Santander
Corporate & Investment Banking

Santander US Capital Markets LLC

Single Family Fixed Rate Prepayment Report

March 2024 (February Speeds)

Agency MBS Strategy
Brian R. Landy, CFA
brian.landy@santander.us
646-776-7795

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Overview

							CPR						%Δ	
Product	Agency	Balance ($mm)	WAC	WAM	WALA	ALS ($k)	Feb	Jan	Dec	3M	6M	12M	Jan→Feb	Dec→Jan
Fixed 30	FNMA	2,879,893	3.991	308	45	231	4.6	4.2	4.3	4.4	4.6	5.2	10.0	−2.6
	FHLMC	2,417,913	3.981	313	41	243	4.4	4.0	4.0	4.1	4.4	5.0	10.1	−0.2
	GNMA I	54,590	4.707	208	141	88	5.3	5.2	5.6	5.4	5.7	6.4	2.2	−8.8
	GNMA II	2,179,611	4.024	315	40	215	6.7	6.0	5.0	5.9	5.7	6.4	13.2	20.0
Fixed 20	FNMA	149,692	3.271	184	51	162	4.1	4.0	4.0	4.0	4.2	4.7	2.4	−0.8
	FHLMC	117,041	3.236	188	47	172	3.9	3.6	3.8	3.8	3.9	4.5	7.5	−5.7
Fixed 15	FNMA	391,021	2.852	127	48	130	5.4	5.4	5.3	5.4	5.5	6.1	−0.4	0.8
	FHLMC	311,574	2.899	130	45	138	5.4	5.3	5.4	5.4	5.5	6.1	2.9	−2.5
	GNMA I	844	3.649	39	141	24	15.0	15.5	14.3	14.9	14.6	15.2	−3.3	9.1
	GNMA II	17,155	3.167	115	59	84	8.5	8.5	8.4	8.5	8.6	9.4	0.7	0.9
Fixed 10	FNMA	20,538	2.600	79	36	102	7.0	7.5	6.8	7.1	7.2	7.8	−7.5	11.9
	FHLMC	9,189	2.616	83	33	117	6.2	6.4	6.5	6.3	6.5	7.0	−3.2	−1.2

Source: Fannie Mae, Freddie Mac, Ginnie Mae, Santander US Capital Markets

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Fixed 30, by Coupon

							CPR						%Δ	
Agency	Coupon	Balance ($mm)	WAC	WAM	WALA	ALS ($k)	Feb	Jan	Dec	3M	6M	12M	Jan→Feb	Dec→Jan
FNMA	≤ 1.5	77,553	2.504	317	37	331	2.2	2.1	2.4	2.2	2.4	3.0	8.0	−14.2
	2.0	766,611	2.876	319	35	294	3.0	2.6	2.9	2.8	3.1	3.8	16.7	−10.1
	2.5	608,945	3.301	319	35	258	3.9	3.4	3.8	3.7	4.1	4.7	16.0	−11.5
	3.0	360,857	3.706	285	66	202	4.5	4.3	4.5	4.4	4.7	5.5	5.7	−5.3
	3.5	265,707	4.122	273	77	176	5.1	4.8	5.1	5.0	5.3	6.1	7.6	−6.9
	4.0	212,630	4.649	278	72	169	5.4	5.1	5.6	5.4	5.7	6.5	4.8	−8.7
	4.5	143,741	5.214	296	56	183	5.5	5.0	5.4	5.3	5.6	6.3	10.1	−8.6
	5.0	130,138	5.824	319	36	220	5.3	4.9	5.0	5.1	5.3	5.9	8.8	−2.5
	5.5	124,023	6.371	326	30	228	5.6	5.3	5.1	5.4	5.6	6.3	5.0	3.9
	6.0	98,119	6.884	332	24	235	7.7	7.5	6.2	7.1	7.0	7.8	3.4	21.9
	≥ 6.5	91,570	7.522	341	15	238	13.3	12.9	9.2	11.9	10.9	11.2	3.8	43.1
FHLMC	≤ 1.5	110,686	2.529	317	37	329	2.5	2.0	2.4	2.3	2.5	3.1	21.1	−14.3
	2.0	702,367	2.896	320	34	302	3.0	2.6	2.8	2.8	3.1	3.8	14.7	−7.1
	2.5	485,087	3.293	320	34	259	4.0	3.4	3.7	3.7	4.0	4.7	15.5	−7.7
	3.0	269,882	3.730	289	62	204	4.5	4.1	4.3	4.3	4.7	5.4	10.4	−3.5
	3.5	186,481	4.150	277	73	180	5.0	4.8	5.1	5.0	5.3	6.1	5.5	−6.0
	4.0	150,700	4.686	288	63	183	5.1	4.8	4.9	5.0	5.3	6.1	5.8	−2.2
	4.5	111,218	5.236	303	50	197	5.3	4.8	5.1	5.1	5.3	5.9	10.8	−7.5
	5.0	111,750	5.831	323	31	231	4.9	4.6	4.4	4.6	5.0	5.6	6.5	4.7
	5.5	113,010	6.385	333	22	248	5.2	5.2	5.0	5.1	5.4	6.3	1.0	3.5
	6.0	93,323	6.885	338	17	246	7.0	6.7	5.9	6.5	6.7	7.5	4.7	13.8
	≥ 6.5	83,410	7.534	345	11	246	12.0	11.8	8.4	10.8	10.1	10.6	2.2	43.4
GNMA I	≤ 1.5	43	2.266	312	46	122	0.2	1.5	3.4	1.7	4.0	4.3	−89.4	−55.2
	2.0	363	2.689	301	54	116	1.8	1.8	5.0	2.9	4.1	4.6	−3.3	−63.8
	2.5	1,811	3.078	270	81	130	4.0	3.8	3.4	3.7	3.9	4.5	4.9	13.1
	3.0	9,723	3.517	235	114	117	4.4	4.4	4.9	4.6	5.0	5.5	−0.4	−10.9
	3.5	8,895	4.037	222	126	103	5.1	5.0	5.0	5.0	5.6	6.3	0.9	1.1
	4.0	9,548	4.527	213	136	100	4.9	5.0	4.8	4.9	5.5	6.2	−1.7	3.1
	4.5	9,296	5.009	190	159	92	5.9	5.4	5.4	5.6	6.0	6.7	10.0	−0.8
	5.0	6,694	5.514	178	171	74	5.9	5.3	7.1	6.1	6.2	6.8	11.7	−25.7
	5.5	3,416	6.021	170	180	62	6.1	6.8	7.3	6.7	6.5	7.0	−10.9	−7.1
	6.0	2,709	6.527	179	172	59	5.8	5.7	8.5	6.7	6.7	7.1	1.3	−33.2
	≥ 6.5	2,091	7.315	202	152	44	7.0	7.2	7.9	7.4	7.5	7.9	−2.3	−9.3

Source: Fannie Mae, Freddie Mac, Ginnie Mae, Santander US Capital Markets

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Fixed 30, by Coupon

							CPR						%Δ	
Agency	Coupon	Balance ($mm)	WAC	WAM	WALA	ALS ($k)	Feb	Jan	Dec	3M	6M	12M	Jan→Feb	Dec→Jan
GNMA II	≤ 1.5	5,360	1.979	320	33	295	3.8	3.0	3.2	3.3	3.9	4.4	26.6	−7.0
	2.0	361,404	2.419	320	33	279	4.7	3.9	4.1	4.2	4.6	5.7	20.9	−5.2
	2.5	449,654	2.936	320	34	234	5.2	4.5	4.7	4.8	5.2	6.4	17.1	−5.0
	3.0	329,227	3.433	298	56	187	5.6	4.9	5.3	5.2	5.7	6.9	14.2	−7.5
	3.5	250,138	3.908	281	72	156	5.7	5.2	5.5	5.5	5.9	7.1	11.0	−6.4
	4.0	164,615	4.457	295	59	164	6.0	5.2	5.6	5.6	5.9	6.7	15.2	−6.6
	4.5	136,090	4.991	315	41	199	5.9	4.8	5.1	5.3	5.4	5.8	22.3	−4.5
	5.0	137,002	5.543	332	25	242	5.4	4.7	4.9	5.0	4.7	5.1	16.0	−4.6
	5.5	125,127	6.057	343	15	272	8.1	7.4	4.4	6.7	5.4	5.6	9.5	69.9
	6.0	108,599	6.575	346	12	268	15.4	14.5	5.7	12.2	8.8	7.6	6.6	166.1
	≥ 6.5	112,396	7.224	350	8	256	17.6	17.6	6.4	14.4	11.1	10.0	−0.2	190.2

Source: Fannie Mae, Freddie Mac, Ginnie Mae, Santander US Capital Markets

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Fixed 30, by Issue Year

							CPR						%Δ	
Agency	Issue Year	Balance ($mm)	WAC	WAM	WALA	ALS ($k)	Feb	Jan	Dec	3M	6M	12M	Jan→Feb	Dec→Jan
FNMA	2024	40,650	6.995	358	1	336	8.9	6.9		8.2	8.2	8.2	29.3	
	2023	284,898	6.611	349	8	318	7.4	7.3	5.8	6.8	6.4	6.6	0.7	28.1
	2022	486,411	4.487	336	21	304	4.5	3.9	4.0	4.1	4.2	4.7	14.7	−2.7
	2021	842,160	3.026	323	32	274	3.5	3.1	3.4	3.3	3.6	4.2	15.8	−10.3
	2020	595,880	3.188	310	42	253	3.6	3.2	3.6	3.4	3.8	4.7	14.4	−11.9
	2019	106,759	4.192	296	55	195	5.5	5.1	5.9	5.5	5.9	7.0	9.0	−13.3
	2018	58,646	4.681	281	69	166	6.3	6.0	6.7	6.4	6.8	8.1	5.1	−10.5
	2017	70,416	4.221	269	80	164	5.6	5.1	5.8	5.5	5.9	7.0	9.7	−10.9
	2016	86,476	3.846	257	91	167	4.6	4.8	4.9	4.7	5.2	6.1	−3.9	−2.5
	2015	52,154	4.125	243	104	152	5.2	4.9	5.2	5.1	5.6	6.5	7.9	−6.5
	2014	28,401	4.536	229	117	129	5.7	5.8	6.1	5.9	6.1	7.1	−3.2	−4.1
	2013	76,326	3.851	215	129	139	4.8	4.7	4.9	4.8	5.1	5.9	0.7	−3.5
	2012	66,494	3.903	205	139	134	5.1	5.0	5.2	5.1	5.4	6.1	1.2	−3.2
	2011	21,685	4.632	192	152	114	6.0	6.0	6.4	6.2	6.4	7.1	1.1	−7.5
	2010	17,530	4.803	181	163	112	6.4	6.5	6.4	6.4	6.7	7.4	−2.2	1.7
	2009	17,150	5.087	163	183	92	7.0	6.6	6.8	6.8	7.1	7.8	4.9	−2.7
	2008	4,171	6.158	155	193	86	7.3	7.2	6.9	7.1	7.3	8.1	1.3	4.7
	2007	4,168	6.489	148	201	80	6.9	7.0	6.9	6.9	7.3	8.1	−1.1	0.9
	2006	2,894	6.520	136	213	73	7.2	7.4	7.5	7.4	7.5	8.4	−2.1	−2.0
	≤ 2005	16,621	6.018	107	243	53	8.3	8.2	8.2	8.2	8.3	8.9	0.5	0.5
FHLMC	2024	33,067	7.058	358	1	308	7.2	6.0		6.8	6.8	6.8	20.0	
	2023	271,978	6.662	349	7	311	7.0	6.9	5.4	6.4	6.1	6.5	1.4	28.2
	2022	433,777	4.466	335	21	300	4.3	3.8	3.7	3.9	4.1	4.5	13.7	0.7
	2021	789,412	3.006	323	32	280	3.5	3.0	3.2	3.2	3.5	4.1	16.3	−7.5
	2020	469,614	3.147	310	42	261	3.5	3.1	3.4	3.3	3.7	4.5	14.4	−9.3
	2019	82,954	4.171	295	56	194	5.6	4.8	5.2	5.2	5.7	6.9	16.2	−7.0
	2018	39,455	4.655	279	70	164	6.3	6.3	6.5	6.3	6.7	8.0	−0.4	−2.7
	2017	51,582	4.196	269	80	169	5.5	5.4	5.7	5.5	5.9	7.0	2.8	−6.1
	2016	60,457	3.874	257	91	173	4.9	4.7	4.9	4.8	5.2	6.1	4.7	−5.8
	2015	38,528	4.091	241	105	153	4.8	4.9	5.2	4.9	5.3	6.3	−2.2	−5.9
	2014	19,632	4.468	229	116	134	5.4	5.6	6.0	5.7	6.0	7.0	−3.3	−7.1
	2013	44,057	3.821	215	130	139	4.7	4.4	5.0	4.7	5.0	5.8	6.2	−11.8
	2012	32,514	3.925	204	139	130	4.9	5.0	5.2	5.0	5.3	6.0	−2.3	−4.0
	2011	10,819	4.641	191	153	116	6.0	6.2	6.0	6.1	6.4	7.2	−2.7	3.0
	2010	11,665	4.882	181	163	108	5.7	6.2	6.9	6.3	6.6	7.5	−9.8	−9.5
	2009	10,071	5.003	169	175	103	6.7	6.9	7.0	6.9	7.0	7.8	−1.9	−1.6
	2008	2,787	6.106	156	192	85	6.5	6.7	6.1	6.4	7.0	7.8	−2.5	9.9
	2007	3,017	6.414	147	202	73	7.8	7.1	7.4	7.4	7.4	8.1	9.9	−4.1
	2006	2,151	6.426	135	213	70	7.2	6.4	7.5	7.0	7.9	8.5	14.2	−15.8
	≤ 2005	10,375	5.999	107	242	51	7.7	8.2	8.5	8.2	8.3	9.0	−6.6	−2.9

