Single-Family Rental Research

Performance Summary Covering All Morningstar-Rated Securitizations

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Introduction

The vacancy rate across single-borrower, single-family rental transactions climbed to 5.2% in October up from 5.0% in September, as transactions worked through the summer's increased lease expirations. Similarly, vacancies stood at 5.3% in October 2015 and then decreased through the first half of 2016. Given the current lease expiration cycle, this trend may repeat itself in the coming year. Among the metropolitan statistical areas most typically seen in single-borrower, single-family rental deals, Houston had the highest vacancy rate at 7.6% in October and has historically had higher vacancy relative to other MSAs Morningstar Credit Ratings, LLC tracks. Rents for properties backing single-family rental securitizations rose by 4.4% from their prior contractual rents but are now below the year-over-year increases of three- and four-bedroom RentRange, LLC median rents. This month's report adds the MSA-level rent change for the regions most typically seen in single-borrower deals. Delinquency rates in single-family rental securitizations held steady at 0.6% for the fourth consecutive month, and as of September, the most recent data available, the average retention rate for full-term leases stayed in the mid-70s. This report tracks the performance of 25 single-borrower deals and just under 97,000 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 October. Page 4 includes a summary of the six 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

While the vacancy rate increased this month, a declining overall turnover rate and fewer expected lease expirations may lead to improvement in vacancy in the coming months. The September turnover rate was 3.0% across all transactions compared with 3.9% in August, and lease expirations across all single-family rental transactions were below 6.0% for the first time since January. At 8.2%, PRD 2015-SFR3 had the highest vacancy rate at the deal level for the fifth consecutive month, but only 2.3% of the deal has lease expirations in October so we expect this metric will improve 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 4.4% in October, down from 4.6% the prior month and now below the RentRange benchmarks. Chart 1 shows that the rent gains for securitized properties experienced a similar decreasing trend one year prior, however the RentRange measures have increased. 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 September, the latest month for which data is available, the rent change for vacant-to-occupied properties was 3.1%, while the rent change for renewal properties was 4.4%. Higher rental increases for renewed properties than for vacant-to-occupied properties 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 is new this month and shows the MSA-level rent change. MSAs with rent changes above the 4.4% 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 CAH 2014-2, at 1.1%, HPA 2016-1, at 1.0%, IH 2015-SFR2, at 1.2%, and SWAY 2014-1, at 1.0%, had a delinquency rate of at least 1.0%. Retention rates of expiring leases in September were at 70.0% or above, with the exception of SWAY 2014-1, at 66.7%.

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Multiborrower Performance

There have been six multiborrower transactions: B2R 2015-1, B2R 2015-2, B2R 2016-1, FKL 2015-SFR1, CAF 2015-1, and CAF 2016-1. As of the most recent remittance report, B2R 2015-1 had one loan that is 30 days delinquent, one that is 60 days delinquent, and two 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 loan that is at least 90 days delinquent in B2R 2015-1, which is 0.2% of the total transaction balance, was transferred to special servicing in June because of payment default. Separately, B2R 2015-2 has one loan that is 60 days delinquent and was transferred to special servicing in May. The deal also has two loans that are 90 or more days behind on payments that combine for 0.4% of the transaction balance. One of these loans was transferred to special servicing in August, and the other was transferred in September. B2R 2016-1 has three loans that are 30 days delinquent and one loan that has migrated to 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 of the loans in both CAF 2015-1 and CAF 2016-1 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 has been listed on the servicer's watchlist report since November 2015 and 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

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

Sources: Morningstar Credit Ratings, LLC; RentRange

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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 13.4%. 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										
		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Atlanta, GA		3.4	3.4	4.0	4.5	5.0	5.3	5.5	5.7	5.3	5.7	4.8	4.7
Charlotte, NC		3.1	2.9	3.2	4.2	4.7	5.8	7.1	5.6	5.1	5.3	5.1	3.9
Chicago, IL		2.0	0.2	1.1	1.7	2.7	3.9	3.7	3.3	2.4	2.6	1.8	1.9
Dallas-Plano-Irving, TX		3.5	3.4	4.3	4.5	5.7	5.8	6.1	5.2	4.7	5.0	4.3	3.8
Fort Lauderdale, FL		4.2	4.0	3.2	3.2	3.7	4.8	4.3	5.2	4.3	4.9	3.4	3.7
Fort Worth-Arlington, TX		3.6	3.6	3.1	3.7	4.9	5.7	6.0	5.6	5.1	4.6	4.0	4.0
Houston, TX		3.6	2.7	1.8	3.3	3.4	3.5	4.1	3.4	2.9	2.2	2.9	-0.1
Indianapolis, IN		1.8	0.8	1.4	3.7	1.7	2.3	1.8	1.4	3.1	2.7	2.1	1.8
Jacksonville, FL		2.1	2.4	2.8	3.3	3.6	3.9	4.8	4.6	3.8	3.7	3.2	3.5
Lakeland, FL		4.4	4.4	4.5	3.7	4.9	5.7	5.7	5.9	5.9	6.9	5.8	4.2
Las Vegas, NV		3.6	3.4	2.5	3.1	4.2	5.0	5.0	5.0	4.7	4.8	4.6	4.7
Los Angeles, CA		5.4	6.7	7.4	6.7	6.8	6.6	8.0	7.3	8.1	7.9	7.2	6.5
Miami, FL		4.7	4.0	4.1	4.2	4.6	3.3	5.9	6.1	5.8	4.7	4.2	3.4
Orlando, FL		3.2	3.7	3.9	4.0	4.2	4.1	4.6	5.1	5.5	5.4	5.3	4.3
Phoenix, AZ		5.1	5.2	5.7	6.1	6.5	7.6	8.1	7.6	8.0	6.4	6.3	5.7
Raleigh-Cary, NC		3.4	2.9	3.6	3.9	4.2	5.6	5.2	4.7	4.2	3.4	3.7	2.5
Riverside-San Bernardino, CA		4.3	3.9	3.1	4.6	5.1	5.4	6.1	5.9	5.4	5.6	4.8	4.6
Sacramento, CA		5.5	4.7	5.9	5.9	7.1	7.3	7.8	7.7	6.7	8.4	9.5	9.7
Sarasota-Bradenton-Venice, FL		4.6	4.0	2.9	3.5	4.0	3.9	5.0	4.9	4.5	4.0	3.7	3.8
Tampa, FL		3.8	3.1	3.3	3.6	3.5	4.2	4.7	4.6	4.7	4.6	4.0	3.7

