

# **Hays Senior Housing Marketing Study**

## **Introduction**

The Hadley Manor Group commissioned the Docking Institute of Public Affairs to conduct a senior housing demand study for Hays, Kansas, focusing on demand for independent living, assisted living, and long term nursing care. The Docking Institute used a multi-method approach to determine demand. A telephone survey of the general population age 59 and older in the 22 county market area was conducted. From this survey the Institute determined current interest (demand) and future interest in the above mentioned facilities at specific occupancy, bedroom, and price levels. This information is discussed in Section I. A second study component, discussed in Section II, is a survey of senior housing facilities in the 22 county market area to determine capacity, room prices, occupancy rates, presence and extent of any waiting list, and whether these facilities also offer independent and/or assisted living services. Section III provides a brief report on demographic trends among the 60 and older age group in Ellis County and the 22 county study area. The final section includes Docking Institute survey findings on senior citizen housing issues from a 1999 Hays, Kansas housing survey of the general population.

## Section I

### Hays Senior Housing Interest Survey September 25, 2000 to October 9, 2000

#### Executive Summary

The primary objectives of this survey were to determine:

- ! Interest in various types of independent living facility types and cost preferences in the Hays market area
- ! Interest in assisted living facility and cost preferences Hays market
- ! Interest in nursing home facility and cost preferences Hays market

From the analysis of the survey of 680 respondents, we estimate that:

- ! 797 people in the Hays Market would currently be interested in an independent living facility.
- ! 1,648 people in the Hays Market would be interested in an independent living facility *within the next five years*.
- ! Most (58%) prefer a two bedroom independent living apartment.
- ! Most (56%) expect one person to live in an independent living apartment.
- ! The two most desired services in an independent living facility are twenty-four hour emergency security and shuttle service.
- ! A total of about 265 people in the Hays Market who currently have an interest and about 843 who have an *interest within the next five years* in a one person-one bedroom independent living apartment would pay at least \$800 per month for such an apartment
- ! A total of nearly 1200 people in the Hays Market who have an interest in a two person-one bedroom independent living apartment *within the next five years* would pay at least \$1,000 per month for such an apartment.
- ! A total of about 980 people in the Hays Market who have an interest in a one person-two bedroom independent living apartment *within the next five years* would pay at least \$1,300 per month.

- ! A total of about 400 people in the Hays Market who currently have an interest and about 870 who have an interest *within the next five years* in a two person-two bedroom independent living apartment would pay at least \$800 per month for such an apartment.
- ! 396 people in the Hays Market are currently interested in an assisted living apartment.
- ! 312 people in the Hays Market would be interested in an assisted living facility *within the next five years*.
- ! A total of about 213 people in the Hays Market who currently have an interest and about 149 who have an interest *within the next five years* in a assisted living apartment would pay at least \$1,400 per month for such an apartment.
- ! 168 people in the Hays Market are currently interested in a nursing facility.
- ! 112 people in the Hays Market would be interested in a nursing facility *within the next five years*.
- ! About 35 people in the Hays Market would currently be interested in a private nursing room for a price of \$3,300 and about 45 would currently be interested in a shared nursing room for a price of \$2,400.
- ! About 39 people in the Hays Market would be interested in a private nursing room for a price of \$3,300 and about 30 would be interested in a shared nursing room for a price of \$2,400 *within the next five years*.
- ! Current levels of interest in each type of independent living facility arrangement and the assisted living arrangement along with present waiting lists (see Section II) for such facilities in Ellis County suggest that there is a strong potential to fill 40 new senior citizen apartments in Hays, Kansas.
- ! Current levels of interest in a nursing facility and present waiting lists (see Section II) for such a facility in Ellis County suggest that there is a strong potential to fill 60 new long term nursing facility rooms in Hays, Kansas.

## **Methods**

As part of the Hays senior housing marketing study, between September 25, 2000 and October 9, 2000, the University Center for Survey Research conducted a telephone survey of 680 households using randomly generated numbers from the following Kansas counties: Rawlins, Thomas, Logan, Decatur, Sheridan, Gove, Lane, Norton, Graham, Trego, Ness, Phillips, Rooks, Ellis, Rush, Pawnee, Smith, Jewell, Mitchell, Osborne, Lincoln and Russell. Data were collected using a computer aided telephone interviewing system (CATI). The CATI system allows interviewers to code survey information into a computer database as the interviewers administer a questionnaire to a respondent. A total of 941 households were successfully contacted after up to six call attempts. In 680 of these households, a person 59 years of age or older agreed to participate in the survey. This represents a response rate of 72%.

Using a 95% confidence interval, the results from the survey have a margin of error of  $\pm 3.8\%$ . In other words, given 100 different random samples of 680 people 59 years or older, only five percent of the time would the total results obtained from the sample population vary by more than  $\pm 3.8\%$  from the results that would be obtained if the total population were surveyed (assuming no response bias). Importantly, the margin of error for subgroups is higher. Any statistics for subgroups with less than 40 to 50 respondents are primarily suggestive.

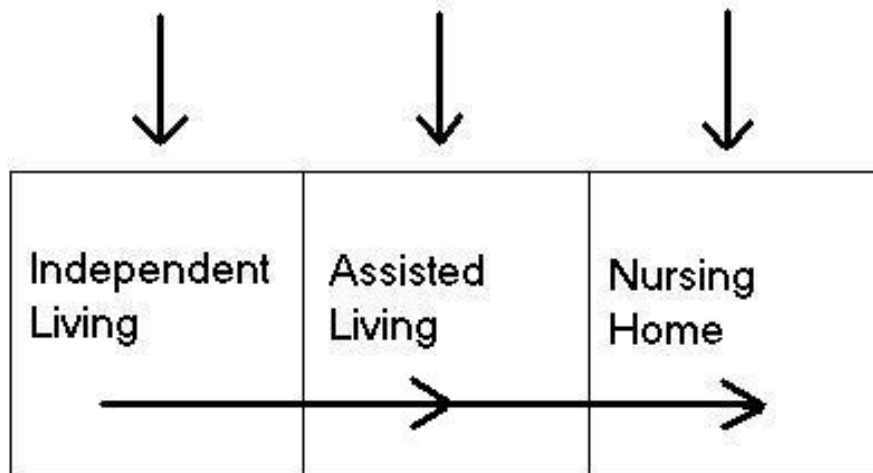
### **Survey Instrument**

The Docking Institute and the Hadley Manor representatives agreed on the survey items used. It was the responsibility of Hadley Manor to identify information areas and objectives of the survey. It was the responsibility of the Docking Institute to develop survey items that were technically correct and without bias. A copy of the survey instrument appears in Appendix 1. Question wording and the design of the survey instrument are the property of the Docking Institute and are not to be used for additional surveys unless written permission is given by the Director of the Docking Institute.

## Conceptualizing Demand for Senior Housing

Through consultation with the Hadley Manor Group, the Docking Institute conceptualizes demand for senior housing to involve at least three important flows. The three possible flows into senior housing examined in this study include: (1) flows into independent living facilities, (2) flows into assisted living facilities, and (3) flows into nursing facilities. In addition, it is highly likely that once an individual has flowed into an independent living facility, the individual could subsequently flow into an assisted living facility and ultimately into a nursing facility. A reverse flow is not likely. Figure 1 illustrates these conceptualized flows.

**Figure 1. Conceptual Model of Flows Into and Through Senior Housing**



## Sample Demographics

Population estimates indicate that the number of people age 59 and older living in the 22 county study area is approximately 32,224, which represents about 26.5% of the total 22 county area population (derived from US Census and Woods and Poole population estimates).<sup>1</sup> The 59 and older population in Ellis County represents 15% of the 22 county area's 59 and older population. The 59 to 64 age category represents approximately 23% of the study area's 59 and older population. The age distribution among the Docking Institute's final sample is very similar and easily within the sample margin of error (3.8%), with 22% of the respondents falling in the 59 to 64 age category. The age of respondents varied from a 59 to 96. Table 1 shows the sample distribution by age categories. The mean and median ages (not shown) are quite close at 73 and 72, respectively.

