Assessing Regional Differences in Livable Communities for the Aging Population in the United States

Dissertation

Submitted to Northcentral University

Graduate Faculty of the School of Business and Technology Management
in Partial Fulfillment of the
Requirements for the Degree of

DOCTOR OF PHILOSOPHY

By

RITA AVINGER QUINTON

Prescott Valley, Arizona
July 2009

APPROVAL

Assessing Regional Differences in Livable Communities

for the Aging Population in the United States

by

Rita Avinger Quinton

Approved by:

Daljit Singh 11-3-2009

Chair: Daljit Singh, Ph.D. Date

Member: Danielle Babb, Ph.D.

Member: Dexter Harlee, Ph.D.

Certified by:

Lynn W. Payne 11/9/09

School Dean: Lynn W. Payne, Ph.D. Date

ABSTRACT

Regional differences in community preparedness to handle the growing aging population have important business and economic implications. However, how South, Northeast, West and Midwest regions differ in housing, shopping, walkability, and transportation preparedness was unclear. In this comparative quantitative study, public officials (N = 303) from cities with populations greater than 25,000 each completed a 34-item online survey assessing housing, shopping, walkability, and transportation preparedness. Differences between South, Northeast, West, and Midwest regions were evaluated using the non-parametric Kruskal-Wallis at a statistical significance threshold of $p < .05$. Null hypotheses were rejected in favor of the alternate hypotheses of significant differences between regions in housing and transportation. For shopping and walkability, null hypotheses were not rejected. Recommendations by region foster the business and economic interests inherent in increasing the livability of the aging population. By fostering preparedness, city managers can increase migration, decrease flight, and recruit the boomer population as a method to increase economic development. Further research is needed to localize differences within regions and down to the best neighborhoods for community preparedness. This study will potentially assist public officials, community agencies, and private sector business towards optimizing housing, walkability, transportation, and shopping preparedness for our growing aging population.

ACKNOWLEDGEMENT

To my mother, Charlotte, for giving me the confidence to go after what I wanted in life...and for always believing that I could do it.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1: INTRODUCTION

Americans are living longer and the number of people over the age of 65 is higher than previous generations due to the large demographic of baby boomers and increased life expectancy. Forecasts are that the population of Americans over the age of 65 will climb from 35 million reported in 2000 to over 55 million in 2020 (U. S. Census Bureau [USCB], 2004b). By 2012, ten thousand Americans will turn 65 every day. Even more significant is the estimation that the over 65 population will grow to more than 71 million by 2030 (USCB, 2004b). The Centers for Disease Control (CDC) reported that as of 2002, life expectancy has increased for females to age 80 and males to age 75 (National Center for Health Statistics, 2005). Recent demographic trends suggest that life expectancy in the American population may climb to 100 years of age by 2060 (Olshansky et al., 2005).

In 2006, the first wave of baby boomers encountered retirement age and 330 people are turning 60 years old every hour. This will produce an additional 34 to 35 million retirees over the next several years ("Maturing of America," 2006). Such a major shift in the aging of our society has never occurred and policymakers throughout the United States (U.S.) are preparing for both the opportunities and challenges represented by the dramatic change (Minnesota Department of Health and Human Services, 2007; Global Generations Policy Institute, 2007). Over 70% of baby boomers have at least one parent still living and 40% still have children living in the family home (AARP, 2001).

Further, with the aging of the baby boomers and the higher life expectancy resulting from improved health, the workforce is being transformed as many older people choose to or need to remain in the workplace (Rubin, 2006). Workers age 55 and older will grow from 1% in 2000 to 20% in 2020 ("Shifting Workplace," 2006). With growing older complicated by caregiver issues and a possible need to delay retirement, it is an even more compelling reason to study various living options for the senior population and the implications for communities, the economy, and for business.

Poorly planned communities can often impede an individual's ability to stay independent and age in place. Adequate community services are particularly critical to have in place to meet the growing elderly population that would also support the ability to remain employed in the community during the aging years. As a result, communities are identifying groundbreaking ways to improve senior living that go beyond conventional service methods ("*Maturing of America*," 2006). Unfortunately, researchers have determined that less than half, or about 46% of U.S. communities, have not even started to plan for or address the needs of the growing boomer population ("Maturing of America," 2006). Therefore, to help today's and tomorrow's seniors remain active and engaged members of society, an evaluation of our communities' livability is vital for enabling people to remain in their homes and age in place, even when declining capacity or competency reduces environmental match ("Maturing of America," 2006).

Statement of the Problem and Purpose

Our aging population is growing, which has important business and economic implications. However, how South, Northeast, West and Midwest regions differ in housing, shopping, walkability, and transportation preparedness was unclear. Business and economic development of a community is closely tied to the community's ability to recruit and retain older workers (Rubin, 2006). Macdonald and Dwyer (2008) reported that nearly one out of four people aged 65 to 74 were in the labor force in 2006, and that with the advent of baby boomers, that percentage may well increase. Community and workplace services that attract and support the older population are keys to community and business vitality (Rubin, 2006). As our aging population prepares to retire in their local region or relocate to new communities, the positive impact of attracting and retaining these citizens could be economically invaluable (Frey, 2007). However, little is known about regional differences and preparedness for the growing aging population.

The purpose of this comparative, quantitative study was to examine and assess four regional areas of the United States to determine which region was best prepared to handle the growing aging population in housing, walkability, shopping, and transportation preparedness. To determine the level of community preparedness, public officials who were city managers or mayors and had direct or indirect affiliation with either the International City/County Management Association's (ICMA) or the National League of Cities (NLC) were surveyed. Representing the largest constituency group of both cities and counties in the

United State, ICMA is a direct link to those working for local governments nationwide (ICMA, 2008). The NLC serves as a resource for more than 19,000 cities, although some of those cities are members through the associated 49 state municipal leagues (NLC, 2008).

Background and Significance of the Problem

Independence and the ability to age in place will positively impact the rates of depression and social isolation where communities have low walkability (Minnesota Department of Health and Human Services, 2007). Evaluating the community preparedness of our communities in the context of handling the growing Boomer population will assist in planning for needed services and necessities that will facilitate successful aging and independence. From society's point of view, well-designed homes are one component of a strategy to enable residents to remain in their communities (with or without home-based services) and to avoid more expensive and sometimes less appealing settings such as nursing homes (AARP, 2005a).

With the decline of downtown shopping areas and the proliferation of scattered development patterns in the suburban neighborhoods, communities have made it more difficult for those without automobiles to access shops and needed services (AARP, 2005b). Adequate availability to transportation is integral to the livability of a community and the ability for its residents to age in place. Access to the bare essentials of shopping such as banking and grocery stores has disappeared from the downtown areas and the suburban locations are

mainly in strip malls, sometimes miles from neighborhoods with high elderly populations (AARP, 2005b).

Increased business and economic development can be a significant benefit of providing community and workplace services aimed at the aging population. These retiree households could be a valuable source of economic development for communities across the nation both for the short and long term (Smith, 2009). The influx of these retirees would increase the tax base, and they would impact the local community in many other ways. Tapping into the assets of the boomer generation yields big benefits to private and public sectors. When just 25 retiree or boomer households move into a community, they have the possibility of adding approximately $1,000,000 to the local coffers if the average annual spending is $40,000 per year per household (Smith, 2009).

These retiree households could be a valuable source of economic development for communities across the nation both for the short and long term (Smith, 2009). The transfer of assets into local banks as well as payment of taxes for services they would be less likely to use such as having children enrolled in the public school system or impacting the criminal justice system can yield tremendous dividends to the local economy (Smith, 2009). Since many would have pensions or fixed incomes such as social security, the income for this group would be stable. Further, the volunteer base would increase, bringing a rich source of expertise and services to the community (Smith, 2009). More affluent retirees are migrating to communities with abundant amenities, and the

availability of these amenities is second only to family as location factors (Smith, 2009).

Community and workplace services that encourage retention of older workers are key ties to the business and economic development of a community (Rubin, 2006). Community preparedness is essential to courting and keeping the retiree base that can bring tremendous assets to public and private industry. According to Frey et al. (2009) from the Brookings Institution, one thing for certain is that the senior population will rise everywhere in America, even in those communities that are unaccustomed to housing enormous numbers of the older population.

Research Questions

The research questions are as follows:

1. To what extent, if any, does housing preparedness for the aging population differ based on geographic region?
2. To what extent, if any, does walkability preparedness for the aging population differ based on geographic region?
3. To what extent, if any, does shopping preparedness for the aging population differ based on geographic region?
4. To what extent, if any, does transportation preparedness for the aging population differ based on geographic region?

Brief Review of Related Literature

By 2011, the Baby Boom generation (those born between 1946 and 1964) will begin to turn 65. For the next 25 years, aging of the population will dominate

the country, escorting in the biggest demographic trend that we will experience over the next 50 to 100 years (Minnesota Department of Health and Human Services, 2007). By the year 2020, the U. S. Census Bureau forecasts that the 50 to 64 year-old age group will *boom* by 21% and the over 65 year-old age group will jump by 33%. The age group under 50 will likely have only a 4% growth (AARP, 2005a).

As the forecasted saturation of boomers moving into retirement approaches, with 73% of them wanting to remain in their homes, communities must be ready to accommodate these individuals (Hooyman & Kiyak, 2005). If communities fail to prepare for the deluge of retirees, they face a critical breakdown of infrastructure and services in the struggle to meet unprecedented demands. Further, Macdonald and Dwyer (2008) reported that nearly one out of four people aged 65 to 74 were in the labor force in 2006, and that with the advent of baby boomers, that percentage may well increase. In fact, 2003 AARP findings revealed that 80% of baby boomers planned to continue to work beyond retirement age (MacDonald and Dwyer, 2008). Having boomer residents in the community brings a wealth of skills and experience, which manifests through volunteerism and a dependable part-time workforce (Feldman, 2003). Attracting and retaining the aging boomer population through community preparedness has clear economic and business implications for city managers, regional developers, and business leaders.

The economic benefit of older adults to communities was outlined in a report developed for ICMA by Feldman (2003). Feldman contends that local

governments must create aging-friendly environments that include compact, walkable, mixed-use communities with a variety of housing and transportation options. Furthermore, the older adults contribute to the revitalization of communities and business districts by the jobs they create because of the demand for services and goods, purchasing power, and a boost to the "9 to 5" shopping day, which has become obsolete due to shifting lifestyles (Feldman, 2003).

Housing options for the aging population may include retrofitting residences with higher livability indices (nonslip flooring, low thresholds, grab bars, etc.), weatherization, energy assistance, reverse mortgages or other housing options such as assisted living facilities or universally designed models. Affordability of the housing options is also a key factor. The walkability of a community is one that has shopping and services within close proximity or walking distance, along with well-maintained sidewalks and streets. As people age, the accessibility to well-maintained sidewalks, and nearby shopping, often leads to extended years of independent living (AARP, 2005a). Making adjustments to the timing on pedestrian crossings would help communities respond to an aging population as well as those with mobility impairments ("Maturing of America," 2006). Walkability contributes to quality of life in that it promotes exercise, physical and mental health, as well as access to the community (AARP, 2005a).

Transportation improvements could include options such as providing larger road signs and markings for those who do continue to drive ("Maturing of

America," 2006). Since over 25% of licensed drivers will be over the age of 65 by 2030, transportation options will be necessary to sustain the quality of life and independence for those wishing to age in place. Door-to-door paratransit services and shared ride taxi programs are options for meeting the growing demands in the rural and suburban elder populations ("Maturing of America," 2006). For those dependent on or choosing to use public transportation such as a bus system, easy-to-read schedules and weekend access are beneficial options (AARP, 2005b).

Access to shopping continues to be a critical issue for the aging population (AARP, 2005b). City and county planning departments could press for adding shopping outlets into subdivisions, and they could encourage specialty stores like Whole Foods or Trader Joe's to build stores in communities that larger chains would not consider due to their size and parking constraints (AARP, 2005b). An additional strategy may be for the public transportation companies to design a route strictly for the aging population for the stops they frequent such as specialty shops, strip malls and grocery stores (AARP, 2005b).

As the baby boom generation approaches retirement, communities must be ready to address the increased demand for services, housing, transportation and maintenance of community assets such as properly maintained sidewalks that encourage and promote walkability. The call for increased community services will impact business and local governments, with the cities absorbing most of the responsibility for preparedness. Affordable housing options and

adequate access to transportation and shopping will be critical as communities prepare for the boomer retiree and over 55 working population.

Definition of Terms

For the purposes of comprehension of this research study, the following terms are defined:

Aging in Place. The capacity to live in one's private home or apartment even when declining competence reduces environmental congruence, and is tied to the availability of local resources and services ("Maturing of America," 2006).

Appropriate Housing Option. "A variety of housing types (including services- oriented housing) at various levels of affordability" (AARP, 2005a, p. 86).

Baby Boomers. The generation that was born between 1946 and 1964 (Haas & Serrow, 2002).

Community preparedness. The capacity of a community to meet the needed services of aging adults, and more specifically baby boomers (AARP, 2005a).

Early Boomers. The part of the generation of baby boomers born between 1946 and 1954 (Dailey, 1998).

Livable Community. One that has affordable and adequately-equipped housing, supportive community features and services, and adequate mobility options which together facilitate personal independence and engagement of local residents in civic and social life (AARP, 2005a).

Public Official. Clarkson (1995) described stakeholders as those that have some level of risk associated with the investment of financial or human capital towards a project. In the proposed study, those stakeholders would be identified as city managers, mayors, board members, city commissioners or administrators that may also be members of ICMA or NLC, otherwise known as public officials.

Readiness Survey. A survey to determine a community's level of preparedness based on factors of livability (AARP, 2005b).

Walkability. A physical environment with good indicators for being pedestrian-friendly and for walking such as nearby shopping and good sidewalks (AARP, 2005b).

Highlights and Limitations of Methodology

An online survey instrument was used in this comparative quantitative study to examine the level of preparedness of services of communities across the United States as the Baby Boomer generation begins to retire. The purpose of the survey was to get feedback from public officials by geographic region to focus on the areas of walkability, housing, shopping and transportation of the respective communities. The survey data was gathered using questionnaires administered to public officials of cities with populations over 25,000 in the U.S. The questionnaires were reviewed for reliability and usability. Results were charted and statistical calculations performed for each hypothesis to determine pattern uniqueness, and descriptive statistics were performed such as mean, standard deviation, and minimum/maximum for each variable.

A limitation of the study involved validity and reliability of the responses to the survey questions. Public officials may be hesitant to give information that may potentially be harmful to the public's perception of readiness of their city's preparedness. Alternatively, respondents could have been tempted to give socially desirable responses. Public officials, however, would probably want to portray their communities accurately to avoid attracting retirees to their community based on false information, which could be detrimental to the community sustainability and future marketing efforts.

The study was further limited due to the 28% response rate. While the response rate was higher than in similar studies such as the Metropolitan Life study with an overall response rate of 18%, the responses for those who did not respond were not known ("Maturing of America," 2006). Other limitations that affected the study were economic conditions, topography, and climate. Surveying only public officials and cities with populations of 25,000 and over were limitations inherent in the study. Varying demographics of citizens of the communities could also potentially limit the generalizability. Economic conditions in some parts of the United States may be more favorable to community preparedness, while surveying a different population or smaller cities could yield different results. Therefore, the findings should be generalized with caution.

Summary and Conclusions

The results of the findings in the current literature revealed that communities are not prepared for the influx of the largest generation ever to approach retirement in the history of the U.S., in particular the Baby Boomers.

Evidence of the significant impact of this wave of retirees on community preparedness was significant and pointed to increasing awareness and need for determining ways to prepare communities and business for adequate services, housing, transportation and quality of life. While the literature supported the notion that people preferred to live out their lives in their own homes, the level of preparedness of the communities was insufficient to meet that impending need. The level of preparedness and community services were directly related to the aging population's decision on where to live, work, and retire (Rubin, 2006).

Attracting and retaining the aging boomer population through community preparedness has clear economic and business implications for city managers, regional developers, and business leaders. Increased business and economic development are direct benefits of recruiting an aging workforce. Community and workplace services that encourage retention of older workers are key ties to the business and economic development of a community (Rubin, 2006). Community preparedness is essential to courting and keeping the retiree base that can bring tremendous assets to public and private industry.

CHAPTER 2: LITERATURE REVIEW

By 2011, the Baby Boom generation (those born between 1946 and 1964) will begin to turn 65. For the next 25 years, aging of the population will dominate the country, escorting in the biggest demographic trend that the United States will experience over the next 50 to 100 years (Minnesota Department of Health and Human Services, 2007). By the year 2020, the U. S. Census Bureau forecasts that the 50 to 64-year-old age group will "boom" by 21% and the over-65-year-old age group will jump by 33%. The age group under 50 will likely have only a 4% growth (AARP, 2005a).

While state and local governments and communities will face the challenge of channeling services to the enormous cohort of soon-to-arrive baby boomers, the city governments will be the umbrella that will serve almost all of them across the United States. According to the authors of the Maturing of America (2006) study, only 46% of communities have begun to prepare for the impending needs of the Baby Boomer retirees. Over 10,000 local governments were surveyed for the Maturing of America study, and the study was conducted by five national organizations – the National Association of Area Agencies on Aging (n4a), the International City/County Management Association (ICMA), the National Association of Counties (NACo), the National League of Cities (NLC), and Partners for Livable Communities (PLC) (Maturing of America, 2006). Further, although some communities had programs in place to address the aging populations, very few had assessed the needs or undertaken a full assessment

of the community services necessary to ensure the community was *elder friendly* ("Maturing of America," 2006).

Ramping up for a bubble in the aging population is a complex issue for local governments. Some of the major areas to be examined are housing, transportation, proximity and variety of shopping and walkability. The interrelatedness of the needs must be considered such as how effective having affordable housing is to the community if there is no transportation to basic services such as hospitals, pharmacies or shopping ("Maturing of America," 2006).

Migration of Older Population

Brookings Institution Visiting Fellow William Frey developed a report in May 2007 to track changes in America's aging population as they age in place or migrate across the nation (2007). Utilizing data primarily from the 1990 and 2000 U. S. Censuses, the Census Population Estimates program, and national and sub-national projections conducted by the Census Bureau and Frey, the Mapping the Growth of Older America: Seniors and Boomers in the 21st Century study characteristics included demographic trends for metropolitan areas, cities, suburbs, and selected counties (Frey, 2007). The findings and conclusions from the study were that the baby boomer generation had distinct social and demographic attributes that differed greatly from past generations, and the differences included educational profiles, household diversity, greater gender equality, and more potential for economic disparity (Frey, 2007). With the largest numbers of baby boomer pre-senior populations residing in metropolitan areas in

the South and West, affluent *yuppie seniors* are expected to emerge in areas such as Denver, Dallas, Las Vegas, and Atlanta, traditionally recognized for a youthful profile (Frey, 2007). Demand for new types of housing and more cultural amenities may occur in these areas as these boomers remain engaged in the workforce.

Trends identified in the Brookings Institution study included the aging in place of boomers in slower growing areas in the Northeast and the Midwest, identified as a less affluent population that may require affordable private and institutional housing (Frey, 2007). The aging in place of boomers will overshadow senior migration as the major reason for senior population growth in all areas except for a small number of retiree magnet areas, which many states and small communities are striving to become (Frey, 2007). The migration dynamic creates an enormous market phenomenon as seniors prepare to relocate to new communities or neighborhoods, and the positive economic impact to the communities could be valuable, particularly if the boomers are wealthy and purchase expensive homes as the findings suggest (Frey, 2007). Public and private sector officials must be ready to assess how the aging in place and migration of seniors will shape demand for services in America's local communities.

In a 2009 Brookings Institution report, which relied heavily on the Brookings Metropolitan Policy Program data including the 2007 American Community Survey, Frey, Berube, Singer, and Wilson (2009) studied metropolitan areas with populations greater than 500,000. These areas were the

100 largest metropolitan areas as of 2007. America has had one of the highest in-country migration statistics in the industrialized world, but this trend has slowed because of the bursting of the housing bubble that ballooned in the early 2000s (Frey et al., 2009). The majority of U. S. cities with populations over 100,000 have gained population, with the largest gains being in the South and the West (Frey et al., 2009). Many states have experienced declining migration, but the previous mobility rate is expected to return with the economic recovery and housing rebound (Frey et al., 2009). Figure 1 shows the net migration decline that has occurred in the traditional magnet states, in particular Florida.

Annual Net Migration Declines in Former Magnet States

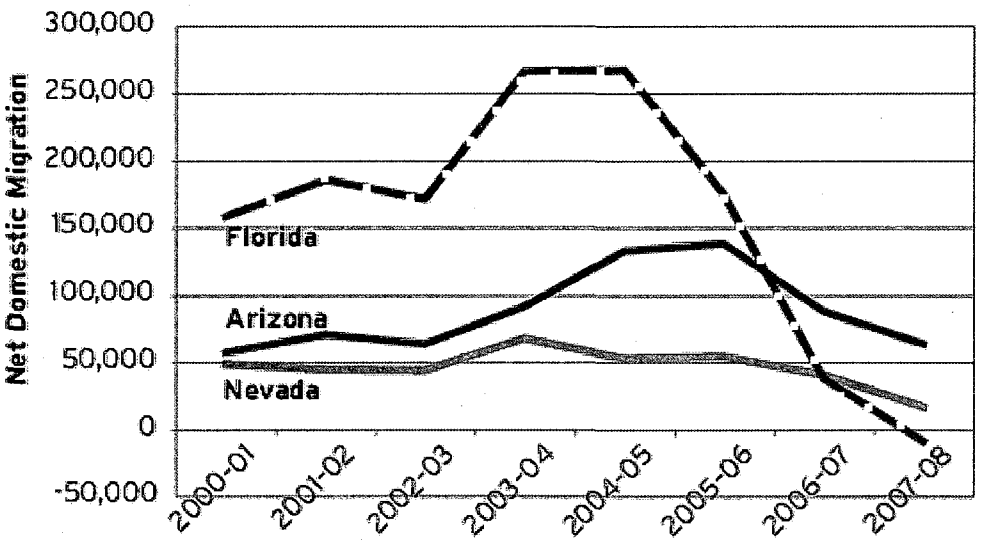


Figure 1. Net migration has declined significantly in former magnet states Sources: *Brookings analysis of Population Estimates Program data*

Economic Impact

The economic benefit of older adults to communities was outlined in a report developed for ICMA by Feldman (2003). Feldman contends that local

governments must create aging-friendly environments that include compact, walkable, mixed-use communities with a variety of housing and transportation options. Furthermore, the older adults contribute to the revitalization of communities and business districts by the jobs they create because of the demand for services and goods, purchasing power, and a boost to the "9 to 5" shopping day, which has become obsolete due to shifting lifestyles (Feldman, 2003). Other community benefits include the wealth of skills and experience the boomers bring, which manifests through volunteerism and a dependable part-time workforce (Feldman, 2003). Attracting and retaining the aging boomer population through community preparedness has clear economic and business implications for city managers, regional developers, and business leaders.