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

		Year 2015		Year 2016											Total Count
		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	
AH4R 2014-SFR1		219	206	184	151	135	174	170	145	155	150	161	180	3,809
AH4R 2014-SFR2		232	212	212	153	159	202	225	233	200	193	199	191	4,484
AH4R 2014-SFR3		273	226	215	173	179	191	185	208	221	204	256	259	4,503
AH4R 2015-SFR1		418	374	323	249	184	171	187	197	205	225	274	260	4,660
AH4R 2015-SFR2		120	146	157	176	212	269	286	254	194	150	136	150	4,124
CAH 2014-1		205	157	127	114	117	110	109	116	160	178	175	178	3,363
CAH 2014-2		165	154	173	184	187	188	150	168	159	182	187	178	3,696
CAH 2015-1		203	187	175	161	167	145	139	170	224	220	198	210	3,871
CSH 2016-1											143	148	169	3,564
HPA 2016-1					37	44	47	40	52	76	89	99	93	2,111
HPA 2016-2												9	14	1,404
IH 2013-SFR1		95	97	136	129	124	117	101	108	113	105	102	129	3,188
IH 2014-SFR1		199	183	203	228	213	238	282	321	311	368	340	342	6,352
IH 2014-SFR2		154	127	138	140	127	113	137	156	155	183	193	197	3,687
IH 2014-SFR3		157	145	141	125	125	113	151	176	188	188	194	192	4,009
IH 2015-SFR1		160	138	141	146	134	105	112	108	130	155	164	147	3,026
IH 2015-SFR2		204	153	138	151	129	115	116	123	152	179	178	177	3,521
IH 2015-SFR3		365	348	317	314	304	254	246	266	308	344	381	381	7,192
PRD 2015-SFR1		258	233	203	163	155	155	153	205	275	300	293	318	3,921
PRD 2015-SFR2		242	219	213	220	224	198	162	134	123	125	137	194	3,303
PRD 2015-SFR3		75	77	83	83	88	112	160	211	239	263	251	259	3,162
PRD 2016-SFR1											210	254	310	5,577
SBY 2014-1		154	146	116	107	95	99	92	107	130	113	127	115	3,003
SWAY 2014-1		286	284	294	293	268	239	229	242	238	246	208	213	4,080
TAH 2015-SFR1		207	238	229	236	231	179	190	189	200	212	206	189	3,382
Overall SFR		4,391	4,050	3,918	3,733	3,601	3,534	3,622	3,889	4,156	4,725	4,870	5,045	96,992

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

		Year 2015		Year 2016									
		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
AH4R 2014-SFR1		5.7	5.3	4.8	3.9	3.5	4.5	4.4	3.8	4.0	3.9	4.2	4.7
AH4R 2014-SFR2		5.2	4.7	4.7	3.4	3.5	4.5	5.0	5.2	4.5	4.3	4.4	4.3
AH4R 2014-SFR3		6.1	5.0	4.8	3.8	4.0	4.2	4.1	4.6	4.9	4.5	5.7	5.8
AH4R 2015-SFR1		9.0	8.0	6.9	5.3	3.9	3.7	4.0	4.2	4.4	4.8	5.9	5.6
AH4R 2015-SFR2		2.9	3.5	3.8	4.3	5.1	6.5	6.9	6.2	4.7	3.6	3.3	3.6
CAH 2014-1		6.1	4.7	3.8	3.4	3.5	3.3	3.2	3.4	4.8	5.3	5.2	5.3
CAH 2014-2		4.5	4.2	4.7	5.0	5.0	5.1	4.0	4.5	4.3	4.9	5.1	4.8
CAH 2015-1		5.2	4.8	4.5	4.2	4.3	3.7	3.6	4.4	5.8	5.7	5.1	5.4
CSH 2016-1											4.0	4.2	4.7
HPA 2016-1					1.7	2.0	2.1	1.8	2.4	3.5	4.2	4.7	4.4
HPA 2016-2												0.6	1.0
IH 2013-SFR1		3.0	3.0	4.2	4.0	3.9	3.7	3.2	3.4	3.5	3.3	3.2	4.0
IH 2014-SFR1		3.1	2.8	3.1	3.5	3.3	3.7	4.4	5.0	4.9	5.8	5.3	5.4
IH 2014-SFR2		4.1	3.4	3.7	3.7	3.4	3.1	3.7	4.2	4.2	5.0	5.2	5.3
IH 2014-SFR3		3.9	3.6	3.5	3.1	3.1	2.8	3.8	4.4	4.7	4.7	4.8	4.8
IH 2015-SFR1		5.2	4.5	4.6	4.8	4.4	3.5	3.7	3.6	4.3	5.1	5.4	4.9
IH 2015-SFR2		5.8	4.3	3.9	4.3	3.7	3.3	3.3	3.5	4.3	5.1	5.1	5.0
IH 2015-SFR3		5.1	4.8	4.4	4.4	4.2	3.5	3.4	3.7	4.3	4.8	5.3	5.3
PRD 2015-SFR1		6.5	5.8	5.1	4.1	3.9	3.9	3.8	5.1	6.9	7.5	7.5	8.1
PRD 2015-SFR2		7.3	6.6	6.4	6.6	6.8	6.0	4.9	4.1	3.7	3.8	4.1	5.9
PRD 2015-SFR3		2.4	2.4	2.6	2.6	2.8	3.5	5.1	6.7	7.6	8.3	7.9	8.2
PRD 2016-SFR1											3.8	4.6	5.6
SBY 2014-1		5.1	4.8	3.9	3.6	3.2	3.3	3.1	3.6	4.3	3.8	4.2	3.8
SWAY 2014-1		7.0	7.0	7.2	7.2	6.6	5.9	5.6	5.9	5.8	6.0	5.1	5.2
TAH 2015-SFR1		5.9	6.8	6.5	6.7	6.6	5.1	5.4	5.4	5.7	6.1	5.9	5.6
Overall SFR		5.2	4.8	4.6	4.3	4.1	4.1	4.2	4.5	4.8	4.9	5.0	5.2