Source: Fannie Mae, Freddie Mac, Ginnie Mae, Santander US Capital Markets

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Fixed 30, by Issue Year

							CPR						%Δ	
Agency	Issue Year	Balance ($mm)	WAC	WAM	WALA	ALS ($k)	Feb	Jan	Dec	3M	6M	12M	Jan→Feb	Dec→Jan
GNMA I	2024	194	7.229	358	1	200	0.2	0.1		0.2	0.2	0.2	35.3	
	2023	1,699	6.672	351	8	207	3.3	4.2	6.0	4.5	3.7	3.2	−21.1	−31.4
	2022	1,533	4.780	338	20	182	4.8	2.7	7.2	4.9	4.0	3.9	76.7	−62.5
	2021	1,076	3.279	325	31	148	3.0	1.9	3.2	2.7	3.6	3.8	61.9	−41.2
	2020	1,426	3.590	310	45	163	4.4	3.1	4.3	3.9	4.5	5.6	41.9	−28.7
	2019	1,174	4.179	300	55	142	3.1	4.5	5.3	4.3	4.8	5.9	−30.1	−16.8
	2018	721	4.497	285	69	115	4.7	4.1	4.3	4.4	4.5	5.6	14.5	−3.4
	2017	1,156	4.339	274	80	122	5.4	5.1	4.9	5.1	5.5	6.5	5.8	4.6
	2016	1,110	3.990	260	92	106	4.7	4.3	4.3	4.4	5.2	5.8	7.5	2.1
	2015	2,006	4.085	244	105	106	4.4	4.7	5.3	4.8	5.6	6.5	−6.1	−11.9
	2014	931	4.247	232	117	86	5.2	5.8	4.1	5.1	5.4	5.8	−11.0	43.0
	2013	6,571	3.609	216	130	104	4.7	4.8	5.0	4.8	5.2	5.9	−3.5	−2.5
	2012	6,336	3.822	206	140	100	5.1	4.9	5.4	5.1	5.5	6.1	5.4	−9.0
	2011	5,228	4.518	195	152	94	5.3	5.4	4.9	5.2	5.6	6.3	−2.5	10.9
	2010	7,529	4.871	185	164	93	5.2	5.1	5.3	5.2	5.8	6.6	1.9	−3.9
	2009	8,623	5.226	172	175	87	5.8	5.4	6.3	5.8	6.2	6.8	9.1	−15.4
	2008	1,778	6.178	161	188	72	6.7	6.5	6.4	6.6	6.7	7.0	3.7	1.2
	2007	561	6.413	149	200	63	5.9	4.7	6.8	5.8	6.0	6.6	24.4	−30.7
	2006	557	6.292	136	213	57	5.3	7.7	5.9	6.3	7.1	7.4	−31.3	31.1
	≤ 2005	4,383	6.202	98	251	37	7.8	8.0	8.3	8.0	8.0	8.4	−2.7	−4.4
GNMA II	2024	54,305	6.529	357	2	315	1.5	1.2		1.4	1.4	1.4	19.7	
	2023	349,149	6.241	350	8	298	11.7	10.0	4.2	8.6	6.2	5.1	18.0	142.9
	2022	426,957	4.302	337	21	273	7.4	6.7	5.2	6.4	5.9	6.2	11.4	28.3
	2021	587,237	2.806	322	32	243	5.1	4.3	4.6	4.7	5.1	6.1	18.8	−6.0
	2020	322,605	3.028	310	43	220	5.3	4.6	4.9	4.9	5.5	7.0	15.6	−6.9
	2019	83,280	4.069	299	56	172	6.4	5.8	6.4	6.2	6.9	8.5	11.6	−9.2
	2018	49,484	4.510	283	71	145	6.7	6.0	6.9	6.5	7.2	8.6	13.2	−14.6
	2017	65,955	3.975	271	81	144	5.8	5.4	6.0	5.7	6.4	7.7	8.1	−11.1
	2016	71,409	3.665	259	92	140	5.5	5.2	5.4	5.4	6.0	7.2	6.2	−3.8
	2015	44,832	3.892	245	105	126	5.6	5.2	5.9	5.6	6.1	7.2	9.7	−12.8
	2014	23,489	4.176	230	117	107	5.7	5.3	5.7	5.6	6.1	7.0	6.8	−7.1
	2013	38,348	3.647	216	130	114	4.9	4.9	5.1	4.9	5.4	6.2	−0.1	−4.5
	2012	31,093	3.755	206	139	112	5.0	5.0	5.2	5.1	5.4	6.2	−0.3	−4.2
	2011	11,059	4.528	194	152	94	5.4	5.5	5.6	5.5	5.9	6.6	−2.7	−1.2
	2010	9,949	4.926	183	165	91	5.4	5.5	6.0	5.6	5.9	6.7	−0.3	−9.2
	2009	5,037	5.238	173	175	87	5.8	5.6	6.2	5.9	6.3	7.1	2.4	−9.2
	2008	1,475	6.261	160	188	72	5.8	5.7	6.1	5.9	6.4	7.2	1.8	−6.4
	2007	678	6.476	149	200	65	6.8	7.3	5.7	6.6	7.1	7.7	−7.3	30.5
	2006	510	6.331	135	213	58	5.8	6.9	5.9	6.2	6.6	7.3	−16.4	17.7
	≤ 2005	2,763	6.187	104	244	41	7.5	8.2	7.8	7.8	7.9	8.5	−7.8	5.3

Source: Fannie Mae, Freddie Mac, Ginnie Mae, Santander US Capital Markets

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FNMA, Fixed 30, Largest Cohorts

							CPR						%Δ	
Coupon	Issue Year	Balance ($mm)	WAC	WAM	WALA	ALS ($k)	Feb	Jan	Dec	3M	6M	12M	Jan→Feb	Dec→Jan
1.5	2021	39,815	2.481	319	35	337	2.1	2.0	2.4	2.2	2.3	2.8	2.5	−17.4
	2020	37,002	2.530	314	39	325	2.5	2.2	2.4	2.3	2.6	3.2	13.0	−10.4
2.0	2022	48,810	2.934	331	25	345	2.7	2.3	2.4	2.4	2.6	3.0	18.4	−4.2
	2021	449,218	2.845	322	32	297	3.1	2.6	2.9	2.9	3.1	3.7	18.2	−10.7
	2020	268,383	2.917	311	40	281	3.0	2.7	3.0	2.9	3.3	4.1	13.8	−9.9
2.5	2022	79,495	3.324	332	24	319	3.6	3.1	3.2	3.3	3.4	3.9	15.3	−2.4
	2021	303,514	3.246	324	31	255	4.1	3.5	3.9	3.8	4.2	4.7	15.7	−11.3
	2020	208,547	3.362	308	43	246	3.9	3.3	3.9	3.7	4.1	5.1	17.6	−15.5
	2019	12,406	3.478	300	52	281	3.9	3.8	3.8	3.8	4.2	4.9	2.1	−0.3
3.0	2022	68,240	3.736	334	23	295	4.1	3.5	3.8	3.8	3.8	4.2	16.9	−9.2
	2021	43,578	3.671	325	31	203	5.3	4.7	4.8	5.0	5.1	5.8	14.3	−3.0
	2020	64,002	3.794	307	45	197	4.8	4.4	4.8	4.7	5.2	6.1	9.2	−7.9
	2019	44,689	3.858	297	54	219	5.0	4.4	5.0	4.8	5.1	6.1	12.6	−11.1
	2016	52,571	3.635	258	90	193	4.0	4.3	4.4	4.2	4.7	5.7	−6.0	−3.4
	2015	11,002	3.763	240	105	187	4.3	4.2	4.5	4.3	4.9	5.7	3.6	−6.8
	2013	42,761	3.569	214	130	156	4.3	4.5	4.4	4.4	4.8	5.5	−4.9	1.8
	2012	25,549	3.576	207	136	157	4.4	4.7	4.7	4.6	4.8	5.5	−6.3	−0.1
3.5	2022	61,911	4.182	336	22	298	4.1	3.7	3.9	3.9	3.9	4.4	11.7	−6.0
	2019	25,852	4.340	295	55	184	5.9	5.4	6.3	5.9	6.3	7.6	9.5	−14.4
	2018	12,077	4.074	277	72	196	5.1	4.8	5.7	5.2	5.4	6.5	7.4	−17.2
	2017	33,203	4.032	270	79	179	5.2	4.7	5.6	5.2	5.6	6.6	11.0	−16.2
	2016	22,777	4.053	256	92	146	5.4	5.3	5.3	5.3	5.6	6.6	2.3	−0.7
	2015	30,209	4.093	243	104	159	5.3	4.8	5.1	5.1	5.5	6.4	10.7	−6.8
	2013	19,137	4.005	216	129	127	5.1	4.9	5.0	5.0	5.3	6.1	3.9	−1.4
	2012	29,059	3.993	204	140	132	5.5	5.0	5.1	5.2	5.6	6.4	12.1	−3.4
4.0	2022	64,010	4.811	337	20	313	4.2	3.7	4.1	4.0	4.1	4.5	15.6	−11.6
	2019	14,664	4.794	293	57	160	6.5	6.6	7.3	6.8	7.2	8.4	−2.9	−9.1
	2018	25,891	4.607	282	68	181	6.1	5.7	6.3	6.1	6.5	7.9	7.2	−9.5
	2017	23,938	4.467	270	80	151	6.2	5.6	6.0	5.9	6.4	7.5	11.3	−7.2
	2014	15,696	4.583	230	117	129	5.6	5.6	6.2	5.8	6.1	7.0	−0.1	−9.5
4.5	2023	15,342	5.413	347	9	345	3.3	2.9	3.0	3.1	3.2	3.3	13.5	−4.6
	2022	66,609	5.340	338	18	306	4.5	3.9	4.1	4.2	4.5	4.8	14.7	−5.1
	2018	15,939	5.079	283	67	142	7.3	7.0	7.7	7.3	7.8	9.2	4.7	−9.1
5.0	2023	54,970	5.948	347	9	331	4.3	4.2	3.9	4.1	4.1	4.5	1.1	9.4
	2022	50,140	5.798	339	17	281	5.9	4.8	5.1	5.2	5.5	5.8	24.5	−6.0
5.5	2023	74,943	6.450	348	8	318	5.3	5.0	4.6	5.0	5.2	5.8	5.2	9.0
	2022	28,409	6.273	339	16	278	6.2	5.5	5.4	5.7	6.0	6.5	11.6	3.2
6.0	2024	12,213	6.982	358	0	346	6.9	4.9		6.3	6.3	6.3	44.1	
	2023	66,052	6.914	349	7	312	7.8	7.5	6.0	7.1	6.9	7.4	3.3	25.5
	2022	12,305	6.841	340	15	270	8.0	8.1	5.8	7.3	7.6	8.7	−1.4	41.0
6.5	2023	50,796	7.393	350	6	311	11.9	12.3	9.0	11.1	10.2	10.6	−3.2	39.5
7.0	2023	13,766	7.890	352	4	294	17.0	16.5	10.0	14.5	13.7	14.1	3.5	69.9

Source: Fannie Mae, Freddie Mac, Ginnie Mae, Santander US Capital Markets

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FHLMC, Fixed 30, Largest Cohorts

							CPR						%Δ	
Coupon	Issue Year	Balance ($mm)	WAC	WAM	WALA	ALS ($k)	Feb	Jan	Dec	3M	6M	12M	Jan→Feb	Dec→Jan
1.5	2021	65,199	2.519	319	35	337	2.5	2.0	2.4	2.3	2.5	3.1	28.3	−16.8
	2020	45,022	2.545	314	39	318	2.4	2.2	2.4	2.3	2.5	3.1	11.8	−10.1
2.0	2022	48,310	2.952	332	24	347	2.8	2.6	2.4	2.6	2.7	3.0	5.8	9.4
	2021	422,767	2.873	323	32	309	3.0	2.6	2.8	2.8	3.1	3.7	16.3	−7.4
	2020	231,261	2.928	312	40	282	3.1	2.7	3.0	2.9	3.3	4.0	13.8	−9.4
2.5	2022	71,148	3.324	332	24	315	3.5	3.2	3.1	3.3	3.4	3.8	11.7	0.6
	2021	261,741	3.232	324	30	252	4.1	3.5	3.9	3.8	4.2	4.8	17.4	−8.6
	2020	139,310	3.379	309	43	250	3.9	3.4	3.7	3.7	4.1	5.0	14.2	−9.0
	2019	10,831	3.482	298	53	276	3.7	3.1	3.8	3.6	4.1	5.0	19.0	−18.7
3.0	2022	61,956	3.736	334	23	279	4.0	3.4	3.3	3.6	3.7	4.1	17.0	5.7
	2021	34,372	3.633	324	30	184	5.1	4.8	4.6	4.8	5.2	5.9	6.2	3.1
	2020	41,816	3.840	305	47	206	4.9	4.3	4.7	4.7	5.1	6.2	16.1	−10.3
	2019	36,228	3.884	295	56	216	5.0	4.2	4.4	4.5	5.1	6.2	19.4	−6.2
	2016	38,269	3.698	258	90	194	4.6	4.3	4.5	4.5	4.9	5.7	6.6	−5.3
	2015	10,356	3.741	239	106	183	4.3	4.3	4.2	4.3	4.7	5.6	−0.3	1.7
	2013	25,829	3.561	213	131	153	4.3	4.1	4.7	4.4	4.7	5.3	4.7	−13.4
	2012	12,461	3.604	208	136	152	4.2	4.3	4.7	4.4	4.7	5.4	−2.4	−8.8
3.5	2022	49,096	4.220	335	22	287	4.1	3.7	3.7	3.9	4.0	4.4	12.8	−1.1
	2019	17,914	4.342	295	56	190	6.5	5.3	5.5	5.8	6.2	7.6	24.0	−4.8
	2018	8,712	4.125	275	74	189	5.5	5.5	5.9	5.6	5.6	6.8	−0.1	−8.1
	2017	25,105	4.053	269	79	181	5.3	5.1	5.6	5.3	5.6	6.7	2.7	−7.9
	2016	15,396	4.094	256	93	154	5.2	5.2	5.4	5.3	5.7	6.7	0.6	−4.1
	2015	21,348	4.101	242	104	156	4.6	5.0	5.4	5.0	5.3	6.3	−8.3	−7.6
	2013	11,848	3.998	216	128	128	5.0	4.4	5.3	4.9	5.3	6.1	14.0	−17.4
	2012	15,162	3.993	203	140	127	5.1	5.4	5.4	5.3	5.6	6.3	−6.4	0.3
4.0	2022	60,051	4.836	337	19	312	3.9	3.5	3.4	3.6	3.8	4.2	12.7	2.4
	2019	10,022	4.742	293	58	160	6.2	5.9	6.2	6.1	6.7	8.1	5.4	−4.1
	2018	16,586	4.607	281	69	180	6.0	6.1	6.0	6.0	6.6	7.9	−2.8	2.3
	2017	15,417	4.469	269	80	156	6.2	5.8	6.4	6.1	6.5	7.6	7.3	−9.1
	2014	10,412	4.592	230	116	130	5.9	5.6	5.9	5.8	6.1	7.0	4.3	−4.6
4.5	2023	11,610	5.464	347	10	361	3.2	2.8	3.4	3.1	3.0	3.3	14.0	−18.1
	2022	59,281	5.347	337	18	310	4.5	3.6	4.1	4.1	4.3	4.6	27.1	−13.2
	2018	10,906	5.021	282	67	142	6.7	6.7	7.2	6.9	7.5	8.7	−0.3	−7.1
5.0	2023	48,748	5.959	347	9	328	4.1	3.8	3.2	3.7	3.9	4.4	8.7	16.6
	2022	45,754	5.791	338	17	282	5.2	4.7	4.6	4.8	5.2	5.6	10.8	2.3
5.5	2023	76,053	6.457	348	8	316	5.1	4.9	4.5	4.8	5.1	5.9	4.0	7.7
	2022	22,674	6.232	339	16	266	5.8	5.5	5.7	5.7	6.0	6.6	5.7	−2.6
6.0	2024	9,758	6.963	358	0	309	5.9	3.4		5.0	5.0	5.0	76.8	
	2023	68,042	6.912	349	7	300	6.9	6.8	5.7	6.5	6.6	7.3	1.0	21.4
	2022	10,836	6.810	340	15	264	8.2	6.9	6.4	7.2	7.1	8.4	20.0	7.5
6.5	2023	47,364	7.403	351	5	297	11.2	11.3	7.7	10.1	9.5	9.9	−0.3	48.7
7.0	2023	13,977	7.888	353	3	297	15.4	15.2	10.2	13.6	12.8	13.0	1.7	53.5

