

UMBS Prepayment Speeds

December 2019

UMBS 10yr

	Indicative Data							Prepayment Speeds						
	Cur Bal (MM)	Factor	# of Pools	WAC	WAM	WALA	WAOLS	Dec	Nov	Chg	% Chg	3mo	6mo	12mo
FNMA 10yr 2	1,972	0.216	417	2.7	52	65	226,281	↓14.9	16.5	-1.7	-10%	15.15	14.81	13.79
2016	511	0.517	67	2.6	77	39	256,101	↓12.7	14.2	-1.5	-10%	13.42	12.36	11.20
2015	76	0.368	41	2.7	63	53	237,233	↓17.7	21.2	-3.5	-17%	16.59	14.54	12.24
2014	55	0.290	23	2.9	55	61	233,508	↑17.1	15.3	1.8	12%	17.68	17.90	14.51
2013	1,043	0.175	210	2.7	38	78	212,507	↓15.3	16.8	-1.5	-9%	15.57	15.47	14.59
2012	216	0.128	61	2.7	33	84	197,451	↓19.4	21.5	-2.1	-10%	18.15	17.78	16.44
FNMA 10yr 2.5	9,813	0.233	1548	3.0	62	54	217,069	↓14.7	16.5	-1.8	-11%	15.37	15.63	14.47
2019	645	0.967	25	3.1	116	3	258,485	↓7.1	10.5	-3.4	-33%	9.67	15.11	-
2017	742	0.616	71	3.0	88	28	239,300	↓13.0	14.7	-1.8	-12%	13.59	14.08	12.30
2016	2,882	0.494	164	2.9	76	39	224,795	↓12.6	15.0	-2.4	-16%	13.96	13.78	12.25
2015	1,608	0.340	191	3.0	62	53	215,127	↑16.1	15.0	1.1	8%	14.84	15.37	13.99
2014	910	0.231	193	3.2	51	64	205,597	↑15.6	17.6	-2.0	-11%	15.88	16.56	15.63
2013	1,346	0.158	357	3.0	38	78	183,034	↓15.8	17.4	-1.5	-9%	16.28	16.26	15.59
2012	1,590	0.100	493	3.0	30	88	213,287	↓18.6	20.5	-1.9	-9%	19.08	18.99	17.71
2011	63	0.054	43	3.1	22	96	201,065	↓21.7	23.9	-2.2	-9%	23.45	22.82	21.26
FNMA 10yr 3	6,129	0.158	1386	3.5	67	49	185,180	↓16.9	18.8	-1.8	-10%	17.28	17.16	15.98
2019	697	0.926	34	3.6	113	4	232,578	↑15.4	14.7	0.7	5%	14.15	12.95	-
2018	351	0.697	36	3.5	95	20	220,587	↑15.6	22.4	-6.7	-30%	17.39	16.96	13.71
2017	1,535	0.604	97	3.4	87	28	195,790	↓15.8	18.0	-2.1	-12%	15.73	15.24	13.05
2016	680	0.455	89	3.5	74	40	168,068	↓13.9	14.1	-0.2	-2%	14.92	14.65	13.44
2015	632	0.332	128	3.5	63	51	162,749	↑17.5	16.3	1.3	8%	16.41	16.59	15.25
2014	572	0.220	160	3.6	51	64	150,634	↓14.9	18.2	-3.3	-18%	16.17	16.29	15.86
2013	492	0.159	241	3.6	41	75	148,858	↓15.8	19.2	-3.4	-18%	17.12	17.46	16.68
2012	427	0.072	296	3.5	27	91	167,718	↓19.5	23.7	-4.2	-18%	20.75	20.27	19.25
2011	692	0.041	252	3.5	20	98	197,225	↓23.6	24.2	-0.6	-2%	23.40	22.93	21.85
2010	51	0.017	53	3.6	11	108	201,010	↓27.5	29.4	-1.9	-6%	28.67	28.94	26.83
FNMA 10yr 3.5	2,680	0.120	775	4.0	83	33	171,590	↑21.4	21.4	0.0	0%	20.88	19.77	17.63
2019	624	0.858	39	4.1	109	7	196,844	↑23.1	19.3	3.8	19%	20.24	16.78	-
2018	873	0.707	72	4.0	98	17	191,889	↓20.5	24.4	-3.9	-16%	22.18	20.65	16.35
2017	528	0.594	52	3.9	87	28	144,160	↑19.7	16.2	3.4	21%	17.33	16.64	14.73
2016	75	0.439	31	4.0	74	41	123,712	↑19.7	19.6	0.1	1%	17.74	19.20	15.98
2015	49	0.313	31	4.2	62	52	110,642	↓12.5	13.7	-1.2	-9%	16.01	16.06	15.01
2014	114	0.205	65	4.2	48	65	118,918	↑17.2	16.6	0.6	4%	17.67	17.96	16.95
2013	91	0.156	76	4.1	41	74	112,598	↓16.5	19.2	-2.8	-14%	17.56	19.01	17.52
2012	26	0.068	51	4.1	26	91	115,492	↓22.7	27.3	-4.6	-17%	21.80	21.24	20.99
2011	173	0.028	175	4.0	16	102	165,254	↓24.7	26.4	-1.7	-6%	25.17	25.08	24.27
2010	127	0.011	181	3.9	10	109	183,635	↑32.0	30.4	1.6	5%	29.92	29.47	27.83
FNMA 10yr 4	530	0.059	355	4.6	91	24	138,176	↑28.1	23.7	4.4	19%	25.28	22.67	19.41
2011	28	0.025	87	4.5	16	103	130,039	↓24.8	25.2	-0.4	-2%	24.59	24.04	24.12
2010	25	0.004	127	4.4	7	113	154,456	↑40.8	36.7	4.1	11%	36.94	34.79	32.46

