the US in the past few years than have entered, primarily as a result of the 2008 recession, fewer jobs and associated anti-immigrant sentiment and laws. The Asian population is similar to the Hispanic population in that increases in the size of its population are due mainly to natural increase, not immigration (Johnson and Lichter 2008). In other words, the rates of natural increase in minority populations relative to non-Hispanic whites, despite the declines in immigration, portend a minority majority population by mid-twenty-first century.

Why would this matter for an aging population? Because of the concerns expressed by some authors for generational tensions that may be played out in discussions regarding the large size of the senior boom versus the much smaller age cohorts that follow and because of unease over whether Medicare and Social Security can continue to be funded at a level to support the older population, including the smaller cohorts that followed baby boomers (Brasier et al., Chap. 12, this volume). Jacobsen et al. (2011) suggest there could be such tensions based on declines in the US Social Security trust fund that have occurred due to the federal government's use of the fund to balance federal budgets in some years, as well as the substantially smaller, ethnically diverse work force that will be paying into Social Security during the next 20 years (the retirement years of baby boomers). During baby boomers' working-age lifetime, the boomers were largely non-Hispanic whites paying Social Security taxes and their taxes paid Social Security benefits for a largely non-Hispanic white retiree population. The much smaller cohorts who are paying Social Security taxes now and who will pay benefits for the senior boom are more likely to be Hispanic, Asian, African-American, American Indian, or multi-ethnic/cultural in background; hence the concern for ethnic tensions.

It is still possible that non-Hispanic whites' birth rates among those of childbearing age might rise above replacement levels in the next two to three decades or that birth rates for Hispanic, African American, and other ethnic groups might decline to below replacement levels during those decades. Certainly, birth rates for all groups rose dramatically following the Great Depression, and particularly after World War II, producing the baby boom. The 2008 Great Recession and its aftermath has been associated with lower birth rates than prior to that period, as well as somewhat lower marriage and divorce rates (Sobotka et al. 2011). However, such economic and political shocks have relatively small influences on long-term demographic trends: the baby boom interrupted a long-term US decline in birth rates that resumed after 1964. Even if a new boom should occur after the recession, the effect of a potential new baby boom would not decrease the impact of the post-World War II baby boom's entry into the 65 years of age and older population. The boom generation of 1946–1964 is still large enough to have an impact for some years to come.

A final note on immigration: if immigration continues to decline, as per the Passel et al. (2012) report, the tempo of the aging of the population will increase. The reason for the increase is that immigrants tend to be young, in the childbearing years, and have young children or to bear children upon arrival at their destination. If US immigration rates continue to decline, the proportion of the population that is 65 years of age and older will be even larger by comparison to the younger population, given that the projections quoted are based on the assumption of immigration (US Census Bureau 2008).

19.3.2 Changing Racial and Ethnic Composition of the 65 Years and Older Population

Associated with the change in the overall racial and ethnic composition of the US population is a change in the race/ethnic composition of the population 65 years of age and older. In 2010, 80% of the 65 years of age and older population was

Table 19.1 Population projections by race and Hispanic origin for persons 65 years of age and older, 2010–2050

	2010	2020	2030	2040	2050
Percentage of total population 65 years and older	12.97	16.05	19.30	20.03	20.17
<i>Percentage of 65 years and older population:</i>					
Hispanic (any race)	7.10	9.16	11.97	16.19	19.78
Non-Hispanic black	8.26	8.94	9.84	10.46	11.23
Non-Hispanic American Indian and Alaska native	0.50	0.62	0.68	0.70	0.73
Non-Hispanic Asian	3.28	4.39	5.31	6.94	8.40
Non-Hispanic native Hawaiian and other Pacific Islander	0.08	0.11	0.13	0.16	0.19
Non-Hispanic with two or more races	0.63	0.76	0.86	0.97	1.21
Non-Hispanic white	80.15	76.03	71.21	64.59	58.47
Minority or multiple ethnicity	19.85	23.97	28.79	35.41	41.53

Source: US Census Bureau (2008)

non-Hispanic white (Table 19.1). Assuming current trends continue, by 2040, the proportion of the total population that is non-Hispanic white is projected to be just below 65%. By 2050, the proportion in that age group who are Latinos is projected to be nearly one in five; for African Americans, the proportion will be more than one in ten; Asians will be more than 8%; and the overall percentage of elders who are minority or of multiple ethnicity will be close to 42% of the total population 65 years of age and older (Jacobsen et al. 2011).