Business and communities can attract the older populations that are still in the workforce to make economic gains. Findings from a Met Life Market Institute report suggested that boomers who are close to the retirement age of 65 but not yet considering retirement are looking for communities that are close to their workplace or that provide transitional options going into a work-from-home scenario ("Housing ," 2009). In fact, among the over 55 population, choosing a community based on proximity to work rose from 11% in 2001 to 17% in 2007 ("Housing," 2009). The report on the 55 and older population was based on information gathered from the 2007 American Housing Survey, which is designed by the U. S. Department of Housing and urban Development and the U. S. Census Bureau to capture data on the characteristics of American housing, including the age of the occupants, structure type and community type.

Community and workplace services that attract and support the older population are critical to recruiting and maintaining a more experienced workforce (Rubin, 2006).

Christen Smith (2009) concurred with findings from Frey's study and further stated that the retiree population adds major value to the local economy of communities and should be recruited instead of big business. When just 25 retiree households move into a community, they have the possibility of adding approximately $1,000,000 to the local coffers if the average annual spending is $40,000 per year per household (Smith, 2009). This could be a valuable source of economic development for communities across the nation both for the short and long term (Smith, 2009). The influx of these retirees would increase the tax base, and they would impact the local community in many other ways. They would likely transfer assets into local banks as well as pay taxes for services they would be less likely to use such as having children enrolled in the public school system or impacting the criminal justice system (Smith, 2009). Since most would have pensions or fixed incomes such as social security, the income for this group would be stable. Further, the volunteer base would increase, bringing a rich source of expertise and services to the community (Smith, 2009). The more affluent retirees are migrating to communities with abundant amenities, and the availability of these amenities is second only to family as location factors (Smith, 2009). Community preparedness is a viable economic development strategy that can pay off with huge dividends for public officials. According to Frey et al. (2009) from the Brookings Institution, one thing for certain is that the senior population

will rise everywhere in America, even in those communities that are unaccustomed to housing enormous numbers of the older population.

Demographic Trends and Implications

As the forecasted saturation of boomers moving into retirement approaches, with 73% of them wanting to remain in their homes, communities must be ready to accommodate these individuals (Hooyman & Kiyak, 2005). The sheer numbers of aging citizens will impact the very fabric of local governments, impacting local programs and services such as land use, housing, transportation, workforce and economic development, safety, recreation and education (Markwood, 2007). According to the National Association of Home Builders, the forecast for growth of the 55 years of age and older population is over 26% (85.3 million) in 2014, up from 23% (70.6 million) in 2007 ("Housing," 2009). The demand for housing designed for the older population has seen growth and the expectation is that demand will continue to increase ("Housing," 2009). Responding to the needs generated by aging Americans, city and community officials will encounter decisions on funding for and development of facilities and amenities to maintain the tax base the cohort provides. If communities fail to prepare for the deluge of retirees, they face a critical breakdown of infrastructure and services in the struggle to meet unprecedented demands.

What is being called a *tsunami* of retirees is attributed in part to the advancements in medicine as well as the number of Americans (77 million) approaching retirement who will be 65 or older ("Maturing of America," 2006). The generation referred to as baby boomers was born between 1946 and 1964

(Haas & Serrow, 2002). This cohort currently comprises one third of the overall population in America (Glass & Kilpatrick, 1998). Because of the overwhelming cohort size, it appears "from the youth culture they created in the 1960s and 1970s to the dual income households of the 1980s and 1990s, this generation has reinterpreted each successive stage of life" (AARP, 1999, p.1). The demographic trend will reach its peak in 2030, with one in five people being over the age of 65 ("Maturing of America," 2006). The U. S. Census Bureau depicts this trend of the over 65 population in Figure 2.

Population Trend for Persons Over 65 from 1990 to 2050

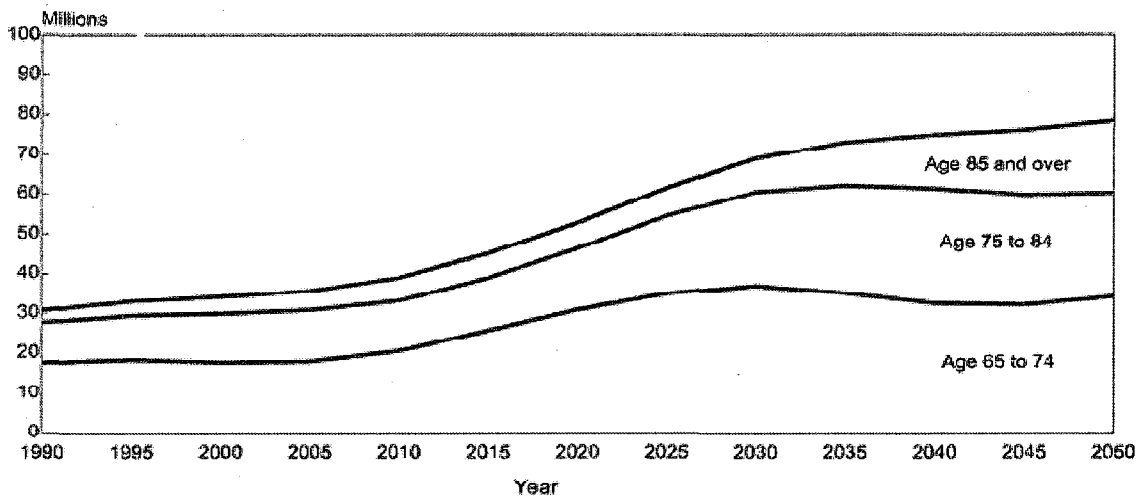


Figure 2. U. S. Census Bureau population of persons age 65 and over: 1990-2050.
Sources: *Population Projections of the United States by Age, Sex, Race and Hispanic Origin: 1995-2050* (p.12), by U. S. Census Bureau, 1996.

The 55 and over market has implications for business, economic development, real estate, relocation services, retirement communities, and cities wishing to attract the older population. The Boomer population growth creates many possibilities for communities to market services and relocation packages to the population that has yet to decide where they will live out their retirement

years. AARP (2000) researchers found that 27% of the 55 and over population think they believed they would not stay in the current home. Of that 27%, almost three of four had no plans for where they would live in the future (AARP, 2000). With the baby boomers quickly advancing into ages where some kind of assistance is a reality, the possibility of need in huge proportions is knocking on the doors of cities and towns throughout America regarding the communities' level of preparedness. With the older population residents, however, also comes the need for more and sometimes different community services and workplace policies that support the aging lifestyle.

States that have had no experience with fast-growing elderly populations will not escape that phenomenon in the future. Frey et al. (2009), in a Brookings Institution report on demographic trends, warned that those states without a history of rapid senior population growth will have to deal with the challenges that accompany that trend. Most of those states are located in the Northeast region of the United States. Furthermore, even states with lower growth in the older population could be overwhelmed. The Northeast states of New York and Pennsylvania will have the lowest levels of senior growth among the states, but even at 23%, that far surpasses the growth those states have experienced in previous decades, thus requiring swift attention from public officials and businesses that will hire the over 55 population (Frey et al., 2009). Businesses hoping to capitalize on the productivity and loyalty of the older workforce will want to reconstruct policies to recruit and maintain that crucial portion of the labor force (Rubin, 2006). Figure 1-2 below shows the projected growth of the older

population by state in the next decade, with the fastest growth occurring in the Intermountain West, the Southeast and Texas.

Projected Growth in the 65+ Population by State, 2010-2020

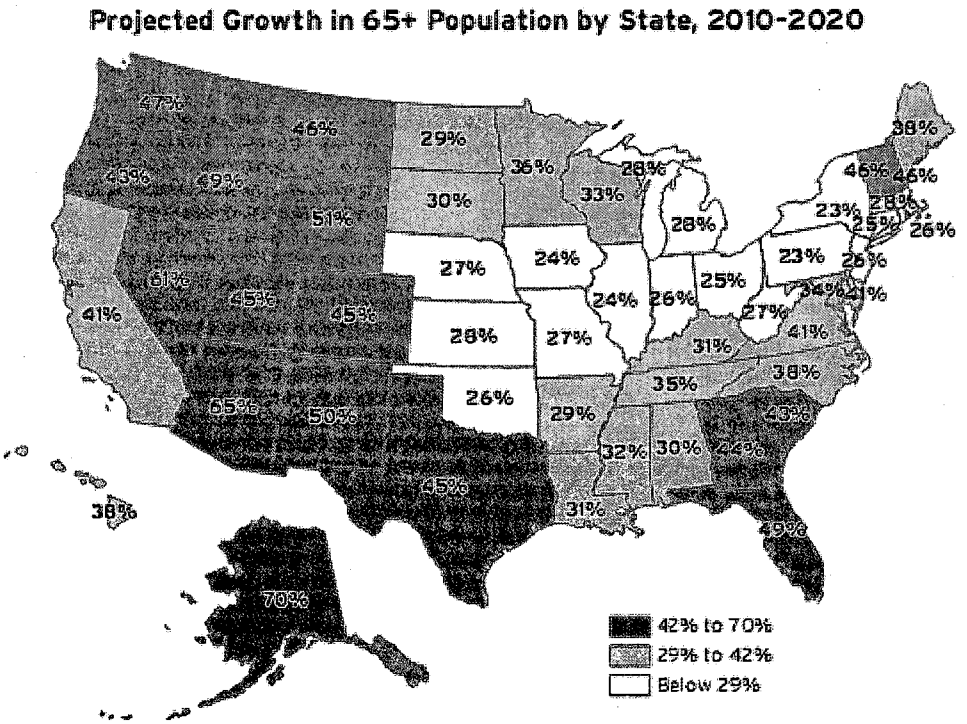


Figure 3. Projected growth in 65+ population by state, 2010-2020
Source: Brookings analysis of Census Bureau population projections.

Boomers "tend not to be passive about what they want to accomplish…are well organized and aggressive in pursuit of their preferences" (Longest, 2002, p. 232). While some legislation such as the Older Americans Act of 1965 provides for some services and community planning, the legislation is inadequate to address the large number of Americans on the threshold of need (National Council on Aging, 2004). City and community officials are left with the reality of preparing to address the remaining needs of the aging population.

Aging Workforce

Most boomers, particularly the earlier ones, experienced a good economy and own homes (Aguilar, 2003; Cornman & Kingson, 1996; Keister & Deeb-Sossa, 2001). In a national study, AARP verified that 73% of people aged 55 and older actually anticipate living out the remainder of life in their homes (Lemberg, 2002; AARP, 2000). Boomers also expect to retire around the age of 66, which means that many of them will remain in the work place longer than anticipated, fueling further need for being able to *age in place* (AARP, 2001).

Business and economic development of a community is closely tied to the community's ability to recruit and retain older workers (Rubin, 2006). A workforce transformation is underway, with the number of workers over 55 years old expected to grow from 13% of the labor force in 2000 to 20% in 2020 ("Shifting Workplace," 2006). Macdonald and Dwyer (2008) reported that nearly one out of four people aged 65 to 74 were in the labor force in 2006, and that with the advent of baby boomers, that percentage may well increase. In fact, 2003 AARP findings revealed that 80% of baby boomers planned to continue to work beyond retirement age (MacDonald and Dwyer, 2008). Recruiting and retaining the experienced workers makes good business sense, as the older workers provide continuity in the workplace, avoiding losing intellectual capacity and talent shortages (Rubin, 2006). Rubin reports that businesses can capitalize on the older population to respond to seasonal or fluctuating production by providing flexibility and part-time options.

Businesses and communities that encourage recruitment and retention of older workers are likely to benefit economically (Rubin, 2006). Adequate community services are particularly critical to have in place to meet the growing elderly population that would also support the ability to remain employed in the community during the aging process. As a result, communities are identifying groundbreaking ways to improve senior living that go beyond conventional service methods ("*Maturing of America*," 2006). Community preparedness is essential to courting and keeping the retiree base that can bring tremendous assets to public and private industry.

Housing

Homeownership estimates among the over-65-years-of-age population is over 80%, which is higher than the national average according to the U. S. Census Bureau (2006). This creates a symbiotic relationship, enabling residents to age in place, which is critical for the sustainability of the community's tax base as well as the preservation of neighborhoods (n4a, 2007). Markwood (2007) suggested that the health of the community with respect to retaining its tax base and stability of the neighborhoods is tied to the responsiveness of the needs of the "healthiest, wealthiest, and most educated older population in our nation's history" (p. 35). To develop that relationship, the cities must ensure that the services are provided to compliment the ability to age in place.

Housing options for the aging population include staying in their homes and possibly using reverse mortgages or other assistance. A telephone survey of 1,005 Americans over the age of 50 was conducted in 2004 for AARP by the

Roper Public Affairs and Media Group and compiled in a report called Beyond 50.05: A Report to the Nation on Livable Communities: Creating Successful Environments for Aging (AARP, 2005a). According to AARP, availability and affordability of housing as well as the availability of services catering to modification and maintenance of housing is integral to that livability factor to encourage people to remain in their homes for as long as possible. Almost half of the respondents indicated that their homes would meet their needs very well as they aged, while 37% reported that their home would only somewhat meet their needs (AARP, 2005a). Some of the features that supported independent living were a full bath and bedroom on the main level, non-slip floors, covered parking, driveways, and sidewalks outside the home (AARP, 2005a).

Offering home modification assistance could be a benefit to communities and the elderly, as it would serve to maintain the homeownership and the aging in place initiative. Being able to age in place in homes that were retrofitted with designs that aided the older population also lead to higher satisfaction with the community, higher quality of life, and increased ability to make choices about aging (AARP, 2005a). Additional housing options for the aging population may include retrofitting residences with higher livability indices (nonslip flooring, low thresholds, grab bars, etc.), weatherization, and energy assistance. Installing grab bars and nonskid strips in tubs and showers, handrails for support and better insulation, storm doors and windows may avoid mobility problems or accidents that would be barriers to those wishing to remain in their homes as they age. These home modifications and repairs may allow older people to

continue to live in their homes, as over 60% of older people live in homes more than 20 years old, and the older homes typically have lower livability indices (Administration on Aging, 2009; Gilderbloom & Rosentraub, 1990).

The literature research revealed that very few studies exist that examined the practical home modifications for older people. AARP (2000) published Fixing to Stay: A National Survey of Housing and Home Modification Issues, which outlined a study of more than 2,000 midlife and older Americans in regards to home modifications. More than three-fourths of the respondents lived in single-family homes, and over 85% of them owned the home. AARP found that the 70% who were able to make modifications had made at least one modification to make the home more livable. The respondents felt that making a modification enabled them to live another ten years in the current residence (AARP, 2000). Slowing the sales of homes for older homeowners would help communities retain the boomers longer, further making it imperative for public officials to find ways to make communities elder friendly (Achenbaum, 2005).

Since the population of 55 and older will steadily increase, the demand for housing designed for older populations will continue to expand ("Housing," 2009). Certainly assisted living facilities or universally designed model homes may be other housing possibilities as well as subsidized housing for those at lower income levels. Universally designed homes use a design approach that helps mitigate having to move to another home as age places different demands on living spaces (AARP, 2005a). Some of the design features include barrier-free

kitchen and bathroom layouts and no-step entrances and floor plans as well as wider doorways (AARP, 2005a).

Twenty percent of all home sales are made by the 55 and over population ("Housing," 2009). Moving to better quality housing is one of the top reasons that the older population chooses to move ("Housing," 2009). Some literature suggests that boomers will not retrofit homes at retirement but rather purchase new homes, as the modifications may be cost prohibitive (Zobell and Reisch, 2006). Large scale remodeling to address modifications could cost anywhere from $10,000 to $75,000 in Southern California, depending upon the scope of change (Zobell and Reisch, 2006). The cost of construction could be compounded with the necessity to vacate the home while upgrades are being made, possibly contributing to even higher costs.

Current models for assisted living are driven by many factors including the private sector goal of profit, which dictates the quality of care as well as the affordability and types of services offered. Regardless of the operational structure, all assisted living is licensed by the state in which it operates. Even though many are subsidized, the cost is still prohibitive to most seniors (Kuttner, 2005). Affordability is a key factor. Since housing needs may change with the aging of the population such as downsizing to a smaller home or moving into a space that does not require outside maintenance, cities across the United States must examine their ability to offer these options to this growing senior population (AARP, 2005a). According to the Commission on Affordable Housing and Health Facility Needs for Seniors in the 21st Century, "a crisis exists for older Americans

who need affordable housing, and the crisis is getting worse" (Libson, 2005/2006, p. 9). Even more telling is that an estimated additional 730,000 rent-assisted dwellings will be necessary to meet the demand to house the over 65 population by 2020 (Libson).

Hanson and Emlet (2006) point out that affordable housing together with services to support independent living is also a benefit to adult children who serve as caregivers. They also suggest that senior housing needs may not be fully understood, recommending further research to be done in this area. According to Telford (2006), "60 percent of people over 50 will have a surviving parent in 2010, compared to only 16 percent in 1960" (p. 19). Not only are people looking for answers to their own retirement questions, but they are also dealing with questions about their parent's retirement. Ervin (2000) stated that America's population would shift dramatically in the twenty-first century, with 20% of the population living to be 65 years of age or older, over 10% living to at least 90 years of age, and a quadrupling of the numbers living to 85 years or older. With the entry of the baby boomers into the ranks of older Americans soon, it is a revelation to the local governments that they are not prepared to handle the associated needs that are implied (AARP, 2005a).

New service models for those wishing to age in place are showing up as "virtual retirement communities" or a network of service providers or concierge services that serve communities with a large elderly population (Burcum, 2008). Residents pay annual membership dues which cover trips to the supermarket, workshops and lectures on topics about aging, facilitated exercise classes and

transportation to anywhere local by volunteers (Gross, 2006). Other fees are ala carte for paid services such as home repairs, home-delivered meals from favorite restaurants or home health aides (Lemberg, 2002). One example is Beacon Hill in Boston, Massachusetts (Gross, 2006). The grass-roots experiment began with twelve residents of this quaint neighborhood that is reminiscent of the nineteenth century (Gross, 2006). The residents not only wanted to grow old in their own homes but also remain independent of their adult children. Residents pay annual membership dues that are $550 for an individual and $780 for a household which cover a variety of services (Gross, 2006).

Walkability

The walkability of a community is associated with features such as shopping and services within close proximity or walking distance, along with well-maintained sidewalks and streets. As people age, the accessibility to well-maintained sidewalks, and nearby shopping, often leads to extended years of independent living (AARP, 2005b). With the older population at risk of waning functional independence as they age, enhancing walkability of communities may be associated with maintaining functional independence longer as the residents have access to a more active lifestyle that encourages physical activity and social interaction (Berke, Koepsell, Moudon, Hoskins & Larson, 2007).

One of the first recommendations for creating a more walkable community is for local governments to improve and maintain sidewalks (Feldman, 2003). Feldman recommends public officials create safe, comfortable walking routes, and that local governments promote land use and transportation and pedestrian

options that make walking a more practical option. Feldman continues with suggestions for greater walkability by encouraging reprogramming of traffic signals to give pedestrians more time to cross busy streets. Benches and resting places are important to walkability, and they not only provide respite for the older population, but they also are conducive venues for meeting and socializing (Feldman, 2003). Benches are most useful when they are located in shady spots and on right angles to contribute to the ease of conversation. Feldman also recommends other strategies for public officials to consider such as having accessible public restrooms in downtown areas and legible signage along the pedestrian routes.

People who live in walkable communities spend about 30 minutes more walking for transportation each week (Saelens, Sallis & Frank, 2003, as cited in Frank et al., 2006). The health benefits from living in a community with good walkability measures is echoed by the Active Community Environments (ACE), pointing to the higher promotion of activity levels and exercise (Doyle, Kelly-Schwartz, Schlossberg & Stockard, 2006).

The social aspect and the psychological benefits are evident as the walkable community also facilitates greater access to activities, interaction and a general feeling of well being (Masotti et al., 2006). If a community has a critical mass of *walkable urbanity*, then it may be a magnet for new residents looking for a less automobile-centric lifestyle (Leinberger, 2005).

Besides the trend of the growing baby boomer population, there is also a growing global tendency for the return of the population's migration to the cities.

In fact, the United Nations predicts that the migration will increase from 47% in 2000 to 60% by 2030 (Masotti et al., 2006). The speculation for this movement is the return to the availability of services and the opportunity for more social interaction (Masotti et al. 2006). This supports the need for more livable communities with close attention paid to having amenities within walking access, and clean, well-maintained and well-lit sidewalks, with year-round accessibility (Masotti et al., 2006).

The older population is at a higher risk for incurring injuries and even fatalities from crosswalk collisions, which may impact the desire to walk to nearby services (Berke et al., 2007). Berke et al. (2007) conducted a study to examine whether older people who lived in communities more conducive to walking were more active or less obese than those living in communities with less desirable walkability factors. Data from the Adult Changes in Thought study of a cross-section of 936 participants ages 65 to 97 were used in combination with a walkability score from the Walkable and Bikable Communities Project to determine the correlation between walkability, activity and body mass index (Berke et al., 2007). Findings suggested that neighborhood characteristics that encouraged walking were directly correlated to the frequency of walking but whether frequency of walking translated to less obesity was less clear (Berke et al., 2007). The results from the study confirm that high community walkability is important for older population mobility and needs further study to determine the level of preparedness of cities to meet the growing demand.

