

# The Senior Living Property Sector: How is it Perceived by the Institutional Investor?

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**Executive Summary.** *The senior living and long-term care property sector has expanded in response to changing demographics and the increased needs of an overall aging population. As the population of baby boomers reaches retirement age and moves into the "sunshine" years, the demand for real estate products designed with elderly end users in mind is growing, and the risk / return profiles of these investments are shifting. The aim of this research is to shed light on the perceived risks and returns associated with the specific types of investments available in the seniors housing real estate sector. We queried members of the Pension Real Estate Association to determine how they view this property sector compared with alternative real estate investments, as well as more traditional institutional investments, such as stocks and bonds. We found that they do not appear to be investing in most of the seniors housing product available, as they perceive it to have relatively high risk, and they do not perceive the returns to be high compared to more traditional real estate investments or alternative investments like international real estate.*

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The seniors housing industry is one of the largest and most complex industries in the United States. The industry is fragmented by geographic region and type of senior living facility. The National Investment Center for the Seniors Housing and Care Industry's 2004 *Update to the Size, Scope, and Performance of the Seniors Housing & Care Industry* estimated that there are 33,000 market rate professionally managed properties (independent living, assisted living, nursing homes, and continuing care retirement communities) with a capacity to hold 3,675,000 seniors. Of these, independent living units represent 19% (600,000), assisted living units 17% (625,000), nursing home beds 46% (1.7 million), and continuing care retirement communities beds/units 18% (650,000) of the total (Exhibit 1).

Most seniors housing literature discusses four distinct property types:

- **Independent Living Facilities.** Independent living facilities (ILFs) are for seniors who are still able to enjoy many benefits of an active, independent lifestyle and who are trading the responsibility of home ownership and maintenance for a range of social, educational, and leisure activities. Meal plans, limited transportation services, and organized activities are common.
- **Assisted Living Facilities.** Assisted living facilities (ASFs) provide combinations of housing, supportive services, and health care to meet the needs of seniors with certain activities of daily living. Safe, secure

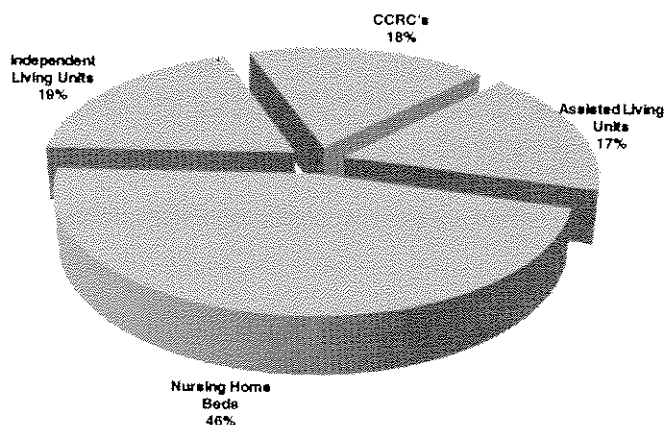
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### Exhibit 1 Seniors Housing Property Types



Source: NIC, *Size, Scope and Performance of the Seniors Housing & Care Industry*, 2004 Update.

places are designed for increasingly aging and dependent residents, while maintaining privacy and lifestyle preferences. Personal care professionals help residents manage basic daily activities and offer a wide array of fitness and cultural activities.

- **Skilled Nursing Facilities.** Skilled nursing facilities (SNFs) are designed for people who require medical, rehabilitative, or restorative care. Some communities offer individual or family counseling, physical or respiration therapies, post-hospital and surgical care, restorative care, and coordination of care services. Residents live in single or shared rooms, but share community rooms for planned daily activities, social events, and dining.
- **Continuing Care Retirement Communities.** Continuing care retirement communities (CCRCs) allow seniors to “age in place,” with flexible accommodations designed to meet health and housing needs as they change over time. Many seniors enter into CCRC contracts while they are healthy and active, knowing they will be able to stay in the same community and receive health care throughout the aging process.

Other facilities, such as hospice and Alzheimer’s units, provide care for specific needs. Hybrid independent living/assisted living and assisted

living/Alzheimer’s facilities offer alternative care programs at single locations. Additional options include age-restricted developments for active adults over 55 and naturally occurring retirement communities (NORCs). There has been recent growth in home health services offered by public agencies or private companies that bring services to aging adults, and adult day care facilities serve about 400,000 elderly U.S. residents nationwide (Kaiser Foundation, 2008). This study will focus on age-restricted communities, independent living, assisted living, and skilled nursing. Given the focus on income-generating assets and long-term investment horizon, these are the most likely candidates for investment by the institutional investment community.

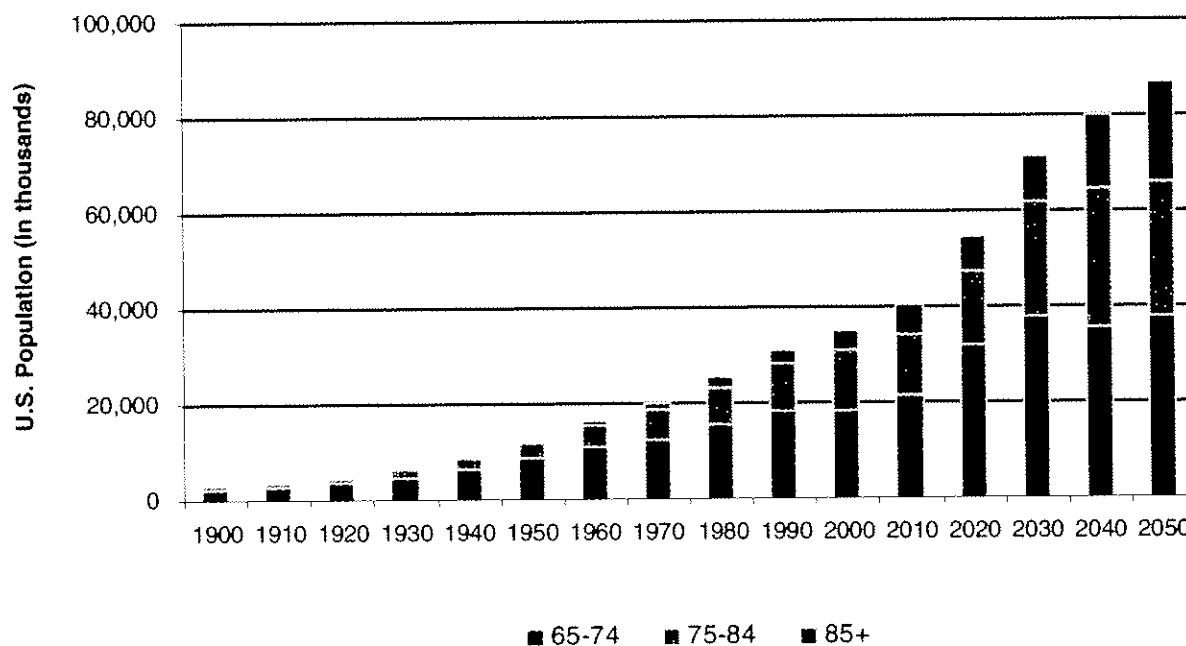
Several demographic trends are expected to supersede the traditional business cycle and create need-based demand for ILFs, ASFs, and SNFs.

As detailed in Exhibit 2, the U.S. Census Bureau has projected that the population over age 65 will increase from 35.0 million in 2000 to over 86.7 million people by 2050, and the population over the age of 85 will increase from 4.2 million in 2000 to 20.9 million people in the same period. Exhibit 3 shows the percentage of people over the age of 65 and 85 years old as a percentage of the entire U.S. population. As people age, they develop needs for help with daily living activities and the assistance provided by various senior living facilities.

Over the last several decades, an increasing percentage of women in the workforce, increased rate of divorce, smaller family size, and job mobility have combined to make traditional arrangements of family care, where aging relatives move in with adult children, more difficult and less common. The demand for alternative models of senior care has increased, and the trend is unlikely to change in the foreseeable future.