**Table 1. Distribution of Survey Respondents by Age Category**

Age Category	Percent (%)
59 to 64	22.0
65 to 69	19.5
70 to 74	16.5
75 to 79	18.9
80 to 84	12.3
85 to 89	6.6
90 and Over	4.3

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<sup>1</sup> The 22 county area population age 65 and older was determined from 1998 estimates derived using 1990 US Census data and published by the Policy Research Institute, University of Kansas at the following website: <http://www.ukans.edu/cwis/units/pri/ksdata/kcced/profiles/index.shtml>. The population of the study area's 59 to 64 age group was determined from 1992 estimates published by Woods and Poole Economics Inc., Washington, DC in their *1992 State Profile* for Kansas. Woods and Poole Economics Inc.'s estimates are based on 1990 US Census data. These population estimates are reported for the age group 55-59 and 60-64. The Docking Institute conservatively estimates that the age group 59 represents one-sixth of the age group 55-59. From the above sources, the sum of the population estimates for age 59, age 60-64, and age 65 and older is the Docking Institute's estimate of the age group 59 and older for the study area.

Total	100.1
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As one would expect about the study age group, most households are two person or one person households. As Figure 2 shows, a slight majority (53.2%) of households have two individuals present. Another 42.5% of the households are one person, and 3.0% are three person households. Extremely small percentages of households have more than three people.

**Figure 2. Distribution of Persons Per Household**

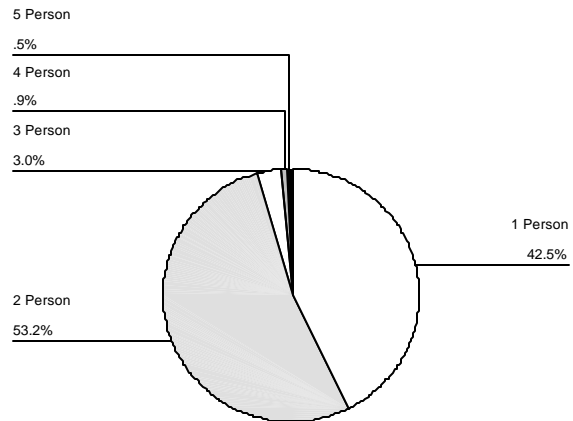


Figure 3 shows the percentage of respondents in each household income category. The single largest income category was the \$20,000 to \$30,000 category at 20%, followed closely by the \$10,000 to \$20,000 at 19.2%. About 11% have household incomes of \$30,000 to \$40,000, while just under 10% (9.7%) have household incomes of less than \$10,000.

**Figure 3. Distribution of Household Income**

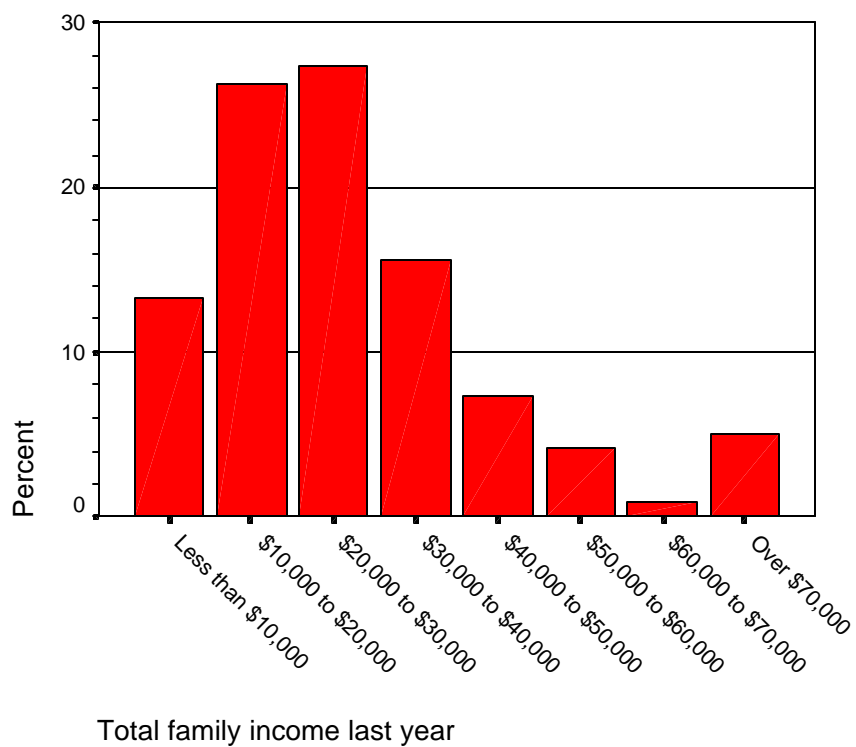
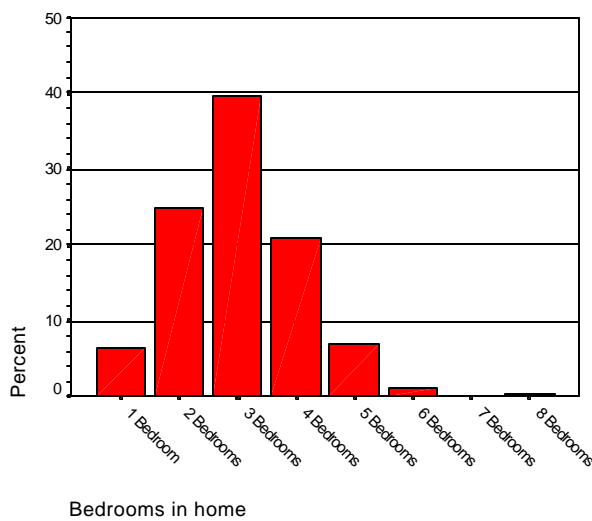


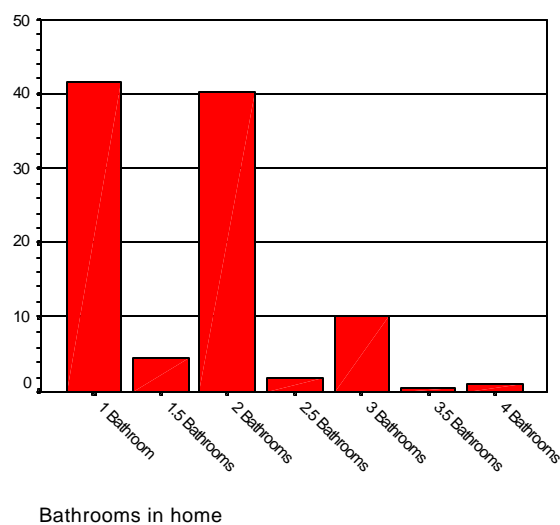
Figure 4 shows that the largest single percentage (39.4%) of respondents have three bedrooms in their homes, followed by 24.9% with two bedrooms. Another 20.8% have four bedrooms, and similar percentages have one and five bedrooms, 6.3% and 6.9% respectively.

Figure 5 shows the sample distribution on number of bathrooms in the home. About 42% have one bathroom, and about 40% have two bathrooms.

**Figure 4. Distribution of Bedrooms Per Household**



**Figure 5. Distribution of Bathrooms Per Household**



Home ownership among respondents is very high, with 88% indicating that they own their home. About 9% rent, and only 3% live in an elderly care facility.

Home owners were asked “If you were going to sell your house, how much do you think you could sell your home for?” Table 2 shows the summary statistics on this question. The perceived market value of home ranged from \$5,000 to \$555,000. The mean perceived market value of homes is

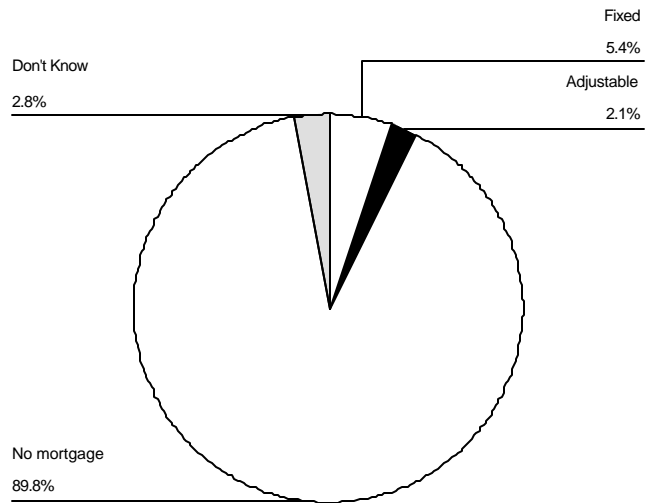
**Table 2. Summary Statistics for Perceived Market Value of Home**

Amount could sell home for		
N	Valid	316
	Missing	364
Mean		\$63,246
Median		\$50,000
Modes		\$30,000 and \$50,000
Std. Deviation		\$51,908
Minimum		\$5,000
Maximum		\$555,000

\$63,246. However, the median (\$50,000) and modal (\$50,000 and \$30,000) values are less than the mean. This combined with the finding (not shown) that only 10% of the homes were valued at over \$100,000, indicates that the median home value is a better measure of the distribution’s central tendency on home values as the mean is somewhat inflated by the very few homes valued at over \$100,000.

