



Clarity MBS Dashboards

User Guide

June 2025



Introduction

This guide is designed to explain the functionality of the Clarity MBS Data Intelligence platform's MBS Reports - how to navigate them, how to interpret the results, and how the numbers are derived. Seven main reports and visualizations are available: Cohort-Level Prepayments Dashboard, Prepayment Heatmap Dashboard, Affordable, Social & Green MBS Dashboard, Seller-Level Loan Characteristics Dashboard, Seller-Level Prepayments Dashboard, Servicing Rights Transfers Dashboard, and Refinance Incentive Explorer Dashboard.

Cohort-Level Prepayments Dashboard

The goal of the Cohort-Level Prepayments Dashboard is to show the daily prepayment rates for specific cohorts of mortgage securities, while also illustrating in-month payoff activity. This may provide a view into long-term prepayment patterns for specific groups of mortgages, and short-term fluctuations in these patterns. For more information, please see the [Daily Prepayment Report](#) webpage on the Freddie Mac website. This webpage contains the main Daily Prepayment Report that feeds into the dashboard as well as the Supplemental and Historical Daily Prepayment Reports.

In November 2023, data from Fannie Mae's comparable daily prepayment reports was added to this dashboard. For more information, please refer to [Fannie Mae's Daily Prepayment Report page](#) on the Fannie Mae website. We make no representations or warranties concerning the accuracy or completeness of Fannie Mae's daily prepayment reports.

Prepayment Heatmap Dashboard

The goal of the Prepayment Heatmap Dashboard is to provide a visualization of the month-over-month changes in specific cohort-level prepayment rates at any given point during each month. This may provide a view into mortgage borrowers' conditions and the performance of mortgage-based products. Historical data is only available back to January 2019. However, we expect the main use will be to monitor voluntary payoff activity with each weekly data update prior to the release of the upcoming monthly factor. For more information, please see the [Daily Prepayment Report](#) webpage on the Freddie Mac website. This webpage contains the main Daily Prepayment Report that feeds into the dashboard as well as the Supplemental and Historical Daily Prepayment Reports.

In March 2024, data from Fannie Mae's comparable daily prepayment reports was added to this dashboard. For more information, please refer to [Fannie Mae's Daily Prepayment Report page](#) on the Fannie Mae website. We make no representations or warranties concerning the accuracy or completeness of Fannie Mae's daily prepayment reports.

Affordable, Social & Green MBS Dashboard

The goal of the Affordable, Social & Green MBS Dashboard is to provide a visualization of the total monthly issuance volume of the various Affordable, Social and Green MBS programs that Freddie Mac and Fannie Mae offer. For more information on Freddie Mac Green MBS, please see the [Single-Family Green Bond website](#), which provides information on the program as well as the estimated environmental impacts. Similarly, documentation on the Social MBS program can be found on the [Single-Family Social Bond website](#). The Affordable programs that Freddie Mac offers that can be visualized on the dashboard are [Home Possible](#) and [HFA Advantage](#). The dashboard can be used to both compare issuance volume, monthly or cumulative, over time or by different attributes for each GSE's respective programs, as well as compare the two GSEs' issuance volumes with each other. The information about Fannie Mae's Affordable, Social and Green MBS programs is based on information available on Fannie Mae's website;



we make no representations or warranties concerning the accuracy or completeness of such information.

Seller-Level Loan Characteristics Dashboard

The goal of the Seller-Level Loan Characteristics Dashboard is to provide a time-series visualization of the percentage of issuance UPB for a selected loan characteristic at the seller-level by quarter. There are two views included in this dashboard. The first view benchmarks a seller vs. the rest of the GSE market for a particular loan characteristic (Freddie and Fannie combined). This can inform investors and sellers of changes in the business mix and target opportunities for investment. The second view allows for a Freddie vs. Fannie comparison for a specific seller given a loan characteristic. This view highlights the difference in the seller's loan deliveries between Agencies.

Seller-Level Prepayments Dashboard

The goal of the Seller-Level Prepayments Dashboard is to provide a time-series representation of historical prepayment rates for both Agencies at the seller-level and cohort-level by factor month. There are two views included in this dashboard. The first one is a graph that allows for a quick comparison of prepayment behavior trends between sellers and the cohort overall, as well as how the prepayment rates compare across Agencies for a given CPR Term. Below the graph is a table that provides additional information for more background on the Seller and Cohort selected.

Servicing Rights Transfers Dashboard

The goal of the Servicing Rights Transfers Dashboard is to provide a visualization of the movement of servicing rights between entities that service GSE loans. The dashboard consists of a flowchart-style visualization of those transfers - where the servicing rights came from, when they were transferred, and to which entity they were transferred to. The data may also be viewed in a table format. The data may be filtered down to specific parties that transferred the servicing rights, specific recipients, specific time periods, or a specific range of size for the transfers.

Refinance Incentive Explorer Dashboard

This dashboard displays the volume of outstanding Freddie Mac securitized 30-year TBA loans that have refinance incentive (i.e., are in-the-money (ITM)), at a given market mortgage rate. The percent and distribution of loans in-the-money will dynamically update given the user inputs for market mortgage rate, incentive margin, coupon ranges, and origination dates. Loans are binned together by weighted average coupon (WAC) in 1/8th percentage point increments for readability. The in-the-money percentage that is displayed is based on the un-binned note rates. For more information, please see the [Refinance Transition Report](#) webpage on the Freddie Mac website.

Logging into and Navigating the Platform

The MBS Dashboards are located within Freddie Mac's proprietary public data visualization platform, [Clarity](#). To start, register for an account on the Clarity platform, which will require your full name, email, organization, and organization type. When your account has been created and verified, log into Clarity with the credentials that you just created.



Secure Login

Please do not bookmark this page. Bookmark after login.

Email Address

Password

☒ Remember my email address

[Sign On](#)

[Change Password?](#) | [Trouble Signing On?](#)

Don't have an account? [Register now](#)

Create Your Account

Email Address *

First Name *

Last Name *

Organization Name *

Title / Role

Organization Type *

Description *

Password *

Confirm Password *

[See password requirements](#)

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Logging into Clarity will prompt you to select your Tool. Click on MBS Data Intelligence.

Freddie Mac

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[LOG OUT](#)

Select your Tool

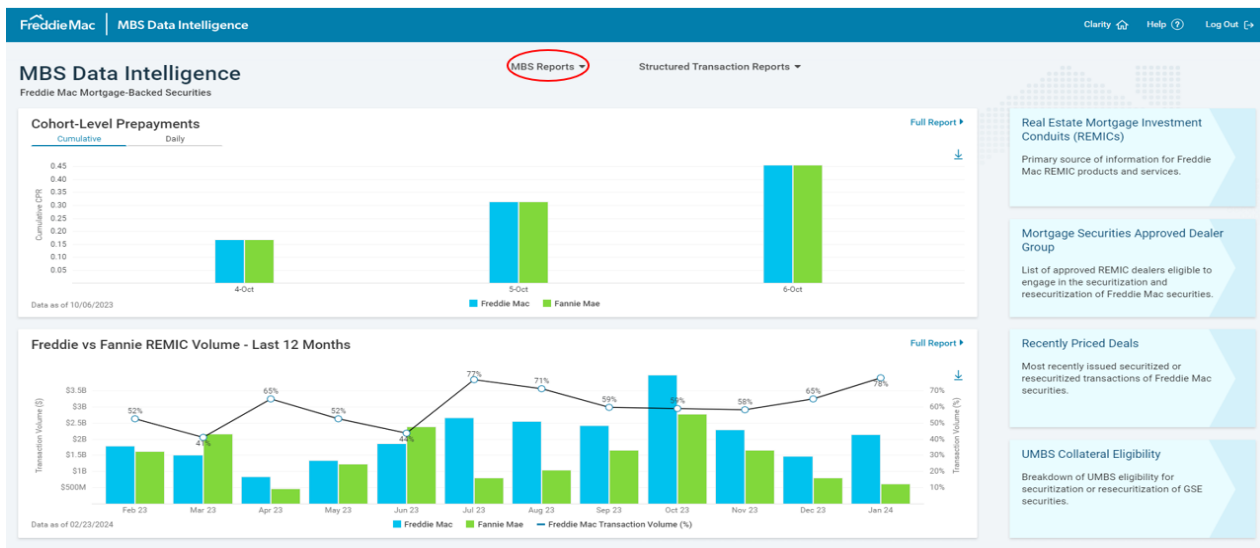
CRT Data Intelligence

Real-time data intelligence and analytics for billions of CRT disclosure and historical portfolio records.

MBS Data Intelligence

Data intelligence tools and dashboards for Single-Family mortgage backed securities, including ESG Bond and REMIC issuance, and Daily Prepayment Reporting.

This will then take you to the MBS Data Intelligence landing page. To navigate to the MBS reports specifically, click on the MBS Reports arrow on the top right of the screen.

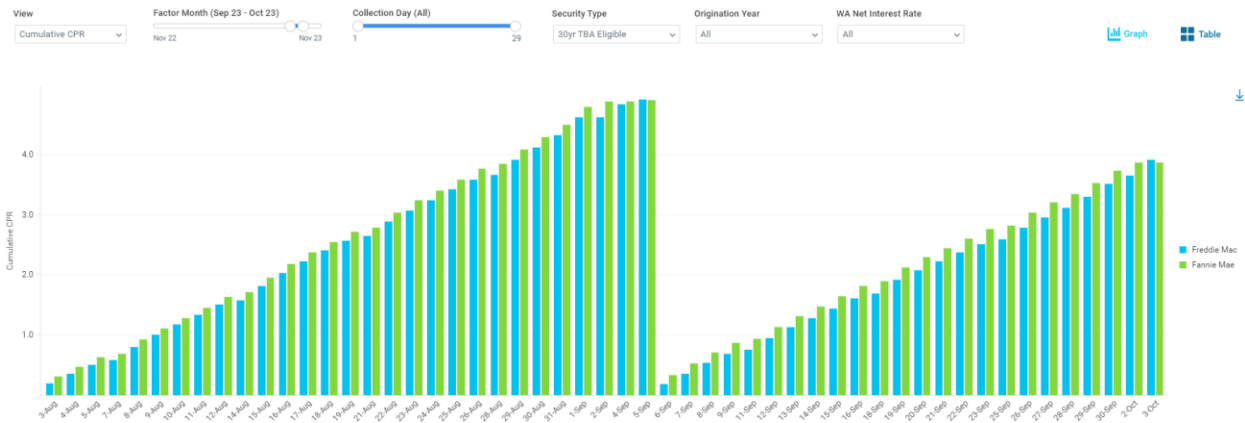


To access the relevant dashboards, click on the MBS Reports at the center top and select the desired dashboard.

Cohort-Level Prepayments Dashboard

The Chart Interface

This is an example of what the Cohort-Level Prepayment Dashboard will look like. You will see several side-by-side blue and green bars, which show the cumulative full voluntary prepayment rates as of each collection day of the month, resetting at the start of each new factor month. The blue bars are for Freddie Mac mortgage securities and the green bars are for Fannie Mae mortgage securities. Note that curtailments and buyouts are not included in the prepayment rates displayed in this dashboard, only full voluntary payoffs (resulting from, for example, refinancings or sales of mortgaged properties).

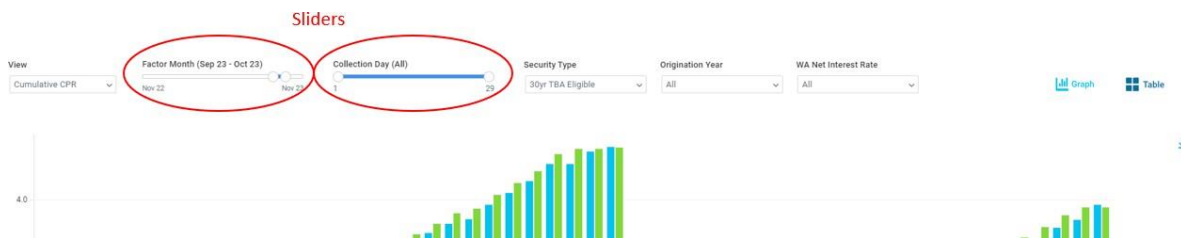


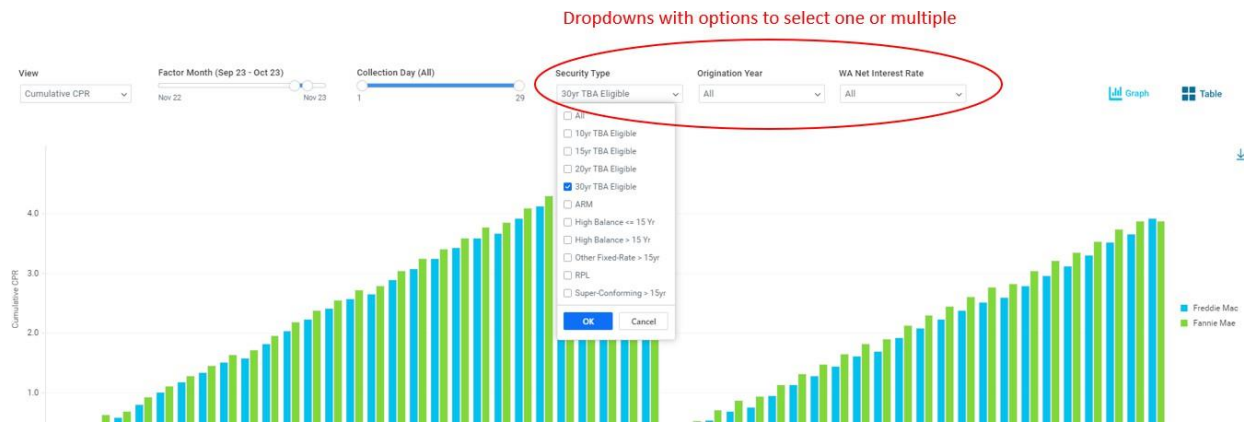
With your cursor, hover over individual bars to show the cumulative CPR for that date, to the nearest tenth of a percentage point.

Data within the report will be updated every Wednesday at approximately 4:30 PM, showing the full voluntary payoff activity up until the end of the previous business week (the previous Friday). This allows users to monitor the latest prepayment trends and daily numbers prior to monthly factor releases.

Input Parameters

The chart can be modified with several parameters: Factor Month, Collection Day, Security Type, Origination Year (vintage), and WA Net Interest Rate (coupon). The chart can also produce either cumulative CPRs or daily CPRs. Change these parameters by either dragging the sliders or clicking on options in the dropdown menus shown below. The dropdown menus allow for multiple categories to be selected at once.

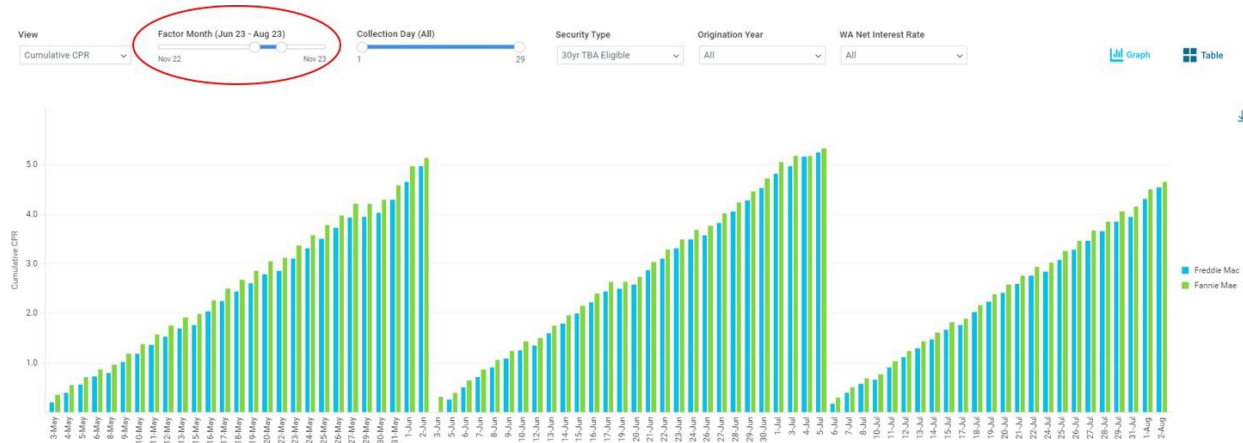




Factor Month

The Factor Month indicates the month when the data is compiled and the pool-level factors are disclosed to investors (on business day 4), representing the realized prepayment activity of the prior month. Note that activity for the first two business days of the factor month are included if reported to the GSEs by the second business day. For example, data with a factor month of August 2023 reflects the payoff activity that occurred from the 3rd business day in July 2023 through and including the first two business days in August. This is reflected in the fact that a factor month of August 2023 will show collection dates in July 2023.

