

Senior Housing Comes of Age

A Berkshire Research Viewpoint

JUNE 2019



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EXECUTIVE SUMMARY

- A favorable long-term outlook for senior housing market fundamentals, their low correlation with other property sectors, and a track record of strong risk-adjusted investment returns suggest that the allocation to the senior housing segment in institutional real estate portfolios should be much higher than it is today.
- Advances in healthcare and longer life spans for the U.S. population are contributing to rapid growth among older population cohorts and reshaping the nation's housing and consumption patterns.
- As the share of the older population in the U.S. expands rapidly in the next decade, demand for various types of senior housing is likely to accelerate significantly from the pace of recent years. Growth in the population over the age of 75, the primary driver for senior housing, is expected to more than double over the next decade compared to the last one.
- Despite the recent increases in new senior housing supply, which has led to short-term declines in occupancy and slower rent growth, new supply would still need to increase by at least two thirds of its current pace to meet rapidly increasing demand in the next decade (assuming the current supply/demand ratio, also known as the penetration rate). New development will need to account for the fact that most of the senior housing demand is concentrated at the low and middle ranges of the net worth spectrum.
- Investors must be mindful of risks and opportunities associated with overbuilding over the next 2-3 years—especially in markets and product segments where vacancy rates are already high by historical standards.
- Seniors of tomorrow will be different from seniors of the prior generation not only in terms of their health needs but also in education, wealth, tastes, social interactions, and demands on real estate—especially the Baby Boomer generation. These factors will also influence their choices with respect to what kind of senior housing they want to live in as compared to their predecessors.

- Considering that almost 70 percent of senior housing inventory is over 20 years old, the market will require additional new product as well as the redevelopment of existing inventory to meet rapidly growing senior housing demand, particularly in the low to middle net worth cohorts.
- Senior housing has achieved the highest investment returns with the lowest volatility over the last decade compared to the four major real estate property types and is well positioned to maintain its track record of strong risk-adjusted performance over the long run. Historical changes in pricing and net operating income suggest that senior housing may have lower risk to appreciation relative to other sectors.
- Senior housing investors need to be aware of various risks and challenges facing the industry from the operational perspective. The scope of services provided through senior housing is becoming more complex while costs (including labor, insurance, and taxes) are rising. More seniors are also choosing to age in their homes and, as networks of home care providers continue to grow, they will compete with service-based properties. Moreover, many senior housing properties today are based on the private pay business model, which tends to focus on seniors with higher net worth, a relatively small segment of the age cohort. At the same time, properties that target low and middle net worth cohorts of seniors rely in part on various forms of government reimbursements including Medicare and Medicaid. While the low and middle net worth segments are indeed facing the largest supply shortage, their potential volatility is also likely to be higher.

INTRODUCTION

In an increasingly uncertain and unpredictable world, one source that offers some clarity about the future is demographics. Population in developed countries is aging rapidly, creating new challenges as well as opportunities for the public and private sectors. The United States is in the early phase of a major demographic shift as the generation of over 70 million Baby Boomers (people born between 1946 and 1964) enters its senior years. As in the past, when this group has moved through different stages of life, the transition will have profound implications for the economy, real estate and social norms. Meanwhile, better health and longer life spans for people who are already in their late 60s, 70s, and 80s are contributing to rapid growth in those age cohorts and reshaping the nation's housing and consumption patterns.

One of the key ways for investors to capitalize on these trends is to increase their allocation to assets with demand that is directly driven by the senior population such as different types of rental multifamily, including those offering a wide range of health-related services. The full spectrum of this product, which includes a wide range of operating models from stand-alone active adult apartments to skilled nursing facilities, has an estimated inventory of over 25,000 properties with 3.5 million professionally managed units/beds and a current market value of about \$500 billion. Within this universe, the investment potential of senior housing looks particularly attractive given its track record of strong risk-adjusted returns established over the last decade.