Outright home ownership among the study population is quite high among those living in their own home. Figure 6 shows that about 90% of the home owners indicate that they currently have no mortgage on their home. About 5% currently have a fixed mortgage, and about 2% have an adjustable mortgage. Another 3% do not know whether their mortgage is adjustable or fixed or refused to answer the question.

**Figure 6. Home Mortgage Status**



An important consideration for assessing interest in senior housing located in Hays, Kansas is respondents’ current location of residence. The willingness to relocate to Hays is important for those not currently living in Hays.

Eleven percent of the sample resides in Hays. Non Hays residents were asked if they “would consider moving to Hays to live in senior citizen housing.” Of those who responded to this question, eleven percent responded in the affirmative. Thus, the Docking Institute concludes that a total of 21% of the respondents currently reside in Hays or would consider moving to Hays for senior housing. This group of people will be referred to as the “**Hays Market**” group. Extrapolating from the sample to the estimated population in the study area, this means that approximately 6,889 people age 59 and older either reside in Hays or would consider moving to Hays for senior housing.

### **Interest in an Independent Living Facility**

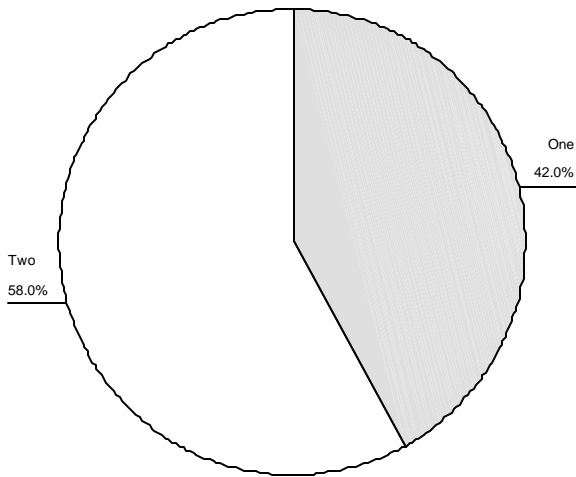
Respondents were provided with a description of an independent living facility (see Appendix 1). They were asked to indicate whether any member of their household, including themselves, is currently interested in this type of facility. In the overall sample, 7.5% of the respondents indicate a current interest in an independent living facility. Extrapolating to the population of the study area, this results in an estimate of approximately 2,496 people in the 22 county study area currently interested in an independent living facility. Turning to only those respondent living in Hays or expressing an interest in moving to Hays for senior housing (Hays Market), 11.4% are currently interested in an independent living facility. Again generalizing from the sample to the study area’s population, this results in an estimate of approximately 797 Hays Market people currently interested in an independent living facility. Those currently not interested in an independent facility were asked to indicate whether any member of their household, including themselves, would be interested in this type of facility within the next five years. In the overall sample of respondents not currently interested in an independent living facility, 16.1% indicate that they would be interested such a facility within five years. Extrapolating to the population of the study area, this results in approximately 4,925 people in the study area who may be interested in an independent living facility within the next five years. Among the Hays Market respondents not currently interested in an independent living facility, 26.6% indicate that they may be interested within the next five years. This percentage corresponds to approximately 1,648 when extrapolated to the study area population. Table 3 summarizes these findings.

**Table 3. Extrapolated Number of People 59 and Older Interested in An Independent Living Facility (sample percentage in parentheses)**

	Currently Interested	Interested Within Next 5 Years
All Respondents	2,496 (7.5%)	4,925 (16.1%)
Hays & Relocate to Hays Respondents	797 (11.4%)	1,648 (26.6%)

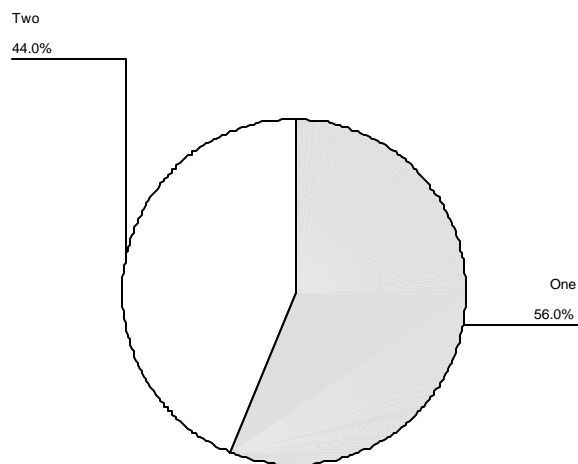
Those respondents expressing an interest in an independent living facility currently or in the future (within the next five years) were asked to indicate their preference for number of bedrooms in the apartment. Figure 7 shows results for Hays Market respondents who express an interest in an independent living facility. Most (58%) prefer a two bedroom apartment, and 42% prefer a one bedroom apartment. This is very similar to results from the overall sample (not shown), where 52.3% prefer a two bedroom apartment, and about 45% prefer a one bedroom apartment. About 3% of the overall sample are uncertain about the number of bedrooms they desire, and less than one percent (0.6%) desire more than two bedrooms.

**Figure 7. Independent Number of Bedrooms Preferred: Hays Market Respondents (N=50)**



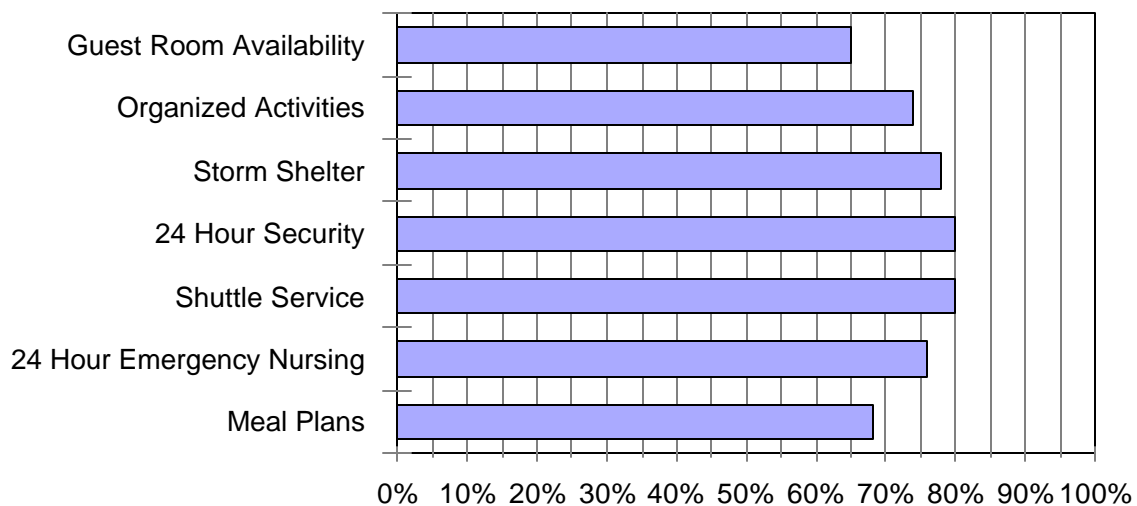
Respondents were also asked to indicate the number of people in their household expected to live in the independent living apartment. Figure 8 shows that among Hays Market respondents, 56% indicate that one person from their household is likely to live in an independent living apartment. This is quite similar to results of the overall sample (not shown) where 53% indicate that one person is likely to live in an independent living apartment.

**Figure 8. Independent Number of Residents Per Apartment: Hays Market Respondents (N=50)**



It is important to offer respondents as much information as possible when asking them to consider their willingness to pay for a service. Thus, those respondents indicating a current or future interest in an independent living facility were presented a number of facility characteristics and asked if each characteristic would be important in “influencing your choice of an independent living facility.” Figure 9 shows those characteristics of an independent living facility considered important by Hays Market respondents.

