

# Single-Family Rental Research

## Performance Summary Covering All Morningstar-Rated Securitizations

December 2016

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### Introduction

While the vacancy rate among single-borrower, single-family rental transactions ticked higher, Morningstar Credit Ratings, LLC expects the vacancy rate to improve in the coming months, as retention rates increase and turnover rates edge lower. The average vacancy rate among single-borrower, single-family rental transactions rose to 5.2% in November from a revised 4.9% in October. In last month's performance summary, Morningstar reported a vacancy rate of 5.2% but revised the figure to 4.9% with updated data and the removal from the report of PRD 2015-SFR1, which paid off in December. Among the metropolitan statistical areas most typically seen in single-borrower, single-family rental deals, Houston had the highest vacancy rate at 7.7% in November. The Florida MSAs of Jacksonville, Lakeland, Miami, and Sarasota-Bradenton-Venice are also showing vacancy rates of at least 7.0%. Rents for properties backing single-family rental securitizations rose by 3.6% from their prior contractual rents, while the year-over-year increases of three- and four-bedroom RentRange, LLC median rents rose at a higher rate, with average rents for four-bedroom properties topping 6%. The average delinquency rate in single-family rental securitizations ticked up to 0.7%, from 0.6% the month prior. As of October, the most recent data available, the average retention rate for full-term leases improved to 77.6%. Monthly property-level data tapes were published in December for the recently closed Amherst, or AMSR, 2016-SFR1 transaction. Morningstar expects to add this analysis to next month's report. Removing the paid-off PRD 2015-SFR1 transaction and adding Tricon, or TAH, 2016-SFR1 to this report brings the performance summary to an analysis of 25 single-borrower deals and over 96,000 properties, excluding AMSR 2016-SFR1.

Morningstar publishes its performance summary to provide market participants detailed property-level information on each securitization. The data below summarizes issuer-reported property-level information through November. Page 5 includes a

summary of the seven multiborrower transactions. For deals seasoned at least one year, we provide Morningstar DealView® Surveillance Analysis reports, available on our website, [www.morningstarcreditratings.com](http://www.morningstarcreditratings.com).

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## Single-Borrower Performance

The vacancy rate of 5.2% remains in line with recent performance and is equal to the November 2015 vacancy rate. The overall turnover rate declined further and was below 3.0%, as of October, for the first time since March. With fewer upcoming lease expirations, Morningstar expects that this may lead to improvement in vacancy in the coming months. Chart 5 shows the MSA-level vacancy rate in single-borrower transactions. MSAs with vacancy above the 5.2% average are red, while those below are blue. The size of the circle indicates the percentage of lease expirations in the given MSA over the past three months. MSAs in Florida are showing higher levels of vacancy, some of which can be explained by lease expirations.

Rents increased 3.6% in November, down from a revised 4.0% the prior month, while the RentRange benchmarks showed further rent growth. Based on the historical rent changes shown in Chart 1, the rent gains for securitized properties may dip in December before recovering in the beginning of 2017. The RentRange benchmarks track the year-over-year change on three- and four-bedroom median rents, weighted by MSA to match the geographic concentration of the Morningstar database. Chart 2 shows the rental change of renewals versus vacant-to-occupied properties. For October, the latest month for which data is available, the rent change for vacant-to-occupied properties was 2.1%, while the rent change for renewal properties was higher at 4.3%. That trend matches the relationship that these measures experienced one year ago, and renewal rent changes may continue to outpace vacant-to-occupied rent changes until the beginning of 2017. Chart 3 shows that the average contractual rents by MSA have been largely in line with or slightly higher than their property-level RentRange estimates. Exceptions are most notable in the Florida MSAs of Miami, Sarasota-Bradenton-Venice, and Fort Lauderdale. Chart 4 shows the MSA-level rent change. MSAs with rent changes above the 3.6% average are blue, while those below are red. The size of the circle indicates the percentage of properties from a given MSA in Morningstar's overall database. Table 1 shows the MSA-level rent change for the past 12 months.

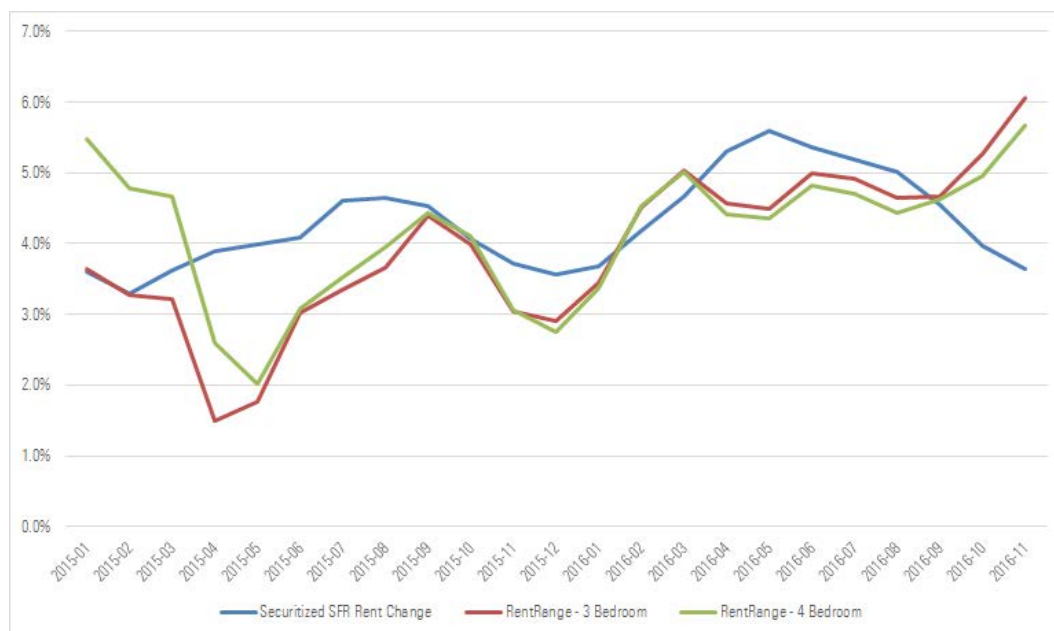
Other performance measures were largely unchanged. Only HPA 2016-1, at 1.0%, IH 2015-SFR2, at 1.0%, and SWAY 2014-1, at 1.3%, had a delinquency rate of at least 1.0%. Retention rates of expiring leases showed improvement in October: The average rose to 77.6%, and all transactions were above 70.0%, with the exception of SWAY 2014-1, at 59.2%.

## Multiborrower Performance

There have been seven multiborrower transactions: B2R 2015-1, B2R 2015-2, B2R 2016-1, FKL 2015-SFR1, CAF 2015-1, CAF 2016-1, and the newly added CAF 2016-2. As of the most recent remittance report, B2R 2015-1 had one loan that is 30 days delinquent and three that are at least 90 days delinquent. One of the 90 or more days delinquent loans, which is 0.4% of the transaction balance, is also in foreclosure and was transferred to special servicing in January. In June, the borrower of this loan filed for bankruptcy. The other two loans that are at least 90 days delinquent in B2R 2015-1 make up 0.4% of the total transaction balance and have been transferred to special servicing. Both were transferred, one in June and the other in November, because of payment default. Separately, B2R 2015-2 has one loan that is 30 days delinquent and one loan that is 60 days delinquent, which was transferred to special servicing in May because of payment default. The deal also has two loans that are 90 or more days behind on payments that combine for 0.4% of the transaction balance. These loans were also transferred to special servicing because of payment default; one of these loans was transferred in August, and the other was transferred in September. B2R 2016-1 has three loans that are 30 days delinquent, one that is 60 days delinquent, and one that remains 90 or more days delinquent. This loan is 0.2% of the total transaction balance and was transferred to special servicing in October for payment default. All the loans in CAF 2015-1, CAF 2016-1, and CAF 2016-2 are current; however, CAF 2015-1 has two loans equal to 4.7% of the transaction balance that were transferred to special servicing in November. Finally, all borrowers in FKL 2015-SFR1 are current. However, one loan that is approximately 1.7% of the transaction balance was transferred to special servicing in October for imminent default.

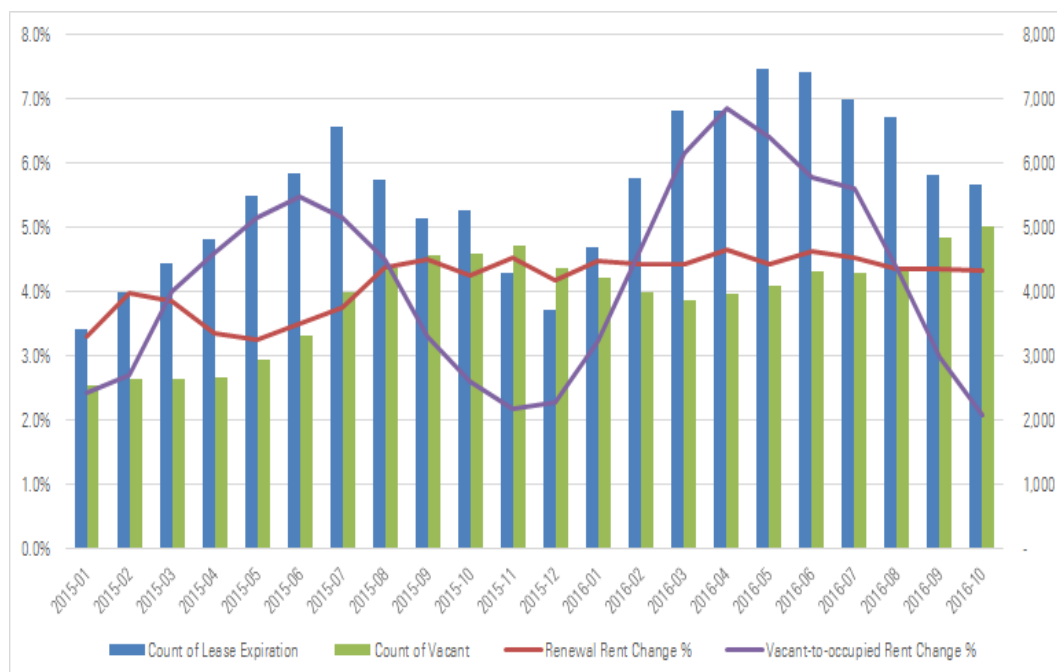
## Single-Borrower Charts and Tables

**Chart 1 – Single-Family Rental Rent Change Versus RentRange Year-Over-Year Rent Change**



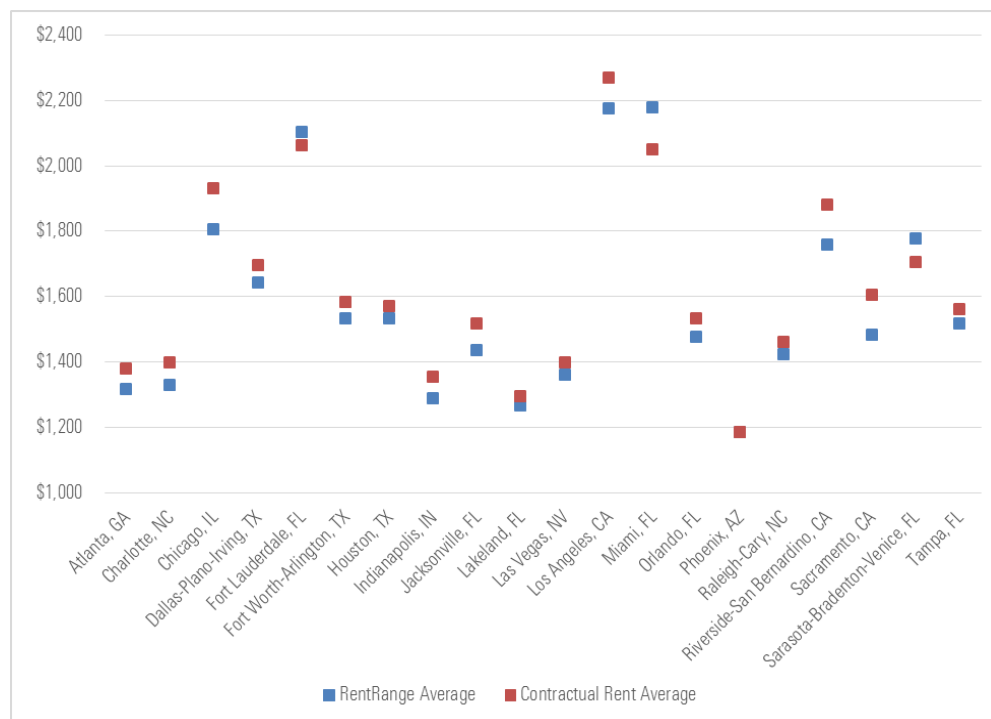
Sources: Morningstar Credit Ratings, LLC; RentRange