What should also be obvious from Table 19.1 is that the proportion of elderly who identify as Hispanic or as a non-Hispanic minority group is increasing rapidly, and more than 40% of the population 65 years of age and older will be of minority race/ethnic backgrounds by the year 2050. Sáenz et al. (Chap. 7, this volume) consider the long history of Latinos in the US and their transition from constituting the majority in some parts of the US to becoming the minority in the same regions. In an interesting reversal, the change from a majority non-Hispanic white elderly population to one that is ever more diverse will be gradual. Any presumed racial/ethnic tensions that might be exacerbated by a generation gap may be less apparent than has been anticipated because an increasingly large proportion of elderly will be minority elders.

However, minority elders tend to have, on average, more disabilities in nonmetro areas than do minority elders in metro places. Lee and Singelmann (Chap. 6, this volume) confirmed that both whites and blacks in nonmetro areas have more disabilities than do those in metro areas, and nonmetro African Americans have greater proportions with disabilities than do nonmetro whites (US Census Bureau 2011). Among Asian Americans, Poston et al. (Chap. 8, this volume) showed that older Japanese had greater health difficulties than other Asian groups, and older nonmetro Asians had more disabilities than those in metro areas. Similarly, rural Native Americans had more disabilities than their urban counterparts, and they are particularly at a disadvantage in the rural west where distances to medical centers are greatest (Rudzitis et al., Chap. 9, this volume). Rural elderly Hispanics are thought to have as many limitations

in the activities of daily living as non-Hispanic whites (Saenz et al., Chap. 7, this volume; Hamman et al. 1999; Markides and Coreil 1986).

19.4 Impact of Geographic Isolation

19.4.1 *Health Care Services in Rural Compared to Urban Places*

In a recent article describing health care services, Peterson et al. (2011), among others, remark that rural elders continue to be more likely to live in poverty, have lower self-rated health status and higher rates of chronic disease than urban elders. Their concerns are that rural places tend to rely more on primary care medical personnel for health services than on specialists and that many fewer specialists provide services in rural places (Peterson et al. 2011). They found that there were 1.48 geriatricians per 10,000 persons 65 years of age and older in the most urban counties, but only 0.8 per 10,000 in the most rural counties. In other words, one of the largest impacts of growing older in a rural place is the relative lack of services.

Rural hospitals are substantially less likely to have intensive care units and, as a result, have somewhat worse outcomes on a variety of health indicators that are closely associated with aging, including pneumonia and heart failure (Joynt et al. 2011), although this problem has been improving (Baldwin et al. 2010). There is recognition that rural residents require services, and agencies like the Veterans Administration have recently established an Office of Rural Health (Berke et al. 2009) that provides telemedicine services. Fan and colleagues (Fan et al. 2011) indicate that rural Medicare beneficiaries are more likely to be female than male and that about one in five are likely to visit an emergency room yearly. The implication is that rural medicine needs to be taking particular care of their aging female residents.

Morton and Weng (Chap. 10, this volume) have already summarized the Murray et al. (2006) study description of the Eight Americas which notes that northern rural counties; Appalachian and Mississippi Valley counties; Native American concentrated western counties; and Black Belt deep South counties, have some of the lowest life expectancies in the US. Contrary to Murray et al. (2006), Morton and Weng show that counties with higher percentages of those 65 years of age and older are associated with lower mortality, particularly in states with more isolated counties. They speculate that this may be because the less healthy leave rural areas or because primarily healthy older people migrate to such places. At the same time, Morton and Weng comment that the increased rate of obesity and associated chronic disabilities in the near-retirement-age population (ages 45–65) is likely to have an impact on the health of the soon to be 65 years of age and older population. The effect may be that rural health care needs will be greater than at present. Rural places already have fewer primary care physicians per capita for residents than do urban places, and the lack of specialists who can care for a somewhat less healthy or possibly less able elderly population will become even more critical over the next three decades.