Making adjustments to the timing on pedestrian crossings would help communities respond to an aging population as well as to those with mobility impairments ("Maturing of America," 2006). Adjusting the walk times may encourage more people to walk, arresting any fears of not being able to successfully cross busy intersections, which may be on the destination route. Walkability contributes to quality of life in that it promotes exercise, physical and mental health, as well as access to the community (AARP, 2005b).

Daisa (2006) examined the recommended practices of smart growth that primarily stresses multi-modality transportation with an emphasis on walkability when designing urban environments. The characteristics of a walkable community include "mixed land uses in close proximity to one another, building entries that front directly onto the street without parking between entries and the public right of way, building landscape and thorough-fare that is pedestrian-scale and a highly connected, multimodal circulation network" (Daisa, 2006, p. 4). Having architecturally interesting streetscape detail that can be appreciated by walkers, cyclists and anyone at the street level is part of the design that emphasizes the walkable community (Daisa, 2006).

Some cities are already working toward addressing the growing boomer population through expansion of multi-use paths and interconnection areas so destinations can be reached on foot ("Maturing of America," 2006). Washington, New Jersey, is working to get grants for construction of bicycle and pedestrian lanes in the center of the community to encourage accessibility by seniors, and the municipality of Falcon Heights, Minnesota, is working with a group called

Active Living – Ramsey County to get people out and active through a walkability improvement program ("Maturing of America," 2006).

In a joint study with MetLife Foundation, ICMA, NLC, Partners for Livable communities, the National Association of Counties, and the National Association of the Area Agencies on Aging, the authors suggested only 51% of local governments had in place some kind of community design or redesign that supported walkability and 20% were considering such policies ("Maturing of America," 2006). The local governments with the highest percentage of senior-friendly walkability were those with populations between 500,000 to 1,000,000 ("*Maturing of America*").

Shopping

Access to shopping continues to be a critical issue for the aging population (AARP, 2005a). One of the key factors for a livable community is the proximity of shopping and services to residential neighborhoods of older people, and being within walking distance is a characteristic of a healthy retirement community (Masotti, Fick, Johnson-Masotti & MacLeod, 2006). Myers & Ryu (2008) state that urban designers should include nearby shopping, parks and community centers to encourage more lively communities. Yet in many communities across the United States, access to shopping in local and downtown neighborhoods has become increasingly more challenging, as retail establishments have followed the movement to the suburbs or mall locations, thus rendering accessibility through walking improbable (AARP, 2005a). Even when retail establishments relocate to downtown areas as a result of downtown

refurbishment, many of these stores cater to tourist trade rather than to local residents (AARP, 2005a).

In many suburban settings, shopping is primarily located in aging strip malls, sometimes requiring the crossing of busy intersections (AARP, 2005a). That can make the shopping experience difficult when carrying bags of groceries or packages, even if it is just a short walk to the bus stop. In Stanton, California, a strip mall is being renovated with an overall theme for the shops, with some of the unused professional spaces transformed into senior housing consisting of townhomes and small-lot single family homes (AARP, 2005a).

Public officials could press for adding shopping outlets into subdivisions, and they could encourage specialty stores like Whole Foods or Trader Joe's to build stores in communities that larger chains would not consider due to their size and parking constraints (AARP, 2005a). Masotti et al. (2008) cite one of the policies necessary for a naturally occurring retirement or livable community is to change residential zoning restrictions to encourage walking distance access to shopping and services for seniors. Municipalities have the tools to affect the community environment, which goes hand-in-hand with the quality of life for seniors as they age, since the older population spends the majority of time in their communities (Masotti et al., 2008.). The location of local farmer's markets to nearby residential areas offers opportunities for the residents to shop locally, while encouraging walking and exercise.

An additional strategy may be for the public transportation companies to design a route strictly for the aging population for the stops they frequent such as

specialty shops, strip malls and grocery stores (AARP, 2005a). An evaluation and reorganization of the public transportation that may include a shuttle bus system to hospitals or malls could also be an effective strategy for increasing the access to shopping for seniors (Masotti et al., 2006).

Transportation

According to the authors of the Maturing of America (2006) study, transportation provides a lifeline between home and the community. "Transportation represents a basic human need for people of all ages and is inextricably linked to independence, autonomy and quality of life" (Dickerson et al., 2007). Since over 25% of all licensed drivers will be over the age of 65 by 2030 (which will be over 20% of the total United States population), transportation options as well as signage and roadway design improvements will be essential to sustain the quality of life and independence for those wishing to age in place ("Maturing of America," 2006). As the population ages, they may face limitations that impede the ability to drive, making transportation options critical to independence. According to the Beverly Foundation (2006), "improving transportation services for older adults improves transportation services for everybody" (p. 2).

In 2003, the Beverly Foundation launched the Innovations for Seniors study in partnership with the Community Transportation Association of America (CTAA) to examine the transportation services in place to meet the needs of seniors (Beverly Foundation, 2004). The purpose of the survey was to examine the challenges of using public transportation for seniors as well as major

innovations that were in use for the transit service providers (Beverly Foundation, 2004). The Beverly Foundation was formed as a national nonprofit whose mission is to research America's older population and promote senior's quality of life through addressing transportation mobility (Beverly Foundation, 2004).

For the Beverly Foundation study, an electronic survey was sent to public and community transit service providers, which equated to 167 inquiries in 50 states, of which 96 surveys were returned from 33 states (Beverly Foundation, 2004). The Beverly Foundation (2004) findings suggested that when older people do cease driving, the transition period to get comfortable using other transportation options is sometimes difficult. Offering travel training is a way to combat that resistance successfully, since fear of the unknown and not being aware of services were barriers to use (Beverly Foundation, 2004). The author also found that fixed transit routes were inflexible, and the recommendation was for expanded fixed route services for seniors that stopped at popular destinations (Beverly Foundation, 2004). Further findings included the need for fixed routes for the older population and the need for further study of the preparedness of cities to meet this growing demand (Beverly Foundation, 2004).

In a follow up study, the Beverly Foundation (2008) surveyed the American Public Transportation Association (APTA) and transit companies across the United States known to organize special transportation for older adults. The purpose of the study was to gather information about services that were being provided to older adults (Beverly Foundation, 2008). Eight-eight surveys were received, representing 26 states, and these findings suggested that

84% of the providers had reduced fares, travel training was provided by 43% and 25% offer door-to-door transportation (Beverly Foundation, 2008).

About 9% of drivers over the age of 70 stop driving annually due to health circumstances (Dickerson et al., 2007). That translates to more than 600,000 people over the age of 70 who cease driving activities every year and become dependent on other ways of mobility (Dickerson et al., 2007). The need for development and support for transportation options for the older population is well-known. In the 2005 White House Conference on Aging, the third highest ranked resolution of the attending delegates was identification of senior transportation options (Dickerson et al., 2007). Additionally, the increase in federal and state funding and the increased interest in local governments to address the transportation issues further demonstrate the awareness and gravity of the problem (Dickerson et al., 2007).

For those who do continue to drive, transportation improvements could include options such as providing larger road signs and markings and specially-designed driver training ("Maturing of America," 2006). The Area Agency on Aging of Pasco-Pinellas County in St. Petersburg, Florida, offers the "Getting in Gear Senior Driving Program" that provides older adults with a range of services that includes driving skills assessments, a defensive driving course and counseling for those who may be considering reducing or stopping driving altogether (n4a, 2007).

In a 2003 report for the ICMA by Feldman, he outlined the need for public officials to improve transportation options for older adults. Considerations when

improving transportation options include frequency of service, proximity to residences, and easy to read transit maps (Feldman, 2003). For those who no longer drive, door-to-door paratransit services and shared ride taxi programs are alternate ways for meeting the growing transportation demands in the rural and suburban elder populations ("Maturing of America," 2006). Technology has improved the reliability and coordination of these paratransit services through real-time notification to the senior of arrival and departure times (Dickerson et al., 2007).

Other options may include public transit systems, dial-a-ride services, private and specialized transportation services and supplemental transportation programs operated by private transit carriers, volunteer groups, community groups or churches. ITNAmerica is another alternative that uses the automobile to assist the seniors in their need for independence and mobility in some communities (Dickerson et al., 2007). Low floor *elderbuses* are options in Brookline, Massachusetts (Feldman, 2003).

Determining whether transportation services are *senior friendly* includes factors such as affordability, accessibility, adaptability and availability, according to research by the Beverly Foundation (2004). While some transportation options may exist in a community, the extent to which they meet these standards determines how well the services will be used by the older population. Safe mobility options are essential for the older population to continue to engage in community and social connections that often require human interactions crucial for a healthy quality of life (Dickerson et al., 2007).

During the 2005 White House Conference on Aging, William Millar, president of the American Public Transportation Association spoke about providing transportation services to older adults. The Beverly Foundation (2006) summed up this vision:

> As the number of older Americans continues to grow, our transportation network must find new ways to meet the needs of citizens who are unable or choose not to drive. Public transportation offers a vital solution for many older adults. (p. 3)

Serving the aging population will continue to call for innovations and adaptations of the transportation options for livable communities, as inadequate mobility options remains one of the most common barriers to aging in place (n4a, 2007).

Naturally Occurring Retirement Communities

Naturally occurring retirement communities (NORCs) are defined as apartment buildings or apartment complexes or housing complexes that were not built specifically for a 50+ population (McCallion, 2005). According to McCallion (2005), the way NORCs are defined, however, can vary. Some of those variations include the following:

1. The AARP (2005a) defined NORCs as buildings or neighborhoods where more than 50% of residents are above age 60.

2. The Heller School for Policy and Management at Brandeis University defined NORCs as households where 40% have heads of household over age 65 (McCallion, 2005). Additionally areas become NORCs when they contain twice the usual percentage of elderly. This elderly population can consist of both newly arrived elderly and those who have aged in place (McCallion, 2005).

3. Marshall and Hunt (1999) defined a NORC as any community or neighborhood where residents have lived for years and have aged as neighbors. Instead of moving out of this community and neighborhood, the residents stay and a NORC is created. In recognition of the problems created by an aging population on any community, Marshall and Hunt attempted to develop a diagnostic tool that could be used by a community to see what type of NORC it is or could become. Marshall and Hunt examined census data from 64 communities located in rural areas of Wisconsin. These communities were classified as either Amenity (attracts both young retires and younger residents), Bi-Focal (natural amenities yet close proximity), or Convenience (more rural, but less amenity).They found that the NORCs that are most successful are those that fall into the category of Amenity and Convenience (Marshall and Hunt).

Naturally-occurring retirement communities have also been the focus of research by the AARP (2005c). In a 2005 survey, the AARP found that 89% of those 50+ Americans wanted to stay in their homes for as long as it was feasible. Hence, to accommodate this desire of retirees, the AARP (2005c) suggested that service delivery models that take advantage of efficiencies of scale should be developed. That would include making sure that community planning incorporates services in areas where there is a concentration of seniors who are aging in place (AARP, 2005c). Such planning makes it possible to serve seniors at lower costs, enhance their ability to remain in their own homes, and avoid expensive institutionalization. Public and private policy makers need to understand the value of providing such supporting services in creating more

livable communities. As Elinor Ginzler reported to the Senate, "The challenge, then, is to create communities, with appropriate and affordable housing, adequate options for mobility, and the community features and services that can facilitate personal independence and continued engagement in civic and social life" (AARP, 2005c, ¶ 7).

Masotti, Fick, Honson-Masotti, and MacLeod (2006) reported that there are health benefits to living in NORCs because most NORCs have environments that are associated with better health for seniors; these healthy benefits are even greater where physical and social environments facilitate greater activity and promote feelings of well-being. When compared to the provision of additional medical and social services, environmentally healthy NORCs are a low-cost, community-level method of facilitating healthy aging. Masotti et al. (2006) suggested that municipal governments should pursue policies that support and encourage the development of healthy NORCs. When such policy and support consideration is given to the development of NORCs, the elderly population is more likely to perceive that the community is supportive of them being part of that community.

Summary

As the baby boom generation approaches retirement, business must be poised to recruit and maintain an older workforce through policies and schedules sensitive to the aging needs (Rubin, 2006). Communities must be ready to address the increased demand for services, housing, transportation, and maintenance of community assets such as properly maintained sidewalks that

encourage and promote walkability (AARP, 2005a). The call for increased community services will impact governments on the county and city levels, with the urban areas absorbing most of the responsibility for preparedness. With less than 50% of local governments reporting that they have begun to plan for the growing senior population, there is little time to spare as the boomers grow older ("Maturing of America", 2006). Putting policies, planning and initiatives in place that support the proliferation of NORCs will be integral in meeting the needs of the growing boomer retiree population (McCallion, 2005).

Attracting and retaining the aging boomer population through community preparedness has clear economic and business implications for city managers, regional developers, and business leaders. Business and communities would benefit economically from providing services that encourage retention of older workers (Rubin, 2006). Community preparedness is essential to courting and keeping the retiree base that can bring tremendous assets to public and private industry. Further, with the aging of the baby boomers and the higher life expectancy resulting from improved health, the workforce is being transformed as many older people choose to or need to remain in the workplace (Rubin, 2006). Workers age 55 and older will grow from 13% in 2000 to 20% in 2020 ("Shifting Workplace," 2006). With growing older complicated by caregiver issues and a possible need to delay retirement, it is an even more compelling reason to study various living options for the senior population and the implications for communities, the economy, and for business.

The assets that retirees can bring to a community are a rich source of economic development, and the payoff to the community in terms of increased volunteerism, higher tax base, and added source of expenditures into the local economy could equate to a recession-proof industry (Smith, 2009). The possibility of this retiree boost for the local economy depends on providing rich amenities and services in the community to attract them. Affordable housing options and adequate access to transportation and shopping will be critical as communities prepare for the boomer retiree population (AARP, 2005a).

Evaluating the community preparedness of our communities in the context of handling the growing Boomer population will assist in business and community planning for needed services and necessities that will facilitate successful aging and independence. While the literature supported the notion that people preferred to live out their lives in their own homes, the level of preparedness of the communities was insufficient to meet that impending need (Hooyman & Kiyak, 2005; "*Maturing of America*," 2006). The research suggested the need to conduct a comparative, quantitative study to examine and assess the level of community preparedness in the four regional areas of the United States with populations greater than 25,000, to compare those regions on services such as housing, and to determine which regions are best prepared to handle service impacting the growing aging population (AARP, 2005b).

CHAPTER 3: METHODOLOGY

Overview

To date, over half of America's communities have not begun to prepare for the rapid aging of the population (AARP, 2005a). With the first baby boomers having turned 62 in 2008, it is imperative that the nation's cities and counties begin a comprehensive assessment of its policies, programs, and services. The physical characteristics of a community such as walkability, transportation, housing, and access to shopping play a large part in the ability to live independently (AARP, 2005b).

Boomers' ascendancy into retirement is noteworthy not only because of the large size, but also because the social and demographic profile contrasts sharply with previous generations (Global Generations Policy Institute, 2007). The boomer generation is better educated, has a higher incidence of female workers in the workforce, is more racially and ethnically diverse and is more likely to work in professional or management positions. There is a clear trend to remain independent and thus age in place versus migration or altering of living situations ("Maturing of America," 2006).

Business and communities would benefit economically from providing services that encourage retention of older workers (Rubin, 2006). Community preparedness is essential to courting and keeping the retiree base that can bring tremendous assets to public and private industry. Further, with the aging of the baby boomers and the higher life expectancy resulting from improved health, the workforce is being transformed as many older people choose to or need to

remain in the workplace (Rubin, 2006). While the literature supported the notion that people preferred to live out their lives in their own homes, the level of preparedness of the communities was insufficient to meet that impending need (Hooyman & Kiyak, 2005; "*Maturing of America*," 2006).

Restatement of the Problem and Purpose

Our aging population is growing, which has important business and economic implications. However, how South, Northeast, West and Midwest regions differ in housing, shopping, walkability, and transportation preparedness was unclear. Business and economic development of a community is closely tied to the community's ability to recruit and retain older workers (Rubin, 2006). Macdonald and Dwyer (2008) reported that nearly one out of four people aged 65 to 74 were in the labor force in 2006, and that with the advent of baby boomers, that percentage may well increase. Community and workplace services that attract and support the older population are keys to community and business vitality (Rubin, 2006). As our aging population prepares to retire in their local region or relocate to new communities, the positive impact of attracting and retaining these citizens could be economically invaluable (Frey, 2007). However, little is known about regional differences and preparedness for the growing aging population.

The purpose of this comparative, quantitative study was to examine and assess four regional areas of the United States to determine which region was best prepared to handle the growing aging population in housing, walkability, shopping, and transportation preparedness. To determine the level of community

preparedness, public officials who were city managers or mayors and had direct or indirect affiliation with either the International City/County Management Association's (ICMA) or the National League of Cities (NLC) were surveyed. Representing the largest constituency group of both cities and counties in the United State, ICMA is a direct link to those working for local governments nationwide (ICMA, 2008). The NLC serves as a resource for more than 19,000 cities, although some of those cities are members through the associated 49 state municipal leagues (NLC, 2008).

Statement of Research Questions

As noted in the introductory chapter, this study was intended to be guided by the following restated research questions:

1. To what extent, if any, does housing preparedness for the aging population differ based on geographic region?

2. To what extent, if any, does walkability preparedness for the aging population differ based on geographic region?

3. To what extent, if any, does shopping preparedness for the aging population differ based on geographic region?

4. To what extent, if any, does transportation preparedness for the aging population differ based on geographic region?

Hypotheses

The associated hypotheses for the research questions were as follows:

1. *H1o*: The level of preparedness regarding housing does not differ based on regions of the country.

   H1a: The level of preparedness regarding housing differs based on regions of the country.

2. *H2o*: The level of preparedness regarding walkability does not differ based on regions of the country.

   H2a: The level of preparedness regarding walkability differs based on regions of the country.

3. *H3o*: The level of preparedness regarding shopping does not differ based on regions of the country.

   H3a: The level of preparedness regarding shopping differs based on regions of the country.

4. *H4o*: The level of preparedness regarding transportation does not differ based on regions of the country.

   H4a: The level of preparedness regarding transportation differs based on regions of the country.

Description of Research Design

The research study was conducted using the quantitative comparative design with an online survey developed in Survey Monkey (surveymonkey.com). Surveys were sent to all 1,248 U. S. cities with populations of 25,000 and over, as determined by the NLC. Surveys were emailed to 1,068 participant cities with

email addresses, and 291 responded, reflecting a 28% response rate. One hundred eighty paper surveys were mailed to those participant cities with no email address and 12 were returned, reflecting a 7% response rate. The returned surveys were manually entered into the online Survey Monkey database and incorporated with the electronic survey data. The overall response rate was over 24%, with 303 surveys out of the 1,248 returned.

This comparative quantitative research method provided a systematic description of the situation concerned with examining livable communities for the aging population. Specifically, the level of community preparedness across the four regions of the U.S. was examined and compared using Kruskal-Wallis statistics at a threshold of statistical significance of p-value < .05. According to Ouyang (2007), "descriptive research involves collecting data in order to test hypotheses or answer questions concerning the current status of the subjects of the study" (p. 1). Questions from a questionnaire of known validity were utilized, examining four of the eight major areas considered integral to being a livable community: housing, transportation, shopping, and walkability (AARP, 2005a). The four regions of the U.S. (Appendix B) of Northeast, Midwest, South and West were utilized for geographic purposes according to the U. S. Census Bureau official census maps (U. S. Census Bureau, 2001).

Operational Definition of Variables

The purpose of this section is to provide operational definitions of the variables used in the study. Additionally, the instrumentation used to measure the variables is presented. The survey questions that were summed to create each

composite dependent variable (Lord, 1980; Nunnaly, 1978; Silverstein, Johns & Griffin, 2008) are included and a chart is presented to delineate the operations definitions of each dependent (Table 1) and independent variable (Table 2).

Housing: Dependent variable (Y_1). The housing options for the aging population composite consisted of the total overall score from four (4) survey questions, each coded as a one or as a zero for the presence (1) or absence (0) of that preparedness item. Housing options near shopping (Q7 Are housing options located near basic shopping opportunities?) responses were scored as a 1 if housing options near shopping were present and as a 0 if housing options near shopping were not present. Property tax reductions were scored as a 1 if property tax reductions were present or as a 0 if property tax reductions were not present (Q8 Does your community offer property tax reductions for homeowners over age 65?). Mixed land use regulations (Q9 Do your community regulations permit mixed land use?), and the availability of assessments (Q10 Are assessments available to help seniors identify ways to modify their homes for better function and safety?) were each scored 1 if present and 0 if absent. The housing composite score was the sum of these four items, each scored as 1 or as 0, so the minimum possible score was zero if that participant reported that none of the four housing composite items were available in that community and the maximum possible score was four, if that participant reported that all four housing composite items were available in that community. Because no assumptions were made regarding the metrical properties of the housing

composite, this ordinal dependent variable was appropriate for non-parametric testing (Kruskal & Wallis, 1952; Nunnaly, 1978).

Walkability: Dependent variable (Y_2). The walkability options for the aging population composite consisted of the total overall score from seven (7) survey questions, each coded as a one or as a zero for the presence (1) or absence (0) of that preparedness item. Walkability plans (Q26 Does your community have a walkability plan?) responses were scored as a 1 if walkability plans were present and as a 0 if walkability plans were not present. Sidewalks throughout the community were scored as a 1 if sidewalks throughout the community were present or as a 0 if sidewalks throughout the community were not present (Q27 Are there sidewalks throughout your community?). Well-maintained sidewalks (Q28 Are the sidewalks well maintained?) and pedestrian routes (Q29 Are there pedestrian routes identified between most major residential areas and typical destinations?) were each scored 1 if present and 0 if absent. Adequately timed traffic signals (Q30 Do traffic signals provide adequate time for senior pedestrians to cross the street without feeling rushed?), push-to-walk buttons at traffic lights (Q31 Do signals have push-to-walk buttons to help stop traffic on a busy street?), and resting places along sidewalks (Q32 Are there resting places (e.g., benches, low walls) for pedestrians along the sidewalks?) were each scored 1 if present and 0 if absent. The walkability composite score was the sum of these seven items, each scored as 1 or as 0, so the minimum possible score was zero if that participant reported that none of the seven walkability composite items were available in that community and the maximum possible score was

seven, if that participant reported that all seven walkability composite items were available in that community. Because no assumptions were made regarding the metrical properties of the walkability composite, this ordinal dependent variable was appropriate for non-parametric testing (Kruskal & Wallis, 1952; Nunnaly, 1978).

