

Small Balance Loan Prepayments

As of December 2021

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- This report presents a summary of Freddie Mac Multifamily Small Balance Loan (SBL) voluntary prepayment activity over the past 12 months (from January 2021 through December 2021).
- We summarize prepayment speeds in aggregate and by product type, vintage, prepayment type, prepayment phase and FRESB deal.
- Prepayments increased over the past 12 months, as anticipated. The average constant prepayment rate (CPR) is 13.5% over the past 12 months. The 2015 and 2016 vintages prepayment speed are nearly double the overall average.
- Based on historical performance to date, we find that prepayment speeds increase with loan seasoning and declining prepayment premiums. As loans season and a growing population of loans move into periods with lower prepayment premiums, we expect prepayment activity to pick up.
- The focus of this report is on voluntary prepayments. There have been very few defaults in the SBL program – only \$25.9 million (7 basis points) in aggregate losses on a total securitized balance of over \$32.8 billion in the program's history since October 2014 through February 2022. See the most recent SBL Performance Report, available [here](#).
- See our [SB-Deal® Investor Presentation](#) for background information on the program's history, mortgage products, the Freddie Mac Optigo® network and FRESB bond structure.

Freddie Mac Multifamily formally added the SBL line of business to its lending platform in October 2014. This program targets loans between \$1 million and \$7.5 million and offers prepayment flexibility to borrowers.

Through December 2021¹, Freddie Mac has funded and securitized nearly 13,200 SB loans totaling \$35 billion of original unpaid principal balance (UPB), of which approximately \$8.7 billion have prepaid. The majority of these loans have been funded in the last few calendar years.

Prepayment Options Background

SBL loan products include both hybrid ARMs and fixed-rate products across multiple loan terms, all with an array of prepayment options. SB loans generally offer more prepayment flexibility than our Conventional Loans, where the standard K-Deal[®] fixed-rate loan has a lockout period followed by defeasance or yield maintenance.

Exhibit 1 shows the mix of SBL products and available prepayment types, along with the percentage of total origination volume across product types and prepayment options. The 5-year hybrid and 10-year fixed-rate loans are the primary products selected by borrowers, making up nearly 70% of our business for the 12 months ending December 2021. The most popular prepayment option is yield maintenance, particularly for 10-year fixed-rate loans. These loans make up 47% of total business for the 12 months ending December 2021, which is up from 40% in the July 2021 report. The second most popular prepayment option starts with a 5% prepayment premium and then declines by 1% each year over the term of the loan – Option 1.

The Freddie Mac SBL program offers borrowers prepayment options along with a number of different products.

Exhibit 1: Loan Products & Available Prepayment Options

Option	Hybrids			Fixed-Rate			Total % Business
	5H	7H	10H	5F	7F	10F	
1	54321, 1%	5544321, 1%	5544332211, 1%	54321	5544321	5544332211	42%
2	321(3), 1%	3(2)2(2)1(3), 1%	3(3)2(3)1(4), 1%	321(3)	3(2)2(2)1(3)	3(3)2(3)1(4)	6%
3	(YM or 1%) + 1%, 1%	(YM or 1%) + 1%, 1%	(YM or 1%) + 1%, 1%	YM or 1%	YM or 1%	YM or 1%	47%
4	310(3), 0%	N/A	N/A	310(3)	N/A	N/A	5%
Total % Business	33%	8%	14%	5%	6%	34%	100%

