

FNMA Prepayment Speeds

June 2019

FNMA 10yr

	Indicative Data							Prepayment Speeds						
	Cur Bal (MM)	Factor	# of Pools	WAC	WAM	WALA	WAOLS	Jun	May	Chg	% Chg	3mo	6mo	12mo
FNMA 10yr 2	2,340	0.259	410	2.7	55	61	223,070	↑15.5	15.2	0.2	1%	14.75	12.76	12.25
2016	585	0.592	67	2.6	83	33	255,952	↑14.8	12.7	2.2	17%	12.27	10.03	9.72
2015	90	0.433	41	2.7	69	47	238,648	↓6.4	10.3	-3.9	-38%	11.19	9.87	8.95
2014	67	0.352	23	2.9	61	55	233,379	↓12.5	17.8	-5.2	-29%	13.69	10.99	9.23
2013	1,301	0.219	210	2.7	44	72	211,965	↓16.3	16.4	-0.1	0%	15.67	13.70	13.21
2012	279	0.166	61	2.7	38	78	196,316	↑16.8	14.6	2.2	15%	16.72	15.13	14.32
FNMA 10yr 2.5	10,925	0.270	1525	3.0	63	52	214,203	↑15.9	14.9	1.1	7%	14.89	13.26	13.02
2017	844	0.705	71	3.0	94	22	239,379	↑14.3	10.6	3.7	35%	12.04	10.44	10.20
2016	3,286	0.570	164	2.9	82	33	225,474	↑13.3	12.4	0.9	7%	12.18	10.69	10.65
2015	1,876	0.402	191	3.0	68	47	215,332	↑15.6	15.1	0.5	3%	14.42	12.60	12.36
2014	1,091	0.280	193	3.2	57	58	205,933	↑19.1	16.1	3.1	19%	16.54	14.68	14.15
2013	1,637	0.199	358	3.0	44	72	183,699	↑16.5	15.9	0.6	4%	16.23	14.93	14.35
2012	2,060	0.133	492	3.0	35	82	213,181	↑18.7	18.3	0.4	2%	18.24	16.34	15.99
2011	91	0.077	43	3.1	28	90	201,493	↓23.1	23.9	-0.8	-3%	21.98	19.67	18.70
FNMA 10yr 3	6,692	0.178	1364	3.5	65	50	180,738	↑17.0	16.7	0.3	2%	16.40	14.82	14.68
2019	92	0.974	10	3.7	116	2	238,683	↑11.9	8.2	3.6	44%	8.26	-	-
2018	400	0.805	36	3.5	102	14	222,019	↑14.9	12.8	2.0	16%	12.15	10.43	9.86
2017	1,733	0.696	97	3.4	93	22	196,588	↓12.7	13.6	-0.9	-7%	12.86	10.83	10.60
2016	776	0.528	88	3.5	80	34	168,389	↑13.1	13.0	0.1	0%	13.10	12.19	12.38
2015	746	0.395	128	3.5	69	45	163,135	↓15.3	17.4	-2.1	-12%	16.17	13.92	14.11
2014	666	0.266	160	3.6	56	58	152,202	↑17.5	16.6	1.0	6%	16.66	15.51	15.57
2013	598	0.199	242	3.6	46	69	150,282	↑18.7	17.2	1.5	8%	17.05	15.97	15.64
2012	575	0.099	297	3.5	32	85	167,581	↑21.1	20.2	0.9	5%	19.85	18.21	17.86
2011	1,015	0.060	251	3.5	25	92	196,917	↑24.5	21.8	2.7	12%	22.70	20.78	19.82
2010	92	0.031	55	3.6	17	102	199,847	↓26.4	27.4	-1.0	-4%	26.78	24.58	22.77
FNMA 10yr 3.5	2,958	0.135	761	4.0	82	34	171,718	↑17.7	17.6	0.1	1%	17.14	15.53	15.32
2019	409	0.962	17	4.1	114	2	206,095	↓11.8	14.7	-2.9	-20%	11.70	-	-
2018	987	0.834	74	4.0	105	11	196,097	↑15.4	13.6	1.8	13%	13.96	12.00	10.98
2017	609	0.689	51	3.9	93	22	145,684	↓15.5	17.1	-1.6	-9%	14.98	12.80	11.99
2016	89	0.523	31	4.0	80	35	127,828	↓13.7	14.4	-0.6	-4%	14.11	12.70	14.03
2015	58	0.371	31	4.2	68	46	111,233	↓9.9	14.9	-5.0	-34%	12.20	13.94	15.03
2014	139	0.253	65	4.2	54	59	118,532	↑20.0	15.4	4.6	30%	17.51	15.94	15.69
2013	112	0.196	76	4.1	47	68	114,151	↓15.1	16.5	-1.4	-9%	17.39	16.03	16.62
2012	35	0.094	51	4.1	32	85	115,010	↓19.8	20.9	-1.1	-5%	23.82	20.74	19.85
2011	273	0.045	177	4.0	22	96	165,613	↑28.5	27.0	1.5	6%	26.51	23.45	21.76
2010	246	0.021	182	3.9	15	104	182,614	↑30.6	26.9	3.8	14%	28.20	26.16	24.20
FNMA 10yr 4	653	0.052	411	4.6	89	27	146,346	↑19.2	15.0	4.2	28%	17.30	15.98	17.83
2011	43	0.040	89	4.5	21	97	129,342	↓26.9	27.1	-0.2	-1%	26.62	24.12	22.78
2010	63	0.012	131	4.4	12	107	155,845	↑32.4	32.0	0.4	1%	31.62	29.96	27.65
2009	14	0.002	78	4.4	5	115	170,585	↑57.6	46.7	10.9	23%	49.63	43.84	38.05

