

ASSESSING HOUSING MARKETS FOR SENIORS

JENNIFER S. COWLEY
assistant research scientist

JOHN R. WITHERSPOON
graduate research assistant



TECHNICAL REPORT
1418
AUGUST 2000

TR

Assessing Housing Markets for Seniors

Jennifer S. Cowley

Assistant Research Scientist

John R. Witherspoon

Graduate Research Assistant



August 2000

© 2000, Real Estate Center. All rights reserved.



Assessing Housing Markets for Seniors

Contents

- 1** What Developers Need to Know About Seniors
Seniors Demographic Characteristics
- 3** Current Seniors Housing Patterns
Socioeconomic Characteristics of Seniors
- 4** Real Estate Market Research
Defining the Market Area
Analyzing Seniors Housing Supply by Product Type
- 5** Analyzing Demand
Data Sources for Analyzing Seniors Housing Markets
Primary Data for Marketing Analysis
- 6** Secondary Sources of Marketing Information
U.S. Bureau of Census Data
Other Sources of Secondary Data
- 8** References

Assessing Housing Markets for Seniors

Jennifer S. Cowley
Assistant Research Scientist

John R. Witherspoon
Graduate Research Assistant

Across the nation, construction of new housing designed for seniors is underway. According to the American Seniors Housing Association, 591 projects totalling more than 65,000 seniors housing units were under construction in 1999, up 30 percent from 1998. Assisted-living housing units accounted for the largest portion of new units, with 68 percent. The fastest-growing segment of the industry is continuing-care retirement communities, which were up 44 percent in 1999. California is the top producer of new seniors housing, followed by Florida, Texas, North Carolina and New York. The top three states accounted for 28 percent of all 1999 construction. This construction comes at a time when the senior population is not growing substantially.

This report explains what developers need to know to accurately assess the need for seniors housing in a particular market area and suggests sources of information needed to determine market demand.

What Developers Need To Know About Seniors

A survey by the Del Webb Corporation found that baby boomers are redefining retirement and have different preferences in housing for their retirement years. The study, which included 800 people at all income levels, found that:

- Baby boomers rank great rooms as the number one home design priority.
- Gourmet kitchens are in high demand.
- Private pools are twice as important to boomers as to previous retirees.
- The majority of retirees will continue to work part time, making home offices essential.
- Approximately 60 percent of respondents would like a home exercise room.
- Upgraded wiring packages allowing for computer, security and entertainment systems are increasingly popular.
- Energy efficient homes are preferred.
- "Senior friendly" features, such as brighter lighting, lighted wall switches, lever faucets and door knobs, widened doorways, lowered toilets and bathtubs are being included in preferences.
- Enhanced security devices such as automatic 911 and fire call buttons and outdoor flashing emergency lights are increasingly popular.
- About half of baby boomers want to retire in a house the same size as their current home.
- Flexible spaces that allow for home offices, recreation rooms, guest quarters and play areas are preferred.
- Separate "guest houses" are increasing in popularity as home offices, guest or exercise rooms.

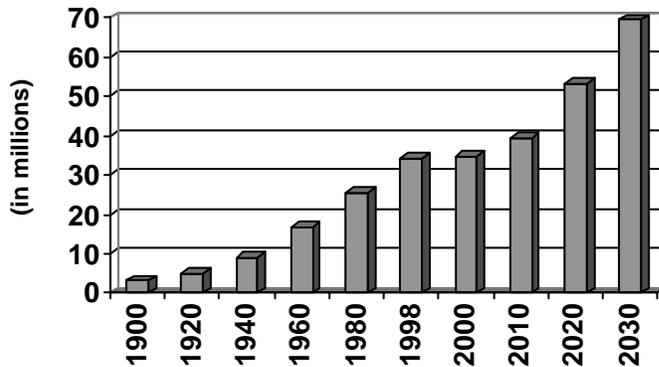
Seniors Demographic Characteristics

The first decade of the new millennium will not see rapid growth in the seniors housing market. The seniors population is large and growing, but the majority of the growth will be seen primarily after 2010. In 1998, 1.9 million people turned 65 – 5,190 per day according to the U.S. Census Bureau. The U.S. senior population represented 12.7 percent of the nation's total population in 1999, compared to 12.5 percent in 1990.

