# Demographic Oriented Real Estate Investing and the Virtus Real Estate Capital Strategy 3.0

Terrell Gates, Founder and CEO, Virtus Real Estate Capital
Zach Mallow, Director of Research, Virtus Real Estate Capital

The purpose of this white paper is to review the performance of alternative, "recession-resilient" property types, discuss recent developments and current trends within these property types, and provide a summary of the Virtus investment strategy today and a glimpse of the strategy of tomorrow. This constitutes the third version in a series of white papers Virtus has written since 2006 (previous versions available here). At the time, alternative property types were a nascent concept and generally considered outside of traditional institutional property categories. These segments have evolved materially since then, some more than others, and the intent is to provide a "state of the union" update since the original 2006 version was written before the Global Financial Crisis ("GFC") and the updated 2012 version was written after the GFC.

Since founding Virtus in 2003, we have always sought out the most compelling risk-adjusted return investment opportunities in the private real estate market. Specifically, our objective today is to consistently be a top quartile fund manager during expanding markets, and a top decile fund manager during contracting or disruptive markets, as compared to the relevant private real estate fund manager benchmarks. **This objective has led us down a different path than other traditional real estate fund managers, whereby we focus on investment property opportunities that are sustainable in and out of market cycles.** We have had four guiding principles shaping our investment strategy that have evolved over time, but remain consistent at their core:

I. The property type offers resilience during economic downturns, we refer to this as recession-resilient or cycle-resilient;
II. The industry demonstrates fragmented or dispersed ownership leading to a less efficient market and property-level operations;
III. The yields and total returns have historically been more robust than traditional property segments; and
IV. Investments are made with a structural risk mitigant in place, whereby invested capital can be recovered in a downside scenario if the primary property business plan has failed.

These guiding principles have been the cornerstone of our investment strategy over the last 15 years, and we expect them to be for the next 15 years and beyond.

## *EXECUTIVE SUMMARY*

Given the length of this paper, we thought it to be prudent to include a few bullets on our conclusions.

- Historical data continues to support the notion that alternative property types, such as Senior Living, Medical Office, Self-Storage and Student Housing, offer a better risk-adjusted return than basic food group property categories.

- REIT performance shows general outperformance, especially during periods of distress **(Page 3);**
- Property level performance, a purer method for comparing real estate performance than REITs, indicate that tenant demand, and hence property income streams are more resilient, and valuations are less volatile, especially to the downside **(Pages 4-6);**

- There are a number of trends that have taken place in these property types in recent years **(Pages 8-9);**
  - New investors, including some of the largest allocators in the world, have entered the alternative categories in force, and their experience has been mixed;
  - Valuations have swollen (especially in larger portfolio transactions), similar to what has been witnessed in other real estate categories, and virtually all risk assets for that matter;
  - Many of these categories have become more "institutionalized";
  - We believe the easy money has been made in these categories, and going forward we expect a greater spread in performance between the "hobbyists" and those who have their roots in these categories and understand the importance of both real estate fundamentals and property level operations;
- Relative value is a central theme in the Virtus investment strategy, and permeates the top-down macro strategy all the way through to property segment sub-strategies, as well as to each decision made at the property level to maintain a relative value or competitive advantage over other properties **(Page 9);**
- In our chosen property types, we think it is important for relative value to drive where we invest and where we will not invest, and we have included summaries of our current strategies in Senior Living, Medical Office, Self-Storage, Student Housing, Workforce Housing and education real estate **(Pages 9-20);**
- In order to survive, let alone thrive, a prudent investor in these categories must look to always thoughtfully evolve in order to continue generating a compelling risk-adjusted return (**Page 21).**

## *LOOKING BACK*

The 2006 edition of this whitepaper presented the Virtus investment thesis as more of a hypothesis of what might occur to real estate in the event of an economic downturn. Shortly thereafter, the world, experienced one of the worst downturns in history rivaling that of the Great Depression. The global economy, capital markets, and real estate markets all suffered. The good news is that our ideas were validated beyond expectations. In looking back over the years since we made our decision to transition away from traditional real estate (office, industrial, retail, multi-family, and often hospitality is included) into what we consider to be the more resilient niches of real estate, it appears our high level strategy was quite sound. Real estate property types whose demand is driven by major demographic trends—those that appear to have been low or non-correlated to economic cycles, capital market cycles and real estate market cycles—performed very well in relative terms and acceptable in nominal terms during the GFC.

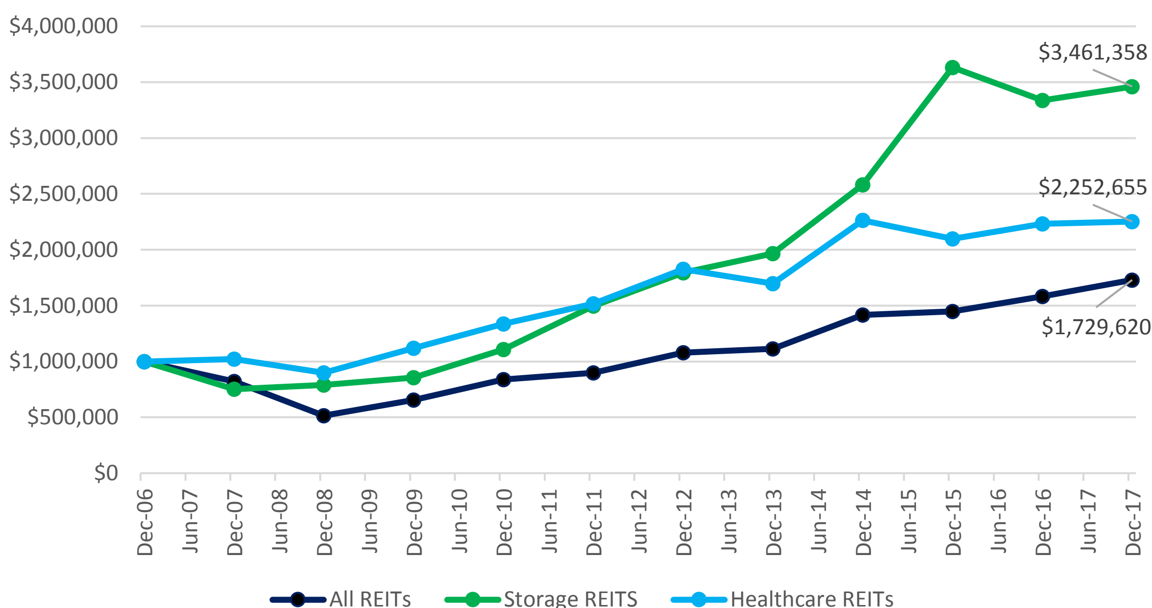
## *LOOKING BACK: REIT PERFORMANCE*[1]

Although public REIT performance does not completely reflect the difficulties of the real estate downturn, it is a good data point to look at in the most stressful years. It is important to recognize that REITs are more correlated to the performance of stocks than they are to the performance of real properties, but it is nevertheless the most widely

[1] REIT Data sourced from NAREIT.com 1Q2018

known data set available and hence relevant for inclusion here. As we mentioned in the 2012 paper, the NAREIT composite index was negative 17.83% in 2007 and negative 37.34% in 2008, by far the largest drawdown in the history of the index, which goes back to the 1970's. REITs have historically been the highest performing liquid asset classes since their inception in the 1970's; however, they are prone to extreme volatility both to the upside and the downside. Accordingly, one would expect a snap back in returns after the major downturn in 2007 and 2008. It did rebound rather aggressively, putting up over 27% in each of 2009 and 2010, and then gave back 6.14% in 2011. This is important to review as a proxy over this five-year period, often considered a full-market cycle. If one invested $1,000,000 in the NAREIT aggregate index from 2007 to 2011, your $1,000,000 investment would have only been worth $898,142 at the end of 2011, despite the rapid rebound in the back half of that period.

Let us now compare any of these returns, public REIT or otherwise, which were predominantly invested in traditional real estate, to the Healthcare REITs, one of the 17 sub-indices of the NAREIT composite index that includes Senior Housing and medical related real estate, like Medical Office, over the same five-year period. Healthcare REITs over the same period of 2007 through 2011 provided an annual return of 9.52% per annum bringing your $1,000,000 investment to $1,517,370 through the end of 2011. Self-Storage REITs performed similarly, bringing your $1,000,000 investment to $1,496,278 at the end of 2011.




This period during the GFC was not an isolated incident or anomaly. And not only did those asset classes outperform during distress, but they have continued to beat out both NAREIT and the S&P 500. Continuing our exercise to the present day, the $1,000,000 investment would have grown even further. The Self-Storage investment would now be worth $3.5 million, and the Healthcare investment would have been worth $2.3 million. The NAREIT aggregate would have provided only $1.7 million—still beating out the S&P 500, but well behind the alternative property types. In other words, Self-Storage and Senior Living performed like defensive assets during the GFC, retaining a far greater share of value and recovering more quickly, but then still outperformed the broader index during more expansionary times.