*n.m. - Not Meaningful

Source: Bloomberg

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FNMA Prepayment Speeds

June 2019

FNMA 15yr

	Indicative Data							Prepayment Speeds						
	Cur Bal (MM)	Factor	# of Pools	WAC	WAM	WALA	WAOLS	Jun	May	Chg	% Chg	3mo	6mo	12mo
FNMA 15yr 2	17,074	0.490	2081	2.6	117	58	272,837	↑ 9.8	9.2	0.6	6%	8.74	7.47	7.51
2016	6,244	0.731	343	2.6	143	33	290,008	↑ 8.5	8.1	0.4	5%	7.54	6.35	6.28
2015	733	0.582	174	2.8	127	48	290,099	↑ 9.7	8.0	1.7	21%	8.67	7.17	7.46
2014	93	0.531	36	2.8	118	55	254,821	↓ 7.6	8.4	-0.9	-10%	8.43	7.63	8.10
2013	6,425	0.416	1018	2.6	101	73	268,113	↑ 10.8	10.2	0.6	6%	9.63	8.22	8.23
2012	3,514	0.376	478	2.6	95	78	247,835	↑ 10.3	9.5	0.8	9%	9.31	8.16	8.33
FNMA 15yr 2.5	127,798	0.468	16768	3.0	120	54	262,002	↑ 10.9	9.8	1.1	11%	9.81	8.40	8.67
2019	974	0.988	22	3.5	177	2	316,164	↓ 4.4	4.5	-0.2	*n.m.	3.15	-	-
2018	535	0.878	81	3.2	161	15	304,595	↑ 9.8	9.0	0.8	9%	8.35	6.80	5.90
2017	7,433	0.812	694	3.0	154	22	285,603	↑ 8.9	8.3	0.6	7%	8.08	6.68	6.43
2016	42,872	0.693	3132	2.9	142	33	268,260	↑ 10.2	8.9	1.3	15%	9.14	7.70	7.86
2015	16,258	0.542	2035	3.0	127	47	266,450	↑ 11.6	10.0	1.6	16%	10.09	8.39	8.86
2014	4,090	0.444	1049	3.1	118	55	268,403	↓ 11.7	12.6	-0.9	-7%	11.39	9.51	9.87
2013	23,294	0.389	4076	2.9	100	73	242,712	↑ 11.1	10.0	1.1	11%	10.12	8.86	9.27
2012	31,682	0.320	5490	3.0	93	81	257,246	↑ 11.9	10.8	1.1	10%	10.62	9.28	9.55
2011	650	0.247	184	3.1	82	91	235,632	↓ 11.4	12.5	-1.2	-9%	11.17	10.24	10.34
FNMA 15yr 3	124,666	0.437	25517	3.5	127	47	230,070	↑ 12.6	11.4	1.2	11%	11.42	9.87	9.90
2019	3,027	0.978	126	3.8	176	2	289,810	↑ 8.9	6.1	2.8	45%	6.23	-	-
2018	7,926	0.874	614	3.7	164	13	277,462	↑ 13.6	12.9	0.7	6%	12.01	9.38	7.89
2017	32,255	0.782	2972	3.4	154	22	244,851	↑ 11.5	9.9	1.6	16%	10.30	8.71	8.25
2016	12,854	0.644	2909	3.5	140	34	203,914	↑ 12.8	11.6	1.2	10%	11.73	9.97	10.17
2015	18,390	0.524	3627	3.5	129	46	220,258	↑ 12.7	12.2	0.5	4%	11.68	9.91	10.34
2014	14,170	0.404	3343	3.5	116	58	223,525	↑ 13.0	11.7	1.4	12%	11.79	10.59	10.80
2013	11,548	0.354	3813	3.5	104	69	209,721	↑ 12.6	11.3	1.2	11%	11.59	10.42	10.79
2012	13,215	0.261	5496	3.5	89	84	209,140	↑ 13.5	12.0	1.5	13%	12.18	10.89	11.02
2011	9,923	0.202	2205	3.4	82	91	239,848	↑ 13.6	12.4	1.1	9%	12.43	10.95	11.12
2010	1,357	0.146	410	3.6	71	102	223,398	↑ 15.6	13.5	2.1	16%	14.10	11.99	12.28
FNMA 15yr 3.5	59,719	0.341	19428	4.0	131	44	197,173	↑ 13.9	12.9	1.0	8%	12.51	10.98	10.97
2019	6,685	0.975	466	4.1	175	2	241,972	↑ 9.4	9.3	0.1	1%	8.60	-	-
2018	15,524	0.879	1735	4.1	166	11	235,451	↑ 16.1	14.0	2.2	15%	13.27	10.43	8.92
2017	8,639	0.762	1992	4.0	152	23	164,456	↑ 12.7	11.9	0.8	7%	11.48	10.11	9.88
2016	2,004	0.619	980	4.0	137	35	129,919	↓ 12.6	13.3	-0.7	-5%	12.45	11.07	11.65
2015	2,715	0.516	1523	4.0	127	46	133,785	↑ 12.7	12.1	0.6	5%	12.14	11.19	11.87
2014	5,097	0.390	2593	4.1	114	59	155,727	↑ 14.8	12.5	2.3	19%	13.28	11.82	12.12
2013	3,983	0.339	2013	4.0	106	68	171,055	↑ 12.6	12.0	0.5	4%	11.67	10.80	11.43
2012	1,857	0.244	2080	4.0	88	85	150,490	↑ 13.4	12.3	1.2	9%	12.45	11.81	12.29
2011	6,408	0.170	3429	3.9	79	94	197,576	↑ 14.5	13.6	0.9	6%	13.42	12.04	12.18
2010	6,714	0.113	2442	3.9	70	103	211,322	↑ 15.0	13.8	1.2	9%	13.86	12.59	12.62
2009	90	0.074	161	4.0	57	118	200,761	↓ 12.1	13.3	-1.1	-9%	13.45	13.59	15.31
FNMA 15yr 4	21,250	0.139	11596	4.5	120	55	176,166	↑ 15.4	14.2	1.2	8%	13.74	11.92	11.88
2019	962	0.978	233	4.7	172	3	158,172	↑ 9.5	5.8	3.7	63%	5.94	-	-
2018	9,675	0.898	1259	4.6	166	9	178,300	↑ 16.2	13.3	2.9	22%	12.98	9.99	8.19
2017	599	0.727	186	4.5	151	23	143,899	↑ 13.5	13.0	0.5	4%	12.61	11.70	12.18
2014	140	0.380	227	4.7	110	61	87,008	↑ 16.4	11.6	4.8	41%	13.93	13.62	14.03
2013	231	0.356	305	4.6	105	67	100,804	↑ 15.3	15.0	0.3	2%	14.04	13.10	12.85
2012	140	0.219	357	4.5	86	86	119,839	↑ 15.4	10.0	5.5	55%	12.50	13.24	13.41
2011	3,056	0.135	2785	4.4	76	97	170,491	↑ 14.5	13.9	0.6	4%	13.69	12.66	13.00
2010	3,540	0.080	2909	4.4	67	107	183,585	↓ 14.9	16.2	-1.3	-8%	15.13	13.67	13.65
2009	2,793	0.044	2430	4.5	56	118	192,190	↑ 16.6	16.4	0.2	1%	16.17	15.07	14.64
2008	57	0.026	236	4.6	44	132	195,993	↑ 17.6	16.6	1.0	6%	17.67	16.59	16.87
FNMA 15yr 4.5	3,422	0.037	8581	4.9	74	101	161,137	↑ 15.7	15.5	0.1	1%	15.04	14.06	15.14
2011	421	0.142	962	4.8	76	97	141,925	↑ 15.1	10.7	4.4	41%	12.98	12.40	13.60
2010	775	0.083	1342	4.8	65	109	151,988	↓ 15.6	16.3	-0.7	-4%	15.03	13.56	14.15
2009	1,269	0.046	2205	4.9	57	118	168,097	↓ 14.8	15.9	-1.1	-7%	15.04	13.77	13.95
FNMA 15yr 5	812	0.012	8836	5.6	39	138	159,751	↑ 19.8	19.6	0.2	1%	19.34	18.50	19.11
2010	34	0.104	193	5.4	66	109	124,402	↑ 14.8	12.5	2.3	19%	11.89	13.20	13.46
2009	100	0.065	608	5.5	57	118	121,207	↓ 13.7	14.8	-1.1	-8%	14.61	13.86	15.15