*n.m. - Not Meaningful

Source: Bloomberg

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UMBS Prepayment Speeds

December 2019

UMBS 15yr

	Indicative Data							Prepayment Speeds						
	Cur Bal (MM)	Factor	# of Pools	WAC	WAM	WALA	WAOLS	Dec	Nov	Chg	% Chg	3mo	6mo	12mo
FNMA 15yr 2	17,483	0.471	2124	2.6	118	57	279,815	8.4	9.7	-1.2	-13%	9.00	9.40	8.44
2017	72	0.812	27	2.6	147	28	287,555	5.1	3.0	2.1	*n.m.	3.92	3.82	3.89
2016	5,796	0.672	342	2.6	137	39	290,457	8.5	9.8	-1.3	-14%	8.85	9.06	7.71
2015	674	0.531	175	2.7	120	54	290,125	8.8	9.9	-1.1	-11%	9.35	9.42	8.30
2014	106	0.535	38	2.8	111	63	276,182	8.8	17.9	-9.1	-51%	11.97	10.15	8.88
2013	5,802	0.373	1017	2.6	95	79	268,766	9.2	10.4	-1.3	-12%	9.68	9.97	9.10
2012	3,183	0.336	479	2.6	89	84	248,975	9.9	10.9	-1.0	-9%	10.25	10.27	9.24
FNMA 15yr 2.5	148,959	0.473	17322	3.0	126	49	270,597	9.9	11.3	-1.4	-12%	10.55	10.91	9.67
2019	28,399	0.972	569	3.2	176	3	306,419	5.9	7.5	-1.6	-21%	6.67	6.91	-
2018	605	0.800	82	3.3	154	21	304,017	12.2	9.7	2.5	26%	12.03	12.01	9.33
2017	7,674	0.747	698	3.0	148	28	283,683	9.4	10.6	-1.1	-11%	10.04	10.10	8.45
2016	41,329	0.631	3133	2.9	135	39	268,682	10.7	11.4	-0.7	-6%	10.92	10.99	9.37
2015	16,269	0.488	2034	3.0	121	53	268,304	11.2	13.3	-2.1	-16%	11.91	11.78	10.10
2014	3,881	0.396	1049	3.1	112	61	268,221	13.0	13.3	-0.3	-2%	13.12	13.03	11.30
2013	21,512	0.349	4076	2.9	94	79	242,393	10.5	11.2	-0.7	-7%	10.78	11.00	9.94
2012	28,706	0.283	5491	3.0	87	87	257,176	11.1	12.6	-1.5	-12%	11.51	11.77	10.54
2011	575	0.216	185	3.1	77	97	236,208	13.8	14.9	-1.1	-7%	13.38	12.46	11.37
FNMA 15yr 3	134,209	0.425	26349	3.5	129	46	234,466	13.6	14.6	-1.0	-7%	14.06	13.66	11.78
2019	21,816	0.934	959	3.7	173	4	270,839	13.0	14.1	-1.0	-7%	13.89	12.56	-
2018	7,524	0.760	618	3.7	157	18	273,188	20.2	23.1	-2.9	-13%	22.26	20.28	14.98
2017	29,692	0.706	2974	3.4	147	28	243,534	13.7	14.7	-1.0	-7%	14.04	13.37	11.06
2016	12,317	0.579	2914	3.5	134	40	202,775	13.6	14.5	-0.9	-6%	13.76	13.45	11.72
2015	17,226	0.470	3629	3.5	122	52	219,001	13.3	14.1	-0.8	-5%	13.51	13.28	11.61
2014	13,216	0.361	3345	3.5	109	64	222,257	12.9	14.1	-1.2	-8%	13.18	13.43	12.02
2013	10,473	0.315	3810	3.5	98	75	207,714	12.3	13.1	-0.8	-6%	12.75	12.58	11.51
2012	11,792	0.229	5489	3.5	83	90	209,586	12.5	13.3	-0.8	-6%	12.79	12.86	11.88
2011	8,977	0.174	2201	3.4	76	97	240,163	13.1	13.6	-0.5	-4%	13.13	13.39	12.19
2010	1,175	0.124	408	3.6	66	108	223,033	14.5	16.2	-1.7	-10%	14.83	15.01	13.49
FNMA 15yr 3.5	64,066	0.332	20105	4.0	132	43	197,542	17.6	19.5	-1.8	-9%	18.32	16.85	13.96
2019	14,887	0.904	1165	4.1	170	6	219,267	17.5	18.1	-0.6	-3%	17.55	14.72	-
2018	14,982	0.743	1738	4.1	158	17	232,657	25.6	29.9	-4.3	-14%	27.63	24.41	17.78
2017	8,099	0.684	1994	4.0	145	29	163,426	14.6	16.0	-1.4	-9%	14.85	14.16	12.15
2016	1,848	0.556	990	4.0	131	41	131,039	14.8	13.6	1.2	9%	14.06	14.04	12.59
2015	2,503	0.462	1518	4.0	121	52	134,569	13.4	13.9	-0.6	-4%	13.53	13.37	12.28
2014	4,677	0.349	2586	4.1	108	65	155,505	13.6	14.0	-0.4	-3%	13.13	13.15	12.50
2013	3,664	0.303	2019	4.0	100	74	169,607	12.4	13.9	-1.5	-11%	13.11	12.95	11.90
2012	1,630	0.213	2073	4.0	82	91	151,045	14.3	14.3	0.0	0%	14.21	13.88	12.86
2011	5,665	0.146	3420	3.9	73	100	197,407	14.0	14.9	-0.9	-6%	14.26	14.29	13.16
2010	6,032	0.097	2432	3.9	65	109	211,250	14.0	15.9	-1.9	-12%	14.62	14.57	13.59
2009	75	0.062	159	4.0	52	124	200,691	13.2	21.4	-8.2	-38%	16.54	14.91	14.24
FNMA 15yr 4	20,031	0.125	11591	4.5	117	57	173,211	19.0	20.8	-1.8	-9%	19.65	18.12	15.10
2019	2,057	0.919	432	4.7	167	7	157,380	13.8	15.1	-1.3	-8%	13.70	11.04	-
2018	8,574	0.769	1260	4.6	159	16	173,962	24.4	27.2	-2.8	-10%	25.66	22.49	16.52
2017	544	0.643	186	4.5	144	29	144,296	21.7	16.1	5.6	35%	18.17	16.74	14.31
2016	132	0.336	231	4.7	104	67	89,332	11.9	17.7	-5.8	-33%	15.14	15.40	14.45
2015	209	0.317	300	4.6	99	73	102,304	11.7	12.1	-0.4	-4%	11.72	12.34	12.75
2014	123	0.191	356	4.5	81	92	120,232	10.8	16.0	-5.2	-32%	13.17	14.64	13.95
2013	2,707	0.116	2770	4.4	70	103	171,447	13.9	14.4	-0.5	-4%	13.92	14.22	13.45
2012	3,197	0.067	2890	4.4	61	113	183,662	14.0	16.0	-2.0	-13%	14.89	15.16	14.41
2011	2,393	0.036	2418	4.5	51	124	192,222	15.7	16.7	-1.0	-6%	15.81	16.00	15.55
2010	47	0.021	234	4.6	39	138	196,285	15.0	18.0	-3.0	-17%	16.23	15.49	16.05
FNMA 15yr 4.5	3,080	0.034	7738	4.9	74	101	159,265	15.9	17.5	-1.6	-9%	16.35	16.08	15.11
2011	369	0.123	952	4.8	70	103	142,119	14.2	15.6	-1.4	-9%	14.04	14.44	13.39
2010	693	0.070	1330	4.8	59	115	150,734	14.2	16.5	-2.3	-14%	15.22	15.15	14.36
2009	1,089	0.038	2183	4.9	51	124	168,676	15.9	16.9	-1.0	-6%	15.86	15.31	14.56
FNMA 15yr 5	614	0.010	6950	5.6	37	140	159,636	17.6	17.4	0.1	1%	17.43	18.60	18.56
2010	30	0.088	194	5.4	60	115	126,325	15.3	13.2	2.1	16%	15.42	15.07	14.34
2009	89	0.053	602	5.5	52	124	122,692	10.7	16.5	-5.8	-35%	14.35	15.81	14.72