Source: Fannie Mae, Freddie Mac, Ginnie Mae, Santander US Capital Markets

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GNMA I, Fixed 30, Largest Cohorts

							CPR						%Δ	
Coupon	Issue Year	Balance ($mm)	WAC	WAM	WALA	ALS ($k)	Feb	Jan	Dec	3M	6M	12M	Jan→Feb	Dec→Jan
2.0	2022	38	2.674	330	25	149	0.1	0.1	11.8	4.2	5.2	5.5	−12.3	−98.9
	2021	211	2.664	326	31	135	2.3	0.8	5.7	3.0	3.4	3.8	178.2	−85.5
	2020	28	2.747	317	40	121	2.8	0.1	2.9	1.9	2.7	3.7	3448.3	−97.3
2.5	2022	140	3.188	334	25	164	4.0	8.4	5.0	5.8	5.2	4.2	−52.7	69.5
	2021	366	3.172	325	31	147	3.6	1.8	2.5	2.7	2.8	3.1	98.6	−27.1
	2020	317	3.054	310	43	144	3.8	1.8	2.4	2.6	2.4	3.8	115.9	−26.1
3.0	2022	201	3.592	334	24	163	1.0	1.4	1.8	1.4	1.0	1.7	−23.9	−24.5
	2021	354	3.504	324	32	147	3.6	1.5	3.2	2.8	3.5	3.6	140.4	−54.3
	2020	710	3.526	310	46	177	4.3	3.2	5.3	4.3	5.2	6.1	32.7	−39.8
	2019	355	3.536	301	52	150	2.0	6.3	5.5	4.7	4.6	5.9	−68.8	15.5
	2017	152	3.549	271	81	101	2.0	4.1	4.9	3.7	4.0	4.2	−51.1	−15.0
	2016	307	3.509	261	92	104	3.6	4.9	3.6	4.0	4.3	4.9	−27.2	35.1
	2015	583	3.507	244	105	123	5.2	3.9	4.6	4.6	5.5	5.9	35.5	−15.6
	2013	4,313	3.502	216	131	111	4.5	4.8	5.1	4.8	5.1	5.7	−5.9	−6.4
	2012	2,521	3.522	209	137	111	5.0	4.4	5.3	4.9	5.3	5.7	12.7	−16.8
3.5	2022	114	4.132	337	21	169	4.9	7.3	4.5	5.6	3.3	3.1	−33.4	64.9
	2021	33	4.000	326	32	155	0.0	10.2	0.0	3.5	5.5	3.9	−99.9	
	2020	230	4.008	310	46	159	5.4	3.8	3.8	4.3	6.1	6.0	42.6	−0.8
	2019	283	4.024	301	54	157	3.1	4.3	8.9	5.5	5.7	6.9	−26.4	−53.2
	2018	212	4.032	283	70	115	4.7	2.8	4.0	3.8	3.8	5.5	66.2	−29.3
	2017	392	4.006	275	79	123	5.3	4.6	4.6	4.9	5.5	6.2	14.7	0.6
	2016	231	4.006	260	92	111	4.7	4.1	3.3	4.0	4.7	5.4	16.1	24.9
	2015	565	4.003	244	106	105	4.4	4.7	5.4	4.8	5.2	6.2	−7.6	−13.1
	2013	1,333	4.001	214	129	89	5.5	4.9	5.1	5.2	5.4	6.2	12.8	−5.8
	2012	3,234	4.009	205	142	97	5.3	5.2	5.3	5.3	5.8	6.4	1.9	−0.4
4.0	2022	287	4.558	337	22	212	3.3	1.1	2.9	2.4	3.0	4.5	193.0	−61.8
	2019	237	4.519	299	56	135	1.6	4.3	5.0	3.7	5.3	6.1	−62.6	−13.5
	2018	247	4.554	285	69	115	6.2	4.4	2.5	4.4	4.2	5.3	43.7	74.1
	2017	280	4.503	274	81	132	2.6	4.2	4.0	3.6	4.3	6.0	−38.6	6.0
4.5	2023	17	5.210	347	11	186	0.2	0.2	0.3	0.2	0.2	0.2	11.9	−30.0
	2022	234	5.067	339	19	185	10.6	1.4	0.6	4.3	3.3	2.8	681.0	147.8
	2018	123	5.055	288	67	111	4.7	6.8	3.8	5.1	5.7	6.8	−32.0	81.6
5.0	2023	114	5.672	348	10	161	2.0	2.1	1.5	1.8	1.5	1.0	−3.3	41.3
	2022	261	5.536	340	18	201	5.2	1.0	4.8	3.7	3.4	3.7	415.4	−78.9
5.5	2024	14	6.220	359	0	190	0.2	0.0		0.1	0.1	0.1	3340.1	
	2023	429	6.084	350	9	209	1.1	3.7	3.9	2.9	2.2	2.0	−71.1	−4.5
	2022	118	6.084	341	17	172	4.0	5.9	19.4	10.1	5.4	4.6	−33.4	−71.6
6.0	2024	35	6.717	358	1	231	0.2	0.1		0.2	0.2	0.2	139.6	
	2023	467	6.604	351	8	197	1.3	1.1	6.5	3.0	2.5	2.1	24.5	−84.0
	2022	93	6.529	341	16	170	1.6	0.6	36.9	15.0	11.3	8.1	152.7	−98.6
6.5	2023	407	7.110	351	7	220	8.0	8.4	12.3	9.6	6.7	5.8	−4.6	−33.5
7.0	2023	229	7.545	352	6	223	4.2	5.5	0.7	3.5	5.6	5.1	−24.6	688.8

Source: Fannie Mae, Freddie Mac, Ginnie Mae, Santander US Capital Markets

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GNMA II, Fixed 30, Largest Cohorts

							CPR						%Δ	
Coupon	Issue Year	Balance ($mm)	WAC	WAM	WALA	ALS ($k)	Feb	Jan	Dec	3M	6M	12M	Jan→Feb	Dec→Jan
2.0	2022	32,597	2.498	332	24	318	4.9	3.7	3.8	4.1	4.3	5.0	34.0	−3.9
	2021	248,810	2.405	321	32	277	4.8	4.0	4.2	4.3	4.7	5.7	21.1	−6.4
	2020	79,806	2.430	311	39	272	4.4	3.8	3.9	4.0	4.5	5.9	15.3	−1.4
2.5	2022	65,354	3.001	332	25	251	5.2	4.6	4.4	4.8	5.0	5.8	12.8	5.3
	2021	228,000	2.923	323	31	234	5.3	4.4	4.8	4.8	5.3	6.3	20.7	−8.5
	2020	146,162	2.922	311	42	231	5.0	4.4	4.6	4.7	5.3	6.8	14.5	−5.1
3.0	2022	56,961	3.455	333	24	252	5.5	4.4	4.7	4.9	5.2	5.9	26.1	−6.7
	2021	81,941	3.396	324	31	206	5.7	5.1	5.1	5.3	5.7	6.6	12.1	0.5
	2020	66,894	3.470	310	45	194	6.0	5.1	5.7	5.6	6.2	7.8	17.8	−11.0
	2019	27,152	3.514	301	54	208	5.8	4.9	6.0	5.6	6.2	7.9	18.7	−17.9
	2017	12,816	3.446	269	82	162	5.2	4.8	6.1	5.4	6.0	7.2	8.1	−21.7
	2016	36,616	3.408	261	90	157	5.5	5.0	5.3	5.3	5.9	7.1	11.4	−5.6
	2015	11,229	3.463	246	105	147	5.2	5.1	5.3	5.2	5.7	7.0	2.9	−4.1
	2013	20,489	3.328	216	130	126	4.4	4.6	4.9	4.6	5.1	5.9	−5.6	−5.3
	2012	9,217	3.388	210	136	122	4.6	4.2	4.9	4.5	5.0	5.9	8.9	−14.2
3.5	2022	48,032	3.945	335	23	265	5.6	4.7	4.5	4.9	4.9	5.5	19.7	4.8
	2021	18,450	3.888	322	35	199	5.4	5.3	5.1	5.3	5.7	6.7	0.7	4.2
	2020	19,920	3.927	307	48	159	7.0	5.7	7.0	6.5	7.1	8.5	24.1	−19.0
	2019	23,367	4.005	299	55	173	6.4	5.7	6.0	6.0	6.8	8.7	12.9	−6.1
	2018	12,339	3.940	280	73	155	5.8	5.5	5.9	5.7	6.5	8.0	6.5	−8.5
	2017	33,500	3.893	272	80	151	5.7	5.4	5.8	5.6	6.3	7.7	7.1	−8.0
	2016	25,943	3.881	258	93	129	5.4	5.2	5.5	5.4	6.1	7.3	3.0	−6.2
	2015	24,268	3.876	247	104	129	5.6	4.9	5.9	5.5	6.1	7.2	15.1	−17.6
	2013	11,604	3.834	216	129	107	5.2	4.8	5.0	5.0	5.4	6.2	8.2	−4.1
	2012	18,003	3.814	206	140	113	5.1	5.1	5.3	5.1	5.5	6.3	−1.2	−2.8
4.0	2022	62,759	4.517	338	20	298	5.6	4.3	4.5	4.8	4.8	5.1	31.7	−4.9
	2019	15,465	4.506	297	58	152	6.9	6.4	7.0	6.8	7.4	8.9	7.7	−9.0
	2018	17,406	4.462	285	69	150	6.7	5.7	6.7	6.4	7.1	8.5	17.3	−15.2
	2017	15,676	4.387	272	80	128	6.3	5.7	6.2	6.1	6.8	8.0	10.1	−9.0
4.5	2023	25,022	5.043	348	10	333	3.7	2.6	2.4	2.9	2.4	2.1	42.7	10.5
	2022	66,214	5.024	340	18	293	6.3	4.8	5.0	5.4	5.3	5.3	32.5	−4.1
	2018	12,238	4.938	286	68	136	7.4	6.4	7.6	7.1	7.7	9.1	15.4	−15.7
5.0	2023	62,878	5.583	349	9	332	4.1	3.2	3.3	3.5	2.9	2.6	28.6	−2.9
	2022	51,224	5.530	341	17	268	7.0	5.8	5.7	6.2	6.0	6.2	20.0	1.8
5.5	2024	12,583	6.065	358	1	358	1.0	1.1		1.0	1.0	1.0	−14.4	
	2023	81,220	6.082	350	8	313	8.4	6.9	3.2	6.2	4.6	3.9	22.4	122.1
	2022	26,978	5.996	342	16	265	10.4	9.8	7.6	9.3	7.8	8.9	7.1	30.8
6.0	2024	13,776	6.586	358	1	324	1.3	0.7		1.1	1.1	1.1	94.0	
	2023	81,498	6.582	351	7	292	16.0	13.6	5.0	11.6	8.1	6.6	19.2	183.8
	2022	10,989	6.526	343	15	268	28.3	29.1	10.5	23.0	15.6	12.6	−3.0	205.2
6.5	2023	58,812	7.040	352	6	275	20.4	18.0	5.9	14.9	10.6	9.0	15.1	223.1
7.0	2023	23,588	7.499	353	5	274	14.4	11.7	4.7	10.4	8.8	8.0	24.5	157.7