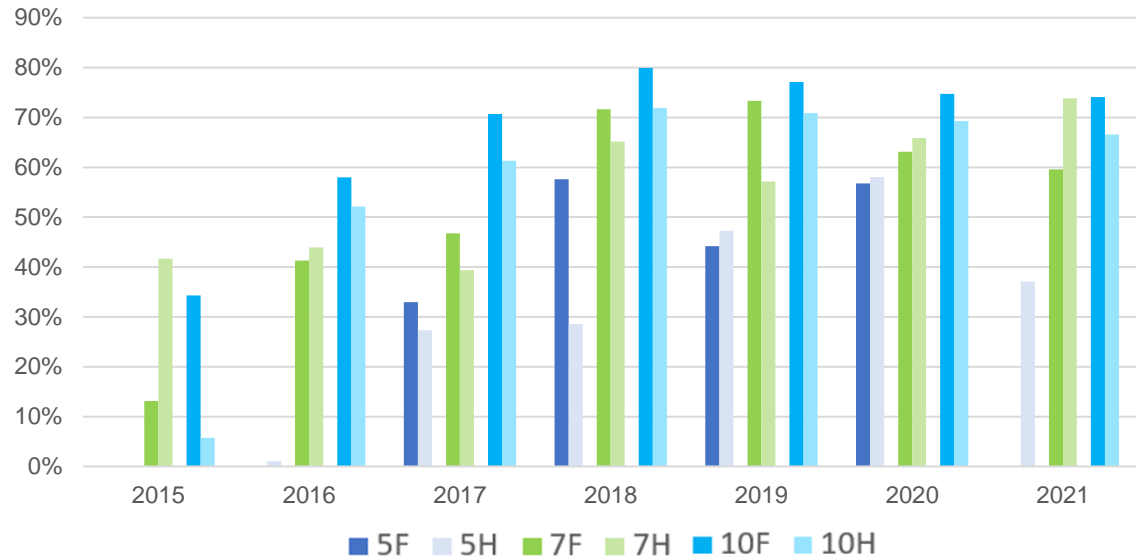
Source: Freddie Mac. We frequently use shorthand above to define the products; for example, we refer to the 5-year Hybrid as "5H" and the 10-year Fixed Balloon as "10F." Option 3 refers to Yield Maintenance but includes legacy YM or 1% +1%, 1% loans. See the SBL Product page at <https://mf.freddie.com/product/sbl.html> for more details.

¹ All data points in this report are as of December 2021 unless otherwise stated. This analysis excludes third-party seasoned loans not typical of the program.

Over the past few years, the share of borrowers choosing yield maintenance remains higher than in the early years of the program, especially in our 7- and 10-year products, as shown below in Exhibit 2.

Exhibit 2: Percentage of Active Loans with Yield Maintenance by Vintage and Product Type

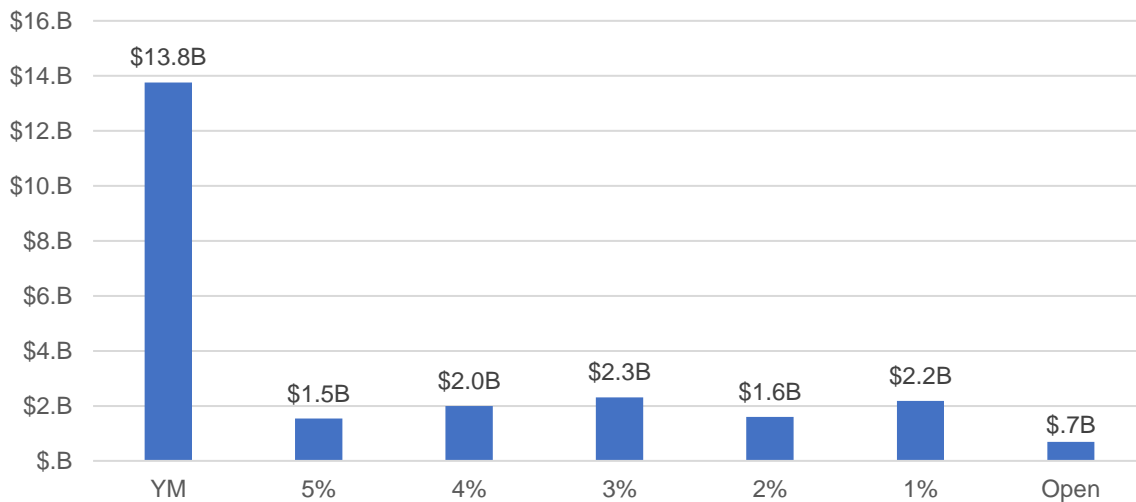
Yield maintenance is more prevalent with newly originated loans and those with longer terms.



