AN EVALUATION MODEL FOR IDENTIFYING LEWISVILLE AND SAN ANGELO, TEXAS, AS SENIOR READY COMMUNITIES

David N. Sanders, M.Ed.

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APPROVED:

Keith Turner, Major Professor
Stanley R. Ingman, Committee Member
Daniel G. Rodeheaver, Committee Member
Nicole Dash, Chair of the Departments of Sociology and Applied Gerontology
Thomas L. Evenson, Dean of the College of Public Affairs and Community Service
Michael Monticino, Dean of the Robert B. Toulouse School of Graduate Studies
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This research portrays a paradigm for the assessment of aging services to support populations aging in place. The dissertation was designed to establish a model to identify and evaluate senior ready communities. Area specific social programs and services are identified. In order to meet the growing needs of aging populations, the dynamic representation of existing services and the need for services that could be developed in certain communities require reevaluation in current planning, restructuring, and/or community development.
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CHAPTER 1

INTRODUCTION

Problem

This dissertation establishes a paradigm that assesses and compares the need for present and future aging services to support successful aging in place in two communities. According to MSNBC (2009), “less than half of the nation’s communities have begun preparing to deal with the needs of the elderly, whose ranks will swell dramatically with the aging of the baby boomers. A survey of more than 1,790 towns, counties and other municipalities found that just 46% are looking at strategies to deal with aging America” (1). The problem of establishing sound planning practices for aging issues is a complex one. A senior ready community, for the purposes of this research, is defined as one with sufficient infrastructure including services and supports for successful aging in place.

The evaluative model for a senior ready community will be applied to the communities of San Angelo and Lewisville in Texas as a demonstration of an urban versus rural community comparison. It identifies levels of social and health resources found in defined city limits. It compares and contrasts existing infrastructure and the possible need for additional services. Once services whether underdeveloped or overdeveloped in certain areas have been identified, then proposed actions could lead city managers to reengage planning, restructuring, and/or community development efforts in order to meet the changing needs of aging populations. The evaluation model for the senior ready community is a planning tool that can be used for accommodating
the changing needs of aging population. The planning objectives would be for communities to support successful aging in place.

Iwarsson (2005) identified the home to be the best environment for successful aging in place. Often the home is identified as an area associated with different risks, both personal and environmental. The ability to interact with that environment or maintain a stable standard of living can be problematic. Both the physical as well as the financial resources of an individual impact the standard of living. The environment to be considered for aging in place needs to be evaluated not only for the activities of daily living (ADL) in such an environment but also the financial and opportunity costs that are associated with aging in place (Iwarsson; Lawton, 1986).

The case of environment affects aging within the home; the environment of the community can also be interactive in the aging process (Lawton, 1983). Communities can be identified in-terms of resources that encourage certain types of business to thrive. Large groups of aging individuals demand the power of choice in regards to aging service acquisition. If the opportunity is lost in regard to filling those needs; the cost to the community could result in aging individuals finding other communities that do. Jaffee (2001) defines resource dependence theory as the ability to procure resources in a specified environment to be utilized for the purposes of an identified goal.

Economic development and civic planning needs to assess the impact and opportunities associated with a boomer generation aging in place. The identification of demographical information on aging services infrastructure can utilize this research and evaluative tool to get there. The evaluative model should show its ability to reduce wasted time and resources in services that are overdeveloped for certain areas while
identifying those demographic areas that need to have an increase in infrastructure in
order to establish or transform an existing community into a senior ready community.

Hypothesis

The dominant hypothesis is that rural surrounded communities due to their
isolation have developed significantly greater service providing infrastructure to support
aging populations. Conversely, urban locked cities may rely on the infrastructure of
adjacent cities to support aging populations.

Methods

Data were collected from two separate cities based on similar population sizes.
The city selected based on criteria for a rural isolated city is San Angelo, Texas. San
Angelo was chosen because it fits the description of a city not surrounded by other
cities. The closest major city is 87 miles distant. Lewisville, Texas was chosen as a city
of comparable size among urban-adjacent cities. Data were collected from public web
sites, phone books, and publicly available information. The collected data for a
community regard the service locations of identified providers.

Variables specific to this study for the evaluation of infrastructure include the
demographics of median housing, cohort age distributions for community, population
size, ethnicity. Geo-mapping was utilized to identify clustering of aging services. These
variables were utilized to specify infrastructure to support successful aging in place. The
seven plotted variables include nursing homes, assisted living facilities, rehabilitation
centers, home health agencies, adult day-services, hospice, and home delivered meal
services. Geo-mapping was utilized via Microsoft Map-point 2009 software for spatial
location of service providers.
Population projections for both cities were obtained from the U.S. Census Bureau’s (2008) website. These data were used to give scope of possible growth for both communities. The trajectory of possible growth helped to identify the urgency of planning needed.

Data Collection and Analysis

This utilization of mapping software established a spatial assessment of the array of services in each community. The identified services for each community indicate the existence of infrastructure to support aging populations. The projected population growth of each city indicated possible future demands for infrastructure. Population growth is projected in 5 year increments to the year 2040 (U.S. Census Bureau, 2008). It is anticipated that population growth will occur faster in urban areas.

An analysis was done to compare and contrast infrastructure and population growth factors for both communities. Structural differences were explored in the ability to support the hypothesis that rural communities were found to be more structurally developed for aging infrastructure than their city locked counterparts. Evaluative analysis included:

1. Median housing
2. Cohort age distributions for community
3. Population size
4. Ethnicity Structure
5. Aging Infrastructural Analysis
   a. Nursing homes
   b. Assisted living facilities
c. Rehabilitative Services
d. Home health
e. Adult day-care/respite
f. Hospice services
g. Senior Services

Successful aging in place depends on the availability of services that enhance self-efficacy (Iwarsson, 2005) in the performance of ADL. The planning challenge for gerontologists is to develop communities that foster sustainability for independent living while aging in place. Communities that reach a level of sustainability are then identified as senior ready. Additionally a community’s social, demographical, and cultural make up needs to be understood in order to identify the circumstances of aging in place within that community.
CHAPTER 2
LITERATURE REVIEW

In today’s global economy, the elderly make up approximately 13% of the population. According to McMorrow and Roeger (2004), “at the global level, the number of elderly people will grow from less than half a billion in 2000 to 1.5 billion in 2050 which as a share of the overall population is equal to an increase from 5% to 15.5%” (p. 9). As the elderly population (65 years and older) has grown, more researchers are paying attention to the expanding social and civic needs of the elderly. Sorgman and Sorensen (2001) relate that the most important reason for addressing aging issues is the result of the aging process and that everyone may experience old age if they live long enough.