Source: Fannie Mae, Freddie Mac, Ginnie Mae, Santander US Capital Markets

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Fixed 20, by Coupon

							CPR						%Δ	
Agency	Coupon	Balance ($mm)	WAC	WAM	WALA	ALS ($k)	Feb	Jan	Dec	3M	6M	12M	Jan→Feb	Dec→Jan
FNMA	≤ 1.5	20,956	2.466	203	34	265	1.9	2.1	2.3	2.1	2.3	2.8	−12.2	−5.5
	2.0	56,635	2.834	202	34	222	2.8	2.7	2.9	2.8	3.1	3.6	3.0	−6.7
	2.5	24,594	3.221	195	41	174	4.1	3.5	4.0	3.9	4.0	4.6	17.3	−10.5
	3.0	22,127	3.630	144	88	117	5.3	5.3	5.1	5.2	5.4	6.1	−0.9	5.4
	3.5	11,544	4.061	134	98	97	6.5	6.3	6.1	6.3	6.3	7.0	3.0	3.3
	4.0	7,675	4.555	143	90	94	6.6	7.0	6.6	6.7	6.8	7.4	−5.9	6.2
	4.5	2,378	5.100	151	83	84	8.2	8.1	7.4	7.9	8.1	9.0	1.2	10.6
	5.0	1,534	5.812	205	30	121	8.7	8.1	7.2	8.0	8.3	9.3	7.4	12.2
	5.5	1,148	6.387	213	22	119	12.4	11.0	11.7	11.8	11.4	11.7	13.3	−6.3
	6.0	776	6.868	215	21	112	15.6	14.9	12.6	14.5	13.9	14.0	5.0	19.8
	≥ 6.5	325	7.491	223	13	115	13.7	22.8	16.0	17.5	17.0	18.5	−42.9	48.0
FHLMC	≤ 1.5	17,304	2.479	202	34	260	2.2	1.9	2.4	2.1	2.3	2.7	17.7	−21.2
	2.0	49,498	2.855	203	34	223	3.0	2.5	2.9	2.8	3.0	3.6	18.5	−13.7
	2.5	18,364	3.278	198	38	191	3.9	3.6	3.9	3.8	3.9	4.5	10.6	−9.6
	3.0	15,591	3.669	151	82	122	4.9	4.9	5.1	5.0	5.2	6.0	−0.6	−2.9
	3.5	7,485	4.098	140	93	99	5.8	6.0	5.8	5.9	6.1	6.9	−2.8	4.3
	4.0	4,381	4.615	144	89	92	6.8	7.1	6.7	6.8	6.8	7.6	−4.3	6.1
	4.5	1,545	5.137	155	79	90	9.3	8.3	7.2	8.3	8.3	8.5	13.0	15.6
	5.0	1,088	5.815	203	33	112	7.3	8.2	7.1	7.5	7.6	8.7	−11.9	16.4
	5.5	865	6.406	213	22	109	11.6	14.4	9.7	11.9	10.7	11.7	−20.1	51.3
	6.0	592	6.874	213	22	107	13.7	15.3	12.0	13.7	12.3	13.0	−11.4	29.7
	≥ 6.5	328	7.549	224	12	127	13.4	9.1	14.2	12.2	13.3	15.4	49.8	−37.6

Source: Fannie Mae, Freddie Mac, Ginnie Mae, Santander US Capital Markets

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Fixed 20, by Issue Year

							CPR						%Δ	
Agency	Issue Year	Balance ($mm)	WAC	WAM	WALA	ALS ($k)	Feb	Jan	Dec	3M	6M	12M	Jan→Feb	Dec→Jan
FNMA	2024	423	6.800	237	1	239	14.5	20.8		16.1	16.1	16.1	−32.4	
	2023	2,752	6.274	226	8	219	10.7	10.8	9.5	10.3	9.6	9.7	−0.1	14.0
	2022	14,990	3.473	214	23	217	4.3	3.9	3.8	4.0	4.2	4.6	11.2	2.5
	2021	58,719	2.767	205	32	219	2.7	2.6	2.8	2.7	3.0	3.5	3.3	−7.6
	2020	34,768	3.022	193	42	205	3.2	3.0	3.3	3.2	3.3	4.0	7.4	−8.5
	2019	3,515	3.961	177	57	155	5.3	6.0	5.3	5.5	5.5	6.4	−11.6	12.3
	2018	2,982	4.352	162	69	122	6.1	6.8	5.4	6.1	6.2	7.1	−9.7	25.7
	2017	5,217	3.925	151	80	123	5.9	4.8	5.7	5.5	5.5	6.4	23.0	−15.8
	2016	6,507	3.600	141	90	127	4.6	4.9	4.6	4.7	5.2	6.0	−6.4	7.4
	2015	3,337	3.954	127	104	102	5.9	6.2	5.4	5.8	5.7	6.4	−5.3	14.5
	2014	1,952	4.362	116	116	85	5.9	6.2	7.0	6.4	6.3	7.2	−5.7	−11.6
	2013	5,466	3.731	102	129	79	6.2	6.6	6.7	6.5	6.6	7.2	−6.5	−1.3
	2012	5,411	3.757	92	139	79	6.9	6.8	6.3	6.7	6.8	7.5	1.9	7.5
	2011	1,968	4.336	81	151	67	8.5	8.7	7.9	8.4	7.8	8.5	−1.2	10.5
	2010	1,072	4.573	71	161	58	8.7	9.9	9.6	9.4	9.1	9.6	−13.0	3.4
	2009	388	4.865	58	175	44	11.4	11.8	10.5	11.3	11.0	11.9	−3.5	13.6
	2008	77	5.979	46	189	30	11.0	17.1	8.0	12.1	12.6	12.8	−37.8	123.0
	2007	65	6.382	37	200	24	14.5	16.2	12.7	14.5	13.8	13.7	−11.4	30.3
	2006	35	6.396	26	212	17	21.6	19.0	19.5	20.0	18.1	15.7	15.0	−2.3
	≤ 2005	45	5.746	14	225	8	32.8	26.6	29.1	29.4	26.7	26.1	28.5	−10.3
FHLMC	2024	266	6.792	237	1	247	9.1	2.1		6.9	6.9	6.9	336.3	
	2023	2,081	6.377	228	7	216	10.3	10.7	9.3	10.1	9.2	9.9	−3.1	15.6
	2022	13,504	3.460	215	23	223	4.1	3.5	3.3	3.7	3.9	4.3	17.0	6.8
	2021	49,165	2.791	205	32	225	3.0	2.4	2.9	2.8	3.0	3.5	25.6	−19.2
	2020	28,531	3.041	194	42	208	3.1	3.1	3.3	3.2	3.3	3.9	−0.1	−8.3
	2019	3,263	3.920	180	54	162	4.2	5.1	3.7	4.4	5.1	6.2	−17.3	38.7
	2018	1,535	4.430	163	69	124	6.0	5.8	6.9	6.2	6.4	7.3	4.1	−16.5
	2017	2,813	3.895	151	81	125	5.3	5.7	5.1	5.3	5.6	6.3	−7.7	12.8
	2016	3,518	3.684	141	91	120	5.3	4.3	5.6	5.1	5.1	5.9	23.1	−23.4
	2015	2,786	3.896	125	106	102	5.2	6.2	5.2	5.5	5.9	6.8	−16.2	20.5
	2014	1,115	4.320	115	116	86	7.1	7.1	6.3	6.8	6.7	7.7	0.0	13.3
	2013	3,195	3.735	102	129	78	6.3	6.1	6.8	6.4	6.2	7.0	3.4	−11.4
	2012	3,058	3.818	91	140	74	6.5	6.7	7.2	6.8	6.9	7.6	−4.0	−6.6
	2011	1,109	4.393	80	151	67	8.4	9.5	7.8	8.5	8.0	8.3	−11.6	22.9
	2010	781	4.624	70	162	56	9.4	11.0	9.3	9.9	9.2	9.7	−14.7	19.3
	2009	145	4.876	58	175	45	10.7	14.1	9.2	11.3	11.2	11.0	−25.1	57.2
	2008	47	5.968	46	190	30	16.2	9.4	11.4	12.3	10.9	11.9	78.2	−18.3
	2007	46	6.328	37	200	23	13.6	15.6	14.0	14.4	14.1	13.7	−13.9	12.0
	2006	36	6.392	26	212	16	17.2	18.3	15.9	17.1	16.2	15.8	−6.7	16.6
	≤ 2005	45	5.751	15	224	8	28.2	27.5	25.9	27.1	26.2	26.3	3.1	6.8

Source: Fannie Mae, Freddie Mac, Ginnie Mae, Santander US Capital Markets

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FNMA, Fixed 20, Largest Cohorts

							CPR						%Δ	
Coupon	Issue Year	Balance ($mm)	WAC	WAM	WALA	ALS ($k)	Feb	Jan	Dec	3M	6M	12M	Jan→Feb	Dec→Jan
1.5	2022	442	2.429	213	25	313	2.2	3.0	1.0	2.1	2.0	2.7	−27.5	193.9
	2021	15,095	2.445	205	32	274	1.8	2.0	2.1	2.0	2.3	2.7	−13.6	−5.7
	2020	5,419	2.530	197	39	241	2.2	2.4	2.7	2.4	2.4	2.9	−7.4	−11.6
2.0	2022	4,848	2.823	213	25	239	2.7	3.4	2.8	3.0	3.2	3.5	−20.7	22.9
	2021	34,374	2.801	205	31	222	2.8	2.7	2.9	2.8	3.1	3.6	4.6	−6.9
	2020	17,413	2.902	194	41	217	2.8	2.6	3.0	2.8	3.0	3.6	8.5	−14.0
2.5	2022	4,009	3.149	214	24	210	4.4	3.4	4.3	4.0	3.9	4.3	28.7	−20.1
	2021	8,560	3.138	205	32	163	3.7	3.2	3.5	3.4	3.8	4.3	16.2	−9.8
	2020	9,796	3.320	191	44	187	4.2	3.7	4.1	4.0	4.1	4.7	14.6	−9.8
	2019	516	3.353	181	53	213	3.6	2.6	3.7	3.3	3.9	5.0	40.7	−31.8
	2016	948	3.188	143	88	154	4.9	4.0	3.4	4.1	4.5	5.2	21.5	18.8
3.0	2022	2,259	3.585	216	22	202	5.1	3.9	2.8	4.0	3.9	4.3	29.7	39.7
	2021	659	3.543	206	31	120	4.5	3.9	5.2	4.5	5.0	5.6	17.3	−26.8
	2020	1,788	3.788	188	46	152	5.1	4.8	3.6	4.5	4.7	5.5	7.3	34.8
	2019	1,847	3.747	176	57	169	5.6	6.6	5.1	5.7	5.6	6.1	−15.7	30.5
	2017	1,854	3.581	150	81	143	5.7	3.7	5.5	5.0	4.9	5.8	55.9	−34.0
	2016	4,768	3.583	141	90	129	4.2	4.7	4.8	4.6	5.1	6.0	−10.7	−1.4
	2015	1,948	3.758	126	104	118	4.9	6.5	5.0	5.4	5.2	6.1	−25.1	31.4
	2013	3,568	3.576	101	130	81	6.1	6.5	6.5	6.4	6.4	7.0	−6.1	0.0
	2012	2,948	3.580	94	137	85	6.3	6.3	5.8	6.1	6.4	7.1	−0.8	9.0
3.5	2022	1,097	4.067	216	21	197	5.3	4.4	3.4	4.3	5.0	5.3	20.9	30.8
	2019	616	4.316	177	56	137	5.1	4.8	5.3	5.1	5.6	7.3	5.3	−9.3
	2018	875	3.934	159	72	137	5.2	5.9	5.6	5.6	5.5	6.2	−12.9	4.8
	2017	2,077	3.971	152	80	120	5.8	5.0	6.0	5.6	5.5	6.5	15.5	−16.5
	2016	498	4.053	140	92	99	7.9	6.6	4.4	6.3	6.3	6.8	20.2	52.2
	2015	962	4.146	127	104	89	7.1	5.8	6.4	6.5	6.3	6.7	22.8	−9.7
	2014	908	4.251	115	116	90	5.6	6.2	5.7	5.9	6.0	6.9	−9.8	8.5
	2013	1,119	4.106	104	127	73	6.4	7.4	7.6	7.2	7.3	7.7	−13.5	−3.5
	2012	2,033	3.988	89	141	74	7.9	7.6	7.2	7.5	7.3	7.9	4.5	5.0
	2011	880	3.999	83	149	72	8.1	8.5	6.7	7.8	7.3	8.1	−4.2	26.5
4.0	2022	1,099	4.774	217	19	217	4.4	4.2	6.0	4.9	5.4	5.8	4.5	−29.5
	2018	1,570	4.496	163	68	123	6.6	7.5	5.4	6.5	6.4	7.3	−12.2	39.9
	2017	1,148	4.437	153	79	104	6.3	5.9	5.5	5.9	6.3	7.3	6.7	8.3
	2015	414	4.454	129	103	80	7.5	5.9	5.3	6.2	6.7	7.3	27.4	10.6
	2014	751	4.647	115	116	77	5.9	6.2	8.4	6.9	6.7	7.4	−5.2	−26.5
	2011	730	4.481	80	152	65	9.0	8.4	8.5	8.6	8.0	8.7	7.6	−0.9
	2010	546	4.447	72	160	60	7.8	11.0	8.7	9.2	8.5	8.9	−30.5	27.8
4.5	2022	652	5.202	218	17	207	7.5	5.5	5.4	6.1	7.4	8.0	36.1	3.7
5.0	2023	896	5.915	225	10	242	7.5	7.9	7.7	7.7	7.3	8.1	−5.2	2.7
	2022	402	5.701	219	16	185	9.5	5.9	4.7	6.7	8.5	8.7	63.4	27.1
5.5	2023	793	6.419	226	8	218	13.1	9.6	9.9	10.8	10.7	11.0	39.4	−3.1
6.0	2023	522	6.889	230	5	208	14.1	16.0	11.8	14.0	13.0	12.8	−13.1	39.2

Source: Fannie Mae, Freddie Mac, Ginnie Mae, Santander US Capital Markets

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FHLMC, Fixed 20, Largest Cohorts