Having said that, we would will be the first to admit that NAREIT returns are not necessarily indicative of actual real estate market conditions, because they are influenced by external factors like investor sentiment, capital market momentum, and monetary policy. We are of the strong opinion that had TARP and QE2 not flooded liquidity into the system and allowed many of the lenders to defer on defaulted and underwater commercial real estate loans, general REITs would have been punished even more than they were during the GFC.

FIGURE 2- CONVENTIONAL VS MEDICAL OFFICE TOTAL REVENUE INDEX (2006=100)

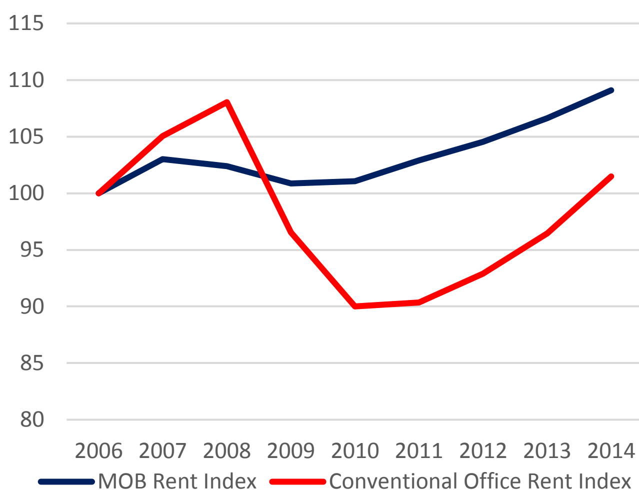
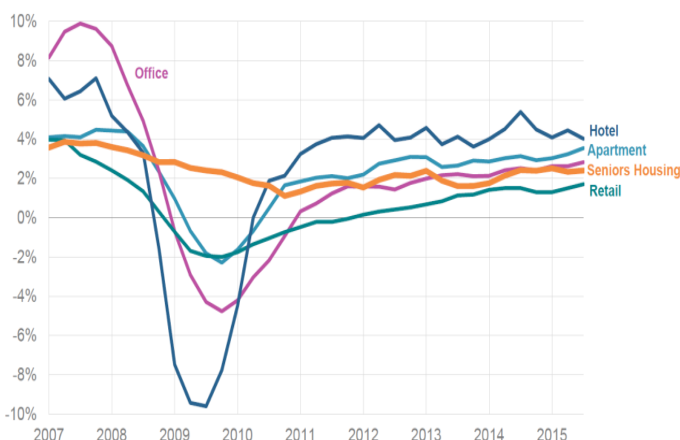



FIGURE 3- NOI GROWTH ACROSS PROPERTY TYPES




### *LOOKING BACK: PROPERTY LEVEL PERFORMANCE*

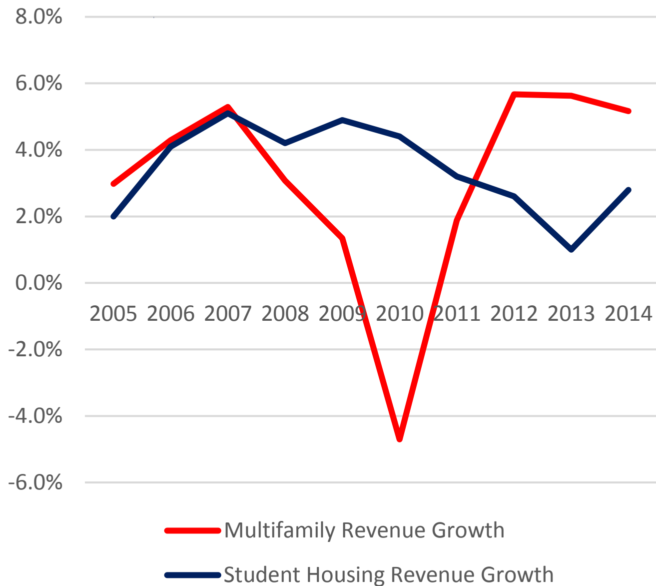
As compared to just REIT performance, analyzing property-level fundamentals is arguably a purer method for comparing asset types, since they remove any distortions caused by investor sentiment and deal solely with true business performance of distinct property segments. There are a myriad of property-level metrics to use, such as vacancy rates, rental rates, concessions, delinquency rates, and other loss to lease factors. Lender default rates and recovery rates per property type can also be illustrative factors. We believe that the most instructive metrics give a measure of the bottom line—these are figures like economic occupancy, total effective rental revenue, or net operating income ("NOI"), which takes into account the costs incurred by property operations.

**Figure 2**[2] compares Medical Office and conventional office as an index of total effective rent collected. Incidentally, this comparison glosses over the fact that Medical Office Building ("MOBs") occupancies have historically been higher than typical office assets, especially since the baseline mark beginning in 2006. **As occupancy and revenue both drop through the GFC, we see that MOBs stayed above our 100 baseline in total revenue collected through the entire downturn, whereas conventional office properties lost significant income.** When you factor in the very different way that distressed properties are valued compared to stabilized ones, it becomes clear how such a revenue decline is quite destructive to NOI and has a multiplying effect in eroding value, especially given office valuations are more volatile than MOB valuations.

Even more instructive is analyzing NOI across property types. While revenues may decline precipitously, unfortunately many of the operational expenses in a typical property are largely fixed. Figure 3[3] shows the NOI of various property types as evidenced by REIT property income statements. This is an especially forgiving graph to all traditional property types, because while their valuations may vary with their stock prices, REIT portfolios tend to

[2] Source: CoStar Analytics for conventional office product. CoStar Analytics and Revista for Medical Office product.
[3] Source: Welltowers Corporate Presentation 3Q2015

be comprised of less volatile stabilized assets. The deep troughs seen in each asset type are fairly muted compared to individual properties that a value-add investor may have encountered, in which total revenue may have declined by as much as 25% or more. **Nonetheless, even in this picture, it is clear that traditional real estate experienced steep declines, while Senior Living stayed at positive NOI growth through the entire downturn.**




We can see a similar trend in Student Housing assets. Student Housing is an interesting example in that while rental rates may be depressed by economic climate, total demand in the form of enrollment is actually countercyclical; each recession historically finds a swell of graduate students and non-traditional undergraduates choosing to sit out the job market and increase their earning potential via additional education. That trend is reflected in Figure 4[4], which looks at total revenue (including occupancy and rate) between Student Housing assets and multifamily assets. **In it, we can see that Student Housing assets retained value through the GFC whereas multifamily assets declined.**

Figures like NOI are not always readily available as clean historical trends that make for effective benchmarking. In such circumstances we use economic occupancy, which cannot be distorted in the same way that an owner desperate to show decent figures can manipulate occupancy by rate concessions. Economic occupancy is simply the percentage of money a property owner collects divided by the amount of money they could collect if the property were 100% leased at street rental rates with no concessions, delinquencies, or loss to lease whatsoever, which is the gross potential rate ("PGR" or "GPR") for a given property. This is much more indicative than physical occupancy, which can be manipulated. An owner only really cares about how much is collected compared to the total potential of the property. **When looking through the Self-Storage REITs to their underlying properties and analyzing property level performance, we see that economic occupancy was virtually flat during this same five-year period from 2007 to 2011.** It is true that vacancy and delinquencies went up slightly, but the storage REITs were also able to raise rental rates even in the midst of the Great Recession! Although the data is less complete, based on performance in our own portfolio and our observations from others in the industry, Student Housing as an industry appears to have actually increased economic occupancy during this same period. If you compare that to the traditional REITs, which is the preponderance of the REIT industry, economic occupancy at one point was down as much as 50% in certain sectors. Even though fundamentals have improved recently and there has been a rebound, every one of those asset classes, including multifamily, has had decreased economic occupancy at a meaningful level over the period in question.

[4] Source: Axiometrics and American Campus Communities (NYSE: ACC) public filings.

FIGURE 5- CAP RATES DURING GFC BY PROPERTY TYPE[5]

| | GFC Cap Rate Expansion | Quarter of Recovery |
|---|---|---|
| Office | 300 bps | 2Q 2013 |
| Retail | 230 bps | 1Q 2014 |
| Student Housing | 135 bps | 1Q 2012 |
| Senior Living | 100 bps | 4Q 2011 |
| Medical Office | 150 bps | 2Q 2012 |

In turning to valuation metrics for a measurement of overall real estate market health, the best measurement is likely to consider capitalization rate volatility during this period. It is true that cap rates can be influenced by a number of external factors like inflation rates, capital flows in and out of a property segment, and borrowing costs, but the market trends and cycles of cap rate volatility generally take this into consideration, albeit on a lagging basis. In looking at our four targeted asset types, from peak to valley, cap rates increased between 75 bps and 200 bps during the GFC. Compared to traditional real estate, the dispersion was generally between 200 bps and 350 bps. That is especially meaningful when you think about lost economic occupancy AND valuation downturns happening simultaneously. And not only were price drops for conventional sectors steeper, but their total time frame of crash and recovery was far more protracted. For instance, it took Office until 1Q 2010 to reach the full extent of its 300 bps cap rate value loss, and rates did not normalize until 2013. Retail had smaller total amplitude, increasing 230 bps, but it did not recapture 2007 cap rate figures until 4Q 2014—just in time to begin its period of fundamentals distress as the effects of ecommerce were noticeably impacting major retailer income statements. Meanwhile, in alternative asset classes, Student Housing experienced a modest 135 bps increase that had completely normalized by 2012. Senior Living experienced roughly a 100 bps increase that was smoothed over by 1Q 2011. Medical Office cap rates are harder to source during this period, but we witnessed roughly a 150 bps expansion that was recovered entirely by early 2012.

