

# FNMA Prepayment Speeds

## January 2018

### FNMA 10yr

	Indicative Data							Prepayment Speeds						
	Cur Bal (MM)	Factor	# of Pools	WAC	WAM	WALA	WAOLS	Jan	Dec	Chg	% Chg	3mo	6mo	12mo
<b>FNMA 10yr 2</b>	3,465	0.395	182	2.7	68	48	221,318	<b>12.5</b>	12.9	-0.4	<b>-3%</b>	11.71	11.57	11.34
2017	19	0.929	6	2.7	110	9	256,299	<b>4.4</b>	1.3	3.1	<b>*n.m.</b>	5.51	3.82	-
2016	696	0.793	28	2.6	100	17	259,186	<b>8.4</b>	9.0	-0.6	<b>-6%</b>	7.51	7.38	7.27
2015	102	0.600	19	2.7	85	31	242,654	<b>11.6</b>	15.3	-3.7	<b>-24%</b>	11.09	13.00	10.82
2014	96	0.506	16	2.9	77	39	231,493	<b>13.8</b>	13.0	0.8	<b>6%</b>	11.74	12.71	11.42
2013	2,095	0.355	83	2.7	59	56	211,417	<b>13.4</b>	14.2	-0.8	<b>-5%</b>	12.67	12.42	12.24
2012	457	0.285	30	2.7	53	62	200,722	<b>14.6</b>	12.8	1.8	<b>14%</b>	13.80	13.35	13.09
<b>FNMA 10yr 2.5</b>	16,421	0.410	582	3.0	77	39	213,977	<b>12.4</b>	12.3	0.0	<b>0%</b>	12.13	12.16	11.86
2017	1,039	0.923	13	3.0	112	6	238,589	<b>8.1</b>	8.8	-0.7	<b>-8%</b>	8.59	7.92	-
2016	4,465	0.775	44	2.9	99	17	224,982	<b>9.2</b>	9.5	-0.3	<b>-3%</b>	9.35	9.22	8.31
2015	2,674	0.580	56	3.0	85	31	214,731	<b>11.7</b>	11.8	-0.1	<b>-1%</b>	11.45	11.54	11.38
2014	1,714	0.434	64	3.2	73	42	205,279	<b>13.3</b>	13.3	0.0	<b>0%</b>	13.43	13.64	13.47
2013	2,662	0.329	145	3.0	59	56	184,279	<b>14.0</b>	14.1	0.0	<b>0%</b>	13.88	14.01	13.68
2012	3,682	0.240	228	3.0	50	66	219,417	<b>15.9</b>	14.9	1.0	<b>7%</b>	14.70	14.49	14.27
2011	185	0.157	32	3.1	42	74	198,977	<b>14.7</b>	16.3	-1.6	<b>-10%</b>	15.44	16.60	16.76
<b>FNMA 10yr 3</b>	9,983	0.270	538	3.5	73	43	182,803	<b>14.8</b>	14.5	0.4	<b>3%</b>	14.33	14.36	14.29
2017	2,246	0.916	18	3.4	111	6	197,387	<b>8.1</b>	7.8	0.4	<b>4%</b>	7.38	7.70	7.03
2016	1,059	0.740	23	3.5	97	18	168,995	<b>11.8</b>	12.0	-0.2	<b>-2%</b>	11.76	11.28	10.30
2015	1,086	0.578	31	3.5	85	29	163,625	<b>13.0</b>	14.6	-1.6	<b>-11%</b>	13.45	14.11	13.70
2014	1,046	0.417	46	3.6	72	42	153,311	<b>15.4</b>	15.6	-0.2	<b>-1%</b>	15.63	15.83	15.23
2013	985	0.329	109	3.6	62	53	150,153	<b>16.3</b>	14.3	1.9	<b>14%</b>	14.96	15.00	14.58
2012	1,109	0.190	184	3.5	46	69	180,490	<b>17.2</b>	18.6	-1.4	<b>-7%</b>	17.36	16.89	16.43
2011	2,144	0.131	101	3.5	40	76	212,408	<b>20.2</b>	17.8	2.4	<b>13%</b>	18.49	17.60	17.18
2010	309	0.086	26	3.6	31	86	198,292	<b>24.1</b>	21.2	2.9	<b>14%</b>	21.39	19.71	18.43
<b>FNMA 10yr 3.5</b>	2,698	0.135	273	4.0	61	55	161,060	<b>16.6</b>	16.3	0.3	<b>2%</b>	16.20	16.07	16.38
2017	661	0.909	16	3.9	109	7	149,062	<b>8.0</b>	10.7	-2.7	<b>-25%</b>	8.62	7.65	6.27
2016	105	0.730	12	4.0	96	19	121,779	<b>6.9</b>	16.4	-9.5	<b>-58%</b>	11.98	12.58	11.37
2015	80	0.557	14	4.2	84	30	109,306	<b>12.7</b>	14.7	-2.0	<b>-14%</b>	15.81	16.11	16.44
2014	219	0.402	22	4.2	69	43	117,584	<b>15.7</b>	14.8	0.9	<b>6%</b>	15.83	15.16	14.88
2013	186	0.326	25	4.1	62	52	114,043	<b>16.9</b>	13.7	3.2	<b>23%</b>	15.54	14.99	15.11
2012	70	0.185	36	4.1	46	69	120,053	<b>18.4</b>	19.5	-1.2	<b>-6%</b>	17.31	16.27	17.22
2011	645	0.107	82	4.0	36	80	175,790	<b>20.3</b>	17.7	2.5	<b>14%</b>	18.42	18.14	18.18
2010	733	0.064	59	3.9	29	88	198,961	<b>22.2</b>	20.4	1.8	<b>9%</b>	20.79	20.51	19.81
<b>FNMA 10yr 4</b>	528	0.037	187	4.4	26	91	154,840	<b>24.4</b>	23.1	1.3	<b>6%</b>	23.03	21.90	21.39
2011	104	0.099	37	4.5	35	81	136,280	<b>19.1</b>	20.4	-1.3	<b>-6%</b>	20.94	20.21	18.85
2010	240	0.045	51	4.4	25	92	161,246	<b>24.5</b>	22.1	2.3	<b>11%</b>	22.03	20.90	20.86
2009	162	0.021	66	4.5	17	101	169,220	<b>28.8</b>	26.9	1.9	<b>7%</b>	26.71	24.93	23.89
<b>FNMA 10yr 4.5</b>	53	0.015	103	4.9	19	99	129,965	<b>32.2</b>	27.7	4.5	<b>16%</b>	27.54	25.60	24.35
2009	33	0.020	49	4.9	16	102	136,685	<b>31.1</b>	26.5	4.5	<b>17%</b>	26.62	25.53	24.18