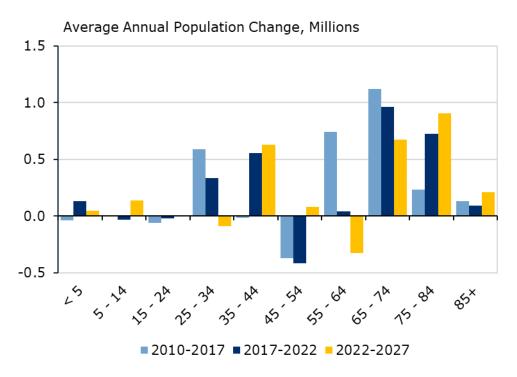
The favorable long-term outlook for senior housing fundamentals combined with resilient investment performance through the current investment cycle makes a compelling case for a much higher allocation to this segment in private institutional real estate portfolios. Based on its estimated market value alone, a fair share of senior housing would be at least five percent of the total in a real estate portfolio—more than five times what it is

today. Additionally, considering that almost half of the existing senior housing inventory is at least 20 years old, the substantial development of new properties and redevelopment of existing ones will be needed to meet the anticipated increase in demand.

THE SILVER TSUNAMI

The aging of the U.S. population is often referred to as a "silver tsunami" due to both magnitude and speed of the demographic wave behind this trend. As the wave grows in the coming decade, the increase in senior housing demand is likely to accelerate significantly from its current pace. It is important to recognize; however, that seniors include multiple cohorts and the age criteria vary widely for different types of products. For example, demand for age-restricted or active adult apartments is typically driven by people in their late 60s and early 70s, while for properties offering various types of health-related services it is typically driven by people in their early 80s. A combination of the rising number of people becoming seniors as Baby Boomers age and a longer life expectancy are prompting a major shift towards housing that is more suitable to their needs, including service-based multifamily housing.

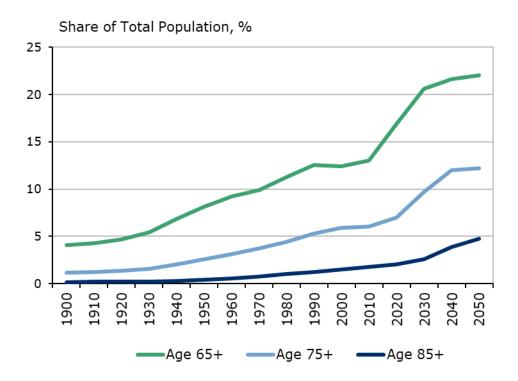
While there are important nuances in projected growth across various age cohorts among the senior population in the U.S. (both over the next five years and beyond), one common theme is that these cohorts will be accounting for an increasing share of the total population for decades to come. Population over the age of 65 is projected to increase from 52.5 million in 2018 to 70.2 million in 2028, an average annual gain of 3.0%, 1.8 million, or almost 80 percent of the net change in the total population. By comparison, this group accounted for less than 20 percent of the net population change over the 2000-2010 period.



Sources: Bureau of the Census, Berkshire Research.

The aging trend will have a two-fold impact on housing—slower overall household growth and change in the quality and composition of demand resulting from a higher share of growth accounted for by seniors. Young and old populations have radically different consumption patterns when it comes to housing. About 80% of households over the age of 65 are owners, and about 80% of households under the age of 25 are renters. Younger households are more likely to be renters and older households are more likely to be owners up until retirement age. At the same time, the number of households 65 and over is so large that even under the

assumption that age-specific homeownership rates for this group remain at their current levels (let alone if they continue to edge lower), seniors will account for the largest share of rental demand growth over the next decade.



Sources: Bureau of the Census, Berkshire Research.

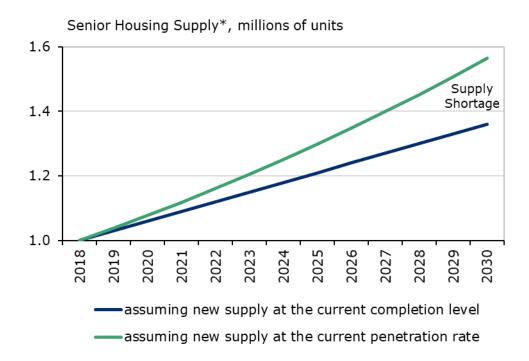
Homeownership rates among households age 65 and over have been dropping steadily over the last five years and are now the lowest since 1995. While about two thirds of seniors have already paid off their mortgages, the hardship of maintaining single-family homes, burden of property taxes, and other recurring costs of homeownership is prompting many to consider multifamily living or specialized housing such as senior housing.