How would this difference have played out in practice? If you bought a suburban office asset with $1,000,000 in NOI in 2007 at a 6% cap rate, you would have paid $16.7MM for it ($1,000,000 divided by 6%). Let us assume you were prudent and you did not elect to borrow up to 90% as was being offered by some lenders (Lehman Brothers and plenty of others) at the time, but instead only borrowed 65% or $10.8MM (we'll leave transactional costs out of this example). Now let us assume you have an operating expense ("OPEX") ratio of 40% to keep the math simple. In 2007 you were collecting $1.67MM in rent, paying $670M in expenses and yielding $1MM in NOI before debt service. Let's now assume your economic occupancy (could be any combination of vacancy, delinquency, concessions, loss to lease, etc.) dropped by 25% during the downturn. Expenses would go down only negligibly if at all, so revenue is now $1.25MM and expenses are perhaps $650M because property tax reductions have not yet been reflected, leading to an NOI of $600M. From an income perspective, the value of your property just fell by 40% if cap rates remained the same. Unfortunately, cap rates did not remain the same. Let us also assume cap rates went up to a 9% cap rate; now your property is worth only $6.67MM and you have a $10MM+/- loan depending on the amortization. To summarize, you bought a seemingly safe stabilized property on a 6% cap rate and leveraged it only modestly at 65%, but revenue declined by 25% and cap rates went up by 300 bps. The end result is you lost $10MM in value, your $6MM in equity is unrecoverable, and you are fighting with your lender because you are $4MM upside down on your loan and the lender is either trying to enforce any loan guaranty you might have provided and/or they are foreclosing on your once stabilized asset.

[5] Source: CoStar Analytics sourced 1Q 2018.

***A TALE OF TWO INVESTMENTS***

Because this is an important distinction between basic food group assets and the more resilient niche assets, I want to review a point we made in the 2012 paper by providing real examples from Virtus investments during this period. In 2006 and 2007, Virtus sponsored an investment to capitalize a platform company, MMIC, to go out and acquire predominantly stabilized class "A" Medical Office assets on or adjacent to hospital campuses in an effort to roll-up a meaningful portfolio ($1 billion plus) to take public. During the same timeframe, Virtus acquired a value-add multi-tenant suburban office project in Austin, TX, where our corporate offices were located for over ten years. We bought it at a below market valuation from an absentee landlord who failed to invest needed capex in the property or utilize high quality leasing and property management professionals. Accordingly, when we bought the property in July 2006, the property was only 60% occupied even though the sub-market was 92% occupied and most of the subject property leases were below market rate. We set out making enhancements and brought in high quality property management and leasing professionals to increase occupancy and rental rates while decreasing concessions and other variances. We executed our value-add plan flawlessly and received help from the strong local market. We took the building to 100% occupancy and grew NOI by over 100% by 2008. It was time to go to market, but then the Great Recession of 2008 happened. One could not give commercial real estate away in late 2008, even though the property was located in one of the wealthiest submarkets in the country. Even if you could sell at that time, market cap rates had increased by at least 300 bps if not more in a very short period, despite being in a resilient market that did not overheat during the run-up in the mid-2000's. Even after adding all that NOI growth, we could barely get our invested capital back. We eventually sold the property. Inclusive of income distributions, we managed to make just over a 2% IRR over the holding period, even though when we sold, our in-place NOI was 143% higher than when we bought it. In summary, we bought a solid asset in a high-end, supply constrained sub-market in one of the best performing real estate markets in the country and did everything right in adding value to grow the NOI, yet we ended up generating returns that were less than had we simply stuck our money in FDIC insured CDs over the same period.

In the case of the Medical Office roll-up, 46 assets were acquired under the platform totaling about $450MM, but the roll-up play was sidetracked in 2007 and especially 2008 when both debt capital and equity capital all but dried up. Capital markets were likewise frozen, and MMIC was unable to exit to the public markets as expected. In addition, the platform company had outsized expenses because it was built to be in acquisition mode in order to grow to $1 billion in assets before going public. These outsized expenses ate up much of the income being generated from the properties in the early years. The vast majority of these assets were stabilized assets and hence minimal NOI growth was expected at the outset. The two value-add assets in the portfolio ultimately failed and were given back to the bank along with two other assets where the tenants moved out as the supporting hospital moved farther away. Given we were buying these assets at the peak of the real estate market in 2006 and 2007, the overall roll-up business plan became untenable and four of the forty-six properties failed. One would naturally think this investment was a complete wipe-out like the vast majority of commercial real estate investments that were made in 2006 and 2007, especially in light of all the factors, macro or micro that had gone wrong. In reality, part of the portfolio was sold in October of 2008 in the midst of the meltdown for a nice return, and the remaining assets were sold over the next several years generating over a 7% IRR from the properties. **In summary, virtually everything went wrong with the business plan and our timing was horrible, yet we ended up posting a high single digit annual return during a period when virtually all real estate categories were well into negative territory.** This is primarily a function of investing in a property type that is highly resilient to economic and capital market forces.

### *TODAY'S TRENDS AND THE VIRTUS RESPONSE*

Hopefully by now it is clear that Senior Living, Medical Office, Student Housing, and Self-Storage are more resilient property types than traditional real estate. Unfortunately, success has the habit of attracting new entrants who can dampen or even ruin the party, especially in niche sectors. It is true that on a relative basis, our property types are less consolidated and less dominated by major institutions than conventional real estate, yet there seem to be new entrants consistently trying to access these asymmetric markets. Great for sellers, especially large portfolios, but more difficult for prudent buyers.

**As of 2018, we believe that the easy money has already been made in these sectors, at least for the moment.** In the past, casual investors with access to capital could have invested passively into our sectors and made attractive returns without knowing exactly what they were doing. While we remain bullish on the appeal of our chosen sectors, we do not believe that such passive strategy will be as profitable for investors going forward. We have been confirmed in these suspicions after having watched many new entrants—some being truly dominant players in the basic food group categories—make their grand entrances into alternative property types with very mixed results, despite investing during one of the longest real estate bull markets in history. Several investors have even already taken their losses and left the table.

The reason for this is that our property types are not *solely* defined by their sunny demographic futures; in addition, they are all quite operationally intensive and have more nuance in performance as compared to traditional real estate. **In short, our targeted segments require understanding of both the real estate fundamentals and the operations going on inside of the properties.** It is for this reason that Virtus has chosen to take an active approach in assessing both the property and the operations. In order to do this, a number of years ago we began building teams organized into business units grouped not by geography, but by property type. As part of this, acquisitions personnel operate on the same property specific team with their equally important asset management counterparts. This activist approach using specialists requires a more robust team than traditional private equity real estate fund models. While this entails greater corporate overhead in staffing versus assets under management ("AUM"), it results in deal teams run by true domain experts committed to ownership and expertise of their chosen subsector. **As the competitive pressure continues from new entrants, this investment in people has paid off time and time again, and we expect it to pay dividends well into the future.**

### *IMPORTANCE OF RELATIVE VALUE*

Relative value is a central theme to everything we do at Virtus. Having confidence in the domain expertise of our investment staff allows the Virtus Investment Committee ("VIC") to spend more time thinking strategically about how to invest within property types, choosing between them, and also tailoring the *kinds of* deals chosen to the highest relative value. We're constantly assessing risks and opportunities to determine where the best risk-adjusted returns are available at the given time in the market. This starts with a top down assessment of the trends affecting our targeted property types. Our teams of specialists regularly analyze a host of variables that ultimately fall into three categories to help us ascertain the following for each of our targeted property segments: (1) current and projected demand; (2) current and projected supply; and (3) current entrance pricing. **Based on that view, Virtus will overweight its investment allocation to the property types that offer a more compelling risk/reward ratio, and underweight to the less compelling categories.**

This relative value perspective, what we call the “Virtus View,” also influences our focus on the risk profile of the investment. For instance, after the immediate recovery from the GFC, Virtus was almost entirely active in value-add repositioning of assets with shorter hold times most accretive to IRR. We believed there was immense untapped revenue growth across our sectors, and we were finding the most robust returns by taking hold of properties with good bones, but which needed physical or operational upgrades. In more recent years, we have begun taking greater interest in lower risk core and core-plus deal profiles. That is because in 2018 when virtually all risk assets, including both traditional and alternative real estate, are fully valued, we want to focus on two strategies. **We either want to invest in strategies where we have line of site on how we will materially grow NOI to outpace an expected cap rate expansion, or we want to own high quality stabilized properties with a very defensive tenant base and lower valuation volatility.** The high growth NOI opportunities are represented in our value-add and opportunistic fund series, whereas the lower volatility defensive income strategy is represented in our lower risk and return core and core-plus investment vehicles.