*n.m. - Not Meaningful

Source: Bloomberg

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UMBS Prepayment Speeds

December 2019

UMBS 20yr

	Indicative Data							Prepayment Speeds						
	Cur Bal (MM)	Factor	# of Pools	WAC	WAM	WALA	WAOLS	Dec	Nov	Chg	% Chg	3mo	6mo	12mo
FNMA 20yr 2.5	9,243	0.719	366	3.3	204	33	302,854	↓ 6.5	8.7	-2.2	-25%	8.41	8.43	7.29
2016	3,797	0.739	82	3.2	198	38	295,873	↓ 9.8	11.5	-1.7	-15%	11.15	9.78	7.65
2015	85	0.661	17	3.4	177	56	289,751	↑ 22.2	13.7	8.5	62%	16.03	11.46	9.96
2013	705	0.459	85	3.3	153	80	249,488	↓ 6.9	9.0	-2.0	-23%	8.64	9.08	8.82
2012	1,025	0.434	135	3.2	148	84	240,035	↓ 8.4	9.9	-1.5	-15%	9.89	9.51	8.19
FNMA 20yr 3	65,601	0.583	3261	3.6	189	47	256,391	↓ 11.0	13.1	-2.0	-16%	12.18	11.65	9.42
2019	11,623	0.980	108	3.8	236	3	295,693	↓ 4.4	6.8	-2.4	-35%	5.88	5.00	-
2018	313	0.831	35	3.7	216	20	285,607	↑ 16.7	20.8	-4.1	-20%	18.19	15.53	10.52
2017	5,420	0.780	166	3.7	209	27	266,110	↓ 15.3	17.6	-2.4	-14%	16.46	14.57	10.51
2016	19,149	0.690	511	3.6	197	39	256,792	↓ 12.5	14.1	-1.7	-12%	13.38	12.47	9.79
2015	8,847	0.562	361	3.7	182	53	255,034	↓ 14.0	15.1	-1.1	-7%	14.41	13.33	10.41
2014	1,349	0.429	110	3.8	172	61	249,517	↓ 14.1	17.6	-3.5	-20%	15.66	14.06	11.27
2013	8,726	0.441	919	3.6	153	79	218,595	↓ 10.1	11.7	-1.5	-13%	10.61	10.54	8.98
2012	10,070	0.378	1019	3.6	146	87	239,221	↓ 10.8	12.0	-1.3	-10%	11.25	10.69	9.00
2011	91	0.293	25	3.6	136	96	237,332	↑ 16.2	15.3	0.9	6%	14.62	13.34	10.22
FNMA 20yr 3.5	38,092	0.444	4546	4.1	184	51	228,150	↓ 15.0	17.7	-2.8	-16%	15.96	14.38	11.41
2019	4,742	0.924	148	4.3	233	6	265,062	↓ 17.4	19.2	-1.8	-9%	17.83	13.34	-
2018	3,260	0.807	156	4.0	217	20	258,680	↓ 17.9	22.0	-4.1	-19%	20.14	17.93	12.68
2017	8,624	0.742	479	4.0	208	28	241,327	↓ 17.4	20.3	-3.0	-15%	18.79	16.41	12.33
2016	2,126	0.652	275	4.0	198	38	211,410	↓ 17.0	17.4	-0.4	-3%	16.52	15.26	12.33
2015	3,464	0.514	651	4.1	182	52	196,356	↓ 15.3	18.5	-3.1	-17%	16.14	14.81	12.01
2014	2,735	0.378	370	4.2	170	63	210,705	↓ 14.6	17.3	-2.7	-15%	15.68	14.60	12.06
2013	3,371	0.381	842	4.1	158	76	191,591	↓ 11.4	14.4	-3.0	-21%	12.43	12.36	10.70
2012	5,436	0.304	1204	4.0	141	90	217,003	↓ 11.3	13.7	-2.5	-18%	11.68	11.39	9.87
2011	3,458	0.221	334	4.0	135	97	226,453	↓ 11.3	15.3	-4.0	-26%	12.89	12.37	10.30
2010	875	0.165	83	4.0	124	108	222,433	↓ 10.7	13.8	-3.2	-23%	11.57	11.50	10.09
FNMA 20yr 4	24,976	0.364	3720	4.5	190	46	210,102	↓ 19.4	22.7	-3.3	-15%	21.01	18.71	14.23
2019	1,405	0.922	162	4.7	232	7	222,482	↓ 17.9	19.0	-1.1	-6%	17.93	13.18	-
2018	8,661	0.773	495	4.5	220	17	236,140	↓ 26.9	32.1	-5.2	-16%	29.83	25.74	17.72
2017	4,417	0.711	535	4.4	208	29	208,077	↓ 18.3	20.6	-2.3	-11%	19.30	17.55	13.90
2016	844	0.593	217	4.4	194	41	189,520	↓ 17.9	17.9	0.0	0%	16.75	14.54	12.45
2015	1,300	0.500	445	4.4	183	52	170,624	↓ 13.9	15.2	-1.3	-9%	14.76	14.38	12.77
2014	2,104	0.397	492	4.6	169	65	173,128	↓ 14.3	15.3	-1.0	-6%	14.29	13.43	12.15
2013	1,145	0.362	352	4.7	161	73	168,375	↓ 12.2	13.8	-1.6	-12%	12.58	12.58	10.66
2012	432	0.270	297	4.5	141	91	187,364	↓ 11.4	13.3	-1.9	-14%	12.67	12.47	11.82
2011	1,884	0.192	322	4.5	133	100	201,414	↓ 13.0	15.0	-2.0	-13%	13.20	12.61	10.71
2010	2,347	0.122	255	4.4	122	109	206,970	↓ 12.1	15.0	-2.9	-19%	13.53	13.18	11.37
2009	428	0.067	100	4.5	105	125	196,738	↓ 10.2	17.9	-7.7	-43%	13.63	13.19	11.47
FNMA 20yr 4.5	5,713	0.132	1331	5.0	162	72	177,884	↓ 16.2	19.7	-3.5	-18%	17.79	16.51	13.46
2019	503	0.919	123	5.1	230	8	154,630	↓ 16.4	21.7	-5.3	-24%	17.54	12.82	-
2018	1,812	0.792	252	5.2	221	15	174,784	↓ 23.0	26.7	-3.7	-14%	25.27	22.93	16.88
2017	126	0.695	50	5.0	210	27	160,284	↓ 14.9	31.2	-16.3	-52%	20.95	20.98	15.87
2014	72	0.397	51	5.2	166	68	144,131	↑ 12.9	8.1	4.8	59%	10.86	11.24	12.72
2013	65	0.373	43	5.1	161	73	150,237	↑ 15.9	9.6	6.3	66%	12.09	12.31	13.13
2011	939	0.165	150	4.9	130	103	185,996	↓ 11.0	15.0	-4.0	-27%	12.52	12.25	11.29
2010	1,088	0.103	160	4.9	118	113	193,271	↓ 11.6	15.6	-4.0	-26%	13.56	13.33	11.78
2009	877	0.063	197	4.9	107	124	181,200	↓ 13.1	14.1	-0.9	-7%	13.17	12.80	11.35
FNMA 20yr 5	1,410	0.027	1296	5.5	87	148	159,606	↓ 13.4	15.7	-2.3	-15%	14.34	14.43	13.13
2011	89	0.173	48	5.4	129	104	179,918	↓ 7.7	14.6	-6.9	-47%	10.79	13.55	13.09
2010	164	0.099	59	5.4	117	115	168,946	↑ 16.6	12.2	4.4	36%	13.97	15.50	13.22
2009	155	0.083	87	5.4	109	123	165,411	↓ 13.5	18.3	-4.9	-27%	15.06	13.82	11.87