\*n.m. - Not Meaningful

Source: Bloomberg

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# FNMA Prepayment Speeds

## January 2018

### FNMA 15yr

	Indicative Data							Prepayment Speeds						
	Cur Bal (MM)	Factor	# of Pools	WAC	WAM	WALA	WAOLS	Jan	Dec	Chg	% Chg	3mo	6mo	12mo
<b>FNMA 15yr 2</b>	19,571	0.608	1646	2.6	132	43	275,867	<b>6.8</b>	7.0	-0.2	<b>-3%</b>	6.90	7.20	7.03
2017	27	0.950	12	2.6	169	9	262,930	<b>0.6</b>	0.5	0.1	<b>*n.m.</b>	1.45	2.98	1.81
2016	6,735	0.870	273	2.6	161	17	290,059	<b>4.8</b>	5.2	-0.4	<b>-7%</b>	4.90	5.08	4.50
2015	764	0.713	134	2.8	143	32	291,296	<b>7.7</b>	9.3	-1.6	<b>-17%</b>	8.41	8.38	7.96
2014	91	0.649	23	2.8	135	39	257,909	<b>5.9</b>	7.9	-2.0	<b>-25%</b>	9.11	7.99	7.45
2013	7,771	0.531	811	2.6	117	57	271,477	<b>7.9</b>	7.8	0.1	<b>2%</b>	7.86	8.12	8.26
2012	4,174	0.487	388	2.6	112	62	259,047	<b>7.8</b>	8.2	-0.4	<b>-5%</b>	7.96	8.57	8.41
<b>FNMA 15yr 2.5</b>	156,462	0.584	11744	3.0	136	40	263,737	<b>8.0</b>	8.3	-0.4	<b>-4%</b>	8.13	8.51	8.28
2017	8,169	0.956	400	3.0	173	6	286,154	<b>4.5</b>	4.6	-0.1	<b>*n.m.</b>	4.45	4.45	3.75
2016	51,026	0.843	2268	2.9	159	17	270,901	<b>6.3</b>	6.6	-0.3	<b>-5%</b>	6.47	6.67	6.00
2015	19,810	0.674	1464	3.0	144	31	268,678	<b>8.2</b>	9.1	-0.9	<b>-10%</b>	8.53	9.10	8.80
2014	5,191	0.568	797	3.1	135	39	266,658	<b>9.8</b>	10.7	-0.8	<b>-8%</b>	10.28	10.82	10.72
2013	30,038	0.505	2769	2.9	117	57	242,124	<b>8.9</b>	9.4	-0.5	<b>-5%</b>	9.08	9.44	9.41
2012	41,326	0.422	3906	3.0	109	65	264,014	<b>9.6</b>	9.5	0.1	<b>1%</b>	9.54	9.94	9.86
2011	888	0.337	137	3.1	98	75	237,565	<b>11.4</b>	12.2	-0.8	<b>-7%</b>	11.10	11.49	11.43
<b>FNMA 15yr 3</b>	141,101	0.526	16491	3.5	139	37	227,828	<b>9.3</b>	10.0	-0.7	<b>-7%</b>	9.69	10.42	10.32
2017	36,090	0.940	1804	3.4	172	6	248,907	<b>5.8</b>	6.0	-0.2	<b>-3%</b>	5.93	6.59	5.65
2016	15,504	0.809	1758	3.5	158	18	207,272	<b>9.3</b>	9.7	-0.3	<b>-3%</b>	9.51	9.86	8.57
2015	22,733	0.667	2431	3.5	146	30	222,931	<b>9.8</b>	11.1	-1.3	<b>-12%</b>	10.56	11.31	10.70
2014	18,339	0.525	2353	3.5	132	42	223,238	<b>10.8</b>	11.9	-1.1	<b>-9%</b>	11.47	12.07	11.91
2013	15,099	0.464	2523	3.5	121	53	209,103	<b>10.6</b>	11.4	-0.8	<b>-7%</b>	11.10	11.62	11.67
2012	17,880	0.352	3898	3.5	105	68	212,396	<b>11.1</b>	11.0	0.1	<b>1%</b>	11.03	11.62	11.51
2011	13,521	0.276	1428	3.4	98	75	250,728	<b>11.1</b>	11.6	-0.5	<b>-4%</b>	11.19	11.69	11.57
2010	1,929	0.208	291	3.6	87	86	229,238	<b>12.4</b>	12.5	-0.1	<b>0%</b>	11.85	12.72	12.47