Source: Freddie Mac

A number of factors drive prepayment behavior, including an incentive to prepay when interest rates fall or when property values rise. However, the existence of a prepayment premium can mitigate both of those factors. Currently, the majority of our outstanding loans are still subject to prepayment premiums, primarily in the form of either yield maintenance or a fixed percentage prepayment premium, as shown in Exhibit 3.

Exhibit 3: Outstanding Loan Balance by Prepayment Phase



Source: Freddie Mac

Prepayment Speeds by Loan Characteristics

From the 12 months ending in December 2021, the number of loans that prepaid increased 25% in comparison with August 2020 through July 2021. Interest rates were very low in 2021 compared with historic trends (although up from 2020), while property values grew rapidly. Along with loans continuing to season into more favorable prepay terms, all these factors provide an increased incentive for borrowers to prepay. The population of loans with the most flexible prepayment terms (1% or open) increased 11%, from approximately \$2.5 billion in July 2021 to approximately \$2.9 billion in December 2021, and overall constitutes approximately 12% of UPB.

Over the 12 months ending December 2021, 1,353 loans prepaid. The total number of loans that have prepaid since the program's inception is just under 3,150. The 12-month average CPR is 13.5% as of December 2021. Exhibit 4 is a summary of the payoffs across different prepayment options (shown in Exhibit 1), prepayment phase, vintage and product type during the 12-month period ending in December 2021.²

Loan prepayments increased in 2021, with prepayment Option 1 leading the way, along with loans that originated in 2017-2018.

Exhibit 4: Payoff Summary by Loan Count in the Past 12 Months

Prepayment Option	1	2	3	4				Total
	853	132	216	152				1,353
Prepayment Phase	YM	5%	4%	3%	2%	1%	Open	
	205	46	223	238	159	349	133	1,353
Vintage	2015	2016	2017	2018	2019	2020		
	130	258	325	357	216	64	1,353	
Product	5H	7H	10H	5F	7F	10F		
	566	106	106	100	97	378	1,353	