Throughout recent history the conflict between citizenry and government has grown. Policy and economic stability change from one governmental administration to another. Planning tends to pursue community initiatives to compete with other communities initiatives rather than project an integrative public policy. This research proposes a planning paradigm to support the sustainability of aging services and programs.

A level of distrust has grown over the years between individuals and the society in terms of public policy. Longino and Murphy (1995) state, with the event of the “baby boom” generation reaching later life, that “this group has had a tendency to distrust authority, especially that which is unresponsive” (p. 121). As a result of the tendency for mistrusting public policy, the costs associated with the delivery of services have been
called into question. This requires that identification of current infrastructure be identified before future commitment of capital occurs.

The problem facing the 21st century is how aging is defined, viewed, and addressed in public policy. Some proposed legislation and public policies are based on myths in regard to aging for the purposes of instigating public support. Thornton (2002) addresses these stereotypes as propagated myths associated with categorizing aging issues. The media, when addressing aging issues, tends to dramatize the state of the aging population by spreading more of these myths. Myths label the elderly, according to Thornton, as “the aged...the enormous social problem facing us in the twentieth century” (p. 308). Labeling these social interactions in such negative ways can have an impact on relationships with elderly individuals and the public policies that are meant to serve them (Thornton). Kane et al. (2004) found that treatment of elderly individuals was affected because of perceived age. Services were restricted or not offered because of the individuals’ ages.

Aging individuals are then perceived to be caught between not being able to access medical care and that the medical establishment views the elderly as unable to make decisions regarding that care. Estes and Swan (1993) have titled the phenomenon of not being able to secure medical care as “elders trapped in the no-care zone” (p. 258). Due to the profound competition of service providers, the cost effectiveness of all long-term care methodologies is called into question (Estes & Swan). In recent years, this debate has surrounded community and home based services. Estes and Swan’s opening quote from the chapter on no-care zone and public policy encompasses the need to redefine long-term care.
Much of the immediate concern must be how we develop a new vision for community care with older people in the 1990s. Any reassessment of community care will need to have at least three key elements: first, a redefinition of the nature of dependency; secondly, a new approach to family care; thirdly, a major injection of resources to underpin community care provision. (Phillipson, 1992, as quoted in Estes & Swan, 1993, p.258)

McMorrow and Roeger (2004) hypothesize one way of addressing aging issues is to enhance the global and local economies. They postulate that increasing the gross national product worldwide will provide the necessary monetary requirements of providing services for the elder. As with other projections, the need for increased economic security is needed before the aging issue can be addressed by society.

A major problem with this line of thinking is that the current level of care for the elderly may be inadequate. With the current trends in economic growth, it will be far into the future before the free enterprise system of doing business may address the aging issue. The common assumption is that elderly individuals may have to work more years in latter life in order to afford the cost of aging services or to keep health insurance in place. Changes in Social Security that raised the level of qualifying for benefits from age 65 to 67 for some individuals provide evidence that public policy is trying to offset the costs associated with serving an aging population.

Culture of Change

Estes and Swan (1993), in their book *The Long Term Care Crisis: Elders Trapped in the No-Care Zone*, report that “access of older persons to health and social services has changed profoundly in the 1980’s and 1990’s” (p. xi). Identifying current structures in such a dynamic and changing environment needs a model and methodology of evaluating existing infrastructure and planning for future services is therefore needed.
Social services have been driven to find new ways of providing products and services that Medicare, Medicaid, and or society will pay for. A transition has occurred over the past 20 years in the funding and development of said services. Estes and Swan (1993) find that public policy and funding of patient services are including community and home-based services in an effort to increase quality of services while reduce costs associated with service delivery. Identifying home-based providers can give a fuller understanding to how choice of health care services are distributed in a community. The importance of home based services is in the ability to support the desire of individuals to age in place in a home environment that they have grown accustomed to over time. The sustainability of these service providers are strongly anchored in reducing cost while increasing the number of individuals who receive these services. One of the largest planning practices for any organization is in the form of marketing and client development. Without demographic constraints, planning efforts are, at best, a shot in the dark.

Estes, Swan, and Gerard (1982) state that “the status and resources of the elderly, and even the trajectory of the aging process itself, are conditioned by one's location in the social structure and the economic and political forces that affect it” (p.155). The current economic manifestations in a growing recessive economy provide additional illustrations of that volatility. Moreover, the distribution of service infrastructure is favorably inclined towards the areas of dense population. Economically this bias has the benefits of reducing cost of delivery while reaching a larger population.

The effect of centralized services is otherwise seen as a magnet for migration to urbanized areas for the purposes of accessing needed services. Providing services to
populations in rural areas becomes more problematic as resources are less available. Scarcity of rural population increases the cost of service delivery.

Environmental Fit Theory

In environmental fit (Lawton, 1986), the individual and the environment form a set of interactions that require adaptation of the individual in order to successful navigate their surroundings. Lawton (1985) and others have identified opposing forces from the environment as environmental press (Lichtenberg, MacNeill, & Mast, 2000; Murry, 1938). Environmental press is the constant interaction of individual abilities while negotiating environmental obstacles. The theory of environmental press can be applied to the home as well as the community in which a person lives (Lichtenberg et al., 2000). The decline of individuals' abilities as measured by increased dependency in ADL negatively impacts environmental press. An individual's capabilities can predict the ability to negotiate the environment of home and community (Lichtenberg et al., 2000).

The focus of this research is the relationship between environmental press and successful aging in place. Some communities are inherently easier to age in place and might better illustrate the concepts of being elder friendly and senior ready. Although individuals may choose a community based on a variety of factors, the question is how well suited is that community to serve their aging needs and desires to age in place?

For a community to be both elder friendly and senior ready, it must have a willingness to accommodate the needs of older populations as well as an appropriate distribution for infrastructure that provide services and supports that population may require. As indicated in the following section, the literature discusses barriers to being elder friendly and senior ready.
Ageism

Ranzijn (2002) postulates that the environment contains multiple barriers to successfully aging in place. A community’s social, demographical, and cultural make up need to be understood in order to identify the difficulties of aging within that community. Ranzijn categorizes these barriers into two categories. The first was referred to as attitudinal or attitude of the community and individuals in the area of ageism, stereotypes, and how a community views entitlements. Ageism is defined as the segregation and discrimination toward an individual based on age.