By 2010, seniors will increase to about 14 percent of the population. But the most substantial growth in the senior population is projected to occur between 2010 and 2025, when members of the baby-boom generation (persons born between 1946 and 1964) begin to reach their senior years.

From 2010 to 2025, the U.S. senior population is projected to increase 51.5 percent, from 39.4 to 59.7 million. This increase will exceed growth for the population as a whole, which will increase by 15.7 million. The senior population will continue to increase until the year 2040, when it will reach about 68.1 million or 22.6 percent of the total U.S. population. These numbers will begin to decline as the baby-bust generation (those born

Number of Persons Age 65 and Older



Source: U.S. Census Bureau

after 1964) begins to dominate the seniors population.

Texas' population is somewhat younger than that of the nation as a whole (the 1998 median age for Texas was 33, compared with 36.2 for the United States), but the U.S. Census Bureau predicts similar growth patterns. In 1990, 1.9 million seniors were living in Texas. By 1998, that number had grown to 2.2 million, or 11.3 percent of the total population. The state's senior population is expected to increase to 3.1 million by 2010 (13 percent of the total) and to nearly six million by 2025 (20 percent of the total).¹ Texas' seniors population is projected to increase by more than 40 percent from 1998 to 2010 and by nearly 94 percent from 2010 to 2025. Clearly, in both Texas and the nation, senior population growth will increase dramatically after 2010, fueling an increased demand for senior housing products.

Both the Texas and U.S. seniors populations have a number of other demographic, health, and socioeconomic characteristics that must be considered in marketing analyses. It is estimated that the fastest growth among all senior components of the population will be among those ages 75 years and older. From 2010 to 2025, the number of persons age 75 and older is projected to increase by 36 percent in the nation (compared to 51.5 percent for the total seniors population) and by 86.5 percent in Texas (compared to 94 percent of the total). Those age 75 and older are expected to account for 47 percent of the nation's seniors population in 2000 and 2010 and 42 percent by 2025.

Comparable values for Texas are 48 percent by 2000, 50 percent in 2010 and 49 percent in 2025.

These age distinctions are important because disabilities restrict independent living, especially after age 75. Annual death rates increase from 29 per 1,000 persons for ages 65 through 74 to 150 per 1,000 for persons age 85 and older. Similarly, the proportion of seniors in nursing homes is 12.5 per 1,000 for persons 65–74 and 220.3 per 1,000 for those 85 and older.²

For those ages 65–74, only about 15 percent have one or more limitations in activities required for daily living. By age 85, roughly half of all seniors have at least one such limitation, and nearly 20 percent have four or more limitations. As a result, the age group from 65 to 74 years is the primary market segment for housing requiring independent living.

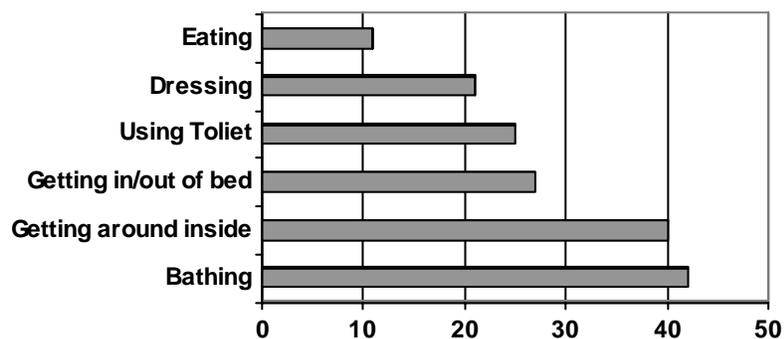
Seniors also display distinct survival patterns by sex. Women typically live longer than men. Among people 75 or older, women account for nearly 66 percent of the population. Because of such demographic characteristics, seniors tend to have relatively distinct marital and household characteristics.

For example, roughly 80 percent of men ages 65 to 74 and 66 percent of men age 75 and older in the United States were married and living with their wives. However, because women tend to outlive their husbands and live longer than men generally, only 50 percent of the women ages 65 to 74 and less than 25 percent of women ages 75 years and older were married and living with their husbands.

Between the ages of 65 and 74, one in 11 men, and two of every five women, were widowed. Among those age 75 years and older, about one quarter of the surviving men but more than two thirds of the women were widowed. Because of differences in mortality, women who are now in their thirties and forties can expect, on the average, to become widowed around age 68 and live 15 years as a widow.

