

# **Single-Family Rental Research**

# Performance Summary Covering All Morningstar-Rated Securitizations

# February 2017

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#### Introduction

Single-borrower, single-family rental securitizations rated by Morningstar Credit Ratings, LLC are performing within Morningstar's expectations, as the average vacancy rate improved to 4.9% from 5.1% in December and delinquency held steady at 0.9%. Morningstar expects the vacancy rate to dip in the coming months, as retention rates remain strong. As of December, the most recent data available, the average retention rate for full-term leases was 77.5%. Among metropolitan statistical areas, Memphis, Tennessee, had the highest vacancy rate of 8.1%. Vacancy rates in the Florida MSAs of Fort Lauderdale, Jacksonville, and Sarasota-Bradenton-Venice were above average, at 6.7% or higher. Lease expiration rates in Fort Lauderdale and Jacksonville were higher than average, while in the Sarasota-Bradenton-Venice MSA, the lease expiration rate was below-average at 5.2%. In Houston, vacancy among single-family rental homes improved to 6.2% from 7.1% the month prior. Meanwhile, rents for properties backing single-family rental transactions rose by 3.5% in January from their prior contractual rents.

This month's report is noteworthy for what it does not contain: The inaugural single-family rental securitization, Invitation Homes 2013-SFR1, paid in full as of the February remittance and thus isn't part of this month's analysis. That leaves the performance summary with an analysis of 27 single-borrower deals and over 105,000 properties.

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 January. Page 4 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.

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#### **Single-Borrower Performance**

The vacancy rate improved to 4.9% partly because of fewer winter lease expirations and a firm average retention rate. Additionally, the overall turnover rate held steady at 2.4% as of December, the most recent data available. Morningstar expects that these factors may lead to lower vacancies in the coming months. Chart 5 shows the MSA-level vacancy rate in single-borrower transactions. MSAs with vacancy above the 4.9% average are red, while those below are blue.

In January, the average delinquency rate held steady at 0.9%; however, 13 deals had delinquency rates at or above 1.0%, up from eight the month prior. That list includes AMSR 2016-SFR1 at 2.5% and TAH 2016-SFR1 at 2.0%. Both transactions have higher levels of Section 8 tenants, and it is likely that some of these delinquencies were caused by a timing mismatch between receiving the Section 8 portion of the rent and the reporting of delinquencies. Any review of delinquency should be viewed within the context of the delinquency definitions in Table 5.

Rents increased 3.5% in January, up from 3.3% the prior month. Based on the historical rent changes shown in Chart 1, the rent gains for securitized properties are likely climb. 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 December, the latest month for which data is available, the rent change for vacant-to-occupied properties was 1.7%, while the rent change for renewal properties was at 4.5%. 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 through the first quarter 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 Sarasota-Bradenton-Venice and Fort Lauderdale. Chart 4 shows the MSA-level rent change. MSAs with rent changes above the 3.5% 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 database. Table 1 shows the MSA-level rent change for the past 12 months.



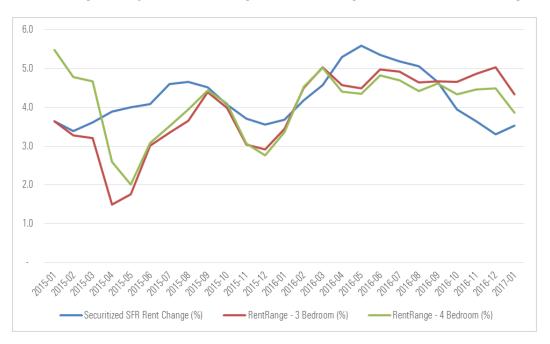
#### **Multiborrower Performance**

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 CAF 2016-2. As of the most recent remittance report, B2R 2015-1 had two loans that are 30 days delinquent and two that are at least 90 days delinquent. One of the loans that is 90 or more days delinquent, which is 0.4% of the transaction balance, is in foreclosure and was transferred to special servicing in January 2016. In June, the borrower of this loan filed for bankruptcy. The other loan that is at least 90 days delinquent in B2R 2015-1 makes up 0.2% of the total transaction balance and was transferred to special servicing in June for payment default. One loan in B2R 2015-1 is reported as current but was likewise transferred to special servicing because of payment default. Separately, B2R 2015-2 has three loans that are 30 days delinquent, which combined account for 2.1% of the transaction balance, and three loans that are 90 or more days behind on payments, which account for 0.5% of the deal balance. The loans at least 90 days delinquent were also transferred to special servicing because of payment default; one of these loans was transferred in May, one was transferred in August, and the third was transferred in September. B2R 2016-1 has three loans that are 30 days delinquent, one that is 60 days delinquent, and one that is more than 90 days delinquent. The loan more than 90 days delinquent, accounting for 0.2% of the deal balance, has been with the special servicer since October, while the loan 60 days behind in payments, accounting for 0.2% of the deal balance, has been with the special servicer since December. All of the loans in CAF 2015-1 are current, including two loans equal to 4.7% of the transaction balance that were 30 days delinquent as of the January remittance and were transferred to special servicing in November. All of the loans in CAF 2016-1 are current, while CAF 2016-2 has one loan that became 90 days delinquent and was transferred to special servicing in January. Finally, all borrowers in FKL 2015-SFR1 are current. However, one loan that is approximately 1.7% of the deal balance was transferred to special servicing in October for imminent default.



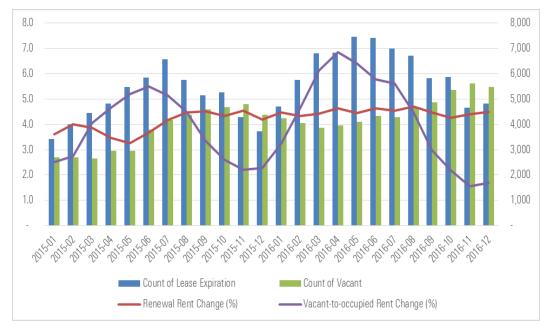
### **Single-Borrower Charts and Tables**

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



Sources: Morningstar Credit Ratings, LLC; RentRange

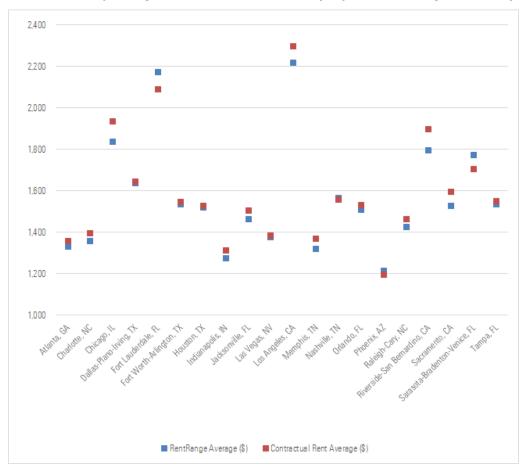
Chart 2 – Rental Changes for Renewals Versus Vacant-to-Occupied Properties



Source: Morningstar Credit Ratings, LLC



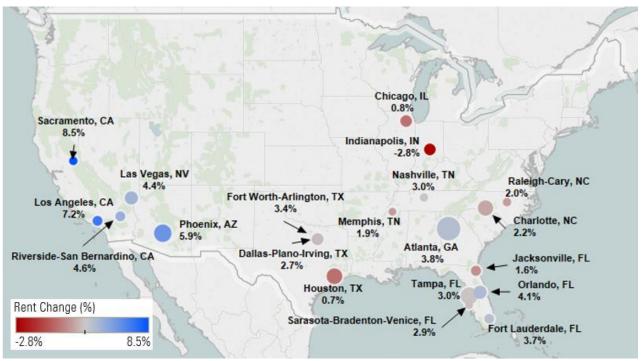
### Chart 3 – January Average Contractual Rent Versus Property-Level RentRange Estimate by MSA



Sources: Morningstar Credit Ratings, LLC; RentRange



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



Sources: Morningstar Credit Ratings, LLC; Tableau Software



<sup>\*</sup>The size of the circles represents the total percentage (by count) of properties in each MSA, ranging from 1.5% to 13.4%. Because of their proximity, the Fort Worth-Arlington, Texas, MSA is hidden behind Dallas-Plano-Irving.