*n.m. - Not Meaningful

Source: Bloomberg

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UMBS Prepayment Speeds

December 2019

UMBS 30yr

	Indicative Data							Prepayment Speeds						
	Cur Bal (MM)	Factor	# of Pools	WAC	WAM	WALA	WAOLS	Dec	Nov	Chg	% Chg	3mo	6mo	12mo
FNMA 30yr 2	263	0.862	223	3.0	320	37	217,984	2.1	3.7	-1.6	*n.m.	3.21	3.36	3.38
2016	149	0.873	104	3.0	318	39	192,734	0.9	3.3	-2.5	*n.m.	2.48	3.04	2.93
FNMA 30yr 2.5	70,227	0.904	2184	3.5	342	14	362,378	3.1	4.1	-1.0	*n.m.	3.89	5.81	5.56
2019	56,173	0.993	370	3.5	356	2	373,659	2.0	2.1	-0.2	*n.m.	2.05	1.50	-
2018	44	0.943	50	3.5	337	19	206,298	0.4	3.1	-2.7	*n.m.	1.34	3.62	2.56
2016	6,160	0.820	395	3.4	313	40	331,488	7.0	8.8	-1.8	-21%	7.82	8.16	6.57
2015	380	0.718	181	3.4	297	54	268,795	8.7	10.9	-2.2	-20%	9.26	9.68	7.91
2014	40	0.691	42	3.2	290	62	243,153	17.5	15.4	2.1	14%	11.56	12.28	9.23
2013	1,715	0.577	363	3.1	266	81	311,546	6.4	7.9	-1.5	-19%	6.75	8.16	6.85
2012	5,330	0.556	601	3.2	263	84	311,181	8.2	9.5	-1.3	-14%	8.59	8.54	7.13
FNMA 30yr 3	685,560	0.697	28710	3.7	314	39	317,037	9.3	11.8	-2.5	-21%	10.61	10.48	8.76
2019	244,211	0.979	3553	3.9	355	3	338,477	5.9	7.5	-1.7	-22%	6.66	5.32	-
2018	2,341	0.884	301	3.9	337	19	319,377	12.9	21.1	-8.2	-39%	17.14	13.07	8.38
2017	11,169	0.861	817	3.8	327	27	323,664	11.0	15.2	-4.3	-28%	12.98	11.08	8.07
2016	188,514	0.734	6683	3.6	314	40	308,068	11.8	14.4	-2.6	-18%	13.09	12.48	9.85
2015	50,395	0.646	3257	3.8	297	54	317,646	12.3	15.2	-2.9	-19%	13.76	12.76	10.13
2014	3,532	0.519	566	3.9	290	60	305,130	15.0	18.2	-3.2	-18%	16.21	14.38	10.98
2013	87,586	0.507	6027	3.6	269	80	293,167	10.2	11.7	-1.5	-13%	10.76	10.62	8.94
2012	97,482	0.478	7373	3.6	262	86	301,536	9.8	12.0	-2.2	-18%	10.75	10.46	8.68
2011	282	0.397	93	3.7	245	96	289,344	15.8	14.3	1.5	10%	14.30	11.41	8.85
FNMA 30yr 3.5	785,177	0.584	65435	4.1	312	41	289,375	16.7	20.5	-3.8	-18%	18.40	15.96	12.14
2019	183,910	0.932	4545	4.4	352	6	315,447	17.0	20.2	-3.2	-16%	17.77	13.27	-
2018	40,764	0.802	2101	4.2	337	19	324,660	24.1	32.6	-8.5	-26%	29.45	24.60	16.23
2017	158,034	0.791	7716	4.1	327	27	300,382	17.6	22.3	-4.7	-21%	20.01	16.92	11.95
2016	83,896	0.656	8958	4.1	314	40	266,601	17.0	20.8	-3.8	-18%	18.72	17.01	13.44
2015	118,704	0.535	10347	4.1	300	52	279,409	16.9	20.5	-3.6	-18%	18.51	16.87	13.21
2014	40,854	0.410	5493	4.2	288	62	274,526	18.0	21.7	-3.7	-17%	19.48	17.49	13.60
2013	48,882	0.423	8566	4.0	271	78	254,478	13.3	15.6	-2.3	-15%	14.10	13.32	11.13
2012	84,280	0.360	14246	4.0	257	89	261,865	12.4	14.5	-2.2	-15%	13.16	12.52	10.42
2011	18,760	0.284	2150	4.0	249	97	280,670	13.2	15.0	-1.8	-12%	13.85	12.88	10.27
2010	6,747	0.233	1107	4.1	236	109	278,446	14.0	16.7	-2.7	-16%	15.09	13.74	10.90
2009	310	0.239	143	4.0	217	126	257,149	16.7	16.9	-0.1	-1%	14.62	12.28	10.61
FNMA 30yr 4	602,124	0.458	74354	4.6	313	41	265,442	23.9	29.7	-5.8	-19%	27.05	23.66	17.13
2019	83,497	0.896	4221	4.8	351	7	282,863	21.8	26.7	-4.9	-18%	24.07	19.01	-
2018	171,297	0.742	7205	4.7	340	16	299,389	33.8	43.3	-9.5	-22%	39.63	34.40	23.22
2017	111,381	0.722	9085	4.5	327	29	265,840	22.7	27.2	-4.5	-17%	24.85	21.56	15.90