**Figure 9. Important Characteristics in Choosing an Independent Living Facility: Hays Market Respondents**

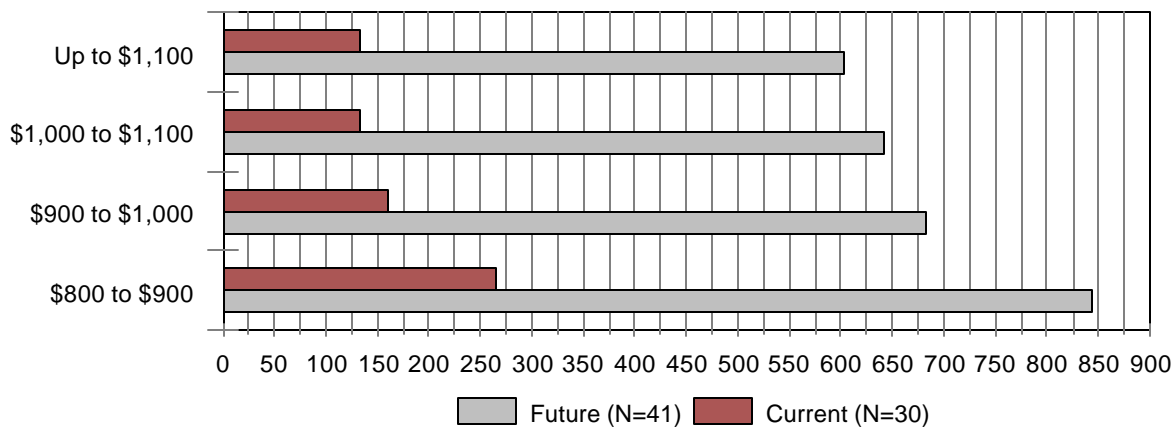


At least 65% of the respondents indicated that each characteristic is important in choosing an independent living facility. However, some characteristics are more important than others. Twenty-four hour security and shuttle service have the highest percentage (80%) of respondents indicating important. These two services are followed in descending order of importance by storm shelter (78%), 24 hour emergency nursing on-site (76%), organized activities (74%), meal plans (68%), and guest room availability (65%).

To estimate demand for a one bedroom-one person independent living apartment, respondents who indicated current or future interest in a one bedroom facility were asked whether they would be willing to pay up to \$1,100 per month for such a facility. Those who indicated “no” or “don’t know” to this question were then asked their willingness to pay between \$1,000 and \$1,100, and so on down to the lowest cost category of \$800 to \$900 per month. Respondents were asked to consider their willingness to pay in the context of an independent living facility that offered all of the services appearing in Figure 9 above.

Figure 10 shows the cumulative Hays Market population’s current and future demand for a *one person-one bedroom* independent living apartment at the various price levels from the highest price category to the lowest price category. Extrapolating from the overall sample percentages to the Hays Market population age 59 and older in the study area who are *currently* (sample size = 30) interested in an independent living facility, about 133 individuals would pay up to \$1,100 per month for a one person-one bedroom apartment in an independent living facility.<sup>2</sup> Moving from the highest

**Figure 10. Number of People in Hays Market Interested in One Person-One Bedroom Independent Living by Price Categories**



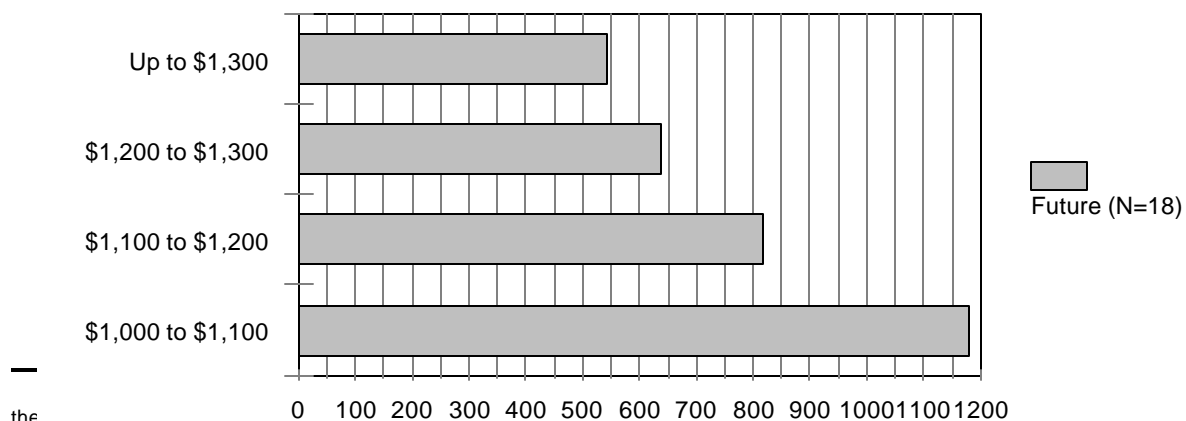
<sup>2</sup> Due to very small cell numbers when considering the Hays Market respondents only, it is necessary to use the percentages in the overall sample interested at the given price levels rather than the percentages among Hays Market respondents to estimate the number of Hays Market people interested at various price levels. This procedure is thought to be representative of the Hays Market respondents, however, given the somewhat higher demand for independent living among Hays Market respondents (see Table 3) this procedure is more likely to underestimate demand than to overestimate demand at

price category to the lowest price range of \$800 to \$900, the number of people in the Hays Market currently interested climbs from about 133 to 265. The number estimated in each cost category represents the number in that category added to the number in any higher cost categories. Thus a cumulative estimated number of people is shown with the lowest cost category representing the highest cumulative total. Looking at interest *within the next five years* (sample size = 41) by price category, about 603 people are interested in a one person-one bedroom independent living apartment at a price up to \$1,100 per month. The number of people interested within the next five years increases to a high of about 843 people at the \$800 to \$900 per month price range.

Turning to those *currently* interested in a *two person-one bedroom* independent living apartment, only ten respondents (sample size = 10) fit this definition. Generalizing to the Hays Market would be quite tenuous due to the very small number of cases from which to draw an inference. Thus only the sample results are reported. Of these ten respondents, one indicated that they would be willing to pay up to \$1,300 for a two person-one bedroom independent living apartment, and four respondents indicated a willingness to pay between \$1,000 and \$1,100. Three of the ten indicated that they were not willing to pay \$1,000 or more, and the final two respondents indicated that they did not know how much they would be willing to pay for a two person-one bedroom apartment.

Figure 11 shows the estimated number of people indicating an interest in a *two*

**Figure 11. Number of People in Hays Market Interested in Two Person-One Bedroom Independent Living Within the Next Five Years by Price Categories**

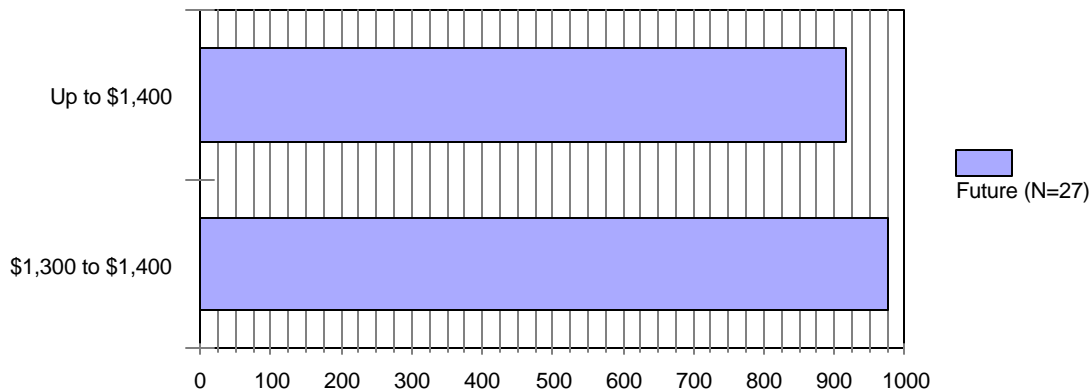


*person-one bedroom* living facility in the *future* (sample size = 18). The results should be interpreted with caution as the number of cases fitting this definition is only 18. We estimate that nearly 550 individuals would pay up to \$1,300 for a two person-one bedroom independent living apartment sometime within the next five years. The estimated number who would pay \$1,000 to \$1,100 per month approaches 1200.

Turning to those *currently* interested in a *one person-two bedroom* independent living apartment, only thirteen respondents (sample size = 13) fit this definition. Generalizing to the Hays Market would be quite tenuous due to the very small number of cases from which to draw an inference. Thus only the sample results are reported. Of these thirteen respondents, two indicated that they would be willing to pay up to \$1,400 for a one person-two bedroom independent living apartment. Eight indicated that they would not be willing to pay at any of the price levels mentioned, the lowest of which was between \$1,100 to \$1,200. Three of the thirteen indicated that they did not know how much they would be willing to pay for a one person-two bedroom apartment.

