VINING SPARKS

GNMA Prepayment Speeds
February 2021
GNMA2 15yr

	Indicative Data						Prepayment Speeds							Buyout Prepayment Component				Delinquencies		
	Cur Bal (MM)	*Factor*	*# of Pools*	*WAC*	*WAM*	*WALA*	Feb	Jan	Chg	% Chg	3mo	6mo	12mo	1mo	3mo	6mo	12mo	30D	60D	90D
GNMA 2 15yr 2	1,412	0.621	82	2.4	153	22	**10.1**	10.4	-0.3	**-3%**	10.21	13.22	12.63	0.74	0.64	2.14	1.32	0.17	0.12	0.52
2020	1,048	0.970	15	2.4	171	3	**6.8**	4.9	1.9	***n.m.**	5.01	4.26	-	0.00	0.00	0.00	-	0.16	0.10	0.05
2017	33	0.556	12	2.5	131	43	**23.1**	28.1	-5.0	**-18%**	25.04	23.31	17.23	15.24	5.36	8.29	4.23	0.00	0.00	1.92
2016	98	0.453	10	2.5	122	52	**24.2**	21.5	2.7	**12%**	25.07	25.69	19.61	2.79	3.55	2.99	1.75	0.32	0.55	2.02
2015	33	0.396	14	2.5	105	67	**21.5**	16.9	4.6	**27%**	20.13	22.91	17.67	0.00	0.00	3.54	1.78	0.00	0.27	0.42
2013	123	0.244	13	2.5	81	93	**13.8**	20.0	-6.2	**-31%**	15.95	19.99	17.12	0.28	0.71	3.78	2.20	0.19	0.00	1.58
2012	70	0.220	10	2.5	75	99	**13.6**	23.1	-9.5	**-41%**	17.68	20.01	16.39	0.00	0.00	3.08	2.11	0.21	0.00	0.74
GNMA 2 15yr 2.5	7,910	0.351	138	2.9	122	52	**25.9**	28.6	-2.7	**-9%**	26.42	25.22	21.45	0.61	0.69	1.78	1.48	0.57	0.24	1.67
2020	1,714	0.905	18	2.9	168	6	**24.2**	22.1	2.1	**10%**	20.44	13.59	8.74	0.00	0.07	0.09	0.15	0.34	0.12	0.69
2019	262	0.656	15	3.0	162	15	**48.1**	54.2	-6.1	**-11%**	50.94	44.19	29.44	1.48	0.49	0.81	0.54	0.22	0.00	2.07
2018	52	0.569	8	3.0	138	36	**40.8**	42.6	-1.7	**-4%**	36.34	33.49	22.98	0.00	0.44	1.57	0.79	0.09	0.28	4.58
2017	911	0.456	20	2.9	131	43	**33.4**	37.0	-3.6	**-10%**	34.09	32.67	26.29	1.27	0.68	2.03	1.15	0.71	0.22	2.33
2016	2,225	0.387	12	2.9	121	53	**25.1**	30.6	-5.5	**-18%**	27.83	27.69	23.50	0.69	0.61	1.18	1.00	0.69	0.40	2.44
2015	835	0.297	17	2.9	106	67	**24.3**	28.6	-4.3	**-15%**	26.33	27.01	23.06	0.47	0.89	2.44	1.86	0.64	0.26	1.70
2014	154	0.242	16	3.0	96	76	**25.9**	37.8	-12.0	**-32%**	29.58	26.83	23.03	0.75	0.52	2.18	1.67	0.35	0.08	1.98
2013	975	0.217	13	2.9	80	93	**21.3**	19.3	2.0	**10%**	19.66	20.40	19.00	0.78	1.54	3.29	2.92	0.69	0.24	1.18
2012	765	0.177	11	2.9	73	101	**19.7**	21.7	-2.0	**-9%**	20.20	20.62	19.26	0.50	1.04	3.05	2.81	0.48	0.19	0.90
2011	18	0.139	7	3.1	64	110	**22.5**	21.2	1.4	**7%**	20.37	21.97	17.24	0.00	0.00	2.40	1.21	0.64	0.00	1.44
GNMA 2 15yr 3	8,826	0.259	227	3.4	115	59	**30.2**	33.9	-3.7	**-11%**	31.90	31.00	26.16	1.80	1.32	1.79	1.46	0.98	0.38	2.74
2020	663	0.761	19	3.4	165	10	**52.1**	47.3	4.8	**10%**	47.42	35.22	21.78	0.81	0.60	0.57	0.51	0.54	0.25	2.34
2019	831	0.544	21	3.5	160	16	**51.0**	54.7	-3.7	**-7%**	53.28	52.03	40.47	3.94	2.32	1.98	1.09	0.86	0.44	4.06
2018	353	0.452	13	3.5	141	33	**37.4**	40.8	-3.4	**-8%**	37.38	38.00	34.52	0.52	1.43	1.79	1.16	0.82	0.26	3.43
2017	1,516	0.406	14	3.4	131	43	**31.1**	37.1	-6.0	**-16%**	34.75	33.85	29.52	2.21	1.34	1.62	1.27	1.03	0.39	3.40
2016	1,285	0.340	15	3.4	119	55	**23.5**	27.2	-3.7	**-14%**	26.26	26.50	23.37	1.97	1.23	1.59	1.39	1.26	0.64	3.38
2015	1,351	0.257	22	3.4	108	66	**23.3**	29.9	-6.6	**-22%**	25.81	26.08	23.05	1.65	1.12	1.81	1.65	1.13	0.44	2.77
2014	783	0.197	29	3.4	96	77	**24.3**	26.6	-2.3	**-9%**	25.55	26.65	23.05	0.93	1.39	1.72	1.74	0.98	0.38	2.23
2013	800	0.186	15	3.4	83	91	**18.5**	21.1	-2.6	**-12%**	19.68	20.30	19.24	0.72	1.00	2.44	2.29	0.97	0.33	1.82