2016	29,271	0.602	6249	4.5	314	40	235,469	20.0	22.8	-2.8	-12%	21.35	19.47	15.69
2015	33,008	0.478	7965	4.6	301	52	226,381	18.9	22.2	-3.3	-15%	20.25	18.84	15.45
2014	48,997	0.346	9473	4.6	286	65	237,900	18.2	22.1	-3.9	-18%	19.82	18.22	14.77
2013	37,382	0.317	7775	4.6	275	74	227,371	17.3	20.0	-2.7	-14%	18.10	16.66	13.52
2012	20,916	0.318	7856	4.5	256	90	210,370	14.1	15.7	-1.6	-10%	14.50	13.96	11.89
2011	25,811	0.227	6258	4.5	248	99	240,581	15.1	16.9	-1.8	-11%	15.47	14.23	11.73
2010	27,572	0.179	5085	4.5	237	109	249,872	15.4	16.9	-1.6	-9%	15.57	14.42	11.73
2009	12,594	0.103	2821	4.5	219	126	255,062	14.6	17.4	-2.8	-16%	15.50	14.41	11.95
FNMA 30yr 4.5	245,247	0.275	54492	5.1	306	48	238,250	23.6	27.9	-4.2	-15%	25.66	23.36	17.64
2019	30,265	0.903	2949	5.2	351	7	255,173	20.9	23.6	-2.7	-11%	21.40	17.76	-
2018	97,187	0.756	6925	5.1	341	16	254,675	30.9	37.1	-6.2	-17%	34.17	30.80	21.93
2017	27,189	0.676	4910	5.0	327	28	236,945	21.9	26.3	-4.4	-17%	24.14	22.49	17.95
2016	4,983	0.537	1623	4.9	314	40	217,938	20.7	24.0	-3.3	-14%	22.04	20.89	17.83
2015	2,895	0.488	1473	5.0	299	52	154,351	17.5	18.6	-1.2	-6%	18.03	17.22	15.05
2014	8,892	0.343	4697	5.0	285	66	179,250	18.8	19.9	-1.1	-6%	18.61	17.74	15.37
2013	7,268	0.307	3393	5.0	276	74	183,532	16.8	19.1	-2.3	-12%	17.35	16.57	14.26
2012	1,872	0.290	1836	5.0	255	92	175,831	13.9	16.1	-2.1	-12%	15.08	14.84	13.20
2011	18,929	0.188	8293	4.9	244	102	215,995	15.6	17.7	-2.1	-12%	16.14	15.07	12.69
2010	17,807	0.134	6875	4.9	234	112	233,401	15.7	17.5	-1.8	-10%	16.39	15.42	12.79
2009	24,444	0.080	6702	4.9	222	125	236,870	16.1	18.8	-2.7	-14%	16.85	15.55	12.79
FNMA 30yr 5	79,500	0.096	47488	5.6	272	80	212,623	20.2	22.3	-2.1	-9%	20.86	19.59	15.86
2019	11,538	0.922	1943	5.7	351	7	245,752	18.8	20.2	-1.4	-7%	18.69	15.53	-
2018	25,607	0.777	3097	5.7	342	15	219,659	27.8	30.7	-2.9	-10%	28.77	26.99	20.23
2017	822	0.579	275	5.5	327	29	233,548	28.6	31.6	-3.0	-9%	28.93	27.20	22.37
2016	699	0.356	549	5.4	284	67	154,239	19.2	19.3	-0.2	-1%	19.21	18.61	15.93
2015	672	0.290	454	5.4	276	74	178,953	20.1	20.5	-0.5	-2%	19.02	17.24	15.28
2014	87	0.287	176	5.5	255	92	161,262	25.5	12.6	12.9	102%	21.82	20.23	16.80
2013	5,384	0.185	4462	5.4	245	103	204,366	16.6	18.2	-1.6	-9%	16.96	15.99	14.14
2012	8,367	0.134	4139	5.4	234	114	219,065	16.5	18.8	-2.3	-12%	17.43	16.58	14.14
2011	7,525	0.092	4844	5.4	225	123	208,284	16.6	18.2	-1.6	-9%	17.03	16.13	13.80
FNMA 30yr 5.5	31,671	0.029	60283	6.0	192	156	176,743	14.2	15.6	-1.4	-9%	14.63	14.42	13.09
2019	783	0.897	311	6.3	349	8	197,337	26.3	17.2	9.1	53%	21.12	18.78	-
2018	2,237	0.795	524	6.2	343	14	214,536	26.0	29.2	-3.2	-11%	26.97	25.30	18.94
2017	252	0.183	564	5.9	243	103	153,507	14.5	14.0	0.5	3%	14.75	14.45	13.51
2016	652	0.159	1021	5.9	232	115	184,969	15.4	19.7	-4.3	-22%	17.91	17.63	15.20
2015	1,144	0.118	1775	5.9	224	123	177,178	15.1	18.4	-3.3	-18%	15.68	14.79	13.85
FNMA 30yr 6	18,473	0.021	60754	6.5	181	168	159,365	12.7	14.2	-1.5	-10%	13.24	13.16	12.63
2009	153	0.100	575	6.5	221	125	157,047	12.0	17.8	-5.8	-33%	15.92	14.67	15.02

