Altus Group

The evolution of valuing single-family rental homes

Contents

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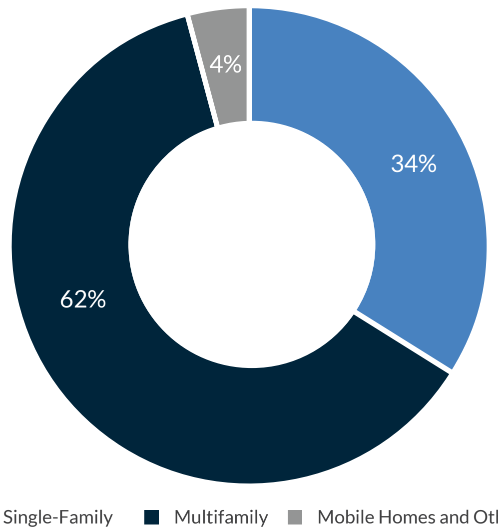
Introduction

There are 121.5 million households in the United States - 64% (77.7 million units) are owned and 36% (43.8 million units) are rented.

The rental composition is:

Rental Structure Type	Households	%
Single-Family	14,700,000	34%
2 to 4 Units	7,600,000	17%
5 or More Units	19,500,000	45%
Mobile Homes and Other	1,900,000	4%
Total	43,800,000	100%

Source: U.S.Census Bureau; compiled by Altus Group



Source: U.S.Census Bureau; compiled by Altus Group

A single-family home is a residence for one family, person, or household, whose owner has an undivided interest in the unit. A Single-Family Rental (SFR) is a home leased to another party rather than owner-occupied.

According to the Urban Institute, most SFR units are owned by individual investors. Approximately 45% belong to landlords who own just one unit (mom and pops) and 87% of investors own 10 or fewer units.[1] SFRs are a relatively new asset class for institutional investors. Despite rapid growth, it is estimated that institutional ownership (portfolios with over 2,000 properties) is between 2.1% to 2.5% of the total SFR units, or 350,000 and 400,000 homes. This contrasts with other income-producing product types including Multifamily Rental (MFR) housing, where institutions own 50% to 55% of the units.[2]

The challenge of valuing SFR homes in the new decade is to keep current with, and reflect, the actions of real estate market participants. Valuation services professionals (appraisers) must have better market research, detailed sales verification, and familiarity with all contemporary market supported tools - including Discounted Cash Flow (DCF) analysis, statistics, and software programs.

The DCF technique has widespread application for the valuation of income-producing properties. It is a relevant form of analysis used by investors. As institutional buyers become a greater part of the marketplace, DCF analysis will become entrenched in future decision-making.

SFR overview

SFRs are more conducive to larger households who desire extra space, privacy, and neighborhoods (including schools).[3] Slightly over 50% of SFRs are occupied by families with minor children and approximately 60% of the homes contain three or more bedrooms compared with 8% in MFRs.[4] The remaining renters are singles (with the option of having roommates and deferring the rental cost) and downsizing baby-boomers.

According to surveys prepared for the U.S. Census Bureau, the average household size is 2.9 people for SFRs and 2.1 people for MFRs. The median size of SFRs is 1,291 square feet compared to 811 square feet in MFRs. While the average per unit monthly rent is higher for an SFR, it is lower on a per square foot basis ($0.79 for SFRs compared to $1.15 in five or more-unit structures).[5]

Based on a review of market data and discussions with market participants, SFRs owned by institutional investors typically have three bedrooms, 1.5 to 2.0 baths, 1,200 to 2,250 square feet, were built after 1990, and are in average to good school districts.

Renter profile

The typical SFR renter is more likely than an MFR renter to be married (38% compared to 21%) and have children (52% compared to 30%). They have a higher median income ($42,600 compared to $32,400) and are older (58% in the 35 to 64 age group compared to 46%).[6]

Shift to renting

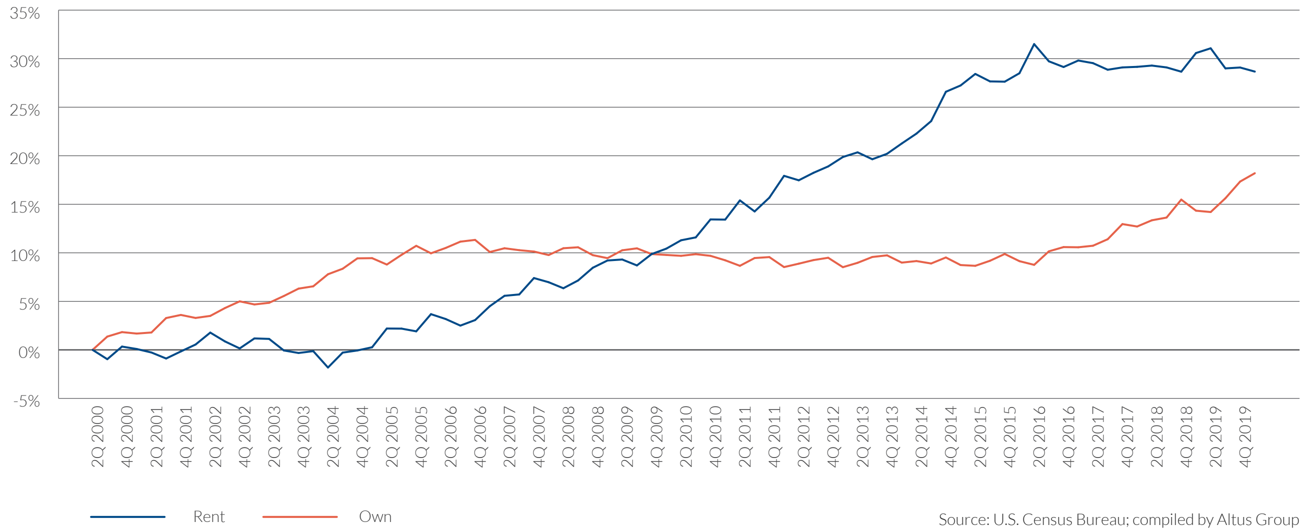
Without SFR units, there is not enough supply in multifamily properties to meet the demand of renters. According to the U.S. Census Bureau, from 2007 through 2016 the number of SFRs increased by 31% compared to 14% for MFRs. In net numbers, SFRs added 3.6 million units compared to 3.2 million MFR units.

Although applicable to both SFRs and MFRs, several factors are responsible for the demand of rental units including, job growth and migration, changes in demographics, relatively flat wage growth, the large population size of the millennial generation, higher student debt, more restrictive single-family lending standards, and the cost of purchasing and maintaining a single-family home. Combined, these factors resulted in a change in the homeownership rate.

Since 2010, the number of homes occupied by renters has increased at a faster rate than homes occupied by owners.

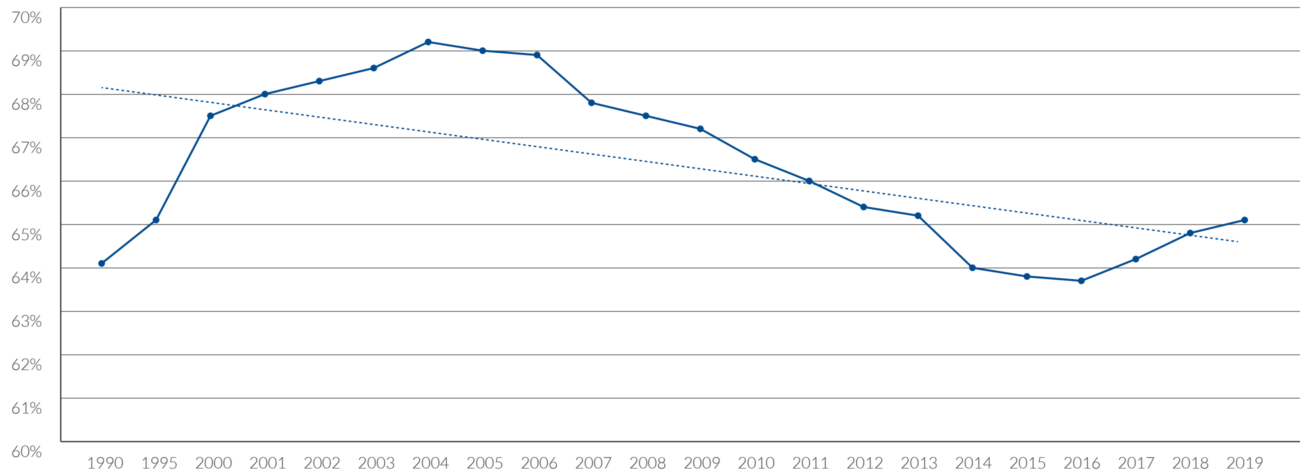
Despite the improved economic conditions following the Global Financial Crisis (GFC), the homeownership rate is well below the peak of 69.2% reached in 2014.

Percentage change in U.S. household ownership



Source: U.S. Census Bureau; compiled by Altus Group

Homeownership rate in the U.S. 1990-2019



Source: U.S. Census Bureau; compiled by Altus Group

Evolution

The GFC was a major inflection point for SFR ownership, accelerating the institutionalization of this asset class.

Pre-recession

The SFR market consisted of approximately 10.0 to 12.0 million units or 30% to 35% of the renter market share[7] with landlords often owning one to five homes. Many transactions were between end-consumers and institutions typically had only secondary exposure to SFRs.[8] Institutional firms purchased core real estate assets (multifamily, office, retail, and industrial) because acquiring and managing SFRs on a large scale was too inefficient.

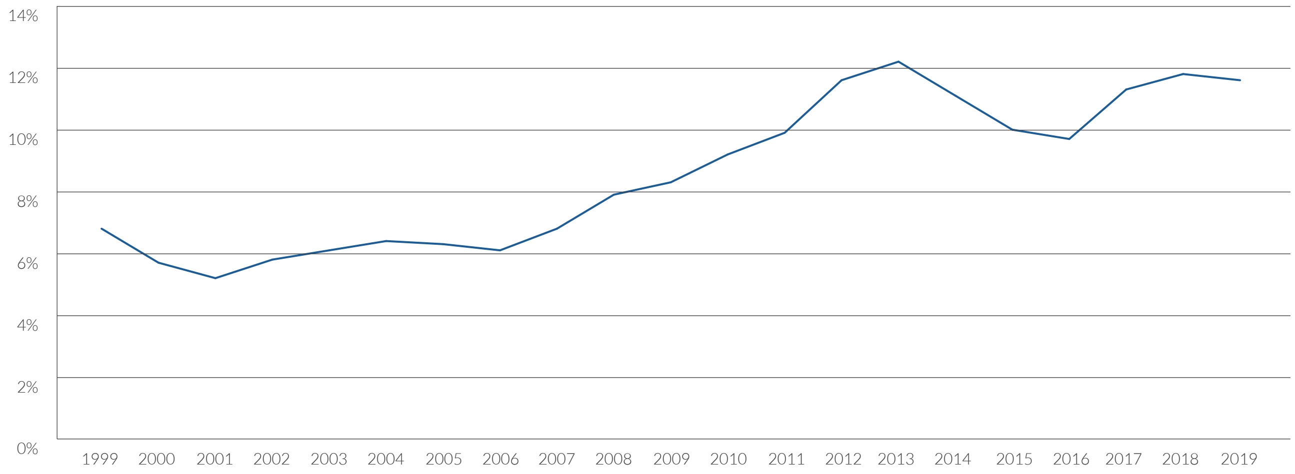
Recession

The GFC resulted in a single-family mortgage default rate of over 8.0% and 4.0 million homes went into foreclosure. Many were purchased by investors at foreclosure auctions.

Investors purchased less than 7.0% of homes before the recession. This steadily increased during the recession and since 2011 more than one in 10 homes sold were bought by investors.

In 2012, the Federal Housing Finance Agency (FHFA) created the Real Estate Owned (REO) Initiative. This allowed private investors to buy properties in bulk as Real Estate Investment Trusts (REITs) if they rented the homes for a certain number of years. Several large firms (Invitation Homes, American Homes 4 Rent, Colony, American Residential Properties, Waypoint, Amherst, Progress Residential, Silver Bay, and others) entered the market at an attractive entry point.[9] They spent billions on tens of thousands of homes and their initial strategy was to sell some or all of them once the market recovered. Meanwhile, the properties generated a steady cash flow.

Share of U.S. home purchased by investors



Source: CoreLogic; compiled by Altus Group

Post recession

As the economy began its gradual recovery, several firms went public and allowed investors to get liquidity and access to the sector. Debt became available quickly and owners instituted professional property management either internally or contracted through a third-party provider.

Technology advancement increased the efficiency in purchasing, renovating, leasing, and managing properties and allowed owners to focus on increasing their operating margins.

As is typical in a maturing market, consolidation allows institutions to attain economies of scale more quickly and take advantage of specific opportunities. In 2015, Colony American Homes merged with Starwood Waypoint Residential Trust to form Starwood Waypoint Homes. In 2017, Starwood Waypoint merged with Invitation Homes to form the largest SFR company. Also in 2017, Tricon Capital acquired Silver Bay Realty Trust.