2012	1,053	0.131	61	3.3	70	104	**18.9**	23.3	-4.4	**-19%**	20.68	22.05	19.86	1.61	1.28	2.27	1.72	0.86	0.15	1.24
2011	186	0.108	12	3.4	63	110	**21.6**	25.2	-3.6	**-14%**	22.97	22.84	20.19	3.21	1.91	2.77	1.73	0.79	0.18	1.37
GNMA 2 15yr 3.5	4,894	0.253	238	3.9	127	48	**33.0**	38.8	-5.7	**-15%**	35.59	34.98	32.24	3.82	2.16	2.35	1.76	1.49	0.70	3.92
2020	158	0.799	14	3.9	166	11	**43.9**	36.8	7.0	**19%**	39.59	28.67	17.28	5.52	3.61	2.20	1.48	1.63	0.70	3.01
2019	728	0.481	19	4.0	157	19	**41.8**	54.0	-12.2	**-23%**	48.45	48.19	43.64	1.90	1.71	2.24	1.33	1.37	0.80	4.00
2018	1,504	0.395	20	4.0	145	31	**40.6**	44.9	-4.3	**-10%**	42.44	42.26	39.73	3.60	1.98	2.25	1.67	1.36	0.77	4.75
2017	947	0.391	12	3.9	132	43	**28.5**	33.3	-4.8	**-14%**	30.81	30.45	27.58	4.05	1.94	2.06	1.62	1.67	0.73	4.66
2016	161	0.326	12	3.9	120	55	**28.3**	27.6	0.8	**3%**	26.74	24.79	22.90	5.11	2.25	2.68	1.94	2.34	0.82	4.56
2015	242	0.258	18	3.9	109	65	**22.0**	27.9	-5.9	**-21%**	24.57	22.72	20.45	7.72	3.47	3.03	2.54	2.14	0.53	2.83
2014	412	0.178	27	3.8	94	79	**21.0**	26.3	-5.3	**-20%**	22.33	21.77	19.53	3.95	2.39	2.63	2.51	1.41	0.74	3.03
2013	254	0.160	27	3.9	86	88	**17.7**	23.3	-5.6	**-24%**	19.74	18.52	17.85	2.97	2.11	3.00	2.59	1.57	0.45	2.69
2012	87	0.108	55	3.9	70	104	**20.3**	25.6	-5.4	**-21%**	21.63	19.31	17.78	4.39	2.18	2.59	2.10	1.72	0.38	2.14
2011	306	0.078	19	3.9	61	113	**19.5**	25.3	-5.8	**-23%**	21.06	21.40	19.16	4.06	2.56	2.52	1.76	1.07	0.47	1.65
2010	92	0.072	11	3.9	53	122	**24.1**	28.4	-4.3	**-15%**	24.43	21.80	18.74	5.58	2.81	1.88	1.04	0.87	0.09	1.68
GNMA 2 15yr 4	1,125	0.141	171	4.5	120	56	**33.0**	33.0	0.1	**0%**	33.78	32.79	32.06	4.47	3.54	3.56	2.47	1.93	0.70	4.32
2020	7	0.752	6	4.4	166	11	**35.4**	53.3	-17.9	**-34%**	43.11	38.49	-	0.00	0.00	0.00	-	0.00	0.00	3.35
2019	293	0.517	20	4.5	156	21	**37.1**	41.2	-4.0	**-10%**	39.16	37.61	37.12	7.08	4.89	4.22	2.75	2.74	0.85	5.34
2018	423	0.396	18	4.5	148	27	**40.5**	38.2	2.3	**6%**	40.85	39.28	39.14	5.11	3.62	3.52	2.57	1.75	0.77	5.60
2017	12	0.377	12	4.3	133	43	**8.1**	15.2	-7.1	**-47%**	15.83	27.09	25.46	0.00	1.39	3.31	1.67	0.42	1.57	3.93
2014	24	0.194	25	4.4	95	80	**16.8**	18.0	-1.2	**-7%**	18.18	20.44	18.37	3.72	3.14	8.15	5.20	1.93	0.14	4.63
2013	36	0.168	14	4.4	86	87	**14.4**	7.4	7.0	**94%**	14.39	13.97	15.32	0.00	1.94	1.67	2.59	2.16	0.59	1.73
2011	192	0.059	20	4.3	58	116	**20.6**	19.3	1.3	**7%**	19.93	20.04	17.74	0.97	1.93	2.91	1.87	1.49	0.45	1.60
2010	80	0.052	11	4.3	50	126	**24.6**	22.1	2.5	**11%**	22.68	21.80	18.42	2.90	3.76	2.68	1.82	1.30	0.58	2.14
2009	46	0.040	13	4.4	39	137	**20.1**	22.3	-2.2	**-10%**	21.39	21.75	18.54	4.58	3.53	3.33	1.93	1.37	0.63	3.03
GNMA 2 15yr 4.5	105	0.051	110	4.8	58	121	**19.0**	19.4	-0.3	**-2%**	21.28	22.06	20.13	1.79	5.88	4.19	2.95	1.70	0.72	2.04
2018	7	0.363	12	4.8	144	31	**59.3**	55.1	4.2	**8%**	47.09	37.71	39.75	0.00	0.57	1.52	0.76	2.49	1.44	3.31
2011	14	0.060	17	4.8	59	117	**14.9**	6.3	8.6	**138%**	15.77	15.18	15.15	0.00	0.60	1.80	0.97	0.78	0.23	6.23
2010	23	0.054	16	4.8	47	129	**18.2**	17.6	0.6	**3%**	19.95	17.69	15.20	4.35	9.46	5.13	3.53	1.43	0.71	0.98
2009	50	0.040	17	4.9	40	137	**15.1**	19.0	-3.8	**-20%**	19.46	21.81	18.79	1.67	7.38	5.17	3.73	2.17	0.78	0.98