**Chart 2 – Rental Changes for Renewals Versus Vacant-to-Occupied Properties**



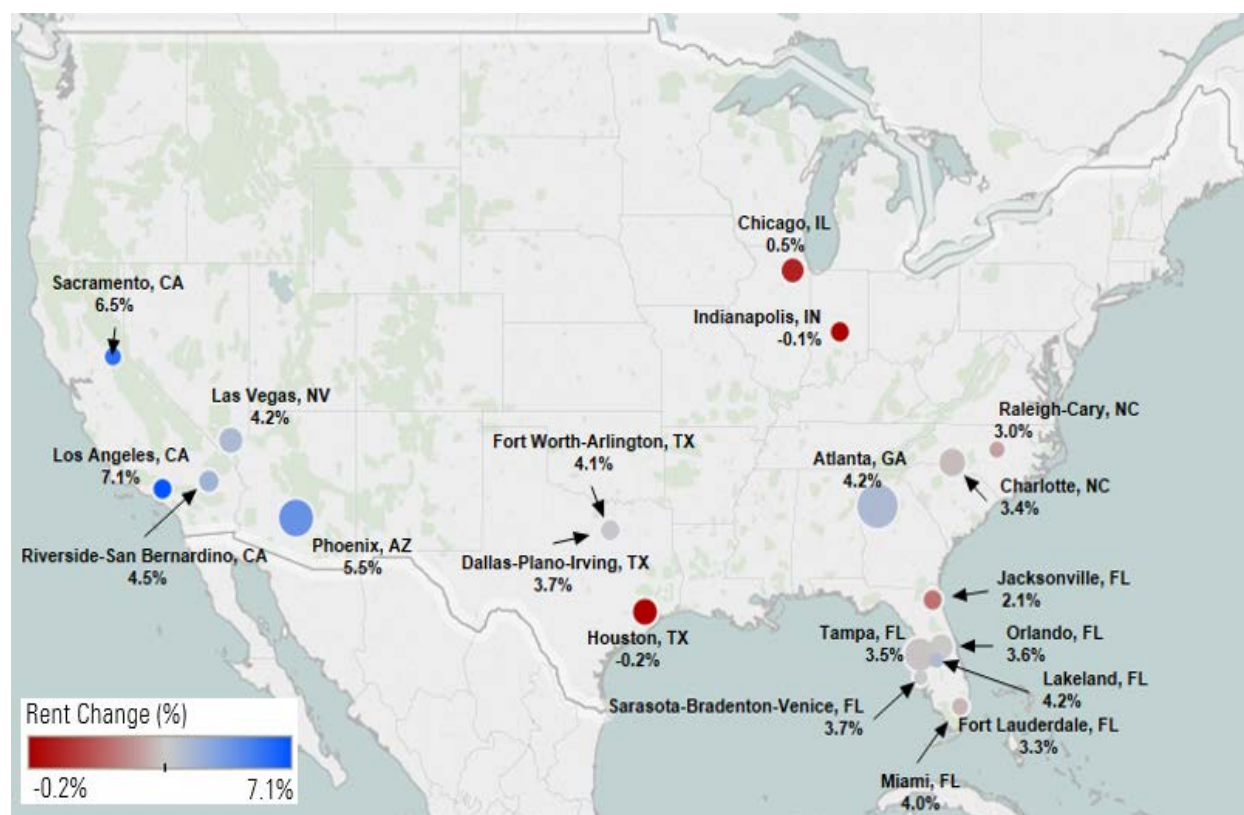
Source: Morningstar Credit Ratings, LLC

**Chart 3 – November Average Contractual Rent Versus Property-Level RentRange Estimate by MSA**



Sources: Morningstar Credit Ratings, LLC; RentRange

## Chart 4 – MSA-Level Blended Rent Change\*



Sources: Morningstar Credit Ratings, LLC; Tableau Software

\*The size of the circles represents the total percentage (by count) of properties in each MSA, ranging from 1.4% to 13.1%. Because of their proximity, the Fort Worth-Arlington, Texas, MSA is hidden behind Dallas-Plano-Irving, and the Miami MSA is behind Fort Lauderdale, Florida.



**Table 1 – Blended Rent Change (by Percentage) - Top MSAs**

		Year 2015	Year 2016										
		Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Atlanta, GA		3.4	4.0	4.5	5.0	5.3	5.5	5.7	5.3	5.7	4.8	4.4	4.2
Charlotte, NC		2.9	3.2	4.2	4.7	5.8	7.1	5.6	5.1	5.3	5.1	4.0	3.4
Chicago, IL		0.2	1.1	1.7	2.7	3.9	3.7	3.3	2.4	2.6	1.8	1.8	0.5
Dallas-Plano-Irving, TX		3.4	4.3	4.5	5.7	5.8	6.1	5.2	4.7	5.0	4.3	3.8	3.7
Fort Lauderdale, FL		4.0	3.2	3.2	3.7	4.8	4.3	5.2	4.3	4.9	3.4	3.7	3.3
Fort Worth-Arlington, TX		3.6	3.1	3.7	4.9	5.7	6.0	5.6	5.1	4.6	4.0	4.0	4.1
Houston, TX		2.7	1.8	3.3	3.4	3.5	4.1	3.4	2.9	2.2	2.9	-0.1	-0.2
Indianapolis, IN		0.8	1.4	3.7	1.7	2.3	1.8	1.4	3.1	2.7	2.1	1.8	-0.1
Jacksonville, FL		2.4	2.8	3.3	3.6	3.9	4.8	4.6	3.8	3.7	3.2	3.1	2.1
Lakeland, FL		4.4	4.5	3.7	4.9	5.7	5.7	5.9	5.9	6.9	5.8	4.2	4.2
Las Vegas, NV		3.4	2.5	3.1	4.2	5.0	5.0	5.0	4.7	4.8	4.6	4.7	4.2
Los Angeles, CA		6.7	7.4	6.7	6.8	6.6	8.0	7.3	8.1	7.9	7.2	6.3	7.1
Miami, FL		4.0	4.1	4.2	4.6	3.3	5.9	6.1	5.8	4.7	4.2	3.4	4.0
Orlando, FL		3.7	3.9	4.0	4.2	4.1	4.6	5.1	5.5	5.4	5.3	4.3	3.6
Phoenix, AZ		5.2	5.7	6.1	6.5	7.6	8.1	7.6	8.0	6.4	6.3	5.7	5.5
Raleigh-Cary, NC		2.9	3.6	3.9	4.2	5.6	5.2	4.7	4.2	3.4	3.6	2.6	3.0
Riverside-San Bernardino, CA		3.9	3.1	4.6	5.1	5.4	6.1	5.9	5.4	5.6	4.8	4.5	4.5
Sacramento, CA		4.7	5.9	5.9	7.1	7.3	7.8	7.7	6.7	8.4	9.5	8.4	6.5
Sarasota-Bradenton-Venice, FL		4.0	2.9	3.5	4.0	3.9	5.0	4.9	4.5	4.0	3.7	3.8	3.7
Tampa, FL		3.1	3.3	3.6	3.5	4.2	4.7	4.6	4.7	4.6	4.0	3.2	3.5

Table 2a – Month-End Vacancy (by Count)



		Year 2015	Year 2016											Total Count
		Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	
AH4R 2014-SFR1		206	184	151	135	174	170	145	155	150	161	180	190	3,809
AH4R 2014-SFR2		212	212	153	159	202	225	233	200	193	199	191	201	4,484
AH4R 2014-SFR3		226	215	173	179	191	185	208	221	204	256	259	248	4,503
AH4R 2015-SFR1		374	323	249	184	171	187	197	205	225	274	260	268	4,660
AH4R 2015-SFR2		146	157	176	212	269	286	254	194	150	136	150	167	4,124
AMSR 2016-SFR1												N/A	N/A	N/A
CAH 2014-1		157	127	114	117	110	109	116	160	178	175	178	193	3,351
CAH 2014-2		154	173	184	187	188	150	168	159	182	187	178	185	3,685
CAH 2015-1		187	175	161	167	145	139	170	224	220	198	210	195	3,871
CSH 2016-1										143	148	169	190	3,564
HPA 2016-1				37	44	47	40	52	76	89	99	93	79	2,107
HPA 2016-2											9	14	17	1,399
IH 2013-SFR1		97	136	129	124	117	101	108	113	105	102	125	132	3,186
IH 2014-SFR1		183	203	228	213	238	282	321	311	368	340	342	319	6,345
IH 2014-SFR2		127	138	140	127	113	137	156	155	183	193	197	185	3,681
IH 2014-SFR3		145	141	125	125	113	151	176	188	188	194	192	198	4,006
IH 2015-SFR1		138	141	146	134	105	112	108	130	155	164	144	152	3,021
IH 2015-SFR2		153	138	151	129	115	116	123	152	179	178	176	213	3,520
IH 2015-SFR3		348	317	314	304	254	246	266	308	344	381	375	408	7,182
PRD 2015-SFR2		219	213	220	224	198	162	134	123	125	137	194	234	3,303
PRD 2015-SFR3		77	83	83	88	112	160	211	239	263	251	259	226	3,162
PRD 2016-SFR1										210	254	310	364	5,577
SBY 2014-1		146	116	107	95	99	92	107	130	113	127	115	112	3,003
SWAY 2014-1		286	284	294	293	268	239	229	242	238	246	213	202	4,071
TAH 2015-SFR1		207	238	229	236	231	179	190	189	200	212	189	159	3,377
TAH 2016-SFR1													157	3,439
Overall SFR		3,788	3,714	3,564	3,476	3,460	3,468	3,672	3,874	4,405	4,621	4,713	4,994	96,430