		Year 2016											2017
		F	eb Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
Atlanta, GA		4	.5 4.8	5.3	5.6	5.7	5.4	5.7	5.0	4.4	4.3	3.7	3.8
Charlotte, NC		4	.3 4.7	5.8	7.2	5.8	5.1	5.3	5.2	4.0	3.4	3.2	2.2
Chicago, IL	~~	1	.7 2.7	3.9	3.7	3.3	2.4	2.6	1.8	1.8	0.4	0.4	0.8
Dallas-Plano-Irving, TX		4	.5 5.7	5.8	5.9	5.2	4.8	5.0	4.5	4.0	3.7	2.9	2.7
Fort Lauderdale, FL		3	.2 3.7	4.9	4.2	4.9	4.3	4.5	3.4	3.7	3.3	2.6	3.7
Fort Worth-Arlington, TX		3	.7 4.8	5.7	5.9	5.7	5.2	4.5	3.9	3.8	3.9	3.0	3.4
Houston, TX		3	.3 3.2	3.4	4.0	3.4	2.8	2.1	3.1	-0.2	-0.3	-0.1	0.7
Indianapolis, IN		3	.7 1.6	2.2	1.7	1.5	3.2	2.7	2.1	1.8	-0.2	-1.0	-2.8
Jacksonville, FL		3	.3 3.6	3.9	4.8	4.5	3.9	3.7	3.3	3.0	2.2	1.9	1.6
Las Vegas, NV		3	.1 3.9	5.0	5.2	5.2	4.9	4.9	4.8	4.8	4.4	4.2	4.4
Los Angeles, CA		6	.7 6.8	6.6	8.0	7.3	8.1	7.9	7.3	6.3	7.0	7.0	7.2
Memphis, TN		2	.0 2.9	4.1	3.7	4.2	3.6	3.2	3.6	3.0	3.2	2.2	1.9
Nashville, TN		3	.8 4.5	5.1	5.6	4.7	4.9	4.4	3.9	4.0	3.9	3.0	3.0
Orlando, FL		3	.9 4.1	4.0	4.7	5.2	5.4	5.5	5.3	4.4	3.9	3.7	4.1
Phoenix, AZ		6	.0 6.2	7.6	8.0	7.6	8.0	6.4	6.4	5.8	5.5	5.2	5.9
Raleigh-Cary, NC		3	.9 4.2	5.6	5.3	4.6	4.3	3.7	3.6	2.4	2.9	2.5	2.0
Riverside-San Bernardino, CA		4	.6 5.1	5.4	6.1	5.9	5.4	5.5	4.7	4.5	4.5	5.1	4.6
Sacramento, CA		5	.9 7.1	7.3	7.8	7.7	6.7	8.5	9.8	7.5	6.6	6.4	8.5
Sarasota-Bradenton-Venice, FL	~~~	3	.5 3.9	3.8	5.1	4.9	4.7	4.1	3.8	3.7	3.8	2.0	2.9
Tampa, FL		3	.5 3.5	4.2	4.7	4.7	4.7	4.6	4.1	3.2	3.6	3.7	3.0

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		Year 2016											2017	Total Count
		Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	
AH4R 2014-SFR1		151	135	174	170	145	155	150	161	180	190	183	176	3,803
AH4R 2014-SFR2		153	159	202	225	233	200	193	199	191	201	179	162	4.484
AH4R 2014-SFR3		173	179	191	185	208	221	204	256	259	248	215	206	4,503
AH4R 2015-SFR1		249	184	171	187	197	205	225	274	260	268	264	258	4,660
AH4R 2015-SFR2		176	212	269	286	254	194	150	136	150	167	156	182	4,124
AMSR 2016-SFR1	~									335	345	306	291	4,262
CAH 2014-1		114	117	110	109	116	160	178	175	178	193	182	155	3,345
CAH 2014-2		184	187	188	150	168	159	182	187	178	185	171	160	3,681
CAH 2015-1		161	167	145	139	170	224	220	198	210	195	194	184	3,869
CSH 2016-1								143	148	169	190	180	161	3,564
CSH 2016-2												177	193	3,993
HPA 2016-1		37	44	47	40	52	76	89	99	93	79	65	59	2,094
HPA 2016-2									9	14	17	18	22	1,390
IH 2014-SFR1		228	213	238	282	321	311	368	340	342	320	305	256	6,315
IH 2014-SFR2		140	127	113	137	156	155	183	193	197	184	158	157	3,667
IH 2014-SFR3 IH 2015-SFR1		125	125	113	151	176	188	188	194	192	197	180	194	3,990
IH 2015-SFR2		146 151	134	105	112	108	130	155 179	164	144	146 213	142	153 187	3,021
IH 2015-SFR3		314	304	254	246	266	308	344	381	375	397	384	392	7,179
PRD 2015-SFR2		220	224	198	162	134	123	125	137	194	234	274	255	3,298
PRD 2015-SFR3		83	88	112	160	211	239	263	251	259	226	206	191	3,161
PRD 2016-SFR1								210	254	310	364	397	414	5,572
PRD 2016-SFR2												195	186	3,744
SBY 2014-1		107	95	99	92	105	130	113	127	115	112	119	119	2,988
SWAY 2014-1		268	239	229	242	238	246	226	208	213	202	175	172	4,058
TAH 2015-SFR1		231	179	190	189	200	212	189	206	189	179	153	130	3,344
TAH 2016-SFR1											157	184	175	3,439
Overall SFR		3,411	3,241	3,263	3,380	3,581	3,788	4,277	4,475	4,923	5,209	5,347	5, 190	105,068
9														



Total



Year 2016



	Year Zuib											2017
	 Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
AH4R 2014-SFR1	3.9	3.5	4.5	4.4	3.8	4.0	3.9	4.2	4.7	5.0	4.8	4.6
AH4R 2014-SFR2	3.4	3.5	4.5	5.0	5.2	4.5	4.3	4.4	4.3	4.5	4.0	3.6
AH4R 2014-SFR3	3.8	4.0	4.2	4.1	4.6	4.9	4.5	5.7	5.8	5.5	4.8	4.6
AH4R 2015-SFR1	5.3	3.9	3.7	4.0	4.2	4.4	4.8	5.9	5.6	5.8	5.7	5.5
AH4R 2015-SFR2	4.3	5.1	6.5	6.9	6.2	4.7	3.6	3.3	3.6	4.0	3.8	4.4
AMSR 2016-SFR1									7.9	8.1	7.2	6.8
CAH 2014-1	3.4	3.5	3.3	3.2	3.4	4.8	5.3	5.2	5.3	5.8	5.4	4.6
CAH 2014-2	5.0	5.0	5.1	4.0	4.5	4.3	4.9	5.1	4.8	5.0	4.6	4.3
CAH 2015-1	4.2	4.3	3.7	3.6	4.4	5.8	5.7	5.1	5.4	5.0	5.0	4.8
CSH 2016-1							4.0	4.2	4.7	5.3	5.1	4.5
CSH 2016-2											4.4	4.8
HPA 2016-1	1.7	2.0	2.1	1.8	2.4	3.5	4.2	4.7	4.4	3.7	3.1	2.8
HPA 2016-2								0.6	1.0	1.2	1.3	1.6
IH 2014-SFR1	3.5	3.3	3.7	4.4	5.0	4.9	5.8	5.3	5.4	5.0	4.8	4.1
IH 2014-SFR2	3.7	3.4	3.1	3.7	4.2	4.2	5.0	5.2	5.3	5.0	4.3	4.3
IH 2014-SFR3	3.1	3.1	2.8	3.8	4.4	4.7	4.7	4.8	4.8	4.9	4.5	4.9
IH 2015-SFR1	4.8	4.4	3.5	3.7	3.6	4.3	5.1	5.4	4.8	4.8	4.7	5.1
IH 2015-SFR2	4.3	3.7	3.3	3.3	3.5	4.3	5.1	5.1	5.0	6.1	5.3	5.3
IH 2015-SFR3	4.4	4.2	3.5	3.4	3.7	4.3	4.8	5.3	5.2	5.5	5.3	5.5
PRD 2015-SFR2	6.6	6.8	6.0	4.9	4.1	3.7	3.8	4.1	5.9	7.1	8.3	7.7
PRD 2015-SFR3	2.6	2.8	3.5	5.1	6.7	7.6	8.3	7.9	8.2	7.1	6.5	6.0
PRD 2016-SFR1							3.8	4.6	5.6	6.5	7.1	7.4
PRD 2016-SFR2											5.2	5.0
SBY 2014-1	3.6	3.2	3.3	3.1	3.5	4.3	3.8	4.2	3.8	3.7	4.0	4.0
SWAY 2014-1	6.6	5.9	5.6	5.9	5.8	6.0	5.5	5.1	5.2	5.0	4.3	4.2
TAH 2015-SFR1	6.6	5.1	5.4	5.4	5.7	6.1	5.4	5.9	5.6	5.3	4.6	3.9
TAH 2016-SFR1										4.6	5.4	5.1
Overall SFR	4.3	4.1	4.1	4.2	4.5	4.8	4.8	5.0	5.2	5.3	5.1	4.9