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

		Year 2015	Year 2016										
		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Atlanta, GA		4.7	4.4	4.0	3.8	3.7	3.6	3.8	3.7	4.2	4.3	4.5	4.7
Charlotte, NC		5.2	4.7	5.1	5.0	4.7	4.0	4.1	4.2	4.1	4.3	5.0	5.5
Chicago, IL		7.2	6.5	5.8	5.6	5.5	5.6	5.3	5.8	6.8	6.2	6.1	6.5
Dallas-Plano-Irving, TX		4.2	3.8	3.7	3.7	3.1	3.4	4.5	4.0	3.8	3.7	4.7	5.8
Fort Lauderdale, FL		4.1	4.3	4.3	4.5	3.8	3.9	3.6	3.5	5.3	5.8	7.1	6.6
Fort Worth-Arlington, TX		4.4	4.3	4.3	4.5	4.5	4.8	4.5	4.5	4.0	3.1	3.6	4.3
Houston, TX		6.8	6.1	6.0	5.7	5.2	6.1	6.7	6.2	6.8	5.8	7.4	7.6
Indianapolis, IN		5.3	4.9	4.8	4.1	3.8	4.6	4.8	5.6	4.9	6.0	6.4	7.1
Jacksonville, FL		5.5	5.6	4.6	4.4	3.9	4.5	4.8	4.7	4.7	4.6	6.2	6.7
Lakeland, FL		4.3	3.8	4.6	4.6	3.8	4.7	3.7	3.7	3.8	6.0	6.3	6.5
Las Vegas, NV		4.3	4.1	3.5	3.5	3.6	3.4	3.3	4.0	3.7	3.4	3.8	4.2
Los Angeles, CA		3.3	2.3	3.2	2.9	3.3	2.8	3.5	3.8	3.1	3.2	3.9	3.2
Miami, FL		3.7	4.6	4.5	4.1	4.0	3.0	3.6	3.6	3.3	4.0	5.4	5.6
Orlando, FL		3.9	3.7	4.0	4.3	3.6	3.1	3.6	3.5	4.0	4.1	4.8	5.0
Phoenix, AZ		4.4	3.8	3.7	3.4	3.1	3.0	3.0	3.8	3.4	3.4	4.4	4.5
Raleigh-Cary, NC		4.6	4.3	4.0	2.9	4.0	5.0	4.5	4.1	4.2	3.9	5.8	5.6
Riverside-San Bernardino, CA		5.5	4.6	4.6	4.4	4.7	4.6	4.6	5.5	4.2	4.9	4.0	3.8
Sacramento, CA		2.2	2.1	2.0	2.4	2.2	1.7	2.6	3.1	3.2	3.8	2.9	3.0
Sarasota-Bradenton-Venice, FL		4.3	4.0	4.1	4.8	5.2	4.7	4.9	5.4	6.2	6.7	7.1	7.4
Tampa, FL		4.7	4.6	4.2	4.1	4.2	3.9	3.6	4.4	4.3	4.6	4.8	5.3

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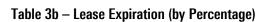

Sources: Morningstar Credit Ratings, LLC; Tableau Software
*The size of the circles represents the last three months of lease expirations by count as a percentage of each MSA, ranging from 16.4% to 24.0%. Because of their proximity, the Fort Worth-Arlington, Texas MSA is hidden behind Dallas-Plano-Irving, and the Miami MSA is behind Fort Lauderdale, Florida.

Table 3a – Lease Expiration (by Count)

		Year 2015		Year 2016										Total Count
		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	
AH4R 2014-SFR1		205	172	226	256	287	284	341	322	326	273	240	220	3,809
AH4R 2014-SFR2		183	129	223	299	434	487	551	388	358	297	221	190	4,484
AH4R 2014-SFR3		119	155	230	237	280	331	461	556	432	396	288	216	4,503
AH4R 2015-SFR1		375	260	128	120	131	190	232	420	540	430	361	341	4,660
AH4R 2015-SFR2		93	130	312	496	592	621	620	421	165	82	99	116	4,124
CAH 2014-1		217	105	131	145	178	189	214	260	349	390	322	290	3,363
CAH 2014-2		256	234	278	425	372	336	276	240	234	262	238	245	3,696
CAH 2015-1		252	187	127	153	187	230	321	393	404	421	313	286	3,871
CSH 2016-1											271	257	230	3,564
HPA 2016-1					71	137	186	170	263	298	263	262	142	2,111
HPA 2016-2												4	8	1,404
IH 2013-SFR1		139	178	289	312	279	269	237	178	158	141	129	157	3,188
IH 2014-SFR1		134	133	237	342	505	608	630	601	509	419	345	284	6,352
IH 2014-SFR2		197	164	199	200	247	241	281	301	279	278	194	203	3,687
IH 2014-SFR3		200	183	225	198	226	249	302	366	323	245	209	184	4,009
IH 2015-SFR1		210	224	286	234	215	138	125	142	180	191	183	200	3,026
IH 2015-SFR2		268	213	252	277	235	180	155	188	222	219	218	247	3,521
IH 2015-SFR3		498	482	527	574	478	377	292	353	427	460	449	532	7,192
PRD 2015-SFR1		77	32	36	61	146	210	389	370	462	414	314	296	3,921
PRD 2015-SFR2		201	77	137	263	496	280	130	105	113	150	177	304	3,303
PRD 2015-SFR3		21	7	16	31	115	224	501	446	442	412	210	74	3,162
PRD 2016-SFR1											170	263	420	5,577
SBY 2014-1		158	125	163	169	192	178	207	232	169	187	184	177	3,003
SWAY 2014-1		57	61	176	142	254	312	311	268	253	204	105	71	4,080
TAH 2015-SFR1		232	132	168	211	229	212	208	215	253	222	239	235	3,382
Overall SFR		4,092	3,383	4,366	5,216	6,215	6,332	6,954	7,028	6,896	6,797	5,824	5,668	96,992

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Table 3b – Lease Expiration (by Percentage)