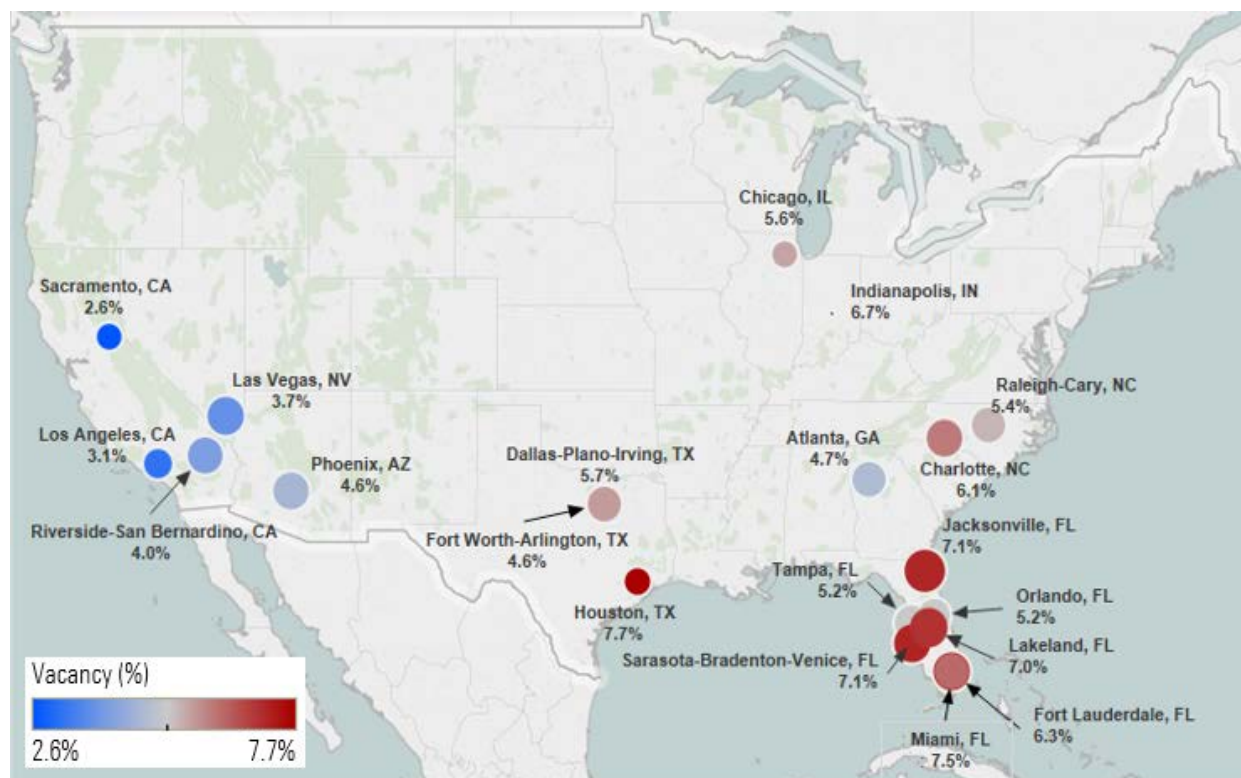
**Table 2b – Month-End Vacancy (by Percentage)**

		Year 2016											
		Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
AH4R 2014-SFR1		5.3	4.8	3.9	3.5	4.5	4.4	3.8	4.0	3.9	4.2	4.7	5.0
AH4R 2014-SFR2		4.7	4.7	3.4	3.5	4.5	5.0	5.2	4.5	4.3	4.4	4.3	4.5
AH4R 2014-SFR3		5.0	4.8	3.8	4.0	4.2	4.1	4.6	4.9	4.5	5.7	5.8	5.5
AH4R 2015-SFR1		8.0	6.9	5.3	3.9	3.7	4.0	4.2	4.4	4.8	5.9	5.6	5.8
AH4R 2015-SFR2		3.5	3.8	4.3	5.1	6.5	6.9	6.2	4.7	3.6	3.3	3.6	4.0
AMSR 2016-SFR1												N/A	N/A
CAH 2014-1		4.7	3.8	3.4	3.5	3.3	3.2	3.4	4.8	5.3	5.2	5.3	5.8
CAH 2014-2		4.2	4.7	5.0	5.0	5.1	4.0	4.5	4.3	4.9	5.1	4.8	5.0
CAH 2015-1		4.8	4.5	4.2	4.3	3.7	3.6	4.4	5.8	5.7	5.1	5.4	5.0
CSH 2016-1										4.0	4.2	4.7	5.3
HPA 2016-1				1.7	2.0	2.1	1.8	2.4	3.5	4.2	4.7	4.4	3.7
HPA 2016-2											0.6	1.0	1.2
IH 2013-SFR1		3.0	4.2	4.0	3.9	3.7	3.2	3.4	3.5	3.3	3.2	3.9	4.1
IH 2014-SFR1		2.8	3.1	3.5	3.3	3.7	4.4	5.0	4.9	5.8	5.3	5.4	5.0
IH 2014-SFR2		3.4	3.7	3.7	3.4	3.1	3.7	4.2	4.2	5.0	5.2	5.3	5.0
IH 2014-SFR3		3.6	3.5	3.1	3.1	2.8	3.8	4.4	4.7	4.7	4.8	4.8	4.9
IH 2015-SFR1		4.5	4.6	4.8	4.4	3.5	3.7	3.6	4.3	5.1	5.4	4.8	5.0
IH 2015-SFR2		4.3	3.9	4.3	3.7	3.3	3.3	3.5	4.3	5.1	5.1	5.0	6.1
IH 2015-SFR3		4.8	4.4	4.4	4.2	3.5	3.4	3.7	4.3	4.8	5.3	5.2	5.7
PRD 2015-SFR2		6.6	6.4	6.6	6.8	6.0	4.9	4.1	3.7	3.8	4.1	5.9	7.1
PRD 2015-SFR3		2.4	2.6	2.6	2.8	3.5	5.1	6.7	7.6	8.3	7.9	8.2	7.1
PRD 2016-SFR1										3.8	4.6	5.6	6.5
SBY 2014-1		4.8	3.9	3.6	3.2	3.3	3.1	3.6	4.3	3.8	4.2	3.8	3.7
SWAY 2014-1		7.0	7.0	7.2	7.2	6.6	5.9	5.6	5.9	5.8	6.0	5.2	5.0
TAH 2015-SFR1		5.9	6.8	6.5	6.7	6.6	5.1	5.4	5.4	5.7	6.1	5.6	4.7
TAH 2016-SFR1													4.6
Overall SFR		4.7	4.6	4.3	4.2	4.2	4.2	4.4	4.7	4.8	5.0	4.9	5.2

**Table 2c – Month-End Vacancy (by Percentage) – Top MSAs**

		Year 2016												Year 2015											
		Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Atlanta, GA		4.9	4.5	4.1	4.1	4.0	4.2	4.1	4.8	4.8	4.5	4.7	4.7	4.9	4.5	4.1	4.1	4.0	4.2	4.1	4.8	4.8	4.5	4.7	4.7
Charlotte, NC		5.0	5.4	5.3	5.0	4.3	4.3	4.4	4.4	4.5	4.9	5.5	6.1	5.0	5.4	5.3	5.0	4.3	4.3	4.4	4.4	4.5	4.9	5.5	6.1
Chicago, IL		7.5	6.8	5.7	5.5	5.7	5.4	5.9	6.9	6.4	6.1	6.4	5.6	7.5	6.8	5.7	5.5	5.7	5.4	5.9	6.9	6.4	6.1	6.4	5.6
Dallas-P plano-Irving, TX		4.4	4.2	4.0	3.3	3.6	4.8	4.2	4.2	4.7	4.7	5.8	5.7	4.4	4.2	4.0	3.3	3.6	4.8	4.2	4.2	4.7	4.7	5.8	5.7
Fort Lauderdale, FL		4.7	4.7	4.8	4.1	4.2	3.9	3.8	5.7	6.1	7.1	6.6	6.3	4.7	4.7	4.8	4.1	4.2	3.9	3.8	5.7	6.1	7.1	6.6	6.3
Fort Worth-Arlington, TX		4.5	4.6	4.6	4.5	4.9	4.5	4.6	4.1	3.6	3.6	4.3	4.6	4.5	4.6	4.6	4.5	4.9	4.5	4.6	4.1	3.6	3.6	4.3	4.6
Houston, TX		6.3	6.2	5.9	5.2	6.1	6.8	6.3	7.4	7.0	7.4	7.6	7.7	6.3	6.2	5.9	5.2	6.1	6.8	6.3	7.4	7.0	7.4	7.6	7.7
Indianapolis, IN		5.5	5.3	4.5	4.2	5.0	5.3	6.1	5.4	6.4	6.4	7.1	6.7	5.5	5.3	4.5	4.2	5.0	5.3	6.1	5.4	6.4	6.4	7.1	6.7
Jacksonville, FL		6.1	5.1	4.8	4.3	4.9	5.2	5.1	5.3	5.3	6.2	6.7	7.1	6.1	5.1	4.8	4.3	4.9	5.2	5.1	5.3	5.3	6.2	6.7	7.1
Lakeland, FL		4.0	4.7	4.7	4.0	4.9	3.9	3.9	4.1	6.3	6.3	6.5	7.0	4.0	4.7	4.7	4.0	4.9	3.9	3.9	4.1	6.3	6.3	6.5	7.0
Las Vegas, NV		4.4	3.7	3.7	3.8	3.6	3.5	4.2	4.4	3.9	3.8	4.2	3.7	4.4	3.7	3.7	3.8	3.6	3.5	4.2	4.4	3.9	3.8	4.2	3.7
Los Angeles, CA		2.3	3.3	2.9	3.3	2.8	3.5	3.9	3.1	3.3	3.9	3.2	3.1	2.3	3.3	2.9	3.3	2.8	3.5	3.9	3.1	3.3	3.9	3.2	3.1
Miami, FL		5.0	5.0	4.5	4.4	3.3	4.0	4.0	3.7	4.6	5.4	5.6	7.5	5.0	5.0	4.5	4.4	3.3	4.0	4.0	3.7	4.6	5.4	5.6	7.5
Orlando, FL		4.1	4.4	4.8	3.9	3.3	3.9	3.8	4.5	4.5	4.8	4.9	5.2	4.1	4.4	4.8	3.9	3.3	3.9	3.8	4.5	4.5	4.8	4.9	5.2
Phoenix, AZ		3.6	3.5	3.2	2.9	2.8	2.9	3.5	3.5	3.9	4.4	4.5	4.6	3.6	3.5	3.2	2.9	2.8	2.9	3.5	3.5	3.9	4.4	4.5	4.6
Raleigh-Cary, NC		4.6	4.3	3.0	4.2	5.3	4.8	4.4	4.5	4.4	5.8	5.5	5.4	4.6	4.3	3.0	4.2	5.3	4.8	4.4	4.5	4.4	5.8	5.5	5.4
Riverside-San Bernardino, CA		4.4	4.4	4.2	4.4	4.3	4.4	5.2	4.1	5.1	4.0	3.8	4.0	4.4	4.4	4.2	4.4	4.3	4.4	5.2	4.1	5.1	4.0	3.8	4.0
Sacramento, CA		2.2	2.1	2.5	2.3	1.7	2.7	3.2	3.3	3.9	2.9	3.0	2.6	2.2	2.1	2.5	2.3	1.7	2.7	3.2	3.3	3.9	2.9	3.0	2.6
Sarasota-Bradenton-Venice, FL		4.5	4.6	5.3	5.8	5.2	5.4	6.0	7.0	7.0	7.1	7.4	7.1	4.5	4.6	5.3	5.8	5.2	5.4	6.0	7.0	7.0	7.1	7.4	7.1
Tampa, FL		5.1	4.7	4.6	4.6	4.3	4.0	4.9	5.0	5.0	4.8	5.3	5.2	5.1	4.7	4.6	4.6	4.3	4.0	4.9	5.0	5.0	4.8	5.3	5.2

**Chart 5 – MSA-Level Vacancy and Lease Expiration Percentage (by Count)\***



Sources: Morningstar Credit Ratings, LLC; Tableau Software

\*The size of the circles represents the last three months of lease expirations by count as a percentage of each MSA, ranging from 10.1% to 20.3%. Because of their proximity, the Fort Worth-Arlington, Texas, MSA is hidden behind Dallas-Plano-Irving, and the Miami MSA is behind Fort Lauderdale, Florida.