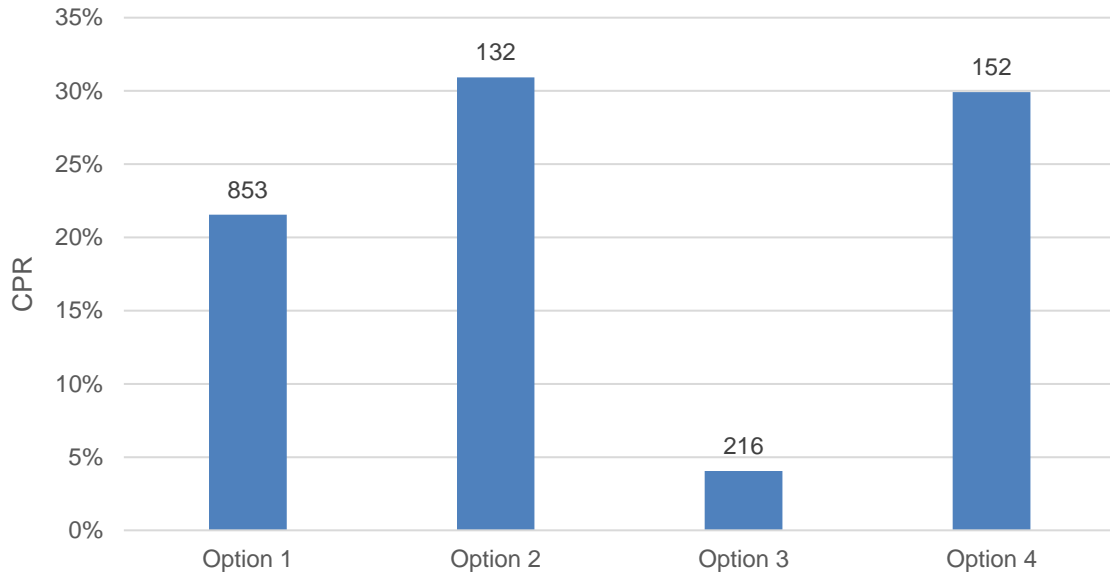
Source: Freddie Mac

In the following exhibits, we present prepayment speed across vintage and other characteristics over the 12 months ending December 2021. We have observed a large increase in prepayments utilizing Option 1, at 853 loans of the 1,353 that have prepaid. However, due to the large share of loans originated with Option 1, the actual CPR of Option 1 in the past 12 months is 22%, as shown in Exhibit 5. Options 2 and 4 have experienced higher prepayment rates at 31% and 30%, respectively, due to the greater prepayment flexibility they provide.

² For additional details on prepaids since inception of the SBL line of business, please see the [May 2019](#), the [November 2019](#), [November 2020](#) and [October 2021](#) SBL Prepay Reports. For additional details around FRESB loan payoffs, please reference our [SB-Deal Performance Presentation](#).

Exhibit 5: CPR by Prepayment Option in the Past 12 Months

Loans with Option 2 had the highest CPR, while loans with Option 1 saw the most prepaes over the past 12 months.

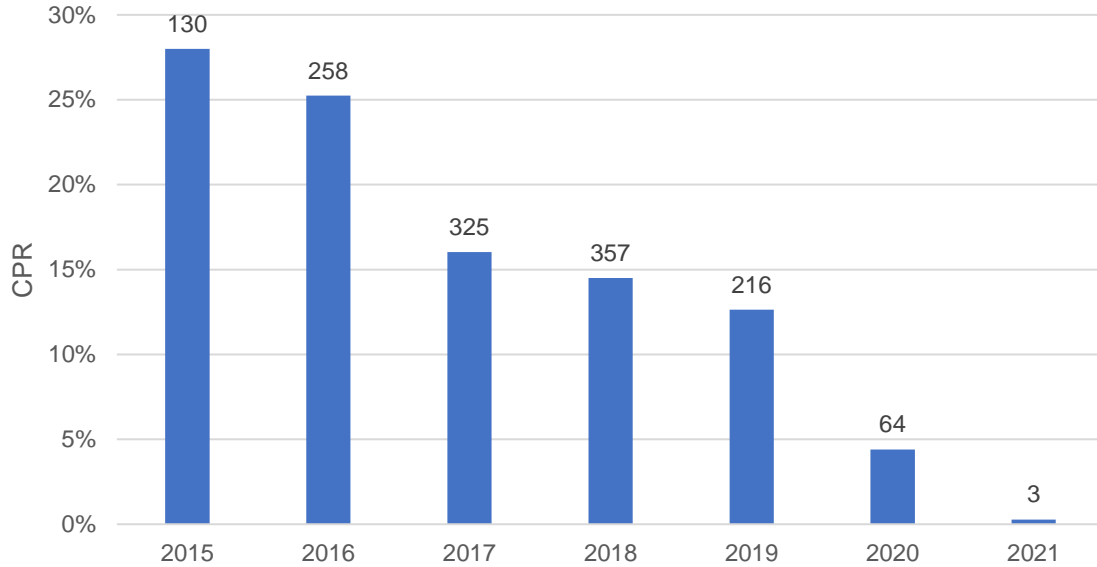


Source: Freddie Mac

The largest number of loans that have prepaid come from the middle vintages, specifically in 2017 and 2018, as loans in those vintages have had time to season. The older vintages had lower origination volumes and have already had many loans payoff and therefore we do not expect high payoff activity. Exhibit 6 shows that loans that originated in 2015 have the highest prepayment speed with a 12-month average CPR of 28%, with each subsequent year having a slower CPR than the previous year, with 2020 down to 4% and 2021 just above 0%.