Multiple factor months can be selected, which will give the data for all the days available for the selected factor months. As the cumulative CPR metric is aggregated on a factor month basis, the exact day in which the factor month changes can be observed. The image below shows the cumulative CPR data for the factor months of June 2023 through August 2023, 3 months total, reflecting prepayments in May 2023 through July 2023.

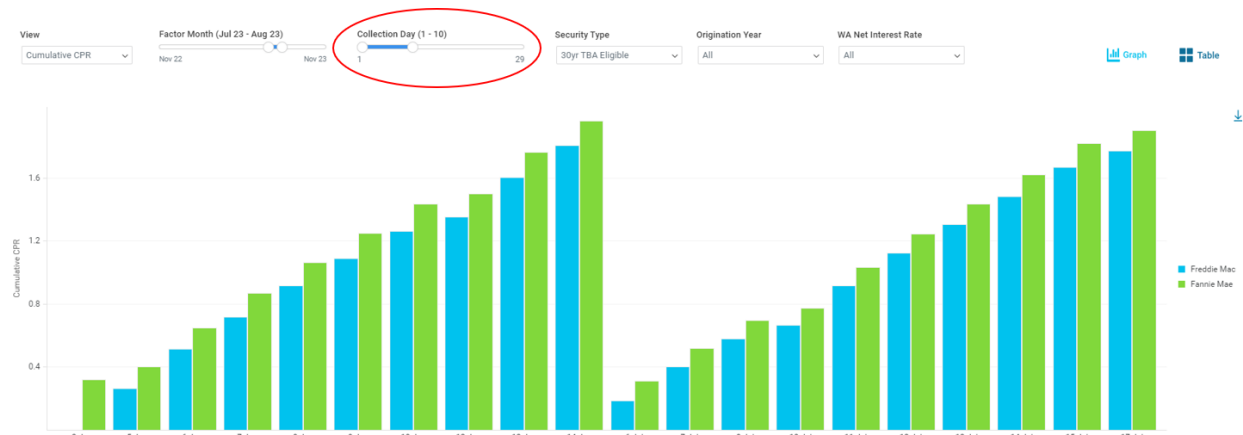


Collection Day

The Collection Day slider indicates the range of days of the collection period to include when displaying the cumulative CPRs. For instance, selecting all collection days will simply display the daily cumulative CPRs for every day in that collection month. The image below shows what this looks like for the factor months of June 2023 through August 2023.



Selecting a range of days will just display the collection days within that range. In the image below, selecting the collection day range of 1-10 will only show the first 10 collection days in each period, thus omitting the 11th day and beyond of the July 2023 and August 2023 factor months. This is especially useful for months that are not complete. If the factor month of August only had 10 collection days in the most recent data, selecting just the first 10 collection days will give a more useful comparison between the July 2023 and August 2023 factor months.



Note that if a factor month has 24 days and the range is set to 1 to 26, for instance, the chart for that factor month will still show all 24 bars. If the factor month instead has 28 days, then the chart will omit the 27th and 28th days.

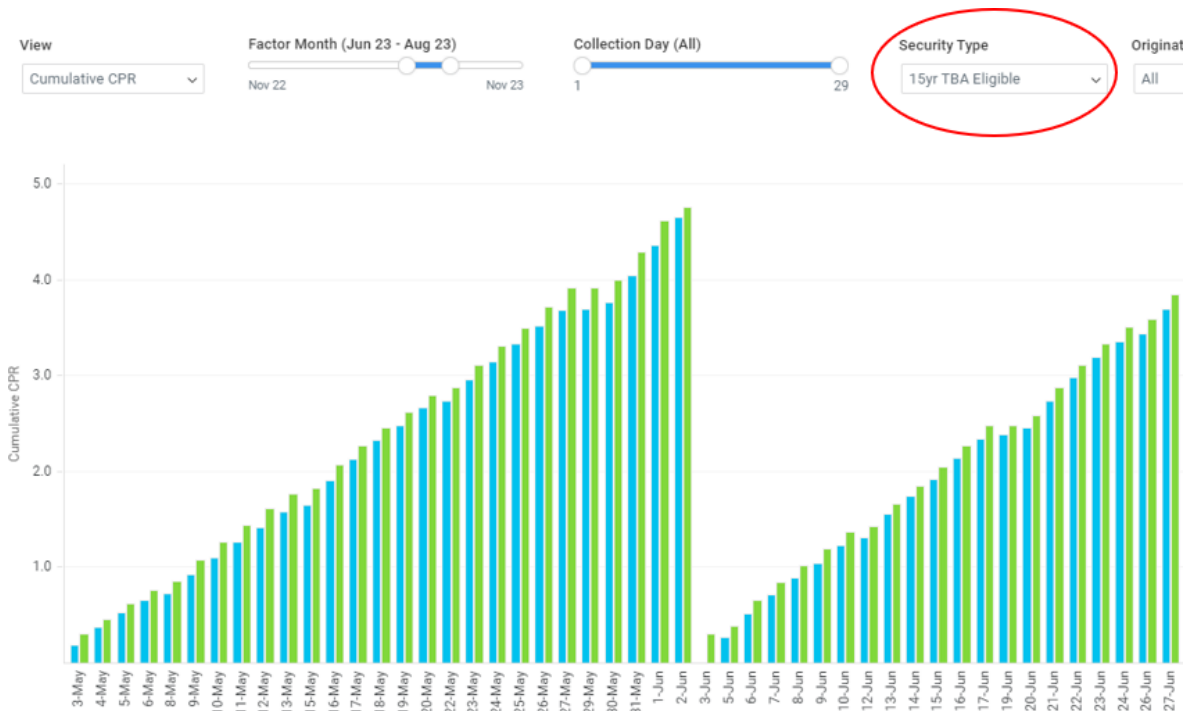
It is important to note that collection days include all days from Monday through Saturday, including holidays, making the count per month higher than regular business day counts. For a table of the number of collection days for each month from 2019 - 2024, please check the appendix at the end of this guide.

Security Type

The security type dropdown menu allows you to choose if you would like to view prepayment rates for individual security types, or to aggregate a weighted CPR of multiple security types, based on the cumulative UPB of their type, thus providing a heavier weighting to securities types with larger outstanding issuance amounts. The possible security types to select include 10-, 15-, 20-, and 30-year TBA-eligible fixed rate mortgages, ARMs, other fixed rate mortgages > 15 years or <= 15 years, RPLs,



government fixed-rate and Super-Conforming >15 years or <= 15 years (High Balance > 15 years or <=15 years for Fannie Mae cohorts). Individual security types, or any combination of them, can be selected. The image below shows the cumulative CPRs over time for 30-year TBA-eligible fixed rate mortgages, and 15-year TBA-eligible fixed rate mortgages.



While the charts look similar, the prepayment rates for 15-year TBA-eligible mortgages for this timeframe of June 2023 were slightly slower at the end of the month.



Origination Year

The origination year dropdown selects loans with only the specified year of origination, also weighting by UPB. The image below shows the difference in CPRs for all 30-year TBA-eligible mortgages originated in the year 2023 vs those originated in 2003.



This shows that the prepayment rate of the 2003 vintage was much faster for this period.



WA Net Interest Rate

The WA Net Interest Rate, or coupon, dropdown allows you to select included or excluded coupon rates to aggregate for cumulative CPR calculations. The image below shows the CPRs for the 6.5 and 2.5 note rates for the June 2023 through August 2023 factor months.





Additional Features

Cumulative vs. Daily View

You can view the daily change in CPR for the selected days instead of the cumulative CPRs for those days by clicking on the View dropdown to the far left. The image below is the daily CPR visualization for the June 2023 through August 2023 factor months for all 30-year TBA-eligible mortgages. This view is particularly useful for viewing fluctuations in prepayment rates on a weekly basis, for example, and changes to daily prepayment rates over time that may be harder to discern when looking at cumulative CPR.

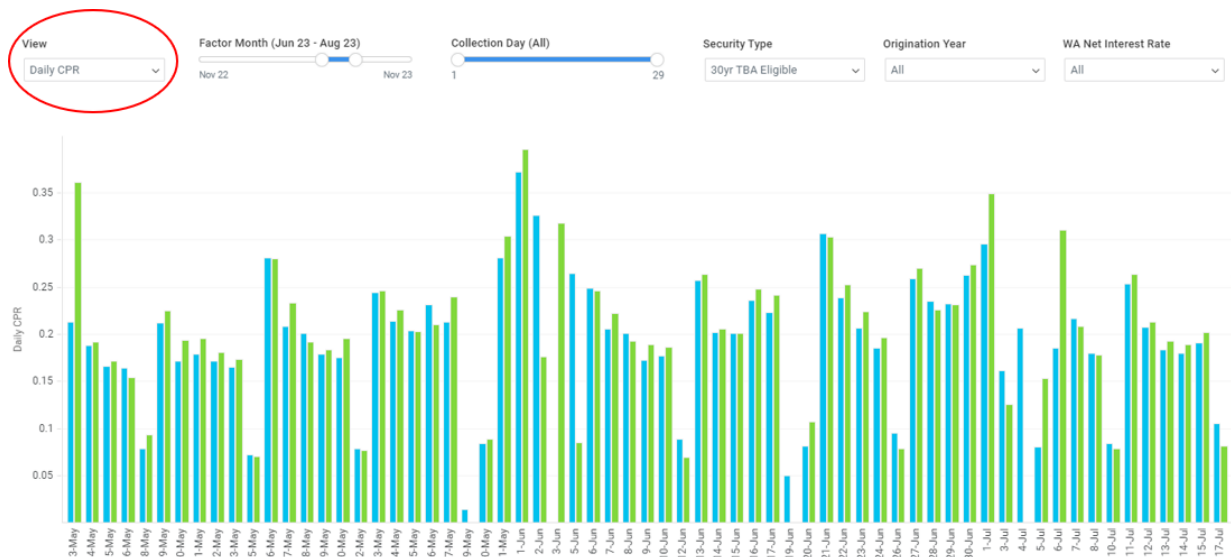




Table vs. Graph View

You can view the data in graph or table form by selecting the desired format with the buttons on the right-side of the screen. The image below is an example of what one such table might look like.

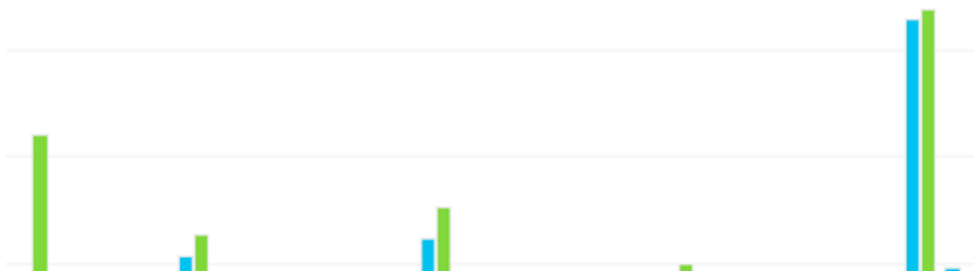
WA Net Interest Rate

All



Graph

Table



Cumulative CPR



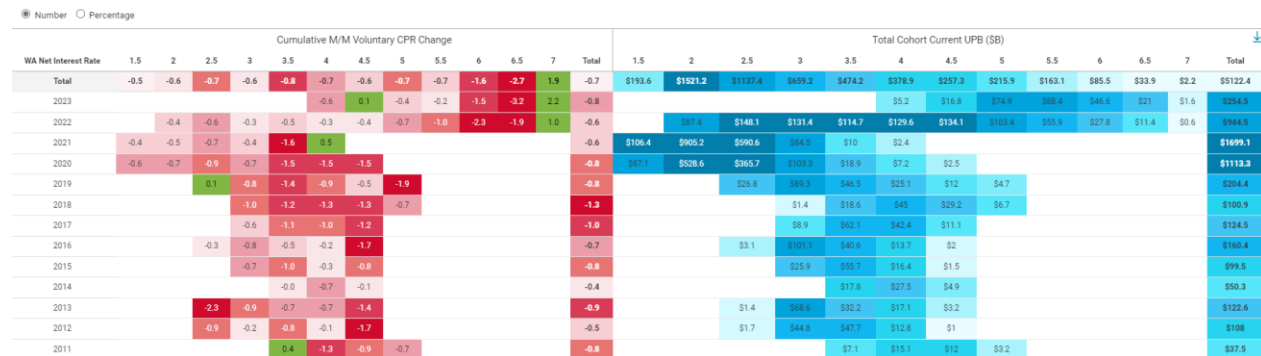
Date	Freddie Mac	Fannie Mae
3-May	0.21	0.36
4-May	0.40	0.55
5-May	0.57	0.72
6-May	0.73	0.88
8-May	0.81	0.97
9-May	1.02	1.19
10-May	1.19	1.38
11-May	1.36	1.58
12-May	1.53	1.76
13-May	1.70	1.93
15-May	1.77	1.99
16-May	2.04	2.27
17-May	2.25	2.50
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Prepayment Heatmap Dashboard

The Heatmap Interface

The image below is an example of what the heatmap page will look like. You will see two side-by-side grid visualizations, one shaded in red and green, and the other shaded in blue. The left red/green chart illustrates cumulative month-over-month voluntary CPR changes for specific cohorts, while the right blue chart illustrates total UPB at the start of the factor month for those same cohorts.



Data within the report will be updated every Wednesday at approximately 4:30 PM, showing the full voluntary payoff activity up until the end of the previous business week (the previous Friday). This allows users to monitor the latest prepayment trends prior to monthly factor releases.

Input Parameters

The heatmap can be modified with four parameters: the Agency, the Factor Month, the Collection Day, and the Security Type. The Collection Day parameter will not affect the blue Total Cohort Current UPB chart as this value only changes once per month. All four parameters will affect the Cumulative M/M Voluntary CPR Change chart. To change their values, click on the dropdown menus shown in the image below.

Agency	Factor Month	Collection Day	Security Type
Freddie Mac	August 2023	24	30yr TBA Eligible

● Number ○ Percentage

Agency

The Agency indicates the issuer of the underlying collateral. The dropdown options are All, Freddie Mac, and Fannie Mae. All shows a combined month-over-month CPR change for both Freddie Mac and Fannie Mae, while selecting the specific agency will show the month-over-month CPR change for that agency.



Factor Month

The Factor Month indicates the month when the data is compiled and the pool-level factors are disclosed to investors (on business day 4), representing the realized prepayment activity of the prior month. Note that activity for the first two business days of the factor month are included if reported to the GSEs by the second business day. For example, data with a factor month of June 2023, shown below, reflects the payoff activity that occurred between the 3rd business day in May 2023 and the 2nd business day of June. Therefore, the month-over-month CPR change chart illustrates the differences in **cumulative CPR** between the corresponding collection days of April 2023 and May 2023. The total UPB chart will show the outstanding UPB for cohorts at the beginning of the June 2023 factor month. Note that the dashboard will always compare the cumulative prepayment rates in the selected factor month relative to the immediately preceding month, as of the same collection day. Comparisons over longer time periods are not currently supported. Factor Months can be selected between February 2019 (when data was first collected, representing January 2019 payoffs) and the current factor month.

