SPECIAL ISSUE



A Projection of U.S. Seniors Housing Demand 2015 - 2040

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AMERICAN SENIORS HOUSING

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A Projection of U.S. Seniors Housing Demand 2015–2040

INTRODUCTION

This document will serve as an update to the 2013 ASHA Special Issue Brief *A Projection of Demand for Market Rate Seniors Housing 2010 – 2030* authored by Phil Downey and Larry Rouvelas of Senior Housing Analytics (henceforth referenced as "the 2013 report"). For this update, the research and authorship team has expanded to include Frank Rockwood of Rockwood Pacific. The update incorporates the most current U.S. Census population projections and NIC MAP supply data for the period from 2010 – 2015.

As stated in the 2013 report, a 25-year demand projection is a challenge due to the unique market dynamics of seniors housing. Changing consumer preferences, evolving technologies, changes in government entitlement programs and healthcare policies, and uncertainty about customers' ability to pay are some of the factors that could significantly impact future demand. Because of these and other uncertainties, any long-term projection based on current consumption patterns must be viewed as directional.

SUMMARY

Service enriched senior housing — a category defined to include market rate independent living, assisted living and memory care units — has historically served a segment of the population seeking supportive health care and hospitality services. U.S population over the age of 80 (80+) — the cohort which includes most residents of seniors housing — is projected to increase by 3.4% per year from 2015 to 2040. In 2015, approximately eleven percent of 80+ seniors in the top 99 Metropolitan Statistical Areas (MSA's) lived in market-rate independent or assisted living residences. How will accelerating underlying population growth stimulate demand for seniors housing?

¹ SHA estimate based on population data from the U.S. Census and supply estimates from NIC: Supply of Investment-grade Seniors Housing and Care Properties in the U.S. (www.NIC.org).

Demand estimates were developed by projecting historic seniors housing market penetration rates (i.e. utilization rates) forward to 2040. If current penetration rates hold, seniors housing demand is projected to more than double by 2040, an estimated demand for nearly two million new units. The rate of demand growth will increase as boomers pass the 80+ threshold after 2025, increasing from 25,000 units per year in 2015 – 2020 to 96,000 units per year in 2030 – 2035.

High annual production of seniors housing has happened before. The single year productivity peak for the top 99 MSA's was approximately 43,800 independent, assisted living and memory care units in the year 2000.² The highest five year average for the same area was 37,800 units per year from 1997 – 2001. Projected demand growth would not likely support comparable rates of growth until after 2025. If the projection proves accurate, the annual production of seniors housing within the NIC 99 will eventually have to exceed the historic high water mark of 2000 by a third in order to keep pace with demand after 2025.³

HOUSING TYPES INCLUDED IN THE PROJECTION

The senior housing property types included in the projection can be characterized as service enriched models and include independent living, assisted living and memory care units consistent with the following definitions⁴:

Independent Living Units (ILU's): Designed for seniors who pay for some services (for example, housekeeping, transportation and meals) as part of a monthly fee or rental rate and who require little, if any, assistance with Activities of Daily Living (ADL)⁵. Typically, independent living units are not licensed for health care. Residents of independent living units may receive home health care services provided to them by either an outside agency or an affiliate of the property management. In order to qualify as an independent living property, the community must contain a community dining facility that provides at least one daily meal as part of the monthly fee. Life plan communities, previously known as continuing care retirement communities (CCRC), are included in this category.

Assisted Living Units (ALU's): Designed for frail seniors who need assistance with Activities of Daily Living, but do not require continuous skilled nursing care. These units can be offered in a separate wing, a separate floor (or part of a floor) or separate building, and typically have state licensure requirements for the delivery of assisted living services.

Memory Care Units (MCU's), also known as Alzheimer's Care Units): Designed for those residents with significant cognitive impairments as a result of Alzheimer's disease or related dementia. Memory care units are typically licensed as assisted living but may have additional state licensure requirements.