2017

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



		Year 2016											<u>2017</u>
		Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
Atlanta, GA		4.1	4.1	3.9	4.1	4.0	4.9	4.9	4.5	4.8	4.8	4.6	5.1
Charlotte, NC		5.2	4.8	4.3	4.3	4.3	4.3	4.5	5.1	5.5	6.0	5.6	5.2
Chicago, IL		5.7	5.5	5.7	5.4	5.9	6.9	6.4	6.1	6.4	5.5	5.4	4.7
Dallas-Plano-Irving, TX		4.0	3.4	3.5	5.1	4.2	4.0	4.3	4.4	5.4	5.3	4.4	4.2
Fort Lauderdale, FL		4.9	4.2	4.5	4.2	4.0	5.9	6.2	7.2	6.9	6.6	6.0	6.7
Fort Worth-Arlington, TX		4.7	4.8	5.2	4.6	4.6	4.0	3.4	3.4	4.0	4.6	5.0	5.1
Hauston, TX		5.8	5.2	5.9	6.8	6.6	7.8	7.5	7.8	8.0	7.7	7.1	6.2
Indianapolis, IN		4.3	4.1	4.8	5.1	6.4	5.8	6.7	6.9	8.7	8.1	6.8	6.2
Jacksonville, FL		5.0	4.5	5.0	5.4	5.2	4.9	5.4	6.4	6.9	7.3	7.6	6.7
Las Vegas, NV		3.6	3.9	3.5	3.5	4.0	4.3	3.8	3.7	4.1	3.7	4.3	3.4
Los Angeles, CA	~~~	2.9	3.3	2.8	3.5	3.9	3.1	3.3	3.9	3.2	3.0	2.9	2.5
Memphis, TN		7.5	5.8	7.0	5.8	6.1	6.5	5.3	6.6	8.3	8.7	8.8	8.1
Nashville, TN	~	3.3	4.7	4.6	3.7	2.5	2.9	2.8	3.5	4.8	5.8	5.5	5.5
Orlando, FL		4.8	3.8	3.3	3.9	3.8	4.2	4.5	4.7	4.7	5.0	4.5	4.0
Phoenix, AZ		3.2	2.9	2.8	2.8	3.5	3.5	3.8	4.3	4.4	4.6	4.2	3.7
Raleigh-Cary, NC		3.3	4.4	5.7	4.8	4.4	4.0	4.1	5.2	4.6	4.8	5.0	5.1
Riverside-San Bernardino, CA		4.2	4.4	4.3	4.4	5.2	4.1	5.1	4.0	3.8	4.0	3.6	4.0
Sacramento, CA		2.5	2.3	1.7	2.7	3.2	3.3	3.9	2.9	3.0	2.4	2.4	2.5
Sarasota-Bradenton-Venice, FL		5.7	5.8	5.3	5.4	6.2	7.1	7.0	6.8	7.2	7.2	6.6	7.5
Tampa, FL		4.7	4.7	4.4	4.1	4.9	4.9	4.9	4.8	5.1	5.0	5.2	5.3





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

Sources: Morningstar Credit Ratings, LLC; Tableau Software



<sup>\*</sup>The size of the circles represents the past three months of lease expirations by count as a percentage of each MSA, ranging from 7.4% to 17.4%. Because of their proximity, the Fort Worth-Arlington, Texas, MSA is hidden behind Dallas-Plano-Irving.

# Table 3a – Lease Expiration (by Count)



		Year 2016											2017	Total
		Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Count
AH4R 2014-SFR1		256	287	284	341	322	326	273	240	220	186	209	235	3,803
AH4R 2014-SFR2		299	434	487	551	388	358	297	221	190	195	150	290	4,484
AH4R 2014-SFR3		237	280	331	461	556	432	396	288	216	146	169	295	4,503
AH4R 2015-SFR1		120	131	190	232	420	540	430	361	341	293	266	319	4,660
AH4R 2015-SFR2		496	592	621	620	421	165	82	99	116	122	124	245	4,124
AMSR 2016-SFR1										217	174	156	200	4,262
CAH 2014-1		145	178	189	214	260	349	390	322	290	210	154	175	3,345
CAH 2014-2		425	372	336	276	240	234	262	238	245	221	222	269	3,681
CAH 2015-1		153	187	230	321	393	404	421	313	286	241	210	220	3,869
CSH 2016-1								271	257	230	182	184	174	3,564
CSH 2016-2	_											217	242	3,993
HPA 2016-1		74	137	185	170	263	298	263	262	141	62	48	65	2,094
HPA 2016-2	^								4	8	10	5	6	1,390
IH 2014-SFR1		342	505	608	630	601	509	419	345	284	202	184	264	6,315
IH 2014-SFR2		200	247	241	281	301	279	278	194	203	154	153	196	3,667
IH 2014-SFR3		198	226	249	302	366	323	245	209	184	203	171	215	3,990
IH 2015-SFR1		234	215	138	125	142	180	191	183	200	207	196	255	3,021
IH 2015-SFR2		277	235	180	155	188	222	219	218	247	270	219	221	3,520
IH 2015-SFR3		574	478	377	292	353	427	460	449	532	480	445	522	7,179
PRD 2015-SFR2	^	263	496	280	130	105	113	150	177	304	165	149	179	3,298
PRD 2015-SFR3		31	115	224	501	446	442	412	210	74	27	27	42	3,161
PRD 2016-SFR1	<b>/</b>							170	263	420	242	312	353	5,572
PRD 2016-SFR2												115	70	3,744
SBY 2014-1		169	192	178	205	232	169	187	184	177	156	147	184	2,988
SWAY 2014-1		254	312	311	268	253	204	170	105	71	60	202	182	4,058
TAH 2015-SFR1		229	212	208	215	253	222	173	239	235	144	142	145	3,344
TAH 2016-SFR1	_										93	85	122	3,439
Overall SFR		4,976	5,831	5,847	6,290	6,503	6,196	6,159	5,381	5,431	4,445	4,661	5,685	105,068