*n.m. - Not Meaningful

Source: Bloomberg

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FNMA Prepayment Speeds

June 2019

FNMA 20yr

	Indicative Data							Prepayment Speeds						
	Cur Bal (MM)	Factor	# of Pools	WAC	WAM	WALA	WAOLS	Jun	May	Chg	% Chg	3mo	6mo	12mo
FNMA 20yr 2.5	6,097	0.662	342	3.2	189	46	279,784	↑ 8.9	6.8	2.1	31%	7.33	6.14	6.30
2016	4,081	0.796	81	3.2	204	32	295,871	↑ 8.0	6.3	1.7	26%	6.61	5.47	5.72
2015	57	0.609	15	3.3	185	50	292,708	↓ 10.1	20.1	-10.0	-50%	12.25	8.43	8.74
2013	762	0.497	85	3.3	159	74	249,619	↑ 10.8	8.4	2.4	29%	9.76	8.56	7.97
2012	1,104	0.471	135	3.2	154	78	240,170	↑ 10.1	6.7	3.5	52%	8.03	6.85	7.21
FNMA 20yr 3	56,207	0.583	3157	3.6	185	50	248,060	↑ 9.7	8.7	1.0	12%	8.50	7.12	7.44
2019	279	0.993	12	4.1	237	2	315,125	↓ 1.7	2.1	-0.4	*n.m.	1.43	-	-
2018	243	0.918	34	3.7	223	15	281,046	↑ 12.8	4.6	8.2	*n.m.	7.04	5.42	4.07
2017	5,549	0.860	161	3.7	216	21	266,788	↑ 9.0	8.5	0.5	6%	7.72	6.20	5.66
2016	19,520	0.757	512	3.6	203	33	256,986	↑ 9.8	8.4	1.3	16%	8.39	7.00	7.24
2015	8,964	0.614	357	3.7	188	47	254,608	↓ 9.6	9.7	-0.1	-1%	8.88	7.36	7.89
2014	1,454	0.472	111	3.9	179	55	250,247	↑ 12.3	9.9	2.4	25%	10.28	8.37	8.92
2013	9,127	0.480	916	3.6	160	73	218,498	↑ 9.8	9.1	0.7	8%	8.82	7.40	7.90
2012	10,957	0.413	1022	3.6	152	81	239,363	↑ 9.8	8.1	1.7	20%	8.44	7.28	7.81
2011	101	0.326	26	3.6	142	90	237,740	↑ 12.1	4.8	7.3	*n.m.	7.30	6.98	6.65
FNMA 20yr 3.5	37,814	0.467	4440	4.1	185	50	226,106	↑ 11.4	9.8	1.7	17%	9.93	8.33	8.53
2019	1,632	0.988	47	4.4	236	2	267,819	↑ 3.7	2.8	0.9	*n.m.	3.75	-	-
2018	3,487	0.907	153	4.0	223	14	261,226	↑ 11.7	9.1	2.6	28%	9.40	7.01	5.46
2017	9,391	0.828	478	4.0	215	22	243,435	↑ 12.2	10.1	2.0	20%	10.26	8.05	7.65
2016	2,480	0.710	273	4.0	204	33	215,503	↑ 12.1	11.7	0.3	3%	11.10	9.36	9.65
2015	3,545	0.568	652	4.1	188	47	195,737	↑ 13.4	10.8	2.7	25%	11.09	9.10	9.88
2014	3,130	0.418	369	4.2	176	58	212,677	↑ 13.0	10.2	2.9	28%	10.70	9.43	10.04
2013	3,483	0.419	840	4.1	164	70	190,531	↑ 11.6	9.1	2.5	27%	10.12	9.00	9.55
2012	5,893	0.334	1206	4.0	148	84	217,226	↑ 10.7	9.7	1.0	10%	9.64	8.34	9.06
2011	3,798	0.244	334	4.0	141	91	226,747	↑ 10.3	9.6	0.8	8%	9.37	8.16	8.59
2010	974	0.182	84	4.0	130	102	222,640	↑ 8.7	8.5	0.2	2%	9.27	8.71	8.65
FNMA 20yr 4	26,703	0.401	3624	4.5	195	41	213,179	↑ 13.4	11.5	1.9	16%	11.57	9.50	9.32
2019	570	0.985	63	4.8	236	3	230,835	↑ 7.7	3.4	4.3	*n.m.	4.18	-	-
2018	9,840	0.913	493	4.5	227	11	242,086	↑ 14.0	12.8	1.2	10%	11.88	8.82	6.79
2017	4,875	0.798	534	4.4	215	23	210,452	↑ 14.0	12.2	1.8	15%	12.42	10.10	9.84
2016	931	0.655	219	4.4	201	35	190,937	↑ 13.3	8.6	4.8	56%	11.01	10.18	10.98
2015	1,415	0.551	443	4.4	189	46	171,979	↑ 15.3	11.9	3.4	28%	12.75	11.16	11.55
2014	2,268	0.438	494	4.6	175	59	173,310	↑ 14.2	12.2	2.0	16%	12.17	10.92	11.61
2013	1,179	0.397	351	4.7	167	67	168,057	↑ 12.0	9.0	3.0	34%	9.95	8.70	10.38
2012	424	0.307	298	4.5	147	85	185,495	↑ 12.9	11.1	1.8	16%	12.00	11.13	10.76
2011	2,110	0.212	322	4.5	139	94	201,678	↑ 11.4	9.4	2.1	22%	10.09	8.83	9.47
2010	2,602	0.136	256	4.4	129	103	207,582	↑ 12.4	10.2	2.2	22%	10.91	9.54	9.61
2009	479	0.075	101	4.5	111	119	197,581	↓ 11.4	11.6	-0.2	-2%	10.89	9.70	10.50
FNMA 20yr 4.5	5,849	0.139	1263	5.0	163	71	179,498	↑ 14.1	12.2	2.0	16%	12.30	10.26	10.39
2019	274	0.990	57	5.2	235	3	156,484	↓ 1.3	2.9	-1.6	*n.m.	2.72	-	-
2018	1,854	0.918	247	5.2	228	9	175,881	↑ 17.3	12.9	4.4	34%	14.29	10.29	7.42
2017	137	0.793	50	5.0	216	21	162,357	↑ 15.4	13.2	2.2	17%	12.72	10.22	10.15
2014	75	0.437	51	5.2	172	62	140,911	↓ 16.1	19.2	-3.1	-16%	16.21	14.05	12.83
2013	69	0.410	43	5.1	168	67	148,844	↑ 31.6	10.9	20.7	190%	17.49	13.92	12.42
2011	999	0.183	150	4.9	136	97	186,174	↓ 11.9	12.2	-0.3	-2%	11.44	10.33	10.88
2010	1,191	0.114	162	4.9	124	108	193,525	↑ 13.5	12.6	0.8	6%	11.96	10.21	11.04
2009	975	0.071	197	4.9	114	118	181,202	↑ 12.9	10.9	2.0	18%	10.86	9.87	10.86
FNMA 20yr 5	1,462	0.031	1310	5.5	92	142	161,344	↑ 13.3	12.3	0.9	8%	12.70	11.70	12.28
2011	99	0.193	48	5.4	135	98	179,036	↑ 21.2	12.4	8.8	71%	15.69	12.66	12.71
2010	151	0.115	58	5.4	124	109	171,529	↑ 13.8	13.4	0.5	4%	11.26	10.54	12.15
2009	172	0.094	89	5.4	116	117	165,297	↑ 10.9	8.9	2.0	22%	10.10	9.82	10.99