Historically low housing supply resulted in increases in home appreciation values and higher-rent command. Value appreciation led to several investors selling some or all of their inventory. However, the largest investors are looking to expand.

Institutionalization

Large, institutional investors are continually "chasing yield", or returns on the investments. Their return is measured based on net operating income (income minus expenses) divided by the property purchase price (or value). To illustrate, if an investor will pay $10.0 million for an office building and they expect to receive $800,000 in net operating income, their return (or overall capitalization rate) is 8%.

Historically, investors looked at core properties – office, retail, industrial, and multifamily – for their investments. Some include hotels in that category. As more money has flowed into these property types, the purchase prices were bid up and their returns decreased. Given the example above, if demand for the office building pushes the purchase price to $14.0 million, the return to the investor decreases to 6%.

This price increase (and reduced return) has led to investors seeking higher returns in alternative (non-core) assets such as single-family rental, medical office, data centers, manufactured housing (mobile home), assisted living, student housing, senior housing, self-storage, net-leased (retail, industrial, office), urban core (street-level) retail, life science, and health care.

Residential is considered a relatively safe investment because people will always need a place to live. Over the last 10 years, the increased prices (and lower returns) for apartments has led residential investors to SFRs where they can get higher returns.

SFR was thought of as a growth strategy for investors looking to buy low-priced properties after the financial crisis. Today, the SFR market has matured into a legitimate asset class because of predictable cash flows, stable returns, and solid rent growth. These characteristics are attractive to a wide range of investors and lenders, and SFRs have quickly become a desirable addition to a well-rounded investment portfolio.

Public players and large private-equity firms include:

Public

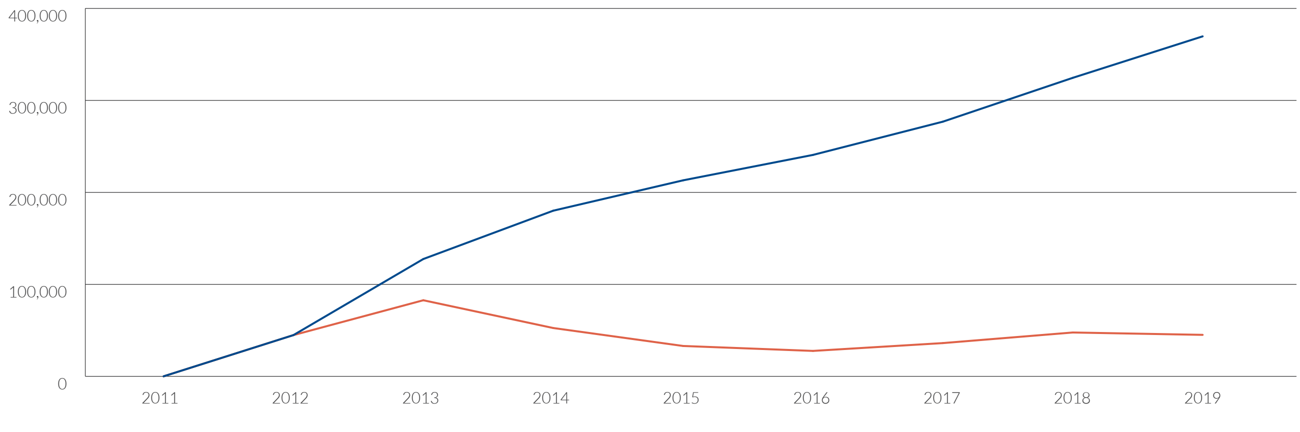
Company	Units
Invitation Homes	83,000
American Homes 4 Rent	53,000
Tricon American Homes	17,000
Front Yard Residential	15,000
Vine Brook Homes	6,000

Private

Company	Units
Progress Residential	40,000
Amherst Residential	36,000
Cerberus Capital Management	11,000
RESICAP	10,000
Conrex	9,000
Pintar Investment Co.	3,500
Gorelick Brothers Capital	3,000

Source: Compiled by Altus Group

Number of SFR's purchased by institutional investors



Note: Estimates based on public sales records. Actual totals may be higher.
Source: Amherst; compiled by Altus Group

Why SFRs?

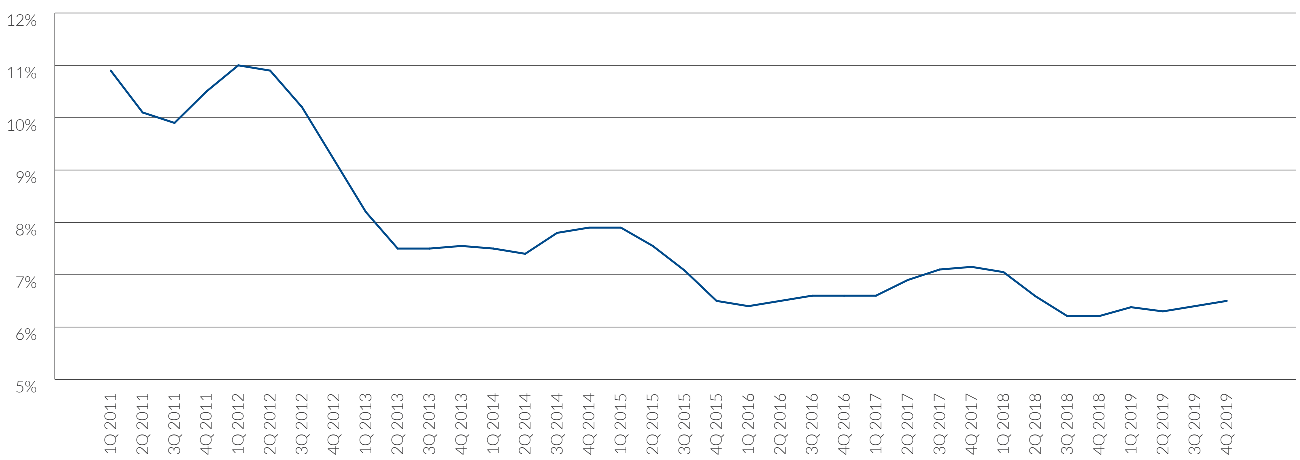
The SFR market is highly fragmented, and many homes and/or portfolios are owned by "mom and pop" operators. SFR ownership is attractive because it can be easily scaled up by adding hundreds of homes quickly by focusing on select markets. Another advantage is that tenants tend to renew their leases, which results in lower turnover costs. SFRs have a 70% retention rate compared to 50% to 53% for multifamily from 2013 through 2018.[10]

With increased pricing in single-family homes and rents for apartments, the demand for affordable housing is high, especially for good locations in desirable school districts. The positive of an SFR is that it costs less than alternatives (purchasing a single-family home or renting a similarly-sized apartment), residents have a pride of occupancy, their unit is free-standing with a yard, and it can be a family-friendly environment.

Overall capitalization rates

The attractiveness of SFRs has led to a cap rate compression in the past five years. As displayed in the following graph, overall capitalization rates (OAR)

SFR overall capitalization rates



Source: Arbor/Chandan Economics; compiled by Altus Group reached a high of 11.0% in 2012 and decreased by 470 basis points to 6.3% at the end of 2019. This 43% reduction in yield results from property prices accelerating more quickly than property-level incomes.

According to one investor, SFRs were underserved in the institutional market just a few years ago. But now, demand has increased and returns are only slightly higher than multifamily properties. He noted the return spread between multifamily and SFR is being compressed. It used to be 400 to 500 basis points or more and is 100 to 250 basis points now.

Comparing OAR's to other market yields provides a context as to how investors and lenders interpret the SFR sector. The difference in yield over the 10-year Treasury is the risk premium of real estate. As displayed in the following graph, the spread between SFR OARs and the 10-year Treasury reached a high of 9.2% in 2012 and decreased by 600 basis points to 3.2% toward the end of 2018. Because of the reduction in Treasury rates in 2019, the spread widened to 500 basis points in the fourth quarter of 2019.

Vacancy

Since the GFC, the national vacancy rate experienced a steady decrease despite additions to the SFR supply. As shown in the following graph, it peaked at 10.6% in 2009 and generally declined over the last 10 years to 6.7% as of year-end 2019.

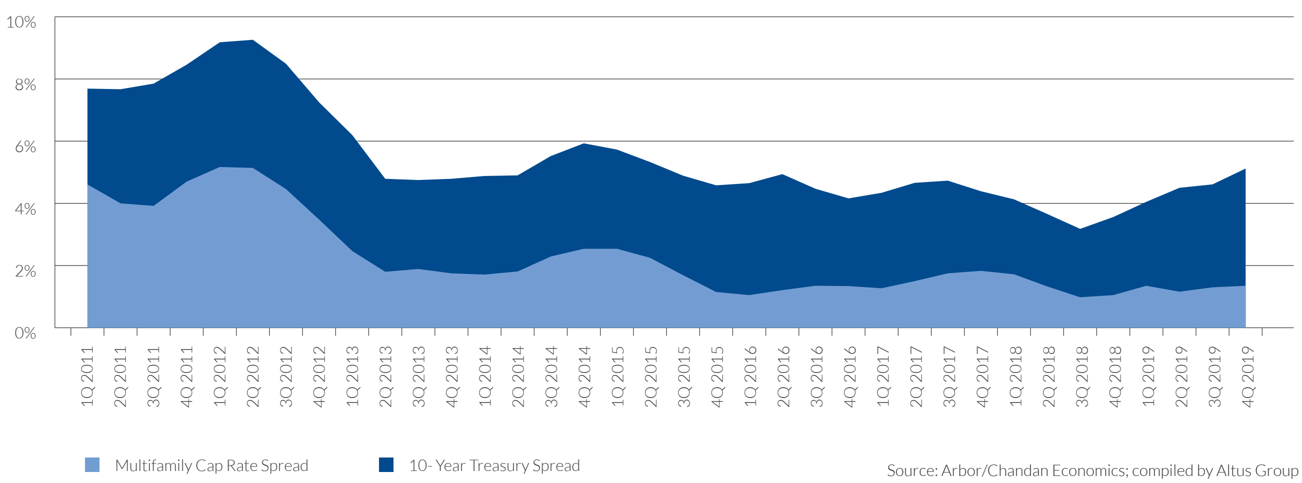
Rent growth potential

Rent is usually stable, even during a financial crisis. During the GFC when home prices decreased, SFR rent growth diminished but never went negative. As rent increases, so should cash flow. Owners can capitalize on this by refinancing or selling and realizing the gain.

Technology and efficiency

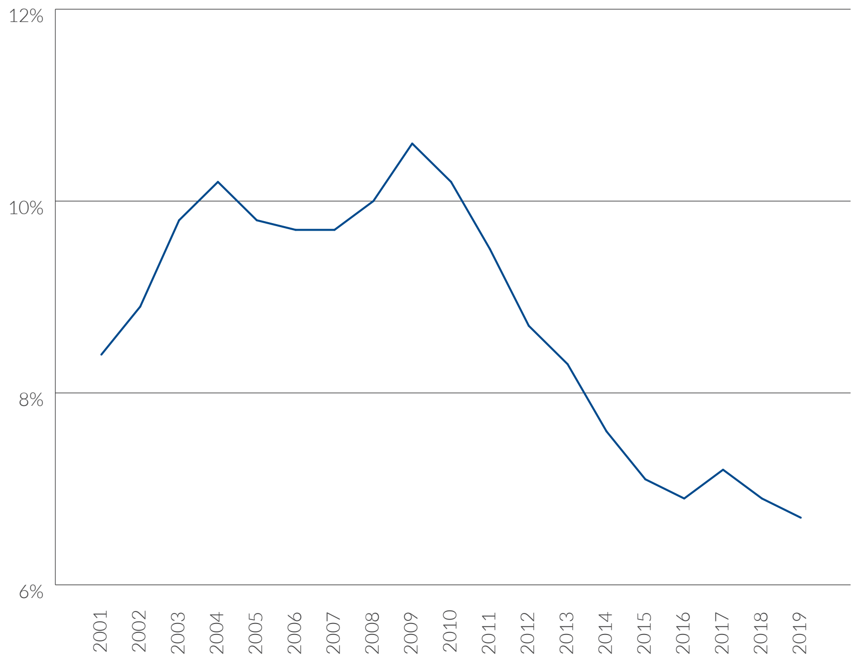
Because of the increase in home prices, many SFR companies place a greater emphasis on improving efficiencies and increasing their operating margins. They are doing this by investing in technology and data analytics. Several firms have developed proprietary software for all facets of ownership and management including property search, bidding, acquisition, due diligence, closing, renovation, leasing, management, repair, and disposition.