**n.m. - Not Meaningful*

Source: Bloomberg

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VINING SPARKS

GNMA Prepayment Speeds
February 2021
GNMA2 30yr

	Indicative Data						Prepayment Speeds							Buyout Prepayment Component				Delinquencies		
	Cur Bal (MM)	*Factor*	*# of Pools*	*WAC*	*WAM*	*WALA*	Feb	Jan	Chg	% Chg	3mo	6mo	12mo	1mo	3mo	6mo	12mo	30D	60D	90D
GNMA 2 30yr 2	162,763	0.990	1,552	2.4	352	3	1.9	2.2	-0.3	*n.m.	1.90	1.61	2.35	0.12	0.08	0.04	0.12	0.40	0.10	0.09
2020	162,695	0.990	1,436	2.4	352	3	1.9	2.2	-0.3	*n.m.	1.89	1.57	-	0.12	0.08	0.04	-	0.40	0.10	0.08
2016	43	0.728	60	2.6	303	53	2.8	11.7	-8.9	-76%	8.94	13.36	10.34	0.00	0.00	0.00	0.00	4.09	0.67	13.03
2013	11	0.459	24	2.5	264	91	0.2	10.0	-9.8	*n.m.	12.93	13.27	10.62	0.00	0.00	0.00	1.01	2.03	3.13	7.85
GNMA 2 30yr 2.5	328,838	0.892	8,913	2.9	348	7	24.4	22.1	2.3	10%	20.43	15.92	10.80	0.82	0.61	0.72	0.59	0.92	0.38	1.66
2020	305,954	0.939	8,357	2.9	350	6	21.6	18.2	3.4	19%	16.68	10.79	6.16	0.62	0.42	0.42	0.24	0.89	0.35	1.26
2019	14,740	0.626	119	3.0	342	15	60.5	62.7	-2.2	-4%	59.78	54.48	35.64	3.59	2.47	1.95	1.18	1.15	0.67	6.76
2018	87	0.579	19	3.1	323	32	33.6	58.4	-24.8	-42%	39.90	42.07	37.68	3.55	5.29	9.06	8.92	1.49	0.78	8.97
2017	256	0.654	91	3.0	311	43	12.9	26.5	-13.7	-51%	20.78	24.61	17.67	1.07	2.60	6.62	3.71	2.44	1.38	8.07
2016	5,443	0.452	152	3.0	301	52	38.3	42.1	-3.8	-9%	40.13	42.32	33.29	2.39	2.17	3.67	3.00	1.48	0.85	6.40
2015	558	0.470	88	3.0	288	66	33.5	31.1	2.4	8%	30.87	29.86	22.90	0.88	1.61	2.95	2.07	1.69	1.00	6.11
2014	28	0.403	7	3.0	273	75	17.3	14.3	3.0	21%	20.79	19.31	17.09	0.00	4.89	5.71	4.53	3.79	1.52	7.03
2013	886	0.344	51	3.0	256	94	22.0	24.2	-2.2	-9%	22.95	24.98	21.11	1.74	1.88	5.82	4.38	1.47	0.38	2.48
2012	885	0.311	27	3.0	251	98	23.6	28.4	-4.8	-17%	25.53	26.23	22.22	2.04	2.93	4.84	4.32	1.39	0.44	2.45
GNMA 2 30yr 3	438,942	0.464	11,377	3.4	319	36	42.4	46.3	-3.9	-8%	43.18	40.59	32.79	4.89	3.59	4.07	3.18	1.90	0.96	6.28
2020	131,363	0.869	7,911	3.5	348	8	38.0	38.9	-0.9	-2%	34.94	22.48	12.83	3.20	2.21	1.83	1.16	2.03	1.05	3.87
2019	105,215	0.582	1,037	3.5	342	15	54.6	59.6	-5.0	-8%	56.19	54.50	40.05	8.09	5.00	4.18	2.58	1.73	1.01	9.14
2018	2,396	0.462	89	3.5	319	36	45.4	53.0	-7.7	-14%	48.51	48.95	48.58	7.66	5.08	6.14	4.93	2.22	1.05	8.45
2017	22,613	0.435	265	3.5	313	41	41.3	48.2	-6.9	-14%	44.58	45.82	40.79	4.60	4.02	6.02	4.53	2.00	1.11	8.35
2016	93,356	0.382	1,114	3.4	301	53	40.9	44.9	-3.9	-9%	42.74	42.88	37.42	4.87	3.85	4.74	3.77	2.21	1.03	8.14
2015	25,079	0.295	291	3.5	286	68	39.5	44.4	-4.9	-11%	41.74	42.56	37.06	3.45	3.25	5.08	4.22	1.77	0.83	5.49
2014	3,817	0.252	98	3.5	277	75	35.3	41.9	-6.7	-16%	40.07	41.42	36.24	2.42	3.14	5.42	4.56	1.96	0.87	4.75
2013	27,945	0.269	283	3.3	256	93	28.9	32.2	-3.3	-10%	30.73	31.28	27.46	2.99	3.39	5.74	5.49	1.49	0.57	2.74
2012	27,122	0.250	275	3.4	250	99	28.4	32.3	-3.9	-12%	30.70	30.72	26.77	2.94	2.94	5.03	4.86	1.34	0.54	2.49
2011	34	0.237	8	3.6	238	111	23.9	15.3	8.7	57%	16.81	26.25	24.31	4.91	1.66	3.35	1.69	1.35	1.51	3.65
GNMA 2 30yr 3.5	425,336	0.338	20,024	3.9	305	49	38.5	46.1	-7.6	-16%	41.51	40.40	36.09	11.65	7.49	7.25	5.69	2.93	1.45	8.87
2020	24,596	0.923	4,542	3.9	348	9	18.4	22.6	-4.2	-19%	19.34	13.76	7.76	7.24	5.03	3.07	1.63	3.77	2.02	5.02
2019	90,421	0.560	4,898	4.0	340	17	48.2	55.8	-7.6	-14%	50.80	48.21	41.86	16.58	10.32	7.84	4.99	3.42	1.90	12.87