**Table 3a – Lease Expiration (by Count)**

		Year 2015												Total Count
		Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	
AH4R 2014-SFR1		172	226	256	287	284	341	322	326	273	240	220	186	3,809
AH4R 2014-SFR2		129	223	299	434	487	551	388	358	297	221	190	195	4,484
AH4R 2014-SFR3		155	230	237	280	331	461	556	432	396	288	216	146	4,503
AH4R 2015-SFR1		260	128	120	131	190	232	420	540	430	361	341	293	4,680
AH4R 2015-SFR2		130	312	496	592	621	620	421	165	82	99	116	122	4,124
AMSR 2016-SFR1												N/A	N/A	N/A
CAH 2014-1		105	131	145	178	189	214	260	349	390	322	290	210	3,351
CAH 2014-2		234	278	425	372	336	276	240	234	262	238	245	221	3,685
CAH 2015-1		187	127	153	187	230	321	393	404	421	313	286	241	3,871
CSH 2016-1										271	257	230	182	3,564
HPA 2016-1				71	137	186	170	263	298	263	262	139	62	2,107
HPA 2016-2											4	8	10	1,399
IH 2013-SFR1		178	289	312	279	269	237	178	158	141	129	156	142	3,186
IH 2014-SFR1		133	237	342	505	608	630	601	509	419	345	284	202	6,345
IH 2014-SFR2		164	199	200	247	241	281	301	279	278	194	203	154	3,681
IH 2014-SFR3		183	225	198	226	249	302	366	323	245	209	184	203	4,006
IH 2015-SFR1		224	286	234	215	138	125	142	180	191	183	200	207	3,021
IH 2015-SFR2		213	252	277	235	180	155	188	222	219	218	247	270	3,520
IH 2015-SFR3		482	527	574	478	377	292	353	427	460	449	532	480	7,182
PRD 2015-SFR2		77	137	263	496	280	130	105	113	150	177	304	165	3,303
PRD 2015-SFR3		7	16	31	115	224	501	446	442	412	210	74	27	3,162
PRD 2016-SFR1										170	263	420	242	5,577
SBY 2014-1		125	163	169	192	178	207	232	169	187	184	177	156	3,003
SWAY 2014-1		57	61	176	142	254	312	311	268	253	204	71	60	4,071
TAH 2015-SFR1		232	132	168	211	229	212	208	215	253	222	235	144	3,377
TAH 2016-SFR1													93	3,439
Overall SFR		3,447	4,179	5,146	5,939	6,081	6,570	6,694	6,411	6,463	5,592	5,368	4,413	96,430

**Table 3b – Lease Expiration (by Percentage)**

		Year 2015	Year 2016										
		Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
AH4R 2014-SFR1		4.5	5.9	6.6	7.5	7.4	8.9	8.4	8.5	7.1	6.3	5.8	4.9
AH4R 2014-SFR2		2.9	5.0	6.7	9.7	10.9	12.3	8.6	8.0	6.6	4.9	4.2	4.3
AH4R 2014-SFR3		3.4	5.1	5.3	6.2	7.4	10.2	12.3	9.6	8.8	6.4	4.8	3.2
AH4R 2015-SFR1		5.6	2.7	2.6	2.8	4.1	5.0	9.0	11.6	9.2	7.7	7.3	6.3
AH4R 2015-SFR2		3.2	7.6	12.0	14.4	15.1	15.0	10.2	4.0	2.0	2.4	2.8	3.0
AMSR 2016-SFR1												N/A	N/A
CAH 2014-1		3.1	3.9	4.3	5.3	5.6	6.4	7.7	10.4	11.6	9.6	8.6	6.3
CAH 2014-2		6.3	7.5	11.5	10.0	9.1	7.5	6.5	6.3	7.1	6.4	6.6	6.0
CAH 2015-1		4.8	3.3	3.9	4.8	5.9	8.3	10.1	10.4	10.9	8.1	7.4	6.2
CSH 2016-1										7.6	7.2	6.5	5.1
HPA 2016-1				3.2	6.1	8.4	7.7	12.1	13.8	12.3	12.3	6.6	2.9
HPA 2016-2											0.3	0.6	0.7
IH 2013-SFR1		5.6	9.0	9.7	8.7	8.4	7.4	5.6	5.0	4.4	4.0	4.9	4.5
IH 2014-SFR1		2.1	3.7	5.3	7.9	9.6	9.9	9.4	8.0	6.6	5.4	4.5	3.2
IH 2014-SFR2		4.4	5.3	5.3	6.7	6.5	7.6	8.2	7.6	7.5	5.3	5.5	4.2
IH 2014-SFR3		4.6	5.6	4.9	5.6	6.2	7.5	9.1	8.1	6.1	5.2	4.6	5.1
IH 2015-SFR1		7.3	9.4	7.7	7.1	4.6	4.1	4.7	5.9	6.3	6.0	6.6	6.9
IH 2015-SFR2		6.0	7.2	7.9	6.7	5.1	4.4	5.3	6.3	6.2	6.2	7.0	7.7
IH 2015-SFR3		6.7	7.3	8.0	6.6	5.2	4.1	4.9	5.9	6.4	6.2	7.4	6.7
PRD 2015-SFR2		2.3	4.1	7.9	15.0	8.5	3.9	3.2	3.4	4.5	5.4	9.2	5.0
PRD 2015-SFR3		0.2	0.5	1.0	3.6	7.1	15.8	14.1	14.0	13.0	6.6	2.3	0.9
PRD 2016-SFR1										3.0	4.7	7.5	4.3
SBY 2014-1		4.2	5.4	5.6	6.4	5.9	6.9	7.7	5.6	6.2	6.1	5.9	5.2
SWAY 2014-1		1.4	1.5	4.3	3.5	6.2	7.6	7.6	6.6	6.2	5.0	1.7	1.5
TAH 2015-SFR1		6.6	3.8	4.8	6.0	6.5	6.0	5.9	6.1	7.2	6.3	6.9	4.3
TAH 2016-SFR1													2.7
Overall SFR		4.3	5.2	6.2	7.2	7.3	7.9	8.1	7.7	7.0	6.0	5.6	4.6

**Table 3c – Lease Expiration (by Percentage) – Top MSAs**

		Year 2015												Year 2016											
		Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Atlanta, GA		4.2	4.1	5.7	7.4	7.2	8.4	7.1	6.9	5.8	5.7	5.9	4.9												
Charlotte, NC		4.5	5.3	5.8	6.7	6.4	6.8	9.3	8.0	8.0	6.8	6.1	5.0												
Chicago, IL		3.8	4.5	6.4	7.9	8.6	8.7	8.9	7.9	6.0	5.7	4.9	3.4												
Dallas-Plano-Irving, TX		4.4	5.9	5.2	7.4	6.9	8.2	8.7	9.8	7.6	5.3	7.1	4.3												
Fort Lauderdale, FL		5.1	8.3	6.4	8.7	7.8	5.5	7.8	6.4	6.0	7.0	5.8	4.8												
Fort Worth-Arlington, TX		3.7	6.3	6.4	9.1	8.0	9.3	8.1	7.5	6.9	5.2	5.2	4.1												
Houston, TX		3.4	4.7	5.5	6.7	7.9	9.1	8.8	8.1	6.6	5.4	5.1	3.7												
Indianapolis, IN		1.9	3.0	3.9	7.6	10.6	12.1	11.2	9.3	7.5	5.5	3.5	1.1												
Jacksonville, FL		3.8	4.7	4.9	7.0	7.5	8.1	7.3	7.2	6.9	7.2	6.7	6.4												
Lakeland, FL		4.6	4.0	6.5	7.1	7.6	7.2	8.7	8.6	10.1	7.2	6.7	5.1												
Las Vegas, NV		2.7	4.9	5.0	7.5	7.2	8.3	8.5	8.7	8.0	6.5	7.6	4.5												
Los Angeles, CA		4.3	5.6	5.7	6.6	6.9	5.5	5.9	5.7	6.8	6.5	4.1	4.4												
Miami, FL		6.6	5.6	7.1	6.5	6.5	6.3	7.6	6.2	7.3	6.0	6.8	5.9												
Orlando, FL		4.8	5.5	5.8	6.2	6.3	9.3	9.0	9.4	7.2	5.6	6.1	4.5												
Phoenix, AZ		5.0	6.5	7.7	7.7	6.6	7.6	6.7	7.0	6.9	6.6	6.4	4.8												
Raleigh-Cary, NC		2.9	4.8	6.3	8.7	7.8	9.8	9.7	8.3	8.0	5.7	6.3	4.5												
Riverside-San Bernardino, CA		4.3	5.9	7.0	7.2	6.9	6.4	6.4	7.1	6.6	5.4	6.3	5.7												
Sacramento, CA		3.5	5.7	6.6	8.0	7.9	8.6	7.5	6.3	7.8	5.1	4.5	4.2												
Sarasota-Bradenton-Venice, FL		3.6	4.1	5.7	7.4	6.9	7.3	8.5	9.1	9.0	6.8	6.3	5.2												
Tampa, FL		4.5	4.3	6.3	6.0	6.1	7.4	8.3	8.7	7.6	5.9	6.1	4.9												



**Table 4a – Historical Months of Vacancy for November Vacancies (by Count)**

		1	2	3	4	5	6	7	8	9	10	11	12+	Total
AH4R 2014-SFR1		40	40	35	32	20	7	2	2	2	1	3	6	190
AH4R 2014-SFR2		50	56	39	17	16	15	6	2	0	0	0	0	201
AH4R 2014-SFR3		52	70	46	39	19	13	5	1	0	2	0	1	248
AH4R 2015-SFR1		81	60	67	27	14	6	10	1	1	1	0	0	268
AH4R 2015-SFR2		63	49	22	19	12	2	0	0	0	0	0	0	167
AMSR 2016-SFR1		N/A	N/A	N/A										N/A
CAH 2014-1		41	45	39	28	13	15	5	1	2	3	1	0	193
CAH 2014-2		58	33	36	26	11	8	6	3	1	1	1	1	185
CAH 2015-1		55	49	41	27	16	3	3	0	0	0	0	1	195
CSH 2016-1		88	60	26	15	1								190
HPA 2016-1		30	29	10	6	3	0	0	0	0	1	0		79
HPA 2016-2		10	3	4	0									17
IH 2013-SFR1		30	28	33	13	13	8	4	1	1	0	0	1	132
IH 2014-SFR1		39	68	70	57	38	18	19	3	5	0	1	1	319
IH 2014-SFR2		42	46	31	36	11	10	4	3	0	0	1	1	185
IH 2014-SFR3		49	47	32	34	21	6	3	2	1	1	0	2	198
IH 2015-SFR1		45	37	26	25	11	2	1	0	0	1	0	4	152
IH 2015-SFR2		71	67	40	19	5	8	1	1	1	0	0	0	213
IH 2015-SFR3		130	109	74	43	21	13	4	1	1	1	3	8	408
PRD 2015-SFR2		71	66	34	30	14	9	3	2	2	0	0	3	234
PRD 2015-SFR3		49	53	60	42	15	5	1	0	0	0	0	1	226
PRD 2016-SFR1		142	102	67	49	4								364
SBY 2014-1		29	28	26	10	7	7	0	1	2	1	1	0	112
SWAY 2014-1		29	48	40	21	16	12	13	4	7	1	6	5	202
TAH 2015-SFR1		60	24	30	17	11	6	4	2	1	2	0	2	159
TAH 2016-SFR1		130	27											157
Overall SFR		1,484	1,244	928	632	312	173	94	30	27	16	17	37	4,994