<b>FNMA 15yr 3.5</b>	47,288	0.323	11543	4.0	122	52	180,448	<b>11.1</b>	11.7	-0.5	<b>-5%</b>	11.45	12.01	12.06
2017	9,183	0.934	1130	4.0	169	7	172,237	<b>6.5</b>	6.9	-0.4	<b>-6%</b>	6.96	6.99	5.26
2016	2,415	0.797	601	4.0	154	19	130,284	<b>10.7</b>	10.7	0.0	<b>0%</b>	10.69	10.91	9.85
2015	3,241	0.670	1013	4.0	144	30	137,217	<b>11.8</b>	11.8	0.1	<b>1%</b>	12.07	12.72	12.45
2014	6,225	0.513	1735	4.1	131	43	160,456	<b>12.2</b>	12.4	-0.3	<b>-2%</b>	12.42	13.07	13.08
2013	5,202	0.448	1371	4.0	122	52	171,378	<b>11.0</b>	13.0	-2.0	<b>-15%</b>	12.33	12.90	12.89
2012	2,515	0.333	1590	4.0	103	69	150,609	<b>12.8</b>	12.8	0.0	<b>0%</b>	12.73	13.41	13.23
2011	8,776	0.237	2295	3.9	94	78	202,615	<b>12.2</b>	12.6	-0.4	<b>-3%</b>	12.30	12.92	12.88
2010	9,580	0.163	1581	3.9	86	87	220,728	<b>13.1</b>	13.5	-0.4	<b>-3%</b>	12.97	13.35	13.29
2009	142	0.115	144	4.0	71	102	202,465	<b>16.7</b>	16.5	0.2	<b>1%</b>	14.66	13.40	14.31
<b>FNMA 15yr 4</b>	15,338	0.088	8233	4.4	85	88	181,116	<b>13.9</b>	14.4	-0.5	<b>-3%</b>	14.04	14.29	14.53
2017	599	0.921	94	4.5	167	8	149,220	<b>7.8</b>	11.0	-3.2	<b>-29%</b>	8.95	9.02	6.27
2016	166	0.512	142	4.6	125	45	84,642	<b>9.8</b>	14.2	-4.5	<b>-31%</b>	12.77	13.68	13.90
2015	309	0.481	219	4.6	121	51	100,617	<b>11.9</b>	14.4	-2.5	<b>-17%</b>	13.02	14.13	13.90
2014	196	0.307	290	4.5	102	70	117,807	<b>13.6</b>	16.6	-3.0	<b>-18%</b>	15.10	14.73	15.02
2013	4,266	0.192	1851	4.4	92	81	173,403	<b>12.8</b>	13.7	-0.8	<b>-6%</b>	13.46	13.56	13.85
2012	5,138	0.117	1886	4.4	82	91	188,197	<b>13.9</b>	13.7	0.3	<b>2%</b>	13.78	14.00	14.17
2011	4,285	0.068	1625	4.5	71	102	197,603	<b>14.5</b>	14.8	-0.3	<b>-2%</b>	14.29	14.77	14.94
2010	107	0.045	188	4.6	59	115	191,756	<b>12.2</b>	14.7	-2.5	<b>-17%</b>	14.75	14.50	15.41
<b>FNMA 15yr 4.5</b>	5,227	0.023	10389	4.9	65	110	165,666	<b>19.4</b>	19.6	-0.2	<b>-1%</b>	18.87	18.54	18.40
2011	602	0.202	692	4.8	92	81	139,739	<b>15.8</b>	18.5	-2.7	<b>-15%</b>	16.73	16.17	15.58
2010	1,158	0.123	880	4.8	80	93	153,532	<b>15.6</b>	16.8	-1.2	<b>-7%</b>	15.72	15.45	15.56
2009	1,930	0.070	1400	4.9	72	102	171,103	<b>16.4</b>	15.3	1.1	<b>7%</b>	15.37	15.35	15.51
<b>FNMA 15yr 5</b>	1,968	0.013	9810	5.5	42	135	156,545	<b>22.4</b>	22.1	0.3	<b>1%</b>	22.03	21.80	21.39
2010	48	0.155	135	5.4	81	93	123,390	<b>13.5</b>	17.9	-4.4	<b>-25%</b>	14.58	15.51	14.76
2009	153	0.100	406	5.5	73	102	119,648	<b>15.3</b>	13.0	2.3	<b>18%</b>	14.84	14.69	14.47