							CPR						%Δ	
Coupon	Issue Year	Balance ($mm)	WAC	WAM	WALA	ALS ($k)	Feb	Jan	Dec	3M	6M	12M	Jan→Feb	Dec→Jan
1.5	2022	236	2.393	212	25	297	0.5	2.8	3.2	2.2	2.1	2.3	−81.6	−13.1
	2021	13,719	2.466	203	33	263	2.2	1.8	2.4	2.1	2.4	2.7	22.2	−27.2
	2020	3,349	2.536	197	39	247	2.4	2.2	2.0	2.2	2.3	2.7	11.7	8.0
2.0	2022	4,170	2.795	213	24	248	3.1	2.6	2.4	2.7	3.1	3.5	19.0	8.8
	2021	29,473	2.836	205	31	222	3.2	2.4	2.9	2.8	3.0	3.6	37.0	−19.3
	2020	15,854	2.905	195	41	219	2.6	2.9	3.1	2.9	3.0	3.6	−9.5	−8.5
2.5	2022	3,782	3.134	214	24	218	3.8	3.0	2.9	3.2	3.3	3.8	29.1	4.2
	2021	5,673	3.280	206	31	180	3.6	3.8	4.1	3.8	4.0	4.6	−6.5	−7.4
	2020	7,418	3.342	192	43	195	3.9	3.6	4.2	3.9	4.0	4.6	7.2	−14.6
	2019	655	3.391	182	52	219	5.5	3.1	2.7	3.7	4.4	5.5	82.0	13.4
	2016	549	3.295	143	89	151	5.9	3.9	5.1	5.0	4.5	5.3	54.8	−24.9
3.0	2022	2,248	3.566	216	22	210	3.8	3.3	3.8	3.7	3.9	4.3	13.9	−12.9
	2021	240	3.814	207	31	151	3.3	3.1	4.1	3.5	4.3	5.9	4.6	−24.3
	2020	1,585	3.795	188	46	156	4.7	4.1	3.5	4.1	4.5	5.7	15.5	18.7
	2019	1,703	3.782	181	53	171	2.8	4.9	3.9	3.9	4.7	5.8	−44.9	28.6
	2017	1,530	3.690	150	81	136	5.0	5.4	5.0	5.1	5.4	6.2	−8.1	7.1
	2016	2,528	3.668	141	91	120	5.0	4.3	5.6	5.0	5.1	5.9	16.2	−23.0
	2015	1,774	3.709	125	106	113	5.5	5.8	5.2	5.5	5.8	6.6	−5.4	10.7
	2013	2,192	3.569	101	130	81	6.3	6.1	6.5	6.3	6.1	6.8	3.1	−5.3
	2012	1,447	3.584	94	137	83	6.2	6.2	7.0	6.5	6.3	6.9	0.0	−12.7
3.5	2022	1,126	4.054	216	21	202	5.0	3.4	3.3	3.9	4.3	4.8	49.2	2.7
	2019	551	4.335	177	57	141	5.1	6.0	5.2	5.5	6.0	7.0	−15.9	15.3
	2018	501	4.129	161	71	131	5.9	3.0	6.4	5.1	6.0	6.9	98.6	−53.2
	2017	796	4.081	152	80	116	5.4	6.1	5.1	5.5	5.9	6.3	−12.8	21.4
	2016	325	4.161	139	94	98	6.4	5.3	6.3	6.0	5.8	6.9	22.4	−16.0
	2015	801	4.154	126	106	91	4.5	7.1	5.3	5.6	6.2	7.2	−38.0	34.5
	2014	573	4.242	116	116	90	7.7	6.8	5.4	6.6	6.4	7.4	13.3	26.2
	2013	611	4.059	104	128	74	5.6	6.4	7.1	6.4	6.4	7.1	−12.6	−10.8
	2012	1,387	3.963	89	142	71	6.6	7.2	7.4	7.1	7.2	8.0	−7.7	−2.4
	2011	424	4.014	82	149	73	7.7	9.5	8.2	8.5	7.8	8.3	−19.5	16.5
4.0	2022	931	4.762	218	19	219	4.8	5.3	5.1	5.1	5.5	6.1	−8.8	3.3
	2018	713	4.651	164	68	120	5.7	8.3	7.6	7.2	6.7	7.7	−32.2	8.7
	2017	367	4.554	153	80	101	6.0	7.2	5.5	6.2	6.6	7.1	−17.7	32.7
	2015	209	4.498	125	107	78	6.0	6.4	4.1	5.5	6.1	6.6	−5.8	57.1
	2014	358	4.635	115	118	78	6.0	6.0	7.5	6.5	6.8	8.5	0.8	−20.9
	2011	444	4.467	80	152	66	8.4	8.7	7.4	8.2	7.3	7.9	−2.9	18.2
	2010	475	4.476	71	161	55	9.0	9.6	9.0	9.2	8.9	9.4	−6.5	8.1
4.5	2022	549	5.272	218	17	210	10.2	5.4	6.0	7.2	7.6	7.7	93.7	−11.1
5.0	2023	539	5.938	226	9	237	6.2	5.9	7.3	6.4	6.5	7.7	5.3	−19.9
	2022	355	5.743	219	16	192	8.2	9.5	5.5	7.7	7.2	7.3	−14.3	74.9
5.5	2023	636	6.442	227	8	216	11.9	13.7	9.2	11.6	10.2	11.1	−13.6	52.3
6.0	2023	436	6.908	230	6	209	13.5	16.4	12.3	14.1	12.4	12.7	−19.2	36.3

Source: Fannie Mae, Freddie Mac, Ginnie Mae, Santander US Capital Markets

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Fixed 15, by Coupon

							CPR						%Δ	
Agency	Coupon	Balance ($mm)	WAC	WAM	WALA	ALS ($k)	Feb	Jan	Dec	3M	6M	12M	Jan→Feb	Dec→Jan
FNMA	≤ 1.5	88,312	2.142	143	33	235	3.1	3.0	3.0	3.0	3.2	3.6	2.6	−2.2
	2.0	149,024	2.572	137	37	170	4.1	4.2	4.3	4.2	4.4	5.0	−1.1	−3.1
	2.5	78,271	3.007	107	67	103	6.4	6.3	6.5	6.4	6.5	7.2	1.6	−3.0
	3.0	40,471	3.516	92	82	75	8.0	8.5	8.0	8.2	8.2	9.0	−6.0	6.7
	3.5	17,283	4.054	101	72	64	9.4	9.2	8.9	9.2	9.2	10.0	2.2	4.1
	4.0	6,450	4.636	124	50	64	10.0	10.1	9.7	9.9	10.0	11.0	−0.6	4.4
	4.5	3,633	5.158	154	20	109	9.3	11.2	8.8	9.8	9.7	11.1	−17.9	28.1
	5.0	3,211	5.704	164	10	186	12.6	11.3	10.3	11.5	11.0	12.5	12.3	10.1
	5.5	2,357	6.210	165	8	185	13.9	14.0	12.0	13.3	13.7	14.5	−0.6	17.3
	6.0	1,675	6.722	169	5	188	21.1	19.1	16.5	19.0	18.0	18.4	11.3	17.6
	≥ 6.5	331	7.188	172	2	215	23.9	22.4	19.1	22.2	22.9	22.8	7.9	19.2
FHLMC	≤ 1.5	90,465	2.235	142	33	228	3.3	3.1	3.2	3.2	3.4	3.9	6.0	−3.4
	2.0	115,128	2.639	138	36	165	4.2	4.1	4.4	4.2	4.5	5.1	4.5	−8.8
	2.5	48,348	3.086	102	72	96	6.7	6.8	6.9	6.8	6.9	7.6	−1.9	−1.3
	3.0	28,696	3.582	95	78	78	8.3	8.1	8.1	8.2	8.2	8.9	3.3	0.0
	3.5	11,217	4.148	110	63	71	8.6	8.9	9.1	8.8	8.9	9.7	−3.2	−2.4
	4.0	5,540	4.729	135	39	81	9.8	8.7	9.1	9.2	9.1	10.0	13.5	−4.9
	4.5	3,530	5.264	158	16	138	9.6	10.1	10.0	9.9	9.6	11.2	−4.9	1.1
	5.0	3,484	5.802	165	9	209	11.0	10.3	10.1	10.5	11.4	12.7	7.5	2.4
	5.5	2,881	6.293	167	7	207	17.6	14.9	13.2	15.3	15.2	16.2	19.8	14.3
	6.0	1,960	6.789	170	4	213	21.1	24.5	20.7	22.1	21.1	21.2	−15.3	21.0
	≥ 6.5	324	7.247	173	2	220	29.8	31.3	25.1	29.1	28.7	28.7	−6.0	29.5
GNMA I	2.0	6	2.500	43	131	43	4.8	3.7	4.2	4.2	6.3	12.1	27.6	−11.2
	2.5	214	3.000	43	133	37	11.9	13.3	10.5	11.9	11.9	12.3	−11.3	28.0
	3.0	319	3.500	39	138	30	14.3	13.9	12.4	13.5	13.3	14.0	2.7	13.0
	3.5	152	4.000	41	145	23	13.6	16.5	16.2	15.5	14.8	15.5	−18.7	1.9
	4.0	126	4.500	32	153	14	21.7	20.1	19.2	20.3	19.4	19.3	9.1	5.2
	4.5	21	5.000	27	161	8	29.2	27.7	29.3	28.7	25.1	22.8	6.4	−6.6
	5.0	3	5.500	24	181	6	27.3	22.4	42.6	32.1	33.3	31.8	25.1	−53.7
	5.5	1	6.000	31	203	9	20.7	8.9	21.3	17.2	22.6	26.0	149.2	−61.0
	6.0	1	6.500	24	213	7	11.0	11.1	10.9	11.0	25.8	28.4	−1.0	1.5
	≥ 6.5	1	7.119	26	223	7	5.4	26.0	14.6	15.9	14.0	15.7	−81.4	89.4
GNMA II	≤ 1.5	823	1.924	144	30	191	5.3	3.0	4.7	4.3	5.3	6.4	76.0	−35.4
	2.0	4,422	2.375	139	34	144	6.9	7.0	7.4	7.1	7.4	8.1	−1.8	−4.9
	2.5	4,603	2.902	106	67	85	8.7	8.4	8.5	8.5	8.6	9.4	4.7	−1.2
	3.0	3,613	3.420	87	87	58	10.0	10.4	9.5	10.0	9.9	10.8	−4.5	9.5
	3.5	2,063	3.933	99	76	60	10.5	9.8	9.3	9.9	9.8	10.6	7.8	5.3
	4.0	656	4.472	121	59	61	8.3	9.9	8.2	8.8	9.7	10.0	−16.7	21.5
	4.5	350	4.983	159	21	108	8.1	11.3	13.4	11.0	10.5	9.8	−29.3	−16.3
	5.0	240	5.532	167	15	155	10.7	5.5	9.9	8.8	8.6	8.9	100.1	−45.6
	5.5	204	5.997	170	16	160	8.5	7.8	9.4	8.6	7.3	7.8	9.3	−18.2
	6.0	168	6.539	172	12	159	5.5	11.6	3.3	7.0	5.9	8.5	−53.5	259.8
	≥ 6.5	14	7.057	165	27	114	4.4	8.2	1.4	5.1	5.0	6.4	−47.4	490.1

Source: Fannie Mae, Freddie Mac, Ginnie Mae, Santander US Capital Markets

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Fixed 15, by Issue Year

							CPR						%Δ	
Agency	Issue Year	Balance ($mm)	WAC	WAM	WALA	ALS ($k)	Feb	Jan	Dec	3M	6M	12M	Jan→Feb	Dec→Jan
FNMA	2024	896	6.358	176	1	235	14.5	14.1		14.3	14.3	14.3	3.1	
	2023	8,196	5.820	166	8	209	13.3	13.4	11.4	12.7	12.0	12.9	−0.8	19.3
	2022	42,835	3.183	154	22	195	5.1	4.6	4.5	4.7	4.9	5.5	11.0	2.5
	2021	154,202	2.388	143	32	189	3.7	3.5	3.8	3.7	3.9	4.4	4.5	−6.6
	2020	95,451	2.702	131	42	169	4.4	4.5	4.5	4.5	4.7	5.4	−2.9	−0.2
	2019	13,005	3.537	118	54	125	6.9	7.0	6.9	7.0	7.2	8.1	−1.3	1.0
	2018	6,449	3.958	102	69	92	8.4	8.4	7.9	8.2	8.3	9.3	−0.1	6.9
	2017	13,006	3.402	93	80	93	7.1	7.4	7.4	7.3	7.4	8.3	−3.3	0.2
	2016	17,606	3.057	83	91	91	6.7	7.0	7.0	6.9	7.0	7.8	−4.4	−0.7
	2015	9,705	3.319	70	104	72	7.7	8.7	8.2	8.2	8.2	9.0	−12.2	6.9
	2014	5,495	3.617	58	116	54	9.9	10.3	9.3	9.9	9.5	10.2	−4.0	11.3
	2013	11,861	3.084	47	129	50	9.4	10.0	9.6	9.7	9.5	10.0	−5.9	4.1
	2012	8,926	3.159	38	138	41	11.2	11.8	11.3	11.4	11.0	11.4	−5.6	4.6
	2011	2,451	3.781	27	150	27	16.5	17.0	14.4	15.9	15.1	15.4	−2.6	19.0
	2010	849	4.094	17	161	17	22.1	22.3	21.1	21.8	20.2	19.9	−1.0	6.2
	2009	88	4.626	7	172	6	41.3	38.2	33.9	37.3	32.2	27.7	10.6	15.8
FHLMC	2024	1,280	6.252	176	0	262	19.4	18.3		19.1	19.1	19.1	6.4	
	2023	9,252	5.936	166	7	224	14.1	14.7	12.4	13.8	13.4	14.2	−3.9	19.5
	2022	35,920	3.267	154	22	196	5.2	4.4	5.2	4.9	4.9	5.5	18.7	−15.8
	2021	122,677	2.417	144	32	190	3.8	3.6	3.8	3.7	4.0	4.5	4.3	−5.9
	2020	80,729	2.696	132	42	172	4.3	4.2	4.4	4.3	4.6	5.3	2.2	−5.1
	2019	9,509	3.584	118	54	123	7.2	6.9	7.1	7.1	7.3	8.3	5.0	−2.6
	2018	4,940	4.000	103	69	95	8.3	8.0	8.3	8.2	8.4	9.3	3.1	−2.9
	2017	9,626	3.436	93	80	95	7.2	7.1	7.2	7.2	7.4	8.2	1.2	−0.3
	2016	11,793	3.113	83	90	90	7.1	7.0	7.2	7.1	7.1	7.8	2.0	−3.1
	2015	7,924	3.314	69	105	71	8.0	8.7	8.4	8.3	8.2	8.9	−8.4	3.7
	2014	3,554	3.580	58	116	55	9.7	9.9	9.1	9.6	9.7	10.3	−2.6	9.2
	2013	7,668	3.059	46	129	49	9.3	10.0	9.8	9.7	9.5	10.1	−8.1	2.4
	2012	4,830	3.187	37	139	38	12.1	12.1	12.1	12.1	11.6	11.9	−0.7	0.7
	2011	1,318	3.819	26	151	25	16.6	17.4	16.3	16.8	15.7	15.8	−5.3	7.5
	2010	503	4.149	17	161	17	20.7	22.9	19.4	21.0	19.9	19.4	−10.8	20.4
	2009	51	4.616	7	173	5	45.1	41.2	36.3	40.3	34.4	29.1	12.5	17.4