SFR return premium



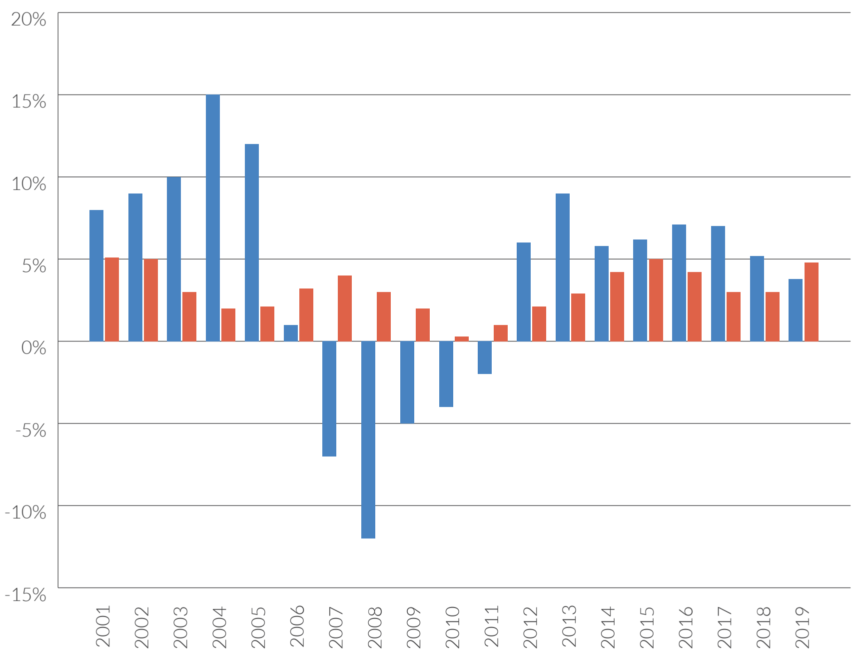
Source: Arbor/Chandan Economics; compiled by Altus Group

Rental home vacancy rate



Source: U.S. Census Bureau; compiled by Altus Group

Home price appreciation and rent growth



Source: John Burns Real Estate Consulting and Roofstock; compiled by Altus Group

Markets

Institutional investors prefer geographic diversification and own properties in multiple markets. Typically, they focus on affordable moderate income and home price areas that continue to attract in-migration with employment growth above the national average. The targeted primary and secondary markets differ from core property-type groups. Based on our research, these markets include:

Representative SFR Markets

Primary	Secondary
Atlanta	Birmingham
Austin	Cleveland
Charlotte	Columbia
Chicago	Detroit
Dallas	Ft. Worth
Denver	Indianapolis
Houston	Jacksonville
Las Vegas	Kansas City
Miami/Ft. Lauderdale	Memphis
Nashville	Oklahoma City
Orlando	Pittsburgh
Phoenix	Raleigh
Portland	San Antonio
Seattle	St. Louis
Tampa/Sarasota	Tucson

Compiled by Altus Group

More recently, investors are showing heightened interest in tertiary markets.

Valuation methodology

There are various reasons an individual, company, or financial institution would need an independent value opinion of a single-family home. Typically, they have two options – a Broker Price Opinion (BPO) or an appraisal. A BPO is a real estate broker's estimate of a home's value. An appraisal estimates the market value and it is prepared by a certified appraiser. Although some methodologies are similar, an appraisal is more detailed.

Broker price opinion

Usually, a BPO is ordered by a financial institution, not an individual homeowner. BPOs are often used by banks or other mortgage lenders in short sales, foreclosures, or loan refinancing to confirm that the value is lower than the debt owed. For example, BPOs were prevalent during the GFC as lenders had to assign asking prices to thousands of foreclosed homes. They can also be used to trade mortgages on the secondary market.[11]

What is it?

According to the National Association of BPO Professionals, "a BPO, is a method which a real estate agent or broker uses to estimate the probable selling price of a house. The estimate of price is submitted in a BPO report (2-3 pages) which includes an inspection of the subject house, subject neighborhood inspection and analysis, local and regional market information and trends, and comparable properties (comps) which are similar to the subject house. This method of estimating a selling price has similarities in methodology and report appearance to a residential appraisal and to a Comparative Market Analysis (CMA)."

Uses

BPO's are used in:

- *Foreclosures*
- *Business lending to individual house flippers*
- *Short sales*
- *REO listings*
- *Home equity lines of credit*
- *Home equity loans*
- *Estate settlements*
- *Private Mortgage Insurance (PMI) removal requests*
- *Due diligence for investors or investment bankers*
- *Selling mortgages on the secondary market*
- *Any other reason which a bank/lender needs to make a financial decision on a property*

Types

There are three types of inspections – (1) interior and exterior, (2) exterior only (drive-by), and (3) none. The interior involves inspecting and assessing the condition. A drive-by involves assessing the home only by its exterior.

What work is completed?

Like an appraisal, a BPO usually evaluates a property's size, location, condition, and site. It may assess market supply and demand characteristics. The broker's representative (agent) then compares this information to at least three recent sales of similar properties. Based on the comparable sales, the broker estimates what the property will sell for during a typical 90 to 120-day marketing period. Sometimes clients ask for a "quick sale" value, which is a lower price assuming the property was sold within a month.

Applications for SFR portfolios

SFRs are income-producing assets and they are purchased based on their ability to generate cash flow and returns to their owners. The most appropriate valuation approach is income-based (Income Capitalization Approach). A primary deficiency of a BPO is that it doesn't reflect the actions of institutional buyers and sellers.

According to the Wall Street Journal (WSJ), Congress outlawed BPOs as the primary way to value a home for traditional mortgages, but this doesn't apply to investors buying thousands of homes. BPOs were used to value collateral in over $20.0 billion of bonds sold by institutional landlords. In 2017, when Fannie Mae guaranteed $1.0 billion of Invitation Homes debt, it accepted BPOs for the 7,200 homes used as collateral. The WSJ estimated that Invitation Homes saved approximately $2.6 million in appraisal fees.[12]

Since BPOs are used to value securities sold to investors, they are under mounting scrutiny from the Securities and Exchange Commission (SEC). Proponents claim that values even out when analyzing large portfolios, meaning that some values will be too high, and others will be too low. Critics say they aren't a reliable indicator of property value, which means debtholders might have less collateral. Properties worth less than their debt may cause losses for investors, while inaccurate prices could misguide a lender in the foreclosure process.

Credit-rating firms often discount values reported in BPOs when grading rent-backed bonds. The WSJ reported that the Kroll Bond Rating Agency reduced the values by 10% and uses the lower of the adjusted BPOs and the costs of buying plus renovating the homes.[13]

Appraisals

The responsibility of an appraiser is to mirror the actions of buyers and sellers.

Most single-family homeowners occupy the property rather than own it as an investment. Therefore, appraisals are conducted when a market value must be established. For example, a mortgage, refinancing, or home equity loan.

The Uniform Residential Appraisal Report (URAR) is one of the most common forms used for a single appraisal. It applies to a one-unit property or one-unit property with an accessory unit. A URAR form, also known as Fannie Mae Form 1004, allows for three approaches – Cost, Sales, and Income. Typically, the most applicable is the Sales Comparison Approach.

Besides financing, institutional owners use appraisals to report values to their investors periodically. Because they may own hundreds or even thousands of properties in several market areas, using a single-property appraisal form is not appropriate. Also, since SFRs are income-producing assets and they are purchased based on their ability to generate cash flow and returns to their owners, the most appropriate valuation approach is income-based (Income Capitalization Approach).

Application of the approach enables owners to:

- *Measure (benchmark) the performance of one SFR portfolio against a larger data set of portfolios*
- *Compare the returns generated by SFRs to various other real estate asset types through benchmarking of capitalization rates and returns*
- *Attribute value between capital appreciation and rental income so the total yield of an SFR property or fund can be examined*
- *Prepare investor reports*

Income capitalization approach

The basic premise is that higher earnings result in higher property value and lower earnings result in lower property value. The Sales Comparison and Cost (Replacement) Approaches are widely understood and have some relevance but they are not easily applied, especially in SFR portfolio valuations.

The result of the Income Capitalization Approach is very important and is usually the primary value indicator for income-producing properties such as SFRs. Investor-purchasers expect a reasonable rate of return on their equity investment based on the ownership risks involved; this approach ideally reflects their thinking process.

The two methodologies in the Income Capitalization Approach are (1) Direct Capitalization (DCAP) and (2) Yield Capitalization (commonly called a Discounted Cash Flow, or DCF).

In the Direct Capitalization Method, the projected first-year net operating income is converted into value utilizing an overall capitalization rate derived from the marketplace (typically comparable sales or investor surveys).

The Yield Capitalization Method is a cash-based valuation model, which considers the actual timing of cash receipts and disbursements. The analysis of the cash flow model considers (1) the behavior of those participants operating and trading similar properties on a national scale; (2) the realities of the local market; and (3) the quality of the properties and their impact on probable productivity and investment desirability. This method is the most common technique employed by institutional purchasers and sellers.

Yield capitalization method (DCF) sample

Premise

This section will demonstrate the DCF method. The Direct Capitalization Method and Sales Comparison Approach were used to test the reasonableness of the DCF value conclusion. The Cost Approach was not developed. We do not believe that DCF is the only appropriate approach. Using it, or any valuation method, depends on the availability of data and the actions of market participants.

Portfolio

An actual 20-property SFR portfolio in Atlanta was selected. The portfolio is like other major urban investment-grade portfolios throughout the country. It was divided into four distinct town locations with five properties each. The identity of each property is confidential.

No.	Town	Year Built	Age	Stories	Square Feet	Bedrooms	Bathrooms	Land area (Sq. Ft.)
1	Villa Rica	2002	18	1.0	1,266	3	2.0	20,038
2	Villa Rica	2000	20	2.0	1,228	3	2.0	9,583
3	Villa Rica	2002	18	1.5	1,248	3	2.0	7,405
4	Villa Rica	2002	18	1.0	1,277	3	2.0	8,276
5	Villa Rica	2001	19	1.5	1,212	3	2.0	11,326
6	Marietta	1994	26	2.0	1,487	3	3.0	7,000
7	Marietta	1985	35	1.5	1,780	3	2.0	15,288
8	Marietta	1986	34	2.0	1,928	3	2.5	16,612
9	Marietta	1997	23	2.0	2,864	4	4.0	13,480
10	Marietta	1985	35	2.0	2,118	3	2.0	16,465
11	Lithonia	1980	40	1.0	1,849	4	3.0	13,068
12	Lithonia	1983	37	2.0	1,896	4	2.5	26,136
13	Lithonia	1989	31	1.0	1,812	3	2.0	17,424
14	Lithonia	2001	19	2.0	2,309	4	2.5	21,780
15	Lithonia	2001	19	1.0	2,056	3	2.0	4,356
16	Jonesboro	2002	18	2.0	2,192	3	2.5	32,670
17	Jonesboro	2004	16	2.0	2,772	4	2.5	39,640
18	Jonesboro	2004	16	2.0	2,406	4	3.0	1,661
19	Jonesboro	2006	14	2.0	2,214	4	3.0	6,600
20	Jonesboro	2004	16	2.0	2,214	3	2.5	11,250
Total					38,128			300,058
Minimum		1980	14		1,212	3	2.0	1,661
Maximum		2006	40		2,864	4	4.0	39,640
Average		1996	24		1,906	3	2.3	15,003

Procedure

Individual cash flows were prepared for all 20 properties. They were then aggregated (rolled-up) into one portfolio-level cash flow. We also rolled-up the properties into four groups based on location.

The major steps are enumerated as follows:

- *Analyze current revenue; establish a market rent level for each property; and forecast future revenues annually for 10 years based on existing leases, renewals at market rentals, and expected vacancy. An additional year is forecast to determine the residual sale price.*
- *Forecast future property expenses based on an analysis of current operations and the experience of competitive properties.*
- *Forecast net operating income and pre-tax cash flow to be generated by the properties.*
- *Determine a discount or yield rate (IRR) which would attract a prudent investor to invest in a similar situation with comparable degrees of risk, non-liquidity, and management burdens.*
- *Estimate a resale price by applying a reasonable overall capitalization rate to the year 11 NOI.*
- *Convert the 10-year forecast of cash flows and net resale price into a present value by discounting at the proper yield rate.*

For this demonstration, we selected one MSA and 20 properties. However, the procedure is the same whether it's one MSA or 10, 20 properties or 20,000.

The focus of this analysis is the steps to complete a DCF. However, an analysis of historical and projected operations and comparable data is a critical component. In arriving at our conclusions, we reviewed the operations of (1) the 20 properties in the sample portfolio and (2) over 2,000 SFRs in the Atlanta MSA. Although we do not display the data, it is contained in our files.

Cash flow assumptions

All cash flow assumptions resulted from (1) data provided by market participants (buyers and sellers), (2) extractions from comparable data, (3) reviews of published information, (4) a review of economic and demographic trends, and (5) discussions with local market participants.

Because the purpose of this section is to demonstrate the DCF method, we will not explain the rationale for the selection of each assumption.