2018	20,513	0.395	401	4.0	323	33	43.3	52.8	-9.4	-18%	47.37	47.01	44.26	14.19	9.21	9.18	7.28	2.87	1.51	11.01
2017	89,409	0.408	2,633	3.9	313	42	41.9	50.3	-8.4	-17%	45.24	44.54	39.81	11.79	7.41	7.07	5.20	2.74	1.41	10.14
2016	58,724	0.359	3,332	3.9	300	55	36.5	44.2	-7.8	-18%	39.06	37.69	33.55	14.14	8.52	8.32	6.77	3.68	1.71	10.31
2015	58,860	0.266	1,843	3.9	288	66	36.4	43.5	-7.1	-16%	39.35	38.36	33.86	9.89	6.43	6.85	5.82	2.84	1.25	7.59
2014	21,957	0.199	637	3.9	275	77	35.0	40.0	-5.0	-12%	37.21	37.42	33.37	5.30	4.55	6.17	5.53	2.36	0.95	5.45
2013	21,835	0.227	605	3.8	257	91	26.8	32.4	-5.6	-17%	29.37	29.77	26.90	6.02	4.79	7.00	6.58	2.09	0.88	3.61
2012	32,423	0.193	892	3.8	246	103	26.9	32.7	-5.8	-18%	29.76	30.10	27.61	5.21	4.20	6.91	7.01	1.62	0.61	2.13
2011	6,144	0.165	143	3.9	238	110	28.7	32.6	-4.0	-12%	30.44	30.65	27.87	4.54	3.44	5.83	5.60	1.48	0.57	1.79
2010	434	0.155	69	4.0	226	122	31.6	35.5	-3.9	-11%	31.14	30.77	26.60	5.11	2.60	3.76	4.36	1.30	0.78	2.44
GNMA 2 30yr 4	226,222	0.285	23,620	4.4	307	48	38.4	40.8	-2.4	-6%	40.10	38.55	36.88	8.44	9.20	8.73	7.11	3.79	1.89	11.32
2020	5,879	0.889	2,442	4.4	350	9	25.4	30.5	-5.1	-17%	27.24	19.51	10.96	4.12	4.23	2.95	1.67	3.29	1.83	7.19
2019	53,817	0.513	5,606	4.5	338	20	45.1	45.1	0.0	0%	44.86	42.55	42.49	10.58	11.48	8.95	6.40	4.35	2.39	15.70
2018	46,024	0.347	2,236	4.5	325	31	45.9	49.1	-3.2	-7%	48.00	46.57	44.39	8.95	9.23	8.45	6.46	3.13	1.64	12.20
2017	41,154	0.394	5,444	4.4	313	43	38.2	40.5	-2.3	-6%	40.41	38.31	35.23	9.87	11.09	10.25	8.07	4.47	2.28	13.88
2016	11,712	0.328	2,766	4.4	301	54	33.1	37.3	-4.3	-11%	36.58	34.48	31.59	9.25	10.58	10.32	8.25	4.68	2.20	11.93
2015	17,661	0.248	2,375	4.4	288	65	32.1	34.9	-2.8	-8%	34.43	32.79	29.90	6.86	7.89	8.95	7.80	4.26	1.85	9.54
2014	20,295	0.176	1,283	4.3	271	79	28.2	31.0	-2.7	-9%	29.89	29.77	28.32	6.36	6.42	8.24	8.21	3.69	1.60	6.54
2013	9,838	0.148	313	4.4	263	88	28.3	32.6	-4.4	-13%	31.37	31.53	29.03	5.07	5.89	7.47	7.00	2.70	1.07	4.76
2012	4,846	0.155	449	4.3	244	105	23.5	26.3	-2.8	-11%	25.75	25.68	25.18	4.82	5.57	8.33	8.86	2.96	1.14	3.15
2011	8,358	0.119	405	4.3	236	113	25.9	28.7	-2.8	-10%	27.99	28.59	27.29	3.96	4.44	6.76	7.33	2.19	0.85	2.44
2010	6,279	0.121	251	4.4	225	123	27.3	31.5	-4.2	-13%	30.08	31.11	28.90	2.88	3.60	6.36	6.58	1.77	0.61	1.66
2009	312	0.105	19	4.4	209	139	28.9	32.8	-3.9	-12%	30.36	30.11	26.38	3.30	3.57	4.59	3.84	1.81	0.62	2.17
2008	14	0.122	3	4.5	201	148	27.6	8.6	19.0	220%	28.95	26.18	23.28	0.00	3.73	3.12	2.90	0.81	1.39	2.75
2005	10	0.549	3	4.5	161	183	17.3	1.6	15.6	*n.m.	12.12	22.79	16.18	0.00	2.73	1.37	0.69	0.68	0.86	3.36
2003	8	0.065	9	4.6	135	211	15.6	2.5	13.1	*n.m.	11.43	12.85	14.81	0.00	0.00	1.43	0.72	0.00	0.00	0.90
GNMA 2 30yr 4.5	103,681	0.223	17,585	4.9	302	53	41.4	40.2	1.2	3%	40.43	38.24	36.23	10.89	13.32	10.94	8.82	4.37	2.22	12.40
2020	1,635	0.827	971	4.9	349	10	37.0	43.3	-6.3	-15%	40.49	29.46	17.01	7.51	9.01	6.73	3.81	4.00	2.22	7.59
2019	19,097	0.588	4,768	5.0	337	21	48.8	41.9	6.9	17%	43.37	39.30	35.70	13.72	15.98	11.64	8.80	5.24	2.96	17.69
2018	42,932	0.354	5,923	5.0	328	29	47.4	47.3	0.1	0%	47.10	44.05	42.30	13.84	15.91	12.20	9.17	4.56	2.52	15.95
2017	7,643	0.362	2,428	4.9	314	43	40.3	37.9	2.4	6%	40.09	38.08	35.50	9.96	16.16	12.85	10.38	5.63	2.64	14.32