\*n.m. - Not Meaningful

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# FNMA Prepayment Speeds

## January 2018

### FNMA 20yr

	Indicative Data							Prepayment Speeds						
	Cur Bal (MM)	Factor	# of Pools	WAC	WAM	WALA	WAOLS	Jan	Dec	Chg	% Chg	3mo	6mo	12mo
<b>FNMA 20yr 2.5</b>	6,692	0.760	188	3.2	206	31	277,817	<b>5.7</b>	5.6	0.0	<b>1%</b>	5.56	5.85	5.28
2017	27	0.969	5	3.5	230	8	284,877	<b>0.9</b>	2.5	-1.6	<b>*n.m.</b>	1.25	2.63	-
2016	4,351	0.908	42	3.2	222	16	295,037	<b>4.6</b>	4.2	0.4	<b>*n.m.</b>	4.52	4.74	4.11
2015	61	0.699	11	3.3	203	34	292,293	<b>11.1</b>	1.2	9.9	<b>*n.m.</b>	6.41	4.50	5.75
2013	919	0.599	51	3.3	176	58	249,740	<b>7.7</b>	8.4	-0.7	<b>-8%</b>	7.51	8.12	7.66
2012	1,320	0.564	74	3.2	171	62	240,127	<b>7.7</b>	8.6	-0.9	<b>-10%</b>	7.56	7.85	7.31
<b>FNMA 20yr 3</b>	61,557	0.677	1744	3.6	200	36	251,831	<b>6.9</b>	8.0	-1.2	<b>-14%</b>	7.63	8.36	7.85
2017	5,429	0.971	75	3.7	233	5	273,937	<b>3.1</b>	3.0	0.1	<b>*n.m.</b>	3.26	3.52	2.55
2016	21,182	0.880	247	3.6	221	17	260,395	<b>6.1</b>	6.6	-0.5	<b>-8%</b>	6.45	6.90	5.82
2015	9,650	0.711	152	3.8	206	31	258,434	<b>7.9</b>	9.8	-1.9	<b>-19%</b>	9.10	9.95	9.27
2014	1,760	0.571	70	3.9	196	39	251,461	<b>9.3</b>	12.4	-3.1	<b>-25%</b>	12.06	12.87	11.73
2013	10,367	0.574	555	3.6	177	57	220,241	<b>7.3</b>	9.6	-2.3	<b>-24%</b>	8.46	9.24	9.09
2012	13,032	0.498	621	3.6	169	65	249,194	<b>8.3</b>	9.0	-0.7	<b>-8%</b>	8.69	9.51	9.23
2011	122	0.393	19	3.6	159	74	234,993	<b>9.8</b>	16.8	-6.9	<b>-41%</b>	11.46	10.40	10.73
<b>FNMA 20yr 3.5</b>	37,223	0.513	2469	4.0	194	41	227,152	<b>8.3</b>	9.6	-1.3	<b>-14%</b>	9.49	10.58	10.43
2017	9,948	0.956	271	4.0	232	6	248,147	<b>4.4</b>	4.9	-0.5	<b>*n.m.</b>	5.10	5.71	4.33
2016	2,712	0.850	135	4.0	221	17	220,805	<b>8.3</b>	10.9	-2.5	<b>-23%</b>	9.30	9.61	8.17
2015	3,892	0.686	362	4.1	206	31	204,763	<b>9.8</b>	12.2	-2.4	<b>-20%</b>	11.96	13.14	12.21
2014	3,678	0.509	214	4.2	194	42	218,253	<b>12.0</b>	12.3	-0.3	<b>-3%</b>	12.98	14.28	13.74
2013	4,127	0.513	487	4.1	181	54	193,805	<b>9.6</b>	11.5	-1.9	<b>-16%</b>	10.75	11.16	11.26
2012	7,021	0.409	749	4.0	165	68	229,320	<b>8.9</b>	10.0	-1.0	<b>-10%</b>	9.95	11.27	11.14
2011	4,642	0.299	201	4.0	158	75	239,267	<b>9.7</b>	10.7	-1.0	<b>-9%</b>	10.78	11.43	11.14
2010	1,201	0.226	47	4.0	147	86	222,563	<b>8.9</b>	9.8	-0.9	<b>-9%</b>	9.73	10.76	11.15
<b>FNMA 20yr 4</b>	19,355	0.357	1813	4.5	190	46	203,409	<b>10.0</b>	11.3	-1.3	<b>-11%</b>	11.02	11.99	12.00
2017	5,557	0.952	316	4.4	232	7	216,534	<b>6.6</b>	7.7	-1.1	<b>-14%</b>	6.91	6.74	4.64
2016	1,073	0.806	133	4.4	218	19	195,818	<b>10.6</b>	13.4	-2.8	<b>-21%</b>	11.95	12.56	11.51
2015	1,602	0.680	285	4.4	207	30	176,977	<b>12.1</b>	12.0	0.1	<b>1%</b>	13.28	14.75	13.62
2014	2,686	0.544	287	4.6	192	43	178,186	<b>11.9</b>	12.3	-0.4	<b>-3%</b>	12.61	14.02	13.86
2013	1,369	0.488	200	4.7	184	51	173,037	<b>11.0</b>	15.6	-4.7	<b>-30%</b>	13.56	14.07	13.40
2012	529	0.386	185	4.5	164	69	196,651	<b>12.3</b>	14.2	-2.0	<b>-14%</b>	13.93	13.63	13.50
2011	2,633	0.265	192	4.5	156	78	215,985	<b>10.7</b>	12.4	-1.7	<b>-14%</b>	12.02	13.23	13.16
2010	3,273	0.172	127	4.4	145	87	221,211	<b>10.9</b>	11.5	-0.6	<b>-5%</b>	11.74	12.79	12.81
2009	619	0.097	65	4.5	127	103	202,963	<b>12.3</b>	10.8	1.5	<b>14%</b>	11.92	13.14	13.17
<b>FNMA 20yr 4.5</b>	4,639	0.118	539	4.9	140	93	194,996	<b>13.2</b>	13.6	-0.4	<b>-3%</b>	13.61	14.46	14.49
2017	140	0.959	37	5.0	233	6	156,721	<b>7.2</b>	5.0	2.2	<b>*n.m.</b>	5.83	6.07	7.02
2014	85	0.560	35	5.2	189	46	137,983	<b>9.1</b>	9.8	-0.7	<b>-7%</b>	13.36	14.57	14.14
2013	74	0.506	24	5.2	184	51	147,342	<b>10.2</b>	8.3	1.9	<b>23%</b>	10.37	11.54	12.18
2011	1,228	0.229	81	4.9	153	81	202,417	<b>12.3</b>	15.3	-3.0	<b>-20%</b>	13.11	14.12	14.53
2010	1,500	0.146	93	4.9	141	92	209,129	<b>14.1</b>	14.4	-0.3	<b>-2%</b>	14.76	15.40	15.21
2009	1,210	0.090	123	4.9	130	102	192,014	<b>13.4</b>	13.3	0.1	<b>1%</b>	13.52	14.55	14.20
<b>FNMA 20yr 5</b>	1,902	0.041	542	5.5	94	140	166,141	<b>12.7</b>	14.9	-2.2	<b>-15%</b>	14.16	14.53	14.56
2017	11	0.917	4	5.7	228	10	135,488	<b>43.6</b>	0.4	43.2	<b>*n.m.</b>	17.54	12.31	-
2011	122	0.252	21	5.4	152	81	187,630	<b>9.2</b>	18.8	-9.6	<b>-51%</b>	18.25	18.59	17.59
2010	194	0.149	39	5.4	140	93	178,181	<b>16.8</b>	23.1	-6.4	<b>-28%</b>	17.75	18.68	17.59
2009	200	0.116	51	5.4	132	101	181,772	<b>11.3</b>	12.6	-1.3	<b>-11%</b>	14.17	14.42	15.08

\*n.m. - Not Meaningful

Source: Bloomberg

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FNMA Prepayment Speeds  
January 2018  
FNMA Jumbos