This concept of relative value permeates the niches or what we call sub-strategies that we are targeting in each property type. Many of the large brand name macro investors who have entered our space are making primarily a top down bet that our property types are more resilient with higher yields, and therefore they are willing to go long in these categories somewhat indiscriminately. We think this is a mistake, and it is important to target where one wants to invest in each of these sectors. It is arguably more important to know exactly where one will not invest. This helps sidestep landmines that the new entrants will struggle to identify because they are flying primarily at 30,000 feet.

Lastly, relative value even permeates the decisions we make at the property level. **Every property we invest in is designed to have a relative value advantage, or more appropriately, a competitive advantage over similar properties in their market.** These competitive advantages generally fall into four categories: (1) location; (2) physical plant quality or attractiveness; (3) operations/personnel; and/or (4) rental rate pricing. For example, the highest quality and best located asset in a sub-market, sets the tone for the rest of the market and tends to have very robust tenant demand in good times and bad. Alternatively, maybe there can be a pricing advantage for an affordable option in the marketplace, with perhaps a high quality operating platform and team. The risk of new supply is muted, because the cost basis of the affordable property is such that it is typically not economically viable for newly built properties to compete at the more affordable part of the rental rate spectrum. If a property has a relative value advantage over the other competitors, it allows the property to be a market leader rather than a market taker. That is accretive in good times, but especially crucial during periods of disruption, such as a market getting hit with significant new supply. **If the property’s relative value advantage begins to breakdown, and our property starts to become more commoditized, Virtus looks to sell the property ahead of a disruptive market occurrence.** Easier said than done, especially if you’re not really staying on top of potential local market disruptions.

Below we will explain how we see our investment landscape in some of our primary property types as of early 2018, keeping in mind that these factors may change by the time you are reading this.

***SENIOR LIVING***

The Senior Living sector benefits from high rates of clear and foreseeable demand growth. Everyone who will be a potential customer is alive today, we know when they will be aging into prime demand years, and there are a ton of them. At rates of population growth in excess of 3.0% (over three times the national growth rate of 0.8% for the entire population), the “Silver Wave” of Boomers reaching old age is at a scale similar to the growth rates of real estate hotspots such as Austin, TX and Raleigh, NC—except this growth is happening across the nation. **In addition,**

**the demand for this product is fairly non-correlated to conventional housing fundamentals—especially in the more needs-based parts of the acuity spectrum such as assisted living.**

As in all forms of real estate, property performance depends on a healthy relationship between supply and demand within the primary market area ("PMA"). In Senior Living, however, the nature of demand is more complex; the primary measure of supply-demand equilibrium is the ratio of total units to "Qualified Seniors"—generally households aged 75+ and having an annual income of at least $35,000. However, it's also crucial to take into account the "penetration rate", or rate at which all Qualified Seniors ("QSs") use Senior Living facilities in a particular community. Making matters even more complex, the draw of individual facilities can vary wildly. Virtus has invested in both locally oriented facilities that draw primarily from their immediate PMA, but also in facilities that draw significant tenant base from outside the metro and even across state lines. This is due to the fact that seniors are typically not the only decision makers; instead, their adult children are the ones assessing facilities and often paying for them. As such, the industry also checks rates of Qualified Caregivers ("QCGs")—largely individuals aged 45-65 with middle to upper incomes. Frequently, seniors will move great distances to live in a facility close to their children. This is becoming even more prevalent, especially as the cultural perception of Senior Living improves. In the past, senior care facilities were often seen as places you might have "stuck" your aging relative to live out their days. This was in particular a major taboo for many ethnicities who are more sensitive to this perception. **Today, however, Senior Living facilities can offer a better lifestyle for the QS as well as the QCG, because the quality of the property and the services they provide have grown substantially making this a valuable social benefit to the overall community.**

In addition to challenges in market selection, Senior Living is perhaps the most operationally intensive of the primary property types in which Virtus invests, which is an impressive distinction considering the demands of other types. Staffing and related caregiving costs have a far larger impact on income statements than in other asset classes, and even deals with defensible locations and good cost bases can fall flat if operations are not run tightly. As such, the firm's ability to understand nuances and operational complexities, plus the operator relationships that Virtus has cultivated over the years, have given the firm an advantage in navigating the current climate compared to less specialized capital sources.

There are opportunities all across the Senior Living acuity spectrum, which is generally segmented into six categories of properties based on the level of care being provided at the property. Having said that, Virtus has historically found two the most compelling, which is a modification of the Virtus early Senior Living strategy:

- Assisted Living ("AL"), which provides fairly high acuity care to seniors who need assistance with Activities of Daily Living needs ("ADLs"). Such facilities are almost totally uncorrelated to housing fundamentals, although for seniors who need to liquidate their estates to enter a facility, local home values may have an impact—though generally a less pronounced one than lower acuity facilities. These facilities also frequently include Memory Care ("MC") units, which caters to residents suffering from some form of dementia and also often require assistance with ADLs.

- Virtus has also invested in the value segment of the Independent Living ("IL") industry. Few seniors can actually afford the exorbitant rates in luxury facilities, which also compete with Class A multifamily and condos for fully independent seniors. Offering lower rates and even services on an a la carte basis greatly expands the universe of prospective tenants to include those who can afford a monthly rent level that is much lower than the costs of all-inclusive high service properties. This segment of the market also has the greatest growth potential if operators are able to achieve greater cost efficiencies, since there are still many senior households priced out of private pay facilities but unable to qualify for subsidized care.

Ideally, Virtus prefers to own rental based Senior Living communities offering multiple levels of care, such as IL, AL and MC in a campus style setting. This ability to provide greater levels of care as the resident's need advances allows the resident to "age in place," which has several benefits. A campus style setting can offer a better quality of life for the resident, lower risk of health issues and mental trauma arising from moving a resident to another facility, and reduced anxiety for the primary caregivers (typically the adult children of the resident). For the owner of the property, it also provides a longer average length of stay for the resident, reduced operating costs by spreading OPEX across a larger facility with a level of shared fixed costs, and it allows the owner to charge higher care fees and related as the resident's need grows.

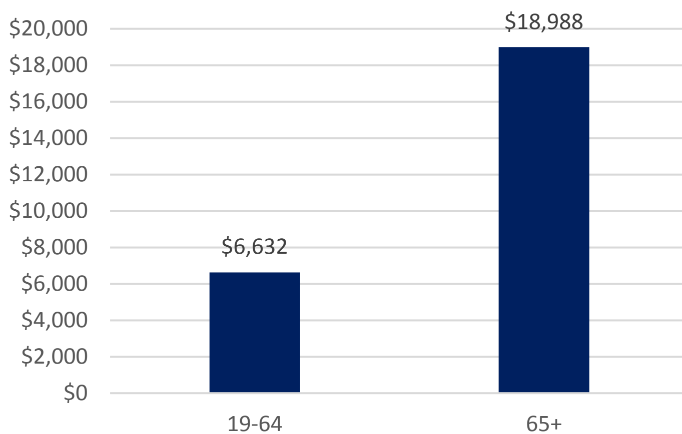
You will note that we focus primarily on rental based models, because we have concluded that tenant demand for entrance fee models where a large a fee is collected up-front, some or none of which is refundable if the resident leaves or passes, is too susceptible to the whims of the housing market, capital markets and overall economic health of an area. This is because the senior typically must liquidate assets to pay the hefty up-front fee and ongoing monthly fees in order to afford these properties. This is most typically the case in continuing care retirement communities ("CCRCs"), which offer the campus style setting with multiple levels of care, but tend to have very volatile overall investment performance due to the high cost of entrance.