	Sparkline	Year 2015		Year 2016									
		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
AH4R 2014-SFR1		5.3	4.5	5.9	6.6	7.5	7.4	8.9	8.4	8.5	7.1	6.3	5.8
AH4R 2014-SFR2		4.1	2.9	5.0	6.7	9.7	10.9	12.3	8.6	8.0	6.6	4.9	4.2
AH4R 2014-SFR3		2.6	3.4	5.1	5.3	6.2	7.4	10.2	12.3	9.6	8.8	6.4	4.8
AH4R 2015-SFR1		8.0	5.6	2.7	2.6	2.8	4.1	5.0	9.0	11.6	9.2	7.7	7.3
AH4R 2015-SFR2		2.3	3.2	7.6	12.0	14.4	15.1	15.0	10.2	4.0	2.0	2.4	2.8
CAH 2014-1		6.4	3.1	3.9	4.3	5.3	5.6	6.4	7.7	10.4	11.6	9.6	8.6
CAH 2014-2		6.9	6.3	7.5	11.5	10.0	9.1	7.5	6.5	6.3	7.1	6.4	6.6
CAH 2015-1		6.5	4.8	3.3	3.9	4.8	5.9	8.3	10.1	10.4	10.9	8.1	7.4
CSH 2016-1											7.6	7.2	6.5
HPA 2016-1					3.2	6.1	8.4	7.7	12.1	13.8	12.3	12.3	6.7
HPA 2016-2												0.3	0.6
IH 2013-SFR1		4.3	5.6	9.0	9.7	8.7	8.4	7.4	5.6	5.0	4.4	4.0	4.9
IH 2014-SFR1		2.1	2.1	3.7	5.3	7.9	9.6	9.9	9.4	8.0	6.6	5.4	4.5
IH 2014-SFR2		5.3	4.4	5.3	5.3	6.7	6.5	7.6	8.2	7.6	7.5	5.3	5.5
IH 2014-SFR3		5.0	4.6	5.6	4.9	5.6	6.2	7.5	9.1	8.1	6.1	5.2	4.6
IH 2015-SFR1		6.9	7.3	9.4	7.7	7.1	4.6	4.1	4.7	5.9	6.3	6.0	6.6
IH 2015-SFR2		7.6	6.0	7.2	7.9	6.7	5.1	4.4	5.3	6.3	6.2	6.2	7.0
IH 2015-SFR3		6.9	6.7	7.3	8.0	6.6	5.2	4.1	4.9	5.9	6.4	6.2	7.4
PRD 2015-SFR1		1.9	0.8	0.9	1.5	3.7	5.3	9.7	9.3	11.6	10.4	8.0	7.5
PRD 2015-SFR2		6.1	2.3	4.1	7.9	15.0	8.5	3.9	3.2	3.4	4.5	5.4	9.2
PRD 2015-SFR3		0.7	0.2	0.5	1.0	3.6	7.1	15.8	14.1	14.0	13.0	6.6	2.3
PRD 2016-SFR1											3.0	4.7	7.5
SBY 2014-1		5.2	4.2	5.4	5.6	6.4	5.9	6.9	7.7	5.6	6.2	6.1	5.9
SWAY 2014-1		1.4	1.5	4.3	3.5	6.2	7.6	7.6	6.6	6.2	5.0	2.6	1.7
TAH 2015-SFR1		6.6	3.8	4.8	6.0	6.5	6.0	5.9	6.1	7.2	6.3	6.8	6.9
Overall SFR		4.8	4.0	5.1	6.0	7.2	7.3	8.0	8.1	7.9	7.1	6.0	5.8

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

		Year 2015		Year 2016									
		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Atlanta, GA		3.8	3.8	3.6	5.2	6.7	6.5	7.6	6.4	6.0	5.8	5.7	5.9
Charlotte, NC		4.1	4.2	5.0	5.5	6.3	6.1	6.4	8.7	7.5	7.9	6.8	6.1
Chicago, IL		3.5	3.3	3.9	6.3	7.8	8.5	8.6	8.8	7.7	5.9	5.7	4.9
Dallas-Plano-Irving, TX		5.4	3.9	5.1	4.9	7.0	6.5	7.8	8.2	9.0	7.3	5.3	7.0
Fort Lauderdale, FL		4.2	4.7	7.6	6.0	8.0	7.3	5.1	7.2	5.9	6.0	7.0	5.7
Fort Worth-Arlington, TX		3.6	3.5	6.0	6.3	9.0	7.9	9.2	8.0	7.3	6.7	5.2	5.2
Houston, TX		3.4	3.3	4.5	5.4	6.7	7.8	9.0	8.7	7.5	6.6	5.4	4.6
Indianapolis, IN		1.7	1.7	2.7	3.6	6.9	9.7	11.1	10.2	8.5	7.4	5.5	3.4
Jacksonville, FL		5.4	3.4	4.3	4.5	6.5	6.9	7.5	6.7	6.4	6.8	7.2	6.6
Lakeland, FL		4.4	4.4	3.8	6.3	6.8	7.2	6.9	8.3	8.0	10.1	7.2	6.7
Las Vegas, NV		5.4	2.6	4.6	4.7	7.1	6.8	7.9	8.1	7.5	8.0	6.5	7.6
Los Angeles, CA		4.9	4.2	5.5	5.6	6.6	6.8	5.4	5.8	5.6	6.8	6.5	4.1
Miami, FL		5.3	6.0	5.1	6.5	5.9	5.9	5.7	6.8	5.5	7.3	6.0	6.7
Orlando, FL		4.4	4.3	5.0	5.4	5.8	5.8	8.6	8.4	8.3	7.1	5.6	6.1
Phoenix, AZ		5.8	5.3	6.9	8.2	8.1	7.1	8.1	7.1	6.9	6.9	6.6	6.3
Raleigh-Cary, NC		3.3	2.7	4.4	5.9	8.2	7.3	9.2	9.1	7.8	8.0	5.7	6.3
Riverside-San Bernardino, CA		5.6	4.5	6.2	7.4	7.7	7.3	6.8	6.7	7.3	6.5	5.4	6.3
Sacramento, CA		3.6	3.4	5.5	6.4	7.8	7.7	8.4	7.3	6.1	7.7	5.1	4.5
Sarasota-Bradenton-Venice, FL		3.7	3.2	3.6	5.2	6.7	6.3	6.6	7.6	8.0	9.0	6.8	6.2
Tampa, FL		4.7	4.0	3.8	5.7	5.4	5.6	6.7	7.5	7.5	7.5	5.9	6.0

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

		1	2	3	4	5	6	7	8	9	10	11	12+	Total
AH4R 2014-SFR1		41	37	40	28	11	4	5	3	1	3	1	6	180
AH4R 2014-SFR2		49	44	33	27	21	11	2	1	2	1	0	0	191
AH4R 2014-SFR3		77	65	51	33	18	9	3	0	2	0	1	0	259
AH4R 2015-SFR1		83	77	49	31	6	9	1	2	1	0	1	0	260
AH4R 2015-SFR2		68	33	24	19	5	0	1	0	0	0	0	0	150
CAH 2014-1		49	42	35	16	16	8	3	3	3	1	0	2	178
CAH 2014-2		36	54	34	28	11	8	3	1	1	1	1	0	178
CAH 2015-1		66	61	47	26	6	3	0	0	0	0	1	0	210
CSH 2016-1		97	46	25	1									169
HPA 2016-1		44	32	12	4	0	0	0	0	1	0			93
HPA 2016-2		7	6	1										14
IH 2013-SFR1		31	34	28	14	9	6	4	1	0	1	0	1	129
IH 2014-SFR1		50	85	80	57	25	28	7	7	1	1	0	1	342
IH 2014-SFR2		52	43	53	16	15	11	4	1	0	1	0	1	197
IH 2014-SFR3		44	48	45	34	10	5	2	1	1	0	0	2	192
IH 2015-SFR1		34	42	34	16	12	2	1	1	1	0	0	4	147
IH 2015-SFR2		79	46	27	12	8	1	1	2	0	0	0	1	177
IH 2015-SFR3		137	100	66	36	21	4	2	3	1	3	1	7	381
PRD 2015-SFR1		77	86	60	40	22	10	9	7	1	1	1	4	318
PRD 2015-SFR2		75	42	39	17	10	3	2	3	0	0	0	3	194
PRD 2015-SFR3		63	86	71	26	9	3	0	0	0	0	0	1	259
PRD 2016-SFR1		138	86	81	5									310
SBY 2014-1		29	33	25	16	6	0	1	3	1	1	0	0	115
SWAY 2014-1		61	55	29	21	8	14	5	8	2	5	0	5	213
TAH 2015-SFR1		51	51	26	26	16	8	5	2	2	0	1	1	189
Overall SFR		1,538	1,334	1,015	549	265	147	61	49	21	19	8	39	5,045