	Indicative Data							Prepayment Speeds						
	Cur Bal (MM)	Factor	# of Pools	WAC	WAM	WALA	WAOLS	Jan	Dec	Chg	% Chg	3mo	6mo	12mo
15yr Jumbo 2	95	0.616	17	2.6	128	48	543,950	6.5	10.4	-3.9	-38%	7.46	5.48	7.31
2013	72	0.574	9	2.6	120	56	545,482	8.3	12.4	-4.1	-33%	7.25	5.81	8.11
15yr Jumbo 2.5	1,936	0.605	114	2.9	140	36	537,621	6.6	9.6	-2.9	-31%	7.43	7.54	6.89
2017	96	0.976	12	3.0	173	5	536,582	3.1	1.2	1.9	*n.m.	1.61	1.02	-
2016	719	0.870	14	2.9	162	16	525,890	4.0	5.5	-1.5	-27%	5.02	5.09	4.66
2015	294	0.618	21	3.0	143	32	544,258	7.3	8.6	-1.3	-15%	6.97	8.33	7.67
2014	44	0.505	10	3.1	133	40	540,633	1.5	10.9	-9.4	-87%	4.89	11.07	8.43
2013	465	0.504	34	2.9	116	58	542,311	6.0	12.9	-6.9	-54%	9.00	9.36	8.40
2012	319	0.405	22	3.0	111	63	551,041	14.2	15.9	-1.6	-10%	12.37	9.96	9.15
15yr Jumbo 3	446	0.244	104	3.5	119	56	556,835	7.0	14.6	-7.7	-52%	9.59	11.82	10.68
2017	81	0.898	14	3.5	171	8	553,127	13.8	22.1	-8.4	-38%	12.62	14.29	8.41
2014	27	0.420	13	3.5	133	42	543,021	2.7	17.1	-14.5	-84%	7.35	13.94	12.63
2012	99	0.210	27	3.5	104	69	548,296	7.2	17.7	-10.5	-59%	12.92	13.27	11.95
2011	198	0.177	24	3.4	99	75	570,764	5.8	9.7	-3.9	-40%	7.78	9.99	9.83
15yr Jumbo 3.5	175	0.100	88	3.9	97	76	580,684	12.2	8.4	3.8	45%	12.12	12.66	14.21
2011	112	0.098	53	3.9	94	78	581,479	15.5	11.3	4.1	37%	13.97	12.32	12.46
2010	41	0.077	18	3.9	87	86	591,263	3.7	2.5	1.2	*n.m.	5.43	11.00	14.34
30yr Jumbo 2.5	355	0.778	26	3.4	308	39	540,125	1.0	4.1	-3.1	*n.m.	3.01	3.38	3.63
2016	183	0.938	19	3.3	326	18	531,708	0.9	0.4	0.5	*n.m.	1.55	2.21	2.59
2012	162	0.656	4	3.5	288	62	549,320	1.2	8.3	-7.1	-86%	4.53	4.69	4.55
30yr Jumbo 3	30,835	0.726	411	3.7	318	36	540,763	5.3	6.4	-1.2	-18%	6.12	6.84	6.40
2017	1,252	0.983	26	3.8	352	5	541,044	1.4	2.3	-0.9	*n.m.	2.63	3.08	1.65
2016	13,654	0.902	96	3.7	338	18	534,605	4.8	5.6	-0.9	-15%	5.26	5.85	5.05
2015	2,879	0.709	73	3.8	322	32	534,747	6.0	7.3	-1.3	-17%	7.11	7.68	7.25
2014	538	0.657	15	3.8	312	39	527,941	4.9	12.4	-7.5	-61%	7.73	8.80	7.42
2013	6,200	0.608	89	3.7	294	58	544,525	5.6	8.3	-2.7	-33%	7.41	8.54	8.23
2012	6,310	0.576	110	3.7	288	63	554,137	6.5	6.0	0.5	7%	6.74	7.21	7.24
30yr Jumbo 3.5	25,668	0.559	546	4.1	329	27	545,585	9.8	11.6	-1.8	-15%	11.47	12.87	11.48
2017	10,239	0.952	84	4.2	353	6	544,732	9.4	9.5	-0.2	-2%	9.54	9.79	6.26
2016	4,545	0.791	54	4.2	341	17	548,175	12.7	16.2	-3.5	-22%	15.44	16.93	13.83
2015	3,040	0.563	80	4.1	327	30	537,718	9.3	13.2	-3.9	-29%	13.00	15.39	13.48
2014	1,291	0.381	41	4.2	314	41	527,973	12.4	17.8	-5.4	-30%	15.16	15.63	13.83
2013	1,412	0.423	60	4.1	299	55	541,653	6.7	10.1	-3.4	-34%	11.12	11.74	11.32
2012	4,599	0.320	163	4.0	284	67	553,900	8.8	9.2	-0.4	-4%	9.72	11.21	10.53
2011	480	0.187	48	4.1	276	75	561,655	5.8	4.8	1.0	*n.m.	7.08	9.71	11.68
2010	61	0.191	15	4.2	262	87	598,593	0.8	14.4	-13.7	*n.m.	5.51	9.21	8.03
30yr Jumbo 4	8,536	0.187	650	4.6	309	46	569,595	15.7	19.3	-3.7	-19%	19.01	21.09	18.44
2017	2,930	0.862	45	4.7	352	7	561,708	23.0	23.0	0.1	0%	24.66	26.54	17.89
2016	533	0.615	27	4.7	340	19	585,771	17.8	22.7	-4.9	-22%	20.73	26.25	25.98
2015	205	0.447	29	4.7	328	29	568,825	15.7	17.2	-1.5	-9%	20.71	22.62	21.40
2014	520	0.242	35	4.6	312	43	531,416	5.9	19.8	-14.0	-70%	16.99	20.96	20.35
2013	642	0.188	44	4.6	302	52	528,482	12.8	21.1	-8.3	-39%	18.44	21.10	18.43
2012	350	0.176	55	4.5	279	70	546,855	12.1	19.6	-7.5	-38%	14.70	17.61	16.26
2011	1,703	0.108	231	4.5	275	77	590,658	10.2	14.4	-4.2	-29%	13.90	16.65	15.48
2010	1,621	0.095	160	4.5	264	87	590,303	11.4	16.1	-4.7	-29%	15.38	16.13	15.70
2009	34	0.078	22	4.6	248	101	551,672	4.8	25.3	-20.5	-81%	15.95	9.91	12.55
30yr Jumbo 4.5	1,904	0.055	488	4.9	272	80	586,650	20.7	17.6	3.0	17%	20.37	21.14	21.11
2017	194	0.811	19	5.2	351	8	608,078	31.9	32.1	-0.2	-1%	34.68	33.43	22.40
2013	25	0.143	13	5.2	303	52	551,423	0.4	5.2	-4.8	*n.m.	16.81	8.94	13.57
2011	476	0.064	149	4.9	271	80	598,189	15.8	11.1	4.7	42%	17.83	20.31	21.32
2010	780	0.048	182	4.9	261	90	584,788	21.0	16.3	4.7	29%	17.70	18.96	19.31
2009	362	0.037	75	4.9	249	101	573,756	24.0	17.7	6.3	36%	21.20	20.86	22.16
30yr Jumbo 5	547	0.028	240	5.4	247	105	564,532	18.8	19.9	-1.1	-6%	19.98	21.42	22.40
2011	52	0.069	42	5.3	271	82	607,168	10.4	17.6	-7.2	-41%	16.45	22.01	24.28
2010	178	0.038	88	5.3	260	92	572,768	21.6	25.8	-4.2	-16%	22.31	22.57	22.46
2009	226	0.026	63	5.4	252	100	567,381	13.9	20.9	-7.0	-33%	18.50	21.45	21.44