Figure 12 shows *future* interest in a *one person-two bedroom* independent living apartment at the given price levels. Twenty-seven respondents fit this definition, and extrapolating to the Hays Market population, responses from these 27 respondents indicate that about 920 people would pay up to \$1,400 for a one person-two bedroom independent living facility. That number rises to 980 when considering those willing to pay

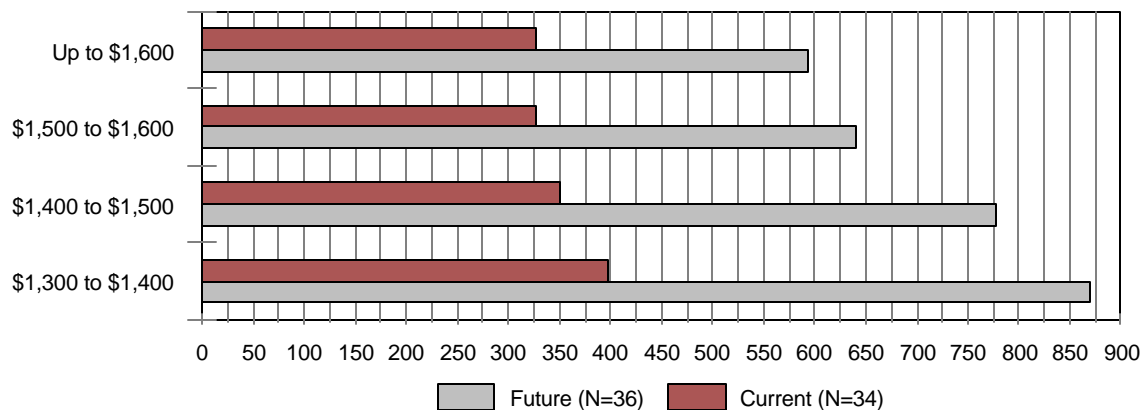
**Figure 12. Number of People in Hays Market Interested in One Person-Two Bedroom Independent Living Within the Next Five Years by Price Categories**



at least \$1,300.

Figure 13 shows the estimated number of people in the Hays Market interested in a *two person-two bedroom* independent living apartment by price categories. About 325 people are interested in a two person-two bedroom independent living apartment for a cost up to \$1,600. In the lowest cost category (\$1,300 to \$1,400), close to 400 people could be expected to be interested in a two person-two bedroom independent living apartment. Looking at future interest, about 580 people would be interested in such an apartment within the next five years, and a total of about 870 would be interested at a price

**Figure 13. Number of People in Hays Market Interested in Two Person-Two Bedroom Independent Living by Price Categories**



range of \$1,300 to \$1,400.

Another issue associated with independent living is the availability of parking space and particularly indoor parking. Respondents interested in an independent living facility were asked “If the facility includes heated indoor parking with security and elevator access to the apartments, would you be interested in this service for an additional \$185 per month?” About 19% of the Hays Market respondents currently interested in some type of independent living facility indicated that they would be interested in such parking. Extrapolating to the Hays Market population, about 151 people of those estimated to be currently interested in an independent living facility (797) would be interested in paying

\$185 for heated, indoor, secure, elevator serviced parking.

### **Interest in an Assisted Living Facility**

Respondents were also asked about their interest in an assisted living facility. They were asked to indicate whether any member of their household, including themselves, is currently interested in this type of facility (see Appendix 1 for specific question wording). As specified in Figure 1 above, the analysis assumes a certain flow of individuals into and through senior housing. If an individual expresses an interest in assisted living, it is assumed that he/she will not return to independent living, but instead, any subsequent moves would generally be into nursing facility living. For this reason, if a respondent indicated an interest in both an independent and an assisted living facility, it is assumed that the respondent would flow first into the independent living facility, and thus, the respondent is included in the independent living facility analysis presented above. The assisted living facility analysis of *current* interest includes those respondents who indicated a current interest in an assisted facility but no current interest in an independent living facility. The assisted living facility analysis of *future* interest includes those respondents who indicated a future interest in an assisted facility (which may include respondents with a *current interest in an independent* living facility) but no future interest in an independent living facility.

Table 4 shows the estimated number of people in the Hays Market and the 22 county study area overall who are currently interested in an assisted living facility or would be interested in an assisted living facility within the next five years. Results of the overall sample from the 22 county study area show that 4.6% of the respondents indicate a current interest in an assisted living facility. Extrapolating the population of the study area, this results in approximately 1,416 people in the 22 county study area interested in an assisted living facility. Turning to the Hays Market respondents, 6.4% are currently interested in an assisted living facility, resulting in approximately 396 Hays Market people currently interested in such a facility. Those not currently interested in an assisted living facility were asked to indicate whether any member of their household, including themselves, would be interested in this type of facility within the next five years. In the overall sample of

respondents not currently interested in an assisted living facility, 5.3% indicate that they would be interested in such a facility within five years. Extrapolating to the population of the study area, this results in approximately 1,428 people in the study area who may be interested in an assisted living facility within the next five years. Among the Hays Market respondents who are not currently interested in an assisted living facility, 6.3% indicate that they may be interested within the next five years. This percentage corresponds to approximately 312 people when extrapolated to the study area population.

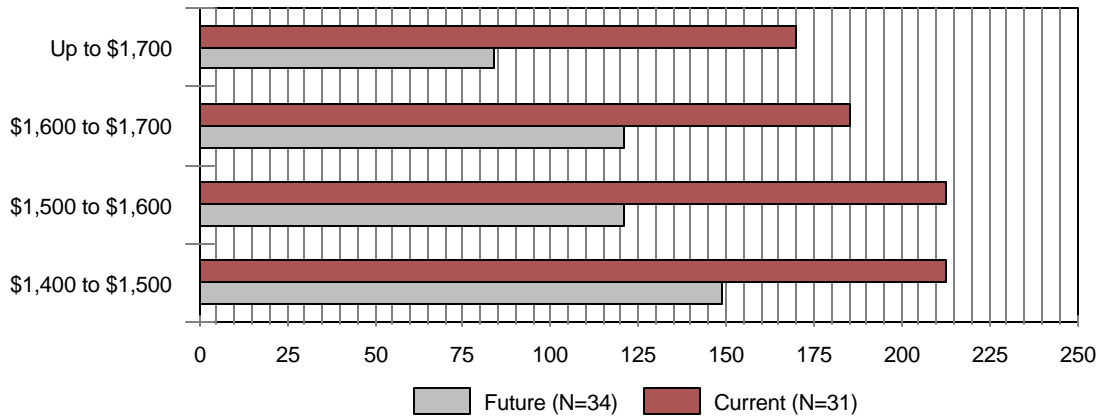
**Table 4. Extrapolated Number of People 59 and Older Interested in An Assisted Living Facility (sample percentages in parentheses)**

	Currently Interested	Interested Within Next 5 Years
All Respondents	1,416 (4.6%)	1,428 (5.3%)
Hays & Relocate to Hays Respondents	396 (6.4%)	312 (6.3%)

Like the series of questions on independent living facilities in the above section of the report, respondents expressing an interest in an assisted living facility were asked about their willingness to pay for an assisted living apartment at various price levels beginning at a high of \$1,700 per month to a low of \$1,400 to \$1,500 per month.

Figure 14 shows the estimated number of people in the Hays Market interested in an assisted living apartment by price categories. About 170 people would currently be interested for a price up to \$1,700 per month, and examining the lowest price category, about 213 would be interested at a price of \$1,400 to \$1,500 per month. Turning to the future interest in an assisted living apartment among the Hays Market, an estimated 84 people would be interested in such a facility within the next five years at a price of \$1,700 per month. A total of about 149 people would be interested with the next five years at the lowest price range, \$1,400 to \$1,500 per month.