UMBS Prepayment Speeds

December 2019

UMBS Jumbos

	Indicative Data							Prepayment Speeds						
	Cur Bal (MM)	Factor	# of Pools	WAC	WAM	WALA	WAOLS	Dec	Nov	Chg	% Chg	3mo	6mo	12mo
15yr Jumbo 2	80	0.481	36	2.6	117	59	558,808	8.5	4.2	4.3	*n.m.	12.80	13.46	8.94
2013	50	0.401	18	2.6	97	78	546,430	2.6	6.1	-3.5	-57%	11.66	14.19	9.85
15yr Jumbo 2.5	1,713	0.492	203	3.0	124	51	546,855	6.7	9.7	-3.0	-31%	8.45	9.03	7.98
2019	203	0.987	7	3.2	177	3	599,302	0.6	0.2	0.4	*n.m.	0.21	8.89	-
2017	87	0.794	18	3.0	150	27	537,654	13.6	7.2	6.5	90%	9.78	8.78	5.81
2016	556	0.672	25	2.9	138	38	526,594	6.5	10.2	-3.7	-36%	8.75	8.94	7.58
2015	222	0.466	34	3.0	120	54	545,189	4.8	11.1	-6.3	-57%	7.51	8.51	8.27
2014	32	0.366	17	3.1	111	62	543,664	2.9	2.3	0.6	*n.m.	10.23	14.71	10.38
2013	364	0.401	55	3.0	96	79	546,596	7.9	13.7	-5.7	-42%	10.55	10.34	8.88
2012	245	0.284	43	3.0	89	85	554,604	9.4	9.6	-0.2	-2%	9.61	9.48	8.91
15yr Jumbo 3	332	0.179	175	3.5	103	72	558,090	8.7	9.7	-1.1	-11%	9.09	10.49	9.83
2017	70	0.718	17	3.5	148	29	558,079	1.4	8.2	-6.8	-83%	3.49	7.32	5.63
2012	66	0.139	41	3.5	82	91	545,472	23.0	14.6	8.3	57%	17.55	14.92	12.38
2011	128	0.114	44	3.4	78	97	573,033	4.8	5.1	-0.3	-6%	5.69	8.30	10.27
15yr Jumbo 3.5	123	0.071	132	3.9	86	88	588,512	10.1	12.0	-1.9	-16%	11.08	13.27	11.27
2011	70	0.064	63	3.9	73	100	581,317	15.0	13.9	1.1	8%	12.95	12.42	10.30
30yr Jumbo 2.5	1,815	0.908	75	3.4	325	29	571,813	4.9	5.9	-1.0	-17%	6.10	5.42	5.79
2016	455	0.910	30	3.3	312	38	551,858	4.5	8.6	-4.1	-48%	6.22	5.04	6.07
2012	135	0.537	17	3.5	264	84	551,403	7.7	12.9	-5.3	-41%	13.56	10.36	7.92
30yr Jumbo 3	38,956	0.692	921	3.8	312	42	559,393	11.2	15.2	-3.9	-26%	13.44	11.45	8.59
2019	10,635	0.979	93	3.9	356	3	606,952	5.8	8.9	-3.1	-35%	9.28	7.19	-
2018	199	0.932	18	3.8	335	19	578,823	14.7	6.8	8.0	117%	9.96	8.68	5.03
2017	1,860	0.877	65	3.8	328	27	549,708	14.1	21.5	-7.3	-34%	16.86	13.75	9.55
2016	11,485	0.750	173	3.7	313	40	535,771	13.5	18.3	-4.8	-26%	15.94	13.33	9.61
2015	3,870	0.683	144	3.8	298	54	543,547	14.2	17.3	-3.1	-18%	15.74	13.16	9.48
2014	547	0.592	26	3.8	289	61	534,759	21.1	17.4	3.7	21%	16.28	13.05	9.28
2013	5,077	0.499	178	3.7	270	80	545,387	12.5	13.4	-0.8	-6%	12.57	10.85	8.52
2012	5,281	0.480	222	3.7	264	85	545,261	10.9	14.8	-3.8	-26%	12.20	9.85	7.57
30yr Jumbo 3.5	27,413	0.497	1293	4.2	317	38	562,464	26.3	33.6	-7.3	-22%	30.08	24.51	16.69
2019	5,895	0.916	112	4.4	354	5	617,128	28.9	28.9	0.0	0%	27.97	19.70	-
2018	1,943	0.785	82	4.3	337	19	577,534	37.4	48.2	-10.8	-22%	44.29	35.79	24.03
2017	7,647	0.703	142	4.2	329	28	545,254	29.3	41.4	-12.0	-29%	36.34	30.00	19.83
2016	3,380	0.578	117	4.1	317	39	551,351	27.7	34.9	-7.2	-21%	31.22	25.90	18.09
2015	2,319	0.425	166	4.1	303	52	538,930	25.4	29.6	-4.2	-14%	26.33	21.93	15.40
2014	1,003	0.297	82	4.2	289	63	528,214	14.9	23.3	-8.5	-36%	18.48	16.65	12.28
2013	1,138	0.330	120	4.0	274	77	541,785	18.4	23.4	-5.1	-22%	20.01	17.07	12.65
2012	3,659	0.255	363	4.0	260	89	542,915	14.7	19.8	-5.1	-26%	17.06	14.24	10.38
2011	381	0.148	94	4.1	252	97	561,609	11.4	24.3	-12.9	-53%	16.01	15.91	11.46
2010	48	0.149	15	4.2	235	109	603,229	0.6	34.5	-33.9	*n.m.	17.00	18.77	13.99
30yr Jumbo 4	11,746	0.219	1287	4.7	313	42	585,166	36.9	43.9	-7.0	-16%	40.81	35.52	26.51
2019	2,112	0.878	93	4.9	353	6	633,167	42.0	37.0	5.0	14%	36.18	28.32	-
2018	3,366	0.627	126	4.8	341	17	580,850	46.4	60.0	-13.6	-23%	55.95	51.05	39.08
2017	2,119	0.554	100	4.6	329	28	570,253	38.0	49.3	-11.3	-23%	43.39	37.48	27.57
2016	376	0.428	55	4.7	316	41	589,640	29.3	27.1	2.2	8%	31.10	28.72	20.41
2015	142	0.312	66	4.7	305	51	567,290	23.6	37.0	-13.3	-36%	28.57	21.67	17.68
2014	365	0.169	84	4.6	288	65	534,278	22.9	35.9	-13.0	-36%	30.01	23.64	18.79
2013	474	0.139	95	4.6	278	74	528,129	30.7	26.4	4.2	16%	25.52	22.19	15.69
2012	269	0.136	119	4.5	255	92	543,114	23.8	23.7	0.1	0%	22.46	18.17	14.09
2011	1,293	0.083	334	4.5	251	99	586,284	21.0	22.5	-1.5	-6%	21.68	18.23	13.05
2010	1,203	0.071	191	4.5	241	109	586,854	23.3	22.4	0.8	4%	22.83	18.16	14.08
30yr Jumbo 4.5	2,845	0.077	733	5.2	299	55	607,478	37.3	38.8	-1.5	-4%	37.69	34.08	27.18
2019	572	0.880	45	5.4	352	7	649,515	44.0	40.2	3.8	10%	38.85	30.57	-
2018	936	0.623	51	5.4	344	14	611,604	53.3	56.0	-2.8	-5%	54.54	51.80	41.91
2017	109	0.443	27	5.2	325	30	616,073	23.5	38.3	-14.9	-39%	42.16	34.04	26.66
2011	353	0.048	229	4.9	247	102	597,458	21.3	13.0	8.3	63%	16.76	16.21	13.57
2010	557	0.034	192	4.9	237	112	583,531	18.6	24.0	-5.4	-23%	22.59	18.64	15.08
2009	262	0.027	73	4.9	225	123	573,679	14.9	14.1	0.8	5%	16.44	16.04	13.02
30yr Jumbo 5	505	0.027	280	5.5	256	97	577,901	29.9	20.8	9.1	44%	23.06	23.94	21.60
2011	33	0.049	63	5.3	246	104	615,467	12.3	16.9	-4.6	-27%	14.02	19.85	17.16
2010	119	0.026	81	5.4	237	114	565,327	28.3	28.7	-0.4	-1%	22.82	21.46	18.66
2009	161	0.019	54	5.4	229	122	568,999	22.9	9.6	13.3	139%	15.76	13.58	12.35