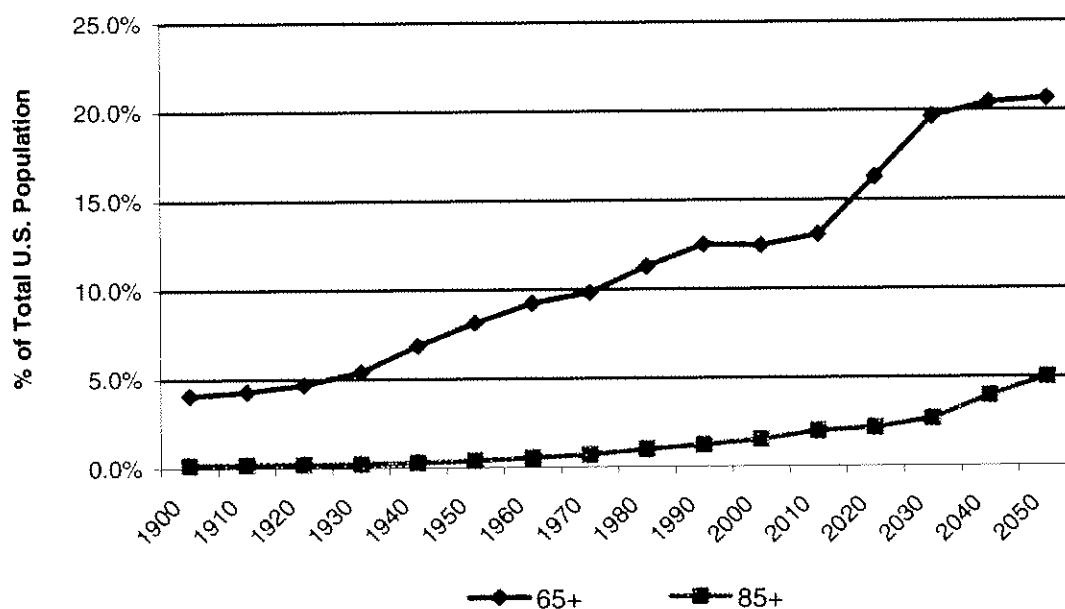
While residents in ILFs generally pay rent for use of the housing and its amenities, reimbursements from Medicare and Medicaid programs frequently support services at ALFs and SNFs. Medicare is a federal program that provides certain hospital and medical insurance benefits to persons age 65 and over and services to disabled persons and persons

**Exhibit 2**  
**U.S. Population by Age**



Source: U.S. Bureau of Census.

**Exhibit 3**  
**Percentage of U.S. Population Over the Ages of 65 and 85**



Source: U.S. Bureau of Census.

with end-stage renal disease. Medicaid is a medical assistance program jointly funded by federal and state governments and administered by each state's determination of which benefits will be made available to elderly residents and who are defined as eligible indigent citizens. The Medicare and Medicaid statutory framework is subject to administrative rulings, interpretations, and discretion that affect the amount and timing of reimbursements to ALFs participating in the program and to SNFs, making the income streams associated with these assets complex and uncertain.

In an effort to reduce spending on healthcare, the federal government enacted the Balanced Budget Act in 1997. The Act changed Medicare reimbursement for nursing home care from an audited cost basis to a prospective payment system where payments are based on a set number of related resource utilization groups ("rugs") representing government-estimated costs of treating specified medical conditions. The Medicare prospective payment program was implemented on July 1, 1998. Throughout 1998 and 1999, Medicare reimbursements paid to senior living facilities decreased dramatically for many owners, primarily the larger publicly traded multi-facility owners, leading to a financial crisis for many companies within the seniors housing industry. The publicly-traded nursing home companies either went bankrupt or fell under severe financial stress. According to industry consultants interviewed for this study, investments in senior living facilities performed poorly, and many lenders and equity investors exited the senior care business.

The federal government modified the original act, reversing many of its original provisions and making changes that are beneficial to the industry. Over the last five years, cost structures have been established to account for the Balanced Budget Act, and today, more lucrative reimbursements are available to seniors housing owners and operators. As more stability has been established, credit quality and investment opportunities have improved. Since early 2000, interest in investing in ASLs and SNFs has rebounded.

The aim of this project is to examine the relative perceived risks and returns associated with alternative types of seniors housing and long-term care

properties from the institutional investment community. The authors conducted a survey of members of the pension fund industry that are currently investing in real estate to determine relative risk and return perceptions of the seniors housing investment alternatives in comparison with more traditional real estate investments as well as other asset classes. Because the characteristics of the different types of seniors housing are similar to other real estate investments and the demand for senior-related real estate should be growing, investments in seniors housing should become an attractive alternative for institutional investors.

## Literature Review and Sources of Data

Various studies have attempted to promote investment in the industry. The most referenced are the studies completed by National Investment Center for the Seniors Housing and Care Industry (NIC) in conjunction with numerous academics (see Mueller, Anikeeff, and Laposa, 1997; Laposa and Singer, 1999; NIC, 2001a; 2004). In addition, there have been numerous studies focused on the supply and demand of seniors housing (Doctrow, Mueller, and Craig, 1999; Tessier and Mueller, 1999; and Anikeeff and Mueller, 2000) as well as several resource books written on the industry, including an excellent resource guide by NIC and the ProMatura Group for the Seniors Housing and Care Industries (2001b), several focused on the assisted living sector (Pearce 1998, 2007; and Moore, 2001) or the development of seniors housing (Suchman, et al., 2001; and Brecht, 2002), and there are two information packets with a collection of materials on the assisted living and the active adult retirement communities (ULI, 2006a and b). See also Mace and Srivastava (2007) for a short primer on the seniors housing asset class.

There are also frequent surveys on the industry. Many are used in this study to help define the risks and returns associated with investing in the seniors housing asset class. These include the following:

- *The State of Senior Housing Survey and the Overview of Assisted Living* produced by

the American Seniors Housing Association (ASHA).

- *Seniors Housing Investment and Transaction Report* produced by the American Senior Housing Association.
- *NIC Trends 1999–2007* by the National Investment Center for the Seniors Housing and Care Industry (NIC).
- *Seniors Housing Construction Trends Report* produced by NIC and ASHA.
- *Seniors Housing Investment Survey* from 1994–2007 produced by Michael Boehm of Senior Living Valuation Services.
- *2003 Lenders Survey* produced by NIC and the CBIZ Valuation Group. This publication contains the results of two surveys: the Lender Survey of Preferences in Financing Senior Housing and Long Term Care Projects and the Senior Living and Long Term Care (Equity) Investor Survey.

Private and public companies that service the seniors housing industry also conduct industry reports and trend analysis. The following firms' publications have been used to help frame the discussion found in this study.

- Marcus & Millichap (2007a and b, 2005, 2006a and b).
- Cushman Wakefield (2005).
- Legg Mason Wood Walker, Inc. (2005) and Stifel and Nichols (2006, 2007), who focus on the public market and report on the performance of REITs invested in seniors housing, including operating companies for seniors housing.
- C.B. Richard Ellis (2006).

In addition, there have been several academic studies focused on the awareness, attitudes, and perceptions of seniors toward seniors housing. These studies are survey based and focus on the user/tenant. For example, Gibler, Lumpkin, and Moschis (1997) found that many seniors are unaware of the alternative product types available. They think a nursing home is their primary option outside of aging in place and they have a very negative opinion of that alternative. In 1998, these

same authors studied the decision-making process of moving to seniors housing and found that although the decision is primarily made by the seniors, their children as well as medical professionals helped them to make the decision to enter seniors housing (Gibler, Lumpkin, and Moschis, 1998). Family members and medical professionals were more involved in decisions to move to housing with higher levels of care. In 2003, Gibler focused on the lower income constituent and subsidized housing finding the current service levels insufficient to fulfill the needs of the aging subsidized housing residents in the inner cities (Gibler, 2003). Finally, Lee and Gibler (2004) completed a survey of seniors that were planning to live in retirement housing and found that these individuals tended to be wealthier and healthier. They were interested in housing that provided personal care, home care, social, and security services.

A few studies have focused on the performance of the companies involved in the seniors housing industry, typically comparing investments in seniors housing with the performance of other asset classes. Laposa and Singer (1999) compare the size and scope of seniors housing to alternative investments in the lodging and apartment industries in the late 1990s. They conclude that seniors housing compares favorably on many different dimensions and should be considered seriously by the institutional investment community. Mueller and Anikeeff (2001) examine the performance of six REIT types including seniors housing and analyze how the inclusion of operating business affects the risk and return characteristic of the alternative REITs. They find that the REITs that have more operational income (hotels and retail) rather than just rental income are more volatile than those that do not (industrial and office), with seniors housing and health care REITs being the exception. This aberration is explained by the fact that in seniors housing, rental revenues are often collected separately from the revenues generated by services. Terris and Meyer (1995) focus on the correlation between the healthcare REITs and the health care companies and found that there is a significant correlation between the performances of these two investment types.