Exhibit 6: CPR by Origination Vintage and Payoff Loan Counts in the Past 12 Months

As loans season, the CPR increases.

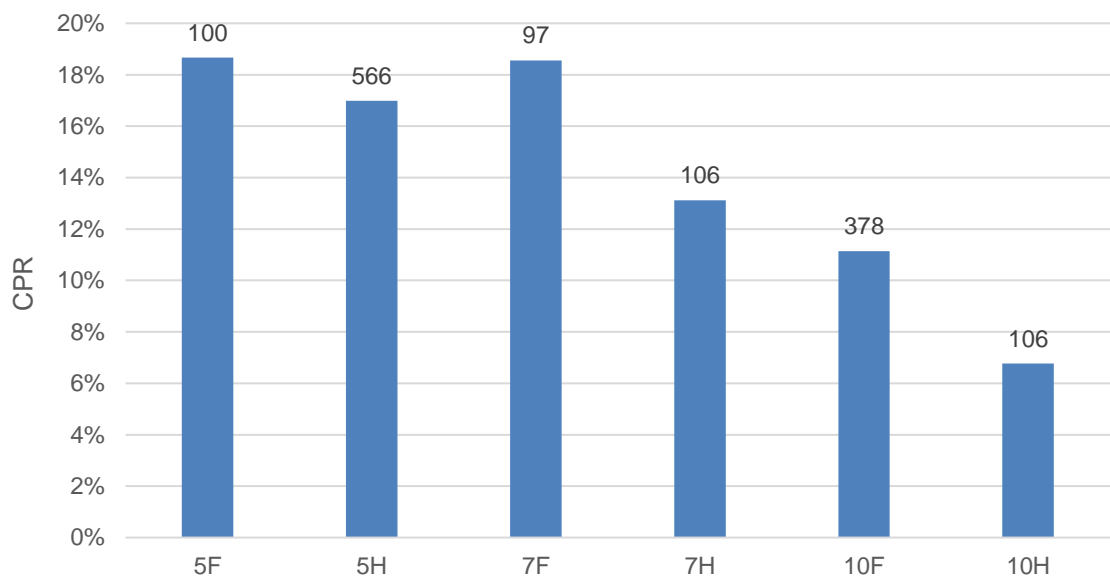


Source: Freddie Mac

Exhibit 7 below shows that prepayments occur across all product types. CPRs are fastest for the 5-year and 7-year fixed-rate products, with speeds of 19%. However, by far the greatest number of prepaid loans are among the 5-year hybrid and 10-year fixed-rate products, with 566 and 378 prepaays, respectively, as they are the most common loan types chosen by borrowers.

Loans with longer terms typically have more punitive prepayment structures and lower CPRs.

Exhibit 7: CPR by Product Type and Payoff Loan Counts in the Past 12 Months



Source: Freddie Mac

A total of 921 5-year hybrid loans that were originated prior to November 2016 converted to floating rate by December 2021, as shown in Exhibit 8. Once converted, the standard prepayment premium is 1%. Of those 921 loans, 465 either paid off or were refinanced prior to converting to floating rate, while the remaining 456 converted to floating rate, for an overall conversion rate of 50%. Of those loans that converted to floating rate, 31% or 140 loans paid off after they extended into their floating-rate period.