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

		1	2	3	4	5	6	7	8	9	10	11	12+	Total
AH4R 2014-SFR1		22.8	20.6	22.2	15.6	6.1	2.2	2.8	1.7	0.6	1.7	0.6	3.3	100.0
AH4R 2014-SFR2		25.7	23.0	17.3	14.1	11.0	5.8	1.0	0.5	1.0	0.5	0.0	0.0	100.0
AH4R 2014-SFR3		29.7	25.1	19.7	12.7	6.9	3.5	1.2	0.0	0.8	0.0	0.4	0.0	100.0
AH4R 2015-SFR1		31.9	29.6	18.8	11.9	2.3	3.5	0.4	0.8	0.4	0.0	0.4	0.0	100.0
AH4R 2015-SFR2		45.3	22.0	16.0	12.7	3.3	0.0	0.7	0.0	0.0	0.0	0.0	0.0	100.0
CAH 2014-1		27.5	23.6	19.7	9.0	9.0	4.5	1.7	1.7	1.7	0.6	0.0	1.1	100.0
CAH 2014-2		20.2	30.3	19.1	15.7	6.2	4.5	1.7	0.6	0.6	0.6	0.6	0.0	100.0
CAH 2015-1		31.4	29.0	22.4	12.4	2.9	1.4	0.0	0.0	0.0	0.0	0.5	0.0	100.0
CSH 2016-1		57.4	27.2	14.8	0.6									100.0
HPA 2016-1		47.3	34.4	12.9	4.3	0.0	0.0	0.0	0.0	1.1	0.0			100.0
HPA 2016-2		50.0	42.9	7.1										100.0
IH 2013-SFR1		24.0	26.4	21.7	10.9	7.0	4.7	3.1	0.8	0.0	0.8	0.0	0.8	100.0
IH 2014-SFR1		14.6	24.9	23.4	16.7	7.3	8.2	2.0	2.0	0.3	0.3	0.0	0.3	100.0
IH 2014-SFR2		26.4	21.8	26.9	8.1	7.6	5.6	2.0	0.5	0.0	0.5	0.0	0.5	100.0
IH 2014-SFR3		22.9	25.0	23.4	17.7	5.2	2.6	1.0	0.5	0.5	0.0	0.0	1.0	100.0
IH 2015-SFR1		23.1	28.6	23.1	10.9	8.2	1.4	0.7	0.7	0.7	0.0	0.0	2.7	100.0
IH 2015-SFR2		44.6	26.0	15.3	6.8	4.5	0.6	0.6	1.1	0.0	0.0	0.0	0.6	100.0
IH 2015-SFR3		36.0	26.2	17.3	9.4	5.5	1.0	0.5	0.8	0.3	0.8	0.3	1.8	100.0
PRD 2015-SFR1		24.2	27.0	18.9	12.6	6.9	3.1	2.8	2.2	0.3	0.3	0.3	1.3	100.0
PRD 2015-SFR2		38.7	21.6	20.1	8.8	5.2	1.5	1.0	1.5	0.0	0.0	0.0	1.5	100.0
PRD 2015-SFR3		24.3	33.2	27.4	10.0	3.5	1.2	0.0	0.0	0.0	0.0	0.0	0.4	100.0
PRD 2016-SFR1		44.5	27.7	26.1	1.6									100.0
SBY 2014-1		25.2	28.7	21.7	13.9	5.2	0.0	0.9	2.6	0.9	0.9	0.0	0.0	100.0
SWAY 2014-1		28.6	25.8	13.6	9.9	3.8	6.6	2.3	3.8	0.9	2.3	0.0	2.3	100.0
TAH 2015-SFR1		27.0	27.0	13.8	13.8	8.5	4.2	2.6	1.1	1.1	0.0	0.5	0.5	100.0
Overall SFR		30.5	26.4	20.1	10.9	5.3	2.9	1.2	1.0	0.4	0.4	0.2	0.8	100.0

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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[1]
Silver Bay Realty	Past due 30 days or more (not dependent on calendar month) and owing $500 or more[2]
SWAY Residential	Past due one calendar month or more (not dependent on day count) and owing $200 or more [3]
Tricon American Homes	Past due 30 days or more (not dependent on calendar month) and owing $500 or more[2]

[1]Includes Section 8 rent, pet fees, and MTM fees, but excludes late fees and damage fees.
[2]Based on total receivables.
[3]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.