\*n.m. - Not Meaningful

Source: Bloomberg

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FNMA Prepayment Speeds  
 January 2018  
 FNMA 105-125 LTV

	Indicative Data							Prepayment Speeds						
	Cur Bal (MM)	Factor	# of Pools	WAC	WAM	WALA	WAOLS	Jan	Dec	Chg	% Chg	3mo	6mo	12mo
<b>30yr 105-125 LTV 3</b>	3,429	0.640	513	3.7	265	57	234,183	<b>6.8</b>	9.9	-3.1	<b>-32%</b>	8.87	9.33	9.62
2016	182	0.923	52	3.9	305	18	227,723	<b>3.5</b>	2.7	0.8	<b>*n.m.</b>	3.61	3.41	4.33
2015	58	0.855	36	3.9	244	31	219,575	<b>5.6</b>	0.2	5.4	<b>*n.m.</b>	4.43	4.77	3.53
2013	1,982	0.646	219	3.7	268	58	232,247	<b>6.7</b>	10.3	-3.6	<b>-35%</b>	9.56	9.82	9.91
2012	1,192	0.594	196	3.7	253	63	239,209	<b>7.6</b>	10.9	-3.3	<b>-30%</b>	8.75	9.65	10.20
<b>30yr 105-125 LTV 3.5</b>	15,022	0.591	1113	4.1	281	59	238,115	<b>10.0</b>	11.3	-1.3	<b>-12%</b>	10.92	12.20	11.78
2017	59	0.984	23	4.1	313	8	237,324	<b>2.7</b>	0.2	2.6	<b>*n.m.</b>	1.02	0.60	0.39
2016	360	0.911	44	4.2	328	19	226,270	<b>6.7</b>	7.2	-0.5	<b>-7%</b>	6.34	6.85	5.36
2015	465	0.842	112	4.2	297	31	223,946	<b>6.7</b>	6.7	0.1	<b>1%</b>	7.04	7.15	6.38
2014	188	0.755	83	4.3	252	41	219,219	<b>8.9</b>	7.3	1.6	<b>23%</b>	10.24	10.08	8.65
2013	5,501	0.630	328	4.1	286	57	229,659	<b>10.3</b>	10.8	-0.5	<b>-4%</b>	10.64	11.76	11.38
2012	8,410	0.548	499	4.1	276	65	245,378	<b>10.2</b>	12.2	-2.0	<b>-17%</b>	11.55	13.06	12.68
2011	33	0.491	15	4.1	252	74	237,400	<b>9.4</b>	21.7	-12.3	<b>-57%</b>	14.33	16.68	12.83
<b>30yr 105-125 LTV 4</b>	10,157	0.548	922	4.6	286	58	230,777	<b>11.6</b>	12.7	-1.2	<b>-9%</b>	12.58	13.57	13.34
2017	283	0.979	29	4.6	340	8	225,449	<b>3.7</b>	1.6	2.1	<b>*n.m.</b>	2.18	2.03	1.46
2016	220	0.898	22	4.6	331	20	213,765	<b>9.3</b>	11.8	-2.5	<b>-21%</b>	8.81	7.65	6.48
2015	619	0.824	61	4.6	318	31	213,819	<b>11.6</b>	9.9	1.7	<b>18%</b>	10.61	8.79	8.83
2014	986	0.724	148	4.7	292	43	216,534	<b>11.8</b>	12.2	-0.4	<b>-3%</b>	11.61	11.79	11.01
2013	2,308	0.635	195	4.6	291	54	217,181	<b>10.0</b>	12.5	-2.5	<b>-20%</b>	11.70	12.76	12.29
2012	5,147	0.480	341	4.5	277	68	240,863	<b>12.6</b>	13.8	-1.2	<b>-9%</b>	13.82	15.14	15.07
2011	469	0.405	89	4.6	258	75	244,086	<b>11.2</b>	13.6	-2.4	<b>-17%</b>	14.12	16.36	15.60
2010	124	0.351	34	4.5	254	86	254,286	<b>17.9</b>	11.9	6.0	<b>50%</b>	15.77	18.70	16.38
<b>30yr 105-125 LTV 4.5</b>	3,945	0.447	479	5.0	283	64	232,782	<b>14.9</b>	15.9	-1.1	<b>-7%</b>	15.26	16.36	16.46
2017	26	0.986	7	5.1	343	9	227,575	<b>0.1</b>	0.1	0.0	<b>*n.m.</b>	0.12	0.34	0.28
2015	40	0.819	8	4.9	318	33	196,739	<b>3.2</b>	0.2	3.0	<b>*n.m.</b>	5.57	6.21	6.57
2014	829	0.689	52	5.1	306	44	210,806	<b>13.5</b>	13.9	-0.4	<b>-3%</b>	13.88	13.25	12.96
2013	953	0.612	75	5.1	297	51	213,738	<b>14.5</b>	14.5	0.0	<b>0%</b>	13.77	14.56	14.82
2012	415	0.429	64	4.9	275	70	233,366	<b>9.6</b>	19.0	-9.4	<b>-50%</b>	14.34	15.05	16.31
2011	1,257	0.353	159	5.0	265	78	253,439	<b>16.6</b>	17.7	-1.0	<b>-6%</b>	16.74	18.55	18.24
2010	399	0.294	93	5.0	257	87	260,578	<b>19.7</b>	15.8	3.9	<b>25%</b>	18.70	22.32	22.50
<b>30yr 105-125 LTV 5</b>	1,225	0.283	267	5.4	266	82	253,733	<b>16.5</b>	20.6	-4.1	<b>-20%</b>	19.75	21.93	22.45
2014	31	0.710	5	5.5	304	46	172,880	<b>8.2</b>	18.1	-9.9	<b>-55%</b>	14.22	11.60	13.08
2013	55	0.601	11	5.6	300	51	197,036	<b>19.1</b>	10.7	8.4	<b>79%</b>	14.46	16.69	16.08
2011	704	0.311	118	5.4	267	80	259,400	<b>16.0</b>	21.9	-5.8	<b>-27%</b>	19.81	21.57	22.19
2010	365	0.227	106	5.5	258	91	257,601	<b>15.1</b>	19.3	-4.1	<b>-21%</b>	20.18	23.15	24.18
2009	64	0.206	23	5.5	254	98	261,743	<b>30.0</b>	15.7	14.3	<b>91%</b>	20.86	25.52	23.07
<b>30yr 105-125 LTV 5.5</b>	87	0.225	57	5.9	258	92	254,536	<b>23.5</b>	28.0	-4.5	<b>-16%</b>	20.40	22.42	25.94
2010	60	0.217	33	5.9	255	93	254,591	<b>20.4</b>	23.6	-3.2	<b>-13%</b>	17.98	20.96	25.38