*n.m. - Not Meaningful

Source: Bloomberg

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UMBS Prepayment Speeds

December 2019

UMBS 105-125 LTV

	Indicative Data							Prepayment Speeds						
	Cur Bal (MM)	Factor	# of Pools	WAC	WAM	WALA	WAOLS	Dec	Nov	Chg	% Chg	3mo	6mo	12mo
30yr 105-125 LTV 3	2,683	0.499	960	3.7	242	79	234,822	↓ 9.0	12.1	-3.1	-26%	11.02	11.35	9.56
2016	157	0.762	91	3.9	283	40	228,632	↓ 9.9	17.1	-7.2	-42%	11.03	11.61	8.89
2015	50	0.699	56	3.9	220	53	218,679	↓ 2.5	7.8	-5.3	-68%	6.80	6.36	6.66
2013	1,529	0.502	418	3.7	245	80	232,144	↓ 7.5	11.8	-4.3	-36%	10.33	11.44	9.77
2012	933	0.460	377	3.7	233	85	241,330	↓ 11.6	12.0	-0.3	-3%	12.44	11.42	9.49
30yr 105-125 LTV 3.5	11,409	0.448	2548	4.1	258	81	236,683	↓ 12.9	14.9	-2.0	-14%	14.07	13.74	11.68
2017	62	0.859	65	4.1	289	30	236,032	↑ 3.5	2.3	1.2	*n.m.	5.21	8.12	6.65
2016	303	0.743	131	4.2	305	41	226,090	↓ 9.4	15.5	-6.1	-39%	11.68	10.60	10.07
2015	376	0.681	238	4.2	275	53	225,571	↓ 9.7	13.1	-3.3	-26%	11.47	10.08	8.75
2014	145	0.592	138	4.3	231	63	221,400	↑ 14.8	13.1	1.7	13%	11.49	9.87	8.37
2013	4,171	0.478	849	4.1	263	79	229,962	↓ 12.6	13.9	-1.4	-10%	13.38	13.72	11.77
2012	6,319	0.412	1078	4.1	253	87	242,664	↓ 13.4	15.6	-2.2	-14%	14.87	14.24	11.99
30yr 105-125 LTV 4	7,593	0.409	2634	4.6	264	79	228,308	↓ 15.1	16.7	-1.6	-10%	15.84	15.25	12.84
2018	43	0.927	28	4.7	315	19	214,324	↓ 1.8	11.9	-10.1	-85%	6.61	7.22	3.78
2017	242	0.832	107	4.6	316	29	224,094	↓ 9.0	11.2	-2.2	-19%	9.61	9.38	7.50
2016	179	0.717	103	4.6	308	42	214,711	↓ 5.9	10.6	-4.7	-44%	8.21	9.08	9.21
2015	481	0.642	217	4.6	294	53	213,301	↓ 12.3	13.1	-0.8	-6%	13.25	12.64	11.53
2014	756	0.556	392	4.7	270	65	217,353	↓ 13.2	14.9	-1.7	-11%	13.76	13.79	11.49
2013	1,730	0.473	681	4.6	268	76	217,334	↑ 16.0	13.6	2.4	17%	15.16	14.77	13.00
2012	3,737	0.349	857	4.5	254	90	236,514	↓ 15.8	18.9	-3.1	-16%	17.20	16.44	13.63
2011	340	0.293	168	4.6	235	97	244,902	↓ 19.0	20.1	-1.1	-5%	18.54	18.07	13.86
2010	84	0.248	77	4.5	230	108	254,552	↓ 20.7	29.5	-8.7	-30%	26.35	19.29	14.85
30yr 105-125 LTV 4.5	2,854	0.322	1470	5.0	261	84	230,437	↓ 18.6	20.4	-1.8	-9%	18.96	17.78	14.93
2015	30	0.602	59	4.9	296	56	196,156	↓ 4.4	23.7	-19.3	-81%	11.66	11.90	13.82
2014	604	0.505	276	5.1	283	66	209,884	↓ 16.5	18.3	-1.8	-10%	17.38	16.25	14.39
2013	699	0.447	297	5.1	274	73	212,764	↓ 17.7	18.1	-0.4	-2%	17.62	16.43	14.07
2012	284	0.305	178	4.9	252	92	229,680	↓ 13.6	17.8	-4.2	-24%	18.19	16.95	14.24
2011	888	0.248	353	5.0	242	100	251,859	↓ 20.5	23.3	-2.8	-12%	21.05	19.50	15.87
2010	270	0.199	204	5.0	235	109	256,860	↑ 27.2	25.9	1.3	5%	23.27	22.48	17.69
30yr 105-125 LTV 5	822	0.191	695	5.4	244	103	248,940	↓ 20.8	25.9	-5.2	-20%	22.29	21.28	17.90
2013	41	0.449	29	5.6	277	73	198,412	↓ 8.8	22.4	-13.6	-61%	16.71	17.89	13.78
2011	475	0.210	309	5.4	244	102	251,679	↓ 20.6	22.9	-2.4	-10%	20.75	20.50	17.36
2010	236	0.148	253	5.5	235	113	257,518	↓ 24.3	25.2	-0.9	-4%	23.43	22.09	19.06
2009	40	0.134	51	5.4	229	120	262,891	↓ 19.0	48.9	-29.9	-61%	34.34	29.26	21.85
30yr 105-125 LTV 5.5	53	0.141	158	5.9	236	113	257,073	↑ 35.3	16.2	19.1	117%	29.29	23.58	22.40
2010	36	0.136	76	5.9	233	115	258,699	↑ 39.8	19.8	20.0	101%	33.03	24.31	23.88