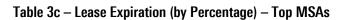


# Table 3b - Lease Expiration (by Percentage)



	• • •	•											
		Year 2016 Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	<b>2017</b> Jan
AH4R 2014-SFR1		6.6	7.5	7.4	8.9	8.4	8.5	7.1	6.3	5.8	4.9	5.5	6.2
AH4R 2014-SFR2		6.7	9.7	10.9	12.3	8.6	8.0	6.6	4.9	4.2	4.3	3.3	6.5
AH4R 2014-SFR3		5.3	6.2	7.4	10.2	12.3	9.6	8.8	6.4	4.8	3.2	3.8	6.6
AH4R 2015-SFR1		2.6	2.8	4.1	5.0	9.0	11.6	9.2	7.7	7.3	6.3	5.7	6.8
AH4R 2015-SFR2		12.0	14.4	15.1	15.0	10.2	4.0	2.0	2.4	2.8	3.0	3.0	5.9
AMSR 2016-SFR1	<u></u>									5.1	4.1	3.7	4.7
CAH 2014-1		4.3	5.3	5.6	6.4	7.7	10.4	11.6	9.6	8.6	6.3	4.6	5.2
CAH 2014-2		11.5	10.0	9.1	7.5	6.5	6.3	7.1	6.4	6.6	6.0	6.0	7.3
CAH 2015-1		3.9	4.8	5.9	8.3	10.1	10.4	10.9	8.1	7.4	6.2	5.4	5.7
CSH 2016-1								7.6	7.2	6.5	5.1	5.2	4.9
CSH 2016-2												5.4	6.1
HPA 2016-1		3.3	6.1	8.3	7.7	12.1	13.8	12.3	12.3	6.7	2.9	2.3	3.1
HPA 2016-2									0.3	0.6	0.7	0.4	0.4
IH 2014-SFR1		5.3	7.9	9.6	9.9	9.4	8.0	6.6	5.4	4.5	3.2	2.9	4.2
IH 2014-SFR2		5.3	6.7	6.5	7.6	8.2	7.6	7.5	5.3	5.5	4.2	4.2	5.3
IH 2014-SFR3		4.9	5.6	6.2	7.5	9.1	8.1	6.1	5.2	4.6	5.1	4.3	5.4
IH 2015-SFR1		7.7	7.1	4.6	4.1	4.7	5.9	6.3	6.0	6.6	6.9	6.5	8.4
IH 2015-SFR2		7.9	6.7	5.1	4.4	5.3	6.3	6.2	6.2	7.0	7.7	6.2	6.3
IH 2015-SFR3		8.0	6.6	5.2	4.1	4.9	5.9	6.4	6.2	7.4	6.7	6.2	7.3
PRD 2015-SFR2	^	7.9	15.0	8.5	3.9	3.2	3.4	4.5	5.4	9.2	5.0	4.5	5.4
PRD 2015-SFR3		1.0	3.6	7.1	15.8	14.1	14.0	13.0	6.6	2.3	0.9	0.9	1.3
PRD 2016-SFR1	<u></u>							3.0	4.7	7.5	4.3	5.6	6.3
PRD 2016-SFR2												3.1	1.9
SBY 2014-1		5.6	6.4	5.9	6.8	7.7	5.6	6.2	6.1	5.9	5.2	4.9	6.2
SWAY 2014-1	<u></u>	6.2	7.6	7.6	6.6	6.2	5.0	4.2	2.6	1.7	1.5	5.0	4.5
TAH 2015-SFR1		6.5	6.0	5.9	6.1	7.2	6.3	4.9	6.8	6.9	4.3	4.2	4.3
TAH 2016-SFR1	~										2.7	2.5	3.5
Overall SFR		6.2	7.3	7.3	7.9	8.2	7.8	6.9	6.0	5.8	4.6	4.4	5.4

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		Year 2016											<u>2017</u>
		Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
Atlanta, GA		5.8	7.3	7.0	8.1	7.1	7.0	5.7	5.7	5.9	4.5	5.0	5.5
Charlotte, NC		5.8	6.6	6.6	6.9	9.1	8.2	8.4	6.8	6.0	4.9	4.0	4.6
Chicago, IL		6.4	7.9	8.6	8.7	8.9	7.9	6.0	5.7	4.9	3.4	3.3	5.6
Dallas-Plano-Irving, TX	~~~	5.2	7.7	6.8	8.8	8.5	9.2	7.3	5.1	6.9	4.0	4.6	5.1
Fort Lauderdale, FL	<b>~~~</b>	6.4	8.7	7.8	5.3	8.0	6.0	6.3	7.0	5.7	4.8	4.6	7.9
Fort Worth-Arlington, TX	~	6.4	9.3	8.2	9.9	7.9	7.7	6.4	4.9	5.2	3.7	3.7	4.7
Houston, TX	<u></u>	5.3	6.7	7.6	9.3	9.0	8.3	6.6	5.5	5.0	3.6	4.4	4.2
Indianapolis, IN	<u></u>	3.7	6.9	10.3	12.9	12.0	9.3	7.1	6.2	3.5	1.4	1.1	4.9
Jacksonville, FL		4.8	7.1	7.7	8.3	7.7	7.1	6.9	6.9	6.5	6.3	5.0	5.7
Las Vegas, NV	~~~	5.1	7.5	7.0	7.9	8.4	8.6	7.9	6.5	7.8	4.2	4.9	5.7
Los Angeles, CA	~~	5.7	6.6	6.9	5.5	5.9	5.7	6.8	6.5	4.1	4.4	4.1	4.9
Memphis, TN	<b>/</b>	4.1	8.7	8.8	7.4	7.1	9.0	7.8	7.6	5.4	3.3	4.2	4.7
Nashville, TN		6.1	8.8	8.8	10.4	9.8	8.1	7.0	6.8	6.6	5.7	4.2	4.7
Orlando, FL		5.7	6.2	6.4	9.2	8.9	9.7	7.4	5.7	6.1	4.4	4.7	5.0
Phoenix, AZ	~~~	7.7	7.7	6.6	7.6	6.6	7.0	6.9	6.5	6.4	4.8	5.2	6.5
Raleigh-Cary, NC	~~~	6.3	8.7	7.8	9.5	9.3	8.3	7.9	5.3	6.4	4.2	3.6	4.4
Riverside-San Bernardino, CA	~~~	7.0	7.2	6.9	6.4	6.4	7.1	6.6	5.4	6.3	5.7	4.9	6.0
Sacramento, CA	~~_	6.6	8.0	7.9	8.6	7.5	6.3	7.8	5.1	4.5	4.4	3.5	4.7
Sarasota-Bradenton-Venice, FL		5.8	7.3	7.0	7.6	8.4	9.1	8.6	6.6	6.4	4.9	4.6	5.2
Tampa, FL		6.3	6.2	6.4	7.4	8.1	8.4	7.4	5.8	6.2	4.7	5.3	5.3



# Table 4a – Historical Months of Vacancy for January Vacancies (by Count)

1	5
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		1	2	3	4	5	6	7	8	9	10	11	12+	Total
AH4R 2014-SFR1		30	26	32	25	22	13	13	5	2	0	0	8	176
AH4R 2014-SFR2		30	39	32	28	18	6	3	4	0	2	0	0	162
AH4R 2014-SFR3		33	42	45	36	20	17	9	3	1	0	0	0	206
AH4R 2015-SFR1	Ш	55	67	52	33	30	11	3	1	5	1	0	0	258
AH4R 2015-SFR2		57	58	37	15	6	5	3	1	0	0	0	0	182
AMSR 2016-SFR1		105	64	48	58	16								291
CAH 2014-1		16	22	32	27	26	11	5	9	2	0	2	3	155
CAH 2014-2		40	34	34	16	13	6	6	5	2	3	0	1	160
CAH 2015-1		43	39	44	25	13	6	10	1	2	0	0	1	184
CSH 2016-1		61	42	32	14	6	5	1						161
CSH 2016-2	1.	100	92	1										193
HPA 2016-1		32	17	3	4	0	1	1	0	0	0	0	1	59
HPA 2016-2		10	7	3	1	1	0							22
IH 2014-SFR1		47	57	45	38	26	18	13	4	3	0	3	2	256
IH 2014-SFR2		35	40	33	22	9	9	2	2	1	2	0	2	157
IH 2014-SFR3		48	40	40	26	14	14	6	1	1	1	1	2	194
IH 2015-SFR1		46	46	27	11	10	4	5	0	0	0	0	4	153
IH 2015-SFR2		53	48	34	29	13	4	3	2	0	1	0	0	187
IH 2015-SFR3	li	125	97	67	39	24	10	12	5	2	0	1	10	392
PRD 2015-SFR2		53	55	54	37	24	13	9	5	2	0	2	1	255
PRD 2015-SFR3		39	29	42	31	26	20	3	1	0	0	0	0	191
PRD 2016-SFR1	lu	137	112	70	52	29	13	1						414
PRD 2016-SFR2	I.	66	101	19										186
SBY 2014-1	***************************************	25	23	24	14	19	6	2	2	1	1	1	1	119
SWAY 2014-1		36	38	27	17	14	18	7	4	4	2	2	3	172
TAH 2015-SFR1		31	32	29	10	9	8	2	3	2	0	0	4	130
TAH 2016-SFR1		44	57	64	10									175
Overall SFR	Шин	1,397	1,324	970	618	388	218	119	58	30	13	12	43	5, 190