**Table 4b – Historical Months of Vacancy for November Vacancies (by Percentage)**

		1	2	3	4	5	6	7	8	9	10	11	12+	Total
AH4R 2014-SFR1		21.1	21.1	18.4	16.8	10.5	3.7	1.1	1.1	1.1	0.5	1.6	3.2	100.0
AH4R 2014-SFR2		24.9	27.9	19.4	8.5	8.0	7.5	3.0	1.0	0.0	0.0	0.0	0.0	100.0
AH4R 2014-SFR3		21.0	28.2	18.5	15.7	7.7	5.2	2.0	0.4	0.0	0.8	0.0	0.4	100.0
AH4R 2015-SFR1		30.2	22.4	25.0	10.1	5.2	2.2	3.7	0.4	0.4	0.4	0.0	0.0	100.0
AH4R 2015-SFR2		37.7	29.3	13.2	11.4	7.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	100.0
AMSR 2016-SFR1		N/A	N/A	N/A										N/A
CAH 2014-1		21.2	23.3	20.2	14.5	6.7	7.8	2.6	0.5	1.0	1.6	0.5	0.0	100.0
CAH 2014-2		31.4	17.8	19.5	14.1	5.9	4.3	3.2	1.6	0.5	0.5	0.5	0.5	100.0
CAH 2015-1		28.2	25.1	21.0	13.8	8.2	1.5	1.5	0.0	0.0	0.0	0.0	0.5	100.0
CSH 2016-1		46.3	31.6	13.7	7.9	0.5								100.0
HPA 2016-1		38.0	36.7	12.7	7.6	3.8	0.0	0.0	0.0	0.0	1.3	0.0		100.0
HPA 2016-2		58.8	17.6	23.5	0.0									100.0
IH 2013-SFR1		22.7	21.2	25.0	9.8	9.8	6.1	3.0	0.8	0.8	0.0	0.0	0.8	100.0
IH 2014-SFR1		12.2	21.3	21.9	17.9	11.9	5.6	6.0	0.9	1.6	0.0	0.3	0.3	100.0
IH 2014-SFR2		22.7	24.9	16.8	19.5	5.9	5.4	2.2	1.6	0.0	0.0	0.5	0.5	100.0
IH 2014-SFR3		24.7	23.7	16.2	17.2	10.6	3.0	1.5	1.0	0.5	0.5	0.0	1.0	100.0
IH 2015-SFR1		29.6	24.3	17.1	16.4	7.2	1.3	0.7	0.0	0.0	0.7	0.0	2.6	100.0
IH 2015-SFR2		33.3	31.5	18.8	8.9	2.3	3.8	0.5	0.5	0.5	0.0	0.0	0.0	100.0
IH 2015-SFR3		31.9	26.7	18.1	10.5	5.1	3.2	1.0	0.2	0.2	0.2	0.7	2.0	100.0
PRD 2015-SFR2		30.3	28.2	14.5	12.8	6.0	3.8	1.3	0.9	0.9	0.0	0.0	1.3	100.0
PRD 2015-SFR3		21.7	23.5	26.5	18.6	6.6	2.2	0.4	0.0	0.0	0.0	0.0	0.4	100.0
PRD 2016-SFR1		39.0	28.0	18.4	13.5	1.1								100.0
SBY 2014-1		25.9	25.0	23.2	8.9	6.3	6.3	0.0	0.9	1.8	0.9	0.9	0.0	100.0
SWAY 2014-1		14.4	23.8	19.8	10.4	7.9	5.9	6.4	2.0	3.5	0.5	3.0	2.5	100.0
TAH 2015-SFR1		37.7	15.1	18.9	10.7	6.9	3.8	2.5	1.3	0.6	1.3	0.0	1.3	100.0
TAH 2016-SFR1		82.8	17.2											100.0
Overall SFR		29.7	24.9	18.6	12.7	6.2	3.5	1.9	0.6	0.5	0.3	0.3	0.7	100.0

**Table 5 – Delinquency Definition**

Issuer	Definition
American Homes 4 Rent	Past due one calendar month or more (not dependent on day count) and owing \$200 or more
Colony American Homes/Colony Starwood Homes	Past due one calendar month or more (not dependent on day count) and owing \$200 or more
Home Partners of America	Past due 30 days or more (not dependent on calendar month) and owing \$500 or more
Invitation Homes	Past due 30 days or more (not dependent on calendar month) and owing 25% of one month's rent or more
Progress Residential	Past due 30 days or more (not dependent on calendar month) and owing \$200 or more <sup>1</sup>
Silver Bay Realty	Past due 30 days or more (not dependent on calendar month) and owing \$500 or more <sup>2</sup>
SWAY Residential	Past due one calendar month or more (not dependent on day count) and owing \$200 or more <sup>3</sup>
Tricon American Homes	Past due 30 days or more (not dependent on calendar month) and owing \$500 or more <sup>2</sup>

<sup>1</sup>Includes Section 8 rent, pet fees, and MTM fees, but excludes late fees and damage fees.

<sup>2</sup>Based on total receivables.

<sup>3</sup>As of January 2016, SWAY Residential reporting was converted to the Colony American Homes/Colony Starwood Homes delinquency definition. Previously, SWAY Residential defined delinquencies as past due 30 days or more following a calendar month grace period, and owing \$500 or more.

Table 6a – Month-End Delinquency (by Count)



		Year 2015												Total Count
		Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	
AH4R 2014-SFR1		34	22	9	8	9	12	13	15	16	15	13	13	3,809
AH4R 2014-SFR2		36	31	16	12	14	15	13	16	18	22	12	23	4,484
AH4R 2014-SFR3		30	20	13	5	5	13	13	10	14	17	17	18	4,503
AH4R 2015-SFR1		27	23	17	10	16	18	15	16	15	16	15	24	4,660
AH4R 2015-SFR2		26	30	13	14	9	12	20	19	21	23	20	19	4,124
AMSR 2016-SFR1												N/A	N/A	N/A
CAH 2014-1		17	29	18	16	14	19	17	22	20	21	24	26	3,351
CAH 2014-2		27	34	27	30	18	21	20	28	29	42	41	32	3,685
CAH 2015-1		25	19	19	16	14	19	23	20	26	35	19	23	3,871
CSH 2016-1										29	26	20	22	3,564
HPA 2016-1				9	28	17	19	19	27	30	36	22	21	2,107
HPA 2016-2											14	13	10	1,399
IH 2013-SFR1		36	9	9	9	8	16	14	10	11	12	19	18	3,186
IH 2014-SFR1		81	45	26	14	14	15	23	33	33	30	33	43	6,345
IH 2014-SFR2		33	22	18	14	15	17	19	14	16	21	26	18	3,681
IH 2014-SFR3		32	23	25	8	5	14	9	26	20	24	18	32	4,006
IH 2015-SFR1		37	22	17	11	10	13	15	22	15	13	15	18	3,021
IH 2015-SFR2		35	21	10	7	8	17	16	21	26	22	42	35	3,520
IH 2015-SFR3		113	70	40	21	25	36	36	57	56	48	60	64	7,182
PRD 2015-SFR2		55	40	32	26	28	23	14	20	18	24	31	26	3,303
PRD 2015-SFR3		26	31	20	21	11	14	19	19	19	20	18	17	3,162
PRD 2016-SFR1										47	51	45	38	5,577
SBY 2014-1		26	32	18	18	10	12	13	24	18	25	14	20	3,003
SWAY 2014-1*		29	20	15	42	53	53	49	46	49	39	41	54	4,071
TAH 2015-SFR1		74	61	50	46	34	41	30	22	22	19	15	18	3,377
TAH 2016-SFR1													20	3,439
Overall SFR		799	604	421	376	337	419	410	487	568	615	593	652	96,430

\*Using SWAY Residential's new delinquency definition January 2016 and beyond as well as its old delinquency definition before January 2016.

**Table 6b – Month-End Delinquency (by Percentage)**

		Year 2015												Year 2016											
		Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
AH4R 2014-SFR1		0.9	0.6	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.3	0.3												
AH4R 2014-SFR2		0.8	0.7	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.3	0.5												
AH4R 2014-SFR3		0.7	0.4	0.3	0.1	0.1	0.3	0.3	0.2	0.3	0.4	0.4	0.4												
AH4R 2015-SFR1		0.6	0.5	0.4	0.2	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.5												
AH4R 2015-SFR2		0.6	0.7	0.3	0.3	0.2	0.3	0.5	0.5	0.5	0.6	0.5	0.5												
AMSR 2016-SFR1																									
CAH 2014-1		0.5	0.9	0.5	0.5	0.4	0.6	0.5	0.7	0.6	0.6	0.7	0.8												
CAH 2014-2		0.7	0.9	0.7	0.8	0.5	0.6	0.5	0.8	0.8	1.1	1.1	0.9												
CAH 2015-1		0.6	0.5	0.5	0.4	0.4	0.5	0.6	0.5	0.7	0.9	0.5	0.6												
CSH 2016-1										0.8	0.7	0.6	0.6												
HPA 2016-1				0.4	1.3	0.8	0.9	0.9	1.2	1.4	1.7	1.0	1.0												
HPA 2016-2											1.0	0.9	0.7												
IH 2013-SFR1		1.1	0.3	0.3	0.3	0.3	0.5	0.4	0.3	0.3	0.4	0.6	0.6												
IH 2014-SFR1		1.3	0.7	0.4	0.2	0.2	0.2	0.4	0.5	0.5	0.5	0.5	0.7												
IH 2014-SFR2		0.9	0.6	0.5	0.4	0.4	0.5	0.5	0.4	0.4	0.6	0.7	0.5												
IH 2014-SFR3		0.8	0.6	0.6	0.2	0.1	0.3	0.2	0.6	0.5	0.6	0.4	0.8												
IH 2015-SFR1		1.2	0.7	0.6	0.4	0.3	0.4	0.5	0.7	0.5	0.4	0.5	0.6												
IH 2015-SFR2		1.0	0.6	0.3	0.2	0.2	0.5	0.5	0.6	0.7	0.6	1.2	1.0												
IH 2015-SFR3		1.6	1.0	0.6	0.3	0.3	0.5	0.5	0.8	0.8	0.7	0.8	0.9												
PRD 2015-SFR2		1.7	1.2	1.0	0.8	0.8	0.7	0.4	0.6	0.5	0.7	0.9	0.8												
PRD 2015-SFR3		0.8	1.0	0.6	0.7	0.3	0.4	0.6	0.6	0.6	0.6	0.6	0.5												
PRD 2016-SFR1										0.8	0.9	0.8	0.7												
SBY 2014-1		0.9	1.1	0.6	0.6	0.3	0.4	0.4	0.8	0.6	0.8	0.5	0.7												
SWAY 2014-1*		0.7	0.5	0.4	1.0	1.3	1.3	1.2	1.1	1.2	1.0	1.0	1.3												
TAH 2015-SFR1		2.1	1.7	1.4	1.3	1.0	1.2	0.9	0.6	0.6	0.5	0.4	0.5												
TAH 2016-SFR1													0.6												
Overall SFR		1.0	0.7	0.5	0.5	0.4	0.5	0.5	0.6	0.6	0.7	0.6	0.7												