The comparable data and property assumptions are contained in the Market Indications and Property Assumptions table. The properties are grouped by location.

Test of reasonableness

Effective gross revenue multiplier

The Effective Gross Revenue Multiplier (EGRM) is the relationship between the gross annual revenue and its sale price or value (Price ÷ Effective Gross Revenue). It is commonly used with SFRs. Typically, the investor's return is higher with a lower EGRM.

We reviewed data from (1) our market survey and (2) other portfolios and compared it to the indications of the subject portfolio (see the Market Indications and Property Assumptions table). The EGRMs indicated for the portfolio are near the averages of the comparable data.

Market indications and property assumptions

	Survey respondent (1)								Comparable portfolio data set (2)									
Item	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**1**	**2**	**3**	**4**	**5**	**Villa Rica**	**Marietta**	**Lithonia**	**Jonesboro**	**Portfolio**
Lease term																		
Months	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Change rates																		
Revenue																		
Market rent (CARC)	3.00%	3.00%	3.00%	3.00%	3.00%				3.22%	3.50%	3.00%	3.22%		3.00%	3.22%	2.83%	2.83%	2.98%
Other revenue	3.00%	3.00%	3.00%	3.00%	3.00%				3.00%	3.50%	3.00%	3.00%		3.00%	3.00%	3.00%	3.00%	3.00%
Expenses																		
Operating expenses									3.00%	3.50%	3.00%	3.02%		3.00%	3.00%	3.00%	3.00%	3.00%
Real estate taxes									3.00%	3.50%	3.00%	3.00%		3.00%	3.00%	3.00%	3.00%	3.00%
Replacement reserve									3.00%		3.00%	3.00%		3.00%	3.00%	3.00%	3.00%	3.00%
Revenue per unit per month																		
Market rent									$1,660	$1,550	$1,320	$1,465	$1,540	$1,238	$1,776	$1,516	$1,591	$1,530
Other revenue									$69	$10	$66	$70		$50	$93	$73	$78	$883
Total									$1,672	$1,560	$1,319	$1,554	$1,541	$1,288	$1,870	$1,589	$1,668	$1,604
% of EGR																		
Vacancy and credit loss	−6.00%	−9.00%	−7.75%	−5.75%	−9.50%	−7.00%	−5.00%	−7.50%	−6.70%	−7.70%	−4.50%	−6.60%	−9.00%	−7.00%	−6.00%	−6.50%	−7.00%	−6.58%
EGRM	13.5	10.0	16.0	11.5	12.0	10.5	14.5		12.0	13.6	11.1	11.5	13.8	12.6	12.3	10.3	10.9	11.5
Operating expenses																		
per Unit																		
Insurance	$425	$80	$305	$465	$285				$170	$165	$110	$140	$165	$119	$177	$143	$220	$165
Repairs and maintenance	$750	$280	$1,200	$100	$1,325				$720	$930	$520	$720	$975	$584	$1,009	$812	$783	$797
Replacement reserve									$200	$225	$200	$200	$250	$225	$225	$225	$225	225
% of EGR																		
Management fee	3.50%	8.50%	7.50%	3.75%	8.25%	7.50%	6.75%	8.50%	7.00%	7.00%	7.00%	7.00%	6.70%	7.00%	7.00%	7.00%	7.00%	7.00%
Unit Turnover									3.20%	1.75%	2.00%	2.30%	2.05%	2.15%	2.75%	3.25%	2.75%	2.75%
Vacancy carry cost									1.30%	1.15%	0.70%	1.30%	1.20%	0.70%	0.90%	0.90%	1.00%	0.89%
Other									0.80%	0.75%	1.50%	1.30%	0.75%	1.25%	0.90%	1.25%	1.25%	1.15%
Expense ratio	35.00%	30.00%	36.00%	35.00%	—	38.00%	45.00%	30.00%	33.00%	31.00%		33.00%	31.00%	30.63%	30.95%	34.15%	33.10%	32.24%
Net operating income																		
per Unit									$12,600	$11,900	$9,400	$11,700	$11,700	$9,969	$14,563	$11,742	$12,456	$12,183
NOI ratio	65.00%	70.00%	64.00%	65.00%	—	62.00%	55.00%	70.00%	67.00%	69.00%		67.00%	69.00%	69.37%	69.05%	65.85%	66.90%	67.76%
Other deductions																		
% of EGR																		
Leasing expenses									5.00%		2.00%	5.10%		4.50%	5.00%	5.00%	5.00%	4.90%
CapEx on turnover									0.90%		3.71%	0.90%		0.45%	0.70%	0.60%	0.60%	0.60%
Maintenance CapEx									5.00%			3.00%		3.50%	4.00%	5.25%	5.25%	4.53%
Cash from operations																		
per Unit									$9,781	$11,900	$7,558	$10,894	$11,700	$8,755	$12,517	$9,807	$10,436	$10,379

(1) Buyers and sellers of Atlanta SFRs.
(2) Over 2,000 SFR properties in Atlanta.

Net operating income ratio

The Net Operating Income (NOI) Ratio is the ratio of net operating income to effective gross revenue (NOI ÷ EGR). It is the inverse of the operating expense ratio. For example, if the operating expense ratio is 40%, the NOI ratio is 60%. A higher NOI ratio is desirable since it leads to higher a property value.

We compared the data in the Market Indications and Property Assumptions table to the indications of the subject portfolio. The portfolio-level indication is within the range of the comparable data.

Rate selection

To determine the appropriate investment rates, we (1) reviewed published market surveys, (2) reviewed data for comparable SFR portfolios, and (3) completed a market survey. See the Valuation Rates Summary table.

Given the lack of coverage of the SFR market by nationally recognized published investor surveys, we also reviewed investment rates for the multifamily rental (MFR) market. Although the SFR market is considered an alternative investment, it shares several characteristics with the MFR market. Therefore, a review of MFR investment rates is appropriate.

Discount rate

The discount rate is derived from a comparative analysis of IRRs anticipated from similar portfolios. The rates for multifamily and single-family rental properties are displayed in the Valuation Rates Summary.

Risk considerations

The anticipated performance of the properties is contingent upon their ability to attract and retain tenants. According to the investors we interviewed, property risk is assigned based on a variety of characteristics including, but not limited to, the age and condition of the roof, windows, mechanicals, and equipment, year built/effective age, class, market (often at the zip code level), school district, and rent relative to market ratio.

Valuation rates summary

	Survey respondent								Comparable portfolio data set (1)									
Item	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**1**	**2**	**3**	**4**	**5**	**Villa Rica**	**Marietta**	**Lithonia**	**Jonesboro**	**Portfolio**
Valuation rates																		
Discount rate																		
Multifamily (2)	7.00%	6.90%	6.75%	7.50%	7.20%			5.75%										
Single -family rental									7.40%	7.75%	6.55%	7.20%		6.80%	6.99%	7.45%	7.25%	7.11%
Residual capitalization rate																		
Multifamily (2)	5.58%	5.80%	5.50%	6.50%	6.20%			5.00%										
Single-family rental									6.90%	5.75%	5.80%	6.45%		6.05%	6.24%	6.70%	6.50%	6.37%
Overall capitalization rate																		
Multifamily (2)	5.03%	5.40%	4.75%	5.50%	5.50%	5.13%	5.50%	4.50%										
Single-family rental									6.05%	5.25%	5.05%	5.80%	5.20%	5.50%	5.61%	6.38%	6.16%	5.89%

(1) Over 2,000 SFR properties in Atlanta.
(2) A compilation of published surveys (PwC Real Estate Investor Survey, RERC Real Estate Report, CBRE North America Cap Rate Survey, and Integra Realty Resources Viewpoint).

In assigning property risk for this analysis, we considered the location, school district, and age characteristics. Well-located properties with good economic and demographic profiles have a higher Location Rating (lower risk score). Properties in inferior locations with below-average economic and demographic profiles have a lower Location Rating (higher risk score). The same is true for school districts. Newer properties have a lower risk rating than older properties.

The property risk profile is summarized in the Property risk table.

Property risk

No.	Town	Zip code	Median household income (1)	Average home value (1)	% of Renters (1)	% College educated (1)	Unem-ployment rate (1)	Location rating	Avg. school score (2)	School rating	Age (Years)
1	Villa Rica	30180	$61,175	$160,810	28%	23.7%	6.5%	Average	6.3	Average	18
2	Villa Rica	30180	61,175	160,810	28%	23.7%	6.5%	Average	5.3	Average	20
3	Villa Rica	30180	61,175	160,810	28%	23.7%	6.5%	Average	5.3	Average	18
4	Villa Rica	30180	61,175	160,810	28%	23.7%	6.5%	Average	5.3	Average	18
5	Villa Rica	30180	61,175	160,810	28%	23.7%	6.5%	Average	5.3	Average	19
6	Marietta	30064	87,257	275,289	18%	47.7%	4.0%	Above average	4.3	Below average	26
7	Marietta	30064	87,257	275,289	18%	47.7%	4.0%	Above average	4.3	Below average	35
8	Marietta	30064	87,257	275,289	18%	47.7%	4.0%	Above average	7.0	Above average	34
9	Marietta	30064	87,257	275,289	18%	47.7%	4.0%	Above average	4.3	Below average	23
10	Marietta	30064	87,257	275,289	18%	47.7%	4.0%	Above average	4.3	Below average	35
11	Lithonia	30058	51,083	116,953	42%	26.4%	9.4%	Below average	2.3	Below average	40
12	Lithonia	30058	51,083	116,953	42%	26.4%	9.4%	Below average	3.0	Below average	37
13	Lithonia	30058	51,083	116,953	42%	26.4%	9.4%	Below average	3.0	Below average	31
14	Lithonia	30058	51,083	116,953	42%	26.4%	9.4%	Below average	2.0	Below average	19
15	Lithonia	30058	51,083	116,953	42%	26.4%	9.4%	Below average	2.0	Below average	19
16	Jonesboro	30238	49,357	98,960	41%	19.1%	9.5%	Below average	3.7	Below average	18
17	Jonesboro	30238	49,357	98,960	41%	19.1%	9.5%	Below average	3.7	Below average	16
18	Jonesboro	30238	49,357	98,960	41%	19.1%	9.5%	Below average	3.7	Below average	16
19	Jonesboro	30238	49,357	98,960	41%	19.1%	9.5%	Below average	3.7	Below average	14
20	Jonesboro	30238	49,357	98,960	41%	19.1%	9.5%	Below average	3.0	Below average	16

Sources: 1) City-Data.com 2) GreatSchools; compiled by Altus Group

The risk rating summary and the impact on the discount rate selection is contained in the Risk calculation table.

Risk calculation

Risk	Category	Range From	Range To	Risk (1 = Lowest)	Rate IRR	Rate TCR
Property age		0	9	1		
		10	19	2		
		20	29	3		
		30	39	4		
		40	49	5		
		50	and Grtr.	6		
Market	Marietta			2		
	Villa Rica			3		
	Lithonia			4		
	Jonesboro			4		
School rating	Above average			1		
	Average			3		
	Below average			5		
Total property	Property	1.00	1.49		6.00%	5.25%
		1.50	1.99		6.25%	5.50%
		2.00	2.49		6.50%	5.75%
		2.50	2.99		6.75%	6.00%
		3.00	3.49		7.00%	6.25%
		3.50	3.99		7.25%	6.50%
		4.00	4.49		7.50%	6.75%
		4.50	100.00		7.75%	7.00%

Selection

The rate indication for the portfolio is the weighted average rates for each property.