**Figure 14. Number of People in Hays Market Interested in an Assisted Living Facility by Price Categories**



## Interest in a Nursing Home Facility

Respondents were also asked about their interest in a nursing home facility. They were asked to indicate whether any member of their household, including themselves, is currently interested in this type of facility (see Appendix 1 for specific question wording). As specified in Figure 1 above, the analysis assumes a certain flow of individuals into and through senior housing. If an individual expresses an interest in nursing home living, it is assumed that he/she will not return to independent or assisted living. For this reason, if a respondent who indicated an interest in nursing home living and an interest in an independent and/or an assisted living facility, it is assumed that the respondent would flow first into the independent or assisted living facility, and thus, the respondent is included in the independent or assisted living facility analysis presented above. The nursing home facility analysis of *current* interest includes those respondents who indicated a current interest in nursing home facility but no current interest in an independent living facility or an assisted living facility. The nursing home facility analysis of *future* interest includes those respondents who indicated a future interest in a nursing facility (which may include respondents with a *current interest in an independent or an assisted living facility*) but no future interest in an independent or assisted living facility.

Table 5 shows the estimated number of people in the Hays Market and the 22 county study area overall who are currently interested in a nursing home facility or would be interested in an nursing facility within the next five years. Results of the overall sample from the 22 county study area show that 2.8% of the respondents indicate a current interest in an nursing facility. Extrapolating the population of the study area, this results in approximately 822 people in the 22 county study area interested in an nursing facility. Turning to the Hays Market respondents, 2.9% are currently interested in a nursing facility, resulting in approximately 168 Hays Market people currently interested in such a facility. Those not currently interested in an nursing facility were asked to indicate whether any member of their household, including themselves, would be interested in this type of facility within the next five years. In the overall sample of respondents not currently interested in a nursing facility, 2.7% indicate that they would be interested in such a facility within five

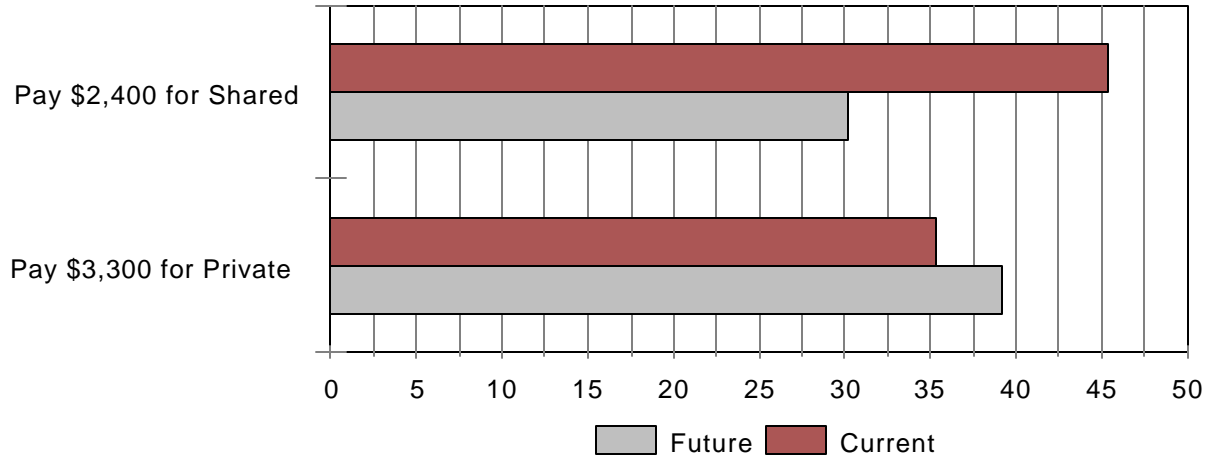
years. Extrapolating to the population of the study area, this results in approximately 704 people in the study area who may be interested in a nursing living facility within the next five years. Among the Hays Market respondents who are not currently interested in an nursing facility, 2.3% indicate that they may be interested within the next five years. This percentage corresponds to approximately 112 people when extrapolated to the study area population.

**Table 5. Extrapolated Number of People 59 and Older Interested in An Nursing Facility (sample percentages in parentheses)**

	Currently Interested	Interested Within Next 5 Years
All Respondents	822 (2.8%)	704 (2.7%)
Hays & Relocate to Hays Respondents	168 (2.9%)	112 (2.3%)

Figure 16 shows the estimated number of people in the Hays Market interested in a private nursing room for a price of \$3,300 and a shared room for a price of \$2,400. It is estimated that at a price of \$3,300 in a private room in a nursing home facility, about 35 people would *currently* be interested. About 45 people would *currently* be interested in shared room in a nursing facility for the price of \$2,400. Turning to *future* interest, it is estimated that about 39 people would be interested at a price of \$3,300 in a private room in a nursing home facility. About 30 people would be interested *within the next five years* in a shared room in a nursing facility for the price of \$2,400.

**Figure 16. Number of People in Hays Market Interested in a Private Room for \$3,300 and Number of People Interested in a Shared Room for \$2,400**



## **Section II**

### **Survey of Senior Housing Facilities**

#### **Methods**

In addition to the telephone survey conducted by the University Center for Survey Research, a survey of 38 administrators of Hays area elderly care facilities was conducted by a Docking Institute Research Associate. The survey began on October 23 and lasted until November 3, 2000. Thirty-two administrators were asked a set of questions pertaining to their respective facilities and the services they provide. The list of facilities and administrators was provided by the Hadley Manor Group. The Docking Institute and the Hadley Manor Group representatives agreed on the survey items used. It was the responsibility of the Hadley Manor Group to identify information areas and objectives of the survey. It was the responsibility of the Docking Institute to develop survey items that were technically correct and without bias.

## Types of Services Provided in the 22 County Study Area

**Table 6. Services Provided in the 22 County Study Area**

	Total Number Reported Cases (N = 36)	Number of Reported Cases Located in Ellis Co.
Nursing Only	12	2
Assisted Only	5	0
Independent Only	1	1
Nursing/Assisted	5	3
Nursing/Independent	9	2
Assisted/Independent	2	1
All Three	2	1

Respondents were first asked if their facility provided nursing care, assisted living care, independent living care, or any combination of the three.

- Twelve facilities reported providing nursing care only; five facilities reported providing assisted living care only; one facility reported providing independent living care only.
- Two of the administrators indicated that their facility was capable of providing all three types of services. One of these facilities was located in Ellis County.
- Five provided nursing and assisted living care. Three were located in Ellis County.
- Nine provided both nursing and independent living care. Two were located in Ellis County.
- Two reported providing assisted and independent living care facilities. One was in Ellis County.

- Eight of the total facilities surveyed were located within Ellis county.

## Nursing Care

**Table 7. Nursing Care Statistics**

	Number Beds Available (N=24)	Number Beds Occupied (N=23)	Cost Per Day (N=20)
Mean	61.42	54.83	\$84.87
Median	57.00	53.00	\$86.00
Minimum	40	8	\$69.00
Maximum	120	114	\$96.00

Administrators were asked to report the number of rooms available and occupied in their facility, average cost for a room, and whether or not there was a waiting list at their facility.

- The average number of beds available in each facility participating in the survey was 61 with an average of 55 of those beds being occupied. The availability of beds in the various facilities ranged greatly from 40 to 120. The occupancy rate had a minimum of 8 and a maximum of 114.
- The average cost per day at the facilities was \$85. The minimum cost per day was \$69 and the maximum was \$96.
- Some of the facilities provide private and semi-private rooms. The maximum cost of a private room was \$101/day and \$76/day as the minimum cost. Rooms that were semi-private ranged from \$70 to \$91 per day.
- Five of the facilities reported having a current waiting list; fifteen said they did not currently have a waiting list; three answered that they sometimes have a waiting list.
- Four of these facilities with a waiting list were located in Ellis County.

Administrators of each of these facilities reported maximum capacity and substantial waiting lists.

## Assisted Living

**Table 8. Assisted Living Statistics**

	Number Rooms/Apts. Available (N=9)	Number Rooms/Apts. Occupied (N=9)	Cost Per Month (N=8)
Mean	20.67	19.22	\$1,593.13
Median	10.00	9.00	\$1,615.00
Minimum	9	7	\$1,225.00
Maximum	57	57	\$1,865.00

The same set of questions was asked of assisted living care providers as the nursing care providers.

- Most facilities reported having rooms or apartment-type places as an alternative to rooms containing multiple beds, which were most common in nursing care facilities. The average number of available apartments, rooms, or suites was 21 with an average of 19 of those being occupied. The minimum number of apartments, rooms, or suites available was 9 and the maximum was 57.
- Facilities charged by the month and had an average cost of \$1,593. The minimum cost per month was \$1,225 and the maximum was \$1,865.
- Of the nine facilities that provide assisted living care, four had waiting lists, two did not, and three said that they sometimes have a waiting list.
  - < Reports from facilities in Hays, Ellis, and Victoria suggest a combined waiting list of approximately 30 - 40 individuals. One of these facilities also reported that there had not been an opening in their facility in over a year.