*n.m. - Not Meaningful

Source: Bloomberg

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FNMA Prepayment Speeds

June 2019

FNMA Jumbos

	Indicative Data							Prepayment Speeds						
	Cur Bal (MM)	Factor	# of Pools	WAC	WAM	WALA	WAOLS	Jun	May	Chg	% Chg	3mo	6mo	12mo
15yr Jumbo 2	77	0.499	34	2.6	112	64	546,322	↑7.0	5.9	1.1	18%	4.91	4.18	7.20
2013	57	0.457	18	2.6	104	72	548,574	↑9.0	7.8	1.2	16%	6.35	5.30	7.96
15yr Jumbo 2.5	1,599	0.497	196	2.9	124	51	538,904	↑10.2	7.1	3.0	42%	7.92	6.93	6.93
2017	94	0.858	18	3.0	156	21	538,966	↑6.1	1.2	4.9	*n.m.	3.03	2.75	3.38
2016	603	0.729	25	2.9	144	32	526,511	↓8.0	8.2	-0.2	-3%	7.56	6.21	6.27
2015	242	0.508	34	3.0	126	48	544,494	↑12.6	7.2	5.5	76%	9.33	8.04	7.16
2014	36	0.415	17	3.1	116	56	543,485	↑2.3	1.6	0.7	*n.m.	6.52	5.83	6.51
2013	366	0.397	54	2.9	100	74	543,345	↑9.0	7.8	1.2	16%	7.32	7.45	7.81
2012	249	0.317	43	3.0	94	79	554,203	↑17.1	6.0	11.1	185%	10.17	8.34	8.11
15yr Jumbo 3	356	0.193	173	3.5	107	68	556,748	↑13.9	13.8	0.1	1%	12.25	9.15	10.13
2017	75	0.770	17	3.5	155	23	556,994	↑7.7	0.8	7.0	*n.m.	3.18	3.90	7.33
2012	75	0.161	42	3.5	88	85	546,435	↑16.0	9.5	6.5	68%	12.65	9.73	9.98
2011	142	0.128	44	3.4	84	91	572,160	↑20.8	13.7	7.1	51%	16.16	12.20	12.48
15yr Jumbo 3.5	133	0.077	130	3.9	87	87	587,966	↑11.9	9.3	2.6	27%	9.92	9.23	11.25
2011	80	0.073	65	3.9	79	94	583,594	↑13.1	8.4	4.7	57%	9.61	8.14	11.09
30yr Jumbo 2.5	316	0.692	59	3.4	291	55	541,137	↓9.3	14.8	-5.5	-37%	9.55	6.15	5.70
2016	164	0.841	28	3.3	308	34	531,737	↓4.4	20.6	-16.2	-79%	11.08	7.10	4.71
2012	142	0.576	17	3.5	271	78	551,765	↑15.1	8.6	6.6	77%	8.30	5.41	7.08
30yr Jumbo 3	28,423	0.657	821	3.7	301	51	540,595	↑8.7	7.0	1.6	23%	7.19	5.63	5.71
2019	550	0.994	13	4.2	357	1	602,029	↑3.4	3.3	0.1	*n.m.	1.97	-	-
2018	124	0.961	17	3.8	336	15	561,823	↓0.5	5.4	-4.9	*n.m.	2.27	1.27	1.62
2017	1,177	0.911	55	3.8	334	21	541,564	↑11.7	7.7	4.0	52%	8.27	5.14	4.00
2016	12,426	0.814	171	3.7	320	34	535,105	↑9.4	6.6	2.8	43%	7.32	5.73	5.59
2015	2,566	0.631	138	3.8	303	48	535,235	↓8.0	8.2	-0.2	-2%	7.76	5.65	6.10
2014	487	0.595	25	3.8	294	55	528,223	↑7.8	5.9	1.9	33%	6.22	5.36	4.75
2013	5,467	0.536	179	3.7	277	74	545,020	↑8.6	7.7	0.9	12%	7.54	6.12	6.54
2012	5,625	0.514	221	3.7	271	79	545,222	↑7.4	6.9	0.5	7%	6.48	5.24	5.55
30yr Jumbo 3.5	24,728	0.511	1188	4.1	315	40	548,195	↑12.5	11.5	1.0	8%	10.73	8.06	7.61