Risk summary

		Risk (1 = Lowest; 5 = Highest)										
		Weighted percentages										
		30%	40%	30%	100%							
No.	Town	Age	Market	School rating	Total	Variance from average	IRR	Variance from average	TCR	Variance from average	SE	Variance from average
1	Villa Rica	2	3	3	2.7	(0.7)	6.75%	-0.36%	6.00%	-0.37%	3.00%	0.00%
2	Villa Rica	3	3	3	3.0	(0.4)	7.00%	-0.11%	6.25%	-0.12%	3.00%	0.00%
3	Villa Rica	2	3	3	2.7	(0.7)	6.75%	-0.36%	6.00%	-0.37%	3.00%	0.00%
4	Villa Rica	2	3	3	2.7	(0.7)	6.75%	-0.36%	6.00%	-0.37%	3.00%	0.00%
5	Villa Rica	2	3	3	2.7	(0.7)	6.75%	-0.36%	6.00%	-0.37%	3.00%	0.00%
6	Marietta	3	2	5	3.2	(0.2)	7.00%	-0.11%	6.25%	-0.12%	3.00%	0.00%
7	Marietta	4	2	5	3.5	0.1	7.25%	0.14%	6.50%	0.13%	3.00%	0.00%
8	Marietta	4	2	1	2.3	(1.1)	6.50%	-0.61%	5.75%	-0.62%	3.00%	0.00%
9	Marietta	3	2	5	3.2	(0.2)	7.00%	-0.11%	6.25%	-0.12%	3.00%	0.00%
10	Marietta	4	2	5	3.5	0.1	7.25%	0.14%	6.50%	0.13%	3.00%	0.00%
11	Lithonia	5	4	5	4.6	1.2	7.75%	0.64%	7.00%	0.63%	3.00%	0.00%
12	Lithonia	4	4	5	4.3	0.9	7.50%	0.39%	6.75%	0.38%	3.00%	0.00%
13	Lithonia	4	4	5	4.3	0.9	7.50%	0.39%	6.75%	0.38%	3.00%	0.00%
14	Lithonia	2	4	5	3.7	0.3	7.25%	0.14%	6.50%	0.13%	3.00%	0.00%
15	Lithonia	2	4	5	3.7	0.3	7.25%	0.14%	6.50%	0.13%	3.00%	0.00%
16	Jonesboro	2	4	5	3.7	0.3	7.25%	0.14%	6.50%	0.13%	3.00%	0.00%
17	Jonesboro	2	4	5	3.7	0.3	7.25%	0.14%	6.50%	0.13%	3.00%	0.00%
18	Jonesboro	2	4	5	3.7	0.3	7.25%	0.14%	6.50%	0.13%	3.00%	0.00%
19	Jonesboro	2	4	5	3.7	0.3	7.25%	0.14%	6.50%	0.13%	3.00%	0.00%
20	Jonesboro	2	4	5	3.7	0.3	7.25%	0.14%	6.50%	0.13%	3.00%	0.00%
Minimum		2	2	1	2.3	(1.1)	6.50%	-0.61%	5.75%	-0.62%	3.00%	0.00%
Maximum		5	4	5	4.6	1.2	7.75%	0.64%	7.00%	0.63%	3.00%	0.00%
Average		3	3	4	3.4		7.11%		6.37%		3.00%	

Residual capitalization rate

Residual capitalization rates for MFR and SFRs are displayed in the Valuation Rate Summary table. The SFR rates are for portfolios comparable to the subject.

The rate indication for the portfolio is the weighted average rates for each property (see the Risk Summary table).

Selling expenses

Selling expenses, calculated at 3.0% of the sale price, are deducted from each resale price. This reflects the assumed sale of the entire portfolio to an institutional investor and the estimate of brokers' commissions, advertising, and transfer taxes.

Discounting process

The following tables contain the anticipated cash flows from operations for the holding period and the year after the sale. In addition to the one portfolio-level and four locational grouping cash flows, we included a sample of an individual property cash flow (Property No. 1 in Villa Rica).

A summary of key valuation indicators is below.

		Villa Rica		Marietta		Lithonia		Jonesboro	
Item	**Atlanta portfolio**	**Amount**	**Diff.**	**Amount**	**Diff.**	**Amount**	**Diff.**	**Amount**	**Diff.**
Units	20	5		5		5		5	
IRR	7.11%	6.80%	−0.32%	6.99%	−0.12%	7.45%	0.33%	7.25%	0.14%
TCR	6.37%	6.05%	−0.32%	6.24%	−0.13%	6.70%	0.33%	6.50%	0.13%
Selling Exp.	3.00%	3.00%	0.00%	3.00%	0.00%	3.00%	0.00%	3.00%	0.00%
Implied OAR	5.89%	5.50%	−0.40%	5.61%	−0.28%	6.38%	0.49%	6.16%	0.27%
Value	$4,136,481	$906,782		$1,298,464		$920,432		$1,010,803	
Rounded	$4,136,000	$907,000		$1,298,000		$920,000		$1,011,000	
per unit	$206,800	$181,400	−12.28%	$259,600	25.53%	$184,000	−11.03%	$202,200	−2.22%
EGR	$359,555	$71,852		$105,448		$89,161		$93,095	
EGR/Unit	$17,978	$14,370	−20.07%	$21,090	17.31%	$17,832	−0.81%	$18,619	3.57%
EGRM	11.5	12.6	9.63%	12.3	6.91%	10.3	−10.39%	10.9	−5.68%
NOI	$243,651	$49,847		$72,815		$58,708		$62,281	
NOI/Unit	$12,183	$9,969	−18.17%	$14,563	19.54%	$11,742	−3.62%	$12,456	2.25%
NOI Ratio	67.76%	69.37%	1.61%	69.05%	1.29%	65.85%	−1.92%	66.90%	−0.86%

Cash flow forecast | Atlanta portfolio

Year	1	2	3	4	5	6	7	8	9	10	11 (1)	CARC (2)
Revenue												
Rent	$367,245	$377,997	$388,943	$400,611	$412,630	$425,008	$437,759	$450,891	$464,418	$478,351	$492,701	2.98%
Other Revenue	17,655	18,185	18,730	19,292	19,871	20,467	21,081	21,714	22,365	23,036	23,727	3.00%
Total	$384,900	$396,182	$407,673	$419,904	$432,501	$445,476	$458,840	$472,605	$486,783	$501,387	$516,428	2.98%
Vacancy Loss (3.47% of Revenue)	(13,374)	(13,769)	(14,169)	(14,594)	(15,032)	(15,483)	(15,947)	(16,426)	(16,918)	(17,426)	(17,949)	2.98%
Credit Loss (3.11% of Revenue)	(11,970)	(12,306)	(12,657)	(13,037)	(13,428)	(13,831)	(14,246)	(14,673)	(15,114)	(15,567)	(16,034)	2.96%
Effective Gross Revenue	$359,555	$370,107	$380,847	$392,273	$404,041	$416,162	$428,647	$441,506	$454,751	$468,394	$482,446	2.98%
Operating Expenses												
Taxes	$49,786	$51,279	$52,818	$54,402	$56,034	$57,715	$59,447	$61,230	$63,067	$64,959	$66,908	3.00%
Management Fee (7.00% of EGR)	25,169	25,907	26,659	27,459	28,283	29,131	30,005	30,905	31,833	32,788	33,771	2.98%
Insurance	3,295	3,394	3,496	3,601	3,709	3,820	3,934	4,052	4,174	4,299	4,428	3.00%
Repairs and Maintenance	15,941	16,420	16,912	17,420	17,942	18,480	19,035	19,606	20,194	20,800	21,424	3.00%
Replacement Reserve ($225 per Unit)	4,500	4,635	4,774	4,917	5,065	5,217	5,373	5,534	5,700	5,871	6,048	3.00%
Unit Turnover (2.75% of EGR)	9,902	10,189	10,482	10,797	11,121	11,454	11,798	12,152	12,516	12,892	13,279	2.97%
Vacancy Carry Cost (0.89% of EGR)	3,185	3,278	3,373	3,474	3,578	3,685	3,796	3,910	4,027	4,148	4,272	2.98%
Other Expenses (1.15% of EGR)	4,125	4,241	4,362	4,493	4,627	4,766	4,909	5,057	5,208	5,364	5,525	2.96%
Total	$115,904	$119,343	$122,875	$126,562	$130,359	$134,269	$138,297	$142,446	$146,720	$151,121	$155,655	2.99%
Expenses per Unit (Excluding												
Taxes and Management Fees)	$40,950	$42,156	$43,399	$44,701	$46,042	$47,423	$48,845	$50,311	$51,820	$53,375	$54,976	2.99%
Expense Ratio	32.24%	32.25%	32.26%	32.26%	32.26%	32.26%	32.26%	32.26%	32.26%	32.26%	32.26%	
Net Operating Income												
Total	$243,651	$250,764	$257,972	$265,711	$273,682	$281,893	$290,349	$299,060	$308,032	$317,273	$326,791	2.98%
NOI Ratio	67.76%	67.75%	67.74%	67.74%	67.74%	67.74%	67.74%	67.74%	67.74%	67.74%	67.74%	
per SFR	12,183	12,538	12,899	13,286	13,684	14,095	14,517	14,953	15,402	15,864	16,340	
Annual Change		2.92%	2.87%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	
% of Value	5.89%	6.06%	6.24%	6.42%	6.62%	6.82%	7.02%	7.23%	7.45%	7.67%	7.90%	
Rolling Average % of Value		5.98%	6.06%	6.15%	6.25%	6.34%	6.44%	6.54%	6.64%	6.74%	6.85%	
Other Deductions												
Leasing Expense (4.90% of EGR)	$17,619	$18,135	$18,661	$19,221	$19,798	$20,392	$21,003	$21,633	$22,282	$22,951		2.98%
CapEx on Turnover (0.60% of EGR)	2,155	2,220	2,285	2,353	2,424	2,497	2,571	2,649	2,728	2,810		2.99%
Maintenance CapEx (4.53% of EGR)	16,301	16,759	17,236	17,753	18,286	18,834	19,400	19,982	20,581	21,198		2.96%
Total	$36,075	$37,114	$38,182	$39,328	$40,507	$41,723	$42,974	$44,264	$45,591	$46,959		
Cash from Operations												
Total	$207,577	$213,650	$219,790	$226,383	$233,175	$240,170	$247,375	$254,796	$262,440	$270,313		2.98%
% of Value	5.02%	5.17%	5.31%	5.47%	5.64%	5.81%	5.98%	6.16%	6.35%	6.54%		
Rolling Average % of Value		5.09%	5.17%	5.24%	5.32%	5.40%	5.49%	5.57%	5.66%	5.74%		
Reversion												
Overall Capitalization Rate										6.37%		
Sale Price										$5,133,000		
Selling Expenses (3.00%)										153,990		
Net Reversion										$4,979,010		
Present Values												
Present Value Factor @ 7.11%	0.933577	0.871566	0.813674	0.759627	0.709171	0.662065	0.618089	0.577034	0.538705	0.502923		
Cash Flow	$207,577	$213,650	$219,790	$226,383	$233,175	$240,170	$247,375	$254,796	$262,440	$270,313	% of	
Present Value	193,789	186,210	178,837	171,967	165,361	159,008	152,900	147,026	141,378	135,947	Total	
Cumulative Present Value	$193,789	$379,999	$558,836	$730,803	$896,164	$1,055,172	$1,208,072	$1,355,098	$1,496,476	$1,632,422	39.46%	
Reversion										$4,979,010		
Present Value										2,504,059	60.54%	
Total Value										$4,136,481	100.00%	
Rounded										**$4,136,000**		

(1) For calculation of sale price in year 10 only
2) Compound Annual Rate of Change