Both senior men and women are increasingly likely to live alone. But because of differences in longevity, senior men are most likely to be living with either a spouse or other relatives while senior women often outlive spouses and live alone. As a result, only about one in seven senior men live alone while about two in five senior women live alone. Fifty percent of women 75 or older live alone.

Average Percent Needing Help With Activities of Daily Living



Source: K.G. Manton, E. Stallard, L.S. Corder. (1998) "The Dynamics of Dimensions of Age-Related Disability 1982 to 1994 in the U.S. Elderly Population." *Journal of Gerontology: BIOLOGICAL SCIENCES*, Vol. 53A, No. 1, B59-B70

Marital and living arrangements for Texas seniors are similar to those nationwide. Fifty percent of all Texas seniors in 1998 were living in married-couple households, including 75 percent of all senior men and 43 percent of senior women, according to the U.S. Administration on Aging. Roughly 31 percent of seniors, including 20 percent of the men and 42 percent of the women, lived alone.

In the nation as a whole, whites are much more numerous among the seniors population than are minorities, which accounted for only 15.7 percent of the seniors population in 1998. It is projected that by 2025 roughly 20 percent of the Texas population will be seniors, including 26 percent of the Anglo population, 15 percent of blacks and 14 percent of Hispanics.

All of these factors suggest that marketers of seniors housing services should consider their likeliest targets to be those in the youngest seniors age groups with necessary income levels. These factors also suggest that such services may need to develop products intended to meet the needs of senior women living alone.

Current Seniors Housing Patterns

Current seniors housing patterns may offer additional insight into future seniors housing preferences. Of the 20.9 million households headed by seniors in 1997, 79 percent were owners, and 21 percent were renters. The median family income of older homeowners was \$20,280, and the median family income of senior renters was \$10,867.

About 50 percent of homes owned by seniors in 1997 were built before 1960 compared with 33 percent of homes owned by people younger than 65. Six percent of senior homeowners had physical problems, which explains the trend of moving out of a home at retirement and into a retirement community, where many rent.

In 1997, 37 percent of older homeowners spent more than one-fourth of their income on housing costs, compared with 30 percent of homeowners age 65 and younger. The median value of homes owned by seniors was \$89,294, compared with a median home value of \$98,815 for all homeowners. About 77 percent of

older homeowners in 1997 owned their homes free and clear of debt.

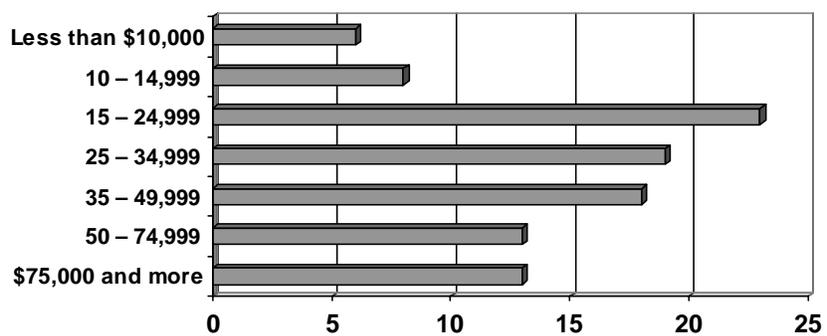
Socioeconomic Characteristics of Seniors

Households headed by persons age 65 and older reported a median 1998 income of \$31,568 (\$32,398 for whites, \$22,102 for African-Americans and \$21,935 for Hispanics). Approximately one of every seven (13.7 percent) households with a senior head had incomes less than \$15,000; 44.6 percent had incomes of \$35,000 or more.

any devaluation of real estate dramatically impacts the worth of the senior population and implies severe illiquidity to their wealth.

The spending patterns of seniors are similar to those of other age groups, with the exception of medical care and transportation. Seniors, like other households, spend about 20 to 23 percent of their incomes for shelter and furnishings, 10 to 12 percent for utilities and 15 to 17 percent for food. In 1997, seniors spent 12 percent of their total expenditures on health care, three times the proportion spent by

Percent Distribution of Seniors Income, 1998



Source: U.S. Administration on Aging

For all seniors reporting income in 1998, 31.7 million (36 percent) reported less than \$10,000; only 22 percent reported \$25,000 or more. The median income for persons 65 and older was \$13,768. According to the Social Security Administration, major sources of income for seniors in 1996 were Social Security (reported by 91 percent of older persons), income from assets (63 percent), public and private pensions (43 percent), earnings (21 percent) and public assistance (6 percent).