Agency
Factor Month
Collection Day
Security Type

All
June 2023
27
30yr TBA Eligible

☒ Number
☐ Percentage

WA Net Interest Rate	Cumulative M/M Voluntary CPR Change												Total
	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	
Total	0.8	0.9	1.2	1.2	1.1	1.1	0.8	0.6	0.5	1.3	2.4	5.5	1.0
2023						0.9	1.2	-0.3	0.2	1.0	2.1	5.0	0.4
2022		0.6	0.8	1.1	0.7	1.0	0.7	0.9	0.8	1.5	2.8	5.9	0.9
2021	0.9	0.8	1.2	1.5	1.9	-0.7							1.0
2020	0.7	1.1	1.2	1.1	1.5	1.4	1.0						1.1
2019			1.2	1.5	1.7	1.6	0.7	1.5					1.5
2018				3.8	1.0	1.5	1.3	1.7					1.4
2017				1.8	1.1	1.8	2.1						1.5
2016			-1.1	1.2	1.1	1.2	1.0						1.1
2015				0.9	0.9	1.3	3.6						1.1
2014					1.1	1.1	0.8						1.1
2013			1.0	0.8	0.9	0.4	0.7						0.8
2012			0.6	1.1	1.1	0.5	-0.2						1.0
2011					0.2	1.2	1.1	0.9					1.0
2010					0.7	1.0	0.5	1.4					0.9

Collection Day

The Collection Day indicates the first X days of the collection period to include when computing month-over-month (M/M) cumulative CPR changes. A Collection Day of 20 for the Factor Month of June 2023 will display the cumulative CPR differences between the first 20 days of the June 2023 collection period and the first 20 days of the May 2023 collection period, while a Collection Day of 14 will compare the first 14 days, and so on. Collection Day will not change the current UPB chart, as that is based on beginning of the month values. For example, the first M/M CPR change chart below is with a collection date of 20 days for June 2023, and the second is with a collection date of 14 days instead, showing the difference in prepayment speeds at different points within the same reporting month.



Agency: All Factor Month: June 2023 Collection Day: 20 Security Type: 30yr TBA Eligible

Number Percentage

Cumulative M/M Voluntary CPR Change													
WA Net Interest Rate	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	Total
Total	0.3	0.4	0.5	0.6	0.4	0.4	0.2	0.1	0.0	0.6	1.1	4.6	0.4
2023						0.5	0.7	-0.4	-0.2	0.5	0.3	2.9	-0.0
2022		0.2	0.2	0.5	0.3	0.3	0.2	0.2	0.3	0.7	1.7	6.2	0.3
2021	0.5	0.3	0.6	0.6	0.4	-0.8							0.4
2020	0.2	0.5	0.5	0.4	0.9	-0.3	0.2						0.5
2019			0.5	0.8	0.7	0.7	-0.1	-0.1					0.6
2018				2.5	0.3	0.5	0.3	0.8					0.5
2017				0.8	0.4	1.0	1.2						0.7
2016			-1.0	0.6	0.4	0.6	0.7						0.5
2015				0.3	0.4	0.5	1.5						0.4
2014					0.6	0.3	0.3						0.4
2013			0.7	0.4	0.4	-0.1	0.1						0.4
2012			0.7	0.4	0.4	0.0	-1.0						0.4
2011					-0.2	0.5	0.6	0.2					0.4
2010					0.4	0.5	-0.0	1.0					0.4

Agency: All Factor Month: June 2023 Collection Day: 14 Security Type: 30yr TBA Eligible

Number Percentage

Cumulative M/M Voluntary CPR Change													
WA Net Interest Rate	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	Total
Total	0.3	0.3	0.4	0.4	0.3	0.4	0.2	0.1	-0.0	0.4	1.0	0.3	0.3
2023						0.5	0.4	-0.2	-0.2	0.2	0.2	-1.7	-0.1
2022		0.2	0.1	0.4	0.3	0.2	0.1	0.1	0.1	0.6	1.7	2.2	0.2
2021	0.3	0.2	0.4	0.5	0.4	-0.6							0.3
2020	0.2	0.4	0.4	0.3	0.6	-0.1	0.9						0.4
2019			0.4	0.6	0.5	0.8	0.2	-0.0					0.5
2018				1.7	0.4	0.5	0.2	0.7					0.4
2017				1.0	0.3	0.9	1.2						0.6
2016			-0.7	0.3	0.3	0.6	1.3						0.3
2015				0.1	0.4	0.5	1.2						0.4
2014					0.5	0.6	0.6						0.6
2013			0.1	0.4	0.2	-0.0	0.0						0.2
2012			0.6	0.2	0.2	0.2	-0.2						0.2
2011					-0.2	0.6	0.7	0.8					0.5
2010					-0.0	0.5	0.2	0.8					0.4



You can notice some slight differences in cumulative cohort prepayment speeds.

It is important to note that collection days include all days from Monday through Saturday, including holidays, making the count per month higher than regular business day counts. For a table of the number of collection days for each month from 2019 - 2024, please check the appendix at the end of this guide.

Collection Day Edge Cases

While the Collection Day parameter sets calculations such that the cumulative CPR after X days for the collection month is compared with the cumulative CPR after X days for the month prior, edge cases arise when the total number of collection days in the two months differs.

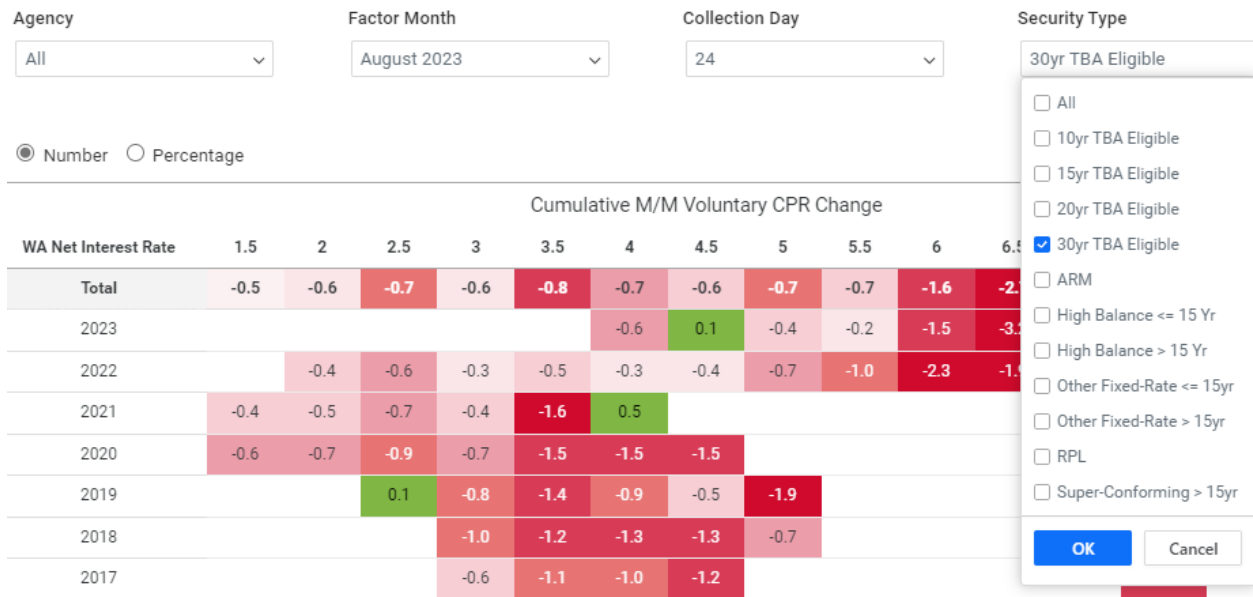
If the selected factor month had more days in it than the prior factor month, then days exceeding the maximum in the prior factor month are compared to the final day of the prior month instead. For example, the factor month of June 2023 had 27 collection days, and the prior factor month of May 2023 had 24 collection days. The charts for Collection Days 25, 26, and 27 will compare the cumulative CPRs for cohorts in June 2023 with the cohort CPRs for Collection Day 24 in May 2023.

If the selected factor month had fewer days in it than the prior factor month, then the final day in the factor month is modified to be compared to the month-end day of the prior month instead, effectively skipping over the extra days in the prior month. For example, the factor month of May 2023 had 24 collection days, and the prior factor month of April 2023 had 28 collection days. The chart for Collection Day 24 will compare the cumulative CPRs of cohorts after the full 24 days in May 2023 with cumulative CPRs after the full 28 days in April 2023, skipping the 24th through 27th days in April 2023. The chart for Collection Day 23 will compare the first 23 days for factor month May 2023 with the first 23 days of factor month April 2023 as per the usual process.

When toggling between factor months, the collection day will remain the same so long as the collection day exists in the other factor month(s) selected. For example, if collection day 3 has been selected for a particular month, when selecting a different month, the collection day will remain 3. However, when selecting a different month where the collection day does not exist in that month, the collection day will default to the last available collection day of that month. For example, if July 2023 and collection day 27 are selected, when changing the month to August 2023, the collection day will default to 24 – the last collection day of August.

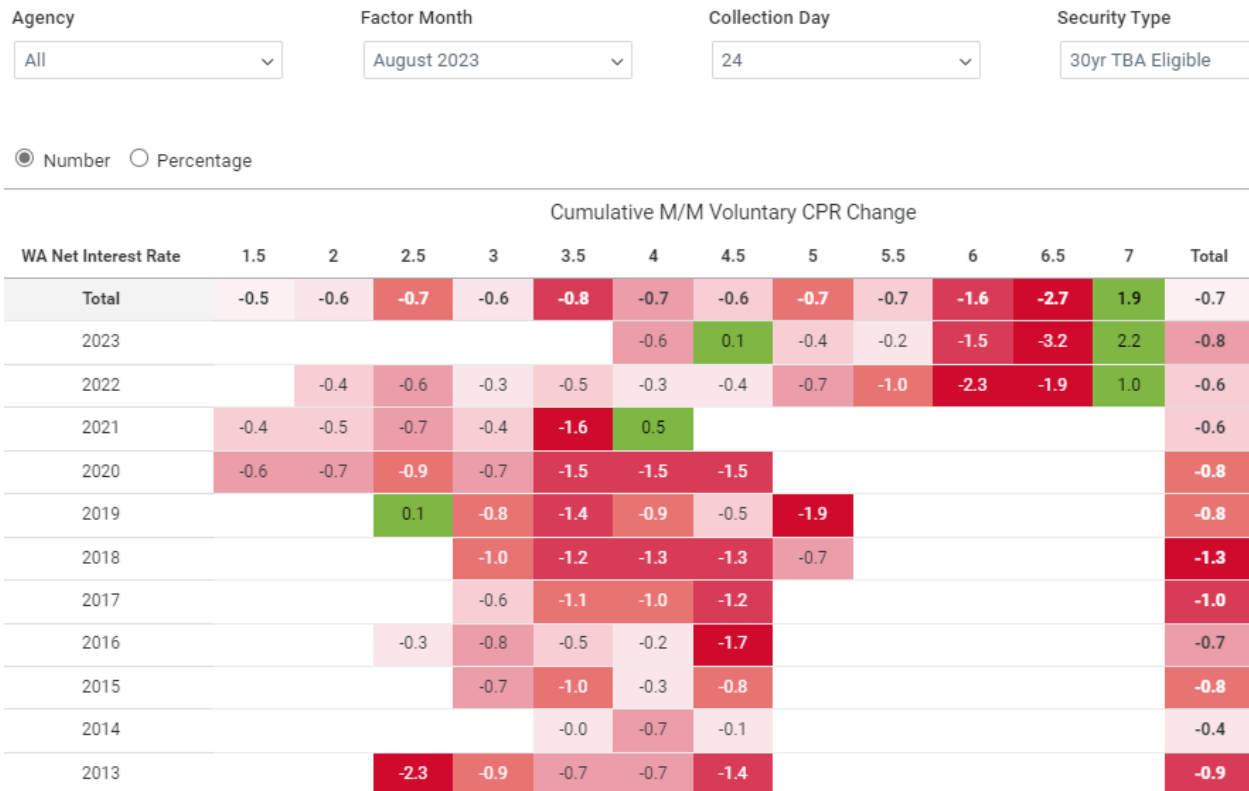
Security Type

The Security Type dropdown allows you to select which categories of securities to include in the visualization calculations and allows for different combinations of security types. The total list includes 10-, 15-, 20-, and 30-year TBA-eligible fixed rate mortgages, ARMs, other fixed rate mortgages greater than or less than 15 years, RPLs, government fixed-rate and Super-Conforming >15 years or <= 15 years. Selecting multiple security types will weigh the month-over-month CPR changes by the UPBs for the respective individual security types, while the total UPBs will sum up the UPBs for the selected security types' cohorts.



The M/M Voluntary CPR Change Chart

The below graph shows the cumulative month-over-month change in the voluntary CPR of cohorts depending on their loan origination year (vintage) and weighted average net interest rate (coupon).



There is a Total row and a Total column; the total row, on top of the grid, calculates a weighted average



CPR change for each coupon across all origination years, while the total column on the right of the grid calculates a weighted average CPR change for each origination year across the entire coupon range. The intersection of the two gives the overall CPR change for all origination years and coupons combined for the given month, collection day, and security type. These weights are all based on the cumulative UPBs for the individual cohorts, which can be found in the Total Cohort Current UPB column on the right.

Cumulative M/M Voluntary CPR Change													
WA Net Interest Rate	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	Total
Total	-0.5	-0.6	-0.7	-0.6	-0.8	-0.7	-0.6	-0.7	-0.7	-1.6	-2.7	1.9	-0.7
2023						-0.6	0.1	-0.4	-0.2	-1.5	-3.2	2.2	-0.8
2022		-0.4	-0.6	-0.3	-0.5	-0.3	-0.4	-0.7	-1.0	-2.3	-1.9	1.0	-0.6
2021	-0.4	-0.5	-0.7	-0.4	-1.6	0.5							-0.6
2020	-0.6	-0.7	-0.9	-0.7	-1.5	-1.5	-1.5						-0.8
2019			0.1	-0.8	-1.4	-0.9	-0.5	-1.9					-0.8
2018				-1.0	-1.2	-1.3	-1.3	-0.7					-1.3

Individual Cell Interpretation and Cell Shading

Each individual cell represents the month-over-month CPR change of that specific cohort for the specified month and collection day number compared to that same cohort for the prior month and same number of collection days, barring edge cases as outlined above. For example, this circled cell below shows the difference in CPR between the factor months of July and August for the cohort of 30-year TBA-eligible mortgages with the origination year of 2022 and coupon of 4.5, which is a -0.4 CPR difference after 24 collection days in both periods.