Cash flow forecast | Villa Rica

Year	1	2	3	4	5	6	7	8	9	10	11 (1)
Revenue											
Rent	$74,284	$76,513	$78,808	$81,172	$83,608	$86,116	$88,699	$91,360	$94,101	$96,924	$99,832
Other Revenue	2,976	3,065	3,157	3,252	3,349	3,450	3,553	3,660	3,770	3,883	3,999
Total	$77,260	$79,578	$81,965	$84,424	$86,957	$89,566	$92,253	$95,020	$97,871	$100,807	$103,831
Vacancy Loss (2.00% of Revenue)	(1,545)	(1,592)	(1,639)	(1,688)	(1,739)	(1,791)	(1,845)	(1,900)	(1,957)	(2,016)	(2,077)
Credit Loss (5.00% of Revenue)	(3,863)	(3,979)	(4,098)	(4,221)	(4,348)	(4,478)	(4,613)	(4,751)	(4,894)	(5,040)	(5,192)
Effective Gross Revenue	$71,852	$74,008	$76,228	$78,515	$80,870	$83,296	$85,795	$88,369	$91,020	$93,751	$96,563
Operating Expenses											
Taxes	$9,389	$9,670	$9,960	$10,259	$10,567	$10,884	$11,211	$11,547	$11,893	$12,250	$12,618
Management Fee (7.00% of EGR)	5,030	5,181	5,336	5,496	5,661	5,831	6,006	6,186	6,371	6,563	6,759
Insurance	594	611	630	649	668	688	709	730	752	775	798
Repairs and Maintenance	2,922	3,009	3,100	3,193	3,289	3,387	3,489	3,593	3,701	3,812	3,927
Replacement Reserve	1,125	1,159	1,194	1,229	1,266	1,304	1,343	1,384	1,425	1,468	1,512
Unit Turnover (2.15% of EGR)	1,545	1,591	1,639	1,688	1,739	1,791	1,845	1,900	1,957	2,016	2,076
Vacancy Carry Cost (0.70% of EGR)	503	518	534	550	566	583	601	619	637	656	676
Other Expenses (1.25% of EGR)	898	925	953	981	1,011	1,041	1,072	1,105	1,138	1,172	1,207
Total	$22,005	$22,665	$23,345	$24,045	$24,766	$25,509	$26,275	$27,063	$27,875	$28,711	$29,572
Expenses per Unit (Excluding											
Taxes and Management Fees)	$7,586	$7,814	$8,048	$8,290	$8,539	$8,795	$9,059	$9,330	$9,610	$9,899	$10,195
Expense Ratio	30.63%	30.63%	30.63%	30.63%	30.63%	30.63%	30.63%	30.63%	30.63%	30.63%	30.63%
Net Operating Income											
Total	$49,847	$51,343	$52,883	$54,469	$56,104	$57,787	$59,520	$61,306	$63,145	$65,039	$66,991
NOI Ratio	69.37%	69.37%	69.37%	69.37%	69.37%	69.37%	69.37%	69.37%	69.37%	69.37%	69.37%
per SFR	9,969	10,269	10,577	10,894	11,221	11,557	11,904	12,261	12,629	13,008	13,398
Annual Change		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
% of Value	5.50%	5.66%	5.83%	6.01%	6.19%	6.37%	6.56%	6.76%	6.96%	7.17%	7.39%
Rolling Average % of Value		5.58%	5.66%	5.75%	5.84%	5.92%	6.02%	6.11%	6.20%	6.30%	6.40%
Other Deductions											
Leasing Expense (4.50% of EGR)	$3,233	$3,330	$3,430	$3,533	$3,639	$3,748	$3,861	$3,977	$4,096	$4,219	
CapEx on Turnover (0.45% of EGR)	323	333	343	353	364	375	386	398	410	422	
Maintenance CapEx (3.50% of EGR)	2,515	2,590	2,668	2,748	2,830	2,915	3,003	3,093	3,186	3,281	
Total	$6,071	$6,254	$6,441	$6,634	$6,834	$7,039	$7,250	$7,467	$7,691	$7,922	
Cash from Operations											
Total	$43,776	$45,089	$46,442	$47,835	$49,270	$50,748	$52,271	$53,839	$55,454	$57,117	
% of Value	4.83%	4.97%	5.12%	5.27%	5.43%	5.60%	5.76%	5.94%	6.11%	6.30%	
Rolling Average % of Value		4.90%	4.97%	5.05%	5.12%	5.20%	5.28%	5.36%	5.45%	5.53%	
Reversion											
Overall Capitalization Rate										6.05%	
Sale Price										$1,107,689	
Selling Expenses (3.00%)										33,231	
Net Reversion										$1,074,458	
Present Values											
Present Value Factor @ 6.80%	0.936349	0.876750	0.820944	0.768690	0.719762	0.673948	0.631051	0.590884	0.553274	0.518057	
Cash Flow	$43,776	$45,089	$46,442	$47,835	$49,270	$50,748	$52,271	$53,839	$55,454	$57,117	% of
Present Value	40,989	39,532	38,126	36,770	35,463	34,202	32,985	31,812	30,681	29,590	Total
Cumulative Present Value	$40,989	$80,521	$118,647	$155,418	$190,880	$225,082	$258,067	$289,880	$320,561	$350,151	38.61%
Reversion										$1,074,458	
Present Value										556,631	61.39%
Total Value										$906,782	100.00%
Rounded										**$907,000**	

(1) For calculation of sale price in year 10 only

Cash flow forecast | Marietta

Year	1	2	3	4	5	6	7	8	9	10	11 (1)
Revenue											
Rent	$106,573	$111,369	$115,267	$118,725	$122,287	$125,955	$129,734	$133,626	$137,635	$141,764	$146,017
Other Revenue	5,605	5,774	5,947	6,125	6,309	6,498	6,693	6,894	7,101	7,314	7,533
Total	$112,179	$117,143	$121,214	$124,850	$128,596	$132,453	$136,427	$140,520	$144,735	$149,077	$153,550
Vacancy Loss (4.00% of Revenue)	(4,487)	(4,686)	(4,849)	(4,994)	(5,144)	(5,298)	(5,457)	(5,621)	(5,789)	(5,963)	(6,142)
Credit Loss (2.00% of Revenue)	(2,244)	(2,343)	(2,424)	(2,497)	(2,572)	(2,649)	(2,729)	(2,810)	(2,895)	(2,982)	(3,071)
Effective Gross Revenue	$105,448	$110,114	$113,941	$117,359	$120,880	$124,506	$128,241	$132,089	$136,051	$140,133	$144,337
Operating Expenses											
Taxes	$13,401	$13,803	$14,217	$14,643	$15,082	$15,535	$16,001	$16,481	$16,975	$17,485	$18,009
Management Fee (7.00% of EGR)	7,381	7,708	7,976	8,215	8,462	8,715	8,977	9,246	9,524	9,809	10,104
Insurance	885	912	939	967	996	1,026	1,057	1,089	1,121	1,155	1,190
Repairs and Maintenance	5,043	5,194	5,350	5,511	5,676	5,846	6,021	6,202	6,388	6,580	6,777
Replacement Reserve	1,125	1,159	1,194	1,229	1,266	1,304	1,343	1,384	1,425	1,468	1,512
Unit Turnover (2.75% of EGR)	2,900	3,028	3,133	3,227	3,324	3,424	3,527	3,632	3,741	3,854	3,969
Vacancy Carry Cost (0.90% of EGR)	949	991	1,025	1,056	1,088	1,121	1,154	1,189	1,224	1,261	1,299
Other Expenses (0.90% of EGR)	949	991	1,025	1,056	1,088	1,121	1,154	1,189	1,224	1,261	1,299
Total	$32,633	$33,786	$34,860	$35,905	$36,982	$38,092	$39,235	$40,412	$41,624	$42,873	$44,159
Expenses per Unit (Excluding Taxes and Management Fees)	$11,851	$12,275	$12,667	$13,047	$13,438	$13,842	$14,257	$14,685	$15,125	$15,579	$16,046
Expense Ratio	30.95%	30.68%	30.59%	30.59%	30.59%	30.59%	30.59%	30.59%	30.59%	30.59%	30.59%
Net Operating Income											
Total	$72,815	$76,328	$79,081	$81,454	$83,897	$86,414	$89,007	$91,677	$94,427	$97,260	$100,178
NOI Ratio	69.05%	69.32%	69.41%	69.41%	69.41%	69.41%	69.41%	69.41%	69.41%	69.41%	69.41%
per SFR	14,563	15,266	15,816	16,291	16,779	17,283	17,801	18,335	18,885	19,452	20,036
Annual Change		4.83%	3.61%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
% of Value	5.61%	5.88%	6.09%	6.28%	6.46%	6.66%	6.86%	7.06%	7.27%	7.49%	7.72%
Rolling Average % of Value		5.75%	5.86%	5.96%	6.06%	6.16%	6.26%	6.36%	6.46%	6.57%	6.67%
Other Deductions											
Leasing Expense (5.00% of EGR)	$5,272	$5,506	$5,697	$5,868	$6,044	$6,225	$6,412	$6,604	$6,803	$7,007	
CapEx on Turnover (0.70% of EGR)	738	771	798	822	846	872	898	925	952	981	
Maintenance CapEx (4.00% of EGR)	4,218	4,405	4,558	4,694	4,835	4,980	5,130	5,284	5,442	5,605	
Total	$10,228	$10,681	$11,052	$11,384	$11,725	$12,077	$12,439	$12,813	$13,197	$13,593	
Cash from Operations											
Total	$62,586	$65,647	$68,029	$70,070	$72,172	$74,337	$76,567	$78,864	$81,230	$83,667	
% of Value	4.82%	5.06%	5.24%	5.40%	5.56%	5.73%	5.90%	6.08%	6.26%	6.45%	
Rolling Average % of Value		4.94%	5.04%	5.13%	5.22%	5.30%	5.39%	5.47%	5.56%	5.65%	
Reversion											
Overall Capitalization Rate										6.24%	
Sale Price										$1,605,119	
Selling Expenses (3.00%)										48,154	
Net Reversion										$1,556,966	
Present Values											
Present Value Factor @ 6.99%	0.934657	0.873583	0.816501	0.763148	0.713281	0.666673	0.623111	0.582395	0.544339	0.508770	
Cash Flow	$62,586	$65,647	$68,029	$70,070	$72,172	$74,337	$76,567	$78,864	$81,230	$83,667	% of
Present Value	58,497	57,348	55,546	53,474	51,479	49,559	47,710	45,930	44,217	42,567	Total
Cumulative Present Value	$58,497	$115,845	$171,391	$224,865	$276,344	$325,902	$373,612	$419,542	$463,759	$506,326	38.99%
Reversion										$1,556,966	
Present Value										792,138	61.01%
Total Value										$1,298,464	100.00%
Rounded										**$1,298,000**	

(1) For calculation of sale price in year 10 only

Cash flow forecast | Lithonia

Year	1	2	3	4	5	6	7	8	9	10	11 (1)
Revenue											
Rent	$90,951	$92,770	$95,089	$97,942	$100,880	$103,906	$107,023	$110,234	$113,541	$116,947	$120,456
Other Revenue	4,408	4,540	4,677	4,817	4,961	5,110	5,264	5,422	5,584	5,752	5,924
Total	$95,359	$97,310	$99,766	$102,759	$105,841	$109,017	$112,287	$115,656	$119,125	$122,699	$126,380
Vacancy Loss (3.50% of Revenue)	(3,338)	(3,406)	(3,492)	(3,597)	(3,704)	(3,816)	(3,930)	(4,048)	(4,169)	(4,294)	(4,423)
Credit Loss (3.00% of Revenue)	(2,861)	(2,919)	(2,993)	(3,083)	(3,175)	(3,270)	(3,369)	(3,470)	(3,574)	(3,681)	(3,791)
Effective Gross Revenue	$89,161	$90,985	$93,281	$96,079	$98,962	$101,931	$104,988	$108,138	$111,382	$114,724	$118,165
Operating Expenses											
Taxes	$13,496	$13,901	$14,318	$14,748	$15,190	$15,646	$16,115	$16,599	$17,097	$17,610	$18,138
Management Fee (7.00% of EGR)	6,241	6,369	6,530	6,726	6,927	7,135	7,349	7,570	7,797	8,031	8,272
Insurance	714	736	758	780	804	828	853	878	905	932	960
Repairs and Maintenance	4,061	4,183	4,308	4,438	4,571	4,708	4,849	4,995	5,145	5,299	5,458
Replacement Reserve	1,125	1,159	1,194	1,229	1,266	1,304	1,343	1,384	1,425	1,468	1,512
Unit Turnover (3.25% of EGR)	2,898	2,957	3,032	3,123	3,216	3,313	3,412	3,514	3,620	3,729	3,840
Vacancy Carry Cost (0.90% of EGR)	802	819	840	865	891	917	945	973	1,002	1,033	1,063
Other Expenses (1.25% of EGR)	1,115	1,137	1,166	1,201	1,237	1,274	1,312	1,352	1,392	1,434	1,477
Total	$30,453	$31,261	$32,145	$33,109	$34,102	$35,126	$36,179	$37,265	$38,383	$39,534	$40,720
Expenses per Unit (Excluding											
Taxes and Management Fees)	$10,715	$10,991	$11,297	$11,636	$11,985	$12,344	$12,715	$13,096	$13,489	$13,894	$14,311
Expense Ratio	34.15%	34.36%	34.46%	34.46%	34.46%	34.46%	34.46%	34.46%	34.46%	34.46%	34.46%
Net Operating Income											
Total	$58,708	$59,724	$61,136	$62,970	$64,859	$66,805	$68,809	$70,873	$73,000	$75,190	$77,445
NOI Ratio	65.85%	65.64%	65.54%	65.54%	65.54%	65.54%	65.54%	65.54%	65.54%	65.54%	65.54%
per SFR	11,742	11,945	12,227	12,594	12,972	13,361	13,762	14,175	14,600	15,038	15,489
Annual Change		1.73%	2.36%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
% of Value	6.38%	6.49%	6.65%	6.84%	7.05%	7.26%	7.48%	7.70%	7.93%	8.17%	8.42%
Rolling Average % of Value		6.44%	6.51%	6.59%	6.68%	6.78%	6.88%	6.98%	7.09%	7.20%	7.31%
Other Deductions											
Leasing Expense (5.00% of EGR)	$4,458	$4,549	$4,664	$4,804	$4,948	$5,097	$5,249	$5,407	$5,569	$5,736	
CapEx on Turnover (0.60% of EGR)	535	546	560	576	594	612	630	649	668	688	
Maintenance CapEx (5.25% of EGR)	4,681	4,777	4,897	5,044	5,195	5,351	5,512	5,677	5,848	6,023	
Total	$9,674	$9,872	$10,121	$10,425	$10,737	$11,059	$11,391	$11,733	$12,085	$12,448	
Cash from Operations											
Total	$49,034	$49,852	$51,015	$52,546	$54,122	$55,746	$57,418	$59,140	$60,915	$62,742	
% of Value	5.33%	5.42%	5.55%	5.71%	5.88%	6.06%	6.24%	6.43%	6.62%	6.82%	
Rolling Average % of Value		5.37%	5.43%	5.50%	5.58%	5.66%	5.74%	5.83%	5.92%	6.01%	
Reversion											
Overall Capitalization Rate										6.70%	
Sale Price										$1,155,929	
Selling Expenses (3.00%)										34,678	
Net Reversion										$1,121,251	
Present Values											
Present Value Factor @ 7.45%	0.930667	0.866141	0.806089	0.750200	0.698186	0.649779	0.604728	0.562800	0.523779	0.487464	
Cash Flow	$49,034	$49,852	$51,015	$52,546	$54,122	$55,746	$57,418	$59,140	$60,915	$62,742	% of
Present Value	45,634	43,179	41,123	39,420	37,787	36,222	34,722	33,284	31,906	30,585	Total
Cumulative Present Value	$45,634	$88,814	$129,936	$169,356	$207,143	$243,365	$278,088	$311,372	$343,278	$373,862	40.62%
Reversion										$1,121,251	
Present Value										546,570	59.38%
Total Value										$920,432	100.00%
Rounded										**$920,000**	