Individuals are marginalized due to society’s implications of negative stereotypes. The media further tends to dramatize the state of the aging population by spreading more disinformation in regard to aging individuals, according to Thornton (2002). Statements include “the aged...the enormous social problem facing us in the twentieth century” (p. 308). Labeling individuals and social interactions with “the aged” in such negative ways develops a social barrier and a false paradigm for future interactions.

Competition for federal and state resources to support the majority of human services continues to get more complicated as the revenue available for said services continually decreases from year to year. As different age groups continue to compete for the dwindling resources, friction between cohorts increases and is tearing the fabric of society. In a society where youth is valued over age and wisdom, the bulk of resources are arguably diverted to those initiatives rather than identified needs.

In a recessive climate the opportunity for earning a living wage is complicated and very competitive. As the stock market declined in 2008, the effect for aging
individuals was a realization that the resources they retained from years of living and employment would not sustain their current level of life style. We spend resources for education and training in search of adequate skills employable by the communities in which they live. For many seniors, the realization of lost income potential adds individuals into a climate of competition for jobs that seem to favor employing younger individuals. Disparities in employment practices that have been historically researched for gender differences in equality needs to further address issues of an aging employable workforce of individuals trying to reenter the market of available jobs.

Employment discrimination based on age is illegal (Age Discrimination in Employment Act, 2006) but often happens to the elderly as an effect of ageist stereotyping. Seniors may be seen as taking longer to complete certain tasks that younger individuals perform, though research suggests older individuals complete the tasked assigned with less mistakes and greater accuracy. Duncan and Loretto (2004) found “evidence that women are considered older earlier than their male colleagues” in the work force (p. 110). This type of discriminating barrier adds to the problem of women being able to provide themselves with a comfortable and sustainable lifestyle in later years. Income disparities for women include variables such as the lack of pensions, savings, and retirement accounts; limited employment credits; sexism; and age discrimination (Duncan & Loretto; Lusky, 1986). Discrimination and ageism as barriers result in the effect of limiting personal choices during the aging process.

Even the language used in personal interactions can play a role to increase or decrease ageist barriers. According to Palmore (2004), language barriers of ageism are often the same (avoidance, derogatory comments, and discrimination) across many
regions of the United States. Palmore further identifies that cultural views place different values of seniors’ worth based on their perceived usefulness in that community.

Individuals can also be responsible for erecting barriers based on their own perceptions of where an individual fits in their local environment. Giles and Reid (2005) propose a model of the ageist barrier being a result of self-categorization with the stereotypes of growing old and identifying oneself with one’s peers. Giles and Reid offer that an equal number of ageist remarks come from elderly individuals as those that come from younger generations. Many older adults assess their own abilities in relationship to those of peers they know and the community in which they live (Giles & Reid).

Aging is a subjective experience for individuals as they negotiate the barriers of a community in which they live. An individual’s aging process, according to Giles and Reid (2005), is often evaluated based on the aging process of peers. In gerontological terms, age is divided into categories or cohorts. Health is a major point of comparison between many seniors (Giles & Reid).

Strategic planning for ways of educating the community on ageism should be developed in order to start addressing the social environment of the community in which they live. By understanding differences among aging cohorts one can then identify what barriers exist in a community and their individual environments.

Environmental Barriers

Environmental barriers (Lawton, 1985, 1986) are structural obstacles that make negotiating the environment more difficult for an individual. They include factors such as physical environment, bureaucracy, and infrastructure. Infrastructure refers to the
available resources, agencies, and public forums/businesses that are available in a
given community to serve an aging population. As communities evolve, business and
industry must adapt to meet the service challenges of populations who are aging in
place (Court, Farrell, & Forsyth, 2007). Economic opportunity can be viewed as the
process of establishing profitable and sustainable infrastructure. Depending on the
distributions of individuals over age 65, there may be ample incentives for business to
adapt and target certain neighborhoods.

The baby boom generation (those individuals born between 1946 and 1964) is
often portrayed as having more education and more resources than any preceding
generation. The baby boom generation has sufficient resources to demand new choices
from businesses. Probably the demand for new choices extends to such important
areas as retirement, health care, and activity replacement.

During instances of economic turmoil, the ability to leverage resources is a
barrier with decreasing opportunity. All segments of society are affected by
unemployment and the fear of continually diminishing access to resources. Some
individuals who might have chosen a level of luxury in regard to lifestyle, retirement, or
continuum of care may have to reevaluate those choices.

The choice of purchasing long term care services often comes down to
institutionalized versus home-based providers. In order to attract opportunity of new
clients and retain existing ones home-based services need to be expanded and be
more cost effective than the alternative of a long-term care institution. The barriers of
providing home-based aging services need to be assessed and overcome. One
difficulty lies in the horrendous costs associated with advertising and marketing services
to new clients. Except for word of mouth, some providers fly below the radar and may struggle to secure enough clients and resources to be financially viable. On the other hand, the community level of governing maybe unaware of the service providers and lack the ability to make a recommendation and referral to aging service providers. Helping communities to identify current and available infrastructure for aging services can be instrumental in developing strategic plans and resources to meet growing population projections.

Because of the diversity of economic conditions and needs for aging service providers, the expectations of meeting those needs must be just as innovative and diverse. The moral imperative is to realize that not all individuals can afford the finest level of care. Innovative ideas and new business models are needed in order to effectively administer services to individual of low to moderate levels of socioeconomic status.

Resource Dependence Theory

Socioeconomic class differences (social inequality) historically develop and have the direct effect of impacting choice. Living in an area of (and having sufficient) economic status provides a level of independent choice as to the selection of services. Those who do not have the needed resources are left with what the community is willing or able to provide. The unequal distribution of resources favors certain areas of a community while being a barrier to others. Some neighborhoods are identified as affluent, aging, or even poor. This distribution of resources and study thereof leads to an understanding of historic development of a community versus identified opportunities’ for future growth.
Jaffee (2001) defined the resource dependence theory of community development as follows: an organization thrives by the ability the entity has in order to procure resources. Any competition to these organizational goals will be met with great resistance. Competition for resources from federal funds has the habit of instilling a sense of rivalry between organizations in their desire and ability to deliver services while defending existing resource levels. Lower income and rural individuals often do not have the resources needed to provide adequately for themselves. This lack of resources and opportunities creates the situation of dependency on society.