2016	2,413	0.274	497	4.9	301	54	39.1	35.9	3.2	9%	36.96	37.29	35.50	8.86	13.55	12.49	10.70	5.86	2.85	13.57
2015	860	0.338	851	4.8	284	66	24.5	23.6	1.0	4%	23.11	25.36	23.46	8.47	9.74	10.09	9.03	4.96	1.79	8.01
2014	3,834	0.184	574	4.8	270	80	28.8	26.0	2.9	11%	27.76	28.02	26.16	7.73	10.73	11.12	9.92	4.99	2.03	7.61
2013	4,723	0.156	172	4.8	261	88	27.9	27.5	0.4	1%	27.42	27.53	26.02	5.74	8.31	8.94	8.78	4.34	1.74	5.64
2012	234	0.147	42	4.9	250	101	33.3	26.8	6.5	24%	29.59	29.75	28.45	8.52	9.87	11.79	10.89	4.84	1.67	5.61
2011	7,535	0.097	513	4.8	232	117	24.9	25.9	-1.1	-4%	25.60	27.37	26.77	4.42	5.77	7.95	8.37	2.66	0.88	1.92
2010	7,328	0.097	427	4.9	223	127	25.8	28.8	-3.0	-10%	27.45	28.70	27.40	3.93	5.18	7.22	7.13	2.26	0.75	1.94
2009	5,253	0.078	156	4.9	212	137	25.4	30.0	-4.6	-15%	27.99	29.15	26.98	3.09	5.05	5.92	5.63	2.07	0.74	1.62
2008	36	0.048	23	5.0	199	150	18.8	38.3	-19.5	-51%	24.82	23.90	21.91	0.00	3.35	4.93	6.56	2.22	0.57	4.12
2007	13	0.080	19	5.0	188	161	14.0	9.8	4.3	44%	11.02	17.90	16.58	0.00	3.14	1.58	1.73	2.32	0.56	3.03
2006	11	0.181	56	5.0	175	176	0.6	1.1	-0.5	*n.m.	7.98	14.39	12.20	0.00	1.32	0.66	1.41	4.75	2.47	2.86
2005	36	0.060	58	5.1	161	188	21.4	10.0	11.5	115%	14.57	17.53	17.23	6.57	6.12	5.68	5.12	2.33	1.28	3.39
2004	25	0.050	43	5.1	145	199	10.9	18.1	-7.2	-40%	18.33	20.25	19.60	0.00	0.68	3.67	4.07	0.75	0.10	1.88
2003	67	0.046	35	5.1	137	211	15.9	24.0	-8.1	-34%	20.02	18.93	16.93	4.00	2.41	3.10	2.72	1.49	0.64	0.72
GNMA 2 30yr 5	39,118	0.144	8,770	5.4	285	69	33.8	41.9	-8.1	-19%	37.65	34.98	33.88	18.58	16.52	12.68	9.93	4.88	2.42	12.73
2020	139	0.854	118	5.4	348	9	40.6	43.6	-3.0	-7%	38.76	32.39	18.17	6.05	4.88	2.67	1.36	4.97	2.05	8.53
2019	4,139	0.626	2,440	5.5	337	21	39.1	42.1	-3.1	-7%	38.36	33.77	30.25	20.73	17.36	11.62	7.79	5.22	2.90	17.09
2018	17,221	0.379	4,497	5.5	328	29	40.1	50.3	-10.2	-20%	45.00	40.92	40.11	25.49	21.76	15.49	11.10	5.64	3.11	19.38
2017	2,231	0.375	232	5.4	317	41	43.9	54.7	-10.8	-20%	49.89	44.09	38.67	29.83	28.21	19.74	14.44	7.48	3.85	17.77
2016	540	0.350	10	5.4	304	53	28.8	40.8	-12.0	-29%	33.55	34.08	35.90	18.71	16.85	15.30	13.42	7.43	3.92	14.39
2015	434	0.303	13	5.4	289	67	33.4	51.5	-18.1	-35%	44.90	39.02	34.15	22.99	24.56	17.71	13.33	7.48	3.67	14.66
2014	152	0.269	26	5.4	273	81	25.7	38.2	-12.5	-33%	34.21	33.15	30.95	9.03	13.08	10.61	9.67	7.54	2.52	14.60
2013	67	0.265	30	5.4	266	89	20.2	27.6	-7.4	-27%	26.56	26.99	26.26	11.50	15.21	10.51	10.33	10.26	3.61	11.64
2012	163	0.129	6	5.4	246	105	18.7	32.0	-13.3	-42%	27.11	26.52	24.97	12.84	12.20	12.44	11.28	6.00	1.57	4.62
2011	1,310	0.119	198	5.3	233	117	21.8	27.5	-5.7	-21%	23.73	24.57	25.15	11.31	10.72	11.32	11.13	5.28	1.97	4.30
2010	5,096	0.083	267	5.3	221	129	21.4	27.2	-5.8	-21%	24.75	25.85	26.11	6.17	6.50	8.48	9.12	3.13	1.10	2.03
2009	5,919	0.069	267	5.4	213	136	22.7	26.1	-3.4	-13%	24.65	25.63	24.69	4.87	5.74	6.81	6.93	2.85	0.96	2.25
2008	371	0.036	75	5.5	200	150	22.0	29.1	-7.1	-24%	24.62	25.22	24.64	8.57	7.70	8.52	8.22	3.52	1.03	2.48
2007	44	0.034	64	5.5	187	163	16.9	23.1	-6.2	-27%	18.46	20.07	22.49	2.24	6.40	8.19	6.27	2.45	2.19	2.72
2006	72	0.039	152	5.6	172	177	14.2	14.4	-0.2	-1%	13.67	16.15	17.92	1.02	2.98	6.54	5.69	2.76	0.84	1.52
2005	450	0.037	124	5.6	161	187	17.2	20.3	-3.1	-15%	18.73	18.99	19.99	4.73	4.59	6.19	6.66	2.66	0.78	1.44