² The top 99 MSA's (a.k.a. the NIC 99 and previously known as the NIC 100 prior to MSA reconfiguration) account for 62.5% of the 80+ population in the LLS

³ In 2014, the population within the NIC 99 comprised approximately 62.5% of the total U.S. population. Applying this 62% factor to the 2025 forecast of 92,000 units per year implies that the allocated demand to the NIC 99 is approximately 57,500 per year; which is approximately 130% of the year 2000 growth in units (43,800 units).

⁴ Source: American Seniors Housing Association

⁵ Activities of daily living (ADL) Basic actions that independently functioning individuals perform on a daily basis: bathing, dressing, transferring (moving to and from a bed or a chair), eating, and caring for incontinence. (source: CMS.gov)

Other models falling under the broad umbrella of market-rate seniors housing are not the primary focus of ASHA member companies and were excluded from the projection. These include active adult units (age-restricted for-sale units with no specialized services), senior apartments (age-restricted rental units which generally do not provide meals and other services), group homes with less than 20 units providing custodial care and licensed nursing care beds.

APPROACH

This update uses the same approach as the 2013 report: first, update historic market penetration for independent living, assisted living and memory care, then project demand as a function of market penetration and the demographic growth of the senior population.

Demographic Growth

The most current U.S. census data and forecast were used for the projections (2014 series). The population figures utilized in the 2013 report were based on an earlier version of U.S. census data (2009 series). With regard to the 75+ and 80+ age cohorts, the difference in U.S. census projection for future years is substantial. The projected 80+ population in 2040 is 28.5 million; which is 1.5 million more than the previous estimate. Continued increases in longevity have driven upward revisions, which, assuming stable penetration rates, translates into a meaningful increase in projected demand. However, as stated in the Introduction, there are numerous factors that may counter the positive effects that increasing longevity has on senior living demand. For instance, if the percentage of the 80+ population needing assistance declines due to health improvements, we would expect future penetration rates to decline.

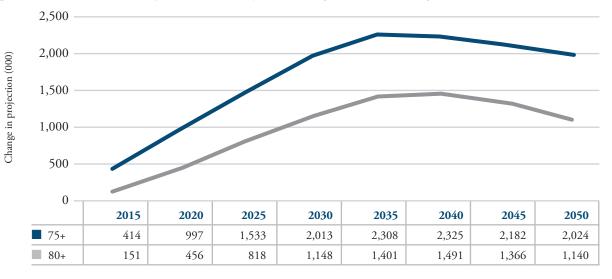
The 2013 report also brought focus to the dominance of the baby boom cohorts over the next twenty five years, and also presented the case for using the 80+ cohort as the basis for the demand projection instead of the 75+ cohort. The timing of Boomers entering the market results in significant differences in demographic growth rates between the 75+ cohort and the 80+ cohort, making the selection of a qualifying age a critical driver of a demand projection based on demographic growth.

Since there is consistent evidence that the vast majority of residents are over the age of 80 when they move, and since the use of the 75+ cohort can distort demand, this update uses the 80+ cohort for the demand projection and does not present the 75+ alternative.

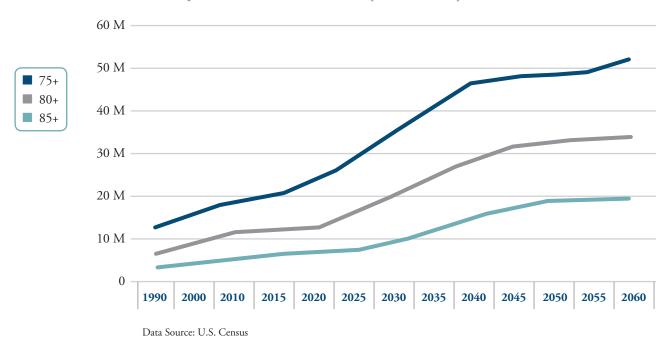
⁶ Source: Table 9. Projections of the Population by Sex and Age for the United States: 2015 to 2060 (NP2014-T9); U.S. Census Bureau, Population Division; Release Date: December 2014