### Table 4b – Historical Months of Vacancy for January Vacancies (by Percentage)

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		1	2	3	4	5	6	7	8	9	10	11	12+	Total
AH4R 2014-SFR1		17.0	14.8	18.2	14.2	12.5	7.4	7.4	2.8	1.1	0.0	0.0	4.5	100.0
AH4R 2014-SFR2		18.5	24.1	19.8	17.3	11.1	3.7	1.9	2.5	0.0	1.2	0.0	0.0	100.0
AH4R 2014-SFR3		16.0	20.4	21.8	17.5	9.7	8.3	4.4	1.5	0.5	0.0	0.0	0.0	100.0
AH4R 2015-SFR1		21.3	26.0	20.2	12.8	11.6	4.3	1.2	0.4	1.9	0.4	0.0	0.0	100.0
AH4R 2015-SFR2	ш	31.3	31.9	20.3	8.2	3.3	2.7	1.6	0.5	0.0	0.0	0.0	0.0	100.0
AMSR 2016-SFR1		36.1	22.0	16.5	19.9	5.5								100.0
CAH 2014-1		10.3	14.2	20.6	17.4	16.8	7.1	3.2	5.8	1.3	0.0	1.3	1.9	100.0
CAH 2014-2		25.0	21.3	21.3	10.0	8.1	3.8	3.8	3.1	1.3	1.9	0.0	0.6	100.0
CAH 2015-1		23.4	21.2	23.9	13.6	7.1	3.3	5.4	0.5	1.1	0.0	0.0	0.5	100.0
CSH 2016-1	Li	37.9	26.1	19.9	8.7	3.7	3.1	0.6						100.0
CSH 2016-2		51.8	47.7	0.5										100.0
HPA 2016-1	h	54.2	28.8	5.1	6.8	0.0	1.7	1.7	0.0	0.0	0.0	0.0	1.7	100.0
HPA 2016-2	li	45.5	31.8	13.6	4.5	4.5	0.0							100.0
IH 2014-SFR1		18.4	22.3	17.6	14.8	10.2	7.0	5.1	1.6	1.2	0.0	1.2	0.8	100.0
IH 2014-SFR2		22.3	25.5	21.0	14.0	5.7	5.7	1.3	1.3	0.6	1.3	0.0	1.3	100.0
IH 2014-SFR3		24.7	20.6	20.6	13.4	7.2	7.2	3.1	0.5	0.5	0.5	0.5	1.0	100.0
IH 2015-SFR1	ш	30.1	30.1	17.6	7.2	6.5	2.6	3.3	0.0	0.0	0.0	0.0	2.6	100.0
IH 2015-SFR2	ш	28.3	25.7	18.2	15.5	7.0	2.1	1.6	1.1	0.0	0.5	0.0	0.0	100.0
IH 2015-SFR3	111	31.9	24.7	17.1	9.9	6.1	2.6	3.1	1.3	0.5	0.0	0.3	2.6	100.0
PRD 2015-SFR2		20.8	21.6	21.2	14.5	9.4	5.1	3.5	2.0	0.8	0.0	0.8	0.4	100.0
PRD 2015-SFR3		20.4	15.2	22.0	16.2	13.6	10.5	1.6	0.5	0.0	0.0	0.0	0.0	100.0
PRD 2016-SFR1		33.1	27.1	16.9	12.6	7.0	3.1	0.2						100.0
PRD 2016-SFR2	1	35.5	54.3	10.2										100.0
SBY 2014-1		21.0	19.3	20.2	11.8	16.0	5.0	1.7	1.7	8.0	0.8	0.8	0.8	100.0
SWAY 2014-1		20.9	22.1	15.7	9.9	8.1	10.5	4.1	2.3	2.3	1.2	1.2	1.7	100.0
TAH 2015-SFR1		23.8	24.6	22.3	7.7	6.9	6.2	1.5	2.3	1.5	0.0	0.0	3.1	100.0
TAH 2016-SFR1		25.1	32.6	36.6	5.7									100.0
Overall SFR		26.9	25.5	18.7	11.9	7.5	4.2	2.3	1.1	0.6	0.3	0.2	0.8	100.0



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# Table 5 – Delinquency Definition



Issuer	Definition
American Homes 4 Rent Amherst Colony American	Past due one calendar month or more (not dependent on day count) and owing \$200 or more Past due one calendar month or more (not dependent on day count) and owing \$500 or more
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 Invitation Homes Progress Residential Silver Bay Realty SWAY Residential Tricon American Homes	Past due 30 days or more (not dependent on calendar month) and owing \$500 or more Past due 30 days or more (not dependent on calendar month) and owing 25% of one month's rent or more Past due 30 days or more (not dependent on calendar month) and owing \$200 or more Past due 30 days or more (not dependent on calendar month) and owing \$500 or more Past due one calendar month or more (not dependent on day count) and owing \$200 or more Past due 30 days or more (not dependent on calendar month) and owing \$500 or more

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

<sup>&</sup>lt;sup>2</sup>Based on total receivables.

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



		Year 2016											2017	Count
		Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	
AH4R 2014-SFR1		9	8	9	12	13	15	16	15	13	13	18	6	3,803
AH4R 2014-SFR2		16	12	14	15	13	16	18	22	12	23	27	16	4,484
AH4R 2014-SFR3	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	13	5	5	13	13	10	14	17	17	18	10	15	4,503
AH4R 2015-SFR1		17	10	16	18	15	16	15	16	15	24	17	16	4,660
AH4R 2015-SFR2		13	14	9	12	20	19	21	23	20	19	18	19	4,124
AMSR 2016-SFR1										81	99	109	106	4,262
CAH 2014-1		18	16	14	19	17	22	20	21	24	26	23	39	3,345
CAH 2014-2		27	30	18	21	20	28	29	42	41	32	41	44	3,681
CAH 2015-1		19	16	14	19	23	20	26	35	19	23	28	40	3,869
CSH 2016-1								29	26	20	22	32	35	3,564
CSH 2016-2												43	33	3,993
HPA 2016-1		9	28	17	19	19	27	30	36	22	21	24	19	2,094
HPA 2016-2									14	13	10	14	20	1,390
IH 2014-SFR1		26	14	14	15	23	33	33	30	33	43	53	60	6.315
IH 2014-SFR2		18	14	15	17	19	14	16	21	26	18	24	32	3,667
IH 2014-SFR3		25	8	5	14	9	26	20	24	18	32	32	30	3,990
IH 2015-SFR1		17	11	10	13	15	22	15	13	15	18	25	23	3,021
IH 2015-SFR2		10	7	8	17	16	21	26	22	42	35	37	35	3,520
IH 2015-SFR3		40	21	25	36	36	57	56	48	60	64	65	76	7,179
PRD 2015-SFR2		32	26	28	23	14	20	18	24	31	26	22	19	3,298
PRD 2015-SFR3		26	21	11	14	19	19	19	20	18	17	10	15	3,161
PRD 2016-SFR1								47	51	45	38	44	40	5,572
PRD 2016-SFR2	/											26	27	3,744
SBY 2014-1		18	18	10	12	13	24	18	25	14	20	27	29	2,988
SWAY 2014-1		53	53	49	46	49	39	42	36	41	54	58	72	4,058
TAH 2015-SFR1		34	41	30	22	22	19	17	17	15	18	16	35	3,344
TAH 2016-SFR1											20	67	68	3,439
Overall SFR		440	373	321	377	388	467	545	598	655	733	910	969	105,068