In a more recent study, Eichholtz, Kok, and Wolnicki (2007) compared the performance of these

two assets as well as healthcare REITs and seniors housing operating companies from 1996 to 2005. Their analysis focused on the type of seniors housing owned by the companies. They found that the healthcare-based REITs outperformed seniors housing operating companies if the product held by the company was less service intensive, such as independent living. As the needs for services increased, these researchers found the fully integrated operating companies tended to outperform the healthcare REITs.

The current study extends the existing literature as it breaks down the perceived risks and returns associated with the seniors housing asset class on a property-specific basis. We go to the institutional investment community to ask for their perception of the risk/return associated with making investments in 21 different types of real estate including direct and indirect investments in the seniors housing marketplace.

## Survey of the Institutional Investment Community

### Research Design

To ascertain the current risk and return perceptions of the institutional investment community toward alternative investments including seniors housing, a survey was conducted of the plan sponsor members of the Pension Real Estate Association (PREA). This organization has a significant number of members that are vendors to the pension fund community, but this study focuses on the smaller group of investors that are employed by the pension fund community. The intent is to examine the attitudes and perceptions of the risk and return levels of alternative investments, extending Worzala, Sirmans, and Zietz (2000) to include the sub sectors of the seniors housing marketplace.

The survey was conducted by email using SurveyMonkey. The 2005–2006 and 2007–2008 PREA directories were used to create the email lists. A total of 46 usable surveys were returned from a total of 304 individuals receiving the survey, for a response rate of 15%. This relatively low response rate is not surprising given the busy lives

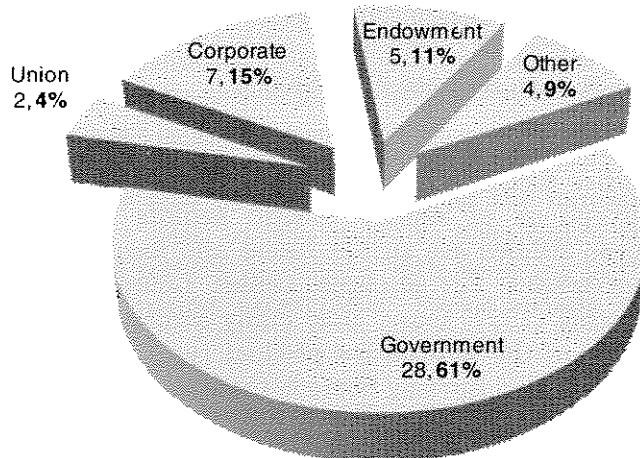
of pension fund executives that are currently investing in the real estate sector.

## Results

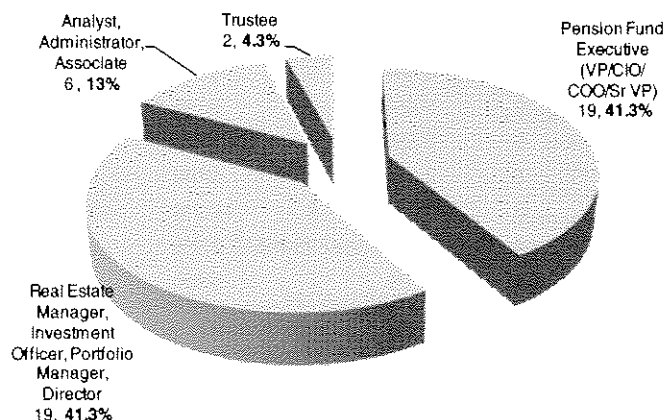
As illustrated in Exhibit 4, the vast majority of respondents were representatives from government pension funds (61% or 28 funds), with the corporate funds making up just over 15% of the sample. The unions, endowments, and foundations were not nearly as well represented. Respondents were predominantly from the larger pension funds, with 85% of the responses coming from the larger pension funds that have investment portfolios greater than \$5 billion. By job title, the respondents were primarily executives of the pension plans. As detailed in Exhibit 5, 41% of the respondents held the job title of a pension fund executive (VP, CIO, COO, or Sr. VP), and 41% held a slightly lower title but were in charge of the real estate investments (real estate manager, director, investment officer, or portfolio manager).

To ascertain the types of decisions that the pension fund investors made, respondents were asked if they were responsible for the decision, played an advisory role, or were not responsible for the investment decisions—first, as they related to the investment alternatives found in a mixed-asset portfolio (stocks, bonds, and real estate) and second, as

**Exhibit 4**  
**Number and Percentage of Plan Sponsor**  
**Survey Respondents by Type of Fund**  
(*n* = 46)



**Exhibit 5**  
**Respondent's Current Job Title**  
 (n = 46)



their investment decisions related to the real estate portfolio of the pension plan, endowment, or foundation. Exhibit 6 details the responses to this question and points out that the majority of the respondents were responsible for the real estate investments rather than the other asset classes. Only 5% reported they were involved directly in the mixed-asset portfolio investment decisions although slightly more than one-fourth (28%) played an advisory role, while 68% said they played no part in these investment decisions. The respondents were close to investment decisions regarding the real estate portfolio, with 66% indicating they were responsible for the asset allocation decisions, and only 7% indicating the decisions were something with which they were not involved.

Given the uncertainty in the investment community of how direct and indirect real estate decisions

were made, respondents were also asked if they actively assisted in these allocation decisions. Clearly, they are actively involved with these decisions, with more of the respondents claiming direct responsibility for the indirect real estate investments than the direct real estate investments. In both cases, about 25% had an advisory only role, but 70% of the respondents were directly responsible for indirect real estate decisions, while only 53% were directly responsible for making direct real estate investment decisions. This could be due to the fact that many pension funds delegate investment decisions for direct real estate investments to their advisory firms in the form of sole discretion for separate accounts, or it is representative of the shift towards pension funds holding real estate as an indirect vehicle, striving for the liquidity and transparency that is often associated with the REIT investment alternative. This is certainly an area for future research.

Not only is there a debate in the pension plan community about how decisions are made, but there is also a split in terms of how real estate-related investments are accounted for in a portfolio. As illustrated in Exhibit 7, private REITs, real estate operating companies, and joint ventures in real estate are typically accounted for in the real estate portfolio. However, in some cases, public REITs are considered real estate (74%), but in other portfolios they are counted as equities in the mixed-asset portfolio (30%). Operating companies are also split, with some funds accounting for these investments as real estate, and others considering them as components of the equities portfolio. Also, mortgages and commercial mortgage-backed securities are

**Exhibit 6**  
**Responsibility of Respondents toward Investment Decisions**

| Real Estate Investment Alternative  | I Advise Only |       | I Am Responsible for Making These |       | I Am Not Responsible For |       | Response Count |
|---|---------------|-------|-----------------------------------|-------|--------------------------|-------|----------------|
| Mixed asset investment decisions (stocks, bonds, real estate)             | 11            | 27.5% | 2                                 | 5.0%  | 27                       | 67.5% | 40             |
| Within the property asset class investment decisions                      | 11            | 26.8% | 27                                | 65.9% | 3                        | 7.3%  | 41             |
| Specific investment decisions for a given indirect real estate investment | 11            | 26.8% | 29                                | 70.7% | 1                        | 2.4%  | 41             |
| Specific investment decisions for a given direct real estate investment   | 10            | 25.6% | 21                                | 53.8% | 8                        | 20.5% | 39             |



### Exhibit 7

#### Accounting for Real Estate Investments in Mixed Asset Portfolios

| Investment Alternatives         | Real Estate Portfolio |       | Equities Portfolio |       | Fixed Income Portfolio |       | Not Sure Which Portfolio |       | Response Count |
|---------------------------------|-----------------------|-------|--------------------|-------|------------------------|-------|--------------------------|-------|----------------|
| Private REITs                   | 36                    | 97.3% | 2                  | 5.4%  | 0                      | 0.0%  | 0                        | 0.0%  | 37             |
| Real estate operating companies | 36                    | 97.3% | 2                  | 5.4%  | 0                      | 0.0%  | 0                        | 0.0%  | 37             |
| Joint ventures in real estate   | 33                    | 97.1% | 0                  | 0.0%  | 0                      | 0.0%  | 1                        | 2.9%  | 34             |
| Public REITs                    | 29                    | 74.4% | 12                 | 30.8% | 1                      | 2.6%  | 0                        | 0.0%  | 39             |
| Operating companies             | 21                    | 63.6% | 8                  | 24.2% | 0                      | 0.0%  | 6                        | 18.2% | 33             |
| Mortgages                       | 18                    | 52.9% | 0                  | 0.0%  | 19                     | 55.9% | 1                        | 2.9%  | 34             |
| CMBSs                           | 14                    | 38.9% | 0                  | 0.0%  | 25                     | 69.4% | 2                        | 5.6%  | 36             |

Note: In some cases respondents chose two or more categories for the investments so percentages will not add to 100%.

not always accounted for similarly, with some investors considering them as fixed income securities rather than real estate investments. Mortgages were slightly more likely to be considered real estate (52%), while the CMBSs were more likely to be accounted for as fixed income (69%).