VINING SPARKS

GNMA Prepayment Speeds
February 2021
GNMA2 30yr

	Indicative Data						Prepayment Speeds							Buyout Prepayment Component				Delinquencies		
	Cur Bal (MM)	*Factor*	*# of Pools*	*WAC*	*WAM*	*WALA*	Feb	Jan	Chg	% Chg	3mo	6mo	12mo	1mo	3mo	6mo	12mo	30D	60D	90D
2004	282	0.036	64	5.6	147	199	**16.0**	20.4	-4.3	**-21%**	19.63	18.34	19.25	3.23	3.66	4.91	5.63	2.38	0.54	0.94
2003	460	0.031	82	5.6	135	211	**17.0**	18.0	-1.0	**-5%**	16.94	18.43	17.83	2.35	3.71	4.39	4.49	2.09	0.67	0.80
2002	23	0.025	45	5.8	128	219	**22.1**	18.3	3.8	**21%**	22.18	16.87	18.16	1.11	3.75	4.26	2.94	2.96	0.46	1.28
GNMA 2 30yr 5.5	8,904	0.055	3,372	6.0	232	120	**25.6**	32.6	-7.0	**-21%**	28.64	28.00	27.64	14.34	13.15	11.33	9.69	5.04	2.16	8.15
2020	12	0.775	15	5.9	348	10	**16.2**	47.5	-31.3	**-66%**	26.95	44.49	28.02	5.94	13.34	10.42	6.42	6.06	1.73	16.77
2019	781	0.620	578	5.9	337	21	**32.3**	42.9	-10.6	**-25%**	36.04	33.54	31.92	24.66	19.02	16.06	12.88	5.90	3.03	12.70
2018	1,657	0.429	735	5.9	328	30	**37.1**	49.4	-12.3	**-25%**	41.92	39.00	38.82	27.41	22.38	17.72	13.42	6.41	3.48	18.82
2017	483	0.331	9	5.9	316	41	**35.2**	51.0	-15.8	**-31%**	44.92	42.76	42.12	30.24	26.79	18.58	13.67	7.47	4.05	22.23
2016	197	0.311	4	5.9	301	56	**33.3**	39.2	-5.9	**-15%**	35.26	37.54	39.56	16.09	16.93	12.79	12.18	7.79	4.69	22.86
2015	65	0.631	4	5.9	290	66	**58.3**	68.0	-9.8	**-14%**	59.69	50.32	36.19	31.90	32.66	22.91	16.18	10.63	5.58	12.20
2014	50	0.368	2	5.9	277	79	**16.3**	39.9	-23.6	**-59%**	29.03	29.83	29.37	8.97	8.16	7.82	9.44	9.03	3.34	20.35
2013	59	0.463	4	5.9	267	88	**50.4**	52.1	-1.7	**-3%**	52.14	49.88	38.62	39.79	34.56	22.78	18.07	11.29	4.62	16.67
2012	49	0.895	6	5.9	254	100	**17.2**	16.1	1.1	**7%**	19.41	16.58	9.13	14.28	15.27	10.27	5.28	15.53	4.29	5.06
2011	34	0.477	8	5.9	240	110	**33.4**	22.8	10.6	**46%**	29.90	28.17	25.31	12.24	18.31	10.68	10.66	13.95	5.78	11.54
2010	39	0.295	16	5.9	224	130	**23.3**	22.5	0.8	**4%**	22.88	28.58	25.36	3.29	15.06	14.06	12.25	6.87	4.80	10.48
2009	827	0.074	100	5.9	211	138	**20.8**	20.5	0.3	**1%**	21.39	21.50	21.31	6.01	7.45	7.63	8.08	4.22	1.22	3.01
2008	1,337	0.031	294	6.0	199	151	**19.1**	22.5	-3.4	**-15%**	21.40	22.19	21.02	6.00	8.42	7.88	7.01	4.27	1.33	2.50
2007	572	0.044	283	6.0	187	163	**21.0**	23.4	-2.4	**-10%**	21.74	22.66	22.09	6.19	7.85	8.37	8.92	5.09	2.19	2.95
2006	471	0.045	253	6.0	174	175	**19.6**	25.2	-5.7	**-22%**	21.81	21.59	21.86	7.97	7.78	9.09	8.95	4.76	1.44	2.51
2005	669	0.040	284	6.0	161	187	**16.5**	22.2	-5.7	**-26%**	18.70	18.88	18.90	5.88	5.19	6.43	6.43	3.23	0.92	1.72
2004	730	0.035	232	5.9	147	199	**15.9**	17.2	-1.3	**-8%**	15.80	17.66	18.21	3.43	4.27	6.34	6.51	2.97	0.93	1.20
2003	688	0.027	221	6.0	137	210	**17.1**	17.6	-0.5	**-3%**	16.80	17.13	17.26	5.41	5.17	5.81	5.77	2.74	0.85	1.06
2002	153	0.016	114	6.3	128	219	**15.6**	16.4	-0.8	**-5%**	16.35	16.96	16.27	3.31	4.06	4.30	4.72	2.46	0.49	1.16
2001	14	0.014	25	6.3	116	231	**10.4**	5.7	4.7	**84%**	10.26	14.71	14.66	0.00	4.45	4.09	3.90	0.60	0.00	3.25