Shopping: Dependent variable (Y_3). The shopping options for the aging population composite consisted of the total overall score from four (4) survey questions, each coded as a one or as a zero for the presence (1) or absence (0) of that preparedness item. Grocery stores, banks, coffee shops, and pharmacies within walking distance (Q22 Does your community have grocery stores, banks, coffee shops and pharmacies within a safe, convenient walking distance (1/4 mile) of clusters of residences of older adults?) responses were scored as a 1 if grocery stores, banks, coffee shops, and pharmacies within walking distance were present and as a 0 if grocery stores, banks, coffee shops, and pharmacies within walking distance were not present. Mixed-use developments were scored as a 1 if mixed-use developments were present or as a 0 if mixed-use developments were not present (Q23 Are there mixed-use developments with shops and a mix of residential units that would appeal to older residents?). Farmers' markets (Q24 Does your community have and support local farmer's markets?) and farmer's markets located within walking distance (Q25 Does your community have farmer's markets located within walking distance of your neighborhoods with older populations?) were each scored 1 if present and 0 if absent. The shopping composite score was the sum of these four items, each

scored as 1 or as 0, so the minimum possible score was zero if that participant reported that none of the four shopping composite items were available in that community and the maximum possible score was four, if that participant reported that all four shopping composite items were available in that community. Because no assumptions were made regarding the metrical properties of the shopping composite, this ordinal dependent variable was appropriate for non-parametric testing (Kruskal & Wallis, 1952; Nunnaly, 1978).

Transportation: Dependent variable (Y_4). Transportation options for the aging population composite consisted of the total overall score from three (3) survey questions, coded as a one or as a zero for the presence (1) or absence (0) of that preparedness item. Regularly scheduled bus or other public transportation service (Q11 Does your community have a regularly scheduled bus or other public transportation service that picks up passengers at established stops?) responses were scored as a 1 if scheduled bus or other public transportation services were present and as a 0 if scheduled bus or other public transportation services were not present. Dial-a-ride service (Q20 Does your community have a dial-a-ride service?) responses were scored as a 1 if dial-a-ride services were present and as a 0 if dial-a-ride services were not present. Taxi service (Q21 Does your community have a taxi service?) responses were scored as a 1 if taxi services were present and as a 0 if taxi services were not present. The transportation composite score was the sum of these three items, each scored as 1 or as 0, so the minimum possible score was zero if that participant reported that none of the three transportation composite items were

available in that community and the maximum possible score was three, if that participant reported that all three transportation composite items were available in that community. Because no assumptions were made regarding the metrical properties of the transportation composite, this ordinal dependent variable was appropriate for non-parametric testing (Kruskal & Wallis, 1952; Nunnaly, 1978).

Regions: Independent variable (X_1). Regions were operationally defined as the four areas of the U.S. (Appendix B) divided into geographical areas according to the official census map (U. S. Census Bureau, 2001). Because regions were represented in four nominal categories, Northeast (coded as 0), Midwest (coded as 1), South (coded as 2) and West (coded as 3), this independent variable was appropriate for non-parametric testing (Kruskal & Wallis, 1952; Nunnaly, 1978).

Operational Construct Tables

Table 1 summarizes the four ordinal dependent variables, including the operational definition of each of these variables and data type. In the operational definition column, the survey questions which are summed to create each composite are identified. For example, survey questions 7, 8, 9, and 10, each scored as a one if that preparedness is present and zero if that preparedness is not present, are summed to create a composite ordinal variable for community housing preparedness which ranges from a minimum score of zero and a maximum score of four. The independent variable of geographic region is summarized in Table 2, reflecting the operational definition and the data type.

Table 1

Operational Definitions of Dependent Variables (Y)

Variable/Concept	Operational Definition	Data Type
(Y_1) Level of community preparedness regarding housing	Sum of Q7, Q8 Q9, and Q10 Each scored 1 or 0 Range: 0 - 4	Ordinal
(Y_2) Level of community preparedness regarding walkability	Sum of Q26, Q27, Q28, Q29, Q30, Q31 and Q32 Each scored 1 or 0 Range: 0 - 7	Ordinal
(Y_3) Level of community preparedness regarding shopping	Sum of Q22, Q23, Q24 and Q25 Each scored 1 or 0 Range: 0 – 4	Ordinal
(Y_4) Level of community preparedness regarding transportation	Sum of Q11, Q20, Q21 Each scored 1 or 0 Range: 0 – 3	Ordinal

Table 2

Operational Definition of Independent Variable (X)

Variable/Concept	Operational Definition	Data Type
Geographic Regions	Four major regions in the United States – Northeast, Midwest South and West	Nominal

Description of Materials and Instruments

The survey (see Appendix A) was based on 34 questions which included dichotomous response formats, nominal-polytomous response formats and several unstructured response formats. The questions were adapted from AARP's Livable Communities: An Evaluation Guide (AARP, 2005b). This guide was specifically designed for public domain usage to evaluate community preparedness. Techniques for planning community surveys, developing focus groups, and identification of ways to make communities more livable are outlined in the guide. Further, the guide contains resources such as federal and state agency contacts, links to advocacy groups, and other organizations focusing on livable communities (AARP, 2005b). Because the guide is in the public domain, no expressed permission for usage was required.

Reliability was assessed using the Cronbach's alpha coefficient of internal reliability (Cronbach, 1951). Cronbach's alpha was calculated post hoc on the

survey data collected for the present study. The alpha value of .71 for the present data was considered adequate because it exceeded the threshold of .70 for acceptable internal consistency (DeVellis, 1991; Nunnaly, 1978).

External validity was fostered by sampling the entire population of public officials of U. S. cities with populations greater than 25,000, which was 1,248 according to the NLC database. The data collection time was extended over a period of six weeks, and many efforts were made to follow-up with and prompt respondents to participate. This was consistent with Trochim's (2007) suggestions that improving external validity can be achieved by drawing a good sample, assuring respondents participate, and doing the study in a variety of places and times with different people. Content validity was fostered by having 34 questions across four constructs. Face validity was fostered by using questions in the survey that have been used for similar constructs for other surveys and evaluations by AARP.

Selection of Participants or Subjects

The population surveyed was the cities of the U.S. with populations 25,000 and over. According to the NLC, there are 1,248 cities with populations 25,000 and over (NLC, 2008). Most of the survey participants were either direct or indirect members of the ICMA or NLC who were public officials such as city managers or mayors. The researcher obtained permission to use the public records data from the NLC that included membership information for both the ICMA and the NLC.

Tests of power were conducted *a priori* to determine the sample size necessary to achieve 80% power (power = .80) (Hopkins, 2001). According to the technique of Hsieh, Block and Larsen (1998), the sample size required to achieve .80 power (at the 95% confidence interval with a .05 significance level) was calculated to be 294 surveys necessary to ensure adequate power to determine statistically significant differences among regions and to foster empirical validity in the present study.

Surveys were sent to all 1,248 cities with populations 25,000 and over, and the expected response rate was 20 to 30%. In a similar study conducted by Metropolitan Life, the overall response rate was 18%, which was considered a low return rate ("Maturing of America," 2006). Every effort was made to ensure a higher return rate, employing weekly calls or emails to those public officials who had not returned the survey within the allotted time. The response rate was over 24%, with 303 surveys returned.

Procedures

The survey was created using questions from an existing survey by AARP (AARP, 2005a). After receiving approval from the Institutional Review Board (IRB) to conduct the study, the researcher sent the questionnaire to the sample for completion on a volunteer basis. Those respondents contacted by email were sent the information explaining the purpose of the survey and a link to the online survey (See Appendix A). Those respondents contacted by mail were sent the information explaining the purpose of the survey and a paper copy of the survey with a self-addressed, stamped return envelope.

To ensure anonymity, the surveys had no respondent names or contact information. The online survey collection database was housed in a personal laptop that was accessed only by the researcher. The pen and paper surveys (N=12) were entered into the online database and then shredded to ensure anonymity, confidentiality, and security of the questionnaires. The database was secured at all times while the data was being collected as well as between collection periods.

Participants clicked on the link in the email, which linked to an online survey tool (Survey Monkey). The survey took about 10 minutes to complete. The study population answered several questions corresponding to categorical variables such as city name, state, regional location, and city size. Thirty-four questions regarding the constructs were grouped in the survey according to construct area such as transportation, shopping, and walkability. At the end of the survey, the respondents submitted it and were thanked for their participation. The submission process sent the responses to the Survey Monkey (surveymonkey.com) database which was used to collect the data. The IP addresses were captured and identified to ensure no duplication of responses. When duplications were identified, the first response was counted and subsequent responses were deleted.

Discussion of Data Processing

Data were downloaded from Survey Monkey using a secure password. IP addresses were identified to ensure no duplication of responses. When duplications were identified, the first response was counted and subsequent

responses were deleted. Descriptive statistics were employed to determine if any patterns existed in the data.

The statistical software program SPSS was used to analyze the data from the survey. Four Kruskal-Wallis statistical tests were conducted, corresponding to the four hypotheses. For each hypothesis, the independent variable was geographic region (Northeast, South, Midwest, West) and the dependent variable was a preparedness composite, either housing (H_1), walkability (H_2), shopping (H_3), or transportation (H_4). The Kruskal-Wallis non-parametric method was used because the independent variable of regions included more than two categories and because the no assumptions were made regarding the metrical properties of the preparedness composites (Kruskal & Wallis, 1952, Nunnaly, 1978). All comparisons were made at the statistical significance threshold of $p < .05$.

Findings are displayed in tables as frequencies, percentages, means, standard deviations (SD), minimum score, maximum score and standard error of the mean (SEM), as appropriate, to supplement the findings text. Graphical displays of composite score findings by region are expressed as mean values per region with error bars expressing the standard error of the mean (SEM).

Methodological Assumptions, Limitations, and Delimitations

Hypothesis guessing is one threat to the validity that would be a possible limitation for this proposed study. Trochim and Donnelly (2007) described hypothesis guessing as the ability for the respondents to try to answer the questions based on what they believe the information will be used for instead of the actual situation. Public officials may be hesitant to give information that may

potentially be harmful to their city or county's perception of preparedness. It would be assumed that they would answer truthfully to portray their cities and counties correctly however.

The present study was limited by the response rate. While the 28% response rate in the present study was higher than the 18% realized in the Metropolitan Life study ("Maturing of America," 2006), it is not possible to know what the responses would have been for the potential participants who chose to not participate. The present study employed self-report survey methodology, so it is possible that participants have been tempted to give socially desirable responses. Further, regional economic conditions, topography, demographics, and climate were not included in the survey. No actual measures of the quality of preparedness were assessed. For example, the present study asked whether covered walkways were present without assessing whether these covered walkways were adequate, safe, or properly maintained. Only public officials from cities with populations of 25,000 and over were included, so the present data may not be representative of the opinions of the aging population within regions or of public officials of smaller cities within regions. Therefore, the findings of the present study should be generalized with caution.

Ethical Assurances

Ethical considerations are so important in research that all formal research must be reviewed and approved by an Institutional Review Board (IRB) that is formed by the educational institution (Trochim & Donnelly, 2007). Although ethical considerations such as anonymity and confidentiality are more prevalent

in human subject studies, certainly quantitative studies using mail or Internet surveys for data gathering must be reviewed carefully to ensure that voluntary consent, statistical integrity and other issues are appropriate before the IRB review (Trochim & Donnelly, 2007).

The principal investigator is the individual held responsible to make sure that all requirements set forth by the Northcentral University IRB were met. The principal investigator was responsible for assuring that the study was conducted with the interests of the participants in the forefront. The research was conducted solely under the direction of Northcentral University and was not associated with any other university, institution, or corporation. In addition, all potential participants were adults over the age of 18 with no limitation on maximum age. No offer of compensation or any other consideration for involvement in the research was made. Participation was completely voluntary and failure to complete the survey did not result in any negative consequences to the prospective participants. At no time was deception involved with the research. The database of the online survey collection data was archived to a Western Digital removable hard drive and will be held for three years, at which time the data will be deleted using a non-recoverable data deletion method such as Hard Disk Data Wiper. All appropriate measures were taken to ensure that the data remains confidential and available only to the researcher.

CHAPTER 4: FINDINGS

This chapter contains findings and results for the research study conducted on regional differences in city livability. These results were based on 303 respondents who completed the online survey measures. Participants were public officials from cities in the United States. Within this quantitative comparative study, regional differences in livability were examined for cities with populations over 25,000 in the areas of housing, walkability, shopping, and transportation. Of particular interest were possible differences between four regions: Northeast, South, Midwest, and West.

This findings section begins with a description of the participants and the preparedness results overall, including proportion of participation by region, community size, and available community housing types. The data from the individual survey questions relating to the constructs are then presented, describing the regional profiles in each area of housing, walkability, shopping, and transportation. A composite of all data from corresponding research questions for each construct are then presented.

In the analysis and evaluation of findings section, hypotheses were tested and a determination was made to reject or not reject the null hypothesis. Kruskal-Wallis statistics were used to evaluate each of four (4) hypotheses of significant differences between regions in housing, walkability, shopping, and transportation preparedness, based on the composite score for each construct. Determinations to reject or not reject the null hypothesis were made at a statistical significance threshold of $p < .05$. This chapter ends with a summary of major findings.

Findings

Participant Descriptive by Region

Descriptive statistics include participants by region, participants by state, community size, membership in city management associations, participation by public officials, budget cuts that affected the older population, and available housing types by region. Counts and percentages per region are highlighted in text and in tables. A summary of the descriptive findings is provided in anticipation of presentation of the findings from formal hypothesis testing.

Participants By Region

Of the 303 cities in the sample, 31% were from the South (n = 93), 26% were from the West (n = 80), 25% were from the Midwest (n = 77), and 18% were from the Northeast (n = 53).

Participants By State

Forty-three (43) of the 50 states were represented (see Appendix D). Roughly one in four of the total communities included in the present sample were from California (12%), Florida (7%) and Illinois (7%).

Community Size by Region

Roughly 45% of the total sample had populations from 25,000 to 49,999 and this category represented the largest across all regions. Almost one quarter of the sample had populations between 50,000 and 74,999 except for the Northeast (15%). Cities with populations from 100,000 to 199,999 accounted for over 13% of the total, and the South and the West had almost one-fifth in that category. Just over one-tenth of the sample had populations between 75,000 and

99,999, with the Midwest having less than 7%. Less than 10% of the total sample had populations over 200,000, with the South and the West having a little over 10% and the Northeast and Midwest having less than 5% (see Table 3).

Table 3

Community Size (in thousands of residents) by Region

Region	Statistic	25-49	50-74	75-99	100-199	200+	Total
Northeast	Count	31	8	7	5	2	53
	%	58.5	15.1	13.2	9.4	3.8	
Midwest	Count	47	19	5	4	2	77
	%	61.0	24.7	6.5	5.2	2.6	
South	Count	34	22	11	16	10	93
	%	36.6	23.7	11.8	17.2	10.8	
West	Count	25	20	11	15	9	80
	%	31.3	25.0	13.8	18.8	11.3	
Total	Count	137	69	34	40	23	303
	%	45.2	22.8	11.2	13.2	7.6	100

Participation by Public Officials

A majority of the sample were public officials (86%). Over 90% of the Northeast and the Midwest respondents were public officials, compared to three-quarters of participants from the West region (see Table 4). All of the respondents were either public officials or designees.

Table 4

Public Official Frequency by Region

Region	Statistic	Question 1* No	Question 1* Yes	Total
Northeast	Count	5	48	53
	%	9.4	90.6	100
Midwest	Count	5	72	77
	%	6.5	93.5	100
South	Count	16	77	93
	%	17.2	82.8	100
West	Count	18	62	80
	%	22.5	77.5	100
Total	Count	44	259	303
	%	14.5	85.5	100

*Are you currently a city manager, major or city official?

Membership in National League of Cities (NLC) or the International City/County Management Association (ICMA)

Over 90% of the cities of all regions except for the Northeast (74%) were members of the NLC or the ICMA either directly or indirectly (see Table 5). Over 90% of the cities in the West, South, and Midwest were members, with just under three-quarters members in the Northeast (see Table 5).

Table 5

NLC or ICMA Membership by Region

		Question 2*		
Region	Statistic	No	Yes	Total
Northeast	Count	14	39	53
	%	26.4	73.6	100
Midwest	Count	7	70	77
	%	9.1	90.9	100
South	Count	6	87	93
	%	6.5	93.5	100
West	Count	2	78	80
	%	2.5	97.5	100
Total	Count	29	274	303
	%	9.6	90.4	100

* Is your city currently a member either directly or indirectly of the National League of Cities or the International City/county Management Association?

Budget Cuts That Affected the Older Population

Less than one third of communities had budget cuts affecting services for the older populations over the past year. Budget cuts ranged from 32% in the Northeast to 26% in the Midwest. A little less than two-thirds of communities had master plans that included provisions for studying the needs of older adults (see Table 6).

Table 6

Budget Cuts by Region

		Question 6*		
Region	Statistic	No	Yes	Total
Northeast	Count	36	17	53
	%	67.9	32.1	100
Midwest	Count	57	20	77
	%	74.0	26.0	100
South	Count	68	25	93
	%	73.1	26.9	100
West	Count	57	23	80
	%	71.3	28.8	100
Total	Count	218	85	303
	%	71.9	28.1	100

* Has your city undergone budget cuts in the past year that have affected services to your older population? ---tables need to be in APA

Available Housing Types by Region

Almost 100% of communities had single-family and multi-family housing. Special housing complexes for older people were found in over 90% of communities. Over 90% of communities had assisted living facilities. Percent answering "yes" ranged from 98.8% (79 of 80) in the West, 95.7% (89 of 93) in the South, and 92.2% (71 of 77) in the Midwest to 79.2% (42 of 53) in the Northeast. These findings suggest that assisted living facilities were available to over four-fifths of communities.

Over 70% of communities had continuing care retirement communities. Percent answering yes ranged from 79.6% (74 of 93) in the South, 75.3% (58 of 77) in the Midwest and 72.5% (58.80) in the West to 50.9% (27 of 53) in the Northeast. These findings suggest that assisted living facilities were available to almost three quarters of communities.

Over four-fifths of communities had nursing homes. Percent answering yes ranged from 95.7% (89 of 93) in the South to 83.1% (64 of 77) in the Midwest and 81.1% (43 of 53) in the Northeast. These findings suggest that nursing homes were available to most communities.

Housing, Walkability, Shopping, and Transportation Descriptive

The present study included four (4) research questions, each relating to regional differences (Northeast, South, Midwest, West) in housing, walkability, shopping, and transportation preparedness. For each preparedness construct, individual survey items are presented first, followed by results from the composite score. For each individual survey item, frequencies and percentage by region are presented in tables and text. The composite scores are expressed as means, standard deviations, and minimum and maximum scores by region in tables, supplemented by bar graphs and explanatory text.

Housing

Housing preparedness consisted of four (4) questions (near shopping, tax reductions, mixed land regulations, senior housing assessments). The corresponding tables have the frequencies of yes and no questions (Table 7,

Table 8, Table 9, Table 10). To supplement the text, the corresponding survey question appears in the caption below each table.

Housing options located near basic shopping opportunities. Housing options located near basic shopping were readily available. Overall, 93.8% of participants (283 of 303) indicated that their local neighborhood had housing options located near basic shopping, while 10.9% (35 of 322) did not have housing opportunities near shopping. Percent answering "yes" ranged from 96.2% (51 of 53) in the Northeast to 92.2% (71 of 77) in the Midwest (Table 7).

Table 7

Housing Options Located Near Basic Shopping Opportunities

		Question 9*		
Region	Statistic	No	Yes	Total
Northeast	Count	2	51	53
	%	3.8	96.2	100
Midwest	Count	6	71	77
	%	7.8	92.2	100
South	Count	7	86	93
	%	7.5	92.5	100
West	Count	5	75	80
	%	6.3	93.8	100
Total	Count	20	283	303
	%	6.6	93.4	100

* Are housing options located near basic shopping opportunities?

Property tax reductions. Property tax reductions for older homeowners were available to about half of the participants. Overall, 50.8% of participants (154 of 303) indicated that their city had property tax reductions for homeowners over the age of 65, while 49.2% (149 of 303) did not have property tax reductions. Percent answering "yes" ranged from 81.1% (43 of 53) in the Northeast to 33.8% (26 of 77) in the Midwest and 33.8% in the South (35 of 58) (Table 8).

Table 8

Property Tax Reductions

		Question 10*		
Region	Statistic	No	Yes	Total
Northeast	Count	10	43	53
	%	18.7	81.1	100
Midwest	Count	51	26	77
	%	66.2	33.8	100
South	Count	35	58	93
	%	37.6	62.4	100
West	Count	53	27	80
	%	66.3	33.8	100
Total	Count	149	154	303
	%	49.2	50.8	100

* Does your community offer property tax reductions for homeowners over age 65?

Mixed land use. Almost all city regulations permitted mixed land use. Overall, 97.4% of participants (295 of 303) indicated that their city regulations permitted mixed land use, while 2.6% (8 of 303) did not allow mixed land use (see table 9).

Table 9

Mixed Land Use

		Question 11*		
Region	Statistic	No	Yes	Total
Northeast	Count	2	51	53
	%	3.8	96.2	100
Midwest	Count	3	74	77
	%	3.9	96.1	100
South	Count	0	93	93
	%	0.0	100.0	100
West	Count	3	77	80
	%	3.8	96.3	100
Total	Count	8	295	303
	%	2.6	97.4	100

* Do your community regulations permit mixed land use? This means that retail establishments and community services are placed within walking distance of residential areas.

Function and safety assessments. Function and safety assessments were offered in almost half of the cities. Overall, 48.5% of participants (147 of 303)

indicated that their communities had function and safety assessments, while 48.5% (147 of 303) did not have assessments (see Table 10).

Table 10

Function and Safety Assessments

		Question 12*		
Region	Statistic	No	Yes	Total
Northeast	Count	29	24	53
	%	54.7	45.3	100
Midwest	Count	42	35	77
	%	54.5	45.5	100
South	Count	47	46	93
	%	50.5	49.5	100
West	Count	38	42	80
	%	47.5	52.5	100
Total	Count	156	147	303
	%	51.5	48.5	100

*Are assessments available to help seniors identify ways to modify their homes for better function and safety?