Source: Fannie Mae, Freddie Mac, Ginnie Mae, Santander US Capital Markets

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Fixed 15, by Issue Year

							CPR						%Δ	
Agency	Issue Year	Balance ($mm)	WAC	WAM	WALA	ALS ($k)	Feb	Jan	Dec	3M	6M	12M	Jan→Feb	Dec→Jan
GNMA I	2017	1	3.500	100	80	89	50.9	0.0	0.0	20.6	10.7	5.4		21.2
	2016	2	3.206	97	89	70	1.7	37.9	1.0	15.8	8.7	4.7	−96.4	4735.9
	2015	8	3.430	81	106	55	1.1	6.9	9.8	6.0	4.0	4.6	−84.5	−30.8
	2014	37	3.841	72	116	40	9.4	8.9	6.9	8.4	10.0	9.5	5.7	31.4
	2013	206	3.340	55	129	36	10.6	10.5	9.5	10.2	10.0	10.7	1.3	11.2
	2012	328	3.391	37	140	30	13.7	15.2	12.8	13.9	13.5	14.0	−10.9	20.3
	2011	154	3.993	26	152	21	17.7	15.9	16.6	16.7	16.7	17.4	12.1	−4.6
	2010	87	4.458	18	163	13	23.3	23.6	23.0	23.3	21.1	20.8	−1.4	3.0
	2009	18	4.730	10	172	5	42.5	41.0	36.2	39.5	35.1	30.0	4.9	17.0
	2008	1	5.915	50	188	30	0.3	0.3	13.4	5.0	15.2	34.6	3.8	−97.8
	2007	0	6.312	37	200	20	4.6	4.3	4.2	4.4	4.5	9.6	7.5	0.1
	2006	0	6.682	25	214	12	1.6	34.2	19.4	19.7	11.3	8.4	−96.2	92.7
	≤ 2005	2	6.215	15	227	5	25.1	11.0	19.1	18.4	22.1	20.5	145.4	−44.6
GNMA II	2024	101	6.006	176	15	175	2.3	1.4		2.0	2.0	2.0	60.7	
	2023	759	5.565	167	14	168	8.2	9.6	6.9	8.2	7.0	6.8	−15.0	42.0
	2022	2,192	3.130	154	22	156	7.0	7.9	8.0	7.7	7.8	8.2	−11.6	−1.4
	2021	4,916	2.437	141	31	142	7.0	6.4	6.9	6.7	7.2	8.1	10.6	−7.8
	2020	1,562	2.932	128	43	129	7.7	7.3	9.0	8.0	7.7	8.7	5.8	−19.8
	2019	716	3.869	118	55	90	9.4	7.1	8.3	8.3	9.0	9.8	33.7	−14.9
	2018	856	3.880	105	68	80	9.6	9.2	7.2	8.6	9.0	9.9	5.3	29.3
	2017	1,462	3.402	93	80	73	8.6	8.8	8.3	8.6	8.8	9.8	−1.9	5.4
	2016	1,503	3.137	82	91	67	8.8	8.9	8.9	8.8	8.9	9.6	−1.5	0.5
	2015	952	3.304	70	103	55	10.9	9.8	10.2	10.3	10.3	11.1	11.8	−3.9
	2014	536	3.581	62	115	45	10.8	11.8	10.6	11.1	10.9	11.6	−9.6	12.9
	2013	813	3.109	47	128	40	12.0	12.5	10.6	11.7	11.4	12.0	−4.0	18.5
	2012	584	3.238	37	139	35	13.2	14.4	12.7	13.4	12.9	13.5	−8.7	14.7
	2011	163	3.947	30	151	24	16.2	17.4	14.8	16.1	15.8	16.2	−7.6	19.2
	2010	36	4.377	30	161	17	20.3	20.1	19.2	19.8	20.0	18.1	1.6	5.1
	2009	4	4.694	7	172	5	34.7	40.5	36.5	37.4	37.2	29.5	−17.5	13.8
	2008	0	6.000	51	188	14	0.1	0.1	0.1	0.1	79.7	57.6	19.6	2.0
	2007	0	6.572	38	198	21	0.1	0.1	0.1	0.1	0.4	1.1	4.7	6.8
	≤ 2005	0	6.185	11	227	4	59.5	38.7	26.5	41.1	36.8	37.9	81.8	57.6

Source: Fannie Mae, Freddie Mac, Ginnie Mae, Santander US Capital Markets

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FNMA, Fixed 15, Largest Cohorts

							CPR						%Δ	
Coupon	Issue Year	Balance ($mm)	WAC	WAM	WALA	ALS ($k)	Feb	Jan	Dec	3M	6M	12M	Jan→Feb	Dec→Jan
1.0	2021	2,263	1.885	143	33	277	1.6	2.2	3.2	2.3	2.3	2.7	−26.6	−33.8
1.5	2022	6,506	2.178	153	24	256	3.2	3.1	2.4	2.9	3.0	3.3	5.3	28.9
	2021	61,307	2.119	145	31	236	3.0	2.9	3.0	3.0	3.1	3.6	4.1	−4.2
	2020	17,877	2.243	135	40	222	3.3	3.4	3.3	3.3	3.5	4.1	−0.8	0.5
2.0	2022	13,982	2.607	153	24	198	3.9	3.4	3.7	3.7	3.9	4.4	13.8	−8.3
	2021	78,013	2.516	143	32	172	4.1	3.9	4.1	4.0	4.2	4.8	3.5	−4.6
	2020	52,192	2.642	132	42	178	4.1	4.5	4.4	4.3	4.5	5.2	−9.8	1.4
	2016	1,699	2.604	85	89	115	5.2	5.1	5.9	5.4	5.5	6.4	2.4	−13.6
	2013	1,815	2.611	46	130	60	7.3	7.9	8.1	7.8	7.7	8.2	−8.2	−2.5
2.5	2022	8,272	3.034	153	23	180	4.7	4.4	4.5	4.5	4.6	5.2	8.5	−2.7
	2021	11,770	2.939	142	33	133	4.8	4.4	5.3	4.9	5.2	5.7	8.3	−17.4
	2020	20,694	3.061	128	44	140	5.7	5.1	5.3	5.4	5.6	6.4	12.8	−3.4
	2019	5,411	3.133	119	53	158	6.1	6.3	6.5	6.3	6.4	7.3	−3.2	−3.2
	2017	3,114	2.963	91	81	115	6.3	6.6	6.3	6.4	6.8	7.4	−5.5	5.2
	2016	11,740	2.945	83	90	102	6.6	6.6	6.7	6.6	6.7	7.5	−0.8	−1.9
	2015	4,204	3.040	69	104	86	7.2	7.9	8.0	7.7	7.4	8.2	−8.5	−1.7
	2013	6,689	2.929	46	130	52	9.5	9.8	9.8	9.7	9.4	10.0	−3.7	0.4
	2012	5,328	2.989	39	137	48	10.2	10.8	10.6	10.5	10.2	10.6	−5.7	2.4
3.0	2022	4,869	3.625	155	21	176	5.4	5.1	4.1	4.9	5.1	5.9	7.6	24.7
	2020	3,537	3.574	125	47	109	6.3	7.2	7.1	6.9	7.0	7.8	−13.3	2.2
	2019	3,656	3.589	118	54	122	7.1	7.4	7.0	7.2	7.5	8.4	−4.5	6.3
	2018	2,040	3.535	100	72	109	7.5	7.7	8.1	7.8	7.7	8.8	−2.1	−5.6
	2017	7,568	3.433	93	79	97	7.3	7.3	7.5	7.4	7.4	8.4	−1.1	−2.4
	2016	3,595	3.486	80	93	70	7.3	8.6	8.0	8.0	8.1	8.8	−15.7	8.4
	2015	4,658	3.487	70	103	68	7.9	9.3	8.0	8.4	8.6	9.4	−15.7	16.7
	2014	3,414	3.528	58	116	58	9.9	9.9	9.5	9.8	9.4	10.0	−0.2	4.7
	2013	2,511	3.515	49	126	44	10.1	11.0	10.1	10.4	10.3	10.8	−9.0	10.3
	2012	2,700	3.450	35	141	35	12.9	13.8	12.5	13.1	12.5	12.9	−7.4	11.2
	2011	1,062	3.445	29	148	34	14.0	15.1	13.0	14.0	13.2	13.5	−7.7	16.7
3.5	2022	3,767	4.145	156	19	198	6.6	5.1	6.1	5.9	6.5	7.0	28.9	−16.5
	2019	2,827	4.086	115	56	99	8.5	8.2	7.7	8.1	8.4	9.2	3.2	7.1
	2018	2,551	4.045	103	69	93	8.9	8.4	7.7	8.3	8.5	9.5	6.0	9.9
	2017	2,005	3.995	93	80	65	8.0	8.7	8.6	8.4	8.5	9.3	−7.9	1.8
	2014	1,356	4.042	56	118	42	10.6	11.9	9.6	10.7	10.2	11.0	−11.6	24.7
4.0	2022	2,492	4.686	156	18	185	7.6	7.0	7.5	7.4	7.8	8.8	9.2	−7.1
	2018	1,489	4.571	105	66	73	9.0	9.9	8.8	9.2	9.1	10.0	−9.2	13.9
4.5	2023	1,601	5.295	164	10	238	8.1	11.7	8.7	9.5	8.5	10.9	−31.9	37.1
	2022	1,678	5.045	157	17	171	9.4	9.5	7.5	8.8	9.3	9.8	−1.1	27.8
5.0	2023	2,026	5.758	165	8	211	13.5	12.1	10.7	12.1	11.2	12.9	11.8	14.3
	2022	978	5.565	158	15	166	12.4	10.0	9.5	10.6	10.7	12.0	24.7	6.2
5.5	2023	1,908	6.210	165	7	183	13.1	13.5	12.1	12.9	13.8	14.8	−3.1	12.2
6.0	2023	1,367	6.709	167	5	187	21.6	19.5	16.6	19.2	18.1	18.4	12.4	19.1

Source: Fannie Mae, Freddie Mac, Ginnie Mae, Santander US Capital Markets

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FHLMC, Fixed 15, Largest Cohorts