Social inequality due to increased numbers of minority individuals often leads to a decrease in funds and services when compared with non-minority areas. Similarly youth versus aging differences in service distribution and resources can also be a level of competition for limited resources. A lack of adequate resources to fill the needs of individuals breeds competition which itself becomes a barrier to providing services. Representation needs to be at all levels of planning and execution of services to address any issues that make each neighborhood and community diverse and unique.

Throughout recent history many individuals chose to live in rural community settings due to lower financial costs of living. In later life, individuals are forced to migrate into urbanized areas in order to receive services. The rural delivery of services innately becomes a barrier due to the increase cost of delivering services in a less dense population. According to Rodwin, Gusmano, and Butler (2006), over 60% of the world’s population will have migrated and live in urban areas by 2030. The effect of the influx of urban aging individuals is that services have been localized in those areas with
the added effect of increasing costs and competition for services. Resources are being strained in order to provide services to the growing population of aging individuals.

**Senior Ready Communities**

To define a senior ready community one might start with the definition of a sustainable community as follows.

According to the Office of Environmental Assistance, ‘a sustainable community can persist over generations, enjoying a healthy environment, prosperous economy and vibrant civic life. It does not undermine its social or physical systems of support. Rather, it develops in harmony with the ecological patterns it thrives in.’ A sustainable community meets its present needs without sacrificing the needs of future generations by developing attitudes and actions that strengthen its economic, environmental, and social frameworks. (Hawkins, 2009, ¶1)

Therefore, if a community adopts this paradigm of sustainable community, that community by default will have in place the necessary services to strengthen its “economic, environmental, and social frameworks” including seniors.

The utilization of a senior ready community model can facilitate a paradigm shift towards an environment lacking barriers while providing resources for a sustainable future where individuals can age in place successfully. By analyzing barriers and or deficits in the environment in which a person lives can lead to a shift of perspective and planning to affect the quality of live and a sustainable future for individuals to interact with. A balance needs to be achieved while growing programs and services in a sustainable manner to meet the growing population’s requirements. It is when society rushes to serve a need that valuable resources maybe lost in the process. A balanced growth of services maybe needed to meet deficits in current populations while using growth projections and identifiable infrastructure to plan for future needs.
Analysis of what is available for aging in place and an understanding of where deficits are vital for communities in the areas of planning, development, and acquisition of resources. It is imperative to analyze the available resources for aging in place in order to address the deficit or explosion of aging services needed in a community.

The process of evaluating infrastructure for aging in place is also needed to identify a framework that accounts for rural versus urban community development. By comparing a rural community, in the case of this research San Angelo, Texas, with a urban surrounded city, like Lewisville, Texas, patterns develop to identify how infrastructure has developed naturally due to economic forces of perceived supply and demand. By utilizing demographic information in conjunction with census and civic information the process of identifying infrastructure can begin to explain and compare two different communities for aging in place.
CHAPTER 3
COMMUNITY EVALUATION RESULTS
Demographical Makeup of San Angelo, Texas

*Households and Families*

From 2005-2007, there were 35,000 households in the city of San Angelo (n.d.), Texas. The average household size was 2.4 individuals. Families made up 64% of the households in San Angelo. This statistic includes both married-couple families (46%) and other families (18%). Nonfamily households made up 36% of all households in San Angelo. Most of the nonfamily households were people living alone, but some were composed of people living in households in which no one was related to the householder (U.S. Census Bureau, 2008).

*Education*

From 2005-2007, 80% of people 25 years and over had at least graduated from high school, and 22% had a bachelor’s degree or higher. Twenty percent were dropouts; they were not enrolled in school and had not graduated from high school (U.S. Census Bureau, 2008). The total school enrollment in San Angelo was 26,000 from 2005-2007. Nursery school and kindergarten enrollment was 2,600, and elementary to high school enrollment was 14,000 children. College or graduate school enrollment was 8,400 (U.S. Census Bureau, 2008).

*Industries*

From 2005-2007, for the employed population 16 years and older, the leading industries in the city of San Angelo were educational services, health care, and social assistance, 27%, and Retail trade of 13% (U.S. Census Bureau, 2008).
Occupations and Type of Employer

Among the most common occupations were management, professional, and related occupations at 30%; sales and office occupations at 27%; service occupations at 21%; production, transportation, and material moving occupations at 11%; and construction, extraction, maintenance, and repair occupations at 10%. Seventy-four percent of the people employed were private wage and salary workers; 19% were federal, state, or local government workers; and 7% were self-employed in their own, not incorporated, businesses (U.S. Census Bureau, 2008).

Housing Characteristics

From 2005-2007, San Angelo city had a total of 39,000 housing units, 9% of which were vacant. Of the total housing units, 75% were in single-unit structures, 22% were in multi-unit structures, and 3% were mobile homes. Seventeen percent of the housing units were built since 1990 (U.S. Census Bureau, 2008).

Occupied Housing Unit Characteristics

From 2005-2007, San Angelo city had 35,000 occupied housing units with 23,000 (65%) owner occupied and 12,000 (35%) renter occupied. Nine percent of the households did not have telephone service, and 7% of the households did not have access to a car, truck, or van for private use. Multiple vehicle households were not rare. Thirty-nine percent had two vehicles, and another 15% had three or more vehicles (U.S. Census Bureau, 2008).

Ethnic Composition

U.S. Census Bureau (2008) showed a 30% Hispanic population and 5% African American population, with limited representation of other ethnicities. Due to the
relationship of Hispanic families and the less than 200 mile distance to the nearest Mexican border town this percentage is expected to grow.

The city of San Angelo is looking toward the 2010 census to further identify how this community is changing in terms of ethnic distribution. According to the U.S. Census Bureau (2008), the percentage of respondents who were contacted resulted in a 67% response rate of individuals they were able to survey. The average response rate for the state of Texas was 66%. One of the obstacles reported by the U.S. Census Bureau is the distrust of government resulting in hard to count areas of the population. With a large percentage of Hispanic individuals in the community a level of distrust has grown over time in response to concerns of immigration and naturalization of Hispanic citizens. On a daily basis one can see border patrol vehicles in many parts of the city reminding the population of its close proximity to Mexico.

Additional areas of hard-to-count neighborhoods are identified as areas of large ethnic populations or enclaves. African American neighborhoods in San Angelo have similar census response rates as Hispanic neighborhoods and areas identified as other minority populations. See Figure 1.
Figure 1. Ethnic composition of San Angelo, Texas.