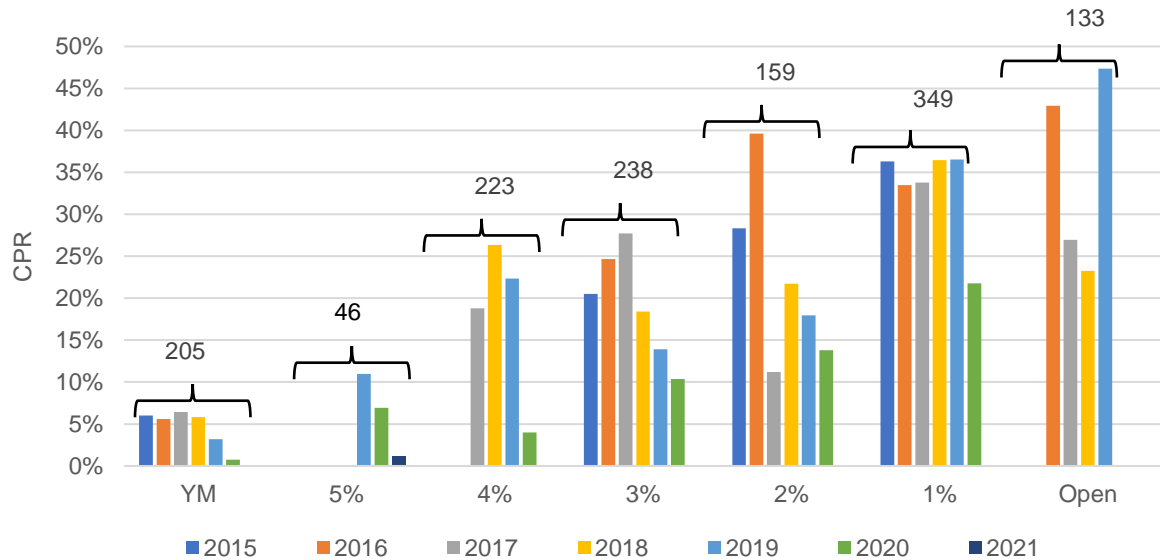
Exhibit 8: Analysis of 5-Year Hybrid Loan Conversion Rates

Origination Month	Originated 5H Loans	Loans Paid Off/ Refinanced	Loans Converted	First Interest Adjustment Date	Conversion Rate	Floating Loans as of Dec 2021
Oct 2014	1	1	0	--	--	--
Nov 2014	1	1	0	--	--	--
Dec 2014	6	1	5	Jan 2020	63%	5
Jan 2015	5	5	0	Feb 2020	38%	--
Feb 2015	9	6	3	Mar 2020	36%	0
Mar 2015	14	10	4	Apr 2020	33%	4
Apr 2015	9	5	4	May 2020	36%	1
May 2015	9	6	3	Jun 2020	35%	1
Jun 2015	28	14	14	Jul 2020	40%	6
Jul 2015	31	14	17	Aug 2020	44%	8
Aug 2015	50	18	32	Sep 2020	50%	18
Sep 2015	68	32	36	Oct 2020	51%	26
Oct 2015	50	26	24	Nov 2020	51%	14
Nov 2015	42	18	24	Dec 2020	51%	16
Dec 2015	71	34	37	Jan 2021	52%	22
Jan 2016	53	26	27	Feb 2021	51%	12
Feb 2016	56	27	29	Mar 2021	51%	17
Mar 2016	70	42	28	Apr 2021	50%	17
Apr 2016	56	31	25	May 2021	50%	18
May 2016	53	18	35	Jun 2021	51%	32
Jun 2016	67	40	27	Jul 2021	50%	25
Jul 2016	26	12	14	Aug 2021	50%	11
Aug 2016	28	15	13	Sep 2021	50%	12
Sep 2016	30	18	12	Oct 2021	50%	10
Oct 2016	46	23	23	Nov 2021	50%	21
Nov 2016	42	22	20	Dec 2021	50%	20
Total	921	465	456		50%	316

Source: Freddie Mac

Historically, as loans season and enter lower prepayment premium periods, we expect loans to prepay more quickly and for CPRs to increase. This is illustrated below in Exhibit 9, where the prepayment speed and seasoning increases as the prepayment premium decreases.