\*n.m. - Not Meaningful

Source: Bloomberg

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# FNMA Prepayment Speeds

## January 2018

### FNMA 125+ LTV

	Indicative Data							Prepayment Speeds						
	Cur Bal (MM)	Factor	# of Pools	WAC	WAM	WALA	WAOLS	Jan	Dec	Chg	% Chg	3mo	6mo	12mo
<b>30yr 125+ LTV 3</b>	2,855	0.674	393	3.8	274	59	233,397	<b>9.6</b>	10.7	-1.1	<b>-10%</b>	10.01	10.12	9.22
2013	1,631	0.690	198	3.8	277	58	230,876	<b>9.1</b>	8.8	0.3	<b>3%</b>	9.00	9.80	8.49
2012	1,148	0.642	162	3.7	269	62	238,265	<b>10.1</b>	13.4	-3.3	<b>-25%</b>	11.52	10.85	10.55
<b>30yr 125+ LTV 3.5</b>	15,736	0.636	827	4.1	282	61	234,000	<b>9.4</b>	11.3	-1.9	<b>-17%</b>	10.70	11.53	10.97
2017	27	0.987	13	4.1	329	9	215,277	<b>0.2</b>	0.3	-0.1	<b>*n.m.</b>	0.24	0.22	0.24
2016	152	0.936	31	4.2	332	19	210,340	<b>5.6</b>	3.6	2.0	<b>*n.m.</b>	4.50	4.42	3.43
2015	215	0.869	66	4.2	299	30	206,192	<b>9.1</b>	3.7	5.4	<b>*n.m.</b>	5.35	4.98	4.86
2014	64	0.795	37	4.4	259	41	197,233	<b>2.6</b>	3.8	-1.2	<b>*n.m.</b>	5.55	5.24	5.27
2013	5,846	0.678	284	4.1	288	57	224,602	<b>8.9</b>	10.5	-1.7	<b>-16%</b>	10.06	10.76	10.06
2012	9,432	0.605	396	4.1	278	64	241,143	<b>9.8</b>	12.1	-2.3	<b>-19%</b>	11.37	12.32	11.82
<b>30yr 125+ LTV 4</b>	8,984	0.610	592	4.6	286	60	227,193	<b>11.4</b>	11.1	0.3	<b>2%</b>	11.73	12.38	12.07
2017	96	0.980	17	4.7	341	7	198,876	<b>4.5</b>	0.3	4.2	<b>*n.m.</b>	4.09	2.17	1.30
2016	101	0.911	14	4.6	332	20	192,258	<b>3.5</b>	3.4	0.2	<b>*n.m.</b>	3.80	6.20	5.12
2015	301	0.855	46	4.6	318	31	191,022	<b>9.1</b>	5.6	3.4	<b>61%</b>	7.37	7.27	6.64
2014	506	0.770	102	4.7	293	43	202,104	<b>9.8</b>	7.6	2.2	<b>30%</b>	9.11	9.05	8.55
2013	2,116	0.686	171	4.6	292	55	212,766	<b>9.0</b>	10.3	-1.2	<b>-12%</b>	9.55	10.32	10.28
2012	5,864	0.562	242	4.5	280	66	237,491	<b>12.7</b>	12.2	0.4	<b>4%</b>	13.16	13.85	13.43
<b>30yr 125+ LTV 4.5</b>	2,187	0.650	211	5.1	295	53	213,379	<b>11.6</b>	10.5	1.1	<b>11%</b>	11.16	12.25	11.53
2017	13	0.965	7	5.1	342	8	196,698	<b>13.5</b>	9.1	4.4	<b>48%</b>	10.03	5.20	-
2015	26	0.807	6	4.9	319	34	174,895	<b>21.6</b>	4.8	16.9	<b>*n.m.</b>	11.69	11.18	9.25
2014	593	0.749	61	5.1	305	45	200,148	<b>10.9</b>	9.6	1.3	<b>13%</b>	9.13	10.10	9.60
2013	994	0.694	87	5.1	296	52	209,525	<b>10.7</b>	8.9	1.8	<b>21%</b>	10.19	11.15	10.65
2012	556	0.510	48	5.0	281	68	236,514	<b>12.9</b>	14.5	-1.6	<b>-11%</b>	14.82	16.45	15.15
<b>30yr 125+ LTV 5</b>	112	0.677	23	5.5	302	48	185,813	<b>9.8</b>	11.6	-1.8	<b>-16%</b>	9.53	11.71	11.47
2014	54	0.700	10	5.4	307	45	183,508	<b>8.7</b>	8.8	-0.1	<b>-1%</b>	6.00	9.19	10.82
2013	57	0.662	12	5.6	298	51	187,158	<b>11.0</b>	14.3	-3.3	<b>-23%</b>	12.85	14.10	12.17