Existing Community Plan for San Angelo, TX

The existing strategic plan for the community of San Angelo documents a community with definite goals for sustainability and growth. This plan documents a rural area that migrates into San Angelo for services.

Population Projections for San Angelo, Texas

The population trends for San Angelo, Texas have represented a sustained population with little to no visible demographic growth. As illustrated below the population projections are projected to show three scenarios that are possible for the
city. Scenario ‘00-‘02 depicts the population projection as remaining relatively the same with the possibility of limited outward migration over the next 40 years. Scenario 1.0 matches the projected growth estimations for the rest of Texas if San Angelo were to keep up with current trends resulting in a population exceeding 123,000 individuals by 2040 and to match the expected state growth levels by 2040.

In Figure 2, scenario 0.0 can be seen to extrapolate the trajectory of population growth from 1990 to 2000, if sustained. This scenario can also be viewed as the more conservative projection of sustainable growth. Due to the rural isolative nature of the community of San Angelo, growth can be greatly influenced by economics, policy, and the accessibility of services. Similar to existence assumptions that rural migration toward urbanized areas is due to the ongoing search and access to services, then San Angelo stands to possibly loose individuals to larger cities if identifiable services are not located and provided within a reasonable distance.
Demographical Makeup of Lewisville, Texas

Households and Families

From 2005-2007, there were 32,000 households in Lewisville, Texas. The average household size was 2.6 people. Families made up 61% of the households in Lewisville. This value includes both married-couple families (44%) and other families (17%). Nonfamily households made up 39% of all households in Lewisville. Most of the nonfamily households were people living alone, but some were composed of people who were not related and living together.
Education

From 2005-2007, 86% of people 25 years and over had at least graduated from high school, and 32% had a bachelor's degree or higher. Fourteen percent were dropouts; they were not enrolled in school and had not graduated from high school. The total school enrollment inside Lewisville city limits was 23,000. Nursery school and kindergarten enrollment was 3,600, and elementary to high school enrollment was 13,000 children. College or graduate school enrollment was 6,700.

Industries

From 2005-2007, for the employed population 16 years and older, the leading industries in Lewisville were educational services, health care, and social assistance at 16%, and retail trade also at 16%.

Occupations and Type of Employer

Among the most common occupations were management, professional, and related occupations at 35%; sales and office occupations at 31%; service occupations at 19%; production, transportation, and material moving occupations at 8%; and construction, extraction, maintenance and repair occupations at 7%. Eighty-five percent of the people employed were private wage and salary workers; 10% were federal, state, or local government workers; and 5% were self-employed in their own, not incorporated, businesses.

Housing Characteristics

From 2005-2007, Lewisville city had a total of 35,000 housing units, 8% of which were vacant. Of the total housing units, 49% were in single-unit structures, 46% were in
multi-unit structures, and 5% were mobile homes. Fifty-three percent of the housing units were built since 1990.

*Occupied Housing Unit Characteristics*

From 2005-2007, Lewisville city had 32,000 occupied housing units with 16,000 (49%) owner occupied and 16,000 (51%) renter occupied. Nine percent of the households did not have telephone service, and 3% of the households did not have access to a car, truck, or van for private use. Multiple vehicle households were not rare. Forty-one percent had two vehicles, and another 14% had three or more.

*Ethnic Composition*

The ethnic compositions for Denton County were representative of the city of Lewisville. Approximately 12% were Hispanic, and 6% were Black. In comparison with the city of San Angelo, Texas, the percentages have tended to increase for Hispanics as reported previously. Table 1 provides this information for Lewisville, Texas.
Table 1

*Population Growth by Race/Ethnicity for Lewisville, Texas, 2000-2040*

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>2000 Census Population</th>
<th>Percent of Total Population</th>
<th>2040 Projection Population</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>73,022</td>
<td>77.2%</td>
<td>164,670</td>
<td>61%</td>
</tr>
<tr>
<td>Blacks</td>
<td>7,296</td>
<td>7.4%</td>
<td>18,896</td>
<td>7%</td>
</tr>
<tr>
<td>Hispanics</td>
<td>17,548</td>
<td>17.8% 67,488</td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>6,309</td>
<td>6.4%</td>
<td>18,896</td>
<td>7%</td>
</tr>
<tr>
<td>Total</td>
<td>98,589</td>
<td>100.0%</td>
<td>269,952</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Note.* Data retrieved from the U.S. Census Bureau (2008).

Existing Community Plan for Lewisville, Texas

The strategic plan for the city of Lewisville, Texas resembles more city planning code and policy decisions for the maintenance and operation of the community. This could be an identifiable factor of a city that has grown to a level were outward expansion is no longer viable. Lewisville’s existing plans address the needs of a community trying to address the needs of its people while infilling and utilizing remaining available space. Lewisville’s’ strategic plan is to manage its existing infrastructure and produce policies and procedures for an environment expecting to become more demographically dense.

Population Projections for Lewisville, Texas

In comparison to the city of San Angelo, Texas, the city of Lewisville, Texas, since 1985, has had a period of sustained growth averaging 1.168% growth every 5 years. The area is growing into a major metropolitan environment with all the
foreseeable growing pains associated with that type of sustained growth. The population projections found in table 2 include estimates of population changes until the year 2040 and are based on this existing level of population expansion. If expansion and infill of residences remains unchecked, the population is projected to increase almost two and a half times its current size. With the demography being surrounded by other cities, the density of this urbanized area will increase.

Table 2

*Population Change and Projections of Lewisville, Texas, 1985-2040*

<table>
<thead>
<tr>
<th>Date</th>
<th>Total Population</th>
<th>% change</th>
<th>Total Population Change</th>
<th>Cumulative Change</th>
<th>Cumulative % increase 1985 base year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>48,786</td>
<td>1.168</td>
<td>0</td>
<td>0 0 0</td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>56,983</td>
<td>1.168</td>
<td>8,196</td>
<td>8,196 1.168</td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>66,556</td>
<td>1.168</td>
<td>9,573</td>
<td>17,769 2.336</td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>77,737</td>
<td>0.000</td>
<td>11,181</td>
<td>20,754 2.336</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>90,826</td>
<td>1.168</td>
<td>13,089</td>
<td>24,270 3.504</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>106,119</td>
<td>1.168</td>
<td>15,293</td>
<td>28,382 4.673</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>123,987</td>
<td>1.168</td>
<td>17,868</td>
<td>33,161 5.841</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>144,863</td>
<td>1.168</td>
<td>20,876</td>
<td>38,744 7.010</td>
<td></td>
</tr>
<tr>
<td>2025</td>
<td>169,254</td>
<td>1.168</td>
<td>24,391</td>
<td>45,268 8.178</td>
<td></td>
</tr>
<tr>
<td>2030</td>
<td>197,753</td>
<td>1.168</td>
<td>28,498</td>
<td>52,890 9.346</td>
<td></td>
</tr>
<tr>
<td>2035</td>
<td>231,049</td>
<td>1.168</td>
<td>33,297</td>
<td>61,795 10.515</td>
<td></td>
</tr>
<tr>
<td>2040</td>
<td>269,952</td>
<td>1.168</td>
<td>38,903</td>
<td>72,200 11.683</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Decade years represent April 1, Census data, not the mid-year estimates (U.S. Census Bureau, 2000).
Aging Cohort Comparison