19.4.2 Aging and Place as Both a Destination and a Place to Live

19.4.2.1 Transportation

Transportation in itself, whether because of distance to and from a grocery store, to and from a medical center, to and from a senior center, or to and from any other place, is problematic as a population ages. Aging, even healthy aging, is often associated with some loss of eye-sight or other limitations that lead to increased limitations on driving. And the tax resources that would support public transportation are limited in rural areas, exacerbating the friction of space (Haig and McCrea 1927; Golant 1975) that comes from the time it takes to travel greater distances between clinics, retail or grocery stores, and friends and family.

The obvious policy recommendation is for nonmetro places to invest in public transportation. But Nan Johnson's analysis of nursing home residency (Chap. 11, this volume) indicates that, for older adults in nonmetro counties, one of the largest risk factors for entering a nursing home is whether older people have support from nearby friends and family. Public transportation is unavailable in the majority of nonmetro areas of the country, and having friends and family nearby to offer rides is crucial to the well-being of older people who can no longer drive or never learned to drive (Glasgow 2000). One cannot, however, recommend a policy that forces family and friends to reside near their older relatives or friends. As already discussed, some older adults do move toward adult children or other relatives, or former out-migrants may answer "a call to home," using Carol Stack's phrase (1996), to be near older relatives as they advance in age.

Moreover, investments in transportation are important, even critical, in rural areas, as is brought home by Menz and Kühling's (2011) multi-national research on auto emissions. They show that aging societies have higher proportions of sulfur dioxide emissions and that those societies that have higher proportions of baby boomers also have higher proportions of sulfur dioxide emissions (Menz and Kühling 2011). Implied is that, if for no other reason than environmental quality in rural places, one policy improvement would be to invest in public transportation to lower the number of automobiles on the roads.

19.4.2.2 Aging and Community Assets

Brasier and colleagues (Chap. 12, this volume) made a compelling argument that, if rural communities can take stock of their assets and resources, those communities may be able to strategize courses of action that will allow older residents to age in place in their own homes or in housing near friends and family in the community in which they currently live. Brasier et al., as well as Bolender and Kulcsár (Chap. 17, this volume) and Glasgow et al. (Chap. 13, this volume) make clear that aging-in-place or aging in a rural retirement destination, whether an unconventional or a conventional destination, is largely a function of how well individuals fit their environment both socially and physically (Brown and Glasgow 2008).

Community development specialists increasingly recommend that rural communities work together to form regional services delivery programs. Barriers to doing so exist, with leaders and residents of each place tending to want their own services, but the high cost of service delivery in rural areas often makes it prohibitively expensive. The Rural Policy Research Institute,¹ better known as RUPRI, is probably the best known organization in the US currently focusing on rural policy analysis to inform policy makers and consultation programs to assist rural communities and regions develop effective programs. RUPRI is university-based, and its several programs include the Center for Rural Health Policy and the Rural Human Services Panel, components that are especially relevant to issues of aging in rural environments. Other national, state, and local organizations have the mission of providing research-based evidence and other types of information and assistance to rural communities to help them design programs that will be beneficial to the well-being of elderly residents, and rural communities would be well-advised to identify and access assistance from those organizations.

19.4.3 Place as an Attraction

The social embeddedness described by Brasier et al. (Chap. 12, this volume), which involves being closely connected to community through neighboring, friendships, and involvement in the life of the community, also requires physical access to the community through walking, ride sharing, or a variety of other transportation options that give older residents access to such activities as shopping, banking and socializing. Bolender and Kulcsár (Chap. 17, this volume) state that an important difference between conventional and unconventional rural retirement destinations is that unconventional ones have better access to a particular community resource—health care. But conventional rural retirement destinations are also noted for their access to a variety of amenities, which often includes improved access to acute and long-term health care after they become a rural retirement destination (Brown and Glasgow 2008).