(1) For calculation of sale price in year 10 only

Cash flow forecast | Jonesboro

Year	1	2	3	4	5	6	7	8	9	10	11 (1)
Revenue											
Rent	$95,436	$97,345	$99,779	$102,772	$105,855	$109,031	$112,302	$115,671	$119,141	$122,715	$126,397
Other Revenue	4,666	4,806	4,950	5,098	5,251	5,409	5,571	5,738	5,910	6,088	6,270
Total	$100,102	$102,151	$104,729	$107,871	$111,107	$114,440	$117,873	$121,409	$125,052	$128,803	$132,667
Vacancy Loss (4.00% of Revenue)	(4,004)	(4,086)	(4,189)	(4,315)	(4,444)	(4,578)	(4,715)	(4,856)	(5,002)	(5,152)	(5,307)
Credit Loss (3.00% of Revenue)	(3,003)	(3,065)	(3,142)	(3,236)	(3,333)	(3,433)	(3,536)	(3,642)	(3,752)	(3,864)	(3,980)
Effective Gross Revenue	$93,095	$95,000	$97,398	$100,320	$103,329	$106,429	$109,622	$112,911	$116,298	$119,787	$123,380
Operating Expenses											
Taxes	$13,500	$13,905	$14,322	$14,752	$15,194	$15,650	$16,120	$16,603	$17,102	$17,615	$18,143
Management Fee (7.00% of EGR)	6,517	6,650	6,818	7,022	7,233	7,450	7,674	7,904	8,141	8,385	8,637
Insurance	1,102	1,135	1,169	1,204	1,240	1,277	1,316	1,355	1,396	1,438	1,481
Repairs and Maintenance	3,916	4,033	4,154	4,279	4,407	4,539	4,675	4,816	4,960	5,109	5,262
Replacement Reserve	1,125	1,159	1,194	1,229	1,266	1,304	1,343	1,384	1,425	1,468	1,512
Unit Turnover (2.75% of EGR)	2,560	2,613	2,678	2,759	2,842	2,927	3,015	3,105	3,198	3,294	3,393
Vacancy Carry Cost (1.00% of EGR)	931	950	974	1,003	1,033	1,064	1,096	1,129	1,163	1,198	1,234
Other Expenses (1.25% of EGR)	1,164	1,188	1,217	1,254	1,292	1,330	1,370	1,411	1,454	1,497	1,542
Total	$30,814	$31,632	$32,526	$33,502	$34,507	$35,542	$36,609	$37,707	$38,838	$40,003	$41,203
Expenses per Unit (Excluding											
Taxes and Management Fees)	$10,797	$11,077	$11,386	$11,728	$12,080	$12,442	$12,815	$13,200	$13,596	$14,004	$14,424
Expense Ratio	33.10%	33.30%	33.40%	33.40%	33.40%	33.40%	33.40%	33.40%	33.40%	33.40%	33.40%
Net Operating Income											
Total	$62,281	$63,369	$64,871	$66,817	$68,822	$70,887	$73,013	$75,204	$77,460	$79,784	$82,177
NOI Ratio	66.90%	66.70%	66.60%	66.60%	66.60%	66.60%	66.60%	66.60%	66.60%	66.60%	66.60%
per SFR	12,456	12,674	12,974	13,363	13,764	14,177	14,603	15,041	15,492	15,957	16,435
Annual Change		1.75%	2.37%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
% of Value	6.16%	6.27%	6.42%	6.61%	6.81%	7.01%	7.22%	7.44%	7.66%	7.89%	8.13%
Rolling Average % of Value		6.21%	6.28%	6.36%	6.45%	6.55%	6.64%	6.74%	6.84%	6.95%	7.06%
Other Deductions											
Leasing Expense (5.00% of EGR)	$4,655	$4,750	$4,870	$5,016	$5,166	$5,321	$5,481	$5,646	$5,815	$5,989	
CapEx on Turnover (0.60% of EGR)	559	570	584	602	620	639	658	677	698	719	
Maintenance CapEx (5.25% of EGR)	4,887	4,988	5,113	5,267	5,425	5,588	5,755	5,928	6,106	6,289	
Total	$10,101	$10,308	$10,568	$10,885	$11,211	$11,548	$11,894	$12,251	$12,618	$12,997	
Cash from Operations											
Total	$52,180	$53,061	$54,304	$55,933	$57,611	$59,339	$61,119	$62,953	$64,841	$66,787	
% of Value	5.16%	5.25%	5.37%	5.53%	5.70%	5.87%	6.05%	6.23%	6.41%	6.61%	
Rolling Average % of Value		5.20%	5.26%	5.33%	5.40%	5.48%	5.56%	5.64%	5.73%	5.82%	
Reversion											
Overall Capitalization Rate										6.50%	
Sale Price										$1,264,263	
Selling Expenses (3.00%)										37,928	
Net Reversion										$1,226,335	
Present Values											
Present Value Factor @ 7.25%	0.932401	0.869371	0.810603	0.755807	0.704715	0.657077	0.612659	0.571244	0.532628	0.496623	
Cash Flow	$52,180	$53,061	$54,304	$55,933	$57,611	$59,339	$61,119	$62,953	$64,841	$66,787	% of
Present Value	48,653	46,130	44,019	42,274	40,599	38,990	37,445	35,961	34,536	33,168	Total
Cumulative Present Value	$48,653	$94,783	$138,802	$181,076	$221,675	$260,666	$298,111	$334,072	$368,609	$401,777	39.75%
Reversion										$1,226,335	
Present Value										609,026	60.25%
Total Value										$1,010,803	100.00%
Rounded										**$1,011,000**	

(1) For calculation of sale price in year 10 only

Cash flow forecast | Property No. 1, Villa Rica

Year	1	2	3	4	5	6	7	8	9	10	11 (1)	CARC (2)
Revenue												
Rent	$15,288	$15,747	$16,219	$16,706	$17,207	$17,723	$18,255	$18,802	$19,366	$19,947	$20,546	3.00%
Other Revenue	607	625	644	663	683	704	725	747	769	792	816	3.00%
Total	$15,895	$16,372	$16,863	$17,369	$17,890	$18,427	$18,980	$19,549	$20,136	$20,740	$21,362	3.00%
Vacancy Loss (2.00% of Revenue)	(318)	(327)	(337)	(347)	(358)	(369)	(380)	(391)	(403)	(415)	(427)	3.00%
Credit Loss (5.00% of Revenue)	(795)	(819)	(843)	(868)	(895)	(921)	(949)	(977)	(1,007)	(1,037)	(1,068)	3.00%
Effective Gross Revenue	$14,782	$15,226	$15,683	$16,153	$16,638	$17,137	$17,651	$18,181	$18,726	$19,288	$19,866	3.00%
Operating Expenses												
Taxes	$1,862	$1,918	$1,976	$2,035	$2,096	$2,159	$2,224	$2,290	$2,359	$2,430	$2,503	3.00%
Management Fee (7.00% of EGR)	1,035	1,066	1,098	1,131	1,165	1,200	1,236	1,273	1,311	1,350	1,391	3.00%
Insurance	120	123	127	131	135	139	143	147	151	156	161	3.00%
Repairs and Maintenance	601	619	638	657	677	697	718	740	762	785	808	3.00%
Replacement Reserve	225	232	239	246	253	261	269	277	285	294	302	3.00%
Unit Turnover (2.15% of EGR)	318	327	337	347	358	368	379	391	403	415	427	3.00%
Vacancy Carry Cost (0.70% of EGR)	103	107	110	113	116	120	124	127	131	135	139	3.00%
Other Expenses (1.25% of EGR)	185	190	196	202	208	214	221	227	234	241	248	3.00%
Total	$4,449	$4,583	$4,720	$4,862	$5,007	$5,158	$5,312	$5,472	$5,636	$5,805	$5,979	3.00%
Expenses per Unit (Excluding												
Taxes and Management Fees)	$1,552	$1,599	$1,646	$1,696	$1,747	$1,799	$1,853	$1,909	$1,966	$2,025	$2,086	
Expense Ratio	30.10%	30.10%	30.10%	30.10%	30.10%	30.10%	30.10%	30.10%	30.10%	30.10%	30.10%	
Net Operating Income												
Total	$10,333	$10,643	$10,963	$11,292	$11,630	$11,979	$12,339	$12,709	$13,090	$13,483	$13,887	3.00%
NOI Ratio	69.90%	69.90%	69.90%	69.90%	69.90%	69.90%	69.90%	69.90%	69.90%	69.90%	69.90%	
per SFR	517	532	548	565	582	599	617	635	655	674	694	
Annual Change		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	
% of Value	5.44%	5.60%	5.77%	5.94%	6.12%	6.30%	6.49%	6.69%	6.89%	7.10%	7.31%	
Rolling Average % of Value		5.52%	5.60%	5.69%	5.77%	5.86%	5.95%	6.05%	6.14%	6.23%	6.33%	
Other Deductions												
Leasing Expense (4.50% of EGR)	$665	$685	$706	$727	$749	$771	$794	$818	$843	$868		
CapEx on Turnover (0.45% of EGR)	67	69	71	73	75	77	79	82	84	87		3.00%
Maintenance CapEx (3.50% of EGR)	517	533	549	565	582	600	618	636	655	675		3.00%
Total	$1,249	$1,287	$1,325	$1,365	$1,406	$1,448	$1,492	$1,536	$1,582	$1,630		
Cash from Operations												
Total	$9,084	$9,357	$9,638	$9,927	$10,224	$10,531	$10,847	$11,173	$11,508	$11,853		3.00%
% of Value	4.78%	4.92%	5.07%	5.22%	5.38%	5.54%	5.71%	5.88%	6.06%	6.24%		
Rolling Average % of Value		4.85%	4.93%	5.00%	5.08%	5.15%	5.23%	5.31%	5.40%	5.48%		
Reversion												
Overall Capitalization Rate										6.00%		
Sale Price										$231,455		
Selling Expenses (3.00%)										6,944		
Net Reversion										$224,511		
Present Values												
Present Value Factor @ 6.75%	0.936768	0.877535	0.822046	0.770067	0.721374	0.675760	0.633031	0.593003	0.555506	0.520381		
Cash Flow	$9,084	$9,357	$9,638	$9,927	$10,224	$10,531	$10,847	$11,173	$11,508	$11,853	% of	
Present Value	8,510	8,211	7,923	7,644	7,376	7,117	6,867	6,625	6,393	6,168	Total	
Cumulative Present Value	$8,510	$16,721	$24,643	$32,288	$39,663	$46,780	$53,646	$60,272	$66,664	$72,832	38.40%	
Reversion										$224,511		
Present Value										116,831	61.60%	
Total Value										$189,664	100.00%	
Rounded										**$190,000**		

(1) For calculation of sale price in year 10 only
2) Compound Annual Rate of Change

Overall capitalization rate test of reasonableness

OARs for MFR and SFRs are displayed in the Valuation Rates Summary table.

The rate indications for the portfolio are the weighted average rates for each property. For the portfolio, the rates applied to the four locational groupings are generally above the indications for the MFRs. This is not unexpected because MFRs are considered a "core" property type by investors along with office, industrial, and retail.

Comparable sales test of reasonableness

We reviewed listings of several SFR portfolios (see the following table) to test the reasonableness of our valuation conclusion.