\*Using SWAY Residential's new delinquency definition January 2016 and beyond as well as its old delinquency definition before January 2016

**Table 7 – Monthly Retention Rate of Expiring Leases**

		Year 2015	Year 2016										
		Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
AH4R 2014-SFR1		76.7	78.8	78.1	73.9	76.1	81.5	77.6	83.1	79.1	72.9	75.5	TBD
AH4R 2014-SFR2		76.0	78.5	79.6	77.0	73.9	77.7	78.9	72.6	75.1	76.9	77.9	TBD
AH4R 2014-SFR3		73.5	77.4	73.0	77.9	73.4	77.0	74.6	77.3	73.2	74.7	79.6	TBD
AH4R 2015-SFR1		76.5	71.9	74.2	77.9	70.0	74.1	73.6	76.1	73.7	77.8	80.4	TBD
AH4R 2015-SFR2		78.5	80.1	76.8	75.0	73.6	72.7	71.0	75.8	70.7	77.8	72.4	TBD
AMSR 2016-SFR1												N/A	TBD
CAH 2014-1		76.2	80.2	75.9	74.7	78.3	81.8	79.2	76.8	80.0	78.6	77.2	TBD
CAH 2014-2		85.0	77.7	77.4	82.8	74.7	78.6	73.3	72.2	76.7	75.2	78.0	TBD
CAH 2015-1		75.9	70.9	73.2	77.5	80.0	76.3	76.1	76.0	75.1	78.0	79.7	TBD
CSH 2016-1										76.4	79.4	76.1	TBD
HPA 2016-1				83.1	82.5	81.7	77.6	85.9	80.5	86.3	87.0	84.4	TBD
HPA 2016-2											75.0	75.0	TBD
IH 2013-SFR1		80.9	80.6	77.2	77.8	76.6	77.2	80.9	71.5	73.8	71.3	71.8	TBD
IH 2014-SFR1		82.0	80.6	80.1	80.8	77.0	74.0	77.4	72.7	71.8	74.8	71.8	TBD
IH 2014-SFR2		78.0	76.9	79.0	80.2	75.1	77.6	74.4	72.0	72.3	75.3	75.9	TBD
IH 2014-SFR3		79.2	80.4	80.3	80.5	78.7	77.5	72.4	75.5	75.5	78.0	78.3	TBD
IH 2015-SFR1		81.3	78.3	78.2	77.2	76.8	66.4	71.1	65.6	67.5	78.7	78.5	TBD
IH 2015-SFR2		79.3	81.0	77.6	74.5	75.6	78.7	73.4	70.3	70.8	73.4	73.3	TBD
IH 2015-SFR3		79.0	83.3	78.7	78.7	77.7	74.3	73.9	72.4	75.4	73.9	79.5	TBD
PRD 2015-SFR2		81.8	73.7	77.2	73.4	72.5	70.0	64.8	65.5	75.3	74.0	77.0	TBD
PRD 2015-SFR3		85.7	87.5	77.4	74.8	75.9	73.1	68.6	72.9	74.3	75.7	78.4	TBD
PRD 2016-SFR1										77.6	77.9	78.3	TBD
SBY 2014-1		80.0	83.4	77.5	80.2	84.3	82.1	77.6	80.5	84.0	78.3	80.8	TBD
SWAY 2014-1		73.7	75.4	75.0	76.1	77.6	76.6	74.0	69.0	70.4	66.7	59.2	TBD
TAH 2015-SFR1		83.6	88.6	83.3	85.8	90.8	83.5	85.1	85.6	79.8	82.8	83.8	TBD
TAH 2016-SFR1													TBD
Overall SFR		79.2	79.5	77.8	77.9	76.6	76.4	75.4	74.8	72.3	75.7	77.6	TBD

TBD – To Be Determined

**Table 8 – Monthly Retention Rate of MTM Leases**

		Year 2015												Year 2016											
		Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
AH4R 2014-SFR1		91.1	94.8	89.6	87.6	88.4	84.1	83.8	85.9	81.5	85.9	83.9	TBD												
AH4R 2014-SFR2		86.4	90.7	86.7	87.8	82.9	82.3	79.8	83.0	77.9	86.6	86.4	TBD												
AH4R 2014-SFR3		84.6	86.2	86.7	84.9	89.7	82.8	78.9	75.7	74.4	79.6	82.0	TBD												
AH4R 2015-SFR1		86.1	88.6	85.3	87.9	83.7	80.8	81.8	85.4	76.0	81.3	80.7	TBD												
AH4R 2015-SFR2		87.5	83.8	86.7	82.1	80.1	73.9	79.5	81.9	80.7	82.5	85.2	TBD												
AMSR 2016-SFR1																								N/A	TBD
CAH 2014-1		82.0	81.3	83.0	89.8	92.7	81.7	82.8	75.7	81.0	69.0	79.4	TBD												
CAH 2014-2		86.3	81.5	88.7	72.6	75.0	74.3	72.7	71.9	54.7	63.6	77.8	TBD												
CAH 2015-1		81.0	84.3	77.1	72.9	84.4	74.5	74.6	63.5	74.1	63.6	69.6	TBD												
CSH 2016-1										79.5	61.7	72.2	TBD												
HPA 2016-1				N/A	N/A	100.0	0.0	N/A	0.0	N/A	N/A	N/A	TBD												
HPA 2016-2											N/A	N/A	TBD												
IH 2013-SFR1		82.0	87.7	77.6	87.0	85.9	78.3	76.1	85.7	75.0	84.6	83.8	TBD												
IH 2014-SFR1		80.4	84.5	80.4	82.1	80.5	71.2	65.7	69.1	74.6	82.1	84.1	TBD												
IH 2014-SFR2		87.9	90.9	90.7	90.2	80.6	78.1	74.6	79.1	67.6	74.1	81.4	TBD												
IH 2014-SFR3		80.0	87.1	84.2	83.3	69.8	84.8	81.4	75.0	76.7	76.4	76.9	TBD												
IH 2015-SFR1		91.9	87.5	85.7	79.1	89.1	86.3	78.0	87.2	79.6	80.0	88.6	TBD												
IH 2015-SFR2		82.9	65.8	77.3	82.2	66.7	75.7	63.8	79.1	86.7	75.5	79.2	TBD												
IH 2015-SFR3		83.7	73.7	78.7	82.5	80.8	77.1	78.8	76.8	82.4	81.6	84.0	TBD												
PRD 2015-SFR2		69.0	75.0	78.6	80.0	67.7	59.4	78.0	78.9	80.6	75.0	79.5	TBD												
PRD 2015-SFR3		75.0	70.0	83.3	85.7	71.4	71.4	64.2	67.6	70.0	70.6	73.0	TBD												
PRD 2016-SFR1										79.0	83.1	80.8	TBD												
SBY 2014-1		92.3	93.7	89.5	86.4	91.6	89.5	87.5	90.9	84.2	94.0	90.9	TBD												
SWAY 2014-1		86.5	88.1	87.8	89.6	89.2	85.4	85.8	77.7	82.7	77.1	87.7	TBD												
TAH 2015-SFR1		93.6	95.5	93.8	91.1	95.3	94.9	95.0	92.5	93.7	93.8	92.7	TBD												
TAH 2016-SFR1													TBD												
Overall SFR		88.0	89.2	87.5	86.3	86.0	82.4	81.7	81.8	80.3	82.2	84.2	TBD												

TBD – To Be Determined

Table 9a – MTM Tenants (by Count)



		Year 2016												Total Count
		Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	
AH4R 2014-SFR1		248	248	260	258	248	239	268	254	249	208	186	179	3,809
AH4R 2014-SFR2		172	153	166	176	223	257	257	261	249	209	187	178	4,484
AH4R 2014-SFR3		145	147	172	177	186	225	250	284	284	246	209	185	4,503
AH4R 2015-SFR1		287	275	240	208	203	200	207	242	272	210	215	202	4,660
AH4R 2015-SFR2		65	93	134	204	262	323	320	282	217	173	142	132	4,124
AMSR 2016-SFR1												N/A	N/A	N/A
CAH 2014-1		61	48	47	50	55	60	64	74	63	71	68	65	3,351
CAH 2014-2		62	54	53	73	76	70	66	64	53	44	36	39	3,685
CAH 2015-1		78	51	48	48	45	47	63	74	58	66	56	46	3,871
CSH 2016-1										44	47	36	30	3,564
HPA 2016-1				0	0	1	1	0	0	0	0	0	0	2,107
HPA 2016-2											0	0	0	1,399
IH 2013-SFR1		71	78	99	88	102	110	80	57	54	58	50	48	3,186
IH 2014-SFR1		75	83	95	94	134	165	168	178	169	139	143	121	6,345
IH 2014-SFR2		51	54	58	69	80	80	88	97	109	71	56	58	3,681
IH 2014-SFR3		50	58	63	56	67	75	86	92	87	73	70	64	4,006
IH 2015-SFR1		61	59	64	63	64	74	61	63	70	59	67	74	3,021
IH 2015-SFR2		61	68	72	53	59	58	62	73	63	68	77	70	3,520
IH 2015-SFR3		149	131	144	139	133	135	131	141	131	140	156	175	7,182
PRD 2015-SFR2		36	28	44	75	94	75	46	54	47	60	65	79	3,303
PRD 2015-SFR3		12	10	9	26	51	106	121	133	127	107	80	61	3,162
PRD 2016-SFR1										76	98	113	109	5,577
SBY 2014-1		223	211	213	218	217	223	236	220	227	234	236	237	3,003
SWAY 2014-1		171	154	143	134	148	178	169	166	156	154	81	71	4,071
TAH 2015-SFR1		585	538	533	542	522	480	450	445	444	474	363	329	3,377
TAH 2016-SFR1													238	3,439
Overall SFR		2,663	2,541	2,657	2,751	2,970	3,181	3,193	3,254	3,249	3,009	2,692	2,790	96,430