The aging cohort comparisons above show two communities of comparable age distributions. The viability of comparing the cities of Lewisville and San Angelo for the purposes of this study is demographically supported. According to the U.S. Census Bureau (2008), the median age for Lewisville is 31.7 years old, whereas for San Angelo a median age is 32.7 years old. The other notable difference is that San Angelo reports higher numbers for its female population versus male population, especially in individuals age 65 and older. These comparisons are detailed in table 3.

Table 3

Aging Cohort Comparison

<table>
<thead>
<tr>
<th>Population Characteristics</th>
<th>Lewisville, TX</th>
<th>San Angelo, TX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>84,626</td>
<td>89,926</td>
</tr>
<tr>
<td>Male</td>
<td>42,234</td>
<td>42,829</td>
</tr>
<tr>
<td>Female</td>
<td>42,392</td>
<td>47,097</td>
</tr>
<tr>
<td>Median age in years</td>
<td>31.7</td>
<td>32.7</td>
</tr>
<tr>
<td>18 years and over</td>
<td>63,536</td>
<td>67,059</td>
</tr>
<tr>
<td>Male</td>
<td>31,718</td>
<td>31,425</td>
</tr>
<tr>
<td>Female</td>
<td>31,818</td>
<td>35,634</td>
</tr>
<tr>
<td>65 years and over</td>
<td>4,545</td>
<td>12,252</td>
</tr>
<tr>
<td>Male</td>
<td>1,956</td>
<td>4,880</td>
</tr>
<tr>
<td>Female</td>
<td>2,589</td>
<td>7,372</td>
</tr>
<tr>
<td>Total housing units</td>
<td>34,966</td>
<td>38,818</td>
</tr>
</tbody>
</table>

Note. Data retrieved from the U.S. Census Bureau (2008).
Housing Comparisons

Housing comparisons regarding the number of home owners of median house prices are similar in structure for the communities and regions being studied as seen below in figure 3. Further housing data are detailed in table 4.

Figure 3. Percentage of households who can afford to buy a home in Denton County and San Angelo regions of Texas.

Source: Texas Real Estate Center
Table 4

*Housing Data for 2000 for Selected Cities in Texas, Colorado, and Oklahoma*

<table>
<thead>
<tr>
<th>Location</th>
<th>Home-ownership Rate</th>
<th>Median Value of Owner-Occupied Housing Units</th>
<th>Median Home Value as % of U.S.</th>
<th>Median Household Income in 1999</th>
<th>Ratio of Median Home Value to Median HH Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denton County, TX</td>
<td>64.4%</td>
<td>$133,200</td>
<td>111%</td>
<td>$58,216</td>
<td>2.3</td>
</tr>
<tr>
<td>Boulder, CO</td>
<td>49.4% $304,7 00</td>
<td>255%</td>
<td>$44,748</td>
<td>6.8</td>
<td></td>
</tr>
<tr>
<td>Norman, OK</td>
<td>55.3%</td>
<td>$95,400</td>
<td>80%</td>
<td>$36,713</td>
<td>2.6</td>
</tr>
<tr>
<td>Lewisville, TX</td>
<td>53.9% $116,7 00</td>
<td>97%</td>
<td>$54,771</td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Marcos, TX</td>
<td>30.1%</td>
<td>$83,400</td>
<td>70%</td>
<td>$25,809</td>
<td>3.2</td>
</tr>
<tr>
<td>Tyler, TX</td>
<td>56.0%</td>
<td>$81,200</td>
<td>68%</td>
<td>$34,163</td>
<td>2.4</td>
</tr>
<tr>
<td>Bryan-College Station, TX</td>
<td>45.6% $96,000</td>
<td>80%</td>
<td>$29,104</td>
<td>3.3</td>
<td></td>
</tr>
<tr>
<td>San Angelo, TX</td>
<td>60.8%</td>
<td>$62,200</td>
<td>52%</td>
<td>$32,232</td>
<td></td>
</tr>
<tr>
<td>Texas 63.8%</td>
<td></td>
<td>$82,500</td>
<td>69%</td>
<td>$39,927</td>
<td>2.1</td>
</tr>
<tr>
<td>U.S. 66.2%</td>
<td></td>
<td>$119,600</td>
<td>100%</td>
<td>$41,994</td>
<td>2.8</td>
</tr>
</tbody>
</table>

*Note.* Data retrieved from the U.S. Census Bureau (2008).

Map-point Distribution of Service Providers in San Angelo, TX

The distribution of services in San Angelo, Texas has developed around the old part of town historically viewed as the shopping and business areas of town. A train rail segregates the town running from the North to the South. The residences on the East side of the rail are predominantly of Hispanic culture, which is evident in the rural slang residents use to refer this part of town as the Barrio.

On the West side of the rail toward the city infrastructure of lakes and recreation, the socioeconomic demography changes to retirement-type living with new housing construction taking place. The evident infrastructure favors the West side of town and
many areas on the East are exhibiting signs of wear and tear. In the historical
development of business along U.S. Interstate highways of which San Angelo is lacking,
the primary new business development is along the Loop 306 bypass that encircles the
city.

Map-point Distribution of Service Providers in Lewisville, Texas

The development of aging services providers in Lewisville, Texas has followed
along the U.S. Interstate 35 (I-35) corridor. The transportation benefits of the Interstate
highway system for importing and exporting goods and services in this community is
evident. The Eastside of I-35 borders the city of Lake Dallas which is known for its
recreational activities. Civic offices are in place on the east side of the highway.
Additionally, Lewisville Lake is a boundary point of common debate as to demographical
differences in Denton County. The comparisons form in the definition of living North or
South of the lake.