⁷ Projections of the Population by Age and Sex for the United States: 2015 to 2060 (NP2012-T12); U.S. Census Bureau, Population Division; Release Date: December 2012

Change in U.S. Census Population Projections (2009 v. 2014)



75+, 80+ and 85+ Population, 1990 – 2060 (in millions)

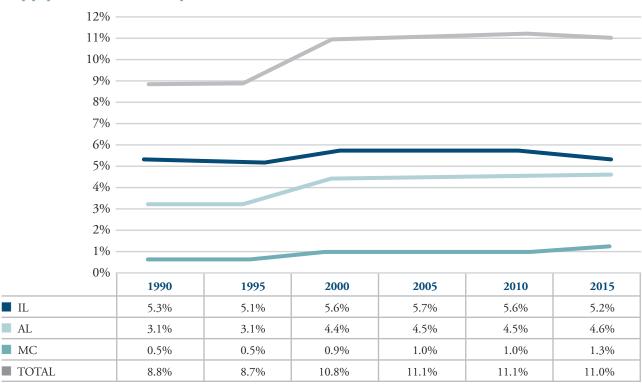


Penetration

The other key assumptions in the projections were estimates of penetration rates. Since U.S. Census projections are available for population-by-age, the demand projection is based on population rather than households. For this analysis the term *supply penetration* is defined as the total number of available units divided by the 80+ population. Supply penetration was first measured for the top 99 MSA's in the U.S. (the NIC 998) from 1990 to 2015.9

The Seniors Housing penetration rate (the sum of IL, AL and MC units divided by the 80+ population) has remained at a fairly constant 11% since 2005. However, there was a significant shift in segment share from 2010 – 2015, with IL dropping 40 bps¹⁰ while both AL and MC increased by 10 and 30 bps, respectively. This shift reflects the higher levels of AL and MC inventory growth over that period, when IL represented only 9% of the growth vs. 49% and 42% for AL and MC, respectively. Over the five-year period, 80+ population growth in the NIC markets averaged 1.87% per year while supply growth averaged 1.73%, 14 bps behind demand.

Supply Penetration, Top 99 MSA's, 1990 - 2015



Source: Penetration rates were calculated at 5 year intervals using the NIC99/100 supply dataset (based on year opened field) and MSA population estimates provided by Geolytics Inc. (circa 2012) and the U.S. Census. The 2010 penetration estimates vary from the 2013 study due to supply inventory changes and substitution of the U.S. census MSA population data for that of Geolytics Inc. for the year 2010.

⁸ NIC MAP Top 99 supply, 1Q2016 release. For a detailed explanation of the NIC MAP dataset, refer to www.NICMAP.org

⁹ Penetration rates were calculated at 5-year. intervals using the NIC 99 supply database based on the "year opened" field, and MSA population data is from the U.S. Census and Geolytics Inc.

¹⁰ Basis points

The top 99 MSA's account for 62.5% of the U.S. 80+ population and provide an excellent sample for gauging penetration trends. As shown in the graph, the 80+ total penetration trend line has been running around 11% since 2000, suggesting market maturity with a stable level of concept acceptance. In light of this leveling trend, the demand projection was developed based on a constant penetration assumption of 11%, the assumption being that per-capita consumption would neither grow nor decline over the next twenty years.

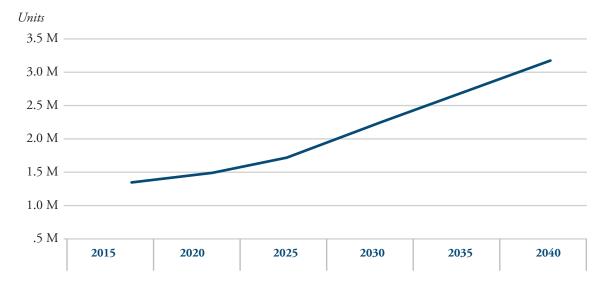
Projecting Demand

The separation between IL, AL and MC was also maintained in the trend analysis. The authors recognize that the distinctions could become less meaningful over time as new service delivery models emerge. The total, however, still reflects a projection based on past combined consumption, and is meaningful even if concepts merge into new hybrids.