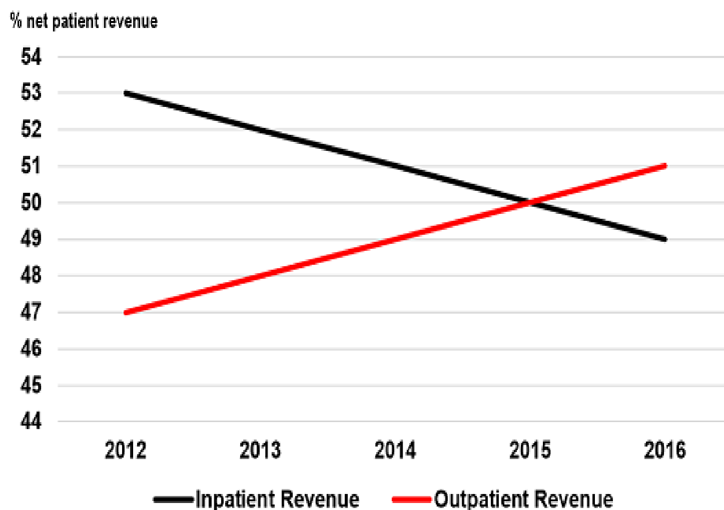
Other than operating risk, the other main challenge in Senior Living investment is the risk of new supply. Because Senior Living typically offers real estate services, "a roof over the tenant's head," programming and hospitality like in a hotel setting plus care services, the owner charges rent and fees based on three services provided. This means that revenue per square foot is very high, which is why stabilized Senior Living properties typically sell for a premium to replacement cost. This of course invites new supply, and in some cases oversupply, from developers. In the immediate years after the GFC, supply growth was nonexistent, and properties had no struggle leasing units and achieving extremely steep rent growth. In recent years, however, competition between properties in many markets has escalated due to increased supply, especially in Assisted Living, which saw inventory growth at 4.6% of total supply in 2017. Rather than distributed across the nation evenly, much of that supply growth was concentrated in low barrier to entry "hotspots," such as Atlanta, Houston, Dallas, and Denver to name a few. Fortunately, the wave seems to have abated with construction pipelines decreasing. Even in the face of historic supply growth and weaker recent absorption, the sector has managed to post strong rent growth in excess of 3.3% annually over the last 3 years—a testament to the needs-based nature of the product type. With net absorption growing again as of 2018, we believe the overall Senior Living sector is well positioned to go into its prime growth years serving the needs of the Boomer Wave, which is only in the first inning of the ball game. **Regardless, Virtus primarily focuses on owning properties where the demand drivers are compelling and in high barrier to entry markets where it's difficult for new supply to come online, or we focus on affordable communities that can be purchased at a discount to replacement cost.**

In recent years, Senior Living has become capitalized by an increasingly diverse and well-funded investor community. In addition to the established REITs and few private equity firms that have deep roots in the space, Senior Living has seen a wave of new investors, including large domestic institutions and foreign investors. In fact, the sector has seen historic levels of volume even without major buying from REITs, who historically had been the only major players. Much of this has occurred in portfolio megadeals with equally historically low cap rates. However, beyond that crowded segment, there is still a landscape of smaller and more strategic opportunities in the sector. Virtus has taken hold of a number of distressed or dislocated projects developed by new entrants to the market who have stubbed their toes by building or buying properties in low barrier markets deluged with new supply, capitalized with a costly capital structure and/or have simply underperformed due to poor operations. In the Virtus value-add and opportunistic investment vehicles, Virtus will continue acquiring and turning around underperforming assets, as

well as developing sites in high barrier markets made "shovel ready" by years of pre-development efforts by our operating partners. In our core and core-plus investment vehicles, Virtus will focus mainly on buying stabilized high quality assets in high barrier to entry markets with a long-term sustainable and growing income stream. It may also see the firm broadening into other subsectors like Senior Apartments, university linked retirement communities ("ULRCs") or else repositioning Skilled Nursing Facilities ("SNFs") whose procedures are increasingly out of step with current trends in post-acute care.

**While the sector can be dauntingly complex and segmented to newcomers, Senior Living will continue to be an exceedingly rewarding opportunity for investors who have done their homework, invested in their people and grown their industry roots.**




Data based on audited financial statements for 323 Moody's-rated not-for-profit hospitals and health systems.
*Source: Moody's Investors Service*

***MEDICAL OFFICE***

Medical Office Buildings refer to office complexes occupied by healthcare service tenants, usually at least 80% of the rent roll. They may be connected to a hospital system geographically ("on campus MOB"), or by affiliation, or they may be totally distinct assets away from major hospital systems ("off campus"). MOB assets benefit from a similar demand wave as Senior Living, with one extra feature: unlike demand for Senior Living facilities where the average age of entry is typically in the early 80's, health service demand rises dramatically after the age of 65[6]. As such, MOB assets are already benefiting from the existing Boomer population wave. This contributes to national healthcare costs projected to rise at 5.6% annually for years to come, far outpacing broad inflation. Incidentally, the Centers for Medicare and Medicaid made these projections after the Trump administration put the future of the Affordable Care Act ("ACA") in doubt. **In other words, healthcare reform may have a huge impact on who is covered and how care gets delivered, but not on the aggregate amount of care needed.** Indeed, it is likely only the headline risk and uncertainty over healthcare policy that have kept MOB capital markets from becoming more crowded than they have in recent years. That said, there are a great number of impactful and disruptive trends making MOB investment more complex than traditional office. In part, this is due to an abstruse and constantly shifting regulatory landscape. Federal reimbursement rates for procedures are under strong pressure to keep costs contained; meanwhile, **the entire industry is shifting to a value-based care delivery framework that has upended**

[6] Source: Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group

**many stable business models attuned to less codified service-based delivery frameworks.** MOB investors need to understand how these trends impact total area demand and the competitive power of their tenant base. That said, there are attractive rewards for investors who do their diligence; MOB tenants tend to be much "stickier" than other office tenants and show very high renewal rates, 85% on average. This is partly due to the market loss incurred from relocating a practice and losing their customer/patient base, but also due to the specialized fitout requirements most medical practices have and the extensive tenant improvements that go with them.

The geographic markets that are generally most compelling are those with strong population growth, especially from the Baby Boomer demographic (meaning the cities grew at a rapid rate decades ago, such as in the South), and/or a lower concentration of healthcare providers per capita. Within such markets, Virtus has historically invested in properties located on or adjacent to a hospital campus. Such assets generally have better tenant credit quality, and an aid in leasing by providing extra space for increasingly overburdened hospitals. However, off campus product can be equally attractive if chosen correctly. **Recent years have seen an explosive growth in outpatient services, and a trend insiders refer to as the "retailization" of healthcare.** For instance, in 2016 (the most recent year with reported figures) total outpatient costs eclipsed inpatient costs for the first time in history. In addition, it is generally possible to find more accretive yield and basis in off-campus product[7]. Almost more importantly, the demand from patients, i.e., consumers, is often greater in well-located retail locations that are more convenient and easier to access. Not to mention, the doctor tenants also often appreciate greater convenience and access to their workplace. Finally, while hospitals in an on-campus deal can help attract tenants, they can also block leases with the substantial power that they often have over tenant mix in affiliated properties. As such, MOB investing requires a close degree of understanding over either the dynamics of the PMA, the synergistic mix of the healthcare tenants at a property, and/or the needs and priorities of the surrounding hospital system.

There are many niche property types within the Medical Office industry, such as Long-Term Acute Care Facilities, Surgery Centers, Imaging Centers, and facilities specializing in various forms of outpatient treatment. Some of these are especially well positioned to take advantage of the transition from service-based to value-based care standards, which has been a trend across both Obama and Trump healthcare regimes. Virtus is likely to invest in several of these categories, each of which has its own risks and opportunities. Although there are tactical opportunities by sourcing under-performing properties and enhancing their income through the Virtus Value-Add Strategy, the MOB segment presents a wealth of core and core-plus risk profiles that offer compelling yield, less leasing risk, and what we generally believe is the most defensive income stream offered in commercial real estate. One of the benefits to being able to invest across the risk spectrum in Medical Office is we become more strategic to our operating partners as well as the healthcare systems, which we serve. **By being able to offer a more comprehensive and synergistic investment strategy, sourcing has been enhanced across both our value-add and core strategies.**

In general, we believe the following deal profiles are most attractive:

1. General Standards: We prefer 1990's or preferably later vintage, since product obsolescence is a risk given the increasing demands on space. In addition, multi-story buildings with corridors are preferable to more retail-style single-story assets with multiple entrances. Load factors should be less than 20% unless in a CBD, and assets should have a variety of bay depths with at least 45' spaces for larger practices.

2. On-Campus Product: Assuming that entry basis is attractive, Virtus works to assess the hospital system's financial health and habits of referrals. In addition, it is paramount to understand the controls that the hospital has over the asset. If it has significant discretion over tenant mix, it is imperative to understand the priorities and goals of the hospital staff responsible for leasing. This is why often we may target a property

[7] Source: Moody's Investor Services

adjacent to campus that benefits from the proximity to the hospital, but is not beholden to the restrictions that are often in place for true on-campus product.

3. Off-Campus Product: The presence of a strong anchor tenant with good credit, an attractive property image along with convenience in location and access are central requirements. This can help with both leasing and patient referrals. In addition, if the asset is located three miles or more from a major affiliated hospital, it should be in a PMA with a strong residential market having medium to high incomes. Finally, off-campus deals require greater diligence of the tenant mix in order to ensure that the building has a good synergy of practices and offers in-demand services.

Although they are a challenge to put together, Virtus may even participate in the construction of new properties in its opportunistic strategy. The best way to meet Virtus' investment criteria in a greenfield or ground-up scenario is to secure tenants sufficient to reach break-even occupancy, before breaking ground on the property or committing any investment dollars. Typically a Virtus Operator will negotiate lease terms with physicians who sign a lease and not only provide a corporate guarantee from their practice, but often a personal guaranty for the lease payments. Once the anticipated property has enough signed leases to provide at least a break-even cash flow, usually around 60% to 70% occupancy, construction begins. Market risk is greatly mitigated by the long-term leases, so the primary remaining risk is construction risk. Typically, the Virtus Operator will guarantee delivery or post a performance bond to assure completion of the project on a timely basis at the set cost.