Another series of questions was asked to determine what real estate investment alternatives the responding pension plans are currently holding, looking to hold, or not at all interested in holding. The responses to these questions are detailed in Exhibit 8, and it appears that, at present, the seniors housing alternatives are not significant holdings of pension fund investors. Indirect seniors housing, both independent living and assisted living, were the most common subsectors of seniors housing to be held in a real estate portfolio, but only slightly more than half of the respondents held these investment alternatives. Somewhat less than a third held age-restricted apartments, while the remaining seniors housing alternatives are not presently held in most pension fund portfolios.

When queried about looking to invest in the real estate investment alternative, respondents placed seniors housing at the bottom of the list. The only non-seniors housing in the bottom 10 property types were direct hotel investments and direct international real estate investments. The desire to follow global trends is reflected in Panel B of Exhibit 8, as 37% of the respondents indicated they were currently looking to add indirect international real estate investments to their portfolios.

The top seniors housing investment alternatives on the "likely to invest" list were the indirect independent living investment and age-restricted apartments, where 16% (or six pension funds) were contemplating adding these two investment alternatives.

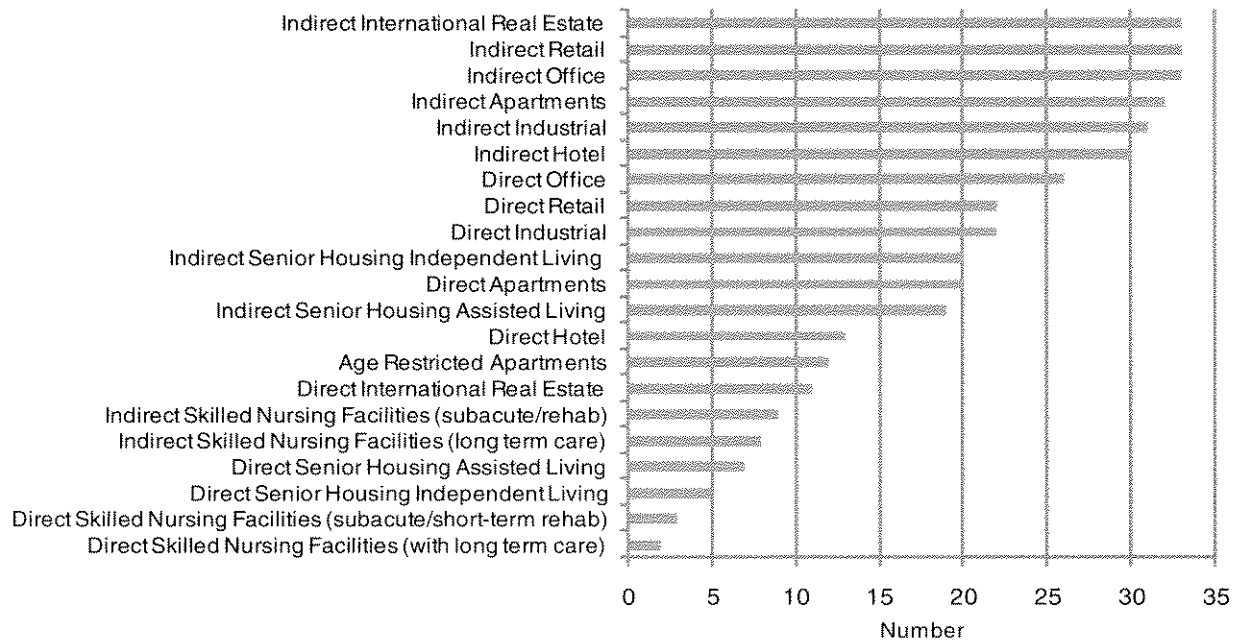
Panel C of Exhibit 8 asks the question one more time to determine which investments pension funds are currently considering. Apparently, most seniors housing investment alternatives are not on the radar screen for the pension plans that responded to this survey. Close to 90% of the respondents placed SNFs high on their list of no interest. Once again, direct hotels and direct international investments were the only two non-seniors housing investment alternatives on the top of the "not at all interested" list. This indicates that the investment community, at least as far as the pension community is concerned, does not intend to be active in the seniors housing marketplace without a significant amount of education from the seniors housing investment community.

Finally, a series of questions were asked to determine the perceived risk and return levels for alternative investments available to today's pension fund investors. First, respondents were asked to apply a Likert scale of 1–5 to rate the relative risk and return of investing in the more traditional asset classes (stocks, bonds, and real estate). Exhibit 9 details the mean ratings as well as the responses by grouping responses with 4 and 5 as higher risk, 3 as moderate risk, and 1 and 2 as lower risk.



# Exhibit 8

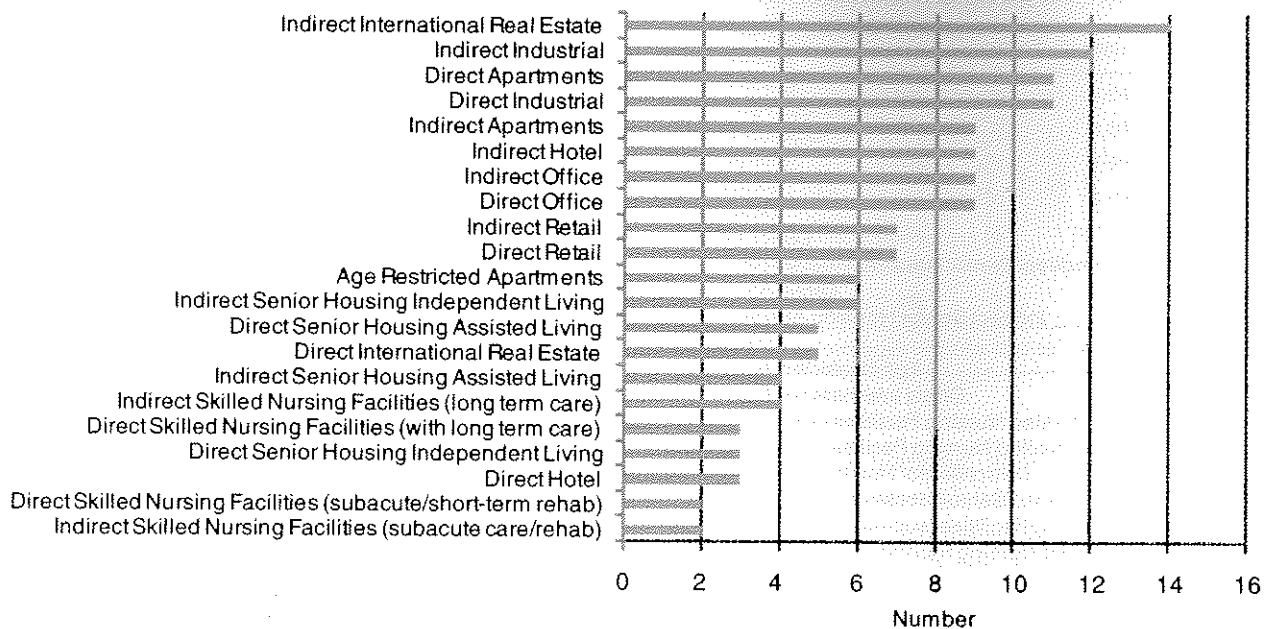
## Panel A: Number of Respondents Currently Holding the Real Estate Investment Alternative



| Real Estate Investment Alternatives  | Currently Hold | Response Percent | Response Count |
|--|----------------|------------------|----------------|
| Indirect Office  | 33             | 89.2%            | 41             |
| Indirect Retail  | 33             | 89.2%            | 40             |
| Indirect International Real Estate Investments   | 33             | 89.2%            | 40             |
| Indirect Apartments  | 32             | 86.5%            | 41             |
| Indirect Industrial  | 31             | 83.8%            | 40             |
| Indirect Hotel   | 30             | 81.1%            | 40             |
| Direct Office  | 26             | 70.3%            | 37             |
| Direct Industrial  | 22             | 59.5%            | 37             |
| Direct Retail  | 22             | 59.5%            | 37             |
| Direct Apartments  | 20             | 54.1%            | 36             |
| Indirect Senior Housing Independent Living (with congregate dining and other services) | 20             | 54.1%            | 38             |
| Indirect Senior Housing Assisted Living  | 19             | 51.4%            | 38             |
| Direct Hotel   | 13             | 35.1%            | 37             |
| Age Restricted Apartments  | 12             | 32.4%            | 35             |
| Direct International Real Estate Investments   | 11             | 29.7%            | 36             |
| Indirect Skilled Nursing Facilities (primarily with subacute care/short-term rehab)    | 9              | 24.3%            | 36             |
| Indirect Skilled Nursing Facilities (primarily with long-term care)                    | 8              | 21.6%            | 37             |
| Direct Senior Housing Assisted Living  | 7              | 18.9%            | 36             |
| Direct Senior Housing Independent Living (with congregate dining and other services)   | 5              | 13.5%            | 36             |
| Direct Skilled Nursing Facilities (primarily with subacute care/short-term rehab)      | 3              | 8.1%             | 36             |
| Direct Skilled Nursing Facilities (primarily with long-term care)                      | 2              | 5.4%             | 37             |