Housing composite. The four (4) housing questions (near shopping, tax reductions, mixed land regulations, senior housing assessments) were combined into a 0 to 4 scale. Housing composites ranged from the West (M = 2.76, SD = 0.83) to the South (M = 3.04, SD = 0.80). Table 11 and Figure 4 show the housing descriptive and composite by region.

Table 11

Housing Descriptives by Region

Statistic	Northeast	Midwest	South	West	Total
Mean	3.2	2.7	3.0	2.8	2.9
N	53	77	93	80	303
SD	0.8	0.8	0.8	0.8	0.8
Minimum	1	1	1	0	0
Maximum	4	4	4	4	4
SEM	0.1	0.1	0.1	0.1	0.1

Note. SD = Standard Deviation, SEM = Standard Error of the Mean.

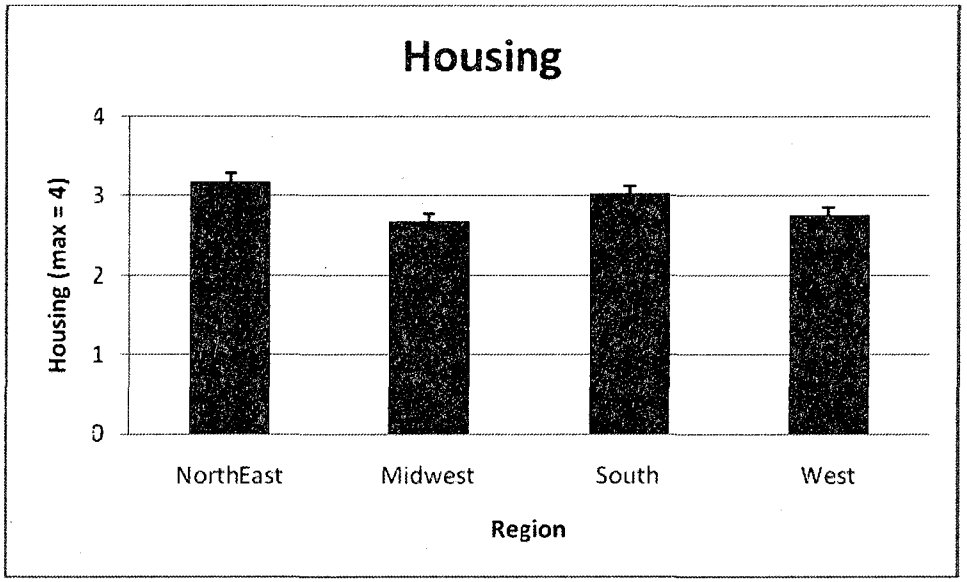


Figure 4. Housing by region

Walkability

Walkability consisted of seven (7) elements: whether the city has a walkability plan, sidewalks, well-maintained sidewalks, pedestrian routes, timed traffic signals, push-to-walk buttons, and resting places. The corresponding

tables have the frequencies of yes and no questions (Table 12, Table 13, Table 14, Table 15, Table 16, Table 17, and Table 18). To supplement the text, the corresponding survey question appears in the caption below each table.

Walkability plans. Walkability plans were somewhat uncommon. Overall, 45.9% of participants (139 of 303) indicated that their cities had walkability plans, while 54.1% (164 of 303) did not have walkability plans (see Table 12).

Table 12

Walkability Plans

		Question 28*		
Region	Statistic	No	Yes	Total
Northeast	Count	36	17	53
	%	67.9	32.1	100
Midwest	Count	42	35	77
	%	54.5	45.5	100
South	Count	42	51	93
	%	45.2	54.8	100
West	Count	44	36	80
	%	55.0	45.0	100
Total	Count	164	139	303
	%	54.1	45.9	100

* Does your community have a walkability plan?

Sidewalks throughout community. Sidewalks throughout the community were readily available. Overall, 77.9% of participants (236 of 303) indicated their

cities had sidewalks throughout the community, while 22.1% (67 of 303) did not have sidewalks throughout the community (see Table 13).

Table 13

Sidewalks Throughout Community

		Question 29*		
Region	Statistic	No	Yes	Total
Northeast	Count	15	38	53
	%	28.3	71.7	100
Midwest	Count	18	59	77
	%	23.4	76.6	100
South	Count	24	69	93
	%	25.8	74.2	100
West	Count	10	70	80
	%	12.5	87.5	100
Total	Count	67	236	303
	%	22.1	77.9	100

* Are there sidewalks throughout your community?

Well-maintained sidewalks. Well-maintained sidewalks were available in over three quarters of the participant cities. Overall, 82.8% of participants (251 of 303) indicated that their cities had well-maintained sidewalks, while 17.2% (52 of 303) did not have well-maintained sidewalks (see Table 14).

Table 14

Well-maintained Sidewalks

		Question 30*		
Region	Statistic	No	Yes	Total
Northeast	Count	15	38	53
	%	28.3	71.7	100
Midwest	Count	11	66	77
	%	14.3	85.7	100
South	Count	13	80	93
	%	14.0	86.0	100
West	Count	13	67	80
	%	16.2	83.8	100
Total	Count	52	251	303
	%	17.2	82.8	100

* Are the sidewalks well maintained? (Surfaces should be flat with only minor cracks and minimal separation between slabs.)

Pedestrian routes. Pedestrian routes were available in less than half of the participant cities. Overall, only 42.6% of participants (129 of 303) indicated that their cities had pedestrian routes, while 57.4% (174 of 303) did not have pedestrian routes (see Table 15).

Table 15

Pedestrian Routes

Region	Statistic	Question 31* No	Question 31* Yes	Total
Northeast	Count	35	18	53
	%	66.0	34.0	100
Midwest	Count	39	38	77
	%	50.6	49.4	100
South	Count	56	37	93
	%	60.2	39.8	100
West	Count	44	36	80
	%	55.0	45.0	100
Total	Count	174	129	303
	%	57.4	42.6	100

* Are there "pedestrian routes" identified between most major residential areas and typical destinations?

Well-timed traffic signals. Well-timed traffic signals were available in over three quarters of the participant cities. Overall, 84.2% of participants (255 of 303) indicated that their cities had well-timed traffic signals, while 15.8 % (48 of 303) did not have well-timed traffic signals. Percent answering "yes" ranged from 90% (72 of 80) in the West to 75% (70 of 93) in the South (see Table 16).

Table 16

Well-timed Traffic Signals

Region	Statistic	Question 32* No	Yes	Total
Northeast	Count	8	45	53
	%	15.1	84.9	100
Midwest	Count	9	68	77
	%	11.7	88.3	100
South	Count	23	70	93
	%	24.7	75.3	100
West	Count	8	72	80
	%	10.0	90.0	100
Total	Count	48	255	303
	%	15.8	84.2	100

* Do traffic signals provide adequate time for senior pedestrians to cross the street without feeling rushed?

Push-to-walk buttons. Push-to-walk buttons were available in over three quarters of the participant cities. Overall, 89.4% of participants (271 of 303) indicated their cities had push-to-walk buttons, while 10.6% (32 of 303) did not have push-to-walk buttons (see Table 17).

Table 17

Push-to-walk Buttons

Region	Statistic	Question 33*		
		No	Yes	Total
Northeast	Count	4	49	53
	%	7.5	92.5	100
Midwest	Count	6	71	77
	%	7.8	92.2	100
South	Count	15	78	93
	%	16.1	83.9	100
West	Count	7	73	80
	%	8.7	91.3	100
Total	Count	32	271	303
	%	10.6	89.4	100

* Do signals have push-to-walk buttons to help stop traffic on a busy street?

Resting places (benches, low walls) along sidewalks. Resting places (benches, low walls) along sidewalks were available in less than half of the participant cities. Overall, only 44.6% of participants (135 of 303) indicated that their cities had resting places (benches, low walls) along sidewalks, while 55.4% (168 of 303) did not have resting places (benches, low walls) along sidewalks (see Table 18).

Table 18

Resting Places (Benches, Low Walls) Along Sidewalks

		Question 34*		
Region	Statistic	No	Yes	Total
Northeast	Count	28	25	53
	%	52.8	47.2	100
Midwest	Count	38	39	77
	%	49.4	50.6	100
South	Count	58	35	93
	%	62.4	37.6	100
West	Count	44	36	80
	%	55.0	45.0	100
Total	Count	168	135	303
	%	55.4	44.6	100

* Are there resting places (e.g., benches, low walls) for pedestrians along the sidewalks?

Walkability composite. The seven (7) walkability questions (walkability plan, sidewalks, well-maintained sidewalks, pedestrian routes, timed traffic signals, push-to-walk buttons and resting places) were combined into a 0 to 7 scale. Walkability composite ranged from the Northeast (M = 4.34, SD = 1.64) to the West (M = 4.88, SD = 1.66) or the Midwest (M = 4.88, SD = 1.37). Table 19 displays walkability descriptives by region. Figure 5 shows the walkability composite by region.

Table 19

Walkability Descriptives by Region

Statistic	Northeast	Midwest	South	West	Total
Mean	4.3	4.9	4.5	4.9	4.7
N	53	77	93	80	303
SD	1.6	1.4	1.7	1.7	1.6
Minimum	1	1	0	0	0
Maximum	7	7	7	7	7
SEM	0.2	0.2	0.2	0.2	0.1

Note. SD = Standard Deviation, SEM = Standard Error of the Mean.

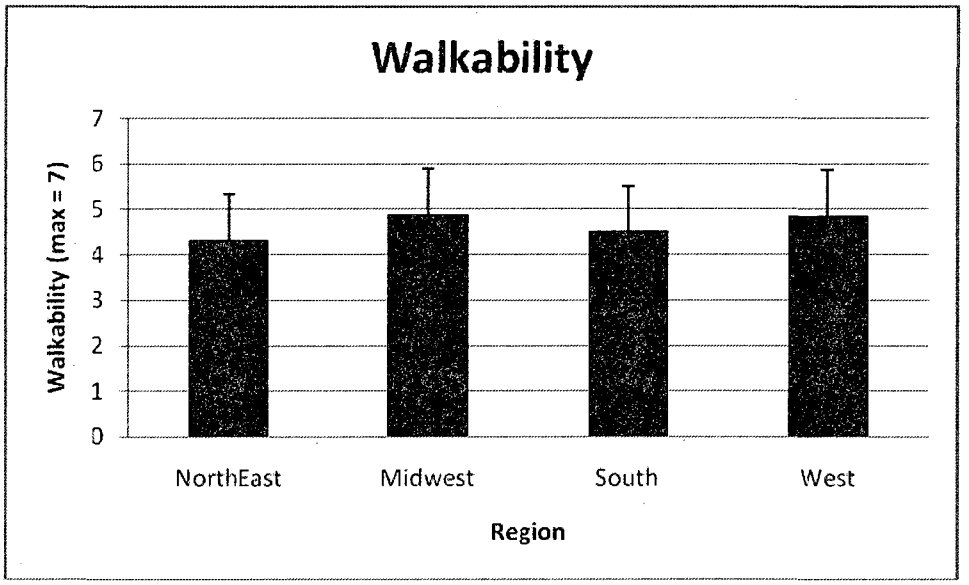


Figure 5. Walkability by region

Shopping

Shopping consisted of four (4) survey items: shopping within walking distance, mixed-use, farmers' market support, and farmers' market proximity.

The corresponding tables have the frequencies of yes and no questions (Table 20, Table 21, Table 22, Table 23). To supplement the text, the corresponding survey question appears in the caption below each table.

Shopping within walking distance of residences of older adults. Shopping within walking distance of residences of older adults was available in over two thirds of the participant cities (see Table 20). Shopping within walking distance ranged from the Northeast with over 75% to the South with 57%.

Table 20

Shopping within Walking Distance of Residences of Older Adults

		Question 24*		
Region	Statistic	No	Yes	Total
Northeast	Count	13	40	53
	%	24.5	75.5	100
Midwest	Count	26	51	77
	%	33.8	66.2	100
South	Count	40	53	93
	%	43.0	57.0	100
West	Count	24	56	80
	%	30.0	70.0	100
Total	Count	103	200	303
	%	34.0	66.0	100

* Does your community have grocery stores, banks, coffee shops and pharmacies within a safe, convenience walking distance (1/4 mile) of clusters of residences of older adults?

Overall, 66% of participants (200 of 303) indicated that their communities had shopping within walking distance of residences of older adults, while only 34% (103 of 303) did not (see Table 20).

Mixed-use developments. Mixed-use developments were readily available in over half of the participant cities (see Table 21). Overall, 61.7% of participants (187 of 303) indicated that their communities had mixed-use developments, while 38.3% (116 of 303) did not have mixed-use developments (see Table 21).

Table 21

Mixed-use Developments with Shops

		Question 25*		
Region	Statistic	No	Yes	Total
Northeast	Count	22	31	53
	%	41.5	58.5	100
Midwest	Count	24	53	77
	%	31.2	68.8	100
South	Count	37	56	93
	%	39.8	60.2	100
West	Count	33	47	80
	%	41.3	58.7	100
Total	Count	116	187	303
	%	38.3	61.7	100

* Are there mixed-use developments with shops and a mix of residential units that would appeal to older residents?

Farmer's markets. Farmer's markets were readily available in almost three-quarters of the participant cities (see Table 22). Overall, 72.9% of participants (221 of 303) indicated that their communities had farmer's markets, while only 27.1% (82 of 303) did not have farmer's markets (see Table 22).

Table 22

Farmer's Markets

		Question 26*		
Region	Statistic	No	Yes	Total
Northeast	Count	20	33	53
	%	37.7	62.3	100
Midwest	Count	21	56	77
	%	27.3	72.7	100
South	Count	25	68	93
	%	26.9	73.1	100
West	Count	16	64	80
	%	20.0	80.0	100
Total	Count	82	221	303
	%	27.1	72.9	100

* Does your community have and support a local farmer's market(s)?

Farmer's markets within walking distance of neighborhoods with older populations. Farmer's markets within walking distance of neighborhoods with older populations were available in less than two thirds of the participant cities. Overall, only 34% (103 of 303) indicated that their communities had farmer's markets within walking distance of neighborhoods with older populations, while

66% of participants (200 of 303) did not have farmer's markets within walking distance of neighborhoods with older populations (see Table 23).

Table 23

Farmer's Markets within Walking Distance of Neighborhoods with Older Populations

		Question 27*		
Region	Statistic	No	Yes	Total
Northeast	Count	31	22	53
	%	58.5	41.5	100
Midwest	Count	47	30	77
	%	61.0	39.0	100
South	Count	68	25	93
	%	73.1	26.9	100
West	Count	54	26	80
	%	67.5	32.5	100
Total	Count	200	103	303
	%	66.0	34.0	100

* Does your community have farmer's markets located within walking distance (1/4 mile) of your neighborhoods with older populations?

Shopping composite. The four (4) shopping questions (walking distance, mixed-use, farmer's market support, farmer's market location) were combined into a 0 to 4 scale. The Midwest (M = 2.47, SD = 1.32) had the highest availability and the South (M = 2.17, SD = 1.19) had the lowest availability of shopping. Table 24 displays shopping descriptives by region.

Table 24

Shopping Descriptives by Region

Statistic	Northeast	Midwest	South	West	Total
Mean	2.4	2.5	2.2	2.4	2.4
N	53	77	93	80	303
SD	1.4	1.3	1.2	1.1	1.2
Minimum	0	0	0	0	0
Maximum	4	4	4	4	4
SEM	0.2	0.2	0.1	0.1	0.1

Note. SD = Standard Deviation, SEM = Standard Error of the Mean.

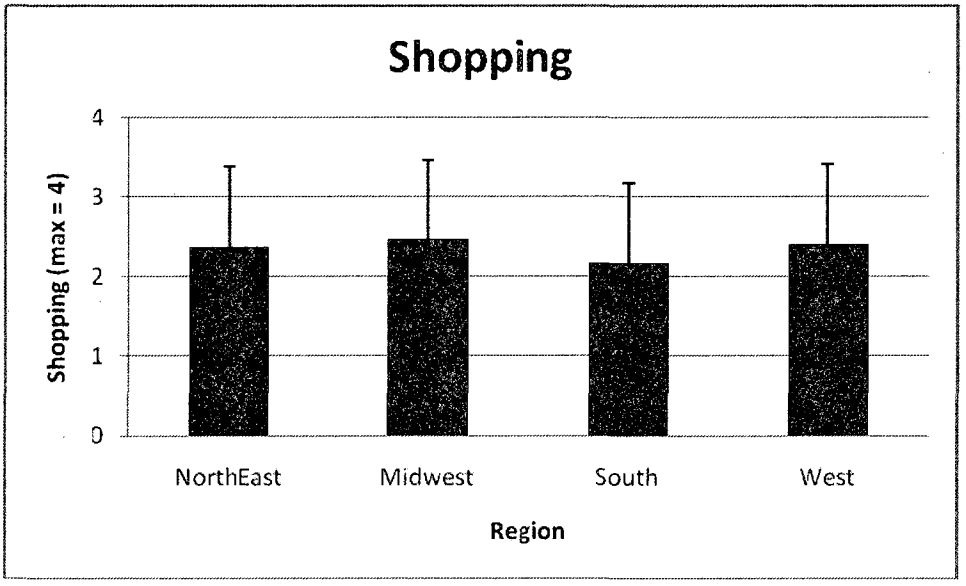


Figure 6. Shopping by region

Summary of shopping preparedness. All regions scored over two on a four-point scale, meaning that over 50% of the shopping preparedness items were available. Figure 6 shows the shopping composite. Farmer's markets were available in more almost three-fourths of the participating communities but were located within walking distance of neighborhoods in less than two-thirds of communities.

Transportation

Transportation is presented in two parts: Transportation Options included three (3) survey items (bus, taxi, dial-a-ride), while the Transit System Services construct included eight (8) survey items: scheduled transit questions (10-minute walk, sidewalks maintained, shelter from weather, routine destinations, dedicated route, weekend availability, easy-to-read schedules, and reduced fares for older residents. The corresponding tables have the frequencies of yes and no questions (transportation options: Table 25, Table 26, Table 27 and transit system services: Table 29, Table 30, Table 31, Table 32, Table 33, Table 34, Table 35, Table 36). To supplement the text, the corresponding survey question appears in the caption below each table.

Transportation options: regularly scheduled bus or public transportation service. Overall, 85.8% of participants (260 of 303) indicated that their city had regularly scheduled bus or public transportation service, while 14.2% (43 of 303) did not have regularly scheduled bus or public transportation service. Percent answering "yes" ranged from 92.5% (49 of 53) in the Northeast and 92.5% (74 of 80) in the West to 77.4% (72 of 93) in the South (see table 25).

Table 25

Regularly Scheduled Bus or Public Transportation Service

Region	Statistic	Question 13 * No	Yes	Total
Northeast	Count	4	49	53
	%	7.5	92.5	100
Midwest	Count	12	65	77
	%	15.6	84.4	100
South	Count	21	72	93
	%	22.6	77.4	100
West	Count	6	74	80
	%	7.5	92.5	100
	Count	43	260	303
	%	14.2	85.8	100

* Does your community have a regularly scheduled bus or other public transportation service that picks up passengers at established stops?

Dial-a-ride service. Dial-a-ride service was available in over three-fourths of the participant cities. Overall, 76.2% of participants (231 of 303) indicated that their city had dial-a-ride service, while 23.8% (72 of 303) did not have dial-a-ride service. Percent answering "yes" ranged from 86.4% (69 of 80) in the West to 62.3% (33 of 53) in the Northeast (see Table 26).

Table 26

Dial-a-ride Service

Region	Statistic	Question 22 * No	Yes	Total
Northeast	Count	20	33	53
	%	37.7	62.3	100
Midwest	Count	13	64	77
	%	16.9	83.1	100
South	Count	28	65	93
	%	30.1	69.9	100
West	Count	11	69	80
	%	13.8	86.2	100
Total	Count	72	231	303
	%	23.8	76.2	100

* Does your community have a dial-a-ride service?

Taxi service. Taxi services were widely available in almost all of the participant cities. Overall, 93.1% of participants (282 of 303) indicated that their communities had taxi service, while only 6.9% (21 of 303) did not have taxi service (see Table 27).

Table 27

Taxi Service

Region	Statistic	Question 23* No	Question 23* Yes	Total
Northeast	Count	2	51	53
	%	3.8	96.2	100
Midwest	Count	6	71	77
	%	7.8	92.2	100
South	Count	6	87	93
	%	6.5	93.5	100
West	Count	7	73	80
	%	8.8	91.2	100
Total	Count	21	282	303
	%	6.9	93.1	100

* Is there a taxi service available in your community?

Transportation options composite. The three (3) transportation options questions (bus, dial-a-ride and taxi) were combined into a 0 to 3 scale. The West (M = 2.7, SD = .6) was higher in transportation options than the South (M = 2.41, SD = .73). Table 28 displays transportation options descriptives by region and Figure 7 displays the composite transportation options by regions.

Table 28

Transportation Options Descriptives by Region

Statistic	Northeast	Midwest	South	West	Total
Mean	2.5	2.6	2.4	2.7	2.6
N	53	77	93	80	303
SD	0.7	0.6	0.7	0.6	0.7
Minimum	0	0	0	0	0
Maximum	3	3	3	3	3
SEM	0.1	0.1	0.1	0.1	0.0

Note. SD = Standard Deviation, SEM = Standard Error of the Mean.