## Independent Living

**Table 9. Independent Living Statistics**

	Apartments Available (N=10)	Apartments Occupied (N=10)	Cost Per Month (N=8)
Mean	14.80	12.90	\$950.63
Median	12.00	10.00	\$895.00
Minimum	4	4	\$550.00
Maximum	33	30	\$1,900.00

Finally, the administrators of independent living facilities were asked the same set of questions as the two previous groups of administrators.

- The average number of apartments available was 15. On average, 13 of these were already occupied. The availability of apartments ranged from 4 to 33 while the occupancy of these apartments ranged from 4 to 30.
- All ten of the facilities charge on a monthly basis. The average cost per month of these apartments was \$951. The lowest price charged per month was \$550 and the highest price per month was \$1,900.
- Four administrators reporting having a waiting list at their facility; five did not have a waiting list; and one facility sometimes has a waiting list.
  - < The combined reports of Ellis County facility administrators suggest that approximately 20 individuals are currently waiting to move into an independent living facility.

**Section III**  
**Demographic Trends Analysis**

**Table 10. Population Trends and Projections for 60 and Older Age Group**

	<b>1990 Population</b>	<b>2000 Est. Population</b>	<b>Est. % Chg. 1990- 2000</b>	<b>2010 Est. Population</b>	<b>Est. % Chg. 2000- 2010</b>
Ellis County	4,545	4,871	7.2	5,504	13.0
Market Area	32,734	32,056	-2.1	32,266	0.7

Sources: 1992 State Profile, Woods & Poole Economics; 1998 Kansas Statistical Abstract, Public Research Institute

The figures in Table 10 indicate that in 1990 there were 4,545 people in Ellis County 60 years of age or older, and 32,734 people 60 years of age or older in the entire market area. Population estimates for the same age group in 2000 for Ellis County are 4,871, and for the entire market area they are 32,056. These numbers represent a total estimated percent change from 1990 to 2000 of 7.2% among individuals 60 years of age and older. The total estimated percent change for the entire market area is -2.1% over the same period and for the same age category.

Table 10 also shows the 2010 population estimates for people 60 years of age and older. In Ellis County the estimated population in 2010 for this age category is 5,504, and in the entire market area the estimated population is 32,266. This represents a total estimated percent change from 2000 to 2010 of 13.0% for people 60 years of age and older in Ellis County. The total estimated percent change for the entire market area is

0.7% over the same period and the for the same age category.

## Section IV

### **Specialized and Senior Housing (from the Docking Institute's 1999 Hays Housing Survey report)**

The Docking Institute conducted a phone survey of randomly selected Hays residents was between November 10, 1999 and November 16, 1999. The telephone survey was completed using a computer-assisted telephone interviewing (CATI) system. There were 437 valid interviews completed among the 524 eligible persons reached, giving a response rate of 83%. At a 95% confidence level the findings reported here are accurate to within +/- 5% of the actual characteristics.<sup>3</sup>

Respondents were asked if they or anyone in the household is currently interested in specialized or senior housing. They were asked if this interest might appear within the next five years. Respondents were also asked what type of housing they would like and what features they would want.

Respondents were asked about their current interest in specialized or senior housing and their possible interest within the next five years. Twenty-two persons (5%) express a current interest in specialized or senior housing. They are most interested (54%) in an independent living facility. A total of 41 people (10%) say they either will be interested in specialized or senior housing (n=12) within five years or might be interested (n=29). These respondents are most interested (35%) in an independent living facility.

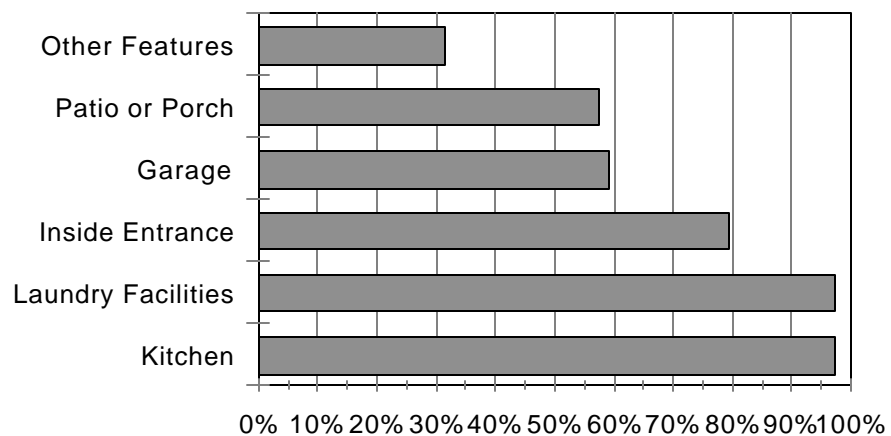
Respondents who expressed an interest in specialized or senior housing were asked

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<sup>3</sup>The full *Hays Housing Survey* report authored by Docking Institute Research Associate Trevor Steinert and Senior Policy Fellow Preston Gilson, Ph.D. is available from the Docking Institute upon request for a cost of \$10.00.

about the characteristics they would like to see in such a facility. Figure 17 gives the percentage of respondents expressing an interest in each feature. The most popular features of those asked about are a kitchen and laundry facilities, each of which were mentioned by 97% of respondents. The other features – garage (59%), patio or porch (57%), inside entrance (79%) – were each selected by a majority of respondents. The most desired plan (41%) is two bedrooms and one bathroom. A majority (51%) of respondents said either that this type of facility is not available in Hays or that they did not know if it is available.

**Figure 17. Desired Specialized or Senior Housing Features**



## **Conclusion**

Current levels of interest in each type of independent living facility arrangement and the assisted living arrangement along with present waiting lists (see Section II) for such facilities in Ellis County suggest that there is a strong potential to fill 40 new senior citizen apartments in Hays, Kansas. Current levels of interest in a nursing facility and present waiting lists (see Section II) for such a facility in Ellis County suggest that there is a strong potential to fill 60 new long term nursing facility rooms in Hays, Kansas. In addition, population projections predict a slight growth (0.7%) in the population age 60 and over in the study by 2010. Moreover, the expected population growth among this age group in Ellis County by 2010 is 13%, suggesting that demand for senior housing facilities will grow. It is the Docking Institute's independent conclusion that current and future interest in independent, assisted, and skilled nursing senior living facilities exceeds current supply. Additionally, given Ellis County's expected increase in the population age 60 and over between now and 2010, this shortage is likely to become more acute if additional senior living facilities are not constructed.

## Appendix 1

### Hadley Manor Survey

Hello, my name is [FIRST NAME]. I am calling from Fort Hays State University. We are questioning residents in your community about long term care needs for older adults in the area.

Is there any member of your household who is 59 years of age or older?

[IF YES, ASK TO SPEAK WITH THAT PERSON UNLESS ALREADY ON THE PHONE]  
[IF TARGETED RESPONDENT IS NOT AVAILABLE, ARRANGE A CALL BACK TIME]  
[WHEN TARGETED RESPONDENT COMES TO THE PHONE, REPEAT INTRO --  
WHEN SPEAKING  
WITH TARGETED RESPONDENT, CONTINUE...]

I want to assure you that your answers will remain completely confidential. I should only take about 5 to 10 minutes.

May I ask you a few questions?

1 YES  
X NO

Now I'm going to describe 3 types of senior citizen housing.

The first type is an independent living facility - where you live in an apartment setting with its own kitchen, bathroom, 1 or 2 bedrooms, and living room. Residents are unassisted in their daily activities. Social Activities are available. All major appliances [Range, Refrigerator, Washer and Dryer are included], lunch, and continental breakfast are provided in a cafeteria setting.

Q1A. Is this type of facility available in your community now?

1 YES  
2 NO  
9 DK/RA

Q1B. Are you or any member of your household currently interested in this type of independent living facility?

1 YES  
2 NO  
9 [DON'T KNOW/REFUSED ANSWER]

Q1C Would you or any member of your household be interested in this type of independent living facility within the next 5 years?

1 YES

2 NO

9 [DON'T KNOW/REFUSED ANSWER]

Q1D. Would you prefer a one or two bedroom independent living facility?

1 ONE

2 TWO

3 MORE THAN TWO

9 [DON'T KNOW/REFUSED ANSWER]

Q1E. Would this be for one or two people?