							CPR						%Δ	
Coupon	Issue Year	Balance ($mm)	WAC	WAM	WALA	ALS ($k)	Feb	Jan	Dec	3M	6M	12M	Jan→Feb	Dec→Jan
1.0	2021	3,837	1.897	143	33	268	2.7	2.4	1.9	2.3	2.9	3.1	12.9	25.1
1.5	2022	6,276	2.236	153	24	256	2.8	2.4	3.2	2.8	2.6	3.1	13.5	−24.1
	2021	55,384	2.217	144	32	230	3.4	3.1	3.2	3.2	3.4	3.9	7.8	−2.1
	2020	24,924	2.329	135	40	212	3.4	3.4	3.5	3.4	3.7	4.4	0.1	−3.5
2.0	2022	11,084	2.637	153	24	198	4.2	3.3	3.7	3.7	3.8	4.3	28.6	−13.4
	2021	59,673	2.587	143	32	166	4.1	4.0	4.4	4.2	4.4	4.9	2.6	−9.5
	2020	41,697	2.714	132	42	169	4.3	4.2	4.6	4.4	4.6	5.3	2.9	−8.4
	2016	829	2.604	85	89	108	5.6	6.0	5.2	5.6	5.6	6.4	−7.7	16.6
	2013	1,139	2.612	46	130	57	8.0	8.8	7.8	8.2	7.9	8.4	−8.9	13.2
2.5	2022	5,375	3.066	154	23	172	5.1	4.3	5.1	4.8	4.9	5.3	19.0	−15.7
	2021	3,364	3.123	142	31	123	5.3	5.8	5.7	5.6	5.9	6.4	−8.8	2.6
	2020	11,607	3.188	128	45	140	5.7	5.6	5.5	5.6	5.8	6.7	1.7	2.2
	2019	4,276	3.211	120	52	149	6.2	5.9	6.1	6.1	6.5	7.6	5.7	−3.5
	2017	3,056	3.023	91	82	110	6.0	6.2	6.3	6.2	6.4	7.4	−2.2	−1.9
	2016	8,108	2.991	83	90	101	6.7	6.7	7.0	6.8	6.8	7.6	0.6	−5.8
	2015	3,875	3.059	68	105	82	7.2	8.5	8.1	7.9	7.8	8.4	−15.9	4.4
	2013	4,862	2.960	45	130	50	9.2	10.1	9.8	9.7	9.5	10.2	−8.8	2.7
	2012	2,976	3.028	39	137	43	11.1	11.3	11.5	11.3	10.7	10.9	−2.5	−1.3
3.0	2022	4,354	3.606	155	21	183	6.5	4.6	5.5	5.5	5.4	5.8	42.4	−16.9
	2020	1,981	3.705	126	47	118	6.5	6.2	6.2	6.3	6.8	7.6	5.9	−0.3
	2019	2,894	3.692	118	54	123	7.9	7.5	7.5	7.6	7.8	8.7	5.4	−0.4
	2018	1,763	3.621	101	71	108	7.5	7.3	7.1	7.3	7.6	8.8	3.0	3.8
	2017	5,321	3.549	94	79	96	7.5	7.6	7.5	7.6	7.8	8.5	−1.3	0.9
	2016	2,587	3.555	80	93	71	8.3	7.9	8.0	8.1	8.0	8.6	5.6	−1.1
	2015	3,588	3.524	69	104	66	8.4	8.8	8.4	8.6	8.3	9.1	−4.7	5.5
	2014	2,288	3.554	58	116	58	9.7	9.9	9.3	9.6	9.5	10.1	−2.4	7.9
	2013	1,324	3.541	49	126	43	10.4	10.7	11.1	10.8	10.4	10.9	−3.4	−3.9
	2012	1,561	3.475	34	143	33	13.8	13.9	13.0	13.6	13.2	13.6	−0.2	6.8
	2011	626	3.488	28	148	32	15.0	15.8	14.2	15.0	14.0	14.2	−5.9	12.5
3.5	2022	3,477	4.222	156	19	194	5.6	6.1	7.0	6.2	6.4	7.2	−7.4	−13.2
	2019	1,496	4.194	115	56	92	8.2	9.2	9.0	8.8	8.5	9.7	−11.8	2.6
	2018	2,087	4.140	104	68	93	8.4	8.7	8.7	8.6	8.9	9.6	−4.1	0.6
	2017	1,080	4.090	92	80	68	9.4	7.8	8.3	8.5	8.4	9.0	20.3	−5.9
	2014	629	4.053	58	116	41	9.2	11.6	9.5	10.1	10.8	11.2	−21.6	22.5
4.0	2022	2,885	4.766	157	18	186	8.4	7.0	7.9	7.8	7.7	8.4	20.8	−12.3
	2018	829	4.646	105	65	75	10.3	6.9	10.2	9.1	9.2	9.8	50.3	−32.9
4.5	2023	1,763	5.344	164	9	247	8.9	10.1	9.3	9.4	9.3	11.4	−12.6	8.8
	2022	1,442	5.173	158	17	179	8.9	8.9	9.7	9.2	8.9	10.0	−0.6	−8.7
5.0	2023	2,415	5.827	165	8	224	10.9	11.3	9.5	10.6	11.6	13.5	−3.9	20.4
	2022	726	5.692	159	15	172	10.1	7.1	11.8	9.7	10.7	10.8	43.0	−40.8
5.5	2023	2,327	6.298	167	7	207	17.8	15.6	13.5	15.6	15.8	16.9	16.0	16.5
6.0	2023	1,593	6.785	169	5	212	20.9	24.3	20.6	21.9	20.9	21.2	−15.7	20.4

Source: Fannie Mae, Freddie Mac, Ginnie Mae, Santander US Capital Markets

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GNMA I, Fixed 15, Largest Cohorts

							CPR						%Δ	
Coupon	Issue Year	Balance ($mm)	WAC	WAM	WALA	ALS ($k)	Feb	Jan	Dec	3M	6M	12M	Jan→Feb	Dec→Jan
2.5	2016	2	3.000	89	88	65	1.9	42.4	1.0	17.6	9.5	5.0	−96.4	5189.0
	2015	4	3.000	72	105	56	2.0	11.0	3.8	5.7	3.7	5.3	−82.4	198.4
	2013	104	3.000	45	130	38	11.3	12.2	9.5	11.0	11.0	11.3	−8.6	30.7
	2012	99	3.000	37	138	35	12.8	14.4	12.0	13.1	13.4	14.0	−12.2	21.7
3.0	2017	1	3.500	100	80	89	50.9	0.0	0.0	20.6	10.7	5.4		21.2
	2015	2	3.500	72	107	52	0.1	3.6	2.0	1.9	2.8	1.6	−96.5	87.5
	2014	15	3.500	57	117	42	12.2	13.9	6.0	10.7	13.9	13.2	−12.4	139.3
	2013	58	3.500	58	129	36	10.8	10.6	7.2	9.5	9.7	11.0	2.8	49.9
	2012	200	3.500	34	141	29	15.4	15.5	13.6	14.8	14.2	14.7	−0.9	14.7
3.5	2016	0	4.000	146	94	134	0.0	0.0		0.0	0.0	0.0		
	2014	5	4.000	55	119	35	5.4	10.6	10.8	9.0	9.7	9.6	−50.6	−1.9
	2013	30	4.000	77	128	33	10.6	6.5	15.6	11.0	9.6	8.8	66.4	−60.2
	2011	72	4.000	25	153	20	17.9	20.4	18.0	18.8	18.1	18.8	−13.5	14.8
4.0	2011	38	4.500	25	153	18	21.4	12.8	15.6	16.5	17.6	17.2	75.5	−19.3

Source: Fannie Mae, Freddie Mac, Ginnie Mae, Santander US Capital Markets

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GNMA II, Fixed 15, Largest Cohorts

							CPR						%Δ	
Coupon	Issue Year	Balance ($mm)	WAC	WAM	WALA	ALS ($k)	Feb	Jan	Dec	3M	6M	12M	Jan→Feb	Dec→Jan
1.5	2022	197	1.968	149	25	205	5.9	1.4	2.2	3.2	3.8	5.4	339.1	−36.8
	2021	610	1.908	144	30	197	5.0	3.3	5.2	4.5	5.6	6.6	53.4	−37.2
2.0	2022	658	2.387	151	24	163	7.3	6.8	7.4	7.2	7.0	7.2	7.2	−8.8
	2021	3,186	2.361	141	31	146	6.5	6.9	6.9	6.8	7.2	8.2	−6.8	0.9
	2020	435	2.420	128	40	158	7.3	6.5	9.4	7.7	7.8	8.4	13.1	−32.6
2.5	2022	517	2.897	153	23	146	6.1	9.2	8.0	7.8	7.8	8.5	−35.4	16.5
	2021	1,007	2.878	141	32	120	8.9	5.9	7.5	7.5	8.0	8.5	53.8	−21.9
	2020	737	2.900	128	43	133	6.6	7.3	8.7	7.6	7.0	8.3	−9.8	−17.0
	2017	448	2.923	91	81	88	8.0	8.4	5.7	7.3	8.0	9.1	−4.9	48.0
	2016	848	2.910	82	90	77	8.8	8.1	8.6	8.5	8.9	9.6	9.8	−6.3
	2015	313	2.936	68	104	70	10.9	7.7	9.4	9.3	9.5	10.6	45.2	−19.0
	2013	385	2.854	45	130	43	12.1	12.5	10.5	11.7	11.3	11.8	−2.9	19.3
	2012	201	2.935	38	138	39	12.2	12.9	12.7	12.6	12.3	12.9	−5.9	1.6
3.0	2022	252	3.448	155	22	141	4.5	8.8	5.2	6.2	6.9	8.6	−50.4	71.4
	2021	87	3.404	135	37	92	14.8	11.6	5.4	10.6	9.4	10.1	29.8	120.1
	2020	296	3.444	125	46	107	9.3	8.3	9.6	9.1	9.0	10.4	13.0	−14.1
	2019	242	3.479	120	53	104	7.9	7.1	8.3	7.8	8.3	9.5	12.5	−15.4
	2018	163	3.452	102	70	87	7.3	7.2	5.1	6.5	7.2	8.9	1.7	43.5
	2017	604	3.448	93	79	71	9.4	9.5	9.8	9.6	9.6	10.1	−1.3	−3.0
	2016	538	3.420	81	92	57	9.0	9.7	9.3	9.3	8.9	9.7	−6.9	4.4
	2015	521	3.411	70	103	51	10.9	11.3	10.5	10.9	10.8	11.7	−3.9	8.0
	2014	285	3.412	59	114	48	10.9	11.7	10.8	11.1	11.2	11.5	−7.6	9.7
	2013	265	3.355	47	128	37	12.7	12.3	10.0	11.6	11.8	12.3	3.0	24.3
	2012	315	3.345	35	140	33	13.5	15.7	13.3	14.2	13.2	13.8	−15.2	19.4
3.5	2022	206	3.949	157	19	152	11.3	12.0	7.6	10.3	8.6	8.8	−6.0	60.7
	2019	273	3.975	117	56	88	10.4	7.4	8.0	8.6	9.7	9.8	42.9	−8.1
	2018	526	3.982	106	67	79	10.4	9.4	8.5	9.4	9.4	10.5	11.1	11.3
	2017	373	3.928	95	79	61	7.4	8.6	9.2	8.4	8.5	10.2	−14.3	−6.9
	2016	80	3.910	82	93	49	5.9	11.5	6.8	8.1	8.8	9.6	−50.0	71.4
	2015	103	3.883	78	102	46	10.4	8.1	11.0	9.9	10.0	10.2	29.6	−27.3
	2014	167	3.852	58	116	38	12.7	11.1	12.5	12.1	11.5	12.4	15.5	−11.5
	2013	89	3.849	55	125	35	12.2	11.1	9.0	10.7	10.9	11.0	10.4	24.9
	2011	71	3.857	27	151	24	15.2	16.7	15.4	15.8	15.6	16.5	−9.8	9.5
4.0	2022	200	4.477	158	19	156	4.7	10.4	8.7	8.0	9.0	8.2	−55.5	20.1
	2019	153	4.540	116	58	72	10.4	7.6	6.7	8.2	8.6	10.3	38.5	14.0
	2018	109	4.475	111	65	70	7.0	7.9	4.7	6.5	9.1	8.8	−12.2	71.2
	2011	50	4.318	30	153	21	17.2	21.3	14.0	17.5	16.9	16.9	−21.1	57.9
4.5	2023	198	5.033	169	9	196	6.5	13.1	7.8	9.2	8.0	6.4	−52.5	72.8
	2022	113	4.931	160	17	154	11.6	7.0	22.2	13.9	13.4	12.4	69.5	−70.9
5.0	2023	181	5.550	168	11	176	11.9	6.0	9.1	9.0	7.1	7.0	105.6	−35.6
5.5	2023	162	5.999	170	16	165	9.0	8.2	8.1	8.4	7.1	7.3	10.3	1.0
6.0	2023	135	6.528	172	11	161	6.4	13.0	3.3	7.7	6.2	8.8	−51.8	306.6

Source: Fannie Mae, Freddie Mac, Ginnie Mae, Santander US Capital Markets

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Fixed 10, by Coupon

							CPR						%Δ	
Agency	Coupon	Balance ($mm)	WAC	WAM	WALA	ALS ($k)	Feb	Jan	Dec	3M	6M	12M	Jan→Feb	Dec→Jan
FNMA	≤ 1.5	10,530	2.195	84	31	143	4.9	5.2	4.8	5.0	5.2	5.7	−5.7	6.8
	2.0	5,744	2.611	79	35	110	6.8	7.5	6.8	7.0	6.9	7.6	−9.2	11.1
	2.5	2,155	3.037	58	57	58	10.7	12.8	10.7	11.4	11.2	12.0	−17.3	21.4
	3.0	1,055	3.561	57	58	47	13.1	12.9	12.6	12.9	12.8	13.7	1.6	2.5
	3.5	521	4.084	61	54	52	14.3	14.7	12.1	13.7	12.9	13.5	−2.8	23.0
	4.0	229	4.692	80	34	70	13.2	9.6	10.2	11.0	12.3	13.2	39.9	−5.7
	4.5	77	5.217	100	14	117	6.0	14.7	11.0	10.6	12.4	15.3	−61.0	35.6
	5.0	102	5.761	106	8	141	13.7	12.6	7.2	11.3	11.1	12.3	9.4	80.4
	5.5	71	6.258	109	6	141	21.6	26.7	14.1	21.2	21.2	21.4	−21.3	103.4
	6.0	50	6.826	111	4	135	22.6	17.7	10.2	17.3	23.0	22.9	31.1	79.7
	≥ 6.5	1	7.410	111	1	113	96.0	32.8		81.7	81.7	81.7	623.6	
FHLMC	≤ 1.5	5,656	2.197	85	31	149	5.0	5.1	5.5	5.2	5.0	5.6	−2.9	−7.0
	2.0	2,073	2.696	82	34	116	6.1	5.9	6.1	6.0	6.5	7.3	3.0	−2.7
	2.5	587	3.143	65	53	58	9.3	10.6	9.8	9.9	10.9	10.9	−12.6	8.6
	3.0	287	3.663	68	50	52	13.1	11.7	7.9	10.9	11.4	11.9	12.6	51.3
	3.5	156	4.188	73	45	53	11.2	11.6	11.8	11.5	11.9	12.3	−3.0	−2.0
	4.0	108	4.805	91	25	78	14.7	13.7	20.1	16.2	15.4	13.3	7.7	−34.3
	4.5	77	5.299	103	13	124	6.0	11.0	10.1	9.0	9.0	11.9	−47.3	9.7
	5.0	84	5.819	106	9	128	10.8	11.7	10.3	10.9	12.7	15.1	−8.8	15.1
	5.5	80	6.314	108	7	130	14.7	12.2	13.3	13.4	16.0	16.4	22.7	−9.2
	6.0	74	6.860	110	5	112	11.3	21.0	9.9	14.2	18.2	17.6	−48.9	124.6
	≥ 6.5	7	7.323	117	2	111	2.2	6.2	6.4	4.0	3.7	4.3	−65.0	−2.0