Another aspect of retirement migration that must be considered is that different race/ethnic groups have different migration patterns (Wilson et al. 2009). Fuguitt's contribution (Chap. 16, this volume) illustrates clearly that when non-Hispanic whites migrate at or near retirement age, they tend to move toward amenity counties. Hispanics, on the other hand, largely move toward traditionally Hispanic residential counties. African American migrants move toward traditional settlement areas for blacks, e.g., the south (Fuguitt, Chap. 16, this volume). His findings are supported by Gurak and Kritz's research on immigrants (Chap. 18, this volume). They indicate that most Latino immigrants in rural places generally live in traditional settlement areas for Hispanics, with Cuban and Nicaraguan groups being

¹ See www.rupri.org

more concentrated in the south and east and Mexican origin populations in the west. Immigrants of European origin tend more toward traditional immigrant destination states like New York or Florida and also California. Asian groups, when they are nonmetro areas, are generally drawn to where other similar Asian groups can be found. Gurak and Kritz imply that family circumstances are, in part, what draws immigrants to particular regions of the country. In other words, it is the people who live in a nonmetro place that make it attractive to immigrants.

Rural communities can continue to be attractive places to live for both people already in residence and for new residents, if those communities take advantage of their unique assets. The draw of rural America is illustrated in several chapters including von Reichert et al.'s (Chap. 14, this volume) in which they found that families often return to be near elderly parents or Bolender and Kulcsár's (Chap. 17, this volume) finding that people are attracted to unconventional retirement destinations. Moreover, Glasgow et al. (Chap. 13, this volume) illustrate that scenic amenities themselves draw relatively affluent, well-educated older people to rural communities. Even in places with significant out-migration of younger adults, as noted by Rathge et al., and Johnson and Lichter (Chaps. 5 and 15, respectively, this volume), having elders in place can have surprising economic benefits. The key may be for nonmetro communities to make choices to invest in long-term elderly residents and in older in-migrants as much as they invest in younger people. Such investment requires that the ageism, referred to by Slack and Rizzuto (Chap. 4, this volume), be set aside.

19.5 Conclusion

Rural places will not continue to age faster than urban places forever. Between the years 2036 and 2054, baby boomers remaining alive will reach 90 years of age and older and will, as a result, age-out of nonmetro and metro America. It is likely, however, that amenity-rich rural places (conventional rural retirement destinations) and unconventional retirement destinations will continue to attract retirement-age in-migrants. Young people will continue to move away from rural places, because their aspirations lead them to seek education or employment in cities (Brooks et al. 2010). Each demographic dynamic is a major influence on the aging of rural populations. However, as has been documented by Johnson and Lichter (Chap. 15, this volume and elsewhere), some rural places are already experiencing a "younging" of the population as new immigrants move in, bringing with them overall higher fertility rates and lower mortality rates (Johnson and Lichter 2008). The largest of these new immigrant groups are Hispanics who are often moving toward meatpacking and food-processing plants in rural America (Lichter and Brown 2011), but other younger immigrants and minorities are likely to move to nonmetro places to follow oil and gas booms and to settle in places with less expensive costs of living (Lichter 2012). The effect will be to increase the diversity of nonmetro places, while increasing, but slowly, lowering their median age.

The specter of some rural communities with especially old age structures simply dying out, such as some in the Great Plains, has been raised (Glasgow and Brown 2012). Johnson (2011), however, finds little evidence for that happening at the present time in natural decrease areas (places with more deaths than births), which are more numerous among nonmetro than metro counties of the US. Nonetheless, policy makers should monitor natural decrease areas for signs that particular rural communities in the US are no longer sustainable. Importantly, policy makers should also monitor the fate of any remaining elderly residents in places that essentially “have gone out of existence” and help them relocate, if necessary.

The influence of baby boomers on rural America will not be explicit in the second half of the twenty-first century. But their legacy will be the use to which they, or the communities in which they lived, have made of the relative prosperity that the baby boomers’ pensions or lack thereof, tax dollars, and social capital brought to rural America. In communities that take advantage of the “grey gold” of baby boomer willingness to volunteer and to use their incomes to build community services and tax bases (Brown and Glasgow 2008), their bequest will be better health care systems; strong community organizations and structures; and all of the infrastructural benefits that boomers have demanded throughout their lifetimes, including high water quality; high environmental quality; good government; and strong community institutions. Where rural communities fail to take advantage of the senior boom, rural places are likely to become less well-off than they are, even now. It is to the advantage of nonmetro America to see its aging population as a bridge to its more multi-ethnic and diverse future.

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