**Exhibit 8 (continued)**

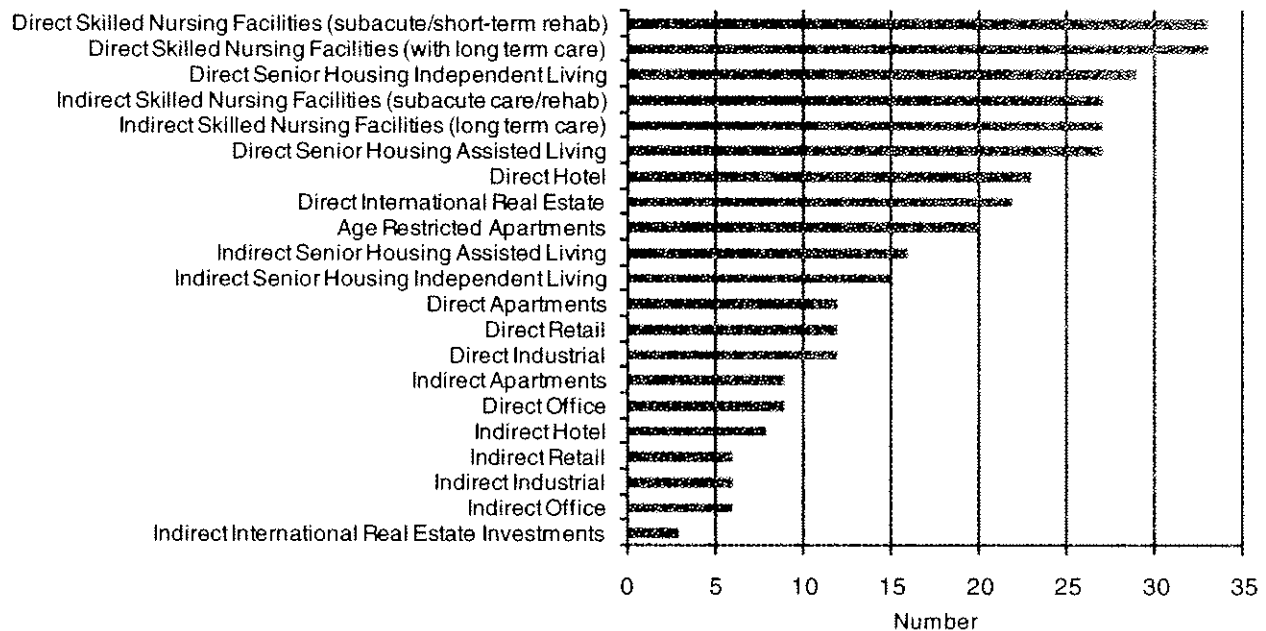
**Panel B: Number of Respondents Looking to Add the Real Estate Investment Alternative**



| Real Estate Investment Alternatives  | Currently Hold | Response Percent | Response Count |
|--|----------------|------------------|----------------|
| Indirect International Real Estate Investments   | 14             | 37.8%            | 40             |
| Indirect Industrial  | 12             | 32.4%            | 40             |
| Direct Industrial  | 11             | 29.7%            | 37             |
| Direct Apartments  | 11             | 29.7%            | 36             |
| Direct Office  | 9              | 24.3%            | 37             |
| Indirect Office  | 9              | 24.3%            | 41             |
| Indirect Hotel   | 9              | 24.3%            | 40             |
| Indirect Apartments  | 9              | 24.3%            | 41             |
| Direct Retail  | 7              | 18.9%            | 37             |
| Indirect Retail  | 7              | 18.9%            | 40             |
| Direct Senior Housing Independent Living (with congregate dining and other services)   | 3              | 8.1%             | 36             |
| Indirect Senior Housing Independent Living (with congregate dining and other services) | 6              | 16.2%            | 38             |
| Age Restricted Apartments  | 6              | 16.2%            | 35             |
| Direct International Real Estate Investments   | 5              | 13.5%            | 36             |
| Direct Senior Housing Assisted Living  | 5              | 13.5%            | 36             |
| Indirect Skilled Nursing Facilities (primarily with long-term care)                    | 4              | 10.8%            | 37             |
| Indirect Senior Housing Assisted Living  | 4              | 10.8%            | 38             |
| Direct Hotel   | 3              | 8.1%             | 37             |
| Direct Skilled Nursing Facilities (primarily with long-term care)                      | 3              | 8.1%             | 37             |
| Indirect Skilled Nursing Facilities (primarily with subacute care/short-term rehab)    | 2              | 5.4%             | 36             |
| Direct Skilled Nursing Facilities (primarily with subacute care/short-term rehab)      | 2              | 5.4%             | 36             |

### Exhibit 8 (continued)

#### Panel C: Number of Respondents Not Interested in Holding the Real Estate Alternative



| Real Estate Investment Alternatives  | Currently Hold | Response Percent | Response Count |
|--|----------------|------------------|----------------|
| Direct Skilled Nursing Facilities (primarily with long-term care)                      | 33             | 89.2%            | 37             |
| Direct Skilled Nursing Facilities (primarily with subacute care/short-term rehab)      | 33             | 89.2%            | 36             |
| Direct Senior Housing Independent Living (with congregate dining and other services)   | 29             | 78.4%            | 36             |
| Direct Senior Housing Assisted Living  | 27             | 73.0%            | 36             |
| Indirect Skilled Nursing Facilities (primarily with long-term care)                    | 27             | 73.0%            | 37             |
| Indirect Skilled Nursing Facilities (primarily with subacute care/short-term rehab)    | 27             | 73.0%            | 36             |
| Direct Hotel   | 23             | 62.2%            | 37             |
| Direct International Real Estate Investments   | 22             | 59.5%            | 36             |
| Age Restricted Apartments  | 20             | 54.1%            | 35             |
| Indirect Senior Housing Assisted Living  | 16             | 43.2%            | 38             |
| Indirect Senior Housing Independent Living (with congregate dining and other services) | 15             | 40.5%            | 38             |
| Direct Industrial  | 12             | 32.4%            | 37             |
| Direct Retail  | 12             | 32.4%            | 37             |
| Direct Apartments  | 12             | 32.4%            | 36             |
| Direct Office  | 9              | 24.3%            | 37             |
| Indirect Apartments  | 9              | 24.3%            | 41             |
| Indirect Hotel   | 8              | 21.6%            | 40             |
| Indirect Office  | 6              | 16.2%            | 41             |
| Indirect Industrial  | 6              | 16.2%            | 40             |
| Indirect Retail  | 6              | 16.2%            | 40             |
| Indirect International Real Estate Investments   | 3              | 8.1%             | 40             |