Agency

All

Factor Month

August 2023

Collection Day

24

☒ Number ☐ Percentage

Cumulative M/M Voluntary CPR Change

WA Net Interest Rate	1.5	2	2.5	3	3.5	4	4.5	5	5.5
Total	-0.5	-0.6	-0.7	-0.6	-0.8	-0.7	-0.6	-0.7	-0.7
2023						-0.6	0.1	-0.4	-0.2
2022		-0.4	-0.6	-0.3	-0.5	-0.3	-0.4	-0.7	-1.0
2021	-0.4	-0.5	-0.7	-0.4	-1.6	0.5			
2020	-0.6	-0.7	-0.9	-0.7	-1.5	-1.5	-1.5		

The shading of the cell indicates how extreme the difference is relative to the maximum and minimum CPR change that occurred during the selected period. A dark red shaded cell indicates that the CPR change was negative and close to the highest observed negative change for that month, while a dark green shade indicates a positive CPR change close to the highest observed positive change for that month. The lighter the shading, the lower the magnitude compared to the maximum for that month. Since



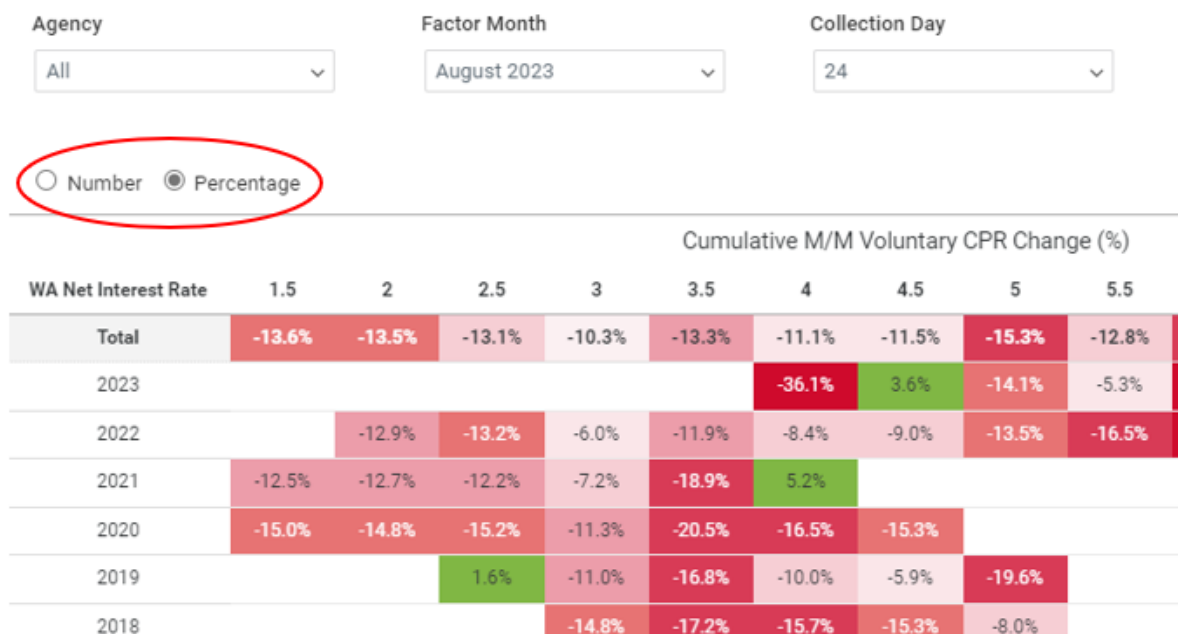
these comparisons are relative for positive and negative changes only, a negative change of -6.0 CPR may still be a light red cell if the maximum for that month was a -20.0 CPR change for a particular cohort, while a positive change of 6.0 CPR may be a dark green cell if it was the highest positive change in a cohort's prepayment rate for that month and collection day.

A legend for the shading colors can be found below, generated dynamically based on the maximum positive or negative change. Note that the shadings for the totals column and row are generated separately, with absolute values for shades not being consistent with that of the main table.

Highest -	High -	Low -	Lowest -	Lowest +	Low +	High +	Highest +
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Number vs. Percentage

You can quickly change between number/percentage cell values, which converts the month-over-month CPR change for that cohort between an absolute CPR value and the percent change, by clicking on these two options.



This can change the shading; Two cells can have the same absolute CPR change of 2.0, but if one's prior CPR was 8.0 and the other's was 3.0, then one will see a percent CPR change of 25% and the other will see a change of 66.6%, resulting in a very different visualization. In practice, however, such differences are relatively insignificant and difficult to notice for most of the data.

The Total Cohort Current UPB Chart

The right graph in the image below shows the total UPB in a particular cohort, also broken down by a particular weighted-average net interest rate and year of origination.



Agency	Factor Month	Collection Day	Security Type
All	August 2023	24	30yr TBA Eligible

☒ Number ☐ Percentage

WA Net Interest Rate	Cumulative M/M Voluntary CPR Change													Total Cohort Current UPB (\$B)													
	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	Total	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	Total	
Total	-0.5	-0.6	-0.7	-0.6	-0.8	-0.7	-0.6	-0.7	-0.7	-1.6	-2.7	1.9	-0.7	\$193.6	\$1521.2	\$1197.4	\$699.2	\$474.2	\$376.9	\$257.3	\$215.9	\$163.1	\$85.5	\$33.9	\$2.2	\$5122.4	
2023							-0.6	0.1	-0.4	-0.2	-1.5	-3.2	2.2	-0.8						\$5.2	\$16.8	\$74.9	\$39.4	\$45.6	\$21	\$1.6	\$254.5
2022			-0.4	-0.6	-0.3	-0.5	-0.3	-0.4	-0.7	-1.0	-2.3	-1.9	1.0	-0.6		\$87.4	\$148.1	\$131.4	\$114.7	\$129.6	\$134.1	\$162.4	\$55.9	\$27.8	\$11.4	\$0.6	\$944.5
2021		-0.4	-0.5	-0.7	-0.4	-1.6	0.5						-0.6	-0.6	\$106.4	\$905.2	\$590.6	\$54.5	\$10	\$2.4							\$1699.1
2020		-0.6	-0.7	-0.9	-0.7	-1.5	-1.5	-1.5					-0.8	-0.8	\$87.1	\$528.6	\$945.7	\$153.3	\$18.9	\$7.2	\$2.5						\$1119.3
2019				0.1	-0.8	-1.4	-0.9	-0.5	-1.6				-0.8	-0.8		\$23.8	\$39.3	\$46.5	\$25.1	\$12	\$4.7						\$204.4
2018					-1.0	-1.2	-1.3	-1.3	-0.7				-1.3	-1.3			\$1.4	\$18.6	\$45	\$26.2	\$6.7						\$100.9
2017					-0.6	-1.1	-1.0	-1.2					-1.0	-1.0				\$8.9	\$42.1	\$42.4	\$11.1						\$124.5
2016				-0.3	-0.8	-0.5	-0.2	-1.7					-0.7	-0.7		\$3.1	\$13.1	\$40.6	\$13.7	\$2							\$160.4
2015					-0.7	-1.0	-0.3	-0.8					-0.8	-0.8			\$25.9	\$55.7	\$16.4	\$1.5							\$99.5
2014						-0.0	-0.7	-0.1					-0.4	-0.4				\$17.6	\$27.5	\$4.9							\$50.3
2013				-2.3	-0.9	-0.7	-0.7	-1.4					-0.9	-0.9					\$22.2	\$17.1	\$3.2						\$122.6
2012				-0.9	-0.2	0.8	-0.1	-1.7					-0.5	-0.5		\$1.7	\$44.6	\$47.7	\$12.8	\$1							\$108
2011					0.4	-1.3	-0.9	-0.7					-0.8	-0.8				\$7.1	\$15.1	\$12	\$3.2						\$37.5
2010					0.0	-0.4	-0.5	0.7					-0.2	-0.2					\$2.3	\$12.7	\$11.8	\$5.7					\$32.5

This table uses the same year index to the far left as the CPR change chart.

Individual Cell Interpretation and Cell Shading

Individual cells show the total outstanding UPB for each cohort. For example, the circled cell shows the total UPB for 30-year TBA-eligible mortgages in billions of USD at the beginning of the August factor month.

● Number ○ Percentage

WA Net Interest Rate	Total Cohort Current UPB (\$B)												Total
	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	
Total	\$114	\$727.5	\$504	\$281.8	\$195.6	\$157.2	\$112.2	\$100.1	\$75.9	\$39.1	\$13.8	\$0.6	\$2321.8
2023						\$1.8	\$7.1	\$34.9	\$43.8	\$22.6	\$8.6	\$0.6	\$119.5
2022		\$42.7	\$68.4	\$61.1	\$50.6	\$62.7	\$63.3	\$49.6	\$25.3	\$13.2	\$5.1		\$441.9
2021	\$65.4	\$438.1	\$274	\$38.7	\$4.8	\$1.1							\$822.2
2020	\$48.6	\$246.6	\$146.9	\$38.6	\$7.2	\$3	\$1						\$491.8
2019			\$13.1	\$41.1	\$19.3	\$10.1	\$5.5	\$2.1					\$91.3
2018				\$0.6	\$7.5	\$17.6	\$12.1	\$2.7					\$40.4
2017				\$4.3	\$26.7	\$16.6	\$4.3						\$52

The current UPB chart only has two total columns to the far right and at the top of the chart, which sum up the total UPBs for all cohorts of the given vintage and coupon rate, respectively. The top right cell shows the total outstanding UPB at the beginning of the current Factor Month for the selected security types. Shading of the cells is based on the largest observed total UPBs for individual cohorts; the lighter the cell, the lower the UPB for that cohort compared to the maximum. A legend for these shadings can be found below, which are also generated dynamically based on the values in the data.

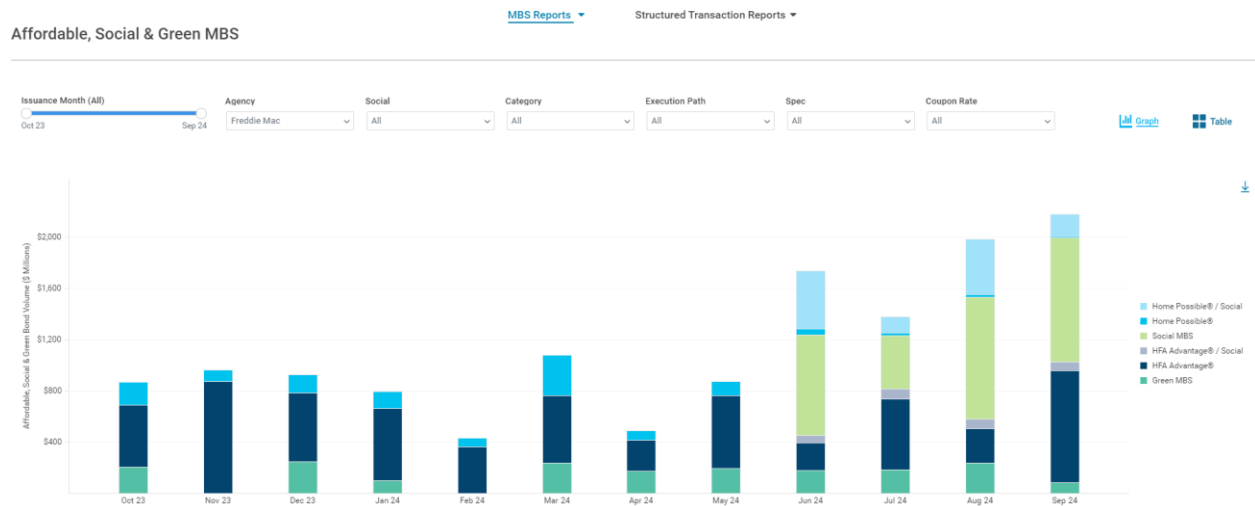
Lowest	Lower	Low	Lower Med.	Higher Med.	High	Higher	Highest
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Affordable, Social & Green MBS Dashboard

The Chart Interface

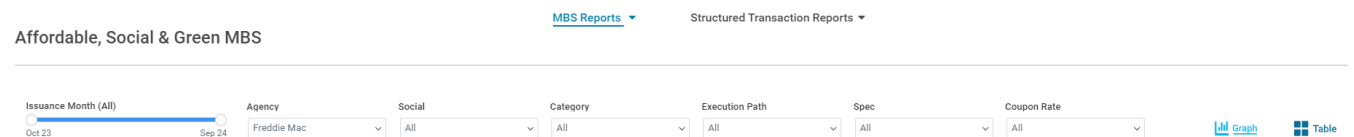
The image below is an example of what the report will look like, outlining issuance of Freddie Mac or Fannie Mae's Affordable, Social and Green MBS programs for a given month in the form of stacked bars. Bar size is measured in millions of dollars, larger bars signify larger amounts of issuance for the included Affordable, Social or Green MBS programs. The key can be found to the far right of the chart, which shows which colors are correlated with a given program.



Data is available starting from January 2021.

Input Parameters

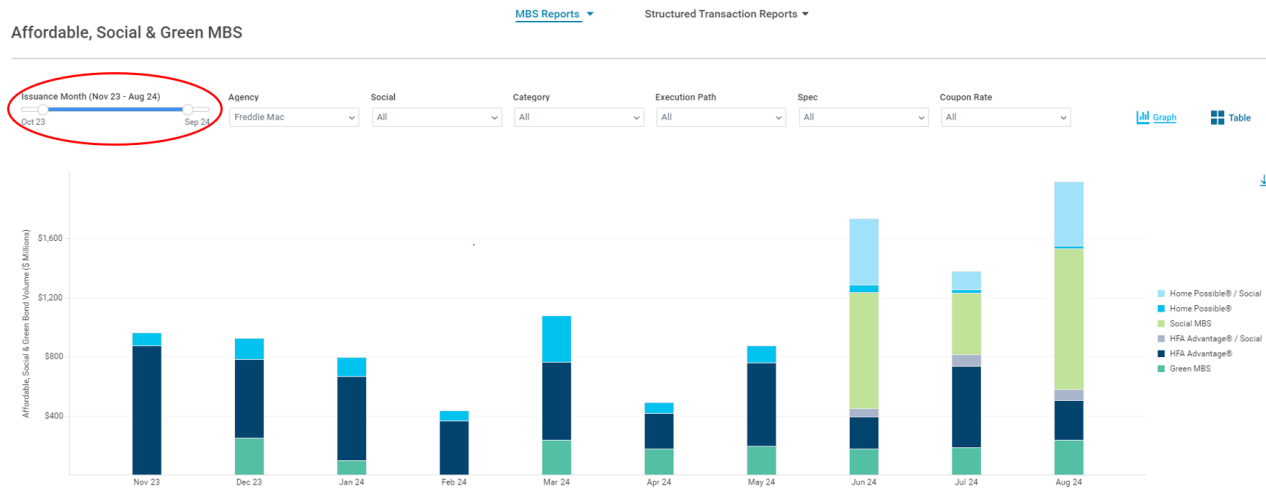
Several different input parameters are available to change the data you wish to view. These include the following: Issuance Month, Agency, Social, Category, Execution Path, Spec, and Coupon Rate dropdowns. They can be found above the chart. Some of the dropdowns are unique options only, while others allow for combinations of variables to be selected.





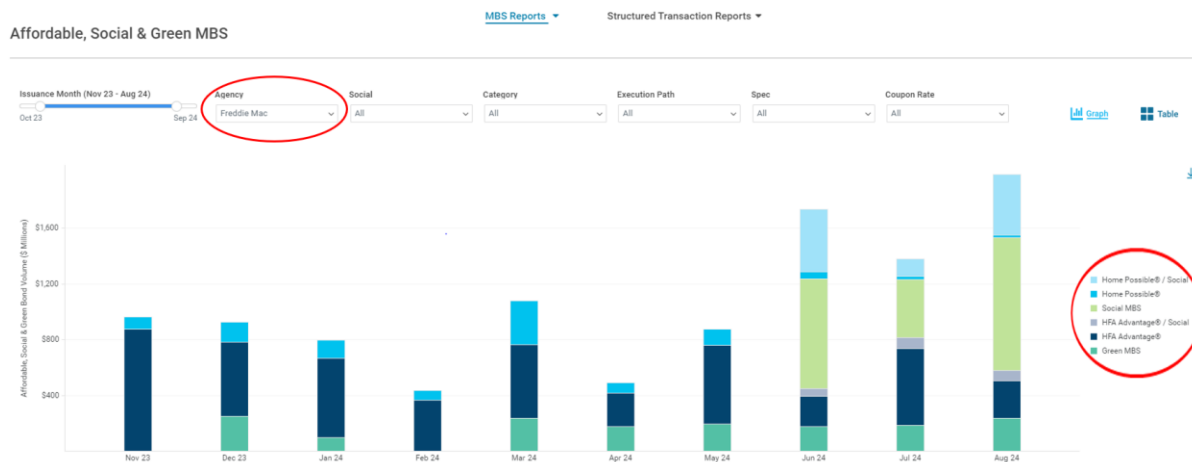
Issuance Month

The Issuance Month slider allows you to select the window of issuance months you would like to view from January 2021 up to the most recent month of issuance data.