2019	980	0.990	21	4.5	356	2	608,428	↑8.2	1.3	6.9	*n.m.	3.17	-	-
2018	1,171	0.912	67	4.2	342	14	575,378	↑17.5	14.0	3.5	25%	13.48	9.97	6.71
2017	9,199	0.847	141	4.2	335	22	545,024	↑13.7	12.0	1.6	14%	10.97	8.20	6.94
2016	3,959	0.678	116	4.2	324	33	549,732	↓13.6	13.6	0.0	0%	13.10	9.45	9.23
2015	2,604	0.483	164	4.1	309	46	538,472	↓11.7	13.0	-1.4	-10%	10.97	8.33	8.65
2014	1,114	0.329	82	4.2	296	57	528,437	↓10.7	12.0	-1.3	-11%	10.94	7.63	8.71
2013	1,217	0.365	120	4.0	281	71	541,695	↑12.6	10.8	1.7	16%	10.16	8.15	8.30
2012	4,008	0.279	365	4.0	267	83	542,919	↑9.4	8.4	1.0	12%	8.35	6.35	6.95
2011	423	0.164	97	4.1	259	91	561,863	↑11.8	8.9	2.8	32%	7.92	6.76	6.41
2010	54	0.169	15	4.2	243	103	600,715	↓0.5	13.1	-12.6	*n.m.	7.95	9.06	7.23
30yr Jumbo 4	11,557	0.227	1226	4.7	313	42	574,676	↑25.3	23.8	1.4	6%	21.93	16.25	12.69
2019	425	0.980	25	5.0	356	3	624,394	↑10.9	10.6	0.4	3%	8.88	-	-
2018	3,731	0.844	117	4.8	348	11	579,066	↑38.9	37.3	1.6	4%	34.07	24.29	15.43
2017	2,694	0.706	101	4.6	335	22	565,788	↑25.7	23.0	2.6	11%	21.77	16.10	13.43
2016	448	0.510	55	4.7	323	35	586,400	↑16.5	14.2	2.3	16%	12.15	11.13	10.92
2015	162	0.354	67	4.7	311	45	569,796	↑25.6	22.8	2.8	12%	19.85	13.49	12.78
2014	415	0.193	83	4.6	295	59	531,729	↓10.6	22.5	-11.9	-53%	16.85	13.43	12.67
2013	551	0.161	98	4.6	285	68	529,151	↓11.3	12.4	-1.0	-8%	11.05	8.88	8.82
2012	302	0.153	119	4.4	262	86	541,943	↑13.6	8.6	5.0	59%	11.37	9.81	8.25
2011	1,450	0.092	345	4.5	258	93	587,086	↑10.9	6.8	4.1	61%	8.56	7.55	8.81
2010	1,350	0.079	192	4.5	247	103	587,636	↑13.8	12.2	1.7	14%	10.94	9.80	9.39
30yr Jumbo 4.5	2,548	0.071	704	5.1	293	61	596,260	↑29.4	23.6	5.8	25%	25.41	19.51	16.46
2019	66	0.946	11	5.4	356	3	647,205	↑41.6	10.2	31.4	307%	19.42	-	-
2018	982	0.818	47	5.4	350	8	608,111	↑40.8	39.2	1.6	4%	38.42	29.84	20.91
2017	135	0.550	27	5.2	332	24	614,777	↑38.2	14.2	24.0	169%	25.20	18.46	19.37
2011	390	0.053	231	4.9	253	96	596,506	↓17.3	17.4	0.0	0%	15.86	10.88	10.71
2010	621	0.038	194	4.9	243	106	583,708	↑19.5	7.5	12.0	160%	14.37	11.46	12.25
2009	292	0.030	75	4.9	231	117	572,526	↑15.0	8.5	6.6	78%	10.76	9.84	11.27
30yr Jumbo 5	498	0.026	272	5.5	249	103	568,716	↓25.8	25.9	-0.1	0%	25.51	19.20	17.08
2011	37	0.054	68	5.3	252	98	612,953	↑29.7	12.8	16.9	131%	15.13	14.38	15.74
2010	137	0.030	85	5.3	243	108	566,261	↑21.1	16.0	5.1	32%	19.97	15.76	17.25
2009	176	0.021	54	5.4	236	116	568,980	↑13.1	12.5	0.6	5%	12.50	11.09	12.91