### Exhibit 9

#### Investment Alternatives Ranked by Risk and Return Ratings

| Investment Alternatives                | Higher Risk |       | Moderate Risk |       | Lower Risk |       | Unfamiliar with Property Type | Mean Rating | Response Count |
|--|-------------|-------|---------------|-------|------------|-------|-------------------------------|-------------|----------------|
| Panel A: Risk Ratings                  |             |       |               |       |            |       |                               |             |                |
| Venture Capital                        | 22          | 84.6% | 1             | 3.8%  | 0          | 0.0%  | 3                             | 4.83        | 26             |
| International Equities                 | 17          | 65.4% | 5             | 19.2% | 1          | 3.8%  | 3                             | 3.83        | 26             |
| Company Stock                          | 12          | 46.2% | 11            | 42.3% | 0          | 0.0%  | 3                             | 3.61        | 26             |
| U.S. Equities                          | 12          | 46.2% | 12            | 46.2% | 0          | 0.0%  | 2                             | 3.58        | 26             |
| Private REITs                          | 13          | 50.0% | 10            | 38.5% | 3          | 11.5% | 0                             | 3.38        | 26             |
| Public REITs                           | 12          | 46.2% | 12            | 46.2% | 2          | 7.7%  | 0                             | 3.38        | 26             |
| Direct Real Estate                     | 9           | 34.6% | 14            | 53.8% | 3          | 11.5% | 0                             | 3.27        | 26             |
| CMBS                                   | 8           | 30.8% | 14            | 53.8% | 4          | 15.4% | 0                             | 3.23        | 26             |
| U.S. Indexed Funds                     | 8           | 32.0% | 13            | 52.0% | 3          | 12.0% | 1                             | 3.21        | 25             |
| Mutual Funds                           | 6           | 23.1% | 11            | 42.3% | 5          | 19.2% | 4                             | 3.09        | 26             |
| International Bonds                    | 7           | 26.9% | 11            | 42.3% | 5          | 19.2% | 3                             | 3.09        | 26             |
| Mortgages                              | 5           | 19.2% | 10            | 38.5% | 11         | 42.3% | 0                             | 2.77        | 26             |
| Corporate Bonds                        | 2           | 7.7%  | 10            | 38.5% | 12         | 46.2% | 2                             | 2.58        | 26             |
| U.S. Bonds other than Government Bonds | 2           | 7.7%  | 9             | 34.6% | 13         | 50.0% | 2                             | 2.42        | 26             |
| U.S. Government Bonds                  | 0           | 0.0%  | 1             | 3.7%  | 24         | 88.9% | 2                             | 1.20        | 27             |
| Panel B: Return Ratings                |             |       |               |       |            |       |                               |             |                |
| Venture Capital                        | 22          | 84.6% | 1             | 3.8%  | 0          | 0.0%  | 3                             | 4.61        | 26             |
| International Equities                 | 16          | 61.5% | 6             | 23.1% | 0          | 0.0%  | 4                             | 3.82        | 26             |
| Direct Real Estate                     | 10          | 38.5% | 13            | 50.0% | 3          | 11.5% | 0                             | 3.42        | 26             |
| Company Stock                          | 8           | 30.8% | 13            | 50.0% | 1          | 3.8%  | 4                             | 3.36        | 26             |
| Private REITs (Indirect RE)            | 10          | 38.5% | 14            | 53.8% | 2          | 7.7%  | 0                             | 3.35        | 26             |
| U.S. Equities                          | 6           | 23.1% | 17            | 65.4% | 0          | 0.0%  | 3                             | 3.30        | 26             |
| Public REITs (indirect RE)             | 9           | 36.0% | 11            | 44.0% | 5          | 20.0% | 0                             | 3.16        | 25             |
| Mutual Funds                           | 2           | 7.7%  | 19            | 73.1% | 0          | 0.0%  | 5                             | 3.10        | 26             |
| U.S. Indexed Funds                     | 5           | 19.2% | 15            | 57.7% | 3          | 11.5% | 3                             | 3.09        | 26             |
| CMBS                                   | 4           | 16.0% | 10            | 40.0% | 11         | 44.0% | 0                             | 2.76        | 25             |
| Mortgages                              | 3           | 12.0% | 12            | 48.0% | 10         | 40.0% | 0                             | 2.72        | 25             |
| International Bonds                    | 3           | 12.0% | 8             | 32.0% | 11         | 44.0% | 3                             | 2.59        | 25             |
| Corporate Bonds                        | 2           | 7.7%  | 5             | 19.2% | 16         | 61.5% | 3                             | 2.39        | 26             |
| U.S. Bonds other than Government Bonds | 1           | 3.8%  | 5             | 19.2% | 17         | 65.4% | 3                             | 2.22        | 26             |
| U.S. Government Bonds                  | 0           | 0.0%  | 2             | 7.4%  | 22         | 81.5% | 3                             | 1.25        | 27             |

Notes: Respondents used a Likert scale with 5 = high risk and 1 = low risk. Higher Risk combines 4 and 5; Lower Risk combines 1 and 2. Not all respondents rated each alternative so the *n* differs from investment to investment.

Mean risk ratings were not surprising, with venture capital viewed as the most risky of the alternative investments, with 85% of the respondents rating it a 4 or 5 on the Likert scale. This was followed by international equities, company stock, and U.S. equities. Investors found indirect real estate to be more risky than direct real estate investments while CMBS investments were considered slightly less risky. Given the recent turmoil in the financial markets in terms of mortgage-backed securities, these risk levels are likely shifting. Straight mortgages had one of the lower risk ratings (2.77), and these investments were found to

have mean risk rating levels similar to bonds. Panel B of Exhibit 8 details the relative mean return ratings for each investment, and the order of mean return ratings shifts. Venture capital and international equities are still perceived to have the highest mean return ratings, but direct real estate has the third highest mean return rating (3.42), and REIT investments, particularly private REITs, move up on the list.

Exhibit 10 details the responses for investors considering investment alternatives for the real estate portfolio. Respondents appear to associate higher

**Exhibit 10**  
**Alternative Real Estate Investments Risk and Return Ratings**

| Investment Alternatives                                    | Higher Risk |       | Moderate Risk |       | Lower Risk |       | Unfamiliar with Property Type | Mean Rating | Response Count |
|--|-------------|-------|---------------|-------|------------|-------|-------------------------------|-------------|----------------|
| Panel A: Risk Ratings                                      |             |       |               |       |            |       |                               |             |                |
| Licensed Alzheimer's/Dementia Facility                     | 13          | 48.1% | 2             | 7.4%  | 1          | 3.7%  | 11                            | 4.25        | 27             |
| Skilled Nursing Facilities (subacute care/rehab)           | 1           | 3.7%  | 4             | 15.4% | 1          | 3.7%  | 7                             | 4.15        | 27             |
| Hybrid Independent Living and Assisted Living Facilities   | 14          | 53.8% | 2             | 7.7%  | 1          | 3.8%  | 9                             | 4.00        | 26             |
| Skilled Nursing Facilities (primarily with long-term care) | 12          | 46.2% | 4             | 15.4% | 1          | 3.8%  | 9                             | 4.00        | 26             |
| Luxury/Upper Scale Lodging                                 | 18          | 69.2% | 8             | 30.8% | 0          | 0.0%  | 0                             | 3.96        | 26             |
| Private International Real Estate Funds                    | 20          | 76.9% | 6             | 23.1% | 0          | 0.0%  | 0                             | 3.92        | 26             |
| Extended Stay Lodging                                      | 16          | 61.5% | 9             | 34.6% | 0          | 0.0%  | 1                             | 3.92        | 26             |
| Continuing Care Retirement Communities                     | 14          | 53.8% | 5             | 19.2% | 1          | 3.8%  | 6                             | 3.90        | 26             |
| Licensed Assisted Living Facility (stand-alone)            | 12          | 46.2% | 4             | 15.4% | 1          | 3.8%  | 9                             | 3.88        | 26             |
| Health Care Operating Companies                            | 11          | 42.3% | 5             | 19.2% | 1          | 3.8%  | 9                             | 3.88        | 26             |
| Limited Service Lodging                                    | 14          | 53.8% | 8             | 30.8% | 1          | 3.8%  | 3                             | 3.87        | 26             |
| Public International Real Estate Funds                     | 18          | 69.2% | 8             | 30.8% | 0          | 0.0%  | 0                             | 3.85        | 26             |
| Full Service Lodging                                       | 18          | 69.2% | 6             | 23.1% | 1          | 3.8%  | 1                             | 3.84        | 26             |
| Senior Housing Independent Living                          | 12          | 46.2% | 6             | 23.1% | 1          | 3.8%  | 7                             | 3.74        | 26             |
| Real Estate Mortgage Investment Conduits                   | 14          | 53.8% | 6             | 23.1% | 1          | 3.8%  | 5                             | 3.71        | 26             |
| Senior Housing Specialized REITs                           | 13          | 50.0% | 7             | 26.9% | 0          | 0.0%  | 6                             | 3.70        | 26             |
| Suburban Office  | 15          | 57.7% | 11            | 42.3% | 0          | 0.0%  | 0                             | 3.69        | 26             |
| Private Commingled Real Estate Funds                       | 11          | 44.0% | 12            | 48.0% | 1          | 4.0%  | 1                             | 3.58        | 25             |
| Flex R&D   | 12          | 46.2% | 12            | 46.2% | 0          | 0.0%  | 2                             | 3.54        | 26             |
| Strip Mall   | 10          | 38.5% | 14            | 53.8% | 2          | 7.7%  | 0                             | 3.38        | 26             |
| CBD Office   | 9           | 34.6% | 14            | 53.8% | 2          | 7.7%  | 1                             | 3.32        | 26             |
| Age Restricted Apartments                                  | 8           | 30.8% | 10            | 38.5% | 3          | 11.5% | 5                             | 3.29        | 26             |
| Diversified Private REITs                                  | 9           | 34.6% | 13            | 50.0% | 4          | 15.4% | 0                             | 3.23        | 26             |
| Diversified Public REITs                                   | 7           | 26.9% | 15            | 57.7% | 4          | 15.4% | 0                             | 3.12        | 26             |
| Power Retail Center  | 4           | 15.4% | 16            | 61.5% | 6          | 23.1% | 0                             | 3.00        | 26             |
| Apartment Market   | 3           | 11.5% | 16            | 61.5% | 5          | 19.2% | 2                             | 2.96        | 26             |
| Regional Mall  | 4           | 15.4% | 14            | 53.8% | 8          | 30.8% | 0                             | 2.88        | 26             |
| Warehouse Market   | 2           | 7.7%  | 11            | 42.3% | 10         | 38.5% | 3                             | 2.70        | 26             |
| Net Lease Properties                                       | 1           | 3.8%  | 4             | 15.4% | 20         | 76.9% | 1                             | 2.04        | 26             |