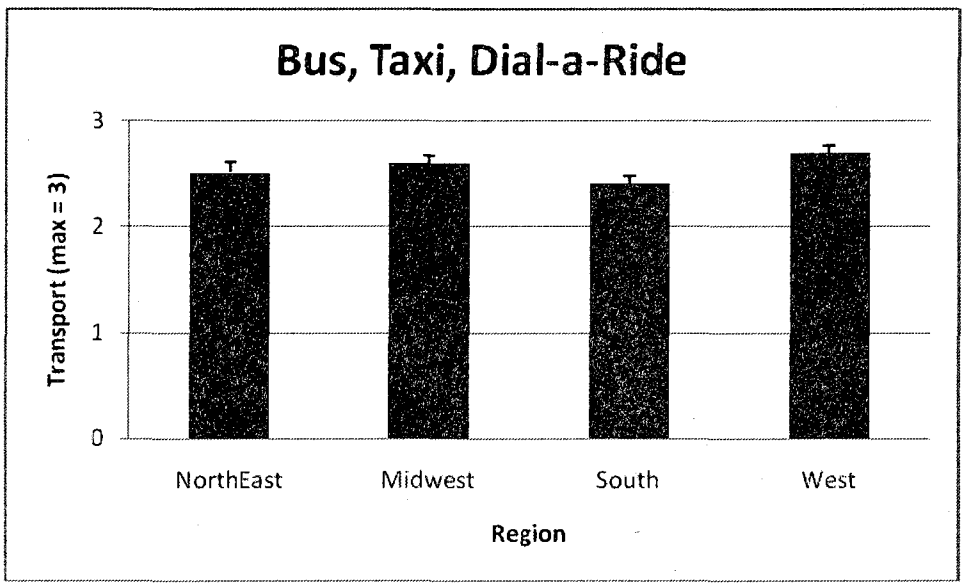


Figure 7. Transportation options by region

Transit system services: transit stops within 10-minutes of older residents. Transit stops within 10-minutes of older residents were common in over four-fifths of the participant cities. Overall, 87.7% of participants (228 of 260) indicated that their communities had transit stops within 10-minutes of older residents,

while only 12.3% (32 of 260) did not have transit stops within 10-minutes of older residents (see table 29).

Transit sidewalks maintained. Well-maintained sidewalks at transit stops were common in almost all of the participant cities. Overall, 94.2% of participants (245 of 260) indicated that their communities had transit sidewalks maintained, while 5.8% (15 of 260) did not have transit sidewalks maintained (see Table 30).

Table 29

Transit Stops within 10-minutes of Older Residents

		Question 14*		
Region	Statistic	No	Yes	Total
Northeast	Count	5	44	49
	%	10.2	89.8	100
Midwest	Count	7	58	65
	%	10.8	89.2	100
South	Count	12	60	72
	%	16.7	83.3	100
West	Count	8	66	74
	%	10.8	89.2	100
Total	Count	32	228	260
	%	12.3	87.7	100

* Are these stops located within a 10-minute walk of residences in the sections of town with older residents?

Table 30

Transit Sidewalks Maintained

		Question 15*		
Region	Statistic	No	Yes	Total
Northeast	Count	5	44	49
	%	10.2	89.8	100
Midwest	Count	4	61	65
	%	6.2	93.8	100
South	Count	5	67	72
	%	6.9	93.1	100
West	Count	1	73	74
	%	1.4	98.6	100
Total	Count	15	245	260
	%	5.8	94.2	100

* Are the sidewalks that serve bus stops maintained?

Transit stops shelter, seats, shade. Transit stops with shelter, seats or shade were available in almost half of the participant cities. Overall, 46.5% of participants (121 of 260) indicated that their communities had transit stops with shelter, seats or shade, while 53.5% (139 of 260) did not have transit stops with shelter, seats or shade (see Table 31). Percent answering "yes" ranged from 59.5% (44 of 74) in the West to 37.5% (27 of 72) in the South (see Table 31).

Table 31

Transit Stops Shelter, Seats, Shade

		Question 16*		
Region	Statistic	No	Yes	Total
Northeast	Count	26	23	49
	%	53.1	46.9	100
Midwest	Count	38	27	65
	%	58.5	41.5	100
South	Count	45	27	72
	%	62.5	37.5	100
West	Count	30	44	74
	%	40.5	59.5	100
Total	Count	139	121	260
	%	53.5	46.5	100

* Do most of the transit stops offer shade, seats/shelter from the weather?

Transit routine destinations of interest to older residents. Transit routes with routine destinations of interest to older residents were available in almost all of the participant cities. Transit stops with shelter, seats, and shade were available at rates over 90% Northeast, Midwest, South, and West regions (see Table 32).

Table 32

Transit Routine Destinations of Interest to Older Residents

		Question 17*		
Region	Statistic	No	Yes	Total
Northeast	Count	3	46	49
	%	6.1	93.9	100
Midwest	Count	2	63	65
	%	3.1	96.9	100
South	Count	5	67	72
	%	6.9	93.1	100
West	Count	6	68	74
	%	8.1	91.9	100
Total	Count	16	244	260
	%	6.2	93.8	100

* Does this system serve hospitals, clinics, shopping facilities and other routine destinations of interest to older persons?

Overall, 93.8% of participants (244 of 260) indicated that their communities had transit routes with routine destinations of interest to older residents, while only 6.2% (16 of 260) did not have transit routes with routine destinations of interest to older residents (see Table 32).

Dedicated transit route for older persons. Dedicated transit routes for older persons were available in one quarter of the participant cities (see Table 33).

Table 33

Dedicated Transit Route for Older Persons

		Question 18*		
Region	Statistic	No	Yes	Total
Northeast	Count	40	9	49
	%	81.6	18.4	100
Midwest	Count	44	21	65
	%	67.7	32.3	100
South	Count	58	14	72
	%	80.6	19.4	100
West	Count	55	19	74
	%	74.3	25.7	100
Total	Count	197	63	260
	%	75.8	24.2	100

* Does your community have a dedicated route specifically for older persons that stops only at those destinations?

Overall, only 24.2% of participants (63 of 260) indicated that their communities had dedicated transit routes for older persons, while 75.8% (197 of 260) did not have dedicated transit routes for older persons (table 33). These findings suggest that dedicated transit routes for older persons were not readily available in most of the participant cities.

Transit weekend availability. Weekend transit services were readily available in over four-fifths of the participant cities (see Table 34).

Table 34

Transit Weekend Availability

		Question 19*		
Region	Statistic	No	Yes	Total
Northeast	Count	5	44	49
	%	10.2	89.8	100
Midwest	Count	12	53	65
	%	18.5	81.5	100
South	Count	12	60	72
	%	16.7	83.3	100
West	Count	7	67	74
	%	9.5	90.5	100
Total	Count	36	224	260
	%	13.8	86.2	100

* Is the transit system available on weekends?

Overall, 86.1% of participants (224 of 260) indicated that their communities had weekend transit service availability, while only 13.8% (36 of 260) did not have weekend transit service availability (table 34). These findings suggest that weekend transit services were readily available for most of the participant cities.

Table 35

Easy to Read Transit Maps

Region	Statistic	Question 20* No	Yes	Total
Northeast	Count	7	42	49
	%	14.3	85.7	100
Midwest	Count	10	55	65
	%	15.4	84.6	100
South	Count	11	61	72
	%	15.3	84.7	100
West	Count	5	69	74
	%	6.8	93.2	100
Total	Count	33	227	260
	%	12.7	87.3	100

* Are schedules and route maps easy to read?

Easy to read transit maps. Easy to read transit maps were readily available in most of the participant cities. Overall, 87.3% of participants (227 of 260) indicated that their communities had easy to read transit maps, while only 12.7% (33 of 260) did not have easily readable maps (see table 35 above).

Table 36

Reduced Fares for Older Residents

Region	Statistic	Question 21* No	Question 21* Yes	Total
Northeast	Count	6	43	49
	%	12.2	87.8	100
Midwest	Count	11	54	65
	%	16.9	83.1	100
South	Count	20	52	72
	%	27.8	72.2	100
West	Count	13	61	74
	%	17.6	82.4	100
Total	Count	50	210	260
	%	19.2	80.8	100

* Are reduced public transportation fares available for older residents?

Reduced fares for older residents. Reduced fares for older residents were readily available in most of the participant cities. Overall, 80.8% of participants (210 of 260) indicated their communities had reduced fares for older residents, while only 19.2% (50 of 260) did not have reduced fares (see Table 36).

Transit system services composite. Table 37 shows the transit system services descriptive by region and Figure 7 displays the transit system services composite.

Table 37

Transit System Services Descriptives by Region

Statistic	Northeast	Midwest	South	West	Total
Mean	6.0	6.0	5.7	6.3	6.0
N	49	65	72	74	260
SD	1.1	1.5	1.6	1.1	1.3
Minimum	3	2	0	3	0
Maximum	8	8	8	8	8
SEM	0.2	0.2	0.2	0.1	0.1

Note. SD = Standard Deviation, SEM = Standard Error of the Mean.

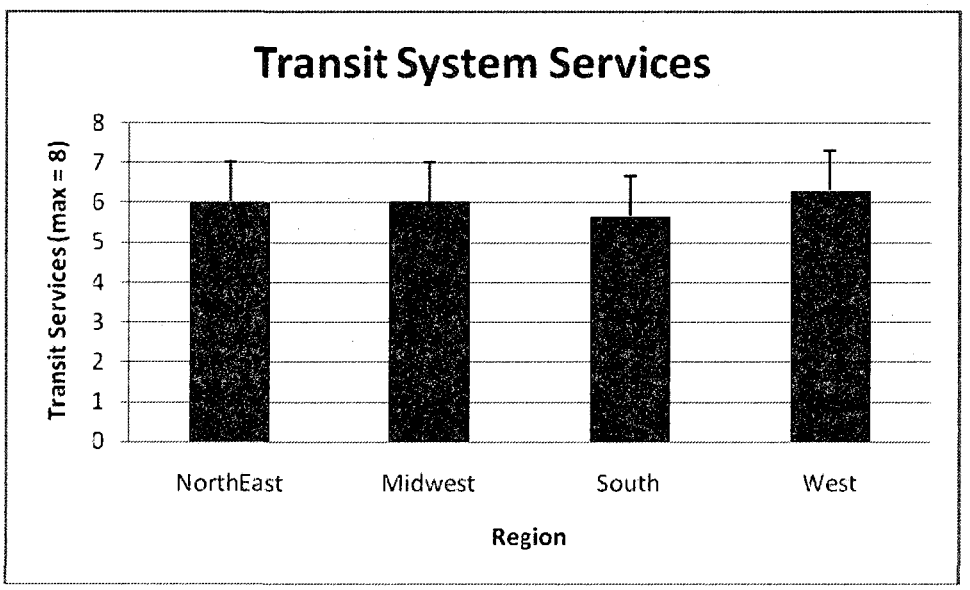


Figure 8. Transit system services by region

The eight (8) transit system services questions (10-minute walk, sidewalks maintained, shelter from weather, routine destinations, dedicated route, weekend availability, easy-to-read schedules, reduced fares) were combined into a 0 to 8 scale. Table 37 displays transit system descriptives by region. Transit composite ranged from the West (M = 6.31, SD = 1.08) to the South (M = 5.67, SD = 1.58) (see Table 37).

Summary of transit system services preparedness. All regions scored between five and seven on an eight-point scale, meaning that almost 60% of the transit system services preparedness items were available across regions (Figure 8). Transit stops within 10 minutes of neighborhoods with older residents, well-maintained sidewalks at the transit stops, routine service to destinations of interest to older persons, weekend transit service, easily-readable maps and reduced fares were all readily available. Dedicated routes specifically for older persons were only available in one quarter of the cities. Transit stops with shelter, shade or seats ranged from 60% in the West to the 38% in the South.

Analysis and Evaluation of Findings

Findings were evaluated using a threshold of statistical significance of $p < .05$. Four hypotheses were evaluated: Housing Preparedness (H1), Walkability Preparedness (H2), Shopping Preparedness (H3), and Transportation Preparedness (H4). For each hypothesis, the null hypothesis and alternative hypotheses are restated, and then a determination was made to reject or not reject the null hypothesis based on the outcome of Kruskal-Wallis statistics.

Table 38 shows a summary of the hypotheses, variables, *p*-values and whether or not the alternate hypothesis was supported.

Housing Preparedness

In the area of housing preparedness, respondents were asked to answer four yes or no questions relating to housing. The associated hypotheses relating to housing preparedness and the respective statistical analyses are presented. The findings are discussed as well as whether the null hypothesis was rejected or not rejected.

H1o: There is no significant difference among the regions of the country and level of preparedness regarding housing.

H1a: There is a significant difference among the regions of the country and the level of preparedness regarding housing.

H1o was rejected (see Table 38). There were statistically significant differences between regions in the housing preparedness composite of four (4) survey items as determined by the Kruskal Wallis analysis, KW (df = 3) = 17.31, $p < .001$. Because the p-value was less than the alpha threshold of $p < .05$ for evaluation of statistical significance, the null hypothesis (H1o) was rejected. These results support the alternative hypothesis (H1a) of significant differences between regions of the country in housing preparedness.

Walkability Preparedness

In the area of walkability preparedness, respondents were asked to answer seven yes or no questions relating to walkability. The associated hypotheses relating to walkability preparedness and the respective statistical

analyses are presented. The findings are discussed as well as whether the null hypothesis was rejected or not rejected.

H2o: There is no significant difference among the regions of the country and level of preparedness regarding walkability.

H2a: There is a significant difference among the regions of the country and the level of preparedness regarding walkability.

H2o was not rejected (see Table 38). There were no statistically significant differences between regions in the walkability composite of seven (7) survey items, determined by the Kruskal-Wallis analysis, KW (df = 3) = 6.38, $p = .09$. Because the p-value was greater than the alpha threshold of $p < .05$ for evaluation of statistical significance, the null hypothesis (H2o) was not rejected. These results support the null hypothesis (H2o) of no significant differences between regions of the country in walkability preparedness.

Shopping Preparedness

In the area of shopping preparedness, respondents were asked to answer four yes or no questions relating to shopping. The associated hypotheses relating to shopping preparedness and the respective statistical analyses are presented. The findings are discussed as well as whether the null hypothesis was rejected or not rejected.

H3o: There is no significant difference among the regions of the country and level of preparedness regarding shopping.

H3a: There is a significant difference among the regions of the country and the level of preparedness regarding shopping.

H3o was not rejected (see Table 38). There were no statistically significant differences between regions in the shopping composite of four (4) survey items, determined by the Kruskal-Wallis analysis, KW (df = 3) = 3.46, p = .33. Because the p-value was greater than the alpha threshold of $p < .05$ for evaluation of statistical significance, the null hypothesis (H3o) was not rejected. These results support the null hypothesis (H3o) of no significant differences between regions of the country in shopping preparedness.

Transportation Preparedness

In the area of transportation preparedness, respondents were asked to answer three yes or no questions relating to transportation. The associated hypotheses relating to transportation preparedness and the respective statistical analyses are presented. Findings were evaluated as whether the null hypothesis was rejected or not rejected.

H4o: There is no significant difference among the regions of the country and level of preparedness regarding transportation.

H4a: There is a significant difference among the regions of the country and the level of preparedness regarding transportation.

H4o was rejected (see Table 38). There were statistically significant differences between regions in the transportation composite (transportation options) of three (3) survey items as determined by the Kruskal Wallis analysis, KW (df = 3) = 10.16, $p < .04$. Because the p-value was less than the alpha threshold of $p < .05$ for evaluation of statistical significance, the null hypothesis

(H4o) was rejected. These results support the alternative hypothesis (H4a) of significant differences between regions of the country in housing preparedness.

Table 38

Analysis and Evaluation of Findings Summary

Hypothesis	Variable	p-value	Hypothesis Supported?
H1a	The level of preparedness regarding housing differs based on regions of the country	0.001	Yes
H2a	The level of preparedness regarding walkability differs based on regions of the country	0.09	No
H3a	The level of preparedness regarding shopping differs based on regions of the country	0.33	No
H4a	The level of preparedness regarding transportation differs based on regions of the country	0.04	Yes

Note. p-values reflect the results from the Kruskal Wallis statistical test. Each of these alternative hypotheses was considered supported only if the p-value was less than .05.

Summary

This chapter presented findings from a survey of public officials from cities in the United States with populations over 25,000. The chapter included demographic profiles of the participants, public official status, membership in NLC or ICMA, city size, and region. The characterization also included whether communities had experienced budget cuts that would have affected services to

the older population. Additionally, survey findings were presented on whether communities had existing master plans that included studying the needs of older adults and whether several housing options were available.

Detailed findings of the comparative analysis included frequencies and percentages of responses per region (Northeast, South, Midwest, West) across 34 survey questions. Composite scores were expressed as means, standard deviations (SD), minimum score, maximum score and standard error of the mean (SEM) per region for each of four (4) areas of preparedness for the aging boomer population: walkability, shopping, and transportation preparedness. In the Analysis and Evaluation of Findings section, for each of four (4) hypotheses, a Kruskal-Wallis analysis was conducted. Null hypotheses were either rejected or not rejected using a statistical significance threshold of $p < .05$.

In the present study of 303 public officials, all four areas of livability were generally available across regions with only a few characteristics showing significant differentiation between regions. Housing was generally similar across regions although property tax deductions differed somewhat. Mixed land use and housing near basic shopping were readily available across regions, while property taxes and assessments were in use by about half of the cities. The property tax deductions were more available in the Northeast and South and less available in the Midwest and West.

Transportation options were generally available across regions. Regularly scheduled bus service was reported as being more available in the West and the

Northeast than the South and Midwest. Taxi services were available in almost all of the cities. Dial-a-ride was available in over three-fourths of the cities.

System services targeted for the older population were generally available across regions, as were transit stops within 10 minutes of neighborhoods with older residents, well-maintained sidewalks at transit stops; routine service to destinations of interest to older persons, weekend transit service, easily-readable maps and reduced fares. Dedicated routes specifically for older persons were only available in one quarter of the cities. Transit stops with shelter, shade or seats were more available in the West and less so in the South.

Shopping was generally available across regions. Although farmer's markets were available, their frequency of being located within walking distance to neighborhoods with older populations was low. In fact, the proximity of farmer's markets to neighborhoods with older populations was reported by just over one-third of the participants.

Walkability characteristics were generally found across regions in the areas of available sidewalks, well-maintained sidewalks, and push-to-walk buttons on busy streets. Walkability plans, pedestrian routes, and resting places (benches, low walls) for pedestrians were less common but similar across regions. Well-timed traffic lights to provide adequate time for pedestrians to cross busy streets were generally available but were more common in the West and less common in the South.

Summary, conclusions, and recommendations drawn from the findings presented in this chapter comprise Chapter 5.

CHAPTER 5: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

There are three sections in this chapter consisting of the summary, conclusions and recommendations. The summary provides a review of vital literature and the study findings. The conclusion section shows the research questions and key conclusions by construct and region based on the findings. The last portion focuses on recommendations for business and public officials (overall and regional), constituency groups and best regional retirement locations. It also includes suggestions for further research.

Summary

In 2006, the first wave of baby boomers encountered retirement age and 330 people are turning 60 years old every hour. This will produce an additional 34 to 35 million retirees over the next several years ("Maturing of America," 2006). Such a major shift in the aging of our society has never occurred and policymakers throughout the U.S. are preparing for both the opportunities and challenges represented by the dramatic change (Minnesota Department of Health and Human Services, 2007).

As the baby boom generation approaches retirement, business must be poised to recruit and maintain an older workforce through policies and schedules sensitive to the aging population needs (Rubin, 2006). Communities must be ready to address the increased demand for services, housing, transportation, and maintenance of community assets such as properly maintained sidewalks that encourage and promote walkability (AARP, 2005a). The call for increased community services will impact governments on the county and city levels, with

the urban areas absorbing most of the responsibility for preparedness. With less than 50% of local governments reporting that they have begun to plan for the growing senior population, there is little time to spare as the boomers grow older ("Maturing of America," 2006). Putting policies, planning and initiatives in place that support the proliferation of NORCs will be integral in meeting the needs of the growing boomer retiree population (McCallion, 2005).

Business and communities would benefit economically from providing services that encourage retention of older workers (Rubin, 2006). Community preparedness is essential to courting and keeping the retiree base that can bring tremendous assets to public and private industry. Further, with the aging of the baby boomers and the higher life expectancy resulting from improved health, the workforce is being transformed as many older people choose to or need to remain in the workplace (Rubin, 2006). Workers age 55 and older will grow from 13% of the workforce in 2000 to 20% in 2020 ("Shifting Workplace," 2006). With growing older complicated by caregiver issues and a possible need to delay retirement, it is an even more compelling reason to study various living options for the senior population and the implications for communities, the economy, and for business.

Evaluating the community preparedness of our communities in the context of handling the growing Boomer population will assist in business and community planning for needed services and necessities that will facilitate successful aging and independence. While the literature supported the notion that people preferred to live out their lives in their own homes, the level of

preparedness of the communities was insufficient to meet that impending need (Hooyman & Kiyak, 2005; "*Maturing of America*," 2006). The research suggested the need to conduct a comparative, quantitative study to examine and assess the level of community preparedness in the areas of livability such as housing, walkability and transportation (AARP, 2005b).

The research study was conducted using the comparative, quantitative design with an online survey developed in Survey Monkey (surveymonkey.com). Surveys were sent to 1,248 public officials who were city managers or mayors in communities with populations 25,000 and over. Examining the level of regional preparedness of city livability with respect to housing, walkability, shopping, and transportation, the survey determined which regions were best prepared to handle services impacting the growing aging population.

Housing Preparedness

Housing preparedness varied across regions, but was generally high in the types of housing available, mixed land use, and housing near basic shopping. However, property tax deductions and function and safety assessments were only available in half of the cities. Property tax deductions were more available in the Northeast and South and less available in the Midwest and West. These findings are important because the cities that enable residents to age in place support the sustainability of the community's tax base as well as the preservation of neighborhoods (n4a, 2007). According to AARP(2005a), availability and affordability of housing as well as the availability of services catering to modification and maintenance of housing is integral to the livability factor that

encourages people to remain in their homes for as long as possible. Since housing needs may change with the aging of the population such as downsizing to a smaller home or moving into a space that does not require outside maintenance, cities across the United States must examine their ability to offer these options to this growing senior population (AARP, 2005a). As the population of 55 and older will steadily increase, the demand for housing designed for older populations will continue to expand ("Housing," 2009).