*n.m. - Not Meaningful

Source: Bloomberg

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FNMA Prepayment Speeds

June 2019

FNMA 105-125 LTV

	Indicative Data							Prepayment Speeds						
	Cur Bal (MM)	Factor	# of Pools	WAC	WAM	WALA	WAOLS	Jun	May	Chg	% Chg	3mo	6mo	12mo
30yr 105-125 LTV 3	2,890	0.539	959	3.7	248	73	235,236	↑ 9.9	8.6	1.2	14%	8.70	7.75	8.99
2016	163	0.819	91	3.9	289	34	228,816	↑ 10.5	8.2	2.3	27%	8.86	6.30	6.01
2015	52	0.734	56	3.9	225	47	219,386	↓ 10.1	17.7	-7.6	-43%	9.66	7.07	7.38
2013	1,675	0.543	419	3.7	251	74	232,855	↑ 10.4	7.9	2.5	31%	8.93	8.07	9.19
2012	987	0.497	376	3.7	238	79	241,254	↓ 8.8	9.3	-0.5	-5%	8.17	7.50	9.26
30yr 105-125 LTV 3.5	12,444	0.490	2552	4.1	264	75	236,955	↑ 12.6	11.2	1.4	13%	11.02	9.59	10.62
2017	55	0.907	64	4.1	295	24	238,681	↑ 10.6	2.0	8.5	*n.m.	5.74	5.28	3.65
2016	314	0.794	132	4.2	311	35	226,992	↑ 14.8	7.6	7.2	96%	10.49	9.80	8.35
2015	402	0.729	237	4.2	281	47	224,931	↑ 9.5	8.9	0.6	7%	9.11	7.36	7.98
2014	156	0.634	141	4.3	236	57	220,050	↓ 8.2	9.6	-1.4	-15%	8.31	6.92	9.04
2013	4,555	0.522	851	4.1	269	73	230,063	↑ 13.3	11.8	1.5	13%	11.41	9.78	10.85
2012	6,928	0.451	1078	4.1	259	81	243,010	↑ 12.3	11.2	1.2	10%	11.03	9.69	10.82
30yr 105-125 LTV 4	8,353	0.450	2637	4.6	270	73	228,943	↓ 12.9	13.9	-1.1	-8%	12.49	10.37	11.40
2018	41	0.967	25	4.7	324	13	219,823	↑ 0.2	0.2	0.0	*n.m.	0.22	0.21	1.09
2017	256	0.883	108	4.6	323	23	224,379	↓ 5.6	7.5	-1.9	-26%	5.73	5.60	6.23
2016	188	0.761	103	4.6	315	36	214,005	↑ 15.3	10.5	4.8	46%	10.86	9.38	9.86
2015	521	0.694	217	4.6	301	47	214,067	↓ 13.2	16.1	-2.9	-18%	13.13	10.39	10.84
2014	826	0.607	393	4.7	276	59	217,367	↓ 9.9	11.5	-1.6	-14%	10.84	9.11	9.82
2013	1,887	0.519	681	4.6	274	70	217,963	↓ 13.7	15.2	-1.4	-9%	13.37	11.23	11.76
2012	4,155	0.387	858	4.5	260	84	236,970	↓ 13.7	14.6	-0.9	-6%	13.14	10.72	12.05
2011	377	0.328	169	4.6	242	91	245,246	↑ 11.9	11.4	0.5	4%	11.05	9.55	11.56
2010	101	0.285	79	4.5	237	102	257,683	↑ 9.4	8.1	1.3	16%	8.43	9.74	10.62
30yr 105-125 LTV 4.5	3,186	0.360	1478	5.0	267	79	230,886	↑ 16.2	14.7	1.5	10%	14.21	11.99	12.96
2015	33	0.648	60	4.9	302	50	194,047	↓ 19.2	27.5	-8.3	-30%	21.82	15.69	16.43
2014	667	0.557	276	5.1	289	60	210,020	↑ 16.6	14.5	2.1	15%	15.44	12.50	12.89
2013	772	0.495	297	5.1	280	67	213,376	↑ 14.1	13.3	0.8	6%	12.86	11.65	12.43
2012	332	0.339	182	4.9	259	86	231,427	↓ 15.0	16.5	-1.5	-9%	13.79	11.48	13.84
2011	988	0.279	357	5.0	248	94	251,602	↑ 17.8	15.1	2.7	18%	14.77	12.06	13.10
2010	312	0.229	206	5.0	241	103	256,715	↑ 18.5	14.8	3.8	26%	13.78	12.75	13.63
30yr 105-125 LTV 5	935	0.217	700	5.4	250	98	250,493	↑ 19.3	18.5	0.7	4%	17.18	14.36	15.75
2013	46	0.500	29	5.6	284	67	198,723	↑ 17.9	8.4	9.5	113%	11.00	9.47	11.18
2011	538	0.239	309	5.4	250	96	253,215	↓ 18.2	18.6	-0.4	-2%	17.18	14.16	15.34
2010	274	0.171	256	5.5	242	107	258,708	↑ 21.7	19.4	2.4	12%	18.66	15.81	17.25
2009	48	0.162	54	5.4	236	114	263,126	↑ 24.1	21.2	3.0	14%	18.32	13.65	16.09
30yr 105-125 LTV 5.5	62	0.163	159	5.9	243	107	252,931	↑ 24.7	18.7	6.1	32%	28.78	21.20	20.46
2010	43	0.159	77	5.9	240	109	254,666	↑ 27.8	25.6	2.2	8%	29.73	23.43	21.59