Exhibit 9: CPR by Loan Prepayment Phase and Payoff Loan Counts in the Past 12 months



Source: Freddie Mac

Exhibit 10 lists CPRs and prepayment count by Freddie Mac SB-Deal. Because the history is short and SB-Deals are more heterogenous compared with K-Deals, we observe an uneven, albeit generally downward trending prepayment history over time, but the most seasoned deals are slowing. Some of the unevenness can be attributed to large pools of loans in deals paying off, inflating an individual deal’s CPR. However, in general, the longer the deal has been outstanding, the higher the prepayment rate.

Exhibit 10: CPR, Initial UPB and Loan Count of Payoffs by FRESB Deal

Deal	Initial UPB, \$ Millions	CPR	Paid off Loan Count in the Past 12 Months	Deal	Initial UPB, \$ Millions	CPR	Paid off Loan Count in the Past 12 Months
SB001	121	10%	4	SB047	553	11%	21
SB002	122	11%	2	SB048	561	11%	26
SB004	192	30%	14	SB049	569	6%	14
SB005	145	38%	8	SB050	506	11%	17
SB006	202	26%	14	SB051	509	10%	18
SB007	101	19%	7	SB052	564	14%	23
SB009	445	22%	26	SB053	590	8%	19
SB010	148	25%	9	SB054	539	20%	27
SB011	110	17%	4	SB055	608	16%	40
SB012	167	15%	7	SB056	565	21%	39
SB013	401	30%	27	SB057	578	14%	31
SB014	310	27%	25	SB058	624	8%	21
SB015	302	32%	23	SB059	626	19%	43
SB016	350	30%	35	SB060	625	15%	27
SB017	387	32%	33	SB061	616	23%	44
SB018	118	34%	12	SB062	625	10%	15
SB020	293	15%	12	SB063	531	14%	22
SB021	94	9%	4	SB064	443	13%	18
SB022	255	20%	14	SB065	615	18%	39
SB023	342	18%	17	SB066	575	12%	25
SB024	259	20%	14	SB067	605	12%	19
SB025	233	19%	18	SB068	537	9%	21
SB026	221	11%	10	SB069	460	9%	15
SB027	246	20%	16	SB070	414	5%	7
SB028	323	20%	23	SB071	423	9%	14
SB029	217	16%	10	SB072	381	8%	9
SB030	307	22%	21	SB073	333	8%	10
SB031	264	11%	9	SB074	419	4%	8
SB032	322	18%	23	SB075	494	6%	10
SB033	221	23%	19	SB076	432	3%	5
SB034	328	30%	25	SB077	426	6%	9
SB035	317	20%	21	SB078	411	7%	10
SB036	351	15%	18	SB079	410	4%	4
SB037	317	6%	6	SB080	405	3%	5
SB038	259	13%	13	SB081	323	2%	3
SB039	264	15%	9	SB082	450	4%	6

SB040	294	12%	13	SB083	401	2%	2
SB041	312	24%	19	SB084	403	3%	3
SB042	288	11%	12	SB085	428	1%	1
SB043	326	8%	7	SB086	414	1%	1
SB044	321	15%	16	SB087	430	2%	1
SB045	403	16%	20	SB088	426	2%	2
SB046	495	14%	20				

Source: Freddie Mac

Summary

As loans in the program season, and due to continued low interest rates and strong multifamily property price appreciation, the number of SB loans that prepaid in the past 12 months has increased 20% when compared with the 12 months ending in July 2021. Furthermore, the first wave of 5-year fixed-rate maturities and 5-year hybrid conversions reached those milestones in 2020 and will continue to contribute to the higher level of prepayments. As discussed earlier, there are many factors that drive prepayment behavior, some of which are idiosyncratic. Accurately predicting future prepayment activity is difficult, but typically the more seasoned loans and those with lower prepayment premiums will prepay at higher rates than others. However, the rapid rise in interest rates seen during the start of 2022 may lead to lower prepayment speeds going forward because higher interest rates typically slow prepayment activity.