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

		Year 2015 Nov	Dec	Year 2016 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Total Count
AH4R 2014-SFR1		21	34	22	9	8	9	12	13	15	16	15	13	3,809
AH4R 2014-SFR2		30	36	31	16	12	14	15	13	16	18	22	12	4,484
AH4R 2014-SFR3		22	30	20	13	5	5	13	13	10	14	17	17	4,503
AH4R 2015-SFR1		26	27	23	17	10	16	18	15	16	15	16	15	4,660
AH4R 2015-SFR2		23	26	30	13	14	9	12	20	19	21	23	20	4,124
CAH 2014-1		16	17	29	18	16	14	19	17	22	20	21	24	3,363
CAH 2014-2		22	27	34	27	30	18	21	20	28	29	42	41	3,696
CAH 2015-1		27	25	19	19	16	14	19	23	20	26	35	19	3,871
CSH 2016-1											29	26	20	3,564
HPA 2016-1					9	28	17	19	19	27	30	36	22	2,111
HPA 2016-2												14	13	1,404
IH 2013-SFR1		32	36	9	9	9	8	16	14	10	11	12	19	3,188
IH 2014-SFR1		67	81	45	26	14	14	15	23	33	33	30	33	6,352
IH 2014-SFR2		25	33	22	18	14	15	17	19	14	16	21	26	3,687
IH 2014-SFR3		32	32	23	25	8	5	14	9	26	20	24	18	4,009
IH 2015-SFR1		33	37	22	17	11	10	13	15	22	15	13	15	3,026
IH 2015-SFR2		30	35	21	10	7	8	17	16	21	26	22	42	3,521
IH 2015-SFR3		86	113	70	40	21	25	36	36	57	56	48	60	7,192
PRD 2015-SFR1		47	41	45	27	22	15	26	28	28	16	15	19	3,921
PRD 2015-SFR2		52	55	40	32	26	28	23	14	20	18	24	31	3,303
PRD 2015-SFR3		16	26	31	20	21	11	14	19	19	19	20	18	3,162
PRD 2016-SFR1											47	51	45	5,577
SBY 2014-1		31	26	32	18	18	10	12	13	24	18	25	14	3,003
SWAY 2014-1*		29	20	15	42	53	53	49	46	49	39	36	41	4,080
TAH 2015-SFR1		74	61	50	46	34	41	30	22	22	19	17	15	3,382
Overall SFR		741	818	633	471	397	359	430	427	518	571	625	612	96,992

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

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

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

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

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Table 7 – Monthly Retention Rate of Expiring Leases

		Year 2015		Year 2016									
		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
AH4R 2014-SFR1		76.1	76.7	78.8	78.1	73.9	76.1	81.5	77.6	83.1	79.1	72.9	TBD
AH4R 2014-SFR2		76.5	76.0	78.5	79.6	77.0	73.9	77.7	78.9	72.6	75.1	76.9	TBD
AH4R 2014-SFR3		67.2	73.5	77.4	73.0	77.9	73.4	77.0	74.6	77.3	73.2	74.7	TBD
AH4R 2015-SFR1		75.2	76.5	71.9	74.2	77.9	70.0	74.1	73.6	76.1	73.7	77.8	TBD
AH4R 2015-SFR2		72.0	78.5	80.1	76.8	75.0	73.6	72.7	71.0	75.8	70.7	77.8	TBD
CAH 2014-1		75.6	76.2	80.2	75.9	74.7	78.3	81.8	79.2	76.8	80.0	78.6	TBD
CAH 2014-2		78.9	85.0	77.7	77.4	82.8	74.7	78.6	73.3	72.2	76.7	75.2	TBD
CAH 2015-1		71.8	75.9	70.9	73.2	77.5	80.0	76.3	76.1	76.0	75.1	78.0	TBD
CSH 2016-1											76.4	79.4	TBD
HPA 2016-1					83.1	82.5	81.7	77.6	85.9	80.5	86.3	87.0	TBD
HPA 2016-2												75.0	TBD
IH 2013-SFR1		78.4	80.9	80.6	77.2	77.8	76.6	77.2	80.9	71.5	73.8	71.3	TBD
IH 2014-SFR1		79.1	82.0	80.6	80.1	80.8	77.0	74.0	77.4	72.7	71.8	74.8	TBD
IH 2014-SFR2		78.2	78.0	76.9	79.0	80.2	75.1	77.6	74.4	72.0	72.3	75.3	TBD
IH 2014-SFR3		79.5	79.2	80.4	80.3	80.5	78.7	77.5	72.4	75.5	75.5	78.0	TBD
IH 2015-SFR1		77.1	81.3	78.3	78.2	77.2	76.8	66.4	71.1	65.6	67.5	78.7	TBD
IH 2015-SFR2		81.7	79.3	81.0	77.6	74.5	75.6	78.7	73.4	70.3	70.8	73.4	TBD
IH 2015-SFR3		79.9	79.0	83.3	78.7	78.7	77.7	74.3	73.9	72.4	75.4	73.9	TBD
PRD 2015-SFR1		71.4	59.4	77.8	68.9	78.1	76.2	72.8	70.0	74.9	77.3	76.1	TBD
PRD 2015-SFR2		73.1	81.8	73.7	77.2	73.4	72.5	70.0	64.8	65.5	75.3	74.0	TBD
PRD 2015-SFR3		66.7	85.7	87.5	77.4	74.8	75.9	73.1	68.6	72.9	74.3	75.7	TBD
PRD 2016-SFR1											77.6	77.9	TBD
SBY 2014-1		80.4	80.0	83.4	77.5	80.2	84.3	82.1	77.6	80.5	84.0	78.3	TBD
SWAY 2014-1		73.7	75.4	75.0	76.1	77.6	76.6	74.0	69.0	70.4	71.8	66.7	TBD
TAH 2015-SFR1		83.6	88.6	83.3	85.8	90.8	83.5	85.1	85.6	79.8	82.1	82.8	TBD
Overall SFR		77.2	79.1	79.2	77.9	78.1	76.3	76.1	74.9	71.8	74.8	76.8	TBD

TBD – To Be Determined

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Table 8 – Monthly Retention Rate of MTM Leases