*n.m. - Not Meaningful

Source: Bloomberg

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FNMA Prepayment Speeds

June 2019

FNMA 125+ LTV

	Indicative Data							Prepayment Speeds						
	Cur Bal (MM)	Factor	# of Pools	WAC	WAM	WALA	WAOLS	Jun	May	Chg	% Chg	3mo	6mo	12mo
30yr 125+ LTV 3	2,400	0.566	676	3.8	258	75	234,249	↑ 10.8	8.8	2.0	23%	9.49	8.48	9.31
2013	1,375	0.581	344	3.8	260	74	231,563	↑ 11.2	9.1	2.1	23%	9.60	8.76	9.21
2012	956	0.535	279	3.7	253	78	239,582	↑ 10.4	8.5	1.9	22%	9.45	8.19	9.65
30yr 125+ LTV 3.5	12,984	0.524	1830	4.1	266	76	233,329	↑ 13.2	11.2	1.9	17%	11.44	9.90	10.97
2016	133	0.836	73	4.2	315	35	212,026	↑ 13.1	6.1	7.0	113%	6.64	4.72	5.57
2015	182	0.735	125	4.2	283	46	204,669	↑ 9.6	7.4	2.3	31%	7.99	8.68	9.37
2014	55	0.698	60	4.4	244	57	197,891	↑ 19.5	2.8	16.7	*n.m.	9.73	8.23	6.46
2013	4,860	0.562	737	4.1	271	73	224,948	↓ 11.1	11.2	-0.2	-2%	10.83	9.58	10.58
2012	7,723	0.495	801	4.1	261	80	239,955	↑ 14.6	11.5	3.1	27%	12.01	10.24	11.39
30yr 125+ LTV 4	7,329	0.497	1804	4.6	269	76	223,420	↑ 14.2	12.5	1.7	13%	12.63	10.84	11.81
2017	89	0.892	56	4.7	324	23	200,335	↑ 4.2	4.2	0.0	*n.m.	5.59	4.80	5.54
2016	89	0.804	70	4.6	315	36	193,987	↓ 10.7	13.3	-2.7	-20%	9.24	7.59	7.07
2015	256	0.726	155	4.6	301	47	191,244	↑ 10.6	6.7	4.0	60%	8.72	8.70	10.10
2014	428	0.652	243	4.7	277	59	203,217	↑ 9.4	9.0	0.5	5%	8.43	7.05	9.12
2013	1,732	0.562	607	4.6	275	71	212,623	↓ 13.5	13.8	-0.3	-2%	12.76	10.97	11.62
2012	4,719	0.452	660	4.5	263	82	231,967	↑ 15.3	12.8	2.5	19%	13.36	11.42	12.42
30yr 125+ LTV 4.5	1,780	0.528	803	5.1	278	69	211,290	↑ 14.8	13.7	1.2	9%	13.34	11.18	12.45
2014	496	0.627	239	5.1	287	61	199,286	↓ 12.1	12.5	-0.4	-3%	11.36	9.21	10.57
2013	812	0.567	292	5.1	279	68	210,085	↑ 14.0	11.5	2.5	21%	12.43	11.15	11.89
2012	431	0.395	168	5.0	264	84	229,705	↑ 19.5	19.2	0.3	2%	17.46	13.37	15.51
30yr 125+ LTV 5	90	0.546	80	5.5	286	64	183,528	↑ 17.0	16.9	0.1	1%	12.98	11.57	13.52
2014	44	0.565	32	5.4	291	61	183,138	↓ 12.0	19.4	-7.4	-38%	12.46	10.36	13.43
2013	46	0.533	37	5.6	281	67	182,782	↑ 21.7	14.6	7.1	48%	13.59	12.81	13.71