Walkability Preparedness

Walkability preparedness was generally high across regions in the areas of available sidewalks, well-maintained sidewalks, and push-to-walk buttons on busy streets. However, walkability plans, pedestrian routes, and resting places (benches, low walls) for pedestrians were available in less than half of the surveyed cities. Well-timed traffic lights were generally available but were more common in the West and less so in the South. Overall, walkability preparedness was lowest in the Northeast. These findings are important because as people age, the accessibility to well-maintained sidewalks and nearby shopping often leads to extended years of independent living (AARP, 2005b). Making adjustments to the timing on pedestrian crossings would help communities respond to an aging population as well as those with mobility impairments ("Maturing of America," 2006). Walkability contributes to quality of life in that it promotes exercise, physical and mental health, as well as access to the community (AARP, 2005b). If a community has a critical mass of walkable

urbanity, then it may be a magnet for new residents looking for a less automobile-centric lifestyle (Leinberger, 2005).

Shopping Preparedness

Shopping preparedness was generally high across regions in the areas of walking distance from neighborhoods to shopping, mixed use developments, and availability of farmer's markets. However, just over one third of communities had farmer's markets within walking distance of neighborhoods with older populations. The Midwest had the highest availability of shopping preparedness, and the South had the lowest. These findings are important because access to shopping continues to be a critical issue for the aging population (AARP, 2005a). One of the key factors for a livable community is the proximity of shopping and services to residential neighborhoods of older people, and being within walking distance is a characteristic of a healthy retirement community (Masotti et al., 2006). Myers & Ryu (2008) state that urban designers should include nearby shopping, parks and community centers to encourage more lively communities.

Transportation Preparedness

Transportation preparedness was generally high across regions, including regularly scheduled public or bus transportation and weekend availability of transportation. However, less than a quarter of cities reported having dedicated transit routes for older persons. Overall, the West region had the greatest availability of transportation preparedness options, and the South had the lowest. These findings are important because the aging population faces increasing limitations that may impede the ability to drive. About 9% of drivers over the age

of 70 stop driving annually due to health circumstances (Dickerson et al., 2007). That translates to more than 600,000 people over the age of 70 who cease driving activities every year and become dependent on other ways of mobility (Dickerson et al., 2007). Further, in the 2005 White House Conference on Aging, senior transportation options was the third highest ranked resolution (Dickerson et al., 2007). Transportation options that include dial-a-ride services, public transit and taxi programs are crucial to meeting the growing demands in the rural and suburban elder populations ("Maturing of America," 2006). For those dependent on or choosing to use public transportation such as a bus system, easy-to-read schedules and weekend access are beneficial options (AARP, 2005b). Dedicated routes designed strictly for the aging population are a good strategy for public transportation companies, providing routine access to specialty shops, strip malls and grocery stores (AARP, 2005a). Promoting transportation preparedness is important for city planners to consider because transportation options are critical to providing mobility and independence for our aging population.

Conclusions

The purpose of the comparative, quantitative study was to examine and assess the level of community preparedness in the four regional areas of the United States with populations greater than 25,000. The South, Northeast, Midwest and West were compared in the areas of housing, shopping, walkability and transportation to determine which regions were prepared to handle the growing aging population. Statistically significant differences between regions

were identified as a way of assisting business, city officials and the aging population with information that would be useful in decision-making.

Housing

The findings provide support for accepting the alternative hypothesis. The first research question addressed whether or not any differences exist within the geographic regions regarding level of preparedness for housing. The corresponding null hypothesis was rejected in favor of the alternative hypothesis:

> H1o: There is no significant difference among the regions of the country and level of preparedness regarding housing.

These results support the alternative hypothesis: there is a significant difference among the regions of the country and the level of preparedness regarding housing.

Walkability

The second research question addressed whether or not any differences exist within the geographic regions regarding level of preparedness for walkability. The corresponding null hypothesis was not rejected:

> H2o: There is no significant difference among the regions of the country and level of preparedness regarding walkability.

These results support the null hypothesis (H2o) of no significant differences between regions of the country in walkability preparedness.

Shopping

The third research question addressed whether or not any differences exist within the geographic regions regarding level of preparedness for shopping. The corresponding null hypothesis was not rejected:

> H3o: There is no significant difference among the regions of the country and level of preparedness regarding shopping.

These results support the null hypothesis (H3o) of no significant differences between regions of the country in shopping preparedness.

Transportation

The findings provide support for accepting the alternative hypothesis. The first research question addressed whether or not any differences exist within the geographic regions regarding level of preparedness for housing. The corresponding null hypothesis was rejected in favor of the alternative hypothesis:

> H4o: There is no significant difference among the regions of the country and level of preparedness regarding transportation.

These results support the alternative hypothesis: there is a significant difference among the regions of the country and the level of preparedness regarding transportation.

Recommendations

Recommendations are organized by topic. Recommendations for business are discussed first, with particular focus on the boomer employees and home builders. Recommendations specific for business and local governments follow. Recommendations targeted at the ICMA, the NLC, and other city

constituency groups regarding the development of a best practices database are then presented and general recommendations are made for public officials by service, including dedicated transit routes, walkability plans, pedestrian routes, and master plans. Following a regional breakdown of recommendations for public officials, recommendations are made regarding the best regional livability for retirees.

Business

Boomer Employees

Businesses should consider developing policies and tools to attract and maintain the over 55 workforce, which would capture and retain intellectual capacity, improve production, and lower turnover rate and thus costs. Aging of the baby boomers and the higher life expectancy has transformed the workplace, as many older people choose to or need to remain in the workplace (Rubin, 2006). Workers age 55 and older will grow from 13% in 2000 to 20% in 2020 ("Shifting Workplace," 2006). Some of the suggested practices may include part-time, flexible schedules, phased retirement options, and consultant possibilities.

Home Builders

The economic benefit for home builders may be best served if home builders build more universally-designed homes to meet the boomer population's housing needs. The addition of these types of housing options, together with community amenities will attract boomers. A business community that recruits the older population would be a winning combination that capitalizes on the enormity of the boomer population and its needs. The demand for housing

designed for the older population has seen growth and the expectation is that demand will continue to increase ("Housing," 2009).

Business and Local Governments

Communities and businesses could benefit from recruiting the boomer population. When just 25 retiree households move into a community, they have the possibility of adding approximately $1,000,000 to the local coffers if the average annual spending is $40,000 per year per household (Smith, 2009). These retiree households could be a valuable source of economic development for communities across the nation both for the short and long term (Smith, 2009). The influx of these retirees would increase the tax base, and they would impact the local community in many other ways. They would likely transfer assets into local banks as well as pay taxes for services they would be less likely to use such as having children enrolled in the public school system or impacting the criminal justice system (Smith, 2009). Since most would have pensions or fixed incomes such as social security, the income for this group would be stable. Further, the volunteer base would increase, bringing a rich source of expertise and services to the community (Smith, 2009).

ICMA, NLC, or City Constituency Organizations

Best Practices Database

A centralized best practices database for public officials would be a valuable resource for all regions, cities and counties. Since over 90% of cities overall were members either directly or indirectly of ICMA or NLC, the opportunity to develop a centralized database of best practices for cities across the United

States regarding livability is excellent. The database could be a resource for all member cities, housing evidenced-based data on what is working for those cities on characteristics of livability. The database could create state-wide, county, regional or even community-based synergy that may be difficult to capture without a central repository of information. ICMA and NLC could perform fact checking of these organizations to verify that the data was correct as reported. Having data available to membership would encourage a higher quality and accuracy of reporting. Cross-tabulation of self-reporting by cities and perceptions of seniors in those cities would also be valuable as a data verification method. This could possibly identify pockets of underserved areas or areas in need of awareness campaigns. It is only by having a centralized database for public officials that gaps could be identified between perceived and actual service in regards to livability.

Public Officials (City Managers, Administrators, Mayors) by Service Dedicated Transit Routes

City officials should consider increasing dedicated transit routes. Three in four cities did not have dedicated transit routes serving the older population. Overall, 24.2% of participants (63 of 260) indicated having dedicated transit routes for older persons. A possible strategy would be for the city officials to meet with public transportation companies to design a dedicated route for the aging population for the stops they frequent such as specialty shops, strip malls and grocery stores (AARP, 2005a). An evaluation and reorganization of the public transportation that may include a shuttle bus system to hospitals or malls could

also be an effective strategy for increasing the access to shopping for seniors (Masotti et al., 2006).

Walkability Plans

Developing more walkability plans needs to be considered by public officials. Less than half of the cities had walkability plans in this study. A joint study with MetLife Foundation, ICMA, NLC, Partners for Livable communities, the National Association of Counties and the National Association of the Area Agencies on Aging indicated that 51% of local governments had in place some kind of community design or redesign that supported walkability ("Maturing of America," 2006). Findings from the present study were similar to the findings from the MetLife joint study ("*Maturing of America*"). This convergence of results suggests that present findings were not spurious. The present study replicates the Met Life study and extends it to include regional differences reported by city managers and mayors. In fact, the findings suggest that figure may be even lower, since 45.9% of participant (139 of 303) public officials indicated that their cities had walkability plans.

Walkability plans are a cost-effective and easy way to address health-related concerns of society. People who live in walkable communities spend about 30 minutes more walking for transportation each week (Saelens, Sallis & Frank, 2003, as cited in Frank et al., 2006). The health benefits from living in a community with good walkability measures is echoed by the Active Community Environments (ACE), pointing to the higher promotion of activity levels and exercise (Doyle, Kelly-Schwartz, Schlossberg & Stockard, 2006). With the older

population at risk of waning functional independence as they age, enhancing walkability of communities may be associated with maintaining functional independence longer as the residents have access to a more active lifestyle that encourages physical activity and social interaction (Berke et al., 2007).

City and county planning departments could press for adding shopping outlets into subdivisions, and they could encourage specialty stores like Whole Foods or Trader Joe's to build stores in communities that larger chains would not consider due to their size and parking constraints (AARP, 2005a). Masotti et al. (2008) cite one of the policies necessary for a naturally occurring retirement or livable community is to change residential zoning restrictions to encourage walking distance access to shopping and services for seniors. Municipalities have the tools to affect the community environment, which goes hand-in-hand with the quality of life for seniors as they age, since they spend the majority of time in their communities (Masotti et al., 2008).

The potential for increased numbers of walkability plans being considered may exist. The MetLife joint study indicated that of the cities without walkability plans, 20% were considering these policies ("Maturing of America," 2006). Local governments were least senior-friendly with populations less than 500,000 ("Maturing of America," 2006).

Pedestrian Routes

More pedestrian routes should be considered by city officials. Pedestrian routes are an important part of walkability and were available in less than half of the cities. Pedestrian routes support walkability, and being able to advertise a

walkable community could influence geographic decisions on where to retire. The social aspect and the psychological benefits are evident as the walkable community also facilitates greater access to activities, interaction and a general feeling of well being (Masotti et al., 2006). If a community has a critical mass of "walkable urbanity," then it may be a magnet for new residents looking for a less automobile-centric lifestyle (Leinberger, 2005, as cited in Frank et al., 2006).

Master Plans

Master plans that include addressing the needs of older adults are needed. Master plans addressing the needs of older adults were found in less than two-thirds of cities. Since planning is a key to identifying, addressing and implementing many of those needs, it would be an ideal strategy to incorporate aging population needs into the existing master plans. This strategy would cost little more than time on the front end and could reap overwhelming dividends to the city and community in terms of preparedness.

Regional Recommendations for Public Officials

Public Officials - South

Public officials in the South should consider focusing on increasing the availability of public transportation. More shade and shelter at transit stops is needed, and that could be a compelling factor for many to use public transportation at a greater frequency. Seniors rely on public transportation. About one in ten drivers over the age of 70 stop driving annually due to health circumstances (Dickerson et al., 2007). That translates to more than 600,000 people over the age of 70 who cease driving activities every year and become

dependent on other ways of mobility (Dickerson et al.). Public officials need to work on increasing public transportation for the elderly.

Additionally, public officials in the South should focus on improving traffic signal timing. Improvement would not only assist in the general walkability of the cities for the elderly but also positively impact anyone who was physically challenged. Adjustment of traffic signal timing would be a low-cost, effective way to increase walkability.

Locating more farmers' markets within walking distance of neighborhoods with older populations is recommended. Availability of local produce and goods near those neighborhoods would encourage and support walkability as well as local growers and businesses. Public officials in the South could attract a higher proportion of retirees to this region and increase the tax base by increasing these services.

Public Officials - Northeast

Public officials in the Northeast should consider providing more housing options for the aging population. Nursing homes and assisted living facilities were available in about four out of five communities, and continuing care facilities were not available for almost half of the Northeast. Since housing needs may change with the aging of the population, such as downsizing to a smaller home or moving into a space that does not require outside maintenance, cities across the United States must examine their ability to offer these options to this growing senior population (AARP, 2005a). Having more housing options available could discourage the migration of the older population to other regions and serve to

maintain or increase the property tax base by supporting the ability to age in place.

Dial-a-ride services are also needed in the Northeast. As the population ages, they may face limitations that impede the ability to drive, making transportation options critical to independence. According to the Beverly Foundation (2006), "improving transportation services for older adults improves transportation services for everybody" (p. 2). By increasing the dial-a-ride services, Northeast public officials may better service and attract older populations to the communities.

Public Officials - Midwest

Public officials in the Midwest should consider putting into place more property tax reductions for older homeowners. Property tax reductions were available to less than one third of older homeowners in the Midwest. Homeownership creates a symbiotic relationship with the cities in that enabling residents to age in place is critical for the sustainability of the community's tax base as well as the preservation of neighborhoods (n4a, 2007). By increasing number of property tax reductions available to older homeowners, Midwest public officials may better maintain the tax base as older populations remain in the community.

Public Officials - West

Public officials in the West should consider making property tax reductions more available for older homeowners. Markwood (2007) suggests that the health of the community, retaining its tax base, and stability of the neighborhoods is tied

to the responsiveness of the needs of the "healthiest, wealthiest, and most educated older population in our nation's history" (p. 35). To develop that relationship, however, the cities must ensure that the services are provided to compliment the ability to age in place. By making property tax reductions more available to older homeowners, public officials can prevent elder flight.

Best Regional Livability for Retirees

West

The West had the highest livability for retirees who want availability of public transportation, dial-a-ride services and shelter or seats at the transit stops. Well-timed traffic signals that allow generous time for crossing streets were readily available in the West region. Other services that were available in over three out of four cities in the West included: housing options near basic shopping opportunities, mixed land use regulations, transit stops within ten minutes of residences with older populations, well-maintained sidewalks at transit stops, transit system service to hospitals, clinics, shopping and other routine destinations of interest to older persons, weekend availability of transit system, easy-to-read maps and schedules and reduced fares for older residents.

Farmers' markets were available in four of five cities in the West, and taxi service was available in more than nine out of ten cities. More than two-thirds of cities in the West had grocery stores, banks, coffee shops and pharmacies within walking distance of residences of older adults.

Northeast

For retirees with housing as a top choice for livability, the Northeast had property tax reductions for older homeowners in more than four out of five cities. Housing options near basic shopping opportunities and mixed land use regulations were found in over four out of five cities.

Public transportation was also widely available in the Northeast in over nine-tenths of cities. Transit stops within a ten-minute walk of residences with older residents and well-maintained sidewalks that serve those stops were available in almost nine out of ten cities. Weekend transit availability, easy-to-read maps and schedules and reduced fares for older residents were available in over eight out of ten cities.

South

If choices of types of housing were important, retirees would find all choices widely available in the South, with single family, multifamily, special housing complexes for older people, assisted living facilities and nursing homes available in over nine out of ten cities. Continuing care retirement communities were found in almost eight out of ten cities.

Areas of Future Research

Housing affordability is a key factor that should be investigated by future scholars. The findings from this study indicate that the availability of housing is high in most regions and that less than half of the cities have assessments to assist the older population with identifying available modifications for function and safety for their residences. According to AARP(2005a), availability and

affordability of housing as well as the availability of services catering to modification and maintenance of housing is integral to that livability factor to encourage people to remain in their homes for as long as possible. Since housing needs may change with the aging of the population such as downsizing to a smaller home or moving into a space that does not require outside maintenance, cities across the United States must examine their ability to offer these options to this growing senior population (AARP, 2005a). According to the Commission on Affordable Housing and Health Facility Needs for Seniors in the 21st Century, "a crisis exists for older Americans who need affordable housing, and the crisis is getting worse" (Libson, 2005/2006, p. 9). Even more telling is that an estimated additional 730,000 rent-assisted dwellings will be necessary to meet the demand to house the over 65 population by 2020 (Libson). Public officials should examine housing options within their communities to ensure that they can meet the growing aging population demands.

As boomers continue to age, there may be a proliferation of homes being sold by this age group as decisions to downsize are made or health reasons force optional housing choices (Myers & Ryu, 2008). Myers and Rye concluded this generational transition may cause an imbalance of historic proportion in the housing market, contracting demand at an alarming rate. When the ratio of seniors to working adults rises 67% over the next 20 years, the housing market will be primarily comprised of elderly homeowners (Myers & Ryu, 2008). Further studies on senior homeowners and existing home inventories could be

advantageous. Public officials could assess the adverse impact of this seller phenomenon and take action to retain elderly homeowners.

Travel training could be studied to ensure that transportation services are used appropriately and when needed. When older people do cease driving, the transition period to get comfortable using other transportation options is sometimes difficult, so offering travel training is a way to combat that resistance successfully, according to a study by the Beverly Foundation (2006), since fear of the unknown and not being aware of services were found to be barriers to use.

There is a need for more detailed characteristics of livability. Areas for future study should include how seniors value livability, healthcare, crime, and tax burden, access to airports, entertainment, and education. Further study on which services senior value over others would further delineate these characteristics of livability as well as those examined in this study. The idea of investigating how valued these would be by seniors would assist city administrators to determine where to put future resources.

Certain characteristics of livability beyond the control of public officials, city managers, or mayors such as cost of living, climate and air quality would also be beneficial for further study. State and local income tax could also be examined. These qualities may be deal breakers for seniors as they make retirement living choices.

Future considerations and services to address other generations could begin to be studied, lending a more longitudinal methodology to the process. These insights would assist in city planning, business and economic

development, and identification of future societal needs. Interviewing citizens by generation and possibly interviewing the same sample every five years could lead to valuable insights integral to livability and quality of life.

State by state livability comparisons would also be an area of interest for future study. Livability criteria could include economic indicators, climate, crime, housing, cost of living, income tax, outdoor activities, educational and cultural opportunities, and other areas. Furthermore, city by city comparisons and the best neighborhoods within those cities would further assist the decision-making process for people making retirement plans or even companies making relocation decisions. This comparison study would be valuable for individual retirement planning, identification of gaps in services, business prospects, and economic development.

The present study only included cities with populations greater than 25,000. Lowering the population threshold to include smaller towns (less than 25,000) would lend itself to different quality of life parameters and possible additional perspectives of livability. Data from geographically smaller cities could redefine how public transportation and walkability impact livability. Understanding why people choose to live in smaller cities could be insightful and aid larger communities in understanding how to market to those who live in smaller communities.

In summary, regional differences in major areas of community services with respect to the aging of the baby boomers had not been compared prior to the study. City managers and mayors were surveyed, providing a unique

perspective and insight into existing services and community preparedness for this aging population. Business and economic development impacts were examined, and aging boomer workforce needs and benefits were explored. Future scholars should consider replicating this study to further examine the level of preparedness of communities, which could drive business location decisions, retiree relocation decisions and economic development marketing plans.

REFERENCES

Achenbaum, W. A. (2005). *Older Americans, vital communities: A bold vision for societal aging.* Baltimore: Johns Hopkins University Press.

Administration on Aging. (2009). Home modification. Retrieved June 16, 2009, from http://74.125.47.132/custom?q=cache:-UoGG6037NIJ:www.aoa.gov/

Aguilar, B. (2003). Baby boomer social workers' perceptions of retirement planning. *Masters Abstracts International.* (UMI No. 1415426).

American Association of Retired Persons [AARP]. (1999). *Baby boomers envision their retirement: An AARP segmentation analysis.* Retrieved January 31, 2007, from http://www.aarp.org/research/reference/publicopinions/aresearch-import-299.html

AARP (2000). *Fixing to stay: A national survey of housing and home modification issues.* Retrieved May 8, 2009, from http://www.aarp.org/research/reference/publicopinions/aresearch-import-783.html

AARP (2001). *In the middle: A report of multicultural boomers coping with family and aging issues.* Retrieved February 2, 2007, from http://www.aarp.org/research/housing-mobility/caregiving/aresearch-import-789-D17446.html

AARP (2005a). *Beyond 50:05: A report to the nation on livable communities.* Retrieved February 13, 2008, from http://www.aarp.org/research/housing-mobility/indliving/beyond_50_communities.html

AARP (2005b). *Livable communities: An evaluation guide.* Retrieved January 31, 2008, from http://www.aarp.org/research/housing-mobility/indliving/d18311_communities.html

AARP (2005c). *Statement before the Senate Committee on Health, Education, Labor, and Pensions Subcommittee on Retirement Security and Aging On "Aging in Place and Naturally Occurring Retirement Communities."* Retrieved October 1, 2008, from http://help.senate.gov/Hearings/2006_05_16/Ginzler.pdf

Benton, J., Byers, J., Cigler, B.A., Klase, K.A., Menzel, D., Salant, T., Streib, G., Svara, J. & Waugh Jr., W. (2007). Conducting research on counties in the 21st century: A new agenda and database considerations. *Public Administration Review, 67*(6), 968-983. Retrieved February 9, 2008, from ABI/INFORM Global database. (Document ID: 1404881051).

Berke, E., Koepsell, T., Moudon, A., Hoskins, R. & Larson, E. (2007). Association of the built environment with physical activity and obesity in older persons. *American Journal of Public Health, 97*(3), 486-493. Retrieved August 1, 2008, from ABI/INFORM Global database. (Document ID: 1233423371).

Beverly Foundation (2004). *Innovation for seniors: Public and community transit services respond to special needs.* Retrieved June 30, 2008, from http://www.beverlyfoundation.org/ senior_transportation_resource_store/index.html

Beverly Foundation (2007). *Public transportation programs for seniors.* Retrieved March 22, 2009 , from http://www.beverlyfoundation.org/senior_transportation_resource_store /pdf/Report_Public_Transit_Programs_for_Seniors.pdf

Burcum, J. (2008, June 22). Aging affordability :The new idea in elder care: membership; stay in your home. pay an annual fee. get easy access to a network of help when you need it. *Star Tribune*, OP.1. Retrieved May 9, 2009, from Business Dateline database. (Document ID: 1501051341).