| | | Year 2015 | | Year 2016 | | | | | | | | | |
		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
AH4R 2014-SFR1		85.0	91.1	94.8	89.6	87.6	88.4	84.1	83.8	85.9	81.5	85.9	TBD
AH4R 2014-SFR2		90.5	86.4	90.7	86.7	87.8	82.9	82.3	79.8	83.0	77.9	86.6	TBD
AH4R 2014-SFR3		85.5	84.6	86.2	86.7	84.9	89.7	82.8	78.9	75.7	74.4	79.6	TBD
AH4R 2015-SFR1		86.1	86.1	88.6	85.3	87.9	83.7	80.8	81.8	85.4	76.0	81.3	TBD
AH4R 2015-SFR2		82.0	87.5	83.8	86.7	82.1	80.1	73.9	79.5	81.9	80.7	82.5	TBD
CAH 2014-1		70.3	82.0	81.3	83.0	89.8	92.7	81.7	82.8	75.7	81.0	69.0	TBD
CAH 2014-2		65.5	86.3	81.5	88.7	72.6	75.0	74.3	72.7	71.9	54.7	63.6	TBD
CAH 2015-1		80.3	81.0	84.3	77.1	72.9	84.4	74.5	74.6	63.5	74.1	63.6	TBD
CSH 2016-1											79.5	61.7	TBD
HPA 2016-1					N/A	N/A	100.0	0.0	N/A	0.0	NA	NA	TBD
HPA 2016-2												N/A	TBD
IH 2013-SFR1		88.1	82.0	87.7	77.6	87.0	85.9	78.3	76.1	85.7	75.0	84.6	TBD
IH 2014-SFR1		86.4	80.4	84.5	80.4	82.1	80.5	71.2	65.7	69.1	74.6	82.1	TBD
IH 2014-SFR2		76.5	87.9	90.9	90.7	90.2	80.6	78.1	74.6	79.1	67.6	74.1	TBD
IH 2014-SFR3		78.0	80.0	87.1	84.2	83.3	69.8	84.8	81.4	75.0	76.7	77.2	TBD
IH 2015-SFR1		76.3	91.9	87.5	85.7	79.1	89.1	86.3	78.0	87.2	79.6	80.0	TBD
IH 2015-SFR2		71.4	82.9	65.8	77.3	82.2	66.7	75.7	63.8	79.1	86.7	75.0	TBD
IH 2015-SFR3		80.9	83.7	73.7	78.7	82.5	80.8	77.1	78.8	76.8	82.4	81.4	TBD
PRD 2015-SFR1		73.9	85.9	80.4	76.9	85.4	75.9	76.3	73.1	67.9	75.9	72.3	TBD
PRD 2015-SFR2		57.1	69.0	75.0	78.6	80.0	67.7	59.4	78.0	78.9	80.6	75.0	TBD
PRD 2015-SFR3		84.6	75.0	70.0	83.3	85.7	71.4	71.4	64.2	67.6	70.0	70.6	TBD
PRD 2016-SFR1											79.0	83.1	TBD
SBY 2014-1		90.7	92.3	93.7	89.5	86.4	91.6	89.5	87.5	90.9	84.2	94.0	TBD
SWAY 2014-1		86.5	88.1	87.8	89.6	89.2	85.4	85.8	77.7	82.7	81.1	77.1	TBD
TAH 2015-SFR1		93.6	95.5	93.8	91.1	95.3	94.9	95.0	92.5	93.7	92.9	93.8	TBD
Overall SFR		85.4	88.4	88.6	86.7	87.1	85.4	82.1	80.6	81.8	79.9	81.9	TBD

TBD – To Be Determined

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Table 9a – MTM Tenants (by Count)

		Year 2015		Year 2016											Total Count
		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	
AH4R 2014-SFR1		258	248	248	260	258	248	239	268	254	249	208	186	3,809
AH4R 2014-SFR2		169	172	153	166	176	223	257	257	261	249	209	187	4,484
AH4R 2014-SFR3		159	145	147	172	177	186	225	250	284	284	246	209	4,503
AH4R 2015-SFR1		266	287	275	240	208	203	200	207	242	272	210	215	4,660
AH4R 2015-SFR2		64	65	93	134	204	262	323	320	282	217	173	142	4,124
CAH 2014-1		82	61	48	47	50	55	60	64	74	63	71	68	3,363
CAH 2014-2		66	62	54	53	73	76	70	66	64	53	44	36	3,696
CAH 2015-1		92	78	51	48	48	45	47	63	74	58	66	56	3,871
CSH 2016-1											44	47	36	3,564
HPA 2016-1					0	0	1	1	0	0	0	0	0	2,111
HPA 2016-2												0	0	1,404
IH 2013-SFR1		51	71	78	99	88	102	110	80	57	54	58	50	3,188
IH 2014-SFR1		71	75	83	95	94	134	165	168	178	169	139	142	6,352
IH 2014-SFR2		52	51	54	58	69	80	80	88	97	109	71	56	3,687
IH 2014-SFR3		62	50	58	63	56	67	75	86	92	87	75	71	4,009
IH 2015-SFR1		55	61	59	64	63	64	74	61	63	70	58	67	3,026
IH 2015-SFR2		56	61	68	72	53	59	58	62	73	63	67	76	3,521
IH 2015-SFR3		128	149	131	144	139	133	135	131	141	131	139	154	7,192
PRD 2015-SFR1		89	65	56	58	52	56	74	99	114	119	112	89	3,921
PRD 2015-SFR2		53	36	28	44	75	94	75	46	54	47	60	65	3,303
PRD 2015-SFR3		13	12	10	9	26	51	106	121	133	127	107	80	3,162
PRD 2016-SFR1											76	98	113	5,577
SBY 2014-1		237	223	211	213	218	217	223	236	220	227	234	236	3,003
SWAY 2014-1		171	154	143	134	148	178	169	166	156	154	105	81	4,080
TAH 2015-SFR1		585	538	533	542	522	480	450	445	444	474	389	363	3,382
Overall SFR		2,779	2,664	2,581	2,715	2,797	3,014	3,216	3,284	3,357	3,396	2,986	2,778	96,992

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Table 9b – MTM Tenants (by Percentage)

		Year 2015		Year 2016									
		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
AH4R 2014-SFR1		6.7	6.4	6.4	6.7	6.7	6.4	6.2	7.0	6.6	6.5	5.5	4.9
AH4R 2014-SFR2		3.8	3.8	3.4	3.7	3.9	5.0	5.7	5.7	5.8	5.6	4.7	4.2
AH4R 2014-SFR3		3.5	3.2	3.3	3.8	3.9	4.1	5.0	5.6	6.3	6.3	5.5	4.6
AH4R 2015-SFR1		5.7	6.2	5.9	5.1	4.5	4.4	4.3	4.4	5.2	5.8	4.5	4.6
AH4R 2015-SFR2		1.6	1.6	2.3	3.2	4.9	6.4	7.8	7.8	6.8	5.3	4.2	3.4
CAH 2014-1		2.4	1.8	1.4	1.4	1.5	1.6	1.8	1.9	2.2	1.9	2.1	2.0
CAH 2014-2		1.8	1.7	1.5	1.4	2.0	2.1	1.9	1.8	1.7	1.4	1.2	1.0
CAH 2015-1		2.4	2.0	1.3	1.2	1.2	1.2	1.2	1.6	1.9	1.5	1.7	1.4
CSH 2016-1											1.2	1.3	1.0
HPA 2016-1					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
IH 2013-SFR1		1.6	2.2	2.4	3.1	2.8	3.2	3.4	2.5	1.8	1.7	1.8	1.6
IH 2014-SFR1		1.1	1.2	1.3	1.5	1.5	2.1	2.6	2.6	2.8	2.7	2.2	2.2
IH 2014-SFR2		1.4	1.4	1.4	1.5	1.9	2.2	2.2	2.4	2.6	3.0	1.9	1.5
IH 2014-SFR3		1.5	1.2	1.4	1.6	1.4	1.7	1.9	2.1	2.3	2.2	1.9	1.8
IH 2015-SFR1		1.8	2.0	1.9	2.1	2.1	2.1	2.4	2.0	2.1	2.3	1.9	2.2
IH 2015-SFR2		1.6	1.7	1.9	2.0	1.5	1.7	1.6	1.8	2.1	1.8	1.9	2.2
IH 2015-SFR3		1.8	2.1	1.8	2.0	1.9	1.8	1.9	1.8	2.0	1.8	1.9	2.1
PRD 2015-SFR1		2.2	1.6	1.4	1.5	1.3	1.4	1.9	2.5	2.9	3.0	2.9	2.3
PRD 2015-SFR2		1.6	1.1	0.8	1.3	2.3	2.8	2.3	1.4	1.6	1.4	1.8	2.0
PRD 2015-SFR3		0.4	0.4	0.3	0.3	0.8	1.6	3.4	3.8	4.2	4.0	3.4	2.5
PRD 2016-SFR1											1.4	1.8	2.0
SBY 2014-1		7.9	7.4	7.0	7.1	7.2	7.2	7.4	7.8	7.3	7.6	7.8	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	2.6	2.0
TAH 2015-SFR1		16.7	15.3	15.2	15.5	14.9	13.7	12.8	12.7	12.7	13.5	11.1	10.7
Overall SFR		3.3	3.1	3.0	3.1	3.2	3.5	3.7	3.8	3.9	3.5	3.1	2.9