risk ratings with a wide range of seniors housing alternatives, as the four highest investment alternative mean risk ratings were attributed to seniors housing, with licensed Alzheimer's/dementia care at the top, followed by skilled nursing facilities (sub acute and rehab), followed by hybrid independent living/assisted living, and finally long-term care SNFs. Similar to the seniors housing alternatives, luxury lodging, private international real estate funds, and extended stay hotels also had higher mean risk ratings. The more traditional real estate investment alternatives were all rated with more moderate risk while regional malls, warehouses, and net properties all had lower mean risk ratings. A lack of knowledge about seniors housing is evidenced by the number of respondents indicating they were not familiar with the property

type. Close to 40% of those who rated the licensed Alzheimer's/dementia facility indicated they were not familiar with the asset class, and most of the seniors housing alternatives had at least six respondents indicating they were not familiar with the investment alternative.

Panel B of Exhibit 10 details the mean return ratings, as well as the responses grouped by higher, moderate, and lower levels for the real estate investments. The order of properties by levels of returns shifts with international real estate (both direct and indirect) and commingled real estate funds moving to the top of the list. All of the seniors housing alternatives were considered to have more moderate returns, ranging from 3.5 for SNFs to 3.26 for age-restricted apartments. These

**Exhibit 10 (continued)**  
**Alternative Real Estate Investments Risk and Return Ratings**

| Investment Alternatives                                    | Higher Risk |       | Moderate Risk |       | Lower Risk |       | Unfamiliar with Property Type | Mean Rating | Response Count |
|--|-------------|-------|---------------|-------|------------|-------|-------------------------------|-------------|----------------|
| Panel B: Return Ratings                                    |             |       |               |       |            |       |                               |             |                |
| Private International Real Estate Funds                    | 19          | 73.1% | 5             | 19.2% | 1          | 3.8%  | 1                             | 4.08        | 26             |
| Public International Real Estate Funds                     | 17          | 68.0% | 7             | 28.0% | 1          | 4.0%  | 0                             | 3.84        | 25             |
| Private Commingled Real Estate Funds                       | 12          | 48.0% | 10            | 40.0% | 1          | 4.0%  | 2                             | 3.65        | 25             |
| Luxury/Upper Scale Lodging                                 | 17          | 65.4% | 6             | 23.1% | 2          | 7.7%  | 1                             | 3.64        | 26             |
| Hybrid Independent Living and Assisted Living Facilities   | 9           | 36.0% | 6             | 24.0% | 1          | 4.0%  | 9                             | 3.56        | 25             |
| Full Service Lodging                                       | 13          | 50.0% | 9             | 34.6% | 2          | 7.7%  | 2                             | 3.54        | 26             |
| Extended Stay Lodging                                      | 13          | 50.0% | 10            | 38.5% | 2          | 7.7%  | 1                             | 3.52        | 26             |
| Skilled Nursing Facilities (subacute care/rehab)           | 9           | 34.6% | 5             | 19.2% | 2          | 7.7%  | 10                            | 3.50        | 26             |
| Health Care Operating Companies                            | 9           | 36.0% | 5             | 20.0% | 3          | 12.0% | 8                             | 3.41        | 25             |
| Skilled Nursing Facilities (primarily with long-term care) | 9           | 34.6% | 4             | 15.4% | 4          | 15.4% | 9                             | 3.41        | 26             |
| Licensed Alzheimer's/Dementia Facility                     | 8           | 30.8% | 5             | 19.2% | 3          | 11.5% | 10                            | 3.38        | 26             |
| Senior Housing Independent Living                          | 7           | 26.9% | 9             | 34.6% | 3          | 11.5% | 7                             | 3.37        | 26             |
| Diversified Private REITs                                  | 11          | 44.0% | 10            | 40.0% | 3          | 12.0% | 1                             | 3.33        | 25             |
| Licensed Assisted Living Facility (stand-alone)            | 8           | 30.8% | 8             | 30.8% | 2          | 7.7%  | 8                             | 3.33        | 26             |
| Continuing Care Retirement Communities                     | 9           | 34.6% | 6             | 23.1% | 3          | 11.5% | 8                             | 3.33        | 26             |
| Senior Housing Specialized REITs                           | 7           | 26.9% | 7             | 26.9% | 3          | 11.5% | 9                             | 3.29        | 26             |
| Age Restricted Apartments                                  | 5           | 20.0% | 13            | 52.0% | 1          | 4.0%  | 6                             | 3.26        | 25             |
| Limited Service Lodging                                    | 10          | 38.5% | 10            | 38.5% | 4          | 15.4% | 2                             | 3.25        | 26             |
| Strip Mall   | 5           | 20.0% | 17            | 68.0% | 3          | 12.0% | 0                             | 3.12        | 25             |
| Suburban Office  | 7           | 28.0% | 14            | 56.0% | 4          | 16.0% | 0                             | 3.12        | 25             |
| CBD Office   | 8           | 32.0% | 11            | 44.0% | 6          | 24.0% | 0                             | 3.08        | 25             |
| Diversified Public REITs                                   | 7           | 26.9% | 14            | 53.8% | 4          | 15.4% | 1                             | 3.08        | 26             |
| Flex R&D   | 5           | 19.2% | 13            | 50.0% | 7          | 26.9% | 1                             | 2.96        | 26             |
| Apartment Market   | 5           | 19.2% | 13            | 50.0% | 6          | 23.1% | 2                             | 2.96        | 26             |
| Real Estate Mortgage Investment Conduits                   | 5           | 20.0% | 9             | 36.0% | 6          | 24.0% | 5                             | 2.95        | 26             |
| Warehouse Market   | 2           | 8.0%  | 13            | 52.0% | 7          | 28.0% | 3                             | 2.82        | 25             |
| Regional Mall  | 4           | 16.0% | 12            | 48.0% | 9          | 36.0% | 0                             | 2.76        | 25             |
| Power Retail Center  | 3           | 12.0% | 14            | 56.0% | 8          | 32.0% | 0                             | 2.76        | 25             |
| Net Lease Properties                                       | 2           | 8.3%  | 5             | 20.8% | 17         | 70.8% | 0                             | 2.21        | 24             |

Notes: Respondents used a Likert scale with 5 = high risk and 1 = low risk. Higher Risk combines 4 and 5; Lower Risk combines 1 and 2. Not all respondents rated each alternative so the *n* differs from investment to investment.

responses indicate why the pension plan investors have not made significant investments in the seniors housing property sector, given that they perceive many of the options to have a lower return relative to the risk associated with the investments. Again, many of the respondents reported lack of familiarity with the seniors housing market, with 10 respondents indicating they were not familiar with SNFs or licensed Alzheimer's/dementia facilities. Indeed, a significant number of respondents had limited familiarity with most of the seniors housing subsectors as investment alternatives.

## Conclusion

This study provides an analysis of three of the four major alternative subsectors of the seniors housing marketplace. As with any real estate investment, the majority of the unique risks are due to the uncertainty associated with the cash flows generated by the investment. As one moves up the risk spectrum for seniors housing, there is more variance because the cash flows are more dependent on the services being offered to the tenants of the investment.