The Westside of the I-35 freeway corridor travels adjacent to the larger portion of
the city. Businesses often develop off the Interstate system by the arterial route of on-
ramps and off-ramps for access to the community. As the city of Lewisville is
surrounded by other metropolitan areas, land is at a premium. Projects often have to
look for infill areas of available land. These properties may have existing zoning codes
or restrictions that may prohibit the type of business that may be developed.

Community Analysis for Aging Infrastructure in San Angelo, Texas

San Angelo is an aging community and segregated from other surrounding
communities of comparative size. Figure 4 depicts the graphed aging infrastructure
available in this community. Though evenly distributed between home health and
nursing homes, there is a 2 to 1 disparity between assisted living and rehabilitative services. As with comparison of Lewisville, Texas, there is one service provider of senior services located within the city boundaries on the North side of town. As can be visualized in the community maps, the tendency is for institutionalized care in San Angelo, if considering assisted living facilities and nursing homes combined.

![San Angelo, Texas Aging Services Distribution](image)

**Figure 4.** Community analysis for aging infrastructure of San Angelo, Texas.

**Community Analysis for Aging Infrastructure in Lewisville, Texas**

Lewisville, Texas is a centrally located community found North of the city of Dallas and identified to be a metropolitan-type area visually skewed toward home health services. Rehabilitative services and home health agencies represent aging in place service providers at a total of 14 agencies (see figure 5), whereas the institutional providers total 8 for nursing homes and assisted living facilities.
Combined Analysis and Comparison of Aging infrastructure

In support of the hypothesis, a higher level of aging infrastructure is found in San Angelo, Texas, when compared to Lewisville, Texas. Interesting to note the distribution of services in Lewisville is skewed to the home health services industry. The services of San Angelo, Texas are more representative of an equal distribution with a small lean toward nursing homes. Table 5 provides the comparison details.

*Figure 5. Community analysis for aging infrastructure of Lewisville, Texas.*
### Table 5

**Side by Side Comparison of Service Providers for Lewisville and San Angelo**

<table>
<thead>
<tr>
<th>Aging Services Distribution</th>
<th>Lewisville, Texas</th>
<th>San Angelo, Texas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing Homes</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>Assisted Living</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Hospice 1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Senior Services</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Adult Day Care</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Rehabilitative Services</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Home Health</td>
<td>8</td>
<td>19</td>
</tr>
</tbody>
</table>

The distribution of service providers becomes visibly apparent, as seen below, in figure 6. The value of being able to compare the two communities is seen in the visual portrait of these communities of comparable size having increased levels of aging services providers.

![Aging Services Distribution Chart](image)

*Figure 6. Community analysis for comparing aging infrastructures of Lewisville and San Angelo.*
Figures 7 through 12 show the aging services in place in Lewisville, Texas.

Figure 7. Map of nursing homes serving Lewisville, Texas.
Figure 8. Map of assisted living facilities serving Lewisville, Texas.
Figure 9. Map of home health agencies servicing Lewisville, Texas.
Figure 10. Map of rehabilitative services in Lewisville, Texas.
Figure 11. Map of rehabilitative services in Lewsville, Texas.
Figure 12. Map of senior services in Lewsville, Texas.
Figures 13 through 19 show the aging services in place in San Angelo, Texas.

Figure 13. Map of hospice provides in San Angelo, Texas.
Figure 14. Map of home health providers serving San Angelo, Texas.
Figure 15. Map of rehabilitative services in San Angelo, Texas.
Figure 16. Map of adult day care providers in San Angelo, Texas.
Figure 17. Map of assisted living facilities serving San Angelo, Texas.
Figure 18. Map of nursing homes in San Angelo, Texas.
Figure 19. Map of senior services provides in San Angelo, Texas.
CHAPTER 4
CONCLUSIONS AND RECOMMENDATIONS

The ability to compare and contrast the number and distribution of aging services within a community and/or between communities is advantageous in public planning. The hypothesis that the proposed evaluative measure will answer the question that a rural-surrounded community, in the case of San Angelo, Texas, due to its isolation, has developed a higher percentage of service providing infrastructure to support aging individuals is confirmed and supported.

The evaluative procedure shows to be useful in its ability to reduce wasted time and resources in identifying services that are overdeveloped for certain areas while identifying those demographic areas that need to have an increase in infrastructure in order to establish or transform an existing community into a senior-ready community.

To this date, many forms of community evaluations use Likert-type surveys and graphs predicting respondents’ relationships and ideals to a given question. By evaluating what services are in place and both mapping and graphing the service distribution, a much clearer picture is presented from a purely demographic viewpoint.

The limitations of this study are based on the availability of printed and advertised materials. In some limited cases, a facility may choose not to publish its presence in the phonebook or on the Internet and choose to rely on word of mouth only. Phonebooks also change information on a regular basis, and services providers may move or stop doing business in a given area. Updated information is needed to keep accuracy at its highest levels. Additional population projections are dynamic by nature and can change due to intrinsic and extrinsic forces.
As stated earlier, this research was focused on the cities’ demographic level rather than the county level to identify service providing territories. Future research may want to look at demography at the county level or more ideally the service areas of the Area Agency on Aging level. Additionally, future research projects can incorporate and cover more demographics for cities of similar size to identify aging infrastructure for comparison with the initial Texas cities of Lewisville and San Angelo.

The implication of designing a senior-ready community by incorporating the methodological process of identifying infrastructure begins a valuable process which should lead to adjusted public planning. Such planning can be utilized in order to realize a continuing elder-friendly and senior-ready community. To define a community that is elder friendly and senior ready, the parts of the identifying label need to be understood. A senior-ready community, for the purposes of this research, is defined as the business and service industries incorporated and located within a given community for the express purpose of providing services to seniors.

Seniors are defined for the purposes of this research as those individuals who have obtained or surpassed the chronological age of 65. The choice of using this delimitating age is the public acceptance of this criterion, due to the ability to qualify for aging benefits and services through Federal programs which are set at 65. There is the growing thought process that individuals are living longer and therefore may over burden current program benefits. National discussion is occurring to identify the prudent measures that need to be taken in order to shore up the valuable programs of Social Security, Medicare, and Medicaid, to name a few. In a case example, younger
generations are already realizing a policy change in Social Security that has made the effective retirement age to be 67 years old or later.