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Table 10 – Monthly Turnover Rate

		Year 2015		Year 2016									
		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
AH4R 2014-SFR1		2.6	2.8	2.4	2.7	3.2	3.2	3.5	4.0	3.8	4.3	3.3	TBD
AH4R 2014-SFR2		2.3	1.8	2.5	2.5	3.1	4.8	4.6	3.6	4.1	4.3	2.8	TBD
AH4R 2014-SFR3		2.2	2.6	2.5	2.6	3.0	3.4	3.7	5.5	5.3	4.8	3.6	TBD
AH4R 2015-SFR1		3.4	3.1	2.9	2.2	2.0	2.8	3.5	4.5	5.1	5.0	3.6	TBD
AH4R 2015-SFR2		1.9	2.1	2.9	4.0	4.9	5.6	6.2	5.6	4.0	3.2	2.1	TBD
CAH 2014-1		2.6	1.9	1.3	1.4	1.8	2.3	2.2	3.2	3.7	4.3	3.7	TBD
CAH 2014-2		2.4	2.3	2.8	3.2	3.2	3.7	3.4	3.3	2.9	3.5	3.5	TBD
CAH 2015-1		3.2	2.3	2.2	1.9	2.3	2.5	3.5	4.0	4.7	4.6	3.6	TBD
CSH 2016-1											3.6	3.2	TBD
HPA 2016-1						1.4	1.9	2.6	2.0	4.7	3.2	2.5	TBD
HPA 2016-2													TBD
IH 2013-SFR1		2.2	2.1	3.0	3.3	3.4	3.2	2.8	3.1	2.8	2.8	2.1	TBD
IH 2014-SFR1		1.5	1.7	2.1	2.4	2.8	3.4	4.2	4.4	3.8	4.2	2.9	TBD
IH 2014-SFR2		2.3	1.9	2.2	2.3	2.6	2.8	3.3	4.0	3.4	3.7	3.1	TBD
IH 2014-SFR3		2.2	2.1	1.9	1.9	2.8	2.6	3.2	3.9	4.0	3.4	2.7	TBD
IH 2015-SFR1		3.0	2.7	2.9	3.5	2.9	2.3	2.5	3.0	3.8	3.8	2.7	TBD
IH 2015-SFR2		3.3	2.2	2.0	3.2	2.9	2.5	2.7	3.0	3.3	3.7	2.8	TBD
IH 2015-SFR3		2.7	2.6	2.3	3.1	2.9	2.4	2.7	2.8	3.2	3.6	3.0	TBD
PRD 2015-SFR1		2.1	1.7	1.2	1.4	2.5	2.5	3.7	4.4	5.2	5.3	4.0	TBD
PRD 2015-SFR2		3.0	1.9	2.2	2.7	4.7	3.9	2.8	2.6	2.3	2.6	2.7	TBD
PRD 2015-SFR3			1.0	1.1	1.0	1.7	2.6	5.4	6.2	5.7	5.6	3.7	TBD
PRD 2016-SFR1											2.5	2.7	TBD
SBY 2014-1		2.4	2.4	2.2	2.4	2.2	2.5	2.5	3.4	3.2	2.4	3.2	TBD
SWAY 2014-1		2.4	1.9	2.6	2.3	2.5	3.2	3.2	3.7	3.7	3.7	3.0	TBD
TAH 2015-SFR1		2.6	2.8	2.0	2.3	3.5	2.2	2.3	2.6	2.7	4.0	2.8	TBD
Overall SFR		2.4	2.2	2.3	2.5	2.9	3.1	3.4	3.8	3.9	3.9	3.0	TBD

TBD – To Be Determined

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Appendix I – Vacancy Versus Lease Expiration

AH4R 2014-SFR1, AH4R 2014-SFR2, AH4R 2014-SFR3, AH4R 2015-SFR1, AH4R 2015-SFR2, CAH 2014-1, CAH 2014-2, CAH 2015-1, CSH 2016-1, HPA 2016-1, HPA 2016-2, IH 2013-SFR1, IH 2014-SFR1, IH 2014-SFR2, IH 2014-SFR3

IH 2015-SFR1

IH 2015-SFR2

IH 2015-SFR3

PRD 2015-SFR1

PRD 2015-SFR2

PRD 2015-SFR3

PRD 2016-SFR1

SBY 2014-1

SWAY 2014-1

TAH 2015-SFR1

Vacancy
Lease Expiration

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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 140 loans; B2R 2015-2, 209 loans; B2R 2016-1, 163 loans; FKL 2015-SFR1, 16 loans; CAF 2015-1, 69 loans; and CAF 2016-1, 85 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

For Chart 2, 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.

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Chart 3 – October 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 October 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 October lease expirations, Morningstar looks for all October lease expirations in the July 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

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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 August or September are removed from the October lease expiration count.

Tables 4a and 4b – Historical Months of Vacancy

Tables 4a and 4b show the number of months of vacancy the October unoccupied properties have experienced. In other words, if a property is unoccupied as of the October 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 October 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.

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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 October property tape to determine the lease status for September 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 September 2016 retention rates are the October statuses of September 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;

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- 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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