1 ONE

2 TWO

3 [THREE]

9 [DON'T KNOW/REFUSED ANSWER]

Q2. Independent living facilities can offer a number of different services.

I'm going to read a list of these services. Please indicate which of these services would be very important in influencing your choice of an independent living facility?

[1 YES 2 NO 9 DK/RA]

Q2A. Would meal plans be very important for influencing your decision?

Q2B. What about a 24 hr. Emergency Call- On-Site Nursing Staff

Q2C. Shuttle Service around the Community?

Q2D. 24-HOUR Security?

Q2E. Storm Shelter?

Q2F. Organized Activities

Q2G. The availability of additional guest rooms?

Q3A1. Most independent living facilities range between \$800 and \$1500 per month, depending on the number and types of services provided.

If an independent living facility included all of the services I just mentioned and pays for all utilities and cable TV, would you be willing to pay up to \$1,100 per month for a ONE BEDROOM apartment in a facility like this?

1 YES 2 NO 9 DK/RA

Q3A1A. Would you pay between \$1,000 and \$1,100?

- 1 YES
- 2 NO
- 9 DK/RA

Q3A1B. Would you pay between \$900 and \$1000?

- 1 YES
- 2 NO
- 9 DK/RA

Q3A1C. Would you pay between \$800 and \$900?

- 1 YES
- 2 NO
- 9 DK/RA

Q3A2. Most independent living facilities range between \$1000 and \$1700 per month, depending on the number and types of services provided. If an independent living facility included all of the services I just mentioned and pays for all utilities and cable TV, would you be willing to pay up to \$1,300 per month for a ONE BEDROOM apartment in a facility like this?

- 1 YES 2 NO 9 DK/RA

Q3A2A. Would you pay between \$1,200 and \$1,300?

- 1 YES
- 2 NO
- 9 DK/RA

Q3A2B. Would you pay between \$1,100 and \$1,200?

- 1 YES
- 2 NO
- 9 DK/RA

Q3A2C. Would you pay between \$1,000 and \$1,100?

- 1 YES
- 2 NO
- 9 DK/RA

Q3A3. Most independent living facilities range between \$1,000 and \$1,700 per month, depending on the number and types of services provided. If an independent living facility included all of the services I just mentioned and pays for all utilities and cable TV, would you be willing to pay \$1,400 per month for a TWO BEDROOM apartment in a facility like this?

1 YES 2 NO 9 DK/RA

Q3A3A. Would you pay between \$1,300 and \$1,400?

1 YES  
2 NO  
9 DK/RA

Q3A3B. Would you pay between \$1,200 and \$1,300?

1 YES  
2 NO  
9 DK/RA

Q3A3C. Would you pay between \$1,100 and \$1,200?

1 YES  
2 NO  
9 DK/RA

Q3A4. Most independent living facilities range between \$1,000 and \$1,700 per month, depending on the number and types of services provided.

If an independent living facility included all of the services I just mentioned and pays for all utilities and cable TV, would you be willing to pay \$1,600 per month for a TWO BEDROOM apartment in a facility like this?

1 YES 2 NO 9 DK/RA

Q3A4A. Would you pay between \$1,500 and \$1,600?

1 YES  
2 NO  
9 DK/RA

Q3A4B. Would you pay between \$1,400 and \$1,500?

1 YES  
2 NO  
9 DK/RA

Q3A4C. Would you pay between \$1,300 and \$1,400?

1 YES  
2 NO  
9 DK/RA

Q3A5. Most independent living facilities range between \$1,200 and \$1,900 per month, depending on the number and types of services provided.

If an independent living facility included all of the services I just mentioned and pays for all utilities and cable TV, would you be

willing to pay \$1,800 per month for a TWO BEDROOM apartment in a facility like this?

1 YES 2 NO 9 DK/RA

Q3A5A. Would you pay between \$1,700 and \$1,800?

1 YES

2 NO

9 DK/RA

Q3A5B. Would you pay between \$1,600 and \$1,700?

1 YES

2 NO

9 DK/RA

Q3A5C. Would you pay between \$1,500 and \$1,600?

1 YES

2 NO

9 DK/RA

Q5. If the independent living facility includes heated indoor parking with security and elevator access to the apartments would you be interested in this service for an additional \$185 per month?

1 YES

2 NO

9 DK/RA

The second type of facility is an assisted living facility. In an assisted living facility the individual continues to live in an apartment but additional services include 3 meals a day in a cafeteria, medical services, housekeeping and laundry services.

Q6A. Is this type of facility available in your community now?

1 YES

2 NO

9 DK/RA

Q6B. Are you or any member of your household currently interested in this type of assisted living facility?

1 YES

2 NO

9 DK/RA

Q6C. Would you or any member of your household be interested in this

type of assisted living facility in the next 5 years?

- 1 YES
- 2 NO
- 9 DK/RA

Q7A. Would you be willing to pay \$1,700 per month for this type of care?

- 1 YES
- 2 NO
- 9 DK/RA

Q7B. Would you pay between \$1,600 and \$1,700 per month for this type of care?

- 1 YES
- 2 NO
- 9 DK/RA

Q7C. Would you pay between \$1,500 and \$1,600 per month?

- 1 YES
- 2 NO
- 9 DK/RA

Q7D. Would you pay between \$1,400 and \$1,500?

- 1 YES
- 2 NO
- 9 DK/RA

Q8A. The third type of facility is a long term nursing home facility. Is this type of care available in your community now?

- 1 YES
- 2 NO
- 9 DK/RA

Q8B. Are you or any member of your household currently interested in long term nursing care?

- 1 YES
- 2 NO
- 9 DK/RA

Q8C. Would you or any member of your household be interested in long term nursing care within the next 5 years?

- 1 YES

2 NO  
9 DK/RA

Q8D. Would you be willing to pay \$3,300 per month for a private room in a long term nursing care facility?

1 YES  
2 NO  
9 DK/RA

Q8E. Would you be willing to pay \$2,400 per month for a shared room in a long term nursing care facility?

1 YES  
2 NO  
9 DK/RA

Q9. A condominium is an apartment complex where people who live in the condominiums own their own apartment and parking garage, but pay a fee to a homeowners association for maintenance of the grounds and buildings. Would you have any interest in purchasing a condominium?

1 YES  
2 NO  
9 DK/RA

Q10. Do you expect to pay for specialized or senior housing using...

[1 YES 2 NO 9 DK/RA]

Q10A. savings?

Q10B. by selling a home?

Q10C. by selling other assets?

Q10D. using insurance?

Q10E. with government assistance?

Q10F. or are you currently uncertain about how you would pay?

Q11A. What community do you live in?

1 HAYS  
2 NOT HAYS  
9 DK/RA

Q11B. Would you consider moving to Hays to live in senior citizen housing?

1 YES

2 NO  
9 DK/RA

Now I'm going to ask you some questions about your current housing situation.

Q12A. Including yourself, how many people live in your household?

Q12B. How many bedrooms does your home have?

Q12C. How many bathrooms does your home have? [enter as 1.5 if 1 1/2]

Q12D. If you have made modifications to your home to increase accessibility what are they?

Q12E. How many years have you lived in your community?

Q12F. Do you own your home, do you rent, or do you live in an elderly care facility?

1 RENT                      3 ELDERLY CARE FACILITY  
2 OWN                        9 [REFUSED ANSWER]

Q12G. If you were going to sell your house, how much do you think you could sell your home for?

Q12H. Do you have a fixed mortgage, an adjustable mortgage, or do you currently not have mortgage on your home?

1 FIXED  
2 ADJUSTABLE  
3 NO MORTGAGE  
9 [REFUSED ANSWER]

Q12I. Just a few more questions before we conclude. What year were you born?

Q12J. Was your total family income for last year above or below \$30,000?

[IF BELOW \$30,000, READ FOLLOWING]  
1 Was it less than \$10,000  
2 between \$10,000 and \$20,000  
3 or between \$20,000 and \$30,000?  
[IF ABOVE \$30,000 READ FOLLOWING]

- 4 Was it between \$30,000 and \$40,000
- 5 between \$40,000 and \$50,000
- 6 between \$50,000 and \$60,000
- 7 between \$60,000 and \$70,000
- 8 or was it over \$70,000?
- 9 DK/RA

Thank you very much for your participation in this study.  
[HANG UP]

Q12K. Gender

- 1 Male
- 2 Female