**Table 9b – MTM Tenants (by Percentage)**

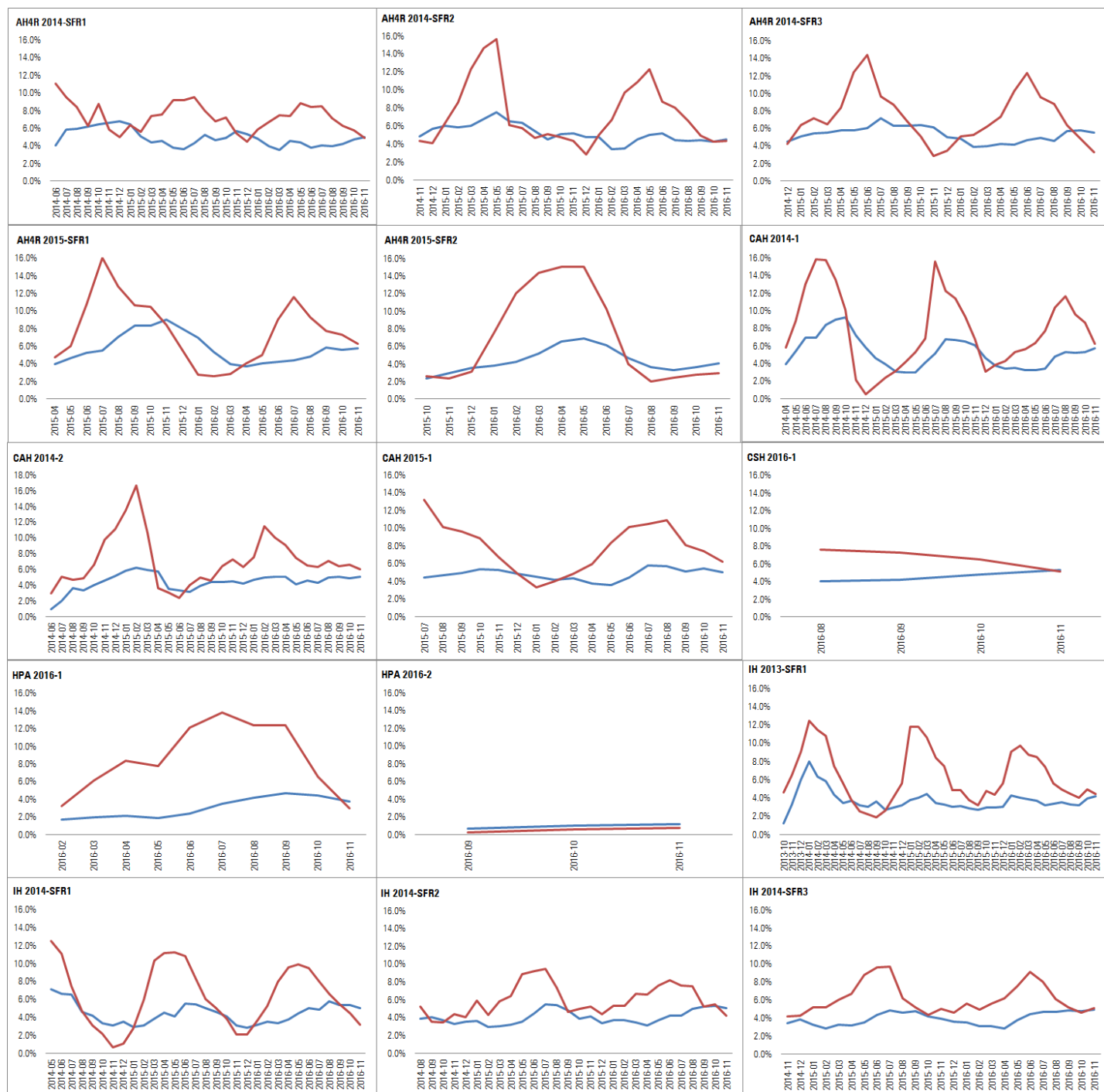
		Year 2015	Year 2016										
		Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
AH4R 2014-SFR1		6.4	6.4	6.7	6.7	6.4	6.2	7.0	6.6	6.5	5.5	4.9	4.7
AH4R 2014-SFR2		3.8	3.4	3.7	3.9	5.0	5.7	5.7	5.8	5.6	4.7	4.2	4.0
AH4R 2014-SFR3		3.2	3.3	3.8	3.9	4.1	5.0	5.6	6.3	6.3	5.5	4.6	4.1
AH4R 2015-SFR1		6.2	5.9	5.1	4.5	4.4	4.3	4.4	5.2	5.8	4.5	4.6	4.3
AH4R 2015-SFR2		1.6	2.3	3.2	4.9	6.4	7.8	7.8	6.8	5.3	4.2	3.4	3.2
AMSR 2016-SFR1												N/A	N/A
CAH 2014-1		1.8	1.4	1.4	1.5	1.6	1.8	1.9	2.2	1.9	2.1	2.0	1.9
CAH 2014-2		1.7	1.5	1.4	2.0	2.1	1.9	1.8	1.7	1.4	1.2	1.0	1.1
CAH 2015-1		2.0	1.3	1.2	1.2	1.2	1.2	1.6	1.9	1.5	1.7	1.4	1.2
CSH 2016-1										1.2	1.3	1.0	0.8
HPA 2016-1				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HPA 2016-2											0.0	0.0	0.0
IH 2013-SFR1		2.2	2.4	3.1	2.8	3.2	3.4	2.5	1.8	1.7	1.8	1.6	1.5
IH 2014-SFR1		1.2	1.3	1.5	1.5	2.1	2.6	2.6	2.8	2.7	2.2	2.3	1.9
IH 2014-SFR2		1.4	1.4	1.5	1.9	2.2	2.2	2.4	2.6	3.0	1.9	1.5	1.6
IH 2014-SFR3		1.2	1.4	1.6	1.4	1.7	1.9	2.1	2.3	2.2	1.8	1.7	1.6
IH 2015-SFR1		2.0	1.9	2.1	2.1	2.1	2.4	2.0	2.1	2.3	1.9	2.2	2.4
IH 2015-SFR2		1.7	1.9	2.0	1.5	1.7	1.6	1.8	2.1	1.8	1.9	2.2	2.0
IH 2015-SFR3		2.1	1.8	2.0	1.9	1.8	1.9	1.8	2.0	1.8	1.9	2.2	2.4
PRD 2015-SFR2		1.1	0.8	1.3	2.3	2.8	2.3	1.4	1.6	1.4	1.8	2.0	2.4
PRD 2015-SFR3		0.4	0.3	0.3	0.8	1.6	3.4	3.8	4.2	4.0	3.4	2.5	1.9
PRD 2016-SFR1										1.4	1.8	2.0	2.0
SBY 2014-1		7.4	7.0	7.1	7.2	7.2	7.4	7.8	7.3	7.6	7.8	7.9	7.9
SWAY 2014-1		4.2	3.8	3.5	3.3	3.6	4.4	4.1	4.1	3.8	3.8	2.0	1.7
TAH 2015-SFR1		16.7	15.3	15.2	15.5	14.9	13.7	12.8	12.7	12.7	13.5	10.7	9.7
TAH 2016-SFR1													6.9
Overall SFR		3.3	3.1	3.2	3.3	3.6	3.8	3.9	3.9	3.5	3.2	2.8	2.9