Agency

The Affordable, Social & Green MBS Issuance Volume panel includes issuance numbers for both Freddie Mac and Fannie Mae, which can be toggled between using the Agency dropdown menu.



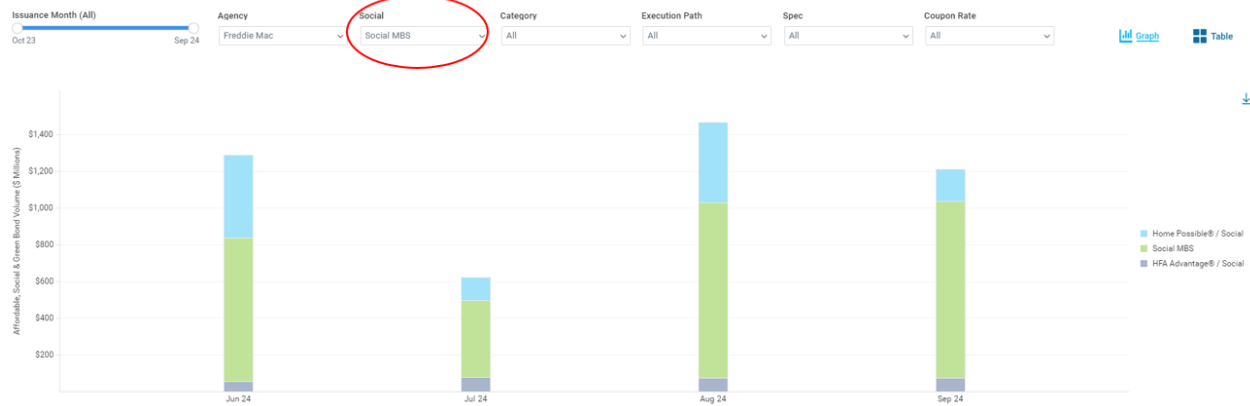
Note that these issuance numbers track the issuance for each Agency's respective programs, which in many cases are similar in nature but have slight differences. Freddie Mac's low-income borrower program is called Home Possible, while Fannie Mae's is called HomeReady, for instance. These programs are rough equivalents, and thus are color-coded to be the same as the other agency's corresponding program.

Social

The filter for Social allows the user to select all Social or Non-Social MBS as a group. There are three options to select from: All, Exclude Social MBS, or Social MBS. The below image filters for just Social



MBS.



Category

To select which specific programs are of interest and to just view issuance on those programs, select the desired programs under the Category dropdown. There are seven possible category combinations for both Agencies which are displayed below.

Freddie	Fannie
1 Home Possible ® / Social	HomeReady ® / Social
2 Home Possible ®	HomeReady ®
3 Social MBS	Social MBS
4 HFA Advantage ® / Social	HFA Preferred ™ / Social
5 HFA Advantage ®	HFA Preferred ™
6 Green MBS / Social	Green MBS / Social
7 Green MBS	Green MBS

The image below shows just Freddie Mac's Green MBS issuance.

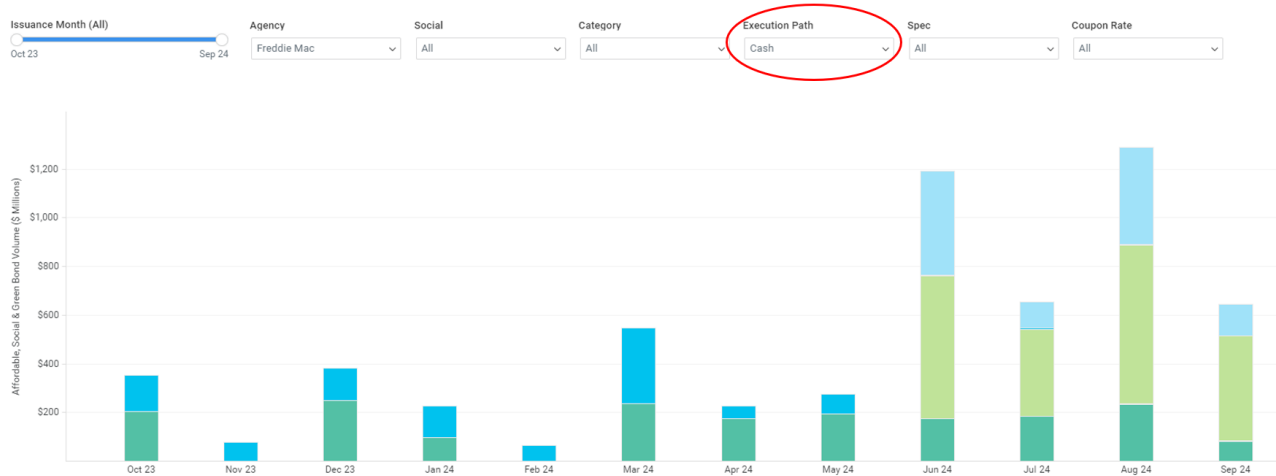


This will display just the issuance volumes for the specified programs. Note that the Freddie Mac and Fannie Mae data presented in these categories include data on various refinance programs. These refinance programs currently do not have sufficient volume to be viewed separately but may be added to this menu as separate categories in the future.



Execution Path

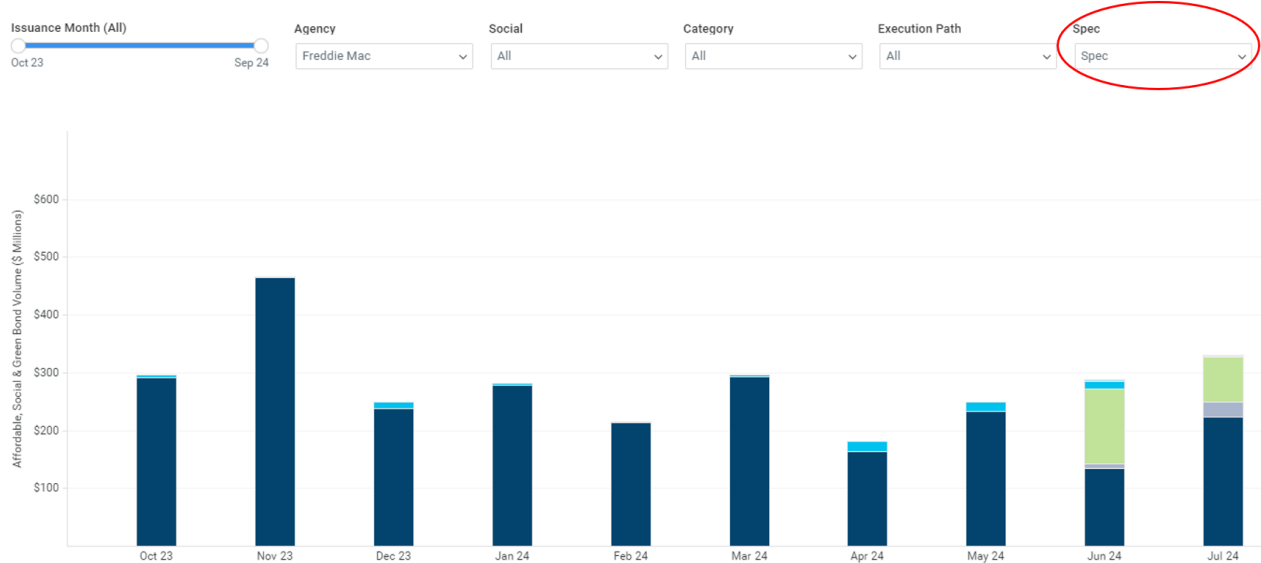
This menu allows you to select which execution path to view: Cash, Guarantor, or both. This corresponds to Freddie Mac and Fannie Mae's Cash Window execution, regular Guarantor execution, or both combined. Each program operates through these execution paths differently. The HFA mortgage programs are only accepted through the Guarantor path. Green MBS were formerly only pooled internally through the Cash Window path until March 2025, when the Guarantor execution path was established. The image below shows the difference in Freddie Mac's issuance for the Cash and Guarantor paths.





Spec

This dropdown menu allows you to specify if you would like to see issuance that falls under any specified, convexity-affecting story or not. You can choose to include Specified pools only, Non-Specified pools only, or both combined. Below shows Freddie Mac's Spec Pool only issuance.

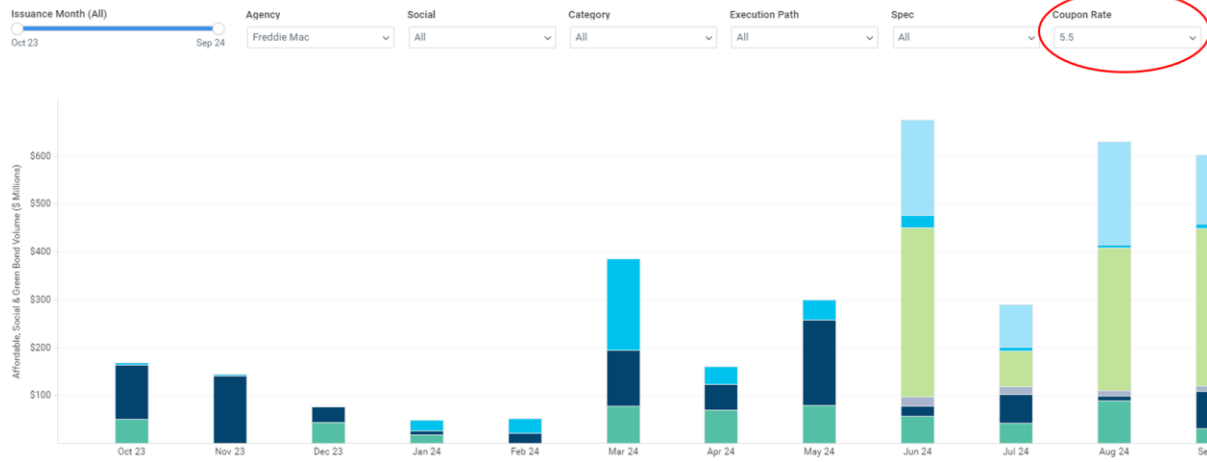


Note that very little to no Green MBS issuance for either of the GSEs is currently spec story eligible.

Coupon Rate

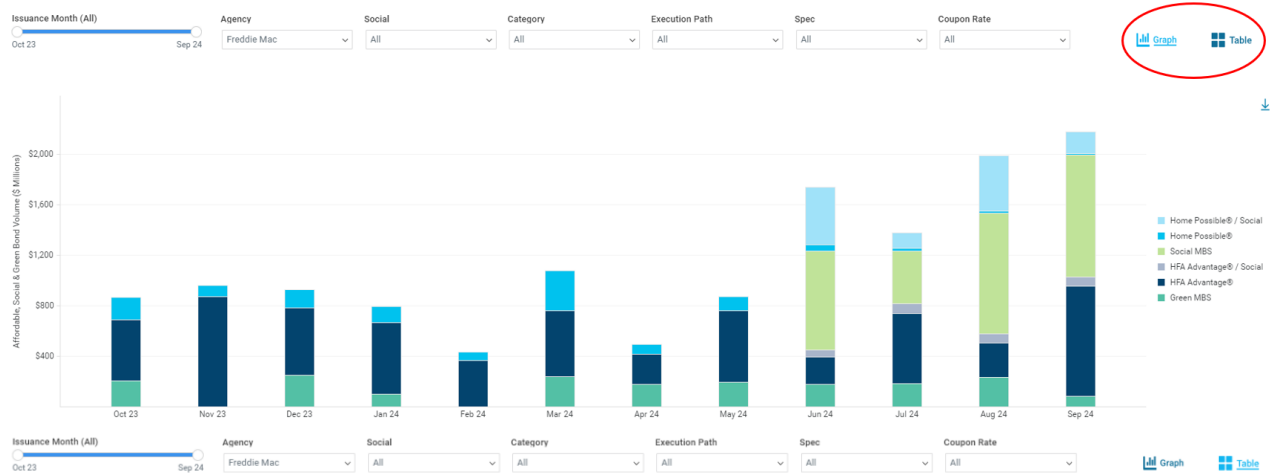
This dropdown menu allows you to specify the issuance of specific coupon rates available in the data. One or more of these rates can be selected at a given time; all rates available is the default option. The image below shows the difference between issuance for Freddie Mac of the 5% coupon rate and the 5.5% coupon rate.





Table/Graph View

To switch between a table and graph visualization of the data, utilize the buttons to the right of the screen. The image below shows issuance for the latest data for Freddie Mac, and its table equivalent.



Affordable, Social & Green Bond Volume (\$ Millions)												Download
	Oct 23	Nov 23	Dec 23	Jan 24	Feb 24	Mar 24	Apr 24	May 24	Jun 24	Jul 24	Aug 24	Sep 24
Home Possible® / Social	–	–	–	–	–	–	–	–	\$451.452	\$124.709	\$434.607	\$174.710
Home Possible®	\$176.103	\$90.336	\$143.542	\$132.052	\$68.667	\$315.456	\$75.270	\$112.920	\$50.513	\$20.753	\$18.455	\$11.497
Social MBS	–	–	–	–	–	–	–	–	\$784.282	\$416.885	\$956.807	\$964.090
HFA Advantage® / Social	–	–	–	–	–	–	–	–	\$54.477	\$79.049	\$73.547	\$73.159
HFA Advantage®	\$486.304	\$873.134	\$535.379	\$566.615	\$365.289	\$524.209	\$240.957	\$566.614	\$219.030	\$552.612	\$268.612	\$872.551
Green MBS	\$204.348	–	\$248.926	\$98.135	–	\$238.006	\$175.520	\$194.166	\$176.535	\$183.604	\$234.531	\$83.043
TOTAL UPB	\$866.755	\$962.470	\$927.846	\$796.803	\$433.957	\$1,077.670	\$491.747	\$873.101	\$1,736.288	\$1,377.613	\$1,986.560	\$2,179.050



Additional Features

Monthly vs. Cumulative View

You can view the cumulative issuance in UPB for the selected months instead of the monthly issuance UPB for those months by clicking on the View dropdown filter to the far left. The image below is the cumulative UPB visualization for the January 2024 through December 2024 issuance months for all Affordable, Social, and Green Bonds. This view is particularly useful for viewing the overall trend in issuance over time, for example, and the overall issuance landscape that may be harder to discern when looking at monthly issuance. Note that all the other input parameters can also modify the cumulative view.



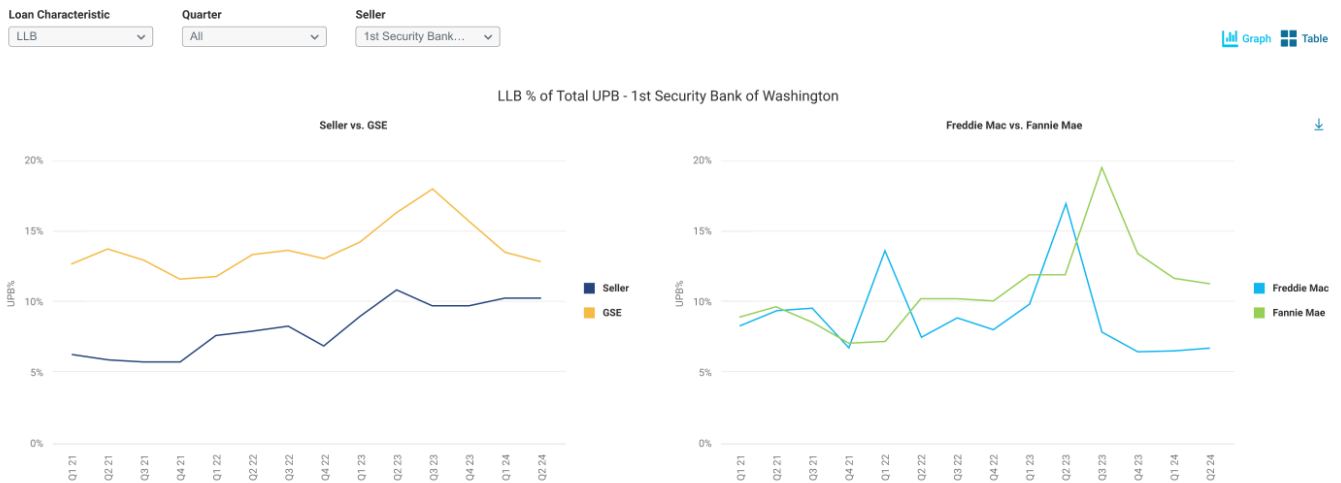
Seller-Level Loan Characteristics Dashboard

The Chart Interface

This is an example of what the Seller-Level Loan Characteristic Dashboard will look like. You will see two side-by-side charts, which show the percentage of issuance UPB for a selected loan characteristic at the seller-level by quarter. The chart on the left focuses on the selected seller's portfolio characteristic (Freddie and Fannie combined) vs. the overall conventional GSE market. The dark blue line is for the selected seller and the yellow line is for the GSE market. The chart on the right focuses on a direct Freddie vs. Fannie comparison for the selected seller's portfolio characteristic. The light blue line is for Freddie Mac and the light green line is for Fannie Mae.