**In summary, MOB investment will be ripe for many years to come for those who can stay ahead of the evolving healthcare landscape. Virtus will focus primarily on defensive income streams available in stabilized high quality buildings in our core and core-plus strategy, while remaining opportunistic in seeking out higher risk-adjusted return scenarios for our value-add and opportunistic strategy.**

***SELF-STORAGE***

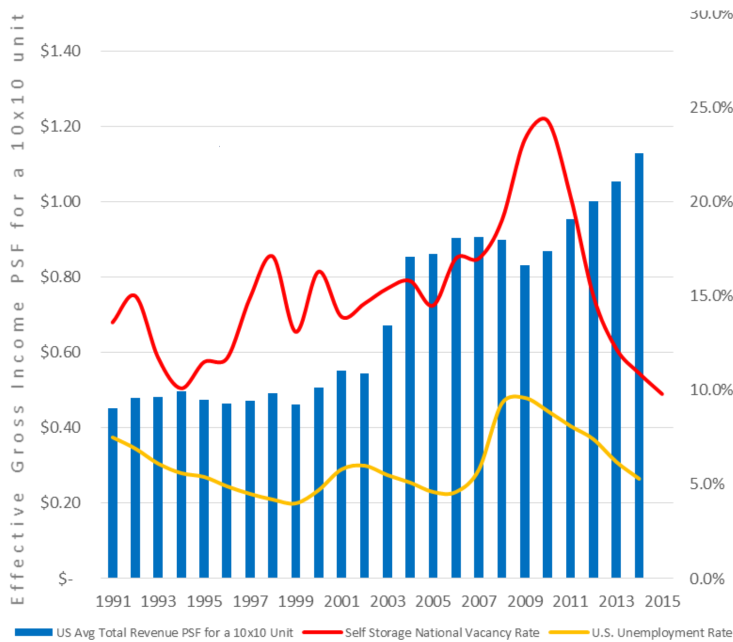
Storage benefits from dual demand drivers and a highly diverse customer base. In good economic times, consumers purchase more goods and need places to store the excess, including larger specialty items like boats and recreational vehicles that typically can't remain at home. In downturns, there is more transition with people consolidating households, downsizing and/or moving for jobs, and they use storage to keep possessions they will need in the future. In addition, there are many industries and small business that rely on storage for things like inventory management and equipment storage. **The income profile of storage customers is instructive: higher income homeowners and lower income renters are both overrepresented in most storage properties, and it is this "barbell" distribution of tenants that has likely pushed the sector's outperformance in both good times and bad.**

Indeed, the storage industry has largely continued its run of successful growth in the years since it passed through the GFC relatively unscathed as Figure 8 shows[8]. Only recently has occupancy and rent growth shown even tentative signs of reversion, though the significant supply pipelines suggest that fundamentals in the near future may be even less attractive. Virtus has not been as active in storage in recent years as we projected to be in 2012. This has been less due to the sector's performance or forward outlook and more due to the soaring valuations we have seen in the space along with concerns of oversupply. **Too much underwriting has dislocated from the asset's ability to produce yield and currently depends on aggressive rates of NOI expansion and capital appreciation, which may**

[8] Source: Self Storage Almanac

**have been evidenced in past years but are unlikely to persist. This seller's market has been an opportune time to offload assets profitably.**

FIGURE 8- SELF-STORAGE GROSS INCOME PSF




As of 2018, Self-Storage is a small part of the Virtus portfolio, though Self-Storage deals purchased during 2008-2013 have been some of the highest performers in our funds. We primarily purchased underperforming properties from "mom and pop" owners in clusters predominantly in high growth markets, and after growing NOI significantly through property improvements, more advanced operations, and sophisticated marketing and revenue management techniques, we would typically create portfolios to sell to REITs and private equity-backed large operators. Even though our Self-Storage acquisition activity has been much lighter recently, we believe the coming years still offer promise for investors with the expertise to select defensible markets and deals. Virtus will approach Self-Storage with select high barrier markets in mind, especially in our core and core-plus strategy, where we will focus on class "A" stabilized properties in dense infill locations, primarily in major markets. We will also monitor high growth markets that may have lower barriers and are likely to be deluged with new supply. This will create distressed buying opportunities for our value-add and opportunistic strategy from mom and pops, as well as new entrants to the Self-Storage market over the last three to five years who have not had our same disciplined approach to site and market selections. These high growth markets over time will absorb the new supply, but there will be periods of dislocation creating buying opportunities at more attractive bases than in the current environment.

Despite the small deal sizes involved and difficulty of current deployment, Virtus still brings the same level of diligence and selectivity to any deal in a fund. Most of the same Self-Storage investment requirements we described in our 2012 paper remain intact, and we have added to those. In perusing those standards, it will perhaps be clear why we expect deals in the immediate future to be more "icing on the cake" rather than a core part of funds. Even in the current environment, we find a couple of strategies in the storage industry to be interesting. Our Self-Storage team has recently been focused on finding smaller stabilized properties (below 50,000 NRSF) that are below the institutional buyers' radar screens, acquire those from mom and pops, and expand onto adjacent land creating a larger property with operational advantages and ultimately creating an asset that institutions will want to own. We also like the opportunity of buying defunct or underperforming retail properties and converting to third-generation climate controlled storage. Although the sites are often ideal as a Self-Storage use, this strategy is very much a rifle shot opportunity because it only works in select locations and markets with accommodative zoning or similar.

**Although storage has been underrepresented in the overall Virtus portfolio in recent years based on our relative value view of the space, this has been our highest performing category historically that we believe will continue to have sustainable demand drivers. As such, we remain committed to exploiting targets of opportunity in the space for many years to come.**

***STUDENT HOUSING***

Student Housing has been a high performing niche industry that is now under the spotlight of a much larger investor community than it was in 2012, when Virtus anticipated that Student Housing assets would comprise the largest and most "down the fairway" set of assets in the portfolio. This prediction was largely true for years, and the firm has had success in beating our rather conservative projections for capital appreciation and NOI growth while benefiting from strong yield. The yields and NOI growth we have achieved are credit to our diligence and initiative in finding off-market deals with NOI growth potential, however, we cannot take full credit for the capital appreciation we have achieved. Valuations have been buoyed by new institutional entrants, by major players in conventional multifamily, and even hotel / hospitality operators trying their hand in the space (with very mixed results), as well as by foreign investors who accounted for nearly half of deal volume during parts of 2017. However, these same new entrants tendering highly attractive offers for our existing assets have also become competitors for the most obvious deals in the sector. Virtus has pivoted to a more strategic and selective view, especially since 2015.

The Student Housing sector still has an exceptional number of demand drivers making it attractive. **Enrollment is projected to remain strong solely based on the pipeline of domestic students, although international enrollment growth has been a hugely impactful force in both overall enrollment and demand for housing.** In the event of a downturn, enrollment has historically been *countercyclical* as graduate students and non-traditional undergraduates have lower opportunity cost for pursuing education and postponing employment. In addition, universities are under even greater budgetary pressure than in 2012 and have almost completely ceded over housing services and development to the private sector. Finally, the cultural expectations around university housing have largely shifted away from "Spartan" dormitories toward the more tailored and amenity-rich experience that private, purpose-built housing offers. To be sure, we have seen this trend taken too far, especially in low barrier markets where overzealous developers have chosen to participate in an amenities "arms race." The recent spate of development has included resort style luxury pools (usually seen in high-end hotels), state-of-the art fitness facilities, golf simulators, tanning beds, and a host of other frills. Many of these projects have been poor performers for both their developers and their immediate competitors—though they may present us attractive future opportunities when debt maturities force a sale.

In short, the current Student Housing landscape is largely about finding a "Goldilocks" middle ground in both market and asset selection. The major Tier I public universities, which offer the best value proposition to students and their parents, have largely been beset by overdevelopment and overvaluation, since these universities are often found in low barrier to entry college towns. Virtus wants to avoid low value tier II or tier III schools, especially certain private universities, that are ripe for disruption from other education models in an era of greater focus on student debt and the return-on-investment of a college degree. Similarly, investors must be mindful of finding assets that have a truly compelling value proposition for students—avoiding overpaying for grand new assets that student budgets won't support, but also steering clear of properties that have been pushed toward obsolescence by new development.

Today we are focused on a couple of areas in Student Housing that we find compelling. Many of the same strategies and acquisition criteria we described in 2012 remain largely in place. Specifically, for our core and core-plus strategy, we are currently focused on high barrier to entry markets predominantly focused on Tier I public flagship universities, and acquiring recently developed highly occupied class "A" properties at "Main and Main" locations adjacent to campus or on campus, likely as part of a public-private partnership ("P3") or other university affiliation. There will be select core-plus opportunities to buy stabilized recent vintage properties within two miles of campus

that offer a disruptive value proposition or attractiveness to students, as compared to the competitive set. The focus, especially in core and core-plus, will be on buying properties that offer a sustainable income stream in and out of market cycles with less valuation volatility.