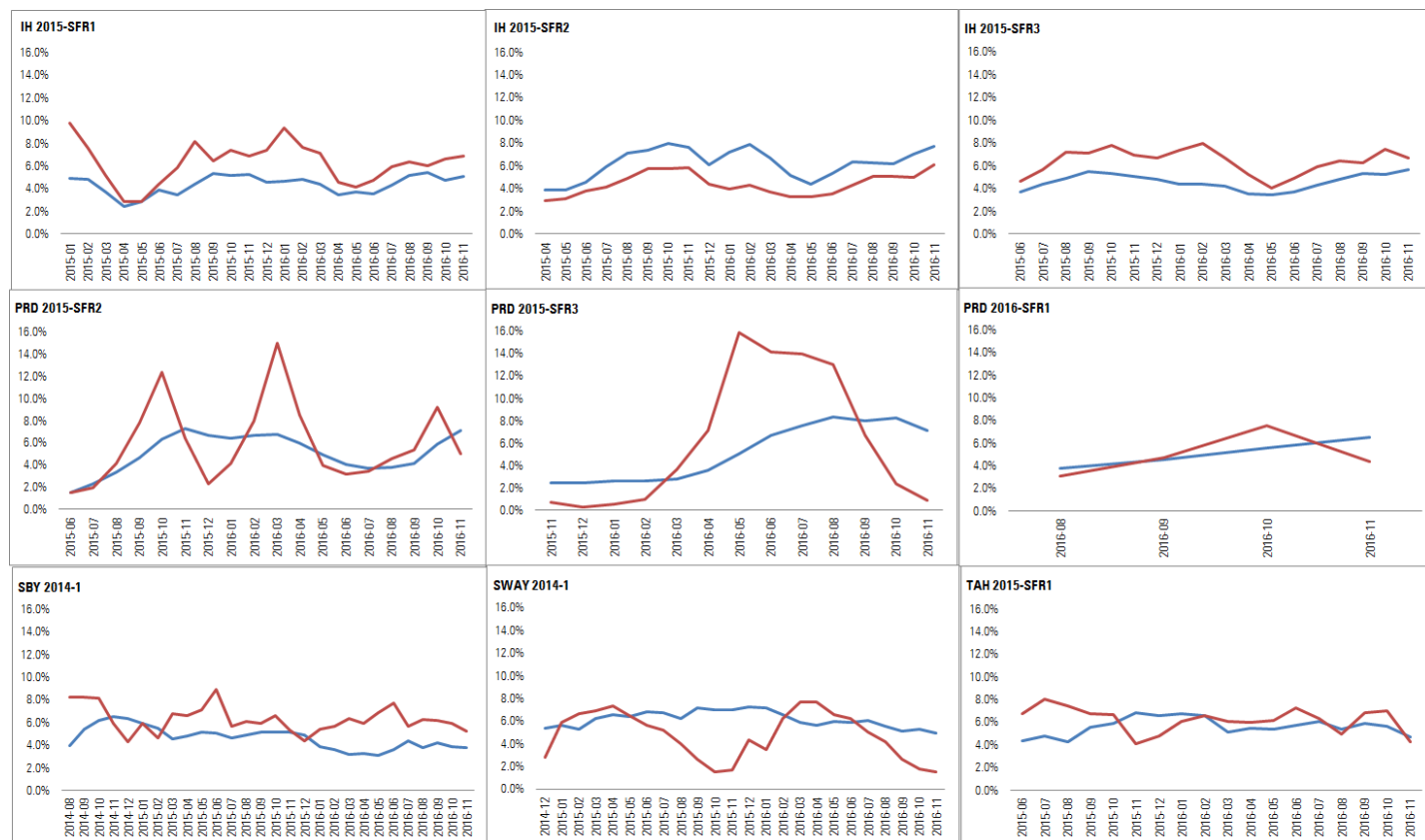
**Table 10 – Monthly Turnover Rate**

		Year 2016											
		Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
AH4R 2014-SFR1		2.8	2.4	2.7	3.2	3.2	3.5	4.0	3.8	4.3	3.3	3.4	TBD
AH4R 2014-SFR2		1.8	2.5	2.5	3.1	4.8	4.6	3.6	4.1	4.3	2.8	2.9	TBD
AH4R 2014-SFR3		2.6	2.5	2.6	3.0	3.4	3.7	5.5	5.3	4.8	3.6	2.6	TBD
AH4R 2015-SFR1		3.1	2.9	2.2	2.0	2.8	3.5	4.5	5.1	5.0	3.6	3.4	TBD
AH4R 2015-SFR2		2.1	2.9	4.0	4.9	5.6	6.2	5.6	4.0	3.2	2.1	2.4	TBD
AMSR 2016-SFR1												-	TBD
CAH 2014-1		1.9	1.3	1.4	1.8	2.3	2.2	3.2	3.7	4.3	3.7	3.3	TBD
CAH 2014-2		2.3	2.8	3.2	3.2	3.7	3.4	3.3	2.9	3.5	3.5	2.9	TBD
CAH 2015-1		2.3	2.2	1.9	2.3	2.5	3.5	4.0	4.7	4.6	3.6	3.1	TBD
CSH 2016-1										3.6	3.2	3.2	TBD
HPA 2016-1					1.4	1.9	2.6	2.0	4.7	3.2	2.5	2.5	TBD
HPA 2016-2												1.0	TBD
IH 2013-SFR1		2.1	3.0	3.3	3.4	3.2	2.8	3.1	2.8	2.8	2.1	2.7	TBD
IH 2014-SFR1		1.7	2.1	2.4	2.8	3.4	4.2	4.4	3.8	4.2	2.9	2.8	TBD
IH 2014-SFR2		1.9	2.2	2.3	2.6	2.8	3.3	4.0	3.4	3.7	3.1	2.8	TBD
IH 2014-SFR3		2.1	1.9	1.9	2.8	2.6	3.2	3.9	4.0	3.4	2.7	2.5	TBD
IH 2015-SFR1		2.7	2.9	3.5	2.9	2.3	2.5	3.0	3.8	3.8	2.7	2.2	TBD
IH 2015-SFR2		2.2	2.0	3.2	2.9	2.5	2.7	3.0	3.3	3.7	2.8	3.4	TBD
IH 2015-SFR3		2.6	2.3	3.1	2.9	2.4	2.7	2.8	3.2	3.6	3.0	2.9	TBD
PRD 2015-SFR2		1.9	2.2	2.7	4.7	3.9	2.8	2.6	2.3	2.6	2.7	3.8	TBD
PRD 2015-SFR3		1.0	1.1	1.0	1.7	2.6	5.4	6.2	5.7	5.6	3.7	2.4	TBD
PRD 2016-SFR1										2.5	2.7	2.8	TBD
SBY 2014-1		2.4	2.2	2.4	2.2	2.5	2.5	3.4	3.2	2.4	3.2	2.3	TBD
SWAY 2014-1		2.4	1.9	2.6	2.3	2.5	3.2	3.2	3.7	3.7	3.7	2.8	TBD
TAH 2015-SFR1		2.6	2.8	2.0	2.3	3.5	2.2	2.3	2.6	2.7	4.0	3.6	TBD
TAH 2016-SFR1												-	TBD
Overall SFR		2.2	2.3	2.5	2.8	3.1	3.4	3.7	3.8	3.7	3.1	2.8	TBD

TBD – To Be Determined

## Appendix I – Vacancy Versus Lease Expiration





## Appendix II – Description of Analysis

Morningstar tracks key metrics to gauge the performance of single-borrower, single-family rental transactions. There are several ways to view these metrics. For example, the vacancy rate might be calculated based on property count, by cash flow, or by days of occupancy. To account for different reporting across issuers, Morningstar seeks commonality across the single-borrower issuers' monthly reporting to derive its calculations.

Multiborrower deals are similar to single-borrower transactions in that the underlying collateral is generally single-family rental properties. They differ, though, in that single-borrower deals are backed by one loan, while multiborrower deals have many loans. B2R 2015-1 is secured by 139 loans; B2R 2015-2, 208 loans; B2R 2016-1, 163 loans; FKL 2015-SFR1, 16 loans; CAF 2015-1, 69 loans; CAF 2016-1, 85 loans; and CAF 2016-2, 71 loans. As such, the monthly reporting for multiborrower deals is different from the data reported in the single-borrower sector. For example, delinquency reported in Tables 6a and 6b are tenants that are past due on rental payments at a property level. For multiborrower transactions, delinquency is measured by borrowers that are past due on payments at the loan level.

### Chart 1 – Single-Family Rental Rent Change Versus RentRange Year-Over-Year Rent Change

To calculate the rent change across 25 single-family rental transactions, Morningstar isolated the leases starting in a given period and compared the contractual rent in that period with the prior occupied contractual rent. Morningstar then compared this rent change with the year-over-year change in three- and four-bedroom median rents from RentRange. Morningstar weighted the RentRange median rents by geography to match the MSA concentration of the Morningstar single-family rental database.

### Chart 2 – Rental Changes for Renewals Versus Vacant-to-Occupied Properties

Morningstar calculated the rent change using the contractual rent for the corresponding period versus the prior occupied contractual rent. To determine the lease expiration sample, Morningstar used the logic outlined below in the section, Tables 3a, 3b, and 3c – Lease Expiration. Morningstar then looked at the property tape to determine the renewed properties and compared that contractual rent with the prior contractual rent. For vacant properties subsequently occupied by new tenants, Morningstar isolated those properties that were vacant in a given month and occupied in the next month and again compared the current contractual rent with the prior contractual rent.

### **Chart 3 – November Average Contractual Rent Versus Property-Level RentRange Estimate by MSA**

Chart 3, which shows some of the MSAs most frequently found in single-family rental securitizations, takes a snapshot of the November contractual rents in the Morningstar single-family rental database and compares these rents with their property-specific rent estimates from RentRange.

### **Chart 4 – MSA-Level Blended Rent Change**

Chart 4 shows the rent change of some of the MSAs most frequently found in single-family rental securitizations. The size of each circle represents the percentage of properties in each MSA from Morningstar's database. MSAs in red are below the overall average rent change for the month, while those in blue are above.

### **Tables 2a, 2b, and 2c – Month-End Vacancy**

Table 2a displays deal-level vacancy by the month-end count of empty properties. Table 2b shows the deal-level vacancy as a percentage of the total properties in each pool. Table 2c shows the MSA-level vacancy percentage for some of the MSAs most frequently found in single-family rental securitizations. The vacancy rate is heavily influenced by the number of lease expirations in each month. Generally, the more leases expiring in a given month, the higher the vacancy rate will be. Because each transaction or MSA has a distinct lease expiration schedule, the vacancy rate should not be viewed at one point in time, but rather in the context of its lease expiration cycle, as reported in Tables 3a, 3b, and 3c and as seen in the charts in Appendix I.

### **Chart 5 – MSA-Level Vacancy and Lease Expiration Percentage (by Count)**

Chart 5 shows the vacancy rate of some of the MSAs most frequently found in single-family rental securitizations. The size of each circle represents the percentage of leases expiring in the last three months. MSAs in red are above the overall average vacancy percentage for the month, while those in blue are below. Typically, the more leases expiring, the higher the vacancy rate.

### **Tables 3a, 3b, and 3c – Lease Expiration**

Because lease expiration profiles change over time as previous tenants renew or new tenants occupy vacant properties, Morningstar seeks to rely on more recently published reporting of lease expirations, rather than solely using the lease expiration schedule from the cutoff date. To determine November lease expirations, Morningstar looks for all November lease expirations in the August property tape. Morningstar looks three months back to set a lease expiration sample that more accurately captures tenants who renew their leases in months before their scheduled lease expiration. Certain issuers have indicated that they proactively work to renew tenants a few months before the lease expiration date. Because Morningstar is looking three months back to determine its sample, there are

instances when tenants vacate properties between the time Morningstar determines its sample and the month in which the tenant must make a decision to stay in the property. Morningstar excludes those vacated properties from its lease expiration sample and its retention rate calculation in Table 7. In the current example, properties that become vacant or that have move out dates in either September or October are removed from the November lease expiration count.

### **Tables 4a and 4b – Historical Months of Vacancy**

Tables 4a and 4b show the number of months of vacancy the November unoccupied properties have experienced. In other words, if a property is unoccupied as of the November property tape, these tables summarize the number of total months the property has been vacant since the transaction cutoff date. Depending on the length of performance history, the overall vacancy may be in line with the number of consecutive vacant months, but this might not always be the case for those properties that have gone through multiple leasing cycles. Table 4a shows historical months of vacancy by count, and Table 4b is as a percentage of the November vacancies.

### **Table 5 – Delinquency Definition**

Morningstar's calculation of delinquency is based on the number of properties flagged as delinquent in the monthly property-level data. Each issuer uses its own criteria for classifying a tenant as delinquent. Table 5 summarizes the delinquency definition for each issuer and contains details on the length of time that must pass from a tenant's due date to be considered delinquent. The length of time is either based on a count of 30 days or is based on the calendar month. The slight distinction, for example, either results in a property with payment due on March 1 considered as delinquent after 30 days or as delinquent on April 1. None of the issuers factor a grace period into their delinquency definition, meaning their respective measures of past due begin if payment has not been received by the stated due date. In addition to timing, these conditions can also differ by the total dollar threshold an issuer uses to classify a tenant as delinquent and by the types of overdue payments that the issuer uses to count toward that threshold. For example, most issuers use only base rent to determine the dollar amount of delinquency. However, Silver Bay Realty and Tricon American Homes each count total receivables to determine the past due amount. Progress Residential includes certain fees above base rent but not total receivables.

### **Tables 6a and 6b – Month-End Delinquency**

Table 6a shows the month-end count of delinquencies based on the definition in Table 5, and Table 6b shows delinquency as a percentage of the total number of properties in each pool. Any review of delinquency should be viewed within the context of the delinquency definitions in Table 5.

**Table 7 – Monthly Retention Rate of Expiring Leases**

When evaluating an issuer's ability to keep tenants in a property, Morningstar considers a retention rate. Once again, differences in monthly reporting affect the calculation that Morningstar uses. Typically, a renewal rate would review those tenants who signed a full-term lease. Considering the different methods issuers use to designate tenants with either a renewal or an MTM status, Morningstar opted to report the retention rate instead of the renewal rate. The retention rate is defined as those properties that retained previous tenants, whether on full-term or MTM leases, divided by the total number of leases due to expire in that period, as reported in Table 3a and explained in Appendix II. If there is not enough seasoning in the deal to look three months back to determine the lease expiration sample, Morningstar relies on the cutoff tape lease expiration profile. As a result, the first three months of retention rate reported in Table 7 will use the cutoff tape to find the sample of lease expirations. After isolating the applicable lease expiration sample, Morningstar looks at the most recent property tape to determine the lease status of the properties. In this report, Morningstar uses the November property tape to determine the lease status for October expirations. Morningstar relies on the issuer's labeling of vacant, renewal, new lease, or MTM, to the extent that these notations are available in each tape.

**Table 8 – Monthly Retention Rate of MTM Leases**

In Table 8, Morningstar reviews the retention rate of those properties in an MTM status. This table looks at previous tenants who went to an MTM status and either renewed or remained in the property on an MTM basis. For the MTM retention rate, Morningstar looks for MTM tenants in the previous month's property tape, and then looks to the current month for their occupancy status. For example, the October 2016 retention rates are the November statuses of October MTM tenants.

**Tables 9a and 9b – MTM Tenants**

In Tables 9a and 9b, Morningstar shows the count and percentage of properties with MTM tenants. Securitizations with higher concentrations of MTM tenants typically report higher retention rates of their MTM leases. MTM tenants are usually subject to a monthly fee, which may encourage them to eventually sign full-term leases.

**Table 10 – Monthly Turnover Rate**

In evaluating how effective an issuer is at retaining tenants, Morningstar also considers the monthly turnover rate. For this metric, Morningstar strives to apply a consistent calculation given the differences in issuers' monthly reporting. Morningstar considers a property turned over if it meets one of three criteria:

- The property is vacant but was occupied in the previous month and the move-out date, if available, is on or after the first day of the current month;



- The move-out date is on or after the first day of the current month, including the last day of the current month;
- Or the property was occupied in the prior month and a tenant has signed a new lease that starts on or after the second day of the current month.

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