Seller-Level Loan Characteristics ⓘ



Data within the report will be updated on the second business day of every month at approximately 4:30 PM, showing the percentage of issuance UPB for the most recent quarter's activity up until the end of the latest month. This allows users to monitor the latest business mix trends at the seller-level once the latest issuance data is available.

Input Parameters

Both charts can be modified with several parameters: Loan Characteristic, Quarter, and Seller. The dropdown menu for the Loan Characteristic and Seller parameters allows for one selection at a time, while the dropdown menu for Quarter allows for multiple selections.

Loan Characteristic: LLB Quarter: All Seller: 1st Security Bank...

Loan Characteristic

The Loan Characteristic dropdown menu allows the user to select a single loan characteristic to display in both charts. The Loan Characteristic filter includes the following selections:

- HLB
- LLB
- TPO
- LTV>=95
- FICO<700
- Purchase
- Cash-Out Refinance
- Investor
- Second Home
- Appraisal Waiver
- Affordable SEP



Please note that all loan characteristics are mutually exclusive.

Seller-Level Loan Characteristics

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Loan Characteristic Descriptions

- **HLB (High-Loan Balance):** This characteristic refers to loans that have an original UPB greater than or equal to \$500K. Please note that the UPB % measures for HLB have changed over time.
 - For 2024Q4 issuance and before, UPB % measures UPB >= \$350K
 - For 2025Q1 issuance and beyond, UPB % measures UPB >= \$500K
- **LLB (Low-Loan Balance):** This characteristic refers to loans that have a UPB less than or equal to \$300K. Please note that the UPB % measures for LLB have changed over time.
 - For 2021Q4 issuance and before, UPB % measures UPB <= \$225K
 - For 2022Q1 to 2022Q4 issuance, UPB % measures UPB <= \$250K
 - For 2023Q1 to 2024Q4 issuance, UPB % measures UPB <= \$275K
 - For 2025Q1 issuance and beyond, UPB % measures UPB <= \$300K
- **TPO (Third-Party Originator):** This characteristic refers to loans originated through a Third-Party channel.
- **LTV>=95:** This characteristic refers to loans with a Loan-to-Value ratio greater than or equal to 95%.
- **FICO<700:** This characteristic refers to loans with a FICO score less than 700.
- **Purchase:** This characteristic refers to loans with a loan purpose classification of Purchase.
- **Cash-Out Refinance:** This characteristic refers to loans with a loan purpose classification of Cash-Out Refinance.
- **Investor:** This characteristic refers to loans with an occupancy status classification of Investment Property.
- **Second Home:** This characteristic refers to loans with an occupancy status classification of Second Home.
- **Appraisal Waiver:** This characteristic refers to loans in which the value of the subject property was obtained with an Appraisal Waiver.
- **Affordable Special Eligibility Program (SEP):** This characteristic refers to loans that fall under a Special Eligibility Program. Special Eligibility Programs include HFA Advantage/HFA Preferred, Home Possible/HomeReady, Refi Possible/RefiNow, and Others.

For more information, please see our [Single-Family Disclosure Guide \(disclosure_guide.pdf \(freddiemac.com\)\)](#).

Quarter

The Quarter dropdown menu allows the user to select multiple quarters of issuance to filter down the view for both charts. Data since 2017Q1 is included in the dashboard.

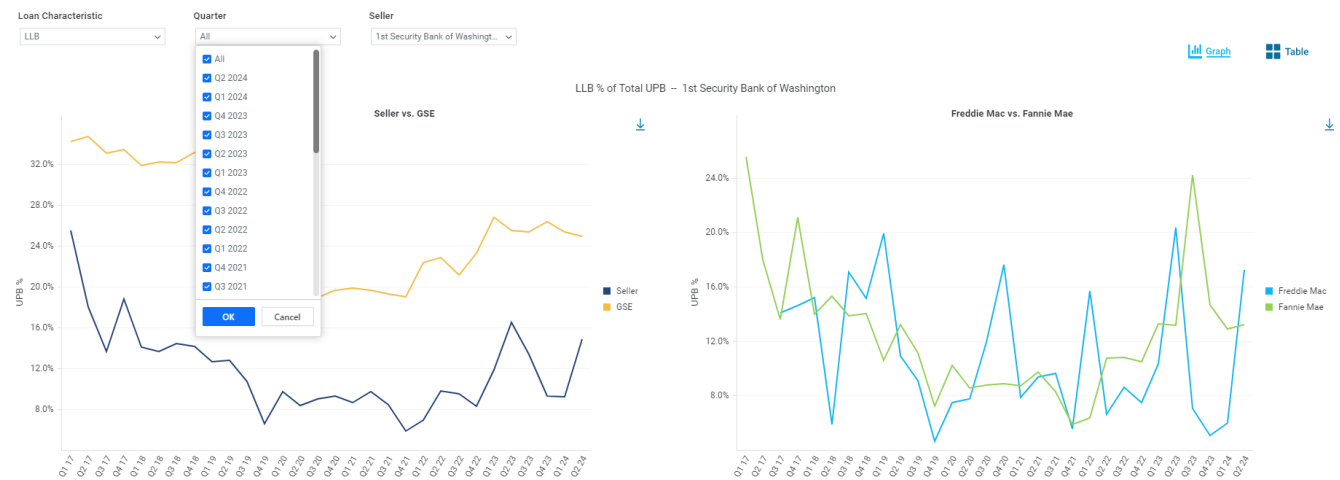




Seller-Level Loan Characteristics ⓘ

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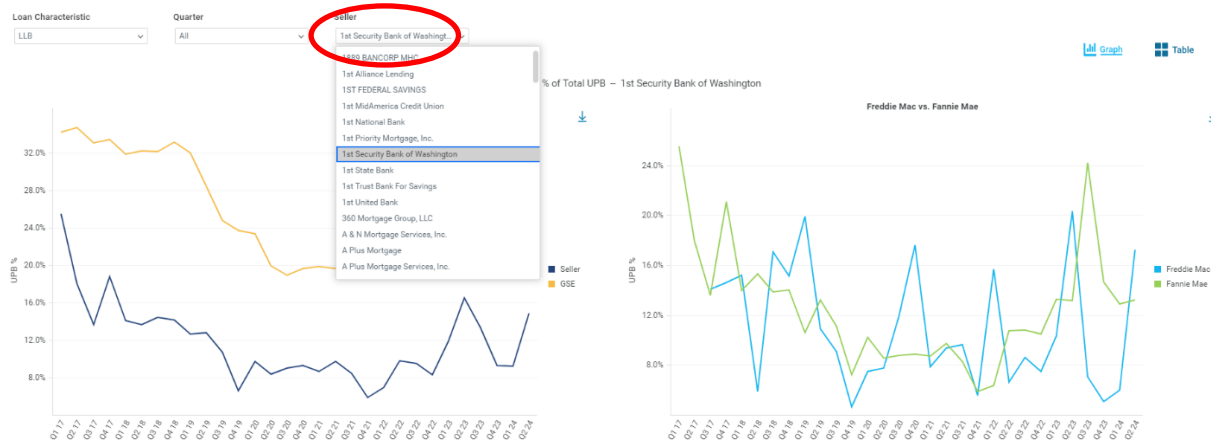
Seller

The Seller dropdown menu allows the user to select a single seller to display in both charts. A Seller represents the entity that sold the mortgage loans to Freddie Mac or Fannie Mae, so it can differ from the mortgage originator. This filter has a type function which allows the ability to type the Seller's name for ease of use. The Seller dropdown menu includes all sellers, and it is sorted by ascending order alphabetically.

Seller-Level Loan Characteristics ⓘ

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Additional Features

Table vs. Graph View

You can view the data in graph or table form by selecting the desired format with the buttons on the right-side of the screen. The default is the graph view. The image below is an example of what one such table might look like.

Seller-Level Loan Characteristics ⓘ

MBS Reports ▾ Structured Transaction Reports ▾

Loan Characteristic: LLB Quarter: All Seller: 1st Security Bank of Washingt...

Graph Table

LLB % of Total UPB – 1st Security Bank of Washington

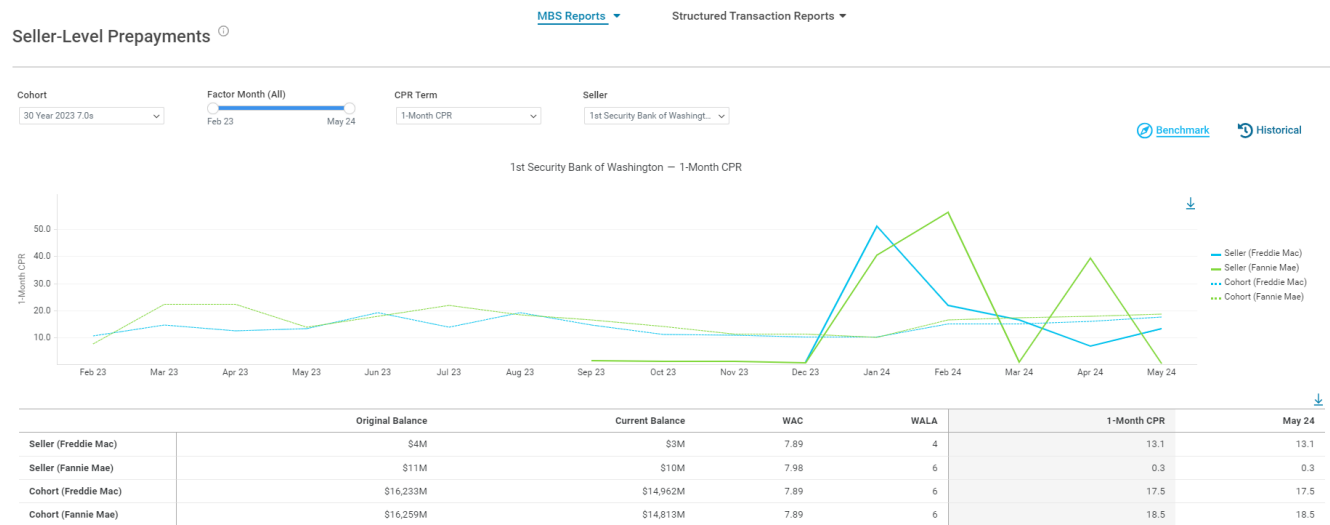
Quarter	Seller vs. GSE		Freddie Mac vs. Fannie Mae	
	Seller	GSE	Freddie Mac	Fannie Mae
Q2 2024	14.8%	25.0%	17.2%	13.2%
Q1 2024	9.2%	25.3%	6.0%	12.9%
Q4 2023	9.3%	26.3%	5.1%	14.6%
Q3 2023	13.3%	25.4%	7.1%	24.2%
Q2 2023	16.5%	25.5%	20.3%	13.1%
Q1 2023	11.9%	26.8%	10.3%	13.3%
Q4 2022	8.3%	23.3%	7.5%	10.5%
Q3 2022	9.5%	21.1%	8.6%	10.8%
Q2 2022	9.8%	22.9%	6.6%	10.7%
Q1 2022	6.9%	22.4%	15.7%	6.4%
Q4 2021	5.9%	19.0%	5.6%	5.9%
Q3 2021	8.4%	19.3%	9.6%	8.3%
Q2 2021	9.7%	19.7%	9.4%	9.7%
Q1 2021	8.7%	19.9%	7.8%	8.7%



Seller-Level Prepayments Dashboard

The Chart Interface

This is an example of what the Seller-Level Prepayments Dashboard will look like. You will see a graph with prepayment trends at the seller-level and cohort-level by factor month. For a given selection of Seller and Cohort, you can examine the prepayment behavior and see how each Seller compares to the Cohort overall, as well as how the prepayment rates compare across Agencies. The light blue line is for the Seller on the Freddie Mac side and the light green line is for the Seller on the Fannie Mae side. The dotted lines correspond to the Cohort. This dashboard also includes a table that provides additional information including Original Balance, Current Balance, WAC, WALA, CPR Term, and Factor Month. By toggling the different CPR Terms, this table will update to show the most recent prepayment speeds.



Data within the report will be updated on the fifth business day of every month at approximately 4:30 PM, showing the prepayment trends for the most recent factor month. This allows users to monitor the latest prepayment behavior trends at the seller-level.

Input Parameters

This dashboard can be modified with several parameters: Cohort, Factor Month, CPR Term, and Seller. The dropdown menus for the Cohort, CPR Term, and Seller allow for one selection at a time, while the slider for Factor Month allows for multiple selections.

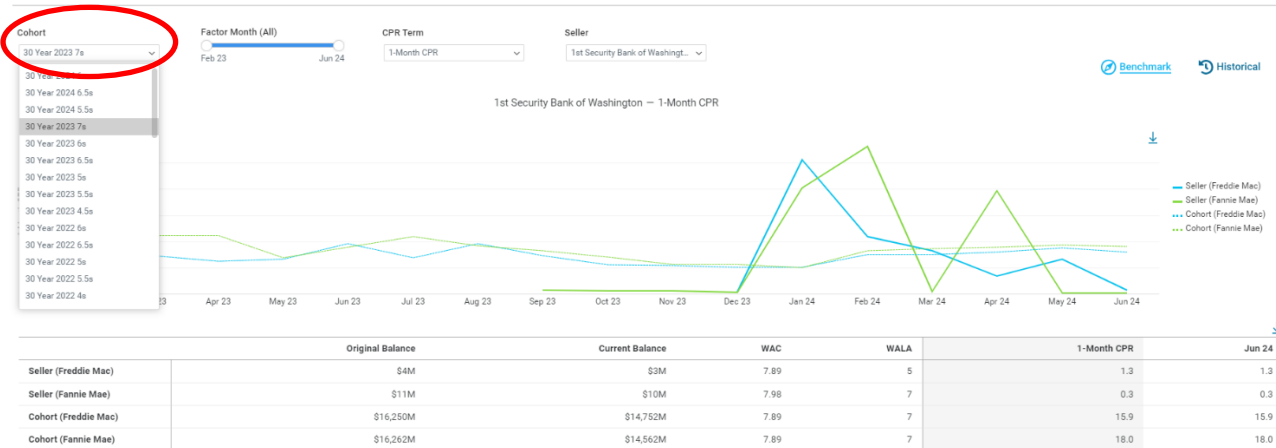


Cohort

The Cohort dropdown menu allows the user to select one cohort to display in the graph and the table will update based on this selection. A Cohort is defined by origination year, coupon, and term. Cohort includes 2018 to 2024 (previous six years and current year) 30YR and 15YR with GSE UPB greater than \$10 billion.