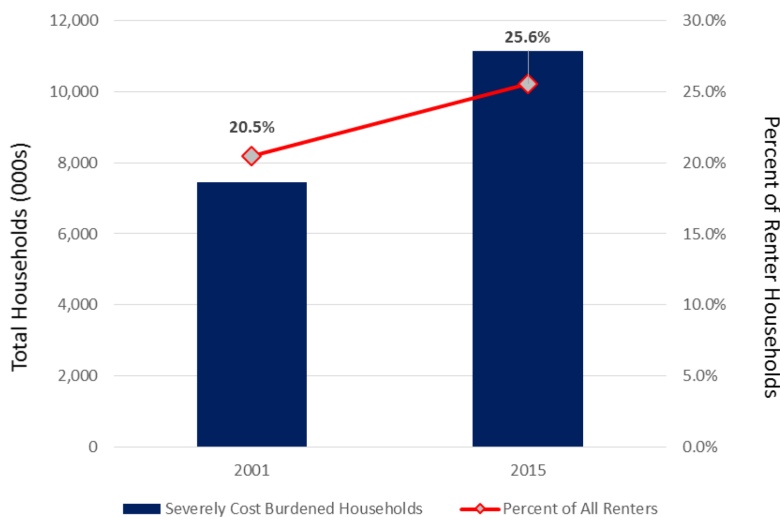
For value-add and opportunistic investing, most of the opportunity currently centers around development and distressed deep value-add plays. The development opportunity is best executed at "Main and Main" pedestrian locations that require long pre-development lead times and typically include assembling many parcels to create the ideal site. The focus is on high barrier markets, primarily select Tier I public flagships and high yet sustainable enrollment growth Tier II public universities. Similar to our other property categories, there will be a number of scenarios in the student space where we can acquire distressed or underperforming properties in high enrollment growth universities that have recently suffered from overdevelopment. Many of these developers and capital partners will have to relinquish their properties to lenders or recap with more patient players like Virtus, who can acquire the property at a lower basis. Furthermore, we could offer a more compelling value proposition to students with a lower rental rate while the overall market absorbs the new supply through continued enrollment growth. This strategy is greatly supported by all the relationships Virtus has cultivated through the years with operators, university administrators, lenders, developers and owners.

**What separates Virtus from the other players today is again our specialization in the space, where we have superior market knowledge simply by being around longer (members of our team started in the student space in 1992), and especially by being willing to spend more time down in the markets and working closely with university officials, students and on-the-ground property personnel to really understand university needs, student psychographics and the less obvious market level risks.**

### *WORKFORCE HOUSING*

Workforce Housing, or quality affordable housing for the mass renter market, has become a primary focus for Virtus in the last five years. Virtus has long suspected that there are significant needs-based opportunities within the nation's housing stock that offer better risk-adjusted returns than conventional multifamily. However, unlike obvious asset classes like Self-Storage, it is difficult to define how such a subsector is demarcated. Even seemingly obvious concepts like "affordable housing" are somewhat porous and refer to a variety of different kinds of projects. That said, in recent years Virtus has expanded with great success into assets we are calling Workforce Housing, despite waiting to invest until the back half of the most recent multifamily boom.

**FIGURE 9- RENTER HOUSEHOLDS PAYING OVER 50% OF TOTAL INCOME ON HOUSING**




How do we define Workforce Housing, and why is it a distinct asset class? In essence, Workforce Housing assets are the result of growing construction costs and stagnating incomes. In most attractive markets, it is simply not economically feasible to develop market-rate product that offers rents attainable by median income renters. The current moment in rental housing illustrates this. As the commercial real estate sector

reaches a ninth year of recovery in 2018, two very true, but seemingly opposing trends have manifested. First, the unabated gains in multifamily revenue growth and occupancy have inevitably lost their steam, even if the landing should be graceful since long-term trends are supportive. Multifamily (or at least the high-end segment of it mostly followed within the institutional community) is reaching the crest of its cycle. While valuations are still at record highs, it is prudent to expect reversions toward the mean, especially with interest rates rising. Secondly, however, the general crisis in American housing has not abated in any way, despite the growth in apartment construction. **In fact, the high costs faced by consumers and the dearth of attractive housing options for median income renters have actually worsened during the apartment sector's revival in investor enthusiasm.** As Figure 9 shows[9], the total number of renter households paying over half their income in rent has shot up by nearly 50% since 2001, now constituting over 25% of all renter households.

Why is this? First off, what most commercial real estate ("CRE") investors call the multifamily sector is really a fairly small part of all rental housing, since it generally entails newer, highly amenitized, 50+ unit buildings. This is the segment of the market that has seen significant supply growth, especially in expensive class "A" properties, and it serves only a small fraction of all renter households. Beneath this highly overinvested subsector is a vast and much less "institutionalized" stock of assets, the whole of which we have dubbed Workforce Housing, which targets quality affordable housing for the masses. This can manifest itself in several niche areas, such as manufactured housing and single family residential rental units ("SFR"), but the biggest opportunity currently remains in a subset of multifamily. This housing is often a little older, and while it is perfectly functional, much of it will not "pop" on the cover of a widely marketed brokerage offering memorandum. **It is also the kind of housing that the majority of median incomes renters can afford, and with value-add renovations, it can extend its appeal to consumers and useful life as an investment—filling both a deep social need and offering strong total returns and sustainable yields to investors.**

For Virtus, a Workforce Housing deal presents itself in a few ways:

- It must be affordable for households making at least 80% of the area median income for the MSA, and it must equate to ideally 25% to at most 35% (or 40% in select coastal metros) of median *renter* incomes within the PMA. Renter cohort median incomes are harder to source than blended cohort figures and are rarely used within conventional multifamily underwriting, but they offer a clearer picture of tenant demand.

- The average rent price on a trended basis and after improvements must generally be below $1,100 per unit (assuming average metro rent costs), since this provides a basic margin of safety from the higher rents that must be charged in the very costly recently developed multi-family stock to be economically viable.

- Assets must be acquired for 50% to 75% of replacement cost, depending on the market. Replacement cost guidelines are predicated upon historical land price volatility and land composition of total asset value—each figure benchmarked according to the MSA in which it is located. The more volatile and land-heavy the market, the greater delta from replacement cost required.

- Markets for acquisition must be diverse, growing economies with compelling historical performance and promising forward expectations.

**Workforce Housing is particularly compelling because not only is tenant demand more stable during downturns than higher-end multifamily, but rental rate growth potential is higher generally throughout the market cycle.**

[9] Harvard Joint Center for Housing Studies. "State of the Nation's Housing" 2017

The separate paths traced by class "A" fundamentals and Workforce Housing assets have not extended toward valuations. Cap rate compression has certainly been more aggressive for newer class "A" product, but it has also extended to Workforce assets. And indeed, many investors who formerly only considered newer class "A" or "B" to "A-" (through property physical improvements) apartment complexes have begun assessing older assets with value-add potential. In this environment, Virtus is often finding better opportunities outside the most high profile gateway markets (New York and San Francisco) and typical high growth markets (like Raleigh and Austin). Instead, the recent focus has been on quieter, but highly stable markets such as Indianapolis that have not yet experienced overinvestment or meaningful rental rate growth, despite a compelling economic and employment backdrop. We remain active in select high growth markets, such as Dallas-Fort Worth, but in 2018 it is likely that our direct sourcing efforts will take us to less obvious places.

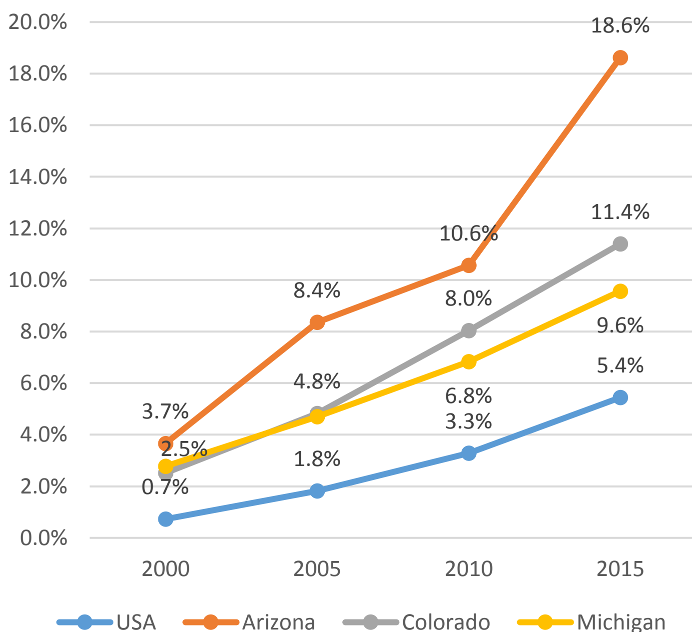
We have also had success partnering with the public sector in delivering class "A" properties where we can charge more affordable rents, due to a subsidy or tax abatement as part of a public-private partnership or related structure. This is of great demand to the public sector as well as industry, because often a company's biggest challenge is making affordable housing available to their employees.