Source: Fannie Mae, Freddie Mac, Ginnie Mae, Santander US Capital Markets

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Fixed 10, by Issue Year

							CPR						%Δ	
Agency	Issue Year	Balance ($mm)	WAC	WAM	WALA	ALS ($k)	Feb	Jan	Dec	3M	6M	12M	Jan→Feb	Dec→Jan
FNMA	2024	40	6.226	115	1	174	33.0	22.9		30.1	30.1	30.1	52.9	
	2023	249	5.793	106	8	141	16.6	17.8	10.5	15.0	16.7	17.5	−7.0	76.6
	2022	2,981	2.889	92	23	132	6.2	7.4	6.0	6.5	6.6	6.9	−16.8	24.6
	2021	11,506	2.286	84	31	131	5.4	5.4	5.1	5.3	5.5	6.0	−0.7	6.1
	2020	3,608	2.656	72	42	113	7.0	8.4	7.6	7.7	7.7	8.4	−17.3	11.5
	2019	455	3.554	60	54	74	9.1	11.9	8.8	9.9	10.7	11.8	−25.0	37.4
	2018	346	3.889	46	69	49	13.3	13.6	12.2	13.0	12.5	13.7	−2.4	12.4
	2017	554	3.295	36	80	45	14.4	14.6	13.8	14.3	13.5	13.9	−1.7	6.2
	2016	571	2.978	27	90	36	15.9	15.9	15.4	15.7	14.3	14.8	−0.6	3.5
	2015	192	3.194	16	103	19	23.5	24.5	20.9	22.9	21.3	20.5	−4.4	19.6
	2014	35	3.319	7	113	7	41.9	39.2	36.8	39.0	34.1	29.2	8.8	8.1
FHLMC	2024	31	6.220	117	1	155	8.8	49.4		14.9	14.9	14.9	−86.2	
	2023	252	6.143	107	7	127	11.2	14.6	11.6	12.5	14.8	15.7	−24.9	27.3
	2022	1,553	2.913	93	23	134	5.7	6.5	6.4	6.2	6.2	6.5	−12.5	0.6
	2021	5,402	2.278	85	31	138	5.3	5.2	5.5	5.3	5.2	5.9	1.7	−4.9
	2020	1,491	2.616	73	42	126	6.1	6.1	6.8	6.3	6.9	7.5	−0.0	−11.0
	2019	135	3.531	61	55	82	10.1	12.4	8.3	10.3	10.5	10.6	−19.5	52.3
	2018	52	3.978	46	74	49	11.5	11.7	16.5	13.3	13.7	13.9	−1.8	−30.8
	2017	92	3.440	36	83	39	15.1	14.5	10.5	13.3	14.2	14.1	3.8	40.8
	2016	108	3.072	27	92	32	18.1	14.7	13.0	15.2	15.1	15.2	25.7	14.0
	2015	63	3.352	17	108	17	21.9	19.7	21.3	20.9	20.6	19.4	12.2	−8.2
	2014	10	3.448	7	113	6	41.3	40.0	32.6	37.5	32.2	26.9	4.2	29.0
	2013	0	4.914	7	171	5	35.4	21.4	16.3	23.5	83.8	64.9	80.6	34.9
	2011	0	5.250	26	154	30	0.0	0.0	0.0	0.0	2.6	9.6		
	2010	0				1		0.4	0.2	0.2	0.1	0.3		183.6

Source: Fannie Mae, Freddie Mac, Ginnie Mae, Santander US Capital Markets

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FNMA, Fixed 10, Largest Cohorts

							CPR						%Δ	
Coupon	Issue Year	Balance ($mm)	WAC	WAM	WALA	ALS ($k)	Feb	Jan	Dec	3M	6M	12M	Jan→Feb	Dec→Jan
1.5	2022	1,068	2.249	91	24	155	4.3	5.9	4.7	5.0	4.7	5.3	−27.5	26.2
	2021	8,761	2.184	84	31	142	4.8	4.9	4.7	4.8	5.1	5.6	−2.3	5.3
	2020	699	2.261	75	39	133	6.2	6.7	6.8	6.6	7.0	7.6	−7.5	−0.7
2.0	2022	972	2.700	92	23	125	5.6	6.8	6.3	6.3	6.4	6.5	−18.3	7.6
	2021	2,693	2.606	82	32	106	7.1	6.7	6.3	6.7	6.5	7.3	6.0	6.5
	2020	1,976	2.575	73	41	118	6.7	8.6	7.4	7.6	7.5	8.0	−23.2	18.0
	2019	12	2.736	63	52	115	2.7	17.8	2.8	8.1	11.5	10.0	−85.8	588.4
	2016	72	2.571	28	89	49	13.4	8.8	10.3	10.8	9.2	11.2	55.5	−14.8
2.5	2022	376	3.196	93	22	118	6.7	9.5	3.1	6.5	7.2	7.7	−30.4	211.0
	2021	46	3.098	82	32	60	4.4	15.3	9.1	9.7	9.1	8.1	−72.9	72.8
	2020	785	3.026	69	45	99	8.3	9.6	8.5	8.8	8.7	9.5	−14.2	14.5
	2019	168	3.059	62	52	97	7.5	10.6	9.1	9.1	9.7	10.2	−30.8	17.9
	2018	21	3.060	43	73	67	9.3	12.3	8.0	9.9	8.8	9.1	−25.8	58.7
	2017	206	2.965	35	81	53	11.7	14.0	13.0	12.9	12.0	13.0	−17.9	8.8
	2016	402	2.921	27	90	39	15.3	16.7	16.0	16.0	14.6	14.8	−8.6	4.6
	2015	130	3.039	16	103	21	22.2	23.1	19.8	21.6	20.5	19.8	−4.2	19.1
	2014	22	3.156	7	113	8	39.3	38.0	33.7	36.6	32.4	27.6	4.1	16.1
3.0	2022	258	3.755	94	21	116	7.8	7.8	10.3	8.6	9.2	9.4	0.8	−25.5
	2020	133	3.589	66	48	72	8.3	7.0	8.3	7.9	8.8	10.3	19.7	−16.8
	2019	138	3.579	59	54	78	10.7	12.2	6.0	9.7	10.4	11.7	−13.1	109.4
	2018	98	3.477	44	71	54	13.2	13.4	13.6	13.4	12.7	13.7	−1.8	−1.9
	2017	263	3.398	37	79	44	16.0	14.7	14.8	15.2	14.2	14.4	9.3	−0.4
	2016	89	3.482	25	92	26	19.0	18.4	16.7	18.0	16.8	17.0	3.8	11.2
	2015	53	3.547	16	102	16	26.0	28.2	23.4	25.8	23.5	22.0	−9.0	23.9
3.5	2022	144	4.256	95	19	127	14.2	15.4	8.7	12.8	10.4	8.9	−8.3	84.3
	2020	14	4.097	67	48	51	7.4	10.9	12.7	10.4	12.5	12.6	−32.8	−14.8
	2019	110	4.061	56	57	61	10.1	13.2	11.7	11.7	12.4	14.3	−25.0	13.6
	2018	167	3.998	46	69	48	14.9	14.0	13.1	14.0	13.3	14.4	7.1	7.1
	2017	73	3.960	36	79	33	16.8	15.8	13.2	15.2	15.0	14.9	6.5	21.6
4.0	2023	26	4.825	103	10	163	27.9	19.5	17.0	21.5	24.3	21.6	49.8	16.1
	2022	114	4.741	97	18	123	12.1	4.7	7.4	8.1	9.9	11.4	168.8	−37.5
	2019	26	4.731	56	59	39	9.2	10.6	11.6	10.5	10.8	12.0	−14.0	−9.5
	2018	61	4.527	49	66	42	10.4	13.3	8.6	10.8	11.4	13.2	−23.2	57.5
4.5	2023	37	5.287	103	10	159	6.5	17.1	7.4	10.4	13.3	18.4	−64.1	143.9
	2022	33	5.130	98	16	100	5.7	13.1	15.3	11.5	12.1	12.6	−58.3	−15.1
5.0	2024	10	5.845	117	0	192	12.8	1.9		10.7	10.7	10.7	621.4	
	2023	78	5.784	106	8	146	15.1	14.0	7.8	12.3	11.8	12.8	8.4	84.0
	2022	14	5.573	99	15	102	6.4	6.5	3.4	5.4	7.5	10.4	−1.9	94.9
5.5	2024	14	6.343	115	1	224	25.1	38.2		29.7	29.7	29.7	−39.5	
	2023	56	6.233	107	7	131	21.0	24.4	14.3	19.9	20.7	21.1	−15.4	80.3
6.0	2024	10	6.818	112	1	138	47.7	10.4		37.3	37.3	37.3	478.8	
	2023	41	6.828	110	4	134	15.0	18.5	10.2	14.6	21.8	21.9	−20.3	88.9

Source: Fannie Mae, Freddie Mac, Ginnie Mae, Santander US Capital Markets

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FHLMC, Fixed 10, Largest Cohorts

							CPR						%Δ	
Coupon	Issue Year	Balance ($mm)	WAC	WAM	WALA	ALS ($k)	Feb	Jan	Dec	3M	6M	12M	Jan→Feb	Dec→Jan
1.5	2022	603	2.191	92	24	162	2.7	5.5	5.0	4.4	4.3	4.7	−52.7	10.5
	2021	4,356	2.173	85	31	148	5.3	5.0	5.5	5.3	5.0	5.6	5.0	−9.6
	2020	698	2.354	76	39	148	5.1	5.3	5.6	5.3	5.7	6.8	−4.6	−4.1
2.0	2022	439	2.677	93	23	129	5.8	4.5	5.1	5.2	5.6	6.2	30.1	−11.7
	2021	999	2.687	84	32	111	5.6	5.9	5.0	5.5	6.2	7.2	−6.2	18.2
	2020	609	2.723	72	43	127	6.7	6.5	8.0	7.1	7.2	7.7	2.7	−18.6
	2019	6	2.884	64	52	118	3.5	3.8	32.4	14.7	8.9	7.9	−6.9	−90.0
	2016	13	2.663	27	90	39	14.2	15.7	8.6	12.8	13.6	14.0	−10.8	89.8
2.5	2022	159	3.158	94	22	116	3.9	6.7	7.4	6.0	6.4	6.3	−42.0	−9.5
	2021	48	3.278	84	31	86	2.2	7.2	8.0	5.9	8.6	7.0	−70.2	−10.3
	2020	156	3.156	68	51	87	7.8	7.3	8.2	7.7	9.9	9.2	7.4	−11.6
	2019	69	3.194	62	53	97	8.4	14.7	4.6	9.3	10.2	9.9	−44.7	233.1
	2018	3	3.172	39	91	38	7.6	16.1	20.3	15.0	14.4	16.5	−54.7	−22.5
	2017	34	3.036	34	87	43	14.0	13.6	14.5	14.0	14.0	14.4	3.6	−6.8
	2016	76	2.983	27	91	34	19.2	15.1	12.6	15.6	15.2	15.4	30.2	21.0
	2015	37	3.157	15	103	19	20.1	18.8	22.2	20.4	20.1	18.8	8.0	−16.9
	2014	5	3.213	7	113	8	38.7	42.5	26.9	35.6	29.8	24.3	−11.4	74.5
3.0	2022	135	3.691	95	21	113	9.6	8.4	5.4	7.8	7.4	7.8	15.2	57.4
	2020	24	3.638	61	70	57	6.6	9.2	5.9	7.2	11.0	10.9	−29.6	59.5
	2019	38	3.762	61	55	82	12.3	11.4	5.4	9.7	9.1	11.0	7.8	116.6
	2018	14	3.648	43	76	59	20.8	5.9	11.8	12.9	13.1	14.0	282.5	−51.8
	2017	41	3.545	38	80	43	17.5	16.9	7.5	14.0	15.6	14.3	4.3	134.5
	2016	15	3.619	25	96	25	17.2	10.7	18.8	15.7	16.3	15.2	67.4	−45.7
	2015	15	3.567	16	102	16	24.0	17.4	14.1	18.3	19.7	20.1	43.1	25.4
3.5	2022	84	4.225	96	19	116	11.4	10.2	6.9	9.5	8.9	10.0	12.5	49.2
	2020	3	4.263	67	55	51	23.2	9.6	3.9	12.4	25.3	16.0	160.1	155.2
	2019	17	4.230	56	59	56	10.9	7.9	10.4	9.7	12.2	11.8	40.0	−25.3
	2018	26	4.146	47	71	50	7.4	14.9	21.7	15.0	14.4	13.6	−51.9	−33.8
	2017	15	4.081	37	82	30	10.0	11.2	8.5	9.9	11.1	13.6	−11.3	33.8
4.0	2023	6	4.902	107	8	121	6.5	2.1	1.6	3.4	3.6	6.4	215.7	34.6
	2022	87	4.801	97	17	122	15.0	13.7	20.9	16.6	15.4	12.8	10.5	−37.0
	2019	5	4.874	56	60	39	23.8	13.9	36.3	25.4	20.0	16.9	79.9	−66.3
	2018	7	4.786	50	65	38	4.5	9.2	3.8	5.8	12.2	13.8	−52.5	148.8
4.5	2023	39	5.352	105	10	143	4.2	10.2	14.6	9.8	10.4	14.8	−60.2	−31.3
	2022	30	5.233	99	16	110	9.1	12.4	4.2	8.6	7.4	8.8	−27.4	205.6
5.0	2024	9	5.878	118	0	204	8.6			8.6	8.6	8.6		
	2023	67	5.825	105	8	136	12.0	12.7	9.7	11.5	13.7	15.4	−6.5	33.7
	2022	9	5.724	100	15	93	2.8	3.4	14.5	7.1	5.7	13.5	−17.7	−77.7
5.5	2024	7	6.360	117	1	138	7.2	15.0		8.4	8.4	8.4	−53.5	
	2023	67	6.303	109	7	132	15.7	13.0	14.2	14.3	16.1	16.4	22.9	−9.2
6.0	2024	5	6.838	114	2	129	22.4	59.1		38.5	38.5	38.5	−70.8	
	2023	68	6.860	110	5	111	10.5	18.9	10.0	13.2	17.8	16.5	−47.0	98.7

Source: Fannie Mae, Freddie Mac, Ginnie Mae, Santander US Capital Markets

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