Though policy has a big effect on aging services, the identification of what is available was of primary concern in this research. How often does one move to a new community as a theoretical practice and wonder what is available to their individual needs and interests. Further speculating on how does an individual decide to move to one community over another? In order to answer this question, Savageau (2007) speculated and developed a series of questionnaires to identify a place to live which was published into a self help book called *Places Rated Almanac*. The premise of this survey measure was to identify variables relevant to choosing a place to live or retire. In the case of Savageau’s *Places Rated Almanac*, the variables of employment, entertainment, weather, crime, education, and health care, to name a few, were utilized for developing a graphable score to compare communities based on the level and individual places importance on a given topic.

The method of graphing a community based on identifiable variables in a given community for comparison to other communities laid the groundwork for using the same procedures to identify aging service providers in that community. One may ask, why is being able to compare communities important? The theoretical choice of a given community is weighted by the available information that addresses the specific sets of requirements or circumstances individuals find themselves dealing with.

In the case of aging in place, some issues may come to mind, such as the availability of home health providers. A home health or home help provider is defined as an individual or company dedicated to the provision of services promoting the ideas of
ADL. The ADL represent those activities necessarily performed on a daily basis to sustain life. Therefore, concepts like bathing, dressing, feeding, grooming, and movement are considered to be the basic level of activities one attends to every day. Instrumental ADL include some higher functioning activities like shopping, organizing plans, travel, and financial management, all of which are activities instrumental in daily living.

On the other end of the scale is the need for facilities that cater to higher levels of ADL needs. These facilities for aging individuals are assisted living, nursing homes, and hospice. Assisted living facilities often resemble condominiums and apartment style of living. The staff is available to assist residents with dressing, bathing, and meal preparation. There is the assumption that the client is still able to do a variety of daily activities themselves and only require occasional assistance.

Nursing homes represent an institutionalized setting. Regulated schedules and factory, like efficiency, are utilized to care for the greatest number of individuals. As hospice is limited to those individuals with less than 6 months of expected life, the palliative care often scores on a level of high need to compensate for ADL need. For the purposes of this research, it has thus been characterized as belonging with levels of institutionalized care providers.

The ability to then graph and visualize aging services providers, in the manner proposed and illustrated by this research, makes visually recognizable the differences between communities when they are compared. In the instance of evaluating a single community, the idea forms that due to natural economic forces of supply and demand, a certain type of service provision has developed. In some cases, a community may be
heavily weighted towards an institutionalized model of care. Other communities may value in-home services in order to better facilitate the ability to age in place.

The identification of aging infrastructure, for the purposes of defining a senior-ready community, is laid in the level of care required to accomplish ADL. Providers such as home health, rehabilitative, and senior services are defined as those service providers primarily involved with addressing ADL in the home environment. The provision of care in the home environment can be considered the ability to age in place.

The ability to age in place may be assessed by the utilization of risk management techniques. Defining risks may be from environmental to innate situations that can be evaluated causal or relational. Take for instance a home environment that has been the abode of an aging individual for many years. Construction techniques have varied over the years and the aspects of the house that once appealed to the individual can start to be more hazardous with greater risks in later life. An example would be the number and elevation of stairs to enter the dwelling. The stairs are an environmental obstacle that one must traverse in order to enter the home. This may become difficult, especially in the presence of a limiting ability, such as a lack of physical strength or a functional disability.

The environmental evaluative techniques can be utilized for the purpose of community identification, as an elder friendly place to live. Evaluative measures such as business placement in relation to parking or transportation can represent environmental impacts on the decision to frequent various establishments. Times and availability of public transportation may affect the decision process with respect to the length, duration, and amount of resources needed for successful completion of instrumental
activities necessary to daily living, such as grocery shopping and banking. How far and how accessible shopping districts are from neighborhoods composed of aging individuals could have the effect of limiting the number of trips and duration of those trips outside the home. The net effect is to have a community that is either elder friendly, and encourages public interaction by design, or a community designed in a way that limits the choice of those residents who have difficulties in being able to traverse the community landscape.

Public Planning

Once a community has been evaluated for aging infrastructure, the evolution of process leads to the decision to implement, or address, the discrepancies between the existing services and services that are, or will be, needed to meet the demands of an aging population. The identification of institutionalized versus home providers of service may help to further define a community’s role toward the aging population.

If the desire of civic leaders and public planners is to develop a community as a retirement destination, it would then be acknowledged that the community would also desire to provide more services that would keep individuals living at home. This presumption follows the thought process that individuals would not choose to retire in a nursing home, until physical needs demanded it. Therefore, the identification of existing infrastructure may be a catalyzing force for future changes and expansion that would better serve those needs. Likewise, if a community has existing institutionalized providers struggling to maintain service levels, it would be unwise to solicit more institutionalized services.
The utilization of identified service providers for the aging population can be a valuable planning instrument for future issues related to the business of aging in place. By having a clearer picture of the state of aging services, individuals will be able to make an informed decision on whether a community is sufficiently developed in aging service providers to meet their current and future needs for care.

In the case of a city like Lewisville, Texas, that is centrally surrounded, the temptation to rely on the surrounding communities can overburden the service providers in those bordering communities. Providers historically try to overstretch their resources in order to take care of the influx of additional clients. This practice can create a dilemma when one community is planning for aging in place while another is not. The transference of need, without supporting financial resources, could tax and overburden the community providing the aging services.

**Continuing Elder Friendly and Senior Ready Communities**

Once a level of service providers has been identified and established, it then becomes necessary to address the sustainability of the process. The question postulated is: what can a community do to effect change in the establishment of service providers that meets the criteria of being an elder friendly and senior ready community?

Some recommendations can include tax incentives for the purposes of attracting new businesses to the area in order to increase serviceability. Grants of fiscal capital and surplus property may create incentive for new aging services providers to locate in a given community. Zoning regulations can be utilized to strategically locate services based on the demographic needs of aging individuals. By mapping the locations of physical service providers, a clearer picture develops not only to the distribution of
services but also to the theoretical possibilities that cause certain services to coalesce, in a given area of the community. In this research, Lewisville, Texas service providers were predominantly found along the I-35 corridor, whereas the San Angelo, Texas community does not possess any Interstate highway and service providers are centrally located around the old downtown shopping district.

Additional research is needed in urbanized areas and their surrounding communities to identify the possibilities that migrant behavior may be taking place in the search for services. By mapping and utilizing the tools for identifying a senior-ready community, planners can become informed of existing infrastructures before making intuitive leaps in committing limited resources into future development and expansion.
References