Virtus has likewise committed a number of resources investigating other ways to deliver quality affordable housing to the mass renter's market, especially in urban settings, such as disruptive building techniques (modular construction, as an example, is on the rise again and has seen great improvements in the most recent generation product), co-living arrangements and high-density housing constructs, to name a few.

**In short, housing is one of the most needs-based asset classes in existence, and Workforce Housing ably fills an inuring social need and is squarely within the wave of demand coming from Generations Y and Z. Virtus expects this to be a meaningful part of its allocation in the coming years, especially in its value-add and opportunistic strategy.**

***EDUCATION-BASED REAL ESTATE***

**FIGURE 10- PERCENT CHARTER ENROLLMENT BY STATE**




In recent years, Virtus has also made investments in opportunities related to innovative and highly demanded education properties. Due to the inuring social need of institutions of education, demand is generally unrelated to market cycles. After studying the space for many years, we became active in charter schools, which are privately run K-12 facilities that receive state funding on a per pupil basis but are not beholden to local school district or teacher's union policies. We have also invested in early education facilities for younger children. We have also university infrastructure opportunities, in light of our history and myriad of university relationships. **Each subsector has different appeals and demand drivers for the firm, but all are bound by the goal of bettering America's educational offerings. For instance, the charter movement will likely**

**continue to see explosive growth, as it benefits from high demand from parents and from a supportive federal regime.** Many charter schools offer truly compelling outperformance over their public counterparts, especially in poorer areas with failing public schools. Charter schools also offer a much higher degree of parental choice and tailored culture versus the necessary "one size fits all" nature of traditional public schools. The result has been a robustly growing sector taking share from existing public schools as Figure 10 shows[10]. States with mature charter scenes like Colorado and Arizona are already in double-digit rates of adoption, as of 2015, the most recent year of published figures. If other states that have newer charter scenes catch up it will equate to a true groundswell of new facilities. Virtus generally takes the role of landlord under a long-term lease (20 to 30 years with rental rate increases) with small to mid-size charter operators who have track records of success, but perhaps lack the operational history to own their own facilities by issuing municipal bonds. In some cases, they simply view private equity real estate capital as a short-term tool to enable a long-term objective of permanent ownership where they can get a buyout clause when certain event horizons are crossed. Once they are able to demonstrate an adequate track record (and pass any necessary state renewals), they are able to issue bonds and take ownership of their facility at a pre-agreed basis. This has been a successful strategy, though we have found that recently municipal bond financing has become too competitive in certain areas for private equity returns to consistently find footing. **In addition, the charter opportunity comes with a number of risks that make it prudent to be very specific about which states, markets, school districts, and operators we target.** That said, we remain keen on the space, even if our participation is more of a series of select rifle shots rather than a broader shotgun like opportunity.

We have also become active investors in early education facilities. These are privately run businesses that provide care and enrichment to children from infancy to pre-K while parents are working. As such, they benefit from increasing long term gains in female workforce participation, and also from trends where higher income and higher education partners tend to marry each other and increasingly maintain dual income households. Unlike in charter schools, Virtus does not expect a major groundswell in total number of facilities due to moderate national birthrates. Whereas we will pursue charter school deals in most states with sector growth potential and favorable legislation, we will only pursue early education deals in markets with well above national rates of household formation and both natural and migratory population growth. Virtus again plays the role of landlord, typically with medium length leases (seven to 15 years) and appropriate rental rate increases along the way, where our tenant is typically a high quality well-established and often private equity backed operator. Despite consolidation abounding with the established operators, real estate ownership remains remarkably fragmented. **The yields and inuring demand for this space offer an attractive relative value basis as compared to many other categories.**

### *HOW WE ARE LOOKING AHEAD*

While we have achieved great success in our primary property types and have built an investor base that looks to us for expertise in managing idiosyncratic risk in these categories, we would not be able to run the firm with confidence if we were not devoting significant resources toward ensuring that we are always at the forefront of *responsible* investment. We certainly believe in the axiom, that an organization must evolve, or it will die. Finding new property types or even subsectors of existing business lines is just as central to our firm DNA as the specific lines of business in which we currently operate. We are constantly in the process of finding entirely new asset types to study, define our views, and then possibly build internal resources to pursue. In recent years we have done this successfully with Workforce Housing, a primary targeted property type for Virtus, as well as early education and

[10] Source: National Center for Education Statistics, Digest of Education Statistics 2016

charter schools—even forging a close partnership with an affiliated organization to ensure we had true domain experts in the latter two sectors.

We have also put resources into opportunities that we ultimately concluded were promising but not right for our investment needs. For instance, we pursued Hispanic-targeted retail centers and found a wealth of possible opportunities, but we did not believe that the tenant credit profile would align with our institutional investor base, nor did we feel that the long horizons and specific joint venture structures our most promising operators favored were good matches for our capital. Likewise, we recently underwent a deep exploration of the SFR space. While we firmly believe the sector has deep run room in consolidating and institutionalizing, we do not believe the valuations and yields currently available in attractive markets offer a favorable spread compared to less risky and more proven forms of rental housing. Such efforts are not wasted work, and they may form the backbone of a future effort if we conclude that circumstances formerly preventing our involvement have changed.

It is a constant iterative process for us to consider entirely new categories or subsectors of our existing targeted property types. We may pursue post-acute care centers, ambulatory surgery centers, biopharma facilities, as well as rehabilitation and/or behavioral health centers in the healthcare space. In alternative multifamily, we are exploring affordable housing from both a public-private and market rate perspective. We are assessing how innovative construction techniques like modular construction or offsite fabrication may impact building. In addition, we are looking at design trends on the horizon such as micro-apartments or co-living. We believe that most of these trends will have "arrived" when they are subsumed into standard industry practice, but we may create outsize value in the interim between when they are simply "good ideas" and the inevitable time they become indistinguishable from conventional housing. We have also considered what appears to be traditional property types, but with a more sustainable tenant base, such as government tenanted office space.

**In all cases, we are mindful that we cannot simply pursue "new" trends, but must find things that truly benefit from long term, unabated demand growth.** This is, sometimes quite difficult to meet the four guiding criteria referenced at the outset of this paper. Many of the most innovative trends impacting real estate in recent years—especially in traditional property types—have *not* been forces creating demand for new property types, so much as innovative means of reducing excess capacity or fulfilling needs by reducing their overall spatial footprint. This is easiest to recognize in retail, where ecommerce takes greater market share and pushes more staid brands like Sears and JCPenny into obsolescence (though it has brought industrial properties back in vogue). It is also manifested in trends like coworking, which make more efficient use of office layouts, or else AirBnB, which has unlocked a truly disruptive amount space in the hospitality sector. While these trends may sometimes be lucrative to their direct agents, they do not necessarily create tailwinds for the entire sector. Accordingly, Virtus will continually steer clear of fads and unsupported trends that conceal spatial headwinds beneath the momentum of their buzzwords.

Nonetheless, we will be unyielding in constantly scanning the horizon for new opportunities that fit into our existing family of investment domains. The coming years will undoubtedly find us identifying new niches within existing business units and also seeking out entirely new opportunities. **At our next update to this summary of the Virtus investment philosophy, we are confident that our existing lines of business will still be worthy parts of the total portfolio, and also that we will have entirely new lines of business grown from our dedication to constant, thoughtful evolution.**

***CONCLUSION***

**Over the last twelve years of exclusively targeting recession-resilient properties, we have learned a tremendous amount, through success and especially through failure. We have undoubtedly concluded that the Virtus targeted property types truly do offer the resilience and compelling yields and returns that we seek, but these benefits come with a price. Constant diligence and a commitment to remain life-long learners in our space is required to be consistently successful. This need is especially acute in the current environment where the easy money has been made, capital flows are robust and valuations are high. By investing in our team of specialists and remaining disciplined and committed to our non-negotiables, we believe we are especially well-positioned to take advantage of the opportunities available in our differentiated investment strategy now and for many years to come.**

To access the 2006 and 2012 versions of Demographic Oriented Real Estate Investing and the Virtus Real Estate Capital Strategy, please click here. Alternatively, you can copy the below URL into your browser.

https://info.virtusre.com/hubfs/Demographic%20Oriented%20Real%20Estate%20Investing%202006%20Updated%202012.pdf

No Offer This document ("Presentation") is neither an offer to sell nor a solicitation of an offer to buy any security. Virtus Real Estate, LLC ("VRE") has prepared this Presentation solely to enable certain intermediaries and representatives ("Intermediaries") to determine whether they are interested in receiving additional information about VRE. While many of the thoughts expressed in this Presentation are stated in a factual manner, the discussion reflects only VRE's beliefs about the markets in which it operates. The material contained in this Presentation has been assembled by VRE based on information provided by its operating partners and other third parties, and has not been audited. While VRE or the operating partners are not aware of any inaccuracy in this information, it does not warrant the accuracy of same. All parties are urged to probe the assumptions contained in this Presentation to satisfy themselves about the accuracy and completeness of such information.