In 1996, Social Security benefits accounted for 40 percent of the aggregate income of seniors. The bulk of the remainder consisted of earnings (20 percent), pensions (18 percent) and assets (18 percent). The median net worth (assets minus liabilities) of older households was \$86,300 (\$77,700 for those age 75 and older), more than the 1993 U.S. average of \$37,600. Net worth was less than \$10,000 for 16 percent of older households but was more than \$250,000 for 17 percent.

For all types of senior households, a large proportion of net worth is in the value of their homes. This implies that

younger consumers. Seniors spend 13 percent on transportation, compared to 19 percent for non-seniors.

About 3.4 million seniors were below the poverty level in 1998.³ The poverty rate for persons age 65 and older was 10.5 percent, the same as in 1997, and the same as the rate for persons ages 18 to 64. Another 2.1 million seniors, 6.3 percent, were classified as "near-poor," which is defined as between the poverty level and 125 percent of the poverty level. One of every six seniors (17 percent), was poor or near-poor in 1998.

One of every eleven (8.9 percent) senior whites was poor in 1998, compared to 26.4 percent of senior African-Americans and 21 percent of senior Hispanics. Higher than average poverty rates for seniors correlated with living in central cities (13.8 percent), rural areas (12.5 percent) and in the South (12 percent). Older women had a higher poverty rate at 12.8 percent than older men at 7.2 percent in 1998. Older persons living alone or with non-relatives were much more likely to be poor (20.4 percent) than were persons living with families

(6.4 percent). The highest poverty rates were experienced by older African-American women who lived alone (49.3 percent). The lower level of resources among Texas seniors is a result, in part, of the large minority population in the state and the particularly disadvantaged circumstances of minority seniors.

When financial and other resources of seniors are examined, it is evident that many have limited resources and the assets of others are tied up in homes that may be difficult to sell or that they may be reluctant to sell. These resources must be assessed carefully in any market analysis done for real estate projects intended for this group. Seniors demographic, housing and socioeconomic characteristics reveal a diverse population with distinct housing needs and preferences and widely disparate financial resources.

Depending on the location, and on the specific seniors population in that location, population growth alone may not necessarily justify a specific project. Diversity in other seniors characteristics may be sufficient to make even a well-designed project economically infeasible. Detailed market research is essential before initiating a project intended for the seniors market.

Real Estate Market Research

Real estate market research is the analysis of supply and demand for a particular type of property within a given market area. The research objective identifies a market segment with unmet demand within a specified market that can be supplied profitably. Seniors housing is typically categorized as one of the five following types:

Independent Living Facility

This is a multifamily apartment complex restricted to people age 55 and older. This type of complex provides unspecified facilities and services to the occupants in order to maintain an otherwise illegal age restriction but do not have a common dining facility.

Congregate Seniors Housing

A multifamily complex limited to seniors, there are kitchens in the units as well as a common dining facility. Limited services such as housekeep-

ing, transportation and recreation activities are usually provided. They are also known as adult congregate living facilities.

Assisted-Living Facility (ALF)

An ALF is a seniors living complex designed to accommodate the elderly in need of assistance, with staff and programs that help residents perform daily living activities. These activities include getting out of bed, bathing, dressing, mobility, feeding oneself and continence. They also assist in handling personal finances, preparing meals, shopping, housework, getting outside, using the telephone, and taking medication. ALF units may have a small refrigerator but usually no kitchen as there is a common dining facility.

Skilled Nursing Facility

Also known as nursing homes, these institutions provide licensed skilled nursing care and related services for patients who require nursing or rehabilitation services. The units may have a small refrigerator but usually no kitchen as there is a common dining facility.

Continuing Care Retirement Community

Also referred to as congregate care, this seniors living complex is designed to provide all of the previously mentioned services within a single community. These normally have a large variety of housing options.

Variations exist within each of these categories. Within a properly defined market area, the supply of, and effective demand for, a specific type of housing must be analyzed.