**n.m. - Not Meaningful*

Source: Bloomberg

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VINING SPARKS

GNMA Prepayment Speeds
February 2021
GNMA2 JUMBO 15yr/30yr

	Indicative Data						Prepayment Speeds							Buyout Prepayment Component				Delinquencies		
	Cur Bal (MM)	*Factor*	*# of Pools*	*WAC*	*WAM*	*WALA*	Feb	Jan	Chg	% Chg	3mo	6mo	12mo	1mo	3mo	6mo	12mo	30D	60D	90D
GNMA 2 Jumbo 2.5	12,842	0.814	114	2.9	350	7	**52.9**	43.8	9.1	**21%**	41.87	31.22	18.99	0.83	0.61	0.84	0.45	0.74	0.31	2.17
2020	12,106	0.872	19	2.9	353	6	**49.5**	38.3	11.2	**29%**	36.74	23.19	12.92	0.55	0.40	0.65	0.34	0.66	0.30	1.69
2019	560	0.412	12	3.0	342	15	**88.3**	88.1	0.2	**0%**	85.15	80.07	57.66	5.30	3.31	2.41	1.21	2.11	0.55	9.98
2016	79	0.330	23	2.9	221	53	**60.3**	62.5	-2.2	**-4%**	62.92	59.89	46.51	0.00	2.06	3.31	2.01	1.77	0.00	7.51
GNMA 2 Jumbo 3	12,272	0.277	175	3.4	315	40	**67.9**	72.8	-4.9	**-7%**	69.72	67.16	56.56	6.40	4.03	4.25	3.01	1.33	0.75	8.53
2020	2,736	0.753	14	3.4	351	8	**64.6**	63.6	1.0	**2%**	60.33	41.71	27.05	5.08	2.25	1.75	1.02	1.47	0.80	4.45
2019	2,575	0.350	17	3.5	342	16	**79.6**	83.2	-3.6	**-4%**	80.55	78.30	63.71	8.51	5.06	4.87	2.82	1.61	0.73	11.69
2018	90	0.248	12	3.5	321	35	**78.7**	75.4	3.3	**4%**	76.82	77.14	66.44	7.05	6.11	6.30	3.76	2.16	0.58	10.98
2017	726	0.234	22	3.5	313	41	**67.2**	77.2	-9.9	**-13%**	73.97	73.53	66.02	10.98	6.52	6.92	4.32	1.14	0.78	13.06
2016	4,062	0.226	19	3.4	302	53	**65.3**	72.5	-7.2	**-10%**	69.35	69.37	60.36	6.83	4.47	4.32	3.26	1.36	0.77	10.07
2015	874	0.165	22	3.4	284	68	**66.2**	67.1	-0.9	**-1%**	67.96	68.01	58.62	2.62	2.90	3.28	3.08	0.91	0.85	6.43
2014	110	0.145	13	3.4	273	74	**50.6**	78.1	-27.5	**-35%**	64.97	65.84	57.94	0.00	2.53	3.74	4.56	0.00	0.00	3.62
2013	538	0.188	21	3.3	255	93	**49.1**	57.3	-8.2	**-14%**	52.31	52.12	43.34	2.82	2.76	5.88	4.72	0.70	0.69	4.51
2012	555	0.187	24	3.4	238	99	**43.7**	54.7	-11.0	**-20%**	46.75	47.54	38.34	2.25	2.41	5.60	4.57	0.73	0.49	3.17
GNMA 2 Jumbo 3.5	8,735	0.167	173	3.9	306	50	**59.9**	72.1	-12.2	**-17%**	64.69	63.47	58.57	22.86	12.19	9.40	6.93	2.00	1.13	12.79
2020	438	0.793	13	3.9	350	9	**53.9**	58.8	-4.9	**-8%**	51.73	36.19	-	6.84	4.59	2.32	-	2.57	2.06	9.49
2019	1,308	0.290	19	4.0	341	17	**63.7**	79.3	-15.6	**-20%**	71.64	70.44	67.05	24.57	15.88	10.43	6.08	1.96	1.42	19.08
2018	441	0.187	16	4.0	322	34	**69.4**	72.9	-3.4	**-5%**	68.97	69.00	65.91	22.64	9.45	6.95	4.37	1.47	0.99	13.86
2017	2,287	0.206	19	3.9	315	42	**64.8**	79.8	-15.1	**-19%**	71.28	69.59	63.67	30.59	15.21	11.33	7.60	2.33	1.42	14.83
2016	1,595	0.193	15	3.9	302	54	**54.9**	65.9	-11.0	**-17%**	58.68	58.86	53.39	26.96	13.78	11.06	8.73	2.29	1.09	14.84
2015	1,318	0.118	16	3.9	289	66	**60.0**	68.9	-8.9	**-13%**	63.02	60.42	53.94	20.05	10.88	8.49	7.41	2.12	0.86	10.00
2014	370	0.076	17	3.8	277	76	**50.6**	66.6	-16.1	**-24%**	58.07	59.67	54.39	9.01	5.34	6.17	5.26	0.68	0.45	4.24