Clarkson, M. (1995). A stakeholder framework for analyzing and evaluating corporations. *Academy of Management. 20*(1), 92-118. Retrieved February 10, 2008 from ProQuest database.

Cornman, J. M. & Kingson, E.R. (1996). Trends, issues, perspectives, and values for the aging of the baby boom. *The Gerontologist, 36*(11), 15. Retrieved September 22, 2007, from ProQuest database.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 16*(3), 297-334. Retrieved February 10, 2008 from ProQuest database.

Daisa, J.M. (2006, May). Context sensitive solutions in designing major urban thoroughfares for walkable communities: An ITE proposed recommended practice. *ITE Journal, (76)*5, 31-38. Retrieved June 29, 2008 from http://www.ite.org/css/committeereport.pdf

DeVellis, R.F. (1991). *Scale development.* Newbury Park, NJ: Sage Publications.

Dickerson, A., Molnar, L., Eby, D., Adler, G., Bedard, M, Berg-Weger, M., et al. (2007). Transportation and aging: A research agenda for advancing safe mobility. *The Gerontologist, 47*(5), 578-593. Retrieved June 30, 2008, from ProQuest database.

Doyle, S., Kelly-Schwartz, A., Schlossberg, M., & Stockard, J. (2006). Active community environments and health. *Journal of the American Planning Association*, *72*(1), 19-32. Retrieved June 30, 2008, from ProQuest database.

Ervin, S. L. (2000, November/December). Fourteen forecasts for an aging society. *The Futurist, 34*(6), 24-28. Retrieved May 29, 2007, from ProQuest database.

Feldman, E. (2003). *Active living for older adults: Management strategies for healthy and livable communities.* Retrieved May 12, 2009, from http://bookstore.icma.org/freedocs/Active_Living.pdf

Frank, L., Sallis, J., Conwa, T., Chapman, J., et al. (2006). Many pathways from land use to health. *Journal of the American Planning Association, (72)*,1, 75-88. Retrieved August 1, 2008, from ProQuest database.

Frey, W. H. (2007, May). *Mapping the growth of older America: Seniors and boomers in the early 21st century*. Retrieved January 25, 2008, from http://www.brookings.edu/metro.aspx

Frey, W., Berube, A., Singer, A., & Wilson, J. (2009). *Getting current: Recent demographic trends in metropolitan America.* Retrieved May 11, 2009, from http://www.brookings.edu/reports/2009/03_metro_demographic_trends.aspx

Gilderbloom, J. I. & Rosentraub, M. S. (1990). Creating the accessible city: Proposals for providing housing and transportation for low income, elderly and disabled people. *American Journal of Economics and Sociology, 49*(3), 271-282. Retrieved March 22, 2009, from Business Source Elite database.

Glass, J. C., & Kilpatrick, B. B. (1998). Gender comparisons of baby boomers and financial preparation for retirement. *Educational Gerontology*, 24, 719-745.

Global Generations Policy Institute (2007). *Baby boomer public policy: A new vision.* Retrieved April 17, 2009, from http://www.genpolicy.com/

Gross, J. (2006, February 9). Aging at home: For a lucky few, a wish come true. *The New York Times*, p. F1. Retrieved May 29, 2007, from ProQuest database.

Haas, W. H., & Serrow, W. J. (2002). The baby boom, amenity retirement migration, and retirement communities: Will the golden age of retirement continue? *Research on Aging, 24*(1), 150-164. Retrieved October 23, 2007, from ProQuest database.

Hanson, D., & Emlet, C.A. (2006). Assessing a community's elder friendliness: A case example of the advantage initiative. *Family Community Health, 29*(4), 266-278.

Hsieh, F.Y., Block, D.A., & Larsen, M.D. (1998). A simple method of sample size calculation for linear and logistic regression. *Statistics in Medicine,17*(14), 1623-1634.

Hopkins, W. (2001). A new view of statistics. Retrieved June 5, 2008, from Sportscience website: www.sportsci.org/resource/stats/ssdetermine.html

Hooyman N.R., & Kiyak H.A. (2005) *Social Gerontology: A Multidisciplinary Perspective.* 7th ed. Needham Heights, MA: Allyn and Bacon.

Housing for the 55+ market: Trends and insights on boomers and beyond (2009). Retrieved May 20, 2009, from http://www.metlife.com/mmi/index.html?WT.ac=GN_mmi

International City/County Management Association [ICMA] (2008). *Who we are.* Retrieved January 28, 2008, from http://www.icma.org/main/bc.asp?bcid=60&hsid=1&ssid1=17

ICMA. (2008). *What we do.* Retrieved January 28, 2008, from http://www.icma.org/main/bc.asp?bcid=654&hsid=1&ssid1=17&ssid2=2532

Keister, L.A., & Deeb-Sossa, N. (2001). Are baby boomers richer than their parents? International patterns of wealth ownership in the United States. *Journal of Marriage and Family, 63*(2), 569-580. Retrieved from May 29, 2007, from ProQuest database.

Kruskal, W. H., & Wallis, W. A. (1952, December). Use of ranks in one-criterion variance analysis. *Journal of the American Statistical Association, 47*(260), 583–621. December 1952. Retrieved June 18, 2009, from http://homepages.ucalgary.ca/~jefox/Kruskal%20and%20Wallis%201952.pdf

Kuttner, R. (2005, May 11). A new model for elder care. *Boston Globe*, p. A17. Retrieved May 15, 2007, from ProQuest database.

Lemberg, J. (2002, January 6). A neighborhood takes care of its elderly without government aid; a local group helps older residents live as they choose. *Boston Globe*, p. 1. Retrieved May 29, 2007, from ProQuest database.

Libson, N. (2005/2006, Winter). The sad state of affordable housing for older people. *Generations*, *29*(4). 9-16. Retrieved June 30, 2008, from ProQuest database.

Longest, B. B., Rakich, J. S., & Darr, K. (2000). *Managing health services organizations and systems* (4th ed.) Baltimore: Health Professions Press.

Lord, Frederic M. (1980). *Applications of item response theory to practical testing problems.* Hillsdale, New Jersey: Lawrence Erlbaum Associates.

Lundy, T., Wallace, C. B., Dennis, W. E., Romer, B., Reddish, W. A., Bean, P. G., Krings, D., Keene Jr., J. R. (2007). Conducting research on counties: Commentary from county government practitioners. *Public Administration Review, 67*(6), 984-990. Retrieved February 9, 2008, from ABI/INFORM Global database. (Document ID: 1405254801).

MacDonald, L., & Dwyer, W. (2008, November). Respect Your Elders. *Risk Management (00355593)*, *55*(11), 36-40. Retrieved May 20, 2009, from Business Source Elite database.

Markwood, S. (2007, August). Get ready for the coming age wave. *Benefits and Compensation Digest, 44*(8), 35-38. Retrieved August 4, 2008, from Business Source Elite database.

Marshall, L. J. & Hunt, M. E. (1999). Rural Naturally Occurring Retirement Communities: A Community Assessment Procedure. *Journal of Housing for the Elderly*, *13*(1), 19-34. Retrieved October 9, 2008, from ProQuest database.

Maturing of America: Getting communities on track for an aging population (2006). Retrieved January 16, 2008, from http://www.aginginplaceinitiative.org/index.php?option=com_content&task=view&id=19&Itemid=48

Masotti, P., Fick, R., Johnson-Masotti, A., & MacLeod, S. (2006). Healthy naturally occurring retirement communities: A low-cost approach to facilitating healthy aging. *American Journal of Public Health, 96*(7), 1164-1170. Retrieved August 7, 2008, from ABI/INFORM Global database. (Document ID: 1075235151).

McCallion, P. (2005). *Naturally occurring retirement communities.* Retrieved October 2, 2008, from http://www.albany.edu/aging/

Minnesota Department of Health and Human Services (2007). Preparing Minnesota for the age wave and beyond. Retrieved January 31, 2008, from http://www.dhs.state.mn.us/main/groups/aging/documents/pub/dhs16_139307.pdf

Multiple Research and Services of Washington. (2008). History of county government in the United States. Retrieved January 31, 2008, from http://www.mrsc.org/Subjects/Governance/locgov6.aspx#US–

Myers, D. & Ryu, S. (2008, Winter). Aging baby boomers and the generational housing bubble: Foresight and mitigation of an epic transition. *Journal of the American Planning Association, 74*(1), 17-33. Retrieved March 22, 2009, from Business Source Elite database.

Nafis, D. A. (2000) The early baby boom age cohort: Housing and locational preferences and plans for the first 10 years of retirement. Ph.D. dissertation, Oregon State University, United States -- Oregon. Retrieved February 1, 2008, from ProQuest Digital Dissertations database. (Publication No. AAT 9983436).

National Association of Area Agencies on Aging [n4a] (2007). *A blueprint for action: Developing a livable community for all ages.* Retrieved February 13, 2008, from http://www.n4a.org/pdf/07-116-n4a-blueprint4actionwcovers.pdf

National Association of Counties [NACO] (2008). *The history of county government part iii.* Retrieved January 31, 2008. from http://www.naco.org/Template.cfm?Section=History_of_County_Government&Template=/ContentManagement/ContentDisplay.cfm&ContentID=14107

National Council on Aging (2004). *NCOA gives input on White House conference on aging.* Retrieved June 16, 2009, from http://www.ncoa.org/content.cfm?sectionID=105&detail=691

National Center for Health Statistics (2005). *Health, United States, 2005 with chartbook on trends in the health of Americans.* (Library of Congress Catalog No. 76-641496). Hyattsville, MG: Author.

National League of Cities [NLC] (2008). *Inside NLC.* Retrieved July 16, 2008, from http://www.nlc.org/inside_nlc/aboutnlc.aspx

NLC (2008). About cities: *Cities 101: Number of cities and city populations.* Retrieved July 16, 2008, from http://www.nlc.org/about_cities/cities_101/138.aspx

Nunnaly, J. (1978). *Psychometric theory.* New York: McGraw-Hill.

Olshansky, S.J., Passaro, D.J., Hershow, R.C., Layden, J., Carnes, B.A., Brody, J. et al. (2005). A potential decline in life expectancy in the United States in the 21st century. *The New England Journal of Medicine. 352*(11), 1138-1145. Retrieved September 22, 2007, from ProQuest database.

Ouyang, R. (2007). Basic inquiry of quantitative research. Retrieved September 16, 2007, from http://ksumail.kennesaw.edu/~rouyang/ED-research/details.htm

Patton, M. (2002). *Qualitative research and evaluation methods (*3rd ed.). Thousand Oaks. CA: Sage.

Rubin, R.M. (2006). What does the aging of the workforce mean for workers and for business? *Business Perspectives, (18)*2, 2-7. Retrieved May 16, 2009, from ProQuest database.

Silverstein, N., Johns, E., & Griffin, J. (2008). Students Explore Livable Communities. *Gerontology & Geriatrics Education, 29* (1), 19-37. Retrieved June 20, 2009, from http://www.informaworld.com/10.1080/02701960802074248

Smith, C. (2009, May). Retirees: A new economic development strategy. *Public Management, 91*(4), 14-15. Retrieved May 13, 2009, from ABI/INFORM Global database. (Document ID: 1705248601).

Trochim, W. M., & Donnelly, J. P. (2007). *The research methods knowledge base* (3rd ed.). Mason, Ohio: Thomson.

U. S. Census Bureau Geography Division (2001). *Census bureau map products.* Retrieved June 30, 2008, from http://www.census.gov/geo/www/us_regdiv.pdf

U. S. Census Bureau [USCB] (2004a). *Housing vacancies and homeownership annual statistics.* Retrieved September 23, 2007, from http://www.census.gov/hhes/www/housing/hvs/hvs.html

U. S. Census Bureau (2004b). *U. S. interim projections by age, sex, race and Hispanic origin.* Retrieved September 23, 2007, from http://www.census.gov/ipc/www/usinterimproj/

Zikmund, W. G. (2003). *Business research methods*. Mason, OH: Thomson South-Western.

Zobell, K. & Reisch, K. (2006). The boom cycle in housing for an aging population: Acquisition and development of senior communities.*California Property Journal, 24*(4), 33-43. Retrieved May 9, 2009, from ProQuest database.

APPENDIXES

Appendix A

Survey

Dear Sir/Madam:

You are invited to participate in a research study that will examine the level of preparedness of United States' cities to handle the influx of the Baby Boomer retirees in the areas of transportation, shopping, housing and walkability. You were selected because are a public official (mayor, city manager or other) of a city with a population over 25,000.

You are agreeing to participate if you complete either the online or paper questionnaire. You may need to get information from other parties to complete this survey. The survey will take approximately 10 minutes, and if this survey has been mailed to you, there is a stamped, self-addressed return envelope included for the return of the survey. If this is an online survey, please click on the link http://www.surveymonkey.com/s.aspx?sm=mcxS61EMS_2foCDNPiNONJJw_3d_3d after you read the remaining details of the survey. Please return the survey by February 28, 2009.

Risks and Benefits of Being in the Study:

Although there are no benefits or risks to you personally for participating in this survey, the results could be useful for public officials, city planners and possible retirees in understanding the availability or lack thereof of community services across the United States.

Confidentiality:

Responses will be kept private, in a locked file or secured online database with only the researcher having access. If any results are published from the survey, the information will not reveal the Identity of any respondents unless otherwise authorized by you in the comment section at the end of the questionnaire.

Contacts and Questions:

The researcher conducting this study is Northcentral University Ph.D. Candidate, Rita A. Quinton. Please contact me with any questions: rita_quinton@yahoo.com or telephone: (386) 405-2502, or mailing address: 651 Stewart Drive, New Smyrna Beach, Florida 32168.

I thank you in advance for contributing to the advancement of information on this important subject.

Rita A. Quinton,
Ph.D. Candidate, Northcentral University.

Survey

Dissertation Topic: Comparing Regional Differences in Livable Communities for the Aging Population

Qualifying Questions:

Please indicate your selection by circling your response. Please choose only one answer.

Are you currently a city manager, mayor or city official?
(a) Yes (b) No

Is your city currently a member either directly or indirectly of the National League of Cities (NLC) or the International City/County Management Association (ICMA)?
(a) Yes (b) No

1. What is the population of your city/community?

   (a) **25,000 - 49,999**

   (b) **50,000 - 74,999**

   (c) **75,000 - 99,999**

   (d) **100,000 - 199,999**

   (e) **>200,000**

2. Please identify the region in which you are located.

   (a) **Northeast** – Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont

   (b) **Midwest** – Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin

(c) **South** – Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia

(d) **West** – Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming

3. What is the name of your city and state?

_____

General

4. Has your city undergone budget cuts in the past year that has affected services to your older population?

(a)Yes (b) No

5. Did your community's most recent master plan study the needs of older adults and make recommendations to meet those needs?

(a)Yes (b) No

Housing

6. Is each of these types of affordable housing available within your community?

a.	Single-family homes	(a) Yes	(b) No
b.	Multifamily homes	(a) Yes	(b) No
c.	Special housing complexes for older people	(a) Yes	(b) No

d.	Assisted living facilities	(a) Yes	(b) No
e.	Continuing care retirement communities	(a) Yes	(b) No
f.	Nursing Homes	(a) Yes	(b) No

7. Are housing options located near basic shopping opportunities?

   (a) Yes (b) No

8. Does your community offer property tax reductions for homeowners over age 65?

   (a) Yes (b) No

9. Do your community regulations permit mixed land use? This means that retail establishments and community services are placed within walking distance of residential areas.

   (a) Yes (b) No

10. Are assessments available to help seniors identify ways to modify their homes for better function and safety?

    (a) Yes (b) No

Transportation

11. Does your community have a regularly scheduled bus or other public transportation service that picks up passengers at established stops? (If no regularly scheduled service, skip to #20.)

    (a) Yes (b) No

12. Are these stops located within a 10-minute walk of residences in the sections of town with older residents?

(a) Yes (b) No

13. Are the sidewalks that serve bus stops maintained?

(a) Yes (b) No

14. Do most of the transit stops offer shade, seats/shelter from the weather?

(a) Yes (b) No

15. Does this system serve hospitals, clinics, shopping facilities and other routine destinations of interest to older persons?

(a) Yes (b) No

16. Does your community have a dedicated route specifically for older persons that stops only at those destinations?

(a) Yes (b) No

17. Is transportation available on weekends?

(a) Yes (b) No

18. Are schedules and route maps easy to read?

(a) Yes (b) No

19. Are reduced public transportation fares available for older residents?

(a) Yes (b) No

20. Does your community have a dial-a-ride service?

(a) Yes (b) No

21. Does your community have a taxi service?

(a) Yes (b) No

Shopping/Services

22. Does your community have grocery stores, banks, coffee shops and pharmacies within a safe, convenient walking distance (1/4 mile) of clusters of residences of older adults?

(a) Yes (b) No

23. Are there mixed-use developments with shops and a mix of residential units that would appeal to older residents?

(a) Yes (b) No

24. Does your community have and support local farmers' markets?

(a) Yes (b) No

25. Does your community have farmer's markets located within walking distance of your neighborhoods with older populations?

(a) Yes (b) No

Walkability

26. Does your community have a walkability plan?
(a) Yes (b) No

27. Are there sidewalks throughout your community?

a) Yes (b) No

28. Are the sidewalks well maintained? (Surfaces should be flat with only minor cracks and minimal separation between slabs.)

a) Yes (b) No

29. Are there "pedestrian routes" identified between most major residential areas and typical destinations?

(a) Yes (b) No

30. Do traffic signals provide adequate time for senior pedestrians to cross the street without feeling rushed?

(a) Yes (b) No

31. Do signals have push-to-walk buttons to help stop traffic on a busy street?

a) Yes (b) No

32. Are there resting places (e.g., benches, low walls) for pedestrians along the sidewalks?

a) Yes (b) No

33. Please comment on any unique or special services that your city provides for its older population or plans to provide within the next three to five years._____

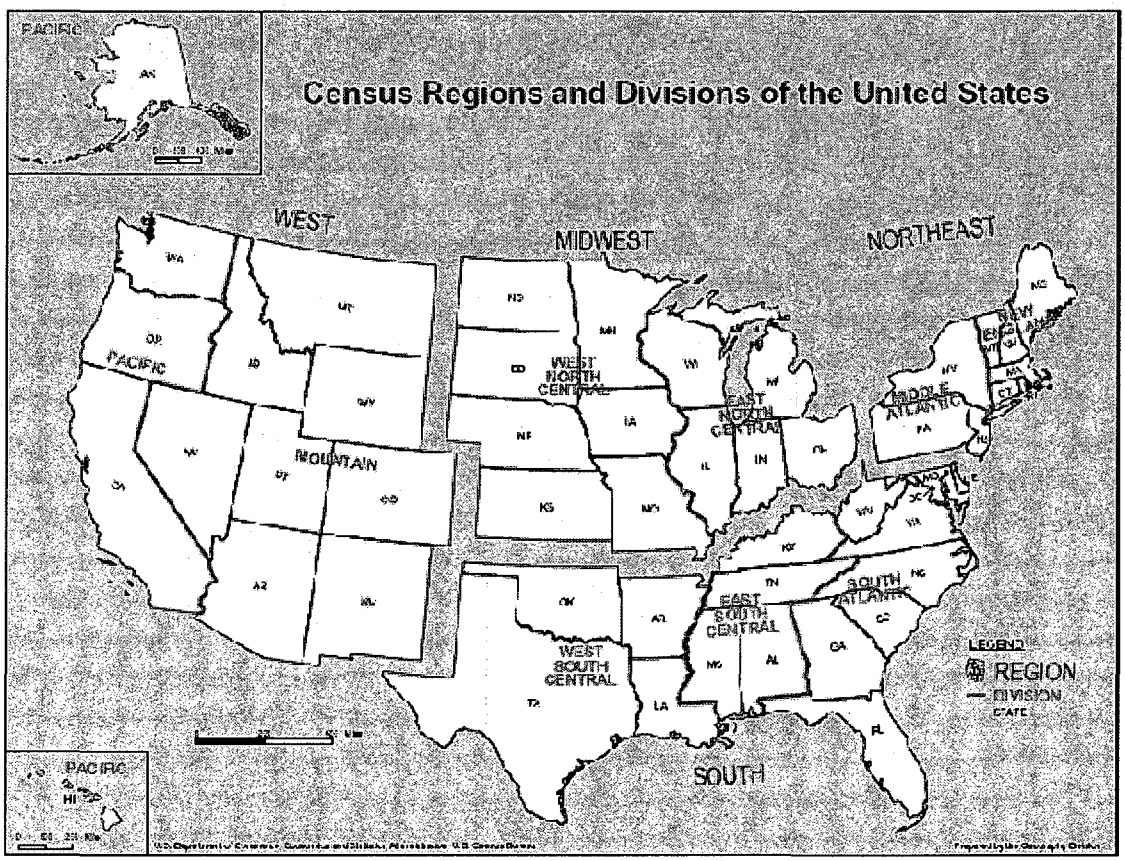
34. **May I publish information from these comments? (a) Yes (b) No**

Thank you for your responses.

Rita Quinton, Northcentral University Ph.D. Candidate, (386) 405-2502

Appendix B

Regional Map of the United States – U.S. Census Bureau



Appendix C

Participants Frequency by State

STATE	Frequency	Percent
AL	3	0.99
AR	4	1.32
AZ	8	2.64
CA	35	11.55
CO	6	1.98
CT	8	2.64
DC	1	0.33
DE	1	0.33
FL	22	7.26
GA	6	1.98
IA	7	2.31
ID	6	1.98
IL	20	6.60
IN	6	1.98
KS	3	0.99
LA	2	0.66
MA	11	3.63
MD	4	1.32
ME	1	0.33
MI	10	3.30
MN	6	1.98
MO	9	2.97
MS	4	1.32
MT	1	0.33
NC	9	2.97
NH	2	0.66
NJ	6	1.98
NM	1	0.33
NV	4	1.32
NY	9	2.97
OH	14	4.62
OK	2	0.66
OR	3	0.99
PA	13	4.29
RI	2	0.66
SC	4	1.32
TN	8	2.64
TX	17	5.61
UT	6	1.98
VA	7	2.31
WA	9	2.97
WI	2	0.66
WY	1	0.33
Total	303	100