DEMAND PROJECTION

Consolidated seniors housing demand was projected using the constant 2015 penetration rates and the 80+ population cohort. If the current penetration rates are sustained, demand will more than double and grow to 3.2 million units by 2040, an increase of 1.8 million over 2015 levels.

Projected U.S. Seniors Housing Demand 2015 - 2040 (in millions)

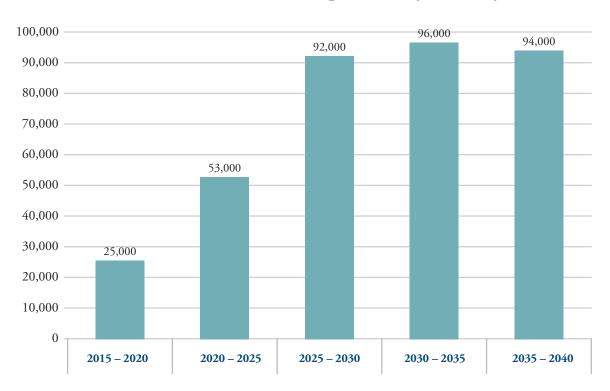


⁷ The supply estimates exclude properties with less than 20 units and below market-rate units.

⁸ Source: NIC MAP Data and Analysis Service, Seniors Housing Supply and Demand, NIC 31

In order to pace with this demand growth, annual production would need to ramp up from 25,000 units per year in 2015 - 2020 to 96,000 units per year in 2030 - 2035 — the peak period of demand growth.

Projected Annual Growth in U.S. Seniors Housing Demand (IL, AL, MC) 2014 - 2040



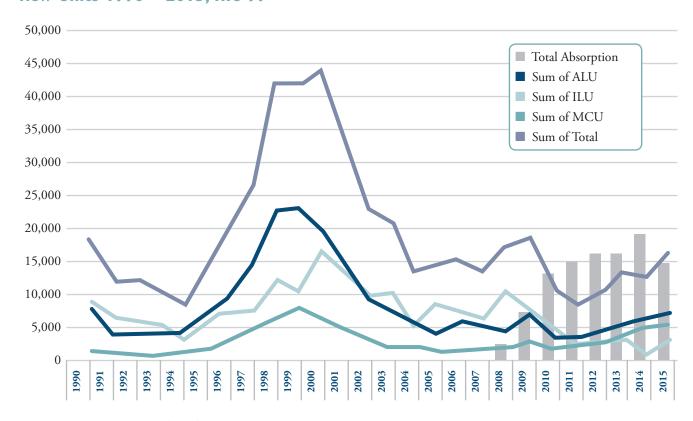
Comparison to Past Supply Growth Trends

How does the demand projection compare to current and past rates of supply growth?

From 1Q'11 to 4Q'15 the NIC 99 MSA's have absorbed an average of 16,000 total seniors housing units per year. Since these markets include 62.5% of the 80+ population, the 2015 – 2020 projection range of 26,000 units per year appears to be directionally consistent with current absorption trends

As shown in the following graph, supply growth in the top 99 MSA's was highly erratic from 1990 - 2015, averaging 19,200 units per year with extreme peaking from 1997 to 2001. The peak five year total in the top 99 MSA's was 189,000 units opened 1997 - 2001, an average of 37,800 per year. It is important to again note that this amount was for the top 99 MSA's only while the projection covers the entire U.S.

New Units 1990 - 2015, NIC 99



Source: NIC Map Supply Database.

While nation-wide production levels of 50,000+ units per year may have been reached in 1997 – 2001, sustained production approaching 100,000 units per year would be required from 2025 to 2040 in order to address the projected demand.