Listings of comparable portfolios | Atlanta MSA

No.	No. of homes	Avg. year built	Avg. size (Sq. ft.)	Occu-pancy	Price Total	Price per unit	NOI per unit	NOI ratio	EGRM	OAR	Remarks
1	55	1951	1,268	89%	$7,556,000	$137,382	$5,907	72.91%	10.6	4.30%	The average contract rents were reported to be 10% below market rent levels.
2	46	1964	1,449	89%	$7,189,000	$156,283	$6,626	70.98%	11.7	4.24%	The average contract rents were reported to be 16% below market rent levels.
3	10	2018	1,896	100%	$4,234,000	$423,400	$23,964	80.84%	14.3	5.66%	The portfolio consists of build-for-rent (BFR) homes.
4	45				$4,199,900	$93,331	$6,111	64.26%	9.8	6.55%	
Total	156				$23,178,900						
Min.	10				$4,199,900	$93,331	$5,907	64.26%	9.8	4.24%	
Max.	55				$7,556,000	$423,400	$23,964	80.84%	14.3	6.55%	
Avg.	39					$148,583	$7,336	71.55%	11.3	4.94%	

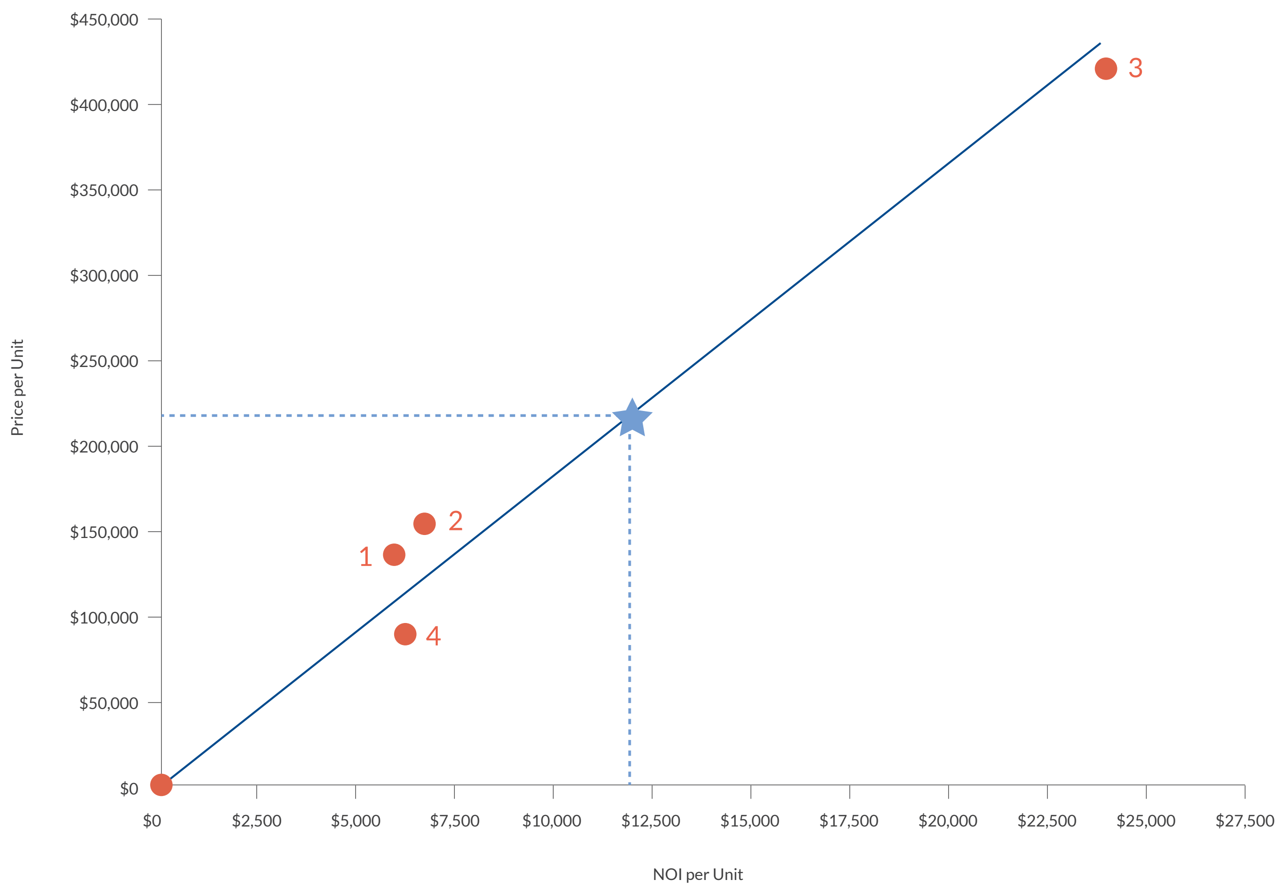
Regression analysis

Despite a limited number of data points, we performed a regression analysis. As shown on the following graph, analysis of the sales revealed a reliable linear regression (a 0.99 correlation coefficient). Based on our portfolio-level forecast NOI of $12,183 per unit, a price of $228,000 per unit is indicated.

Individual sales analysis

Sale Nos. 1 and 2 have average contract rent levels reported to be 10% and 16% below market rent levels, respectively. This is unusual in SFR portfolios, but they suggest above-average potential growth in NOI and a lower OAR. Sale No. 3 is a portfolio of new build-for-rent properties (BFR). Sale No. 4 contains properties in a less desirable location.

Regression analysis



Because the average projected NOI per unit for the subject ($12,183) is well above the average of the comparables, the indicated average price per unit for the portfolio should be above the average of the comparables. The per-unit indication of the DCF analysis ($206,850 per unit) is reasonable.

Summary of findings and opinions

BPOs

Advantages

- *Less expensive than an appraisal*
- *Quicker turnaround time*
- *Useful in certain situations*

Disadvantages

- *Doesn't reflect the income-producing nature of the asset*
- *A less-refined or accurate opinion of value*
- *Brokers are usually not as qualified as a certified appraiser*
- *Certified appraisals are regulated and bound by the Uniform Standards of Professional Appraisal Practice (USPAP) regulations, which dictates how appraisals must be performed and reported. Brokers preparing BPOs are not bound by any law and are not mentioned in the Financial Institutions Reform and Recovery Act (FIRREA), the federal law which governs the mortgage industry*
- *Quality varies greatly*
- *The broker or agent may not have inspected the property*
- *According to the WSJ, the process is sometimes outsourced to companies in other countries (India), where they consult Google Earth and real-estate websites in estimating value*[14]
- *Doesn't incorporate entrepreneurial profit. This is typically the increase in value beyond the actual cost of a renovation*

DCF

Advantages

- *In contrast to BPOs, applying the Income Capitalization Approach enables investors to compare the returns generated by SFRs to various other real estate asset types (particularly multifamily) through benchmarking of capitalization rates and returns, including:*
  - *Effective Gross Revenue Multiplier*
  - *Operating Expense Ratio*
  - *Net Operating Income (NOI) Ratio*
  - *Implied Internal Rate of Return (IRR)*
  - *OAR*
- *Able to measure (benchmark) the performance of one SFR property (or portfolio) against a larger data set of properties (or portfolios)*
- *Standardization of underwriting*
- *Investor reporting*
- *Allows for analysis of macroeconomic and wider capital market trends (especially perceptions regarding risk)*
- *Value attribution between capital appreciation and rental income so the total yield of an SFR property or fund can be examined*
- *Allows for the valuation of unstabilized and stabilized assets within an SFR portfolio*

Disadvantages

- *The sourcing of assumptions and rates can be difficult*

Conclusion

The SFR market has matured into a legitimate asset class because of predictable cash flows, stable returns, and solid rent growth. These characteristics are attractive to a wide range of investors and lenders and it is estimated that institutional ownership is between 350,000 and 400,000 homes. This amount is expected to continue to increase.

SFRs are income-producing assets and they are purchased based on their ability to generate cash flow and returns to their owners. One of the primary deficiencies of a BPO is that it doesn't reflect the actions of institutional buyers and sellers. Without that basis, the method has no market relevance. The most appropriate valuation approach is income-based (Income Capitalization Approach). The Sales Comparison and Cost (Replacement) Approaches are widely understood and have some relevance but they are not easily applied, especially in SFR portfolio valuations.

The DCF technique has widespread application for the valuation of income-producing properties. It is an essential form of analysis used by investors. As institutional buyers become a greater part of the marketplace, DCF analysis will become entrenched in future decision-making.

The increasing use of DCF analysis does not negate the validity and usefulness of traditional appraisal techniques. However, the institutional ownership marketplace has relegated their use to one of a test and support. Early in the decade of 2010, a DCF analysis was a valid and rational approach to investment value. Today, so many market participants use a DCF analysis that it is also a valid approach to market value.

Because of the expanding market emphasis on the DCF method, the valuation community must become knowledgeable and proficient in its use. Its use becomes imperative if the user needs to revise market assumptions and generate multiple valuation scenarios.

About Altus Group

Altus Group Limited is a leading provider of software, data solutions and independent advisory services to the global commercial real estate industry. Our businesses, Altus Analytics and Altus Expert Services, reflect decades of experience, a range of expertise, and technology-enabled capabilities. Our solutions empower clients to analyze, gain insight and recognize value on their real estate investments. Headquartered in Canada, we have approximately 2,200 employees around the world, with operations in North America, Europe and Asia Pacific. Our clients include many of the world's largest commercial real estate industry participants.

Valuation advisory

With over 20 years spent developing industry standard valuation methodologies, we are the leading Valuation Management provider in the U.S.

- *We support 100+ funds and serve 22 of the 24 NCREIF open ended (ODCE) funds*
- *Over 170 real estate advisory professionals globally*
- *Offer an intuitive workflow management platform to seamlessly handle information and output exchange in the valuation management process*
- *Deliver powerful data analytics including portfolio benchmarking and performance attribution*
- *Designated or Associate members with professional real estate associations including the National Council of Real Estate Investment Fiduciaries (NCREIF), Appraisal Institute, American Real Estate Society (ARES), Pension Real Estate Association (PREA) and the National Association of Real Estate Investment Trusts (NAREIT)*

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Endnotes

[1] Strochak, S. (2017). "Five things that might surprise you about the fastest-growing segment of the housing market." Urban Institute. Retrieved from https://www.urban.org/urban-wire/five-things-might-surprise-you-about-fastest-growing-segment-housing-market

[2] Amherst Capital Management. (2016). "U.S. Single-Family Rental—An Emerging Institutional Asset Class." Retrieved from: https://www.amherstcapital.com/documents/24001/24142/US+SFR+Emerging+Asset+Class/9d84e0da-4a9f-4665-9880-88a4515d9d2b

[3] Balint, J. (2018). "Single-Family Rentals Increased Faster than Apartments in 22 of 30 Big Cities, Led by Phoenix." RENTCafe Blog. Retrieved from https://www.rentcafe.com/blog/rental-market/real-estate-news/single-family-homes-rent-increased-faster-than-apartments

[4] Freddie Mac (2018). "Single Family Rental: An Evolving Market." Retrieved from https://mf.freddiemac.com/docs/single-family-rental-markets.pdf?_ga=2.55180011.1337235558.1596666777-1477523334.1596666777

[5] Freddie Mac (2018). "Single Family Rental: An Evolving Market." Retrieved from https://mf.freddiemac.com/docs/single-family-rental-markets.pdf?_ga=2.55180011.1337235558.1596666777-1477523334.1596666777

[6] Porter, C. and Sharp, M. (2017). "Understanding the Single-Family Renter." John Burns Real Estate Consulting, LLC. Retrieved from https://www.realestateconsulting.com/understanding-the-single-family-renter/

[7] Freddie Mac (2018). "Single Family Rental: An Evolving Market." Retrieved from https://mf.freddiemac.com/docs/single-family-rental-markets.pdf?_ga=2.55180011.1337235558.1596666777-1477523334.1596666777

[8] Amherst Capital Management. (2016). "U.S. Single-Family Rental—An Emerging Institutional Asset Class." Retrieved from: https://www.amherstcapital.com/documents/24001/24142/US+SFR+Emerging+Asset+Class/9d84e0da-4a9f-4665-9880-88a4515d9d2b

[9] Rand, G. (2017). "The Trillion Dollar Consolidation of SFR." DSNews. Retrieved from https://dsnews.com/daily-dose/05-05-2017/trillion-dollar-consolidation-sfr

[10] Freddie Mac (2018). "Single Family Rental: An Evolving Market." Retrieved from https://mf.freddiemac.com/docs/single-family-rental-markets.pdf?_ga=2.55180011.1337235558.1596666777-1477523334.1596666777

[11] Thorsby, D. (2019). "What Is a BPO in Real Estate?" U.S. News & World Report. Retrieved from https://realestate.usnews.com/real-estate/articles/what-is-a-bpo-in-real-estate

[12] Dezember, R. and Rudegeair, P. (2018). "What's a House Worth? Wall Street Turns to Drive-By 'Appraisals'". The Wall Street Journal. Retrieved from https://www.wsj.com/articles/whats-a-house-worth-wall-street-turns-to-drive-by-appraisals-1516536001

[13] Dezember, R. and Rudegeair, P. (2018). "What's a House Worth? Wall Street Turns to Drive-By 'Appraisals'". The Wall Street Journal. Retrieved from https://www.wsj.com/articles/whats-a-house-worth-wall-street-turns-to-drive-by-appraisals-1516536001

[14] Dezember, R. and Rudegeair, P. (2018). "What's a House Worth? Wall Street Turns to Drive-By 'Appraisals'". The Wall Street Journal. Retrieved from https://www.wsj.com/articles/whats-a-house-worth-wall-street-turns-to-drive-by-appraisals-1516536001

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