In fact, there could be significant pent-up demand for renting among seniors as some of them are reluctant homeowners who could benefit from using their home equity as a source of cash flow. There are likely two main reasons why relatively few of them are doing so. First, seniors on fixed incomes tend to be risk-averse while rents can be volatile. In contrast, the cost of living in a fully-owned home or a home with a fixed-rate mortgage is relatively stable. The second reason is simply that there is a major shortage of rental multifamily housing that most seniors can afford. Furthermore, as the home-care industry evolves, it makes aging-in-place an increasingly available alternative for the elderly—a trend that should be considered when evaluating demand for healthcare-oriented living options.

Current levels of new construction would need to rise substantially to meet rapidly increasing demand in the coming decades. A significant increase in supply targeting the senior population since 2011 did bring occupancy below historical norms, especially in the assisted living and nursing care properties, but this overbuilding was mild considering projected long-term demand. Lower occupancy is more attributable to the timing of new supply rather than a fundamental change in demand dynamics. In the case of senior housing only (i.e., assisted and independent living) for example, the pace of completions is now averaging about 30,000 units, or 3.0% of the existing inventory, a year nationally. Meanwhile, the target demand for this product, households age 75-84, is expected to grow at a rate of 3.5-4.0% annually through 2030 from the current level of 8.9 million to 13.9 million, creating a substantial supply shortage.

¹ National Investment Center, NORC at the University of Chicago.

To keep the current penetration rate at its current rate of about 11.0% would require that new supply increases by over 50,000 units per year—two thirds higher than it is today and more than twice the historical average level. Understanding the income distribution of future demand as well as variation in market dynamics across various types of product and locations will be crucial for building the right type of product that bridges this wide gap.



^{*} Majority Assisted Living and Majority Independent Living Sources: Bureau of the Census, NIC, Berkshire Research.

Another way to look at this is from a purely demand perspective. Since 2010, the net absorption of senior housing has averaged 17,000 units a year while the population age 75 and over grew by about 400,000 annually. Given that the projected growth in this cohort of about 800,000 per year from 2017 to 2022, and 1.1 million per year from 2022 to 2027, demand growth could average 38,000 and 52,000 units per year for each of those periods, assuming the current penetration rate. New supply would have to expand substantially from its current level just to keep up with demand.

Investors and developers must be mindful of risks and opportunities emerging due to overbuilding over the next 2-3 years—especially in markets and product segments where vacancy rates are already high by historical standards. The reason for this is that a more significant acceleration in growth among households over the age of 75 only starts after 2021 and many markets are already seeing higher levels of new product relative to what they can realistically absorb in the near term. This is a tangible concern in many markets that are currently saturated with new product that was added in recent years.

Understanding real estate fundamentals will be particularly important during this transitory phase to mitigate supply risk at both the local (submarket) and broader market (metro area) level, as well as the demographics of both seniors and their adult children, to determine where age and income qualified demand can support higher levels of new supply.

The main source of qualifying income for seniors are their savings and investments, the equity in their homes, and financial support from their family members. Returns on all of these assets may not be as strong as they have been in the last decade. Furthermore, the ratio of households age 45-64 relative to households age 75 and

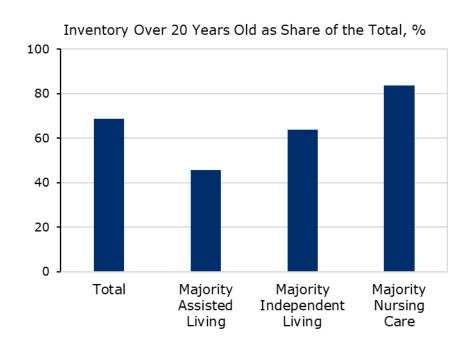
over is expected to drop from over four in the last decade to less than three in the next one, which, on the aggregate, would demand more financial support from the relatively smaller pool of supporting family members.

AGING SUPPLY

The supply side of the market is another key consideration in evaluating long-term prospects for senior housing, particularly the aging of existing inventory. Seniors of tomorrow will be different from seniors of the prior generation not only in terms of their health needs but also education, wealth, and tastes—especially the Baby Boomer generation. It would be reasonable to expect that this will influence their choices with respect to what kind of senior housing amenities will be demanded.

This is likely to create a wide range of opportunities for the development of new properties as well as the redevelopment of existing ones. Much of the future growth in senior housing demand will be accounted for by households with low and moderate net worth who will not have enough financial resources to qualify for senior housing based on a full private pay model. These households would require some form of public support. A careful stratification of senior housing demand within the target market and submarket along with thorough understanding local regulations and policies will be needed to select the right mix of product at competitive prices to achieve the expected returns on investments.