Defining the Market Area

As noted previously, the demographic characteristics of seniors suggest that they are unlikely to move from their present housing. Often, those who move wish to remain in a familiar community. Most older people want to stay put. They are reluctant to leave homes they have lived in for many years because they are comfortable in the neighborhood and secure in the knowledge that they are near familiar stores and close friends.⁴

After youth, the tendency to move drops steadily until old age, when

migration rates are quite low. Among seniors, however, mobility is greater in the younger segment (ages 65 to 74) than the older segment (ages 75 and older). Currently, only about 3.5 percent of the population 65 and older moves into a different house in the same county in a year, and only about 2 percent change their county of residence in a year. Of those who move, nearly half remain within the same metropolitan area.⁵

Because the desire to remain within a community is an important consideration to seniors, the geographic market area for any project is small. Generally, only areas within the immediate community or metropolitan area should be included as a part of a particular housing development's market area. To draw seniors from outside the local area, a development generally must possess great natural beauty or other special features. As a result, areas without significant current populations of seniors are poor choices for developing seniors housing unless available amenities have exceptional appeal.

The market area for a seniors housing development is similar to that of a retail market area. Retail centers depend on consumers who travel to the center to make purchases. Unless a particular center has unique attractions, consumers generally do not travel beyond their local market area to shop.

Analyzing Seniors Housing Supply by Product Type

An area market analysis should include an inventory of existing seniors housing with information about each housing development within the defined market area. The market orientation of the developments can be determined by finding out if they provide:

- independent living facilities,
- congregate care facilities,
- an assisted-living facility,
- a skilled nursing facility or
- continuing care retirement facilities.

Next, information that differentiates projects within each of the market orientations is required. For each development, what are the:

- product features,
- tenant amenities,
- health and exercise services,
- availability of medical services,

- group activities and
- management qualities?

Finally, information that provides market information about each development is needed. This information includes:

- date sales or leasing began (or will begin),
- amount of space leased,
- amount of vacant space available for lease,
- amount of space leased per month during the past 12 months and
- current sales prices or rental rates and terms.

Although such data provide information about supply, they also indicate demand. When data are collected in sufficient detail, it may be possible to identify particular product types with high occupancy rates, those that have experienced large amounts of absorbed space in the past year or both. Although more research is required, these product types may represent areas of potential opportunity for the developer.

Developers gathering information for market area analyses may be able to get some information from existing area entities and organizations. For example, the City of Amarillo provides a significant amount of pertinent information to assist potential developers. The city conducts a Survey of Housing⁶ each year. An assessment of seniors housing is included as part of this study. The planning department surveys every retirement center and convalescent home within the metropolitan area to determine occupancy rates and the number of persons living in these facilities. In addition, the city tracks the number of new units under construction.

City officials expect, as a rule, 10 percent of those age 65 and older in the metropolitan area to be target consumers for some type of retirement facility. Of this population, 40 percent will be the market for retirement centers. The city estimates there are approximately 2,171 residents who are potential consumers and, using the 40 percent guideline, the minimum number of people who would like to be served by a retirement facility would be 868. In 1999, the planning department found 1,193 people being served in this type of facility.

Eleven known retirement centers with a total of 1,140 units exist within the Amarillo area. The 1999 occupancy rate was 96 percent, up from 89 percent in 1998. The city attributes the increase in occupancy to the lack of new facilities opening and an increase in the seniors population. The city goes on to separate occupancy rates for federally subsidized units, which in 1999 had an occupancy rate of 98 percent. Two new assisted-living facilities which are expected to add 160 beds are under construction in the area. City officials expect that this will cause occupancy rates to fall over the next year.

The City of Amarillo also tracks convalescent (nursing) homes. Fifteen nursing facilities exist in the area, totalling 1,505 beds. The occupancy rate for 1999 was 83 percent, up 8 percent over 1998. A planned 20-bed expansion at an existing facility was reported to the city. The city maintains a map of all area retirement and convalescent centers.

Analyzing Demand

After conducting a supply inventory, a developer may conclude there is a lack of a particular type of seniors housing within the market area and begin construction. But it is particularly important to recall the conclusions reached in the demographic section of this report:

- Populations most likely to purchasing seniors housing services are those with growing seniors segments concentrated in the youngest senior age groups.
- Seniors housing services may need to develop products intended to meet the needs of senior women living alone.
- Although existing patterns are not necessarily indicative of future preferences, the housing patterns of seniors suggest they are likely to prefer housing options that allow independent living at moderate costs.
- Many seniors have limited resources and assets that are tied up in homes that may be difficult to sell or that they may be hesitant to sell.