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FNMA Prepayment Speeds  
 January 2018  
 FNMA Relocation

	Indicative Data							Prepayment Speeds						
	Cur Bal (MM)	Factor	# of Pools	WAC	WAM	WALA	WAOLS	Jan	Dec	Chg	% Chg	3mo	6mo	12mo
<b>15yr RELO 2</b>	45	0.605	18	2.6	137	34	305,222	<b>15.6</b>	26.0	-10.4	<b>-40%</b>	19.36	14.21	14.12
2015	20	0.607	7	2.6	135	31	297,313	<b>2.3</b>	28.7	-26.4	<b>-92%</b>	15.26	12.73	14.92
<b>15yr RELO 2.5</b>	254	0.484	74	3.0	132	43	278,127	<b>9.5</b>	12.8	-3.2	<b>-25%</b>	11.75	13.35	13.23
2017	35	0.921	9	3.0	170	6	299,889	<b>7.7</b>	5.7	2.0	<b>36%</b>	11.64	10.80	-
2015	40	0.705	7	2.9	145	29	289,105	<b>9.7</b>	19.2	-9.5	<b>-50%</b>	14.64	21.89	15.26
2014	103	0.493	40	3.0	132	43	270,266	<b>10.6</b>	8.3	2.3	<b>27%</b>	10.30	11.33	14.77
2012	32	0.346	9	2.8	106	68	276,022	<b>11.2</b>	23.3	-12.1	<b>-52%</b>	12.60	10.57	7.92
2011	28	0.295	2	2.9	99	74	264,708	<b>9.8</b>	19.1	-9.3	<b>-49%</b>	14.15	14.87	14.35
<b>30yr RELO 2.5</b>	292	0.603	39	3.1	306	46	322,619	<b>10.9</b>	14.2	-3.3	<b>-23%</b>	11.89	11.89	10.64
2016	84	0.936	9	3.1	342	16	328,168	<b>4.7</b>	8.6	-3.9	<b>-45%</b>	8.67	5.55	3.50
2013	147	0.535	25	3.1	293	57	321,095	<b>15.5</b>	14.8	0.7	<b>5%</b>	13.77	14.67	13.24
2012	57	0.501	3	3.0	287	61	308,087	<b>7.8</b>	14.0	-6.2	<b>-44%</b>	9.86	11.28	11.94
<b>30yr RELO 3</b>	4,176	0.740	254	3.7	329	26	325,855	<b>8.4</b>	9.8	-1.4	<b>-14%</b>	9.46	10.59	11.42
2017	1,400	0.978	74	3.8	353	5	330,405	<b>2.9</b>	2.7	0.2	<b>*n.m.</b>	2.99	3.60	3.01
2016	658	0.894	22	3.6	339	17	321,710	<b>7.7</b>	7.7	0.0	<b>0%</b>	8.19	7.70	7.01
2015	1,086	0.728	47	3.7	323	31	322,727	<b>13.7</b>	14.8	-1.0	<b>-7%</b>	14.64	14.75	14.66
2014	364	0.602	44	3.9	311	40	325,741	<b>15.4</b>	17.3	-1.9	<b>-11%</b>	16.31	17.80	16.43
2013	345	0.508	34	3.5	295	56	322,991	<b>6.4</b>	11.0	-4.6	<b>-42%</b>	9.37	12.54	13.88
2012	283	0.452	26	3.5	283	67	327,041	<b>8.1</b>	11.3	-3.2	<b>-28%</b>	9.75	11.57	12.74
2011	40	0.558	7	3.8	267	74	337,018	<b>4.7</b>	14.2	-9.5	<b>-67%</b>	6.75	8.18	11.16
<b>30yr RELO 3.5</b>	1,576	0.454	163	4.1	303	48	310,638	<b>10.3</b>	15.3	-5.0	<b>-33%</b>	14.15	15.90	16.21
2017	231	0.957	13	4.1	348	9	325,101	<b>5.1</b>	4.0	1.1	<b>*n.m.</b>	4.12	4.74	-
2014	690	0.498	63	4.2	310	43	299,637	<b>13.1</b>	17.4	-4.3	<b>-25%</b>	17.72	19.77	19.40
2013	217	0.434	26	4.1	299	52	303,015	<b>12.1</b>	16.6	-4.5	<b>-27%</b>	13.37	17.04	16.35
2012	124	0.360	16	3.9	277	71	316,281	<b>8.4</b>	17.0	-8.5	<b>-50%</b>	13.77	17.37	15.47
2011	155	0.320	27	4.0	270	76	325,973	<b>12.7</b>	20.3	-7.5	<b>-37%</b>	16.03	14.52	16.96
2010	141	0.286	15	3.9	259	86	330,059	<b>1.9</b>	14.4	-12.5	<b>-87%</b>	11.88	11.49	13.10
<b>30yr RELO 4</b>	500	0.187	132	4.5	274	75	301,960	<b>15.3</b>	18.5	-3.1	<b>-17%</b>	17.89	19.29	20.01
2014	117	0.324	37	4.6	308	46	277,211	<b>18.8</b>	35.8	-17.0	<b>-48%</b>	31.63	27.97	27.72
2011	194	0.178	49	4.4	267	80	307,618	<b>9.1</b>	12.9	-3.8	<b>-29%</b>	12.18	15.18	16.78
2010	154	0.143	25	4.5	257	90	316,916	<b>18.9</b>	12.5	6.4	<b>51%</b>	14.05	16.68	18.00
<b>30yr RELO 4.5</b>	101	0.054	144	4.9	230	117	256,547	<b>16.8</b>	12.4	4.3	<b>35%</b>	23.07	22.46	22.78
2011	42	0.132	18	4.8	265	82	279,358	<b>18.9</b>	14.4	4.5	<b>31%</b>	26.89	23.37	23.41

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