We reported the results of a survey of plan sponsor members of the Pension Real Estate Association. Respondents were asked their perceptions on the risk and return levels associated with the seniors housing sectors in comparison to more traditional real estate investments and to more conventional financial assets, including stocks and bonds. The results of the survey show clearly that members of the pension fund investment community are not currently invested nor are they looking to invest in seniors housing. They rate the risks higher than some of the other more traditional real estate investments but the returns lower than some of the alternative investments that might be considered relatively risky, such as international real estate investments.

We believe this mismatch of risk and return levels is due to a lack of understanding of the seniors housing subsectors and hope this research provides a picture of the market and will allow for a better understanding of the seniors housing investment alternatives. Continued research is needed to expand the data that is available, particularly as it relates to revenues and expenses associated with the various subsectors of the seniors housing market. In addition, a significant number of respondents admitted a lack of familiarity with the investment alternative, thereby providing evidence that NIC's mission to educate the institutional investment community may not be complete. With increased education and data about the performance characteristics of the properties, as well as ways that the risks can be mitigated while holding seniors housing investments, investors will gain a better appreciation for industry. That is, they will realize that many of seniors housing subsectors are not significantly different from assets with which they are already familiar, including apartments and hotel properties. As more investors consider seniors housing, they will give this property type a higher degree of scrutiny and hopefully expand investments, given the ever increasing need for new development as our population continues to age.

## References

American Association of Homes and Services for the Aging. American Seniors Housing Association, Assisted Living Federation of America, National Center for Assisted Living, and

National Investment Center for the Seniors Housing & Care Industries, Inc., *2006 Overview of Assisted Living*, 2006 and *2007 Overview of Assisted Living*, 2007.

American Seniors Housing Association. *Seniors Housing Investment & Transaction Report 2003*. 2003.

—. *Seniors Housing Research Notes*. May 2004.

—. *The State of Seniors Housing 2006*.

Anikeeff, M.A. and G.R. Mueller. Seniors Housing and Long Term Care: Defining the Business. *Seniors Housing & Care Journal* 2000. NIC Seniors Housing and Care Program at Johns Hopkins University, 2000, 8:1, 3–12.

Boehm, M. *Senior Housing Investment Survey*. Volumes 1–14. San Francisco, CA: Senior Living Valuation Services, Inc., 1994–2007.

Brecht, S.B. *Analyzing Seniors Housing Markets*. Washington DC: Urban Land Institute, 2002.

C.B. Richard Ellis. *2006 Senior Housing Market Insight*. San Diego, CA: C.B. Richard Ellis Senior Housing Services Team, 2006.

Cushman and Wakefield Senior Housing Healthcare Industry Group. *Fall 2005 Healthcare Industry Marketbeat*, 2005.

Doctrow, J., G. Mueller, and L. Craig. Survival of the Fittest: Competition, Consolidation and Growth in the Assisted Living Industry. *Journal of Real Estate Portfolio Management*, 1999, 5:3, 225–34.

Eichholtz, P.M., N. Kok, and B.G. Wolnicki. Who Should Own Senior Housing? *Journal of Real Estate Portfolio Management*, 2007, 13:3, 205–17.

Gibler, K.M. Aging Subsidized Housing Residents: A Growing Problem in U.S. Cities. *Journal of Real Estate Research*, 2003, 25:4, 395–420.

Gibler, K.M., J.R. Lumpkin, and G.P. Moschis. Mature Consumer Awareness and Attitudes Toward Retirement Housing and Long-Term Care Alternatives. *Journal of Consumer Affairs*, 1997, 31:1, 113–38.

—. Making the Decision to Move to Retirement Housing. *Journal of Consumer Marketing*, 1998, 15:1, 113–24.

Henry Kaiser Family Foundation. Adult Day Care Increasing in Importance in Elder Care Marketplace. *Kaiser Daily Health Policy Report*, January 10, 2008.

Laposa, S. and H. Singer. *Size, Scope and Performance of the Seniors Housing and Care Industry: A Comparative Study with the Multifamily and Lodging Sectors*. PricewaterhouseCoopers and the National Investment Center for the Seniors Housing and Care Industries, 1999.

Lee, E. and K.M. Gibler. Preferences for Korean Seniors Housing. *Journal of Property Investment and Finance*, 2004, 22:1, 112–35.

Legg Mason Wood Walker, Inc. Private Pay Senior Housing: Rebounding Fundamentals Offer Investment Opportunities. *Equity Research Industry Analysis*, June 2005.

Mace, B.B. and S. Srivastava. Senior Housing in America: A Primer. *PREA Quarterly*, Fall 2007, 54–66.

Marcus & Millichap. Discriminating Investors Seek Opportunity as Senior Housing Matures. *Seniors Housing Research Report*, September 2005.

—. Comparatively High Returns Draw Investors to Seniors Housing. *Seniors Housing Research Report*, Spring 2006a.



- . Investor Pool for Seniors Housing Becoming Broader. *Seniors Housing Research Report*, Fall 2006b.
- . Surging Senior Population Supports Favorable Outlook. *Seniors Housing Research Report*, First Half 2007a.
- . *Real Estate Investment Research 2007 National Apartment Report*, Encino, CA, 2007b.
- Moore, J. *Assisted Living Strategies for Changing Markets: How For-Profits and Not-For-Profits Can Still Prosper While Serving Seniors*. 21<sup>st</sup> Century Senior Life Series, Ft. Worth, TX: Westridge Publishing, 2001.
- Mueller, G. and M. Anikeeff. Real Estate Ownership and Operating Business: Does Combining Them Make Sense for REITs? *Journal of Real Estate Portfolio Management*, 2001, 7: 1, 55–65.
- Mueller, G., M., Anikeeff, and S.P. Laposa. The Investment Case for Senior Living and Long Term Care Properties in an Institutional Real Estate Portfolio. *Seniors Housing. Research Issues in Real Estate*, Volume 4, National Investment Conference for the Senior Housing and Care Industries and American Real Estate Society, Boston, 1997.
- NIC. *Size, Scope and Performance of the Senior Housing and Care Industry: A Comparative Study with the Multifamily and Lodging Sectors, Updated 2004 Data*, 2004.
- NIC and American Seniors Housing Association. *Seniors Housing Construction Trends Report 2006*, 2006.
- NIC and CBIZ Valuation Group. *2003 Lender Survey: Preferences in Financing Senior Housing and Long Term Care Projects*. Annapolis, MD: 2003.
- NIC and PricewaterhouseCoopers. *The Case for Investing in Seniors Housing and Long Term Care Properties with Updated Projections*, 2001a.
- NIC and ProMatura Group. *NIC Resource Guide: A Sourcebook for Evaluating, Underwriting and Financing Seniors Housing & Care Properties*. Second edition, 2001b.
- Pearce, B.W. *A Complete Guide, Senior Living Communities: Operations Management and Marketing for Assisted Living, Congregate, and Continuing-Care Retirement Communities*. Baltimore: The Johns Hopkins Press, 1998.
- . *Senior Living Communities: Operations, Management and Marketing for Assisted Living, Congregate and Congregate Care Retirement Communities*. Baltimore, MD: The Johns Hopkins Press, 2007.
- PREA Directory. Hartford, CT, 2007–2008.
- Stifel and Nicolaus. Little Connection Reported Between Housing Market & Senior Housing. *Health Care Real Estate*, July 2007.
- . Post NAREIT Review of Health are REITs. *Health Care Real Estate*, June 2006.
- Suchman, D., et al. *Developing Active Adult Retirement Communities*. Washington, DC: Urban Land Institute, 2001.
- Terris, D. and F. Myer. The Relationship Between Healthcare REITs and Healthcare Stocks. *Journal of Real Estate Research*, 1995, 10:4, 483–94.
- Tessier, D. and G. Mueller. Trade Area Demand Analysis for Private Pay Assisted Living Facilities. *Journal of Real Estate Portfolio Management*, 1999, 5:3, 275–86.
- Urban Land Institute (ULI). *Assisted Living Congregate Care Info Packet*. Washington, DC, 2006a.
- . *Active Adult Retirement Communities*. Washington, DC, 2006b.
- U.S. Census Bureau, 2000, (www.uscensus.gov).
- Worzala, E., S. Sirmans and E. Zietz. Risk and Return Perceptions of the Institutional Investor. *Journal of Real Estate Portfolio Management*, 2000, 6:2, 153–66.

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