2013	270	0.111	19	3.8	257	92	**43.4**	46.1	-2.7	**-6%**	44.46	46.15	41.40	8.30	6.45	6.74	7.37	1.74	0.62	6.89
2012	656	0.099	19	3.8	245	103	**50.8**	53.9	-3.1	**-6%**	50.85	50.69	44.19	5.35	3.44	6.30	7.03	0.90	0.30	2.53
2011	49	0.091	13	3.9	224	110	**46.6**	56.6	-10.0	**-18%**	48.19	48.76	41.38	9.10	7.32	4.87	2.46	0.73	0.00	5.17
GNMA 2 Jumbo 4	2,924	0.120	147	4.5	313	44	**59.8**	61.5	-1.6	**-3%**	62.21	58.01	55.99	10.91	14.31	11.69	8.95	3.47	1.98	19.62
2019	628	0.302	15	4.5	340	19	**64.2**	66.5	-2.3	**-3%**	65.44	60.13	60.13	9.00	10.92	9.08	6.04	3.43	2.27	26.79
2018	750	0.137	12	4.5	327	31	**66.1**	65.9	0.2	**0%**	67.92	64.63	62.93	10.90	14.61	11.78	8.24	3.13	1.68	19.81
2017	681	0.188	13	4.4	315	43	**60.3**	59.4	0.9	**1%**	62.60	57.15	54.11	12.88	18.42	14.70	12.17	3.86	2.69	23.64
2016	131	0.127	11	4.4	302	55	**58.1**	57.0	1.1	**2%**	63.05	58.14	49.96	26.67	28.61	20.23	14.09	4.75	2.97	17.08
2015	181	0.080	12	4.4	290	66	**50.4**	47.0	3.4	**7%**	55.48	51.90	46.60	10.12	13.62	11.06	10.43	3.13	1.98	16.18
2014	92	0.035	12	4.3	274	78	**43.6**	64.0	-20.5	**-32%**	59.93	56.40	49.06	8.44	10.72	9.69	9.23	3.06	0.93	14.59
2013	45	0.033	9	4.4	267	87	**55.4**	49.4	6.0	**12%**	42.73	40.42	35.69	0.00	3.00	7.07	8.77	1.93	0.00	11.81
2012	56	0.049	13	4.3	242	105	**45.4**	53.8	-8.4	**-16%**	45.86	44.51	41.99	7.81	13.76	15.15	12.57	1.40	2.79	5.89
2011	72	0.038	16	4.3	237	113	**19.2**	52.6	-33.4	**-64%**	39.17	36.98	33.05	3.88	10.38	6.13	5.36	0.59	0.50	0.97
2010	135	0.050	16	4.4	227	124	**43.2**	50.0	-6.8	**-14%**	47.68	49.39	42.54	3.17	6.52	7.91	6.22	2.11	1.01	5.47
GNMA 2 Jumbo 4.5	748	0.096	113	5.0	315	42	**59.8**	52.7	7.1	**13%**	59.02	53.88	51.00	12.64	22.40	17.39	12.51	3.87	2.28	21.98
2019	171	0.343	13	5.0	340	19	**76.8**	50.0	26.8	**54%**	65.03	58.38	54.59	10.59	18.33	15.39	9.99	4.18	3.03	33.37
2018	329	0.156	12	5.0	330	29	**57.7**	61.9	-4.2	**-7%**	64.02	58.37	55.35	18.46	29.59	22.14	14.90	4.36	2.31	24.94
2017	26	0.121	9	4.9	314	42	**60.1**	52.5	7.7	**15%**	63.29	55.85	56.13	0.00	11.74	18.85	19.94	7.03	2.01	30.93
2016	12	0.135	8	4.9	305	53	**56.4**	34.4	22.0	**64%**	49.74	55.06	48.31	34.84	22.20	11.80	6.08	7.18	11.15	22.16
2014	15	0.030	13	4.8	273	79	**33.1**	0.2	32.9	***n.m.**	43.23	47.56	42.74	0.00	17.75	12.60	17.84	0.00	0.00	15.02
2011	43	0.027	13	4.8	230	117	**25.6**	49.7	-24.1	**-49%**	42.86	39.03	32.93	9.11	10.05	5.78	4.64	1.23	1.00	1.99
2010	63	0.034	14	4.9	227	125	**55.6**	37.8	17.8	**47%**	48.79	45.70	38.78	0.00	18.01	14.93	13.85	3.32	0.48	6.38
GNMA 2 Jumbo 5	150	0.052	76	5.5	297	59	**49.0**	49.4	-0.4	**-1%**	58.62	52.63	48.64	3.50	12.20	13.40	10.23	2.79	2.48	25.00
2010	20	0.024	9	5.4	224	129	**40.5**	38.9	1.6	**4%**	42.68	35.59	28.58	0.00	6.36	3.77	4.14	2.03	1.73	9.28
2009	19	0.017	15	5.4	215	137	**0.3**	26.7	-26.4	***n.m.**	20.01	26.42	28.32	0.00	0.00	15.84	9.76	0.00	4.19	2.09

**n.m. - Not Meaningful*

Source: Bloomberg

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