According to the National Investment Center's (NIC) latest estimates, there are 23,500 senior housing properties with over 3.0 million units in the United States.² Almost 70 percent of this inventory (including nursing care) is at least 20 years old. Even within the assisted living (AL) and independent living (IL) segments, which have estimated national inventory of about 1.0 million units and experienced more active development over the last decade, properties that are at least 20 years old account for almost half of the total.



Sources: NIC Map®Data, Berkshire Research

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² NIC Investment Guide, 5th Edition.

Senior housing inventory by age varies widely even across 31 primary markets as defined by NIC, not to mention the rest of the country. As the chart below shows, the share of majority AL and majority IL inventory that is at least 20 years old is over 70 percent in Tampa and Los Angeles and over 65 percent in Miami, Baltimore, San Francisco, and Philadelphia. A combination of aging senior housing inventory and accelerating growth in senior housing demand over the next decade could require much higher levels of new development than currently anticipated.

55 70 75 60 65 Tampa Los Angeles Miami Baltimore San Francisco Philadelphia Orlando Pittsburgh Riverside San Diego Washington Portland Cincinnati Phoenix Cleveland Sacramento Primary Markets

Inventory Over 20 years Old as Share of the Total*, %

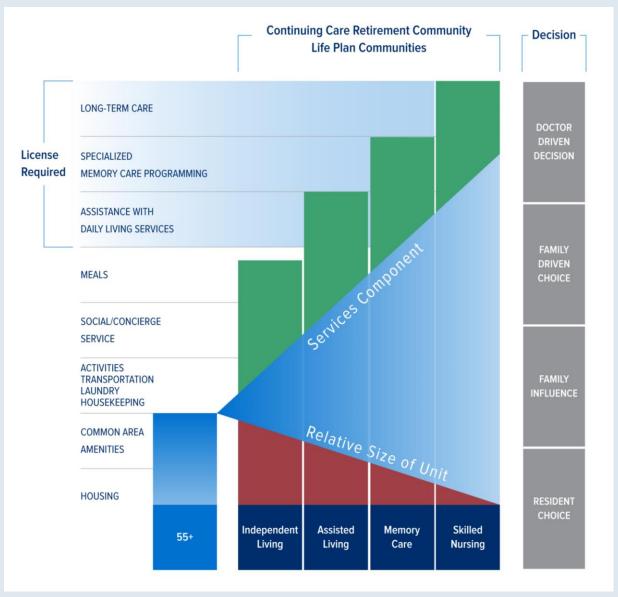
Sources: NIC Map®Data, Berkshire Research.

WHAT IS SENIOR HOUSING?

Broadly defined, senior housing includes five types of residential settings with varying degrees of services and medical care component: active adult communities and senior apartments (for rent and for sale), independent living communities, assisted living communities, skilled nursing facilities, and memory care facilities. As the age of prospective residents increases, so does their demand/need for various types of services, which range from basic tasks such as meal preparation, housekeeping, and transportation, to more specialized forms of individual support, including medical care. In terms of decision making with regards to a household's move from a single-family home or a more traditional apartment or condominium into some type of senior housing, the role played by the family and eventually a doctor also tends to rise with the need for more personalized services.

From an operational standpoint, senior housing is a unique business that combines real estate, hospitality and medical services. The relative importance of a purely real estate component tends to drop, as well as the typical unit size, as the range and complexity of services that are being offered expand. However, the percentage of overall living cost that is covered by various forms of government pay support increases.

Senior Housing Sub-Types

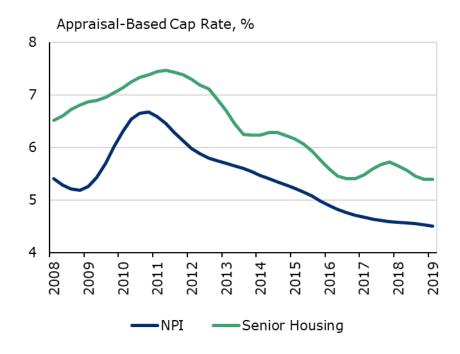


COMPELLING INVESTMENT RETURNS AND PRICING

With favorable demographic trends supporting long-term demand for senior housing, the sector has the potential to maintain the relatively attractive risk-adjusted return profile experienced historically. Based on the data reported by private institutional investors to NCREIF, the senior housing total return over the decade ending in Q1 2019 has averaged 11.7% per year, well above the 8.5% average annual return by the National Property Index (NPI) that captures aggregate performance of the four major property sectors (office, multifamily, industrial, and retail).³