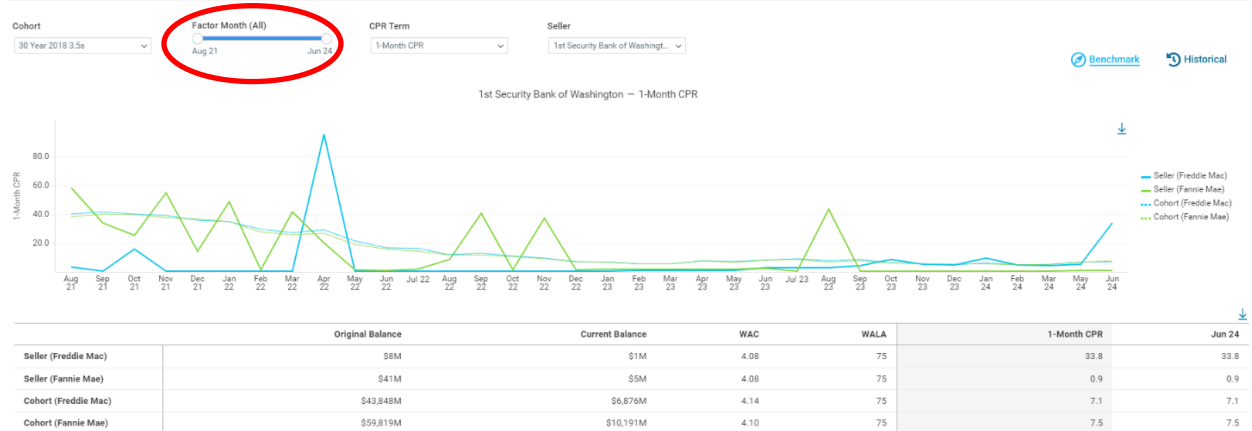
Seller-Level Prepayments

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Factor Month

The Factor Month slider allows the user to select multiple factor months to filter both views. The Factor Month indicates the month when the data is compiled and the pool-level factors are disclosed to investors (on business day 4), representing the realized prepayment activity of the prior month. Factor Month includes data since the August 2021 factor for corresponding Cohorts.

Seller-Level Prepayments

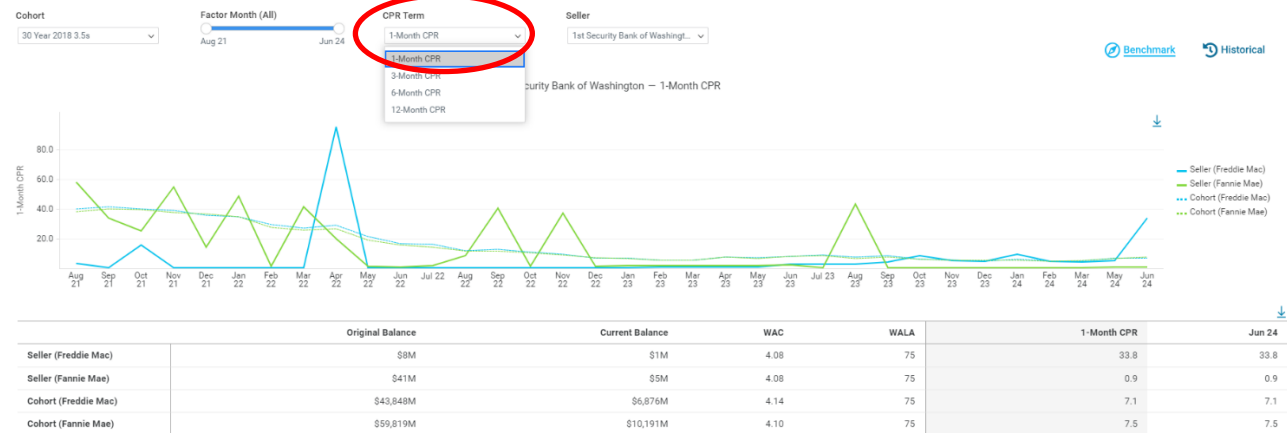
[MBS Reports](#)[Structured Transaction Reports](#)

CPR Term

The CPR Term dropdown menu allows the user to select a single CPR Term at a time. The CPR Term includes 1-Month CPR, 3-Month CPR, 6-Month CPR, and 12-Month CPR. The CPR Term captures the total unscheduled prepayments over the prior corresponding months up to and including the noted factor date, at an annualized rate. For instance, the 3-Month CPR refers to the total unscheduled prepayments over the prior three months. The table will adjust accordingly to display the CPR Term and corresponding months for the selected CPR Term.

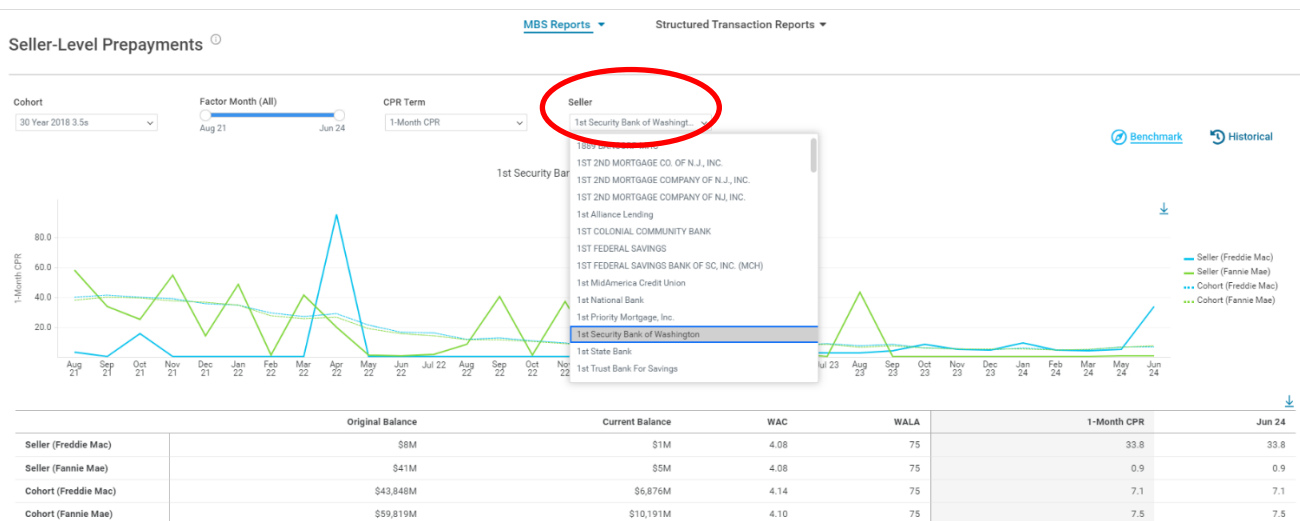


Seller-Level Prepayments ①

[MBS Reports](#)[Structured Transaction Reports](#)

Seller

The Seller dropdown menu allows the user to select a single Seller to display in the graph and the table. A Seller represents the entity that sold the mortgage loans to Freddie Mac or Fannie Mae, so it can differ from the mortgage originator. This filter has a type function which allows the ability to type the Seller's name for ease of use. The Seller dropdown menu includes all sellers, and it is sorted by ascending order alphabetically.



Additional Features

Benchmark vs. Historical View

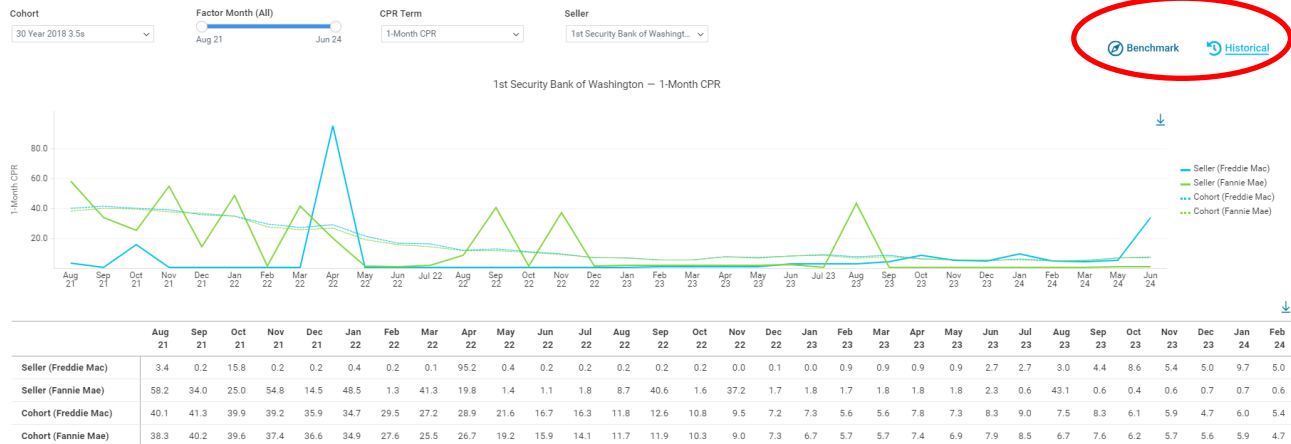
You can view the data in Benchmark or Historical form by selecting the desired format with the buttons on the right- side of the screen. The default is the Benchmark view. The Historical view shows the CPR for every factor month in the graph in table form. The image below is an example of what one such Historical view might look like.



Seller-Level Prepayments

MBS Reports

Structured Transaction Reports

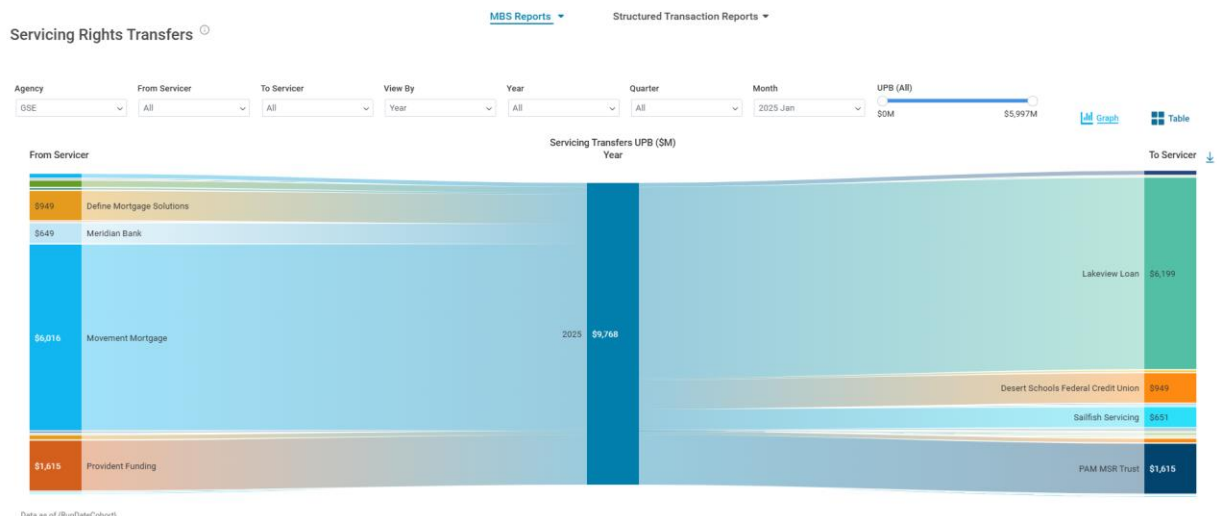


Servicing Rights Transfers Dashboard

The Chart Interface

Below is an example of what the Servicing Rights Transfers Dashboard will look like. At the top of the dashboard, there are eight parameters that the user may input or filter. Below them is the chart displaying the volume of servicing rights transfers in millions of dollars of UPB, divided into three columns connected in a flowchart style. The left column displays total servicing rights transfer volume by the transferor (i.e., the 'from' servicer), the middle column displays total servicing rights transfer volume by time period, and the right column displays total servicing rights transfer volume to the transferee (i.e., the 'to' servicer). All the below examples for this section have been filtered down to the month of January 2025, for clarity.

The dashboard shows gross transfer volumes, not netted amounts. For example, if Servicer X sold \$10M and bought \$100M in a given period, it would appear as \$10M in the "from" column and \$100M in the "to" column, rather than a net \$90M purchase.





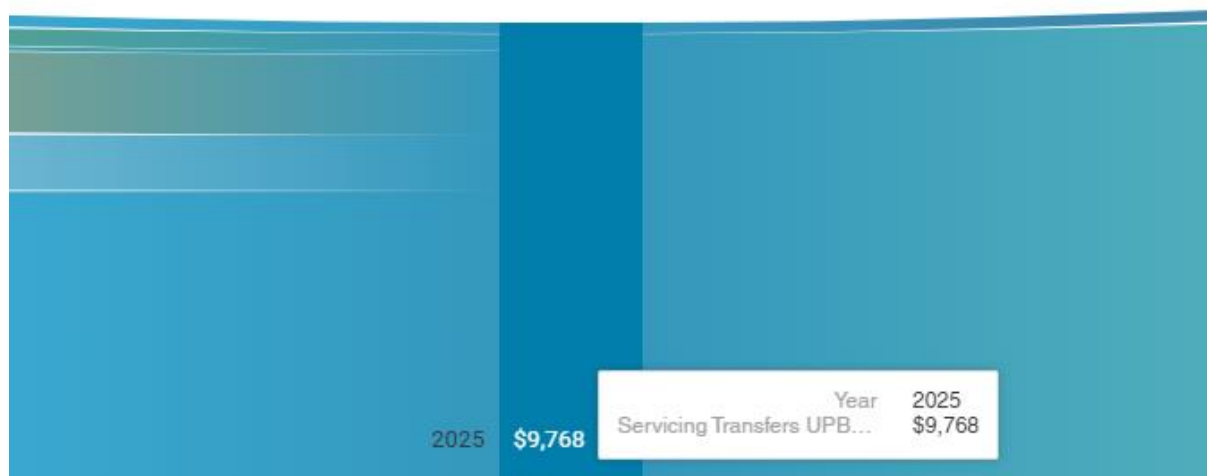
Hovering over individual components of the dashboard provides more information. For example, hovering over an individual servicer in the left column displays the servicer name and transferred UPB over the entire selected period.

From Servicer



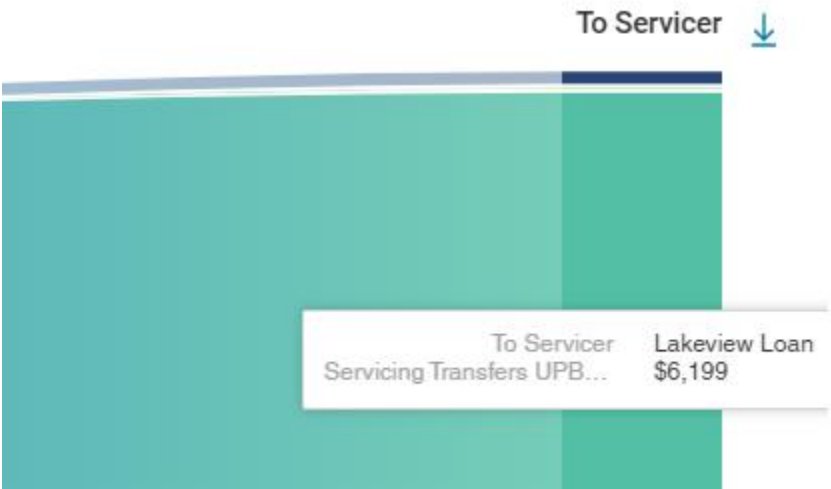
Hovering over one of the time periods in the middle column displays the period and the amount of servicing rights that were transferred by the selected servicers during that period.

Servicing Transfers UPB (\$M) Year





Hovering over an individual servicer in the right column displays the servicer name and the received UPB over the entire selected period.