Note Regarding the Current Inventory

It's important to note that the existing inventory of seniors housing is aging. The average age of majority AL properties in the NIC MAP 99 is 19 years, and the average age for majority IL properties is 24 years. Both will age an additional 20 years over the projection period. Equating incremental demand growth to incremental unit growth assumes that no current properties will exit and likely underestimates the level of new supply required to address the projected demand.

ABOUT THE AUTHORS

PHIL DOWNEY, SENIOR HOUSING ANALYTICS

During his thirty year career in senior living, Phil has played a seminal role in the birth and maturation of the American seniors housing industry, and was a pivotal leader in the national rollout of multi-brand businesses for Sunrise and Marriott. He has expertise in strategic planning, product conceptualization, market feasibility analysis site selection, and project programming. While with Sunrise and Marriott he directed product development, market selection/location strategy, and project-specific market analysis initiatives resulting in the creation and roll-out of over \$2 billion of multi-branded seniors housing communities in all major markets in the U.S. and Canada. In 2009, he co-founded Senior Housing Analytics and now serves a broad range of owners, operators, investors and developers of all senior housing product types.

Phil also has served as Chairman of the American Seniors Housing Association as well as on executive committees in the Assisted Living Federation of America and the National Investment Center for the Senior Living Industries, and is also guest faculty at the Erickson School of Aging at the University of Maryland, Baltimore County, and has been a featured speaker at major conferences, including ULI, ALFA, NIC national and regional conferences and ASHA. Phil holds a BA from the University of Illinois and a Masters in City and Regional Planning from Rutgers University. He is currently on the board of Victory Housing, a non-profit developer and operator of affordable housing in the Washington D.C. area.

LARRY ROUVELAS, SENIOR HOUSING ANALYTICS

Larry is a founder and principal in Senior Housing Analytics (SHA). SHA analyzes market feasibility for development and acquisition, advises on development rollout strategy, and assesses certain market aspects of skilled nursing. He has unusually broad experience in senior housing, with roles ranging from operations to development to finance to sales & marketing.

From 2003 to 2009, he was at Sunrise Senior Living, a large operator & developer of senior housing. He was the Executive Director of an assisted living community, among other operations roles. At various times, he also assessed feasibility of real estate developments, sold corporate subsidiaries, and strengthened sales productivity. Among senior housing activities, he led the rewrite of the Real Estate Development section of "The Investment Case for Senior Housing," published by the industry's primary financier group, the National Investment Center for Seniors Housing & Care Industry (NIC). He has been a frequent panelist at NIC conferences. Prior to Sunrise, he was a consultant at McKinsey & Co. He has a BA from Yale College and an MBA from Harvard Business School.

FRANCESCO "FRANK" ROCKWOOD, ROCKWOOD PACIFIC

Frank has decades of real estate experience in senior housing, multi-family, and community development. He has developed a track record reflective of his commitment to advancing the professionalism and analytical rigor of the real estate services profession. Frank provides decision support, development services, financial advisory, and real estate transaction services to mission-oriented senior living and healthcare organizations. Clients supported include federal agencies, local governments, hospital systems, public and private senior living and multi-family companies.

Prior to co-founding Rockwood Pacific in 2013, Frank served as a real estate executive with Sunrise Senior Living, Transamerica Senior Living, Walt Disney, the City and County of Denver and the Zeckendorf Company. Frank has served as a finance executive at Ziegler, a specialty investment bank serving senior living and healthcare providers, and as a finance and corporate development executive at Transamerica Corporation.

Frank has addressed a wide range of audiences at conferences and events hosted by the following organizations: LeadingAge, California Assisted Living Association, the Urban Land Institute (ULI), Ziegler, Silicon Valley Positive Aging Forum and Berkeley-Haas (Haas School of Business) on topics such as master planning, joint venturing, market feasibility and the state of property and financing transactions.

Frank graduated cum laude from Harvard College with an A.B. in Applied Mathematics (Harvard Scholar) and from Berkeley-Haas with a Master of Business Administration (Appraisal Institute Scholar).



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