*n.m. - Not Meaningful

Source: Bloomberg

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FNMA Prepayment Speeds

June 2019

FNMA Relocation

	Indicative Data							Prepayment Speeds						
	Cur Bal (MM)	Factor	# of Pools	WAC	WAM	WALA	WAOLS	Jun	May	Chg	% Chg	3mo	6mo	12mo
15yr RELO 2	34	0.448	18	2.6	121	49	310,384	↑ 14.3	12.6	1.7	14%	14.86	14.23	13.87
2015	15	0.451	7	2.6	119	47	306,303	↑ 24.2	2.7	21.5	*n.m.	11.39	11.98	14.10
15yr RELO 2.5	186	0.349	85	3.0	117	56	280,390	↑ 19.6	15.8	3.8	24%	17.10	15.19	16.82
2017	28	0.708	12	3.0	149	22	302,410	↑ 27.6	9.9	17.7	179%	18.10	13.89	11.88
2015	28	0.498	7	2.9	127	45	288,117	↑ 20.5	16.2	4.3	26%	15.96	15.14	18.27
2014	74	0.355	41	3.0	116	58	271,050	↑ 16.8	13.8	2.9	21%	15.07	12.73	15.33
30yr RELO 2	235	0.486	40	3.1	288	61	323,256	↑ 16.4	9.1	7.3	81%	10.95	9.68	12.51
2016	70	0.780	10	3.1	323	32	328,275	↑ 9.9	5.7	4.2	74%	5.65	5.59	11.84
2013	117	0.426	25	3.1	275	73	321,164	↑ 19.2	9.7	9.5	97%	12.10	9.77	12.89
2012	46	0.401	3	3.0	269	77	311,669	↑ 19.3	12.4	6.9	55%	11.55	8.30	11.75
30yr RELO 3	4,131	0.645	337	3.8	316	36	330,105	↑ 15.6	12.5	3.1	25%	13.03	11.09	11.60
2018	520	0.942	39	4.1	344	12	339,457	↓ 6.3	6.8	-0.5	-7%	5.65	5.59	4.34
2017	1,391	0.859	94	3.8	334	21	332,323	↑ 13.4	13.3	0.1	1%	12.26	10.16	8.43
2016	516	0.701	22	3.6	320	33	323,068	↑ 21.2	17.7	3.6	20%	17.42	16.42	15.96
2015	859	0.576	58	3.7	304	47	325,205	↑ 18.7	11.4	7.3	64%	13.74	11.56	14.40
2014	291	0.481	45	3.9	292	57	330,363	↑ 20.1	10.4	9.7	93%	14.29	11.56	13.85
2013	271	0.399	34	3.5	277	72	324,584	↑ 21.5	11.5	9.9	86%	15.93	12.59	14.43
2012	226	0.360	31	3.5	265	83	327,560	↓ 11.1	14.9	-3.8	-25%	16.12	11.82	13.46
2011	31	0.433	7	3.8	249	90	342,186	↑ 17.3	15.3	2.0	13%	14.83	14.06	15.33
30yr RELO 3.5	1,604	0.415	197	4.1	299	52	318,921	↑ 16.5	12.8	3.7	29%	13.86	11.61	13.13
2018	358	0.941	25	4.3	345	11	345,049	↑ 11.7	4.8	6.8	*n.m.	6.81	5.32	5.08
2017	193	0.793	15	4.1	328	25	325,650	↑ 19.2	16.4	2.8	17%	16.41	14.02	12.81
2014	518	0.374	64	4.2	291	59	300,017	↑ 17.2	15.0	2.1	14%	16.42	14.50	16.73
2013	168	0.335	26	4.1	281	68	305,857	↑ 23.4	16.3	7.1	44%	16.98	13.98	15.22
2012	100	0.290	18	3.9	259	87	318,024	↓ 5.7	8.8	-3.1	-35%	11.18	9.83	12.83
2011	129	0.265	28	4.0	252	92	325,776	↑ 11.4	11.1	0.4	3%	10.64	9.02	11.27
2010	111	0.226	14	3.9	241	102	322,232	↑ 27.4	16.3	11.1	68%	17.14	12.05	12.99
30yr RELO 4	461	0.167	143	4.5	270	78	307,992	↑ 14.2	14.0	0.2	2%	13.42	10.67	13.83
2014	87	0.242	37	4.6	290	62	276,057	↑ 20.8	9.7	11.1	114%	14.24	11.11	17.11
2011	150	0.138	48	4.4	249	96	301,200	↓ 11.0	13.0	-1.9	-15%	13.80	11.75	14.44
2010	124	0.115	25	4.4	240	106	315,127	↑ 17.7	16.9	0.8	4%	15.33	10.85	11.78
30yr RELO 4.5	75	0.042	282	5.0	211	134	250,356	↑ 21.8	11.3	10.4	92%	13.82	14.66	16.53
2011	31	0.098	18	4.8	246	98	271,580	↓ 5.4	12.4	-7.0	-57%	6.37	11.31	17.30

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Source: Bloomberg

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