# Table 6b - Month-End Delinquency (by Percentage)

		Year 2016 Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	<b>2017</b> Jan
AH4R 2014-SFR1		0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.5	0.2
AH4R 2014-SFR2		0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.3	0.5	0.6	0.4
AH4R 2014-SFR3		0.3	0.1	0.1	0.3	0.3	0.2	0.3	0.4	0.4	0.4	0.2	0.3
AH4R 2015-SFR1		0.4	0.2	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.5	0.4	0.3
AH4R 2015-SFR2		0.3	0.3	0.2	0.3	0.5	0.5	0.5	0.6	0.5	0.5	0.4	0.5
AMSR 2016-SFR1										1.9	2.3	2.6	2.5
CAH 2014-1		0.5	0.5	0.4	0.6	0.5	0.7	0.6	0.6	0.7	0.8	0.7	1.2
CAH 2014-2		0.7	0.8	0.5	0.6	0.5	0.8	0.8	1.1	1.1	0.9	1.1	1.2
CAH 2015-1		0.5	0.4	0.4	0.5	0.6	0.5	0.7	0.9	0.5	0.6	0.7	1.0
CSH 2016-1								0.8	0.7	0.6	0.6	0.9	1.0
CSH 2016-2												1.1	0.8
HPA 2016-1		0.4	1.3	0.8	0.9	0.9	1.2	1.4	1.7	1.0	1.0	1.1	0.9
HPA 2016-2	~								1.0	0.9	0.7	1.0	1.4
IH 2014-SFR1		0.4	0.2	0.2	0.2	0.4	0.5	0.5	0.5	0.5	0.7	8.0	1.0
IH 2014-SFR2	~~	0.5	0.4	0.4	0.5	0.5	0.4	0.4	0.6	0.7	0.5	0.7	0.9
IH 2014-SFR3	<b>~~~</b>	0.6	0.2	0.1	0.3	0.2	0.6	0.5	0.6	0.4	0.8	0.8	0.8
IH 2015-SFR1		0.6	0.4	0.3	0.4	0.5	0.7	0.5	0.4	0.5	0.6	8.0	0.8
IH 2015-SFR2		0.3	0.2	0.2	0.5	0.5	0.6	0.7	0.6	1.2	1.0	1.1	1.0
IH 2015-SFR3		0.6	0.3	0.3	0.5	0.5	0.8	0.8	0.7	0.8	0.9	0.9	1.1
PRD 2015-SFR2		1.0	0.8	0.8	0.7	0.4	0.6	0.5	0.7	0.9	0.8	0.7	0.6
PRD 2015-SFR3		0.8	0.7	0.3	0.4	0.6	0.6	0.6	0.6	0.6	0.5	0.3	0.5
PRD 2016-SFR1								0.8	0.9	0.8	0.7	0.8	0.7
PRD 2016-SFR2												0.7	0.7
SBY 2014-1		0.6	0.6	0.3	0.4	0.4	0.8	0.6	0.8	0.5	0.7	0.9	1.0
SWAY 2014-1		1.3	1.3	1.2	1.1	1.2	1.0	1.0	0.9	1.0	1.3	1.4	1.8
TAH 2015-SFR1	~	1.0	1.2	0.9	0.6	0.6	0.5	0.5	0.5	0.4	0.5	0.5	1.0
TAH 2016-SFR1											0.6	1.9	2.0
Overall SFR		0.6	0.5	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.9	0.9



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Table 7 – Monthly Retention Rate of Expiring Leases

	1	/ear 2016 Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	<u>2017</u> Jan
AH4R 2014-SFR1		78.1	73.9	76.1	81.5	77.6	83.1	79.1	72.9	75.5	77.4	76.6	TBD
AH4R 2014-SFR2		79.6	77.0	73.9	77.7	78.9	72.6	75.1	76.9	77.9	80.5	74.7	TBD
AH4R 2014-SFR3		73.0	77.9	73.4	77.0	74.6	77.3	73.2	74.7	79.6	72.6	74.6	TBD
AH4R 2015-SFR1		74.2	77.9	70.0	74.1	73.6	76.1	73.7	77.8	80.4	81.9	77.1	TBD
AH4R 2015-SFR2		76.8	75.0	73.6	72.7	71.0	75.8	70.7	77.8	72.4	69.7	69.4	TBD
AMSR 2016-SFR1		75.5					70.0			72.8	81.6	81.4	TBD
CAH 2014-1		75.9	74.7	78.3	81.8	79.2	76.8	80.0	78.6	77.2	77.6	76.0	TBD
CAH 2014-2		77.4	82.8	74.7	78.6	73.3	72.2	76.7	75.2	78.0	76.9	81.5	TBD
CAH 2015-1		73.2	77.5	80.0	76.3	76.1	76.0	75.1	78.0	79.7	82.2	76.7	TBD
CSH 2016-1								76.4	79.4	76.1	73.1	78.3	TBD
CSH 2016-2												76.0	TBD
HPA 2016-1		83.8	82.5	81.6	77.6	85.9	80.5	86.3	87.0	84.4	80.6	70.8	TBD
HPA 2016-2									75.0	75.0	70.0	100.0	TBD
IH 2014-SFR1		80.1	80.8	77.0	74.0	77.4	72.7	71.8	74.8	71.8	71.8	76.1	TBD
IH 2014-SFR2		79.0	80.2	75.1	77.6	74.4	72.0	72.3	75.3	75.9	74.0	79.7	TBD
IH 2014-SFR3		80.3	80.5	78.7	77.5	72.4	75.5	75.5	78.0	78.3	78.3	76.0	TBD
IH 2015-SFR1		78.2	77.2	76.8	66.4	71.1	65.6	67.5	78.7	78.5	80.2	77.6	TBD
IH 2015-SFR2		77.6	74.5	75.6	78.7	73.4	70.3	70.8	73.4	73.3	77.4	79.9	TBD
IH 2015-SFR3		78.7	78.7	77.7	74.3	73.9	72.4	75.4	73.9	79.5	75.0	80.4	TBD
PRD 2015-SFR2		77.2	73.4	72.5	70.0	64.8	65.5	75.3	74.0	77.0	77.6	79.2	TBD
PRD 2015-SFR3		77.4	74.8	75.9	73.1	68.6	72.9	74.3	75.7	78.4	70.4	81.5	TBD
PRD 2016-SFR1								77.6	77.9	78.3	76.9	72.8	TBD
PRD 2016-SFR2												66.1	TBD
SBY 2014-1		77.5	80.2	84.3	82.9	77.6	80.5	84.0	78.3	80.8	75.0	76.9	TBD
SWAY 2014-1		77.6	76.6	74.0	69.0	70.4	66.2	71.8	66.7	59.2	60.0	82.2	TBD
TAH 2015-SFR1		90.8	83.5	85.1	85.6	79.8	83.3	82.1	82.8	83.0	77.1	85.9	TBD
TAH 2016-SFR1											86.0	80.0	TBD
Overall SFR		78.3	77.8	76.2	76.1	75.0	74.8	75.6	76.9	77.5	77.1	77.5	TBD
TRD — To Be Determined													