Volatility of returns during this same period was much lower in senior housing relative to the NPI, 5.9% versus 9.1%. In fact, senior housing has achieved higher returns with lower volatility relative to NPI over any 5-, 7-, or 10-year period since 2003, when the sector's investment performance track record starts was introduced by NCREIF. During the Great Recession, the total return index for senior housing declined in just two quarters compared to six for the NPI, with the respective drops of 6.1% and 26.4% over those periods.

Unlike the major property sectors, senior housing performance was far more resilient during the downturn, sustaining growth in demand and property income amid severe contraction in employment and economic output due in part to the need for healthcare services among older population cohorts. Demand for senior housing product such as assisted living or independent living is driven by people who are no longer actively employed and therefore less exposed to the business cycle than other property types. That is not to say that it is immune to economic conditions, as both a senior's ability to generate cash by selling a house at an acceptable price as well as the financial conditions of the adult children who are still in the labor force, can be affected by the broader economy.



Sources: NCREIF, Berkshire Research.

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³ National Council of Real Estate Investment Fiduciaries is a member-driven, not-for-profit association whose mission is to improve private real estate investment industry knowledge by providing transparent and consistent data, performance measurement, analytics, standards and education.

Despite much higher returns and lower return volatility over the last decade, senior housing cap rates have not compressed quite as much as those for the overall NPI or its multifamily segment. Relative to their respective peaks, appraisal-based cap rates for senior housing dropped by 28 percent versus 32 percent for NPI. The current spread between appraisal-based cap rates for senior housing and NPI continues to trail near the 10-year average of about 100 basis points. Meanwhile, recent spreads between transaction-based cap rates for senior housing range from about 100 basis points over office, industrial, and retail to about 200 basis points over traditional multifamily.⁴

Premium should exist as senior housing is a riskier property type due to the operating business component as well as the still relatively short track record of investment performance based on a small number of institutional-grade properties that reported data to NCREIF thus far. While it is not surprising that senior housing cap rates are higher given the greater impact of property operations on returns in this sector, the fact that today's spread is not much different from what it has been historically (150-300 basis points) does suggest potentially lower risk to future appreciation associated with pricing.

The share of appreciation over the last decade that was driven by growth in net operating income rather than cap rate compression was tangibly higher in senior housing, suggesting lower value exposure to a potential cap rate expansion going forward. Given this potential expansion, it would not be surprising to see some compression in cap rate spreads between senior housing and the major property types, including multifamily, over the next few years.

As the demographic composition of the U.S. population shifts towards older age groups, allocations to senior housing in institutional real estate portfolios are likely to follow. As of Q1 2019 there were 122 senior housing properties contributing data to NCREIF compared to 62 a decade ago. While this does reflect a growing acceptance of this property sector by private institutional investors, the market value of these assets is only one percent of the total. Given the compelling return profile of senior housing, low correlation in its fundamentals relative to other property sectors, and the growing market size, there is a case to be made that the optimal allocation to this sector within a diversified real estate portfolio should be much higher than it is today.

CONCLUSION

The U.S. population is aging and growth among seniors over the age of 75 will accelerate in the next decade, boosting demand for various types of senior housing to much higher levels. As a result, the shortfall between today's rates of new supply and what will be needed to meet new demand (holding the current penetration rate constant) is more than twice the level of historical completions—at least for the majority AL and majority IL segments. Additionally, senior housing inventory is also aging rapidly, with more than half of it already over 20 years old. With changing tastes and preferences among the next generation of seniors, there is a risk of functional obsolescence in existing properties and the associated need for new supply beyond the baseline projection.

Despite the favorable long-term outlook for market fundamentals, its low correlation with other property sectors, and a track record of strong risk-adjusted investment returns, senior housing is still significantly underweighted in institutional real estate portfolios today. Considering this, investors should be increasing their allocation to senior housing since the sector's relatively attractive pricing can offer them multiple opportunities even as the real estate cycle matures.

⁴ NCREIF, Real Capital Analytics.

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