*n.m. - Not Meaningful

Source: Bloomberg

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UMBS Prepayment Speeds

December 2019

UMBS 125+ LTV

	Indicative Data							Prepayment Speeds						
	Cur Bal (MM)	Factor	# of Pools	WAC	WAM	WALA	WAOLS	Dec	Nov	Chg	% Chg	3mo	6mo	12mo
30yr 125+ LTV 3	2,256	0.526	676	3.8	252	81	234,333	↓ 9.3	11.0	-1.8	-16%	10.87	10.97	9.73
2013	1,292	0.541	343	3.8	254	80	231,519	↓ 7.9	10.7	-2.8	-26%	10.06	10.37	9.59
2012	898	0.493	280	3.7	247	84	239,807	↓ 11.3	12.1	-0.8	-7%	12.26	12.26	10.21
30yr 125+ LTV 3.5	12,029	0.480	1830	4.1	259	82	232,934	↓ 13.5	15.0	-1.6	-10%	14.03	13.71	11.81
2016	130	0.803	74	4.2	308	41	211,956	↓ 5.9	9.0	-3.1	-34%	8.20	5.55	5.09
2015	171	0.692	124	4.2	277	52	204,700	↑ 11.9	11.0	0.9	8%	9.39	8.66	8.69
2014	52	0.652	59	4.4	238	63	195,654	↑ 13.8	7.2	6.6	92%	10.62	9.59	8.91
2013	4,552	0.517	736	4.1	265	79	224,594	↓ 12.9	13.5	-0.6	-5%	13.02	12.98	11.27
2012	7,092	0.451	802	4.1	255	86	239,691	↓ 14.1	16.3	-2.2	-14%	14.96	14.49	12.38
30yr 125+ LTV 4	6,730	0.450	1805	4.6	263	81	222,793	↓ 15.0	17.3	-2.4	-14%	15.97	15.57	13.23
2017	85	0.840	56	4.7	316	29	198,213	↑ 13.3	5.5	7.9	144%	13.36	9.59	7.22
2016	85	0.767	70	4.6	309	42	194,242	↑ 13.4	3.4	10.1	*n.m.	6.65	7.07	7.33
2015	239	0.681	154	4.6	295	53	191,144	↓ 9.8	12.8	-3.0	-23%	10.33	10.24	9.49
2014	397	0.603	243	4.7	271	65	203,592	↓ 13.2	17.5	-4.2	-24%	13.23	12.43	9.77
2013	1,600	0.518	608	4.6	269	77	212,547	↓ 12.6	12.9	-0.3	-2%	12.46	12.72	11.85
2012	4,308	0.405	660	4.5	257	88	231,209	↓ 16.3	19.7	-3.4	-17%	18.00	17.42	14.45
30yr 125+ LTV 4.5	1,624	0.481	804	5.1	272	75	210,403	↓ 13.0	16.9	-3.9	-23%	15.18	15.16	13.20
2014	457	0.578	239	5.1	281	67	199,490	↓ 11.5	17.8	-6.3	-35%	14.79	13.32	11.29
2013	743	0.518	293	5.1	272	74	209,336	↓ 12.9	13.9	-1.0	-7%	14.11	14.64	12.91
2012	385	0.352	168	5.0	257	90	228,155	↓ 14.9	21.6	-6.7	-31%	18.19	18.67	16.07
30yr 125+ LTV 5	84	0.501	81	5.5	281	70	183,316	↓ 16.6	18.6	-2.0	-11%	16.50	14.99	13.29
2014	41	0.525	32	5.4	285	67	184,006	↓ 14.5	20.9	-6.5	-31%	14.65	11.69	11.03
2013	41	0.476	37	5.6	275	73	182,011	↑ 19.2	16.4	2.8	17%	18.57	18.28	15.58

*n.m. - Not Meaningful

Source: Bloomberg

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UMBS Prepayment Speeds

December 2019

UMBS Relocation

	Indicative Data							Prepayment Speeds						
	Cur Bal (MM)	Factor	# of Pools	WAC	WAM	WALA	WAOLS	Dec	Nov	Chg	% Chg	3mo	6mo	12mo
15yr RELO 2	29	0.383	18	2.6	114	56	308,312	↓ 6.0	11.5	-5.5	-48%	13.48	20.22	17.28
2015	13	0.390	7	2.6	111	53	302,335	↓ 8.6	18.0	-9.5	-52%	10.21	17.96	15.02
15yr RELO 2.5	160	0.301	85	3.0	111	62	280,520	↓ 15.5	17.4	-1.9	-11%	14.75	17.83	16.52
2014	64	0.305	41	3.0	109	64	271,964	↑ 18.7	18.4	0.3	2%	18.51	18.97	15.91
30yr RELO 2.5	294	0.522	49	3.2	301	50	339,377	↑ 11.5	9.8	1.7	17%	12.82	13.37	11.54
2016	61	0.686	10	3.1	315	38	328,237	↓ 7.9	24.4	-16.5	-68%	23.73	20.83	15.94
2013	108	0.394	25	3.1	269	80	324,063	↑ 17.1	3.5	13.6	*n.m.	10.96	11.67	10.72
2012	43	0.377	3	3.0	262	83	313,153	↑ 3.8	0.9	3.0	*n.m.	4.25	8.44	8.37
30yr RELO 3	3,915	0.593	350	3.8	311	40	332,460	↓ 13.5	17.8	-4.3	-24%	15.42	16.42	13.79
2019	205	0.981	20	3.9	354	4	384,945	↓ 1.3	7.3	-6.0	-82%	4.94	5.38	-
2018	474	0.860	39	4.1	337	18	339,096	↑ 16.0	13.8	2.2	16%	14.96	15.22	10.54
2017	1,251	0.773	94	3.8	327	27	332,180	↓ 13.6	21.1	-7.4	-35%	17.52	17.52	13.92
2016	459	0.624	22	3.6	313	39	322,602	↓ 18.8	20.6	-1.9	-9%	17.65	18.92	17.68
2015	785	0.522	58	3.7	297	53	324,879	↓ 12.4	15.5	-3.1	-20%	14.18	16.01	13.79
2014	259	0.429	45	3.9	286	63	331,423	↓ 13.9	21.4	-7.5	-35%	17.39	18.33	15.01
2013	248	0.365	34	3.5	270	78	325,786	↓ 11.3	12.8	-1.6	-12%	10.89	13.74	13.17
2012	205	0.327	31	3.5	258	89	325,929	↓ 13.3	16.7	-3.4	-20%	14.00	15.13	13.49
2011	29	0.402	7	3.8	242	96	339,474	↓ 1.4	11.9	-10.5	-88%	10.30	10.62	12.35
30yr RELO 3.5	1,427	0.368	198	4.1	292	58	319,042	↓ 16.7	25.5	-8.8	-35%	20.82	20.25	16.02
2019	15	0.876	5	4.4	349	8	327,608	↑ 2.0	0.2	1.7	*n.m.	8.36	15.83	-
2017	166	0.684	15	4.1	322	31	326,354	↓ 15.3	27.4	-12.2	-44%	21.04	23.95	19.14
2014	456	0.329	64	4.2	284	65	299,403	↓ 16.8	24.0	-7.2	-30%	20.15	20.71	17.66
2013	146	0.293	25	4.1	274	74	306,592	↓ 16.2	26.4	-10.1	-38%	20.49	20.93	17.58
2012	92	0.265	19	3.9	252	93	316,694	↓ 14.5	23.1	-8.6	-37%	14.27	15.55	12.67
2011	118	0.244	28	4.0	246	98	326,981	↑ 15.8	9.0	6.8	76%	9.95	12.54	10.80
2010	103	0.210	14	3.9	235	108	324,616	↓ 8.4	11.2	-2.8	-25%	12.12	10.93	11.49
30yr RELO 4	404	0.147	142	4.5	264	84	307,075	↓ 19.5	23.9	-4.4	-18%	21.62	20.97	15.98
2014	76	0.210	37	4.5	283	68	276,873	↓ 17.0	22.0	-5.0	-23%	23.15	22.34	16.91
2011	131	0.120	47	4.4	242	102	300,636	↓ 19.1	29.0	-9.9	-34%	20.14	21.54	16.79
2010	109	0.101	25	4.4	233	112	314,082	↑ 24.3	16.0	8.3	52%	19.66	20.34	15.73
30yr RELO 4.5	67	0.037	275	5.0	205	141	249,851	↓ 16.8	20.2	-3.4	-17%	19.93	18.01	16.35
2011	27	0.087	18	4.8	239	104	273,086	↑ 15.3	0.7	14.5	*n.m.	12.55	18.17	14.81

*n.m. - Not Meaningful

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