 $\mathsf{TBD}-\mathsf{To}\;\mathsf{Be}\;\mathsf{Determined}$ 

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

		Year 2016	14	A	14	1	t-d		C	2	Nev		2017
AUAD 2014 CED4		Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec 4	Jan
AH4R 2014-SFR1		89.6	87.6	88.4	84.1	83.8	85.9	81.5	85.9	83.9	89.4	88.4	TBD
AH4R 2014-SFR2		86.7	87.8	82.9	82.3	79.8	83.0	77.9	86.6	86.4	86.0	82.6	TBD
AH4R 2014-SFR3		86.7	84.9	89.7	82.8	78.9	75.7	74.4	79.6	82.0	84.1	87.5	TBD
AH4R 2015-SFR1		85.3	87.9	83.7	80.8	81.8	85.4	76.0	81.3	80.7	80.6	80.9	TBD
AH4R 2015-SFR2		86.7	82.1	80.1	73.9	79.5	81.9	80.7	82.5	85.2	76.6	84.5	TBD
AMSR 2016-SFR1	^									91.7	95.3	93.1	TBD
CAH 2014-1		83.0	89.8	92.7	81.7	82.8	75.7	81.0	69.0	79.4	81.5	75.4	TBD
CAH 2014-2		88.7	72.6	75.0	74.3	72.7	71.9	54.7	63.6	77.8	79.5	65.8	TBD
CAH 2015-1		77.1	72.9	84.4	74.5	74.6	63.5	74.1	63.6	69.6	82.6	81.1	TBD
CSH 2016-1								79.5	61.7	72.2	76.7	77.4	TBD
CSH 2016-2												69.2	TBD
HPA 2016-1		N/A	N/A	100.0	0.0	N/A	TBD						
HPA 2016-2									N/A	N/A	N/A	N/A	TBD
IH 2014-SFR1		80.4	82.1	80.5	71.2	65.7	69.1	74.6	82.1	83.2	77.3	75.0	TBD
IH 2014-SFR2		90.7	90.2	80.6	78.1	74.6	79.1	67.6	74.1	81.4	83.3	90.5	TBD
IH 2014-SFR3		84.2	83.3	69.8	84.8	81.4	75.0	76.7	76.4	76.9	82.0	80.9	TBD
IH 2015-SFR1	~~~	85.7	79.1	89.1	86.3	78.0	87.2	79.6	80.0	88.6	81.3	88.9	TBD
IH 2015-SFR2		77.3	82.2	66.7	75.7	63.8	79.1	86.7	75.5	78.7	87.8	81.1	TBD
IH 2015-SFR3		78.7	82.5	80.8	77.1	78.8	76.8	82.4	81.6	84.0	78.0	82.7	TBD
PRD 2015-SFR2		78.6	80.0	67.7	59.4	78.0	78.9	80.6	75.0	79.5	76.3	74.6	TBD
PRD 2015-SFR3		62.5	85.7	71.4	71.4	64.2	67.6	70.0	70.6	73.0	76.3	84.1	TBD
PRD 2016-SFR1								79.0	83.1	80.8	76.4	84.0	TBD
PRD 2016-SFR2												78.8	TBD
SBY 2014-1		89.5	86.4	91.6	89.5	87.5	90.9	84.2	94.0	90.9	90.6	91.8	TBD
SWAY 2014-1		89.2	85.4	85.8	77.7	82.7	83.8	81.1	77.1	87.7	87.3	88.9	TBD
TAH 2015-SFR1		95.3	94.9	95.0	92.5	93.7	96.7	92.9	93.8	92.4	93.0	96.8	TBD
TAH 2016-SFR1	/										92.6	96.9	TBD
Overall SFR		88.1	86.7	85.5	81.4	81.4	82.9	80.1	82.2	85.1	86.2	87.2	TBD

 $\mathsf{TBD}-\mathsf{To}\;\mathsf{Be}\;\mathsf{Determined}$ 

M\(\tag{RNINGSTAR}^\epsilon\)

### **Table 9a – MTM Tenants (by Count)**



		Year 2016											2017	Total Count
		Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	
AH4R 2014-SFR1		260	258	248	239	268	254	249	208	186	179	178	173	3,803
AH4R 2014-SFR2		166	176	223	257	257	261	249	209	187	178	170	140	4,484
AH4R 2014-SFR3		172	177	186	225	250	284	284	246	209	185	164	159	4,503
AH4R 2015-SFR1		240	208	203	200	207	242	272	210	215	202	199	181	4,660
AH4R 2015-SFR2		134	204	262	323	320	282	217	173	142	132	114	111	4, 124
AMSR 2016-SFR1	_									368	383	402	393	4,262
CAH 2014-1		47	50	55	60	64	74	63	71	68	65	65	57	3,345
CAH 2014-2		53	73	76	70	66	64	53	44	36	39	38	36	3,681
CAH 2015-1		48	48	45	47	63	74	58	66	56	46	53	44	3,869
CSH 2016-1								44	47	36	30	31	30	3,564
CSH 2016-2												39	44	3,993
HPA 2016-1		0	0	1	1	0	0	0	0	0	0	0	0	2,094
HPA 2016-2									0	0	0	0	0	1,390
IH 2014-SFR1		95	94	134	165	168	178	169	139	143	121	95	84	6,315
IH 2014-SFR2		58	69	80	80	88	97	109	71	56	58	58	57	3,667
IH 2014-SFR3		63	56	67	75	86	92	87	73	70	64	67	69	3,990
IH 2015-SFR1		64	63	64	74	61	63	70	59	67	74	61	76	3,021
IH 2015-SFR2		72	53	59	58	62	73	63	68	76	69	72	61	3,520
IH 2015-SFR3		144	139	133	135	131	141	131	140	156	175	159	164	7,179
PRD 2015-SFR2		44	75	94	75	46	54	47	60	65	79	75	85	3,298
PRD 2015-SFR3		11	26	51	106	121	133	127	107	80	61	50	51	3,161
PRD 2016-SFR1								76	98	113	109	111	142	5,572
PRD 2016-SFR2												65	58	3,744
SBY 2014-1		213	218	217	223	236	220	227	234	236	237	222	236	2,988
SWAY 2014-1		148	178	169	166	156	154	127	105	81	71	63	68	4,058
TAH 2015-SFR1		522	480	450	445	444	474	439	389	363	329	294	302	3,344
TAH 2016-SFR1	_										237	231	249	3,439
Overall SFR		2,554	2,645	2,817	3,024	3,094	3,214	3,161	2,817	3,009	3,123	3,076	3,070	105,068