These conclusions suggest a key question for the developer considering entering a market: "What is the

effective demand for a particular type of housing especially designed for seniors?" *Effective demand* is demand supported by purchasing power.⁷ Answering this question requires market research. Although a number of seniors might like to or need to move to specially designed housing, how many can afford it?

Seniors within a particular market area must be analyzed by age groups as well. For example, before building independent-living facilities, developers should focus on potential space users who are ages 65 to 74, the age group most likely to select such housing. To be successful, there must be a sufficient number of seniors in the proper age group, with income to afford the offered housing and with the desire to move to a particular type of seniors housing. The number of seniors meeting all the criteria may in fact indicate no unmet need for additional seniors housing.

Data Sources for Analyzing Seniors Housing Markets

A seniors housing development market analysis, like those for other types of developments, requires the use of both primary and secondary data on alternative market areas. Major primary and secondary data sources likely to be useful in examining markets for seniors housing developments follow.

Primary Data for Marketing Analysis

When a promising market area is identified, primary market data are collected for the purpose of estimating "... what proportion of the potential market would actually move into the housing..."⁸ Primary data obtained by personal interviews, telephone interviews, mail surveys and other means are used to make this estimate.

Although the design of questionnaires and personal interviews are best left to those familiar with market research, the developer should review the questions to ensure that they will produce the desired information. If the developer intends to develop a particular type of housing for seniors, market research must address a specific age group and household type – not the senior population in general.

By contrast, if the developer is willing to supply any identified, unmet need, the market research should be stratified by age group so that data about each age group are obtained and the potential of various housing types can be evaluated.

Needed information includes the income range of respondents, which is used to determine the price and quality of developments in a specific market area. Developers also need information about the kinds of features respondents are interested in, including level of service desired (meals, nursing care, social activities). Finally, after establishing the respondents' income level and ability to pay, the relationship between the desired features, their cost and the respondents' ability and willingness to pay for them must be tested in the questionnaire. This is accomplished through questions such as "Would you be willing to pay \$1,000 per month for housing with specific features?"

Questions also must establish the respondents' interest in leaving their present housing and must clearly distinguish levels of interest. For example, "no interest" must be distinguished from "interested" and "interested" from "very interested." Likewise, in married couple households, the views of both spouses are important. To avoid incorrectly identifying a household as an immediate prospect, questions should clearly identify circumstances in which the respondent would be willing to move.

A well-designed questionnaire should yield critical data such as the number of households expected to move to the project within a reasonable time after completion. From this estimate of unmet need of a particular market segment in a specified market area, the project's orientation, size, quality and features and selling price and rental rates can be determined.

Secondary Sources of Marketing Information

U.S. Census data and other secondary data play a key role in most market analyses. Descriptions of types of data available and their sources follow.

U.S. Bureau of Census Data

The decennial census of population and housing is the largest single data-

producing event each decade, providing information on a large number of items for every area of the nation. Data are obtained from two census questionnaires: the short and long forms. The short form provides data on key population and housing items. The data from the 2000 Census will be available in a variety of forms including printed reports, downloadable online files, diskettes and CD-ROM starting in April 2001.

In addition, the U.S. Bureau of the Census provides periodic information from several other data collection efforts. *Housing Units Authorized by Building Permits* are monthly reports showing monthly and year-to-date permits issued by each jurisdiction, including the number of units, and are useful in assessing housing growth in an area and the number of single-family and multifamily units likely to enter the market in the immediate future. The reports are available on the Real Estate Center's website at <http://recenter.tamu.edu>.

The *American Housing Survey* is conducted annually in selected metropolitan statistical areas (MSAs). The areas surveyed vary from one year to another, but each area is surveyed at least once every four years. Texas cities included are Dallas-Fort Worth, Houston and San Antonio. The surveys provide detailed information on type of units, characteristics (year of construction, size, value or rent and utilities available) and the characteristics of persons who occupy them, including the householder's age.

Together, these reports provide extensive information on the types of units occupied by seniors in a given area. In addition, the surveys collect information on householder preferences, including why they moved from their last residence and why they selected their present one.