Total

### Table 9b - MTM Tenants (by Percentage)



	Year 2016											2017
	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
AH4R 2014-SFR1	6.7	6.7	6.4	6.2	7.0	6.6	6.5	5.5	4.9	4.7	4.7	4.5
AH4R 2014-SFR2	3.7	3.9	5.0	5.7	5.7	5.8	5.6	4.7	4.2	4.0	3.8	3.1
AH4R 2014-SFR3	3.8	3.9	4.1	5.0	5.6	6.3	6.3	5.5	4.6	4.1	3.6	3.5
AH4R 2015-SFR1	5.1	4.5	4.4	4.3	4.4	5.2	5.8	4.5	4.6	4.3	4.3	3.9
AH4R 2015-SFR2	3.2	4.9	6.4	7.8	7.8	6.8	5.3	4.2	3.4	3.2	2.8	2.7
AMSR 2016-SFR1									8.6	9.0	9.4	9.2
CAH 2014-1	1.4	1.5	1.6	1.8	1.9	2.2	1.9	2.1	2.0	1.9	1.9	1.7
CAH 2014-2	1.4	2.0	2.1	1.9	1.8	1.7	1.4	1.2	1.0	1.1	1.0	1.0
CAH 2015-1	1.2	1.2	1.2	1.2	1.6	1.9	1.5	1.7	1.4	1.2	1.4	1.1
CSH 2016-1							1.2	1.3	1.0	0.8	0.9	0.8
CSH 2016-2											1.0	1.1
HPA 2016-1	0.0	0.0	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	0.0	0.0
IH 2014-SFR1	1.5	1.5	2.1	2.6	2.6	2.8	2.7	2.2	2.3	1.9	1.5	1.3
IH 2014-SFR2	1.5	1.9	2.2	2.2	2.4	2.6	3.0	1.9	1.5	1.6	1.6	1.6
IH 2014-SFR3	1.6	1.4	1.7	1.9	2.1	2.3	2.2	1.8	1.7	1.6	1.7	1.7
IH 2015-SFR1	2.1	2.1	2.1	2.4	2.0	2.1	2.3	1.9	2.2	2.4	2.0	2.5
IH 2015-SFR2	2.0	1.5	1.7	1.6	1.8	2.1	1.8	1.9	2.2	2.0	2.0	1.7
IH 2015-SFR3	2.0	1.9	1.8	1.9	1.8	2.0	1.8	1.9	2.2	2.4	2.2	2.3
PRD 2015-SFR2	1.3	2.3	2.8	2.3	1.4	1.6	1.4	1.8	2.0	2.4	2.3	2.6
PRD 2015-SFR3	0.3	0.8	1.6	3.4	3.8	4.2	4.0	3.4	2.5	1.9	1.6	1.6
PRD 2016-SFR1							1.4	1.8	2.0	2.0	2.0	2.5
PRD 2016-SFR2											1.7	1.5
SBY 2014-1	7.1	7.2	7.2	7.4	7.8	7.3	7.6	7.8	7.9	7.9	7.4	7.9
SWAY 2014-1	3.6	4.4	4.1	4.1	3.8	3.8	3.1	2.6	2.0	1.7	1.5	1.7
TAH 2015-SFR1	14.9	13.7	12.8	12.7	12.7	13.5	12.5	11.1	10.7	9.7	8.8	9.0
TAH 2016-SFR1										6.9	6.7	7.2
Overall SFR	3.2	3.3	3.5	3.8	3.9	4.0	3.6	3.1	3.2	3.2	2.9	2.9



# Table 10 - Monthly Turnover Rate



		Year 2016											2017
		Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
AH4R 2014-SFR1		2.7	3.2	3.2	3.5	4.0	3.8	4.3	3.3	3.4	2.8	2.3	TBD
AH4R 2014-SFR2		2.5	3.1	4.8	4.6	3.6	4.1	4.3	2.8	2.9	2.5	2.3	TBD
AH4R 2014-SFR3		2.6	3.0	3.4	3.7	5.5	5.3	4.8	3.6	2.6	2.6	2.2	TBD
AH4R 2015-SFR1		2.2	2.0	2.8	3.5	4.5	5.1	5.0	3.6	3.4	2.9	3.0	TBD
AH4R 2015-SFR2		4.0	4.9	5.6	6.2	5.6	4.0	3.2	2.1	2.4	2.4	3.0	TBD
AMSR 2016-SFR1	_										2.4	1.7	TBD
CAH 2014-1		1.4	1.8	2.3	2.2	3.2	3.6	4.3	3.7	3.3	3.3	2.3	TBD
CAH 2014-2		3.2	3.2	3.7	3.4	3.3	2.9	3.5	3.5	2.9	2.4	2.1	TBD
CAH 2015-1		1.9	2.3	2.5	3.5	4.0	4.7	4.6	3.6	3.1	2.6	2.3	TBD
CSH 2016-1								3.6	3.2	3.2	2.6	2.2	TBD
CSH 2016-2												3.5	TBD
HPA 2016-1	~~		2.3	1.9	2.6	2.0	4.7	3.2	2.5	2.5	1.6	1.8	TBD
HPA 2016-2	~									1.0	0.7	0.9	TBD
IH 2014-SFR1		2.4	2.8	3.4	4.2	4.4	3.8	4.2	2.9	2.8	2.1	2.0	TBD
IH 2014-SFR2		2.3	2.6	2.8	3.3	4.0	3.4	3.7	3.1	2.8	2.6	1.8	TBD
IH 2014-SFR3		1.9	2.8	2.6	3.2	3.9	4.0	3.4	2.7	2.5	2.4	2.0	TBD
IH 2015-SFR1		3.5	2.9	2.3	2.5	3.0	3.8	3.8	2.7	2.2	2.6	2.7	TBD
IH 2015-SFR2		3.2	2.9	2.5	2.7	3.0	3.3	3.7	2.8	3.4	3.5	2.4	TBD
IH 2015-SFR3		3.1	2.9	2.4	2.7	2.8	3.2	3.6	3.0	2.9	3.0	2.6	TBD
PRD 2015-SFR2		2.7	4.7	3.9	2.8	2.6	2.3	2.6	2.7	3.8	2.8	2.9	TBD
PRD 2015-SFR3		1.0	1.7	2.6	5.4	6.2	5.7	5.6	3.7	2.4	1.6	1.5	TBD
PRD 2016-SFR1								2.5	2.7	2.8	2.8	2.7	TBD
PRD 2016-SFR2												5.5	TBD
SBY 2014-1		2.4	2.2	2.5	2.5	3.4	3.2	2.4	3.2	2.3	2.4	2.6	TBD
SWAY 2014-1		2.5	3.2	3.2	3.7	3.7	3.7	2.9	3.0	2.8	1.7	2.0	TBD
TAH 2015-SFR1		3.5	2.2	2.3	2.6	2.7	4.0	1.8	2.8	3.6	3.1	1.6	TBD
TAH 2016-SFR1												1.9	TBD
Overall SFR		2.5	2.8	3.1	3.5	3.8	3.9	3.7	3.0	2.7	2.4	2.4	TBD

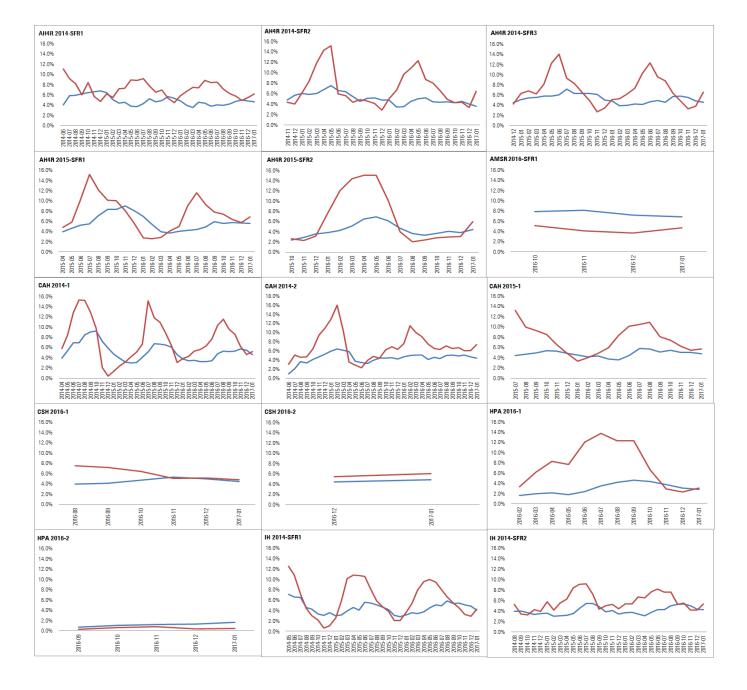
TBD - To Be Determined

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# 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 138 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 single-borrower, 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 – January 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 January 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.

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

Table 1 shows the MSA-level rent change for the past 12 months using the same rent change calculation used in Chart 1 and Chart 4.

#### 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 past 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 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 January lease expirations, Morningstar looks for all January lease expirations in the October 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 November or December are removed from the January lease expiration count.

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

Tables 4a and 4b show the number of months of vacancy the January unoccupied properties have experienced. In other words, if a property is unoccupied as of the January 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 January 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 January property tape to determine the lease status for December 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 December 2016 retention rates are the January statuses of December 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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