Other publication series from the U.S. Bureau of the Census are also of help in market analysis. Among these are the Current Population Reports, particularly report series P-20, P-23, P-25 and P-26. The P-20 (*Population Characteristics*) series presents information each year on key characteristics including relevant housing items such as household and family characteristics, marital status and living arrangements. Series P-23 (*Special Studies*) provides periodic but

not necessarily recurrent coverage of such topics as trends in marriage and family formation patterns. Although these data cannot be generalized to state or substate areas, they are important for tracking trends between censuses that may affect seniors and other housing markets.

The P-25 and P-26 series (*Population Estimates and Projection*) provide estimates of current population and per capita income for all states, counties and places in the nation. At the state level they also provide detailed age, sex and race-ethnicity estimates. The projections apply to the nation and the state only, but they are useful in providing forecasts of future trends in mortality and other important considerations in assessing patterns among seniors.

These and similar data can be obtained from several Texas sources. The U.S. Bureau of the Census has a regional office in Dallas and can be found on the web at <http://www.census.gov>. Government documents sections of most larger city and academic libraries also have much of this information. In addition, the Texas State Data Center, coordinated by the Texas Department of Commerce, makes census and other data available and accessible to the public.

The Texas Department of Commerce also coordinates the Texas State Population Estimates and Projections Program. The Department of Rural Sociology in The Texas A&M University System produces the estimates and projections for this program, which includes annual estimates of the total population of all counties and places in Texas, of the population of counties by 75 age groups, sex and race-ethnicity, and biennial projections of the population of counties by age, sex and race-ethnicity.

Other Sources of Secondary Data

Other useful secondary data sources include the Texas Department of Health, Texas Department of Commerce, Texas Department of Human Resources, Texas Employment Commission, Bureau of Labor Statistics and Bureau of Economic Analysis. The Texas Department of Health has detailed information on mortality by counties and major metropolitan areas and provides data on hospitals and other health care facilities useful in

analyzing seniors populations and facilities.

The Texas Department of Commerce and the Texas Employment Commission both monitor state employment trends and other indicators of economic activity. The Department of Human Resources provides information on how many seniors may be receiving various types of assistance in different parts of the state.

The U.S. Bureau of Labor Statistics provides information on how many seniors may be receiving various types of assistance in different parts of the

state. It also provides data on the cost of living in states and major metropolitan areas, which is useful in identifying areas that might be attractive to seniors on fixed incomes. The Bureau of Economic Analysis, part of the U.S. Department of Commerce, also provides economic data for counties and metropolitan areas, including annual estimates of per capita county income.

These are only a few of the state and federal agencies providing data useful for market analysis. Information on other data sources can be obtained by

calling the State Data Center or by referring to the *Secondary Sources of Research Data*,⁹ available from the American Chamber of Commerce Research Association.

Numerous private-sector firms provide economic and demographic data that may be useful in market analyses and can provide extensive expertise in completing a market analysis. In addition, several national and state agencies and organizations have produced particularly useful references for analyzing seniors housing.

References

¹ S.H. Murdock et al., Texas Agricultural Experiment Station, The Texas A&M University System, *Projections of the Population of Texas and Counties in Texas by Age, Sex and Race/Ethnicity for 1990–2025*, (Austin, Texas: The Texas State Population Estimates and Projections Program, Texas Department of Commerce, 1988).

² Real Estate Center at Texas A&M University

³ Current Population Reports, "Poverty in the United States: 1998," pp. 60–207, September 1999, U.S. Bureau of the Census

⁴ Housing Options for Older Americans (Washington, D.C.: American Association of Retired Persons, 1984).

⁵ Jacob S. Siegel and Cynthia M. Taeuber, "Demographic Perspectives on the Long-Lived Society," *Daedalus*, Vol. 115, No. 1 (Winter 1986), pp. 89–90

⁶ City of Amarillo Planning Department 1999 Survey of Amarillo Housing (City of Amarillo, 1999), pp. 27–28.

⁷ J.B. Featherston, "Approaching Market Analysis in a New Economic Environment," *The Journal of Real Estate Development*, Vol. 1, No. 4

(Boston, Massachusetts: Spring 1986), p. 7.

⁸ John Merrill, *Sheltered Housing for Older People: Getting Started* (Madison: University of Wisconsin, 1988), p. 14.

⁹ S.H. Murdock and R.R. Hamm, *Secondary Sources of Research Data: Applied Community Research*, (Alexandria, Virginia: American Chamber of Commerce Research Association, 1988).