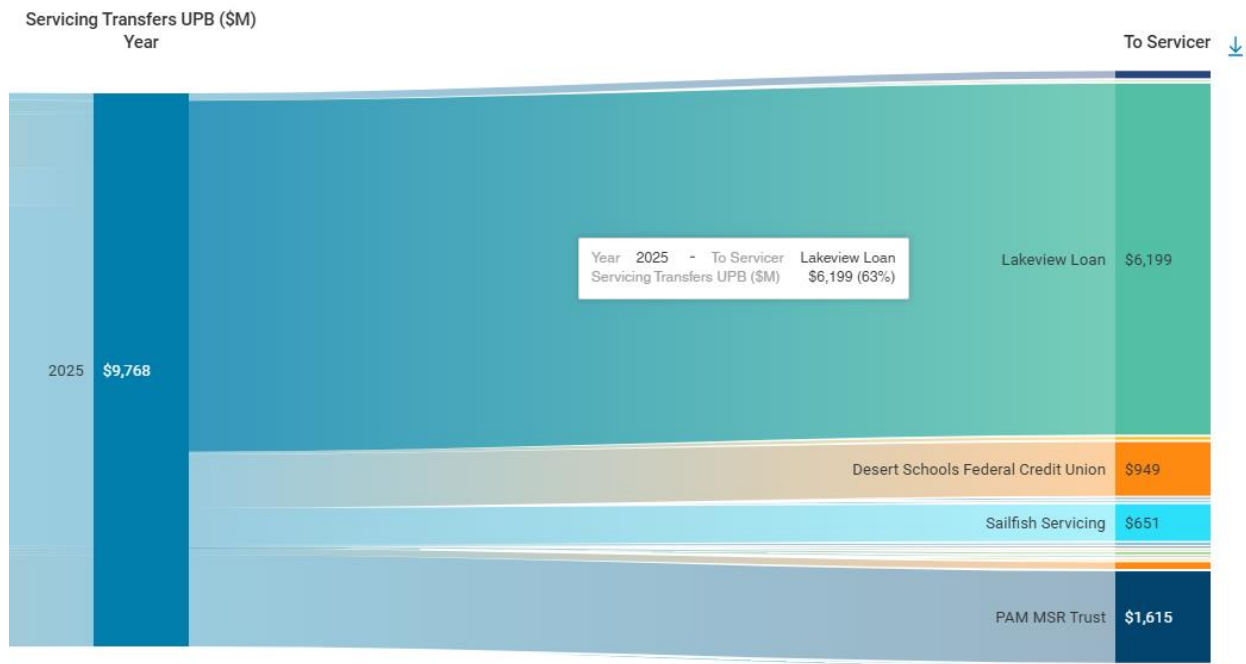


Hovering over each individual path from the 'from' (transferor) servicer displays that servicer, the period of the transfer, the amount of the transfer, as well as the percentage of the time period's total transfers that came from this servicer.

From Servicer



Hovering over each individual path from the time period column to a 'to' (transferee) servicer displays that servicer, the period of the transfer, the amount of the transfer, as well as the percentage of the time period's total transfers that went to that particular 'to' servicer.



Data within the report will be updated on the fifth business day of every month at approximately 4:30 PM, showing the servicing rights transfers UPB for the most recent activity up until the end of the latest month.

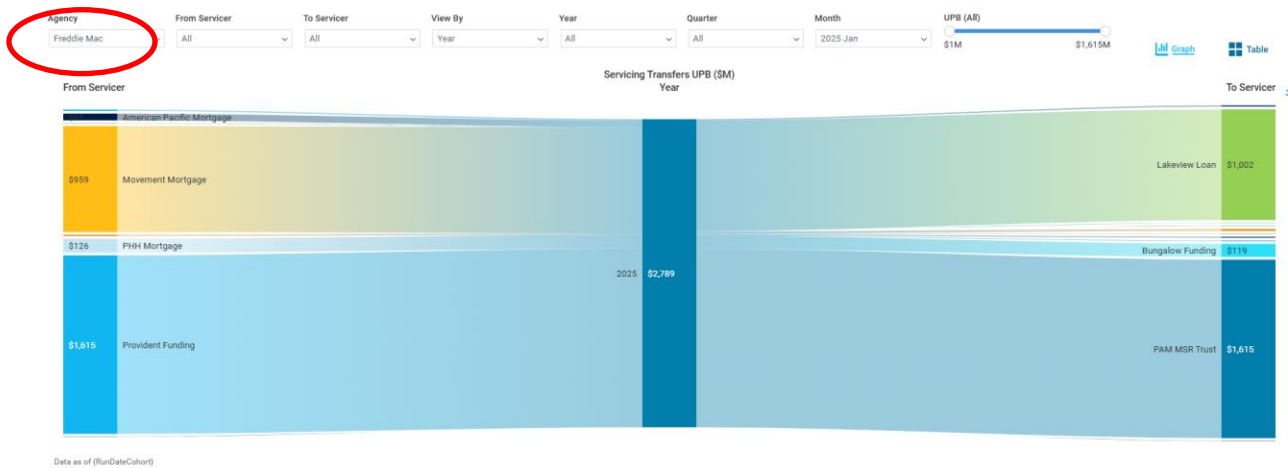
Input Parameters

The chart can be modified with several parameters: Agency, From Servicer, To Servicer, View By, Year, Quarter, Month, and UPB. All of these are dropdown boxes except for the UPB parameter, which is a slider.

Agency: GSE
From Servicer: Bank of America, Capl...
To Servicer: All
View By: Year
Year: All
Quarter: All
Month: All
UPB (All): \$3M to \$3,737M

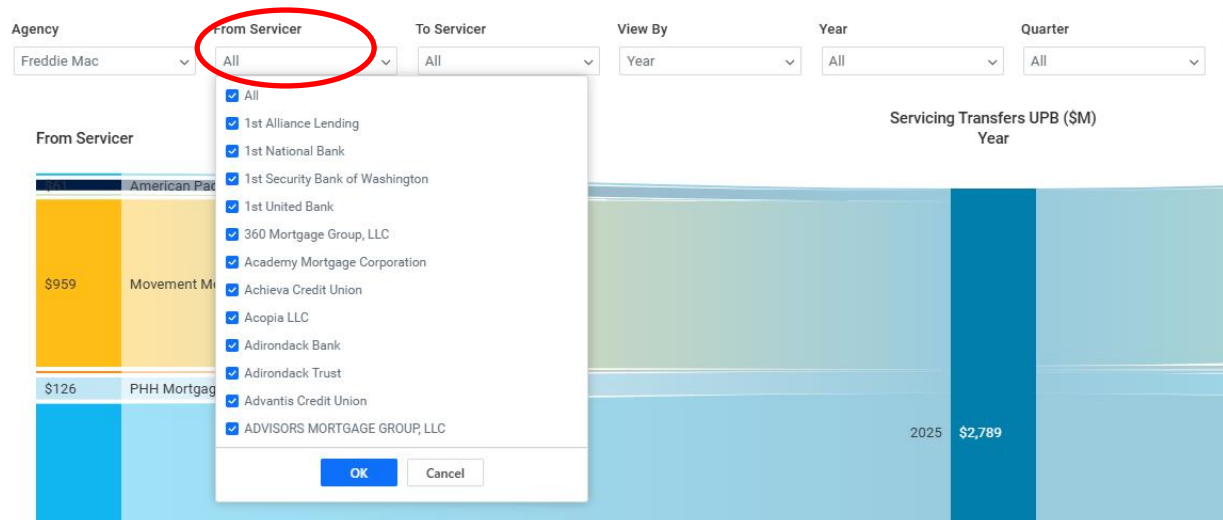
Agency

The Agency box allows the user to select the GSE collateral for which they would like to view servicing rights transfer information. Users can select Freddie Mac, Fannie Mae, or GSE to view transfers from both.



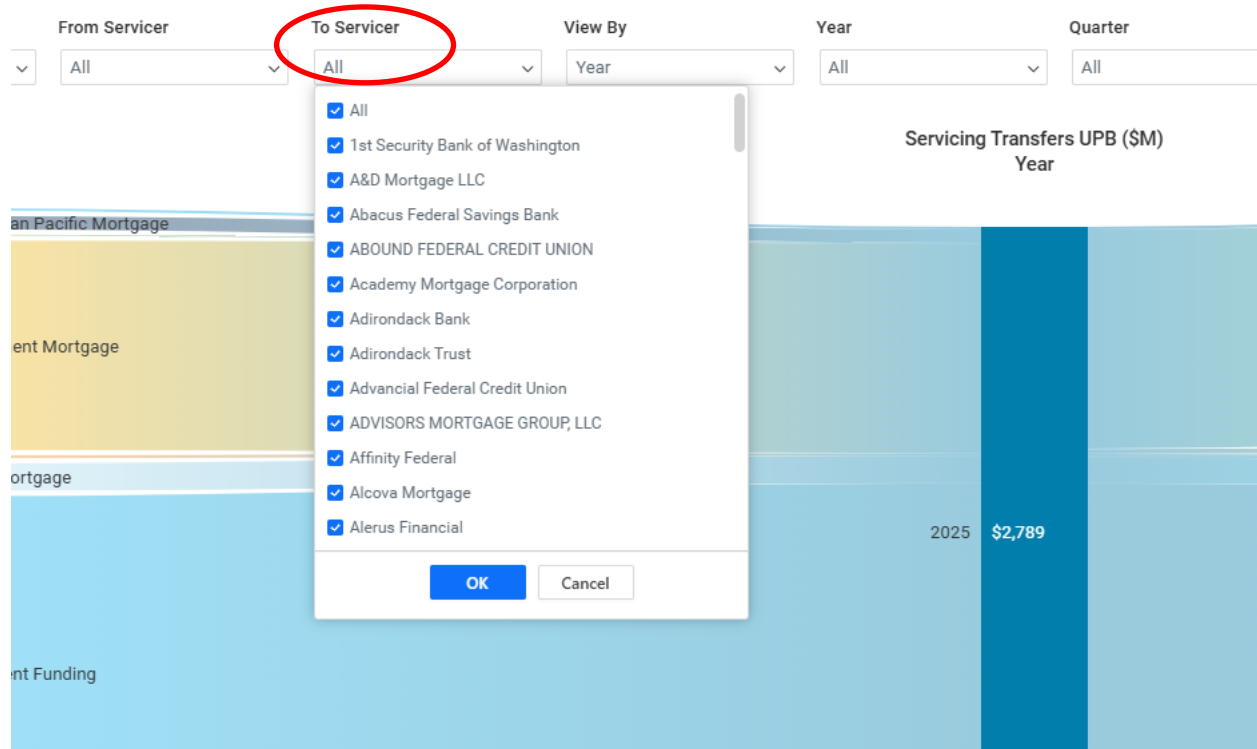
From Servicer

The From Servicer box allows the user to select which the transferor servicer for which they would like to view servicing rights transfer information. Multiple servicers can be selected at once.



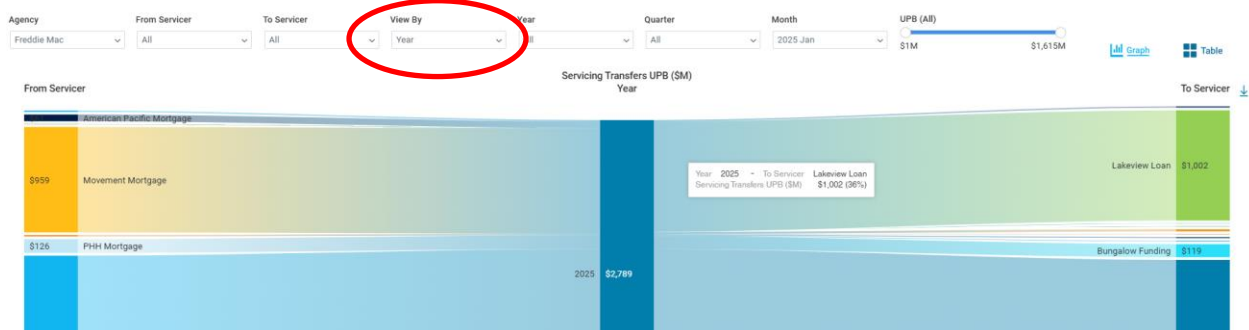
To Servicer

The To Servicer box fulfills a similar function, allowing the user to select the transferee servicer for which they would like to view servicing rights transfer information. Multiple servicers can be selected at once.



View By

The View By box allows the user to change the time periods for which to view the servicing rights transfer data. The default option is by yearly transfer amounts, but this can be further divided by quarter or by month for a more granular view of the data.

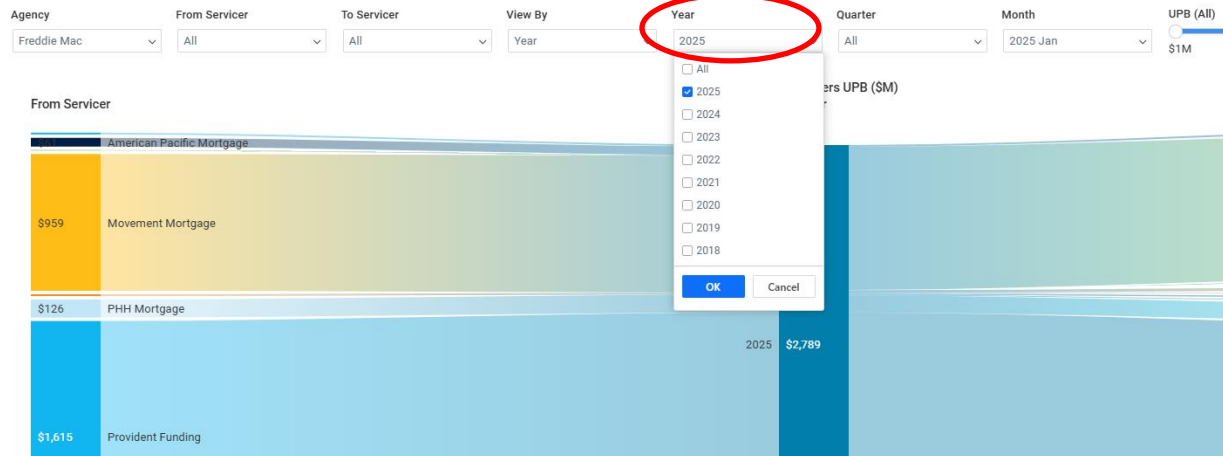


Year, Quarter, Month

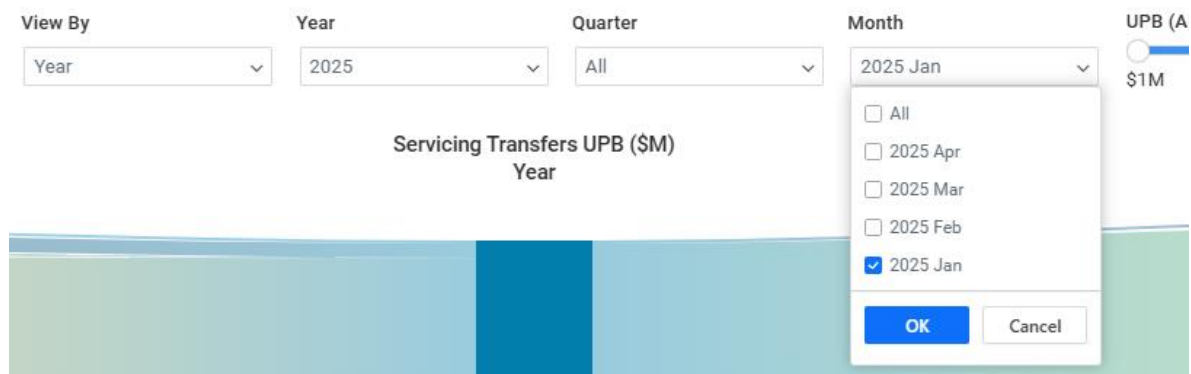
The Year, Quarter, and Month boxes allow the user to view only selected time periods starting in 2018 up until the current factor date. Selected time periods do not have to be sequential. Below, the data has been filtered to display transfers in 2025 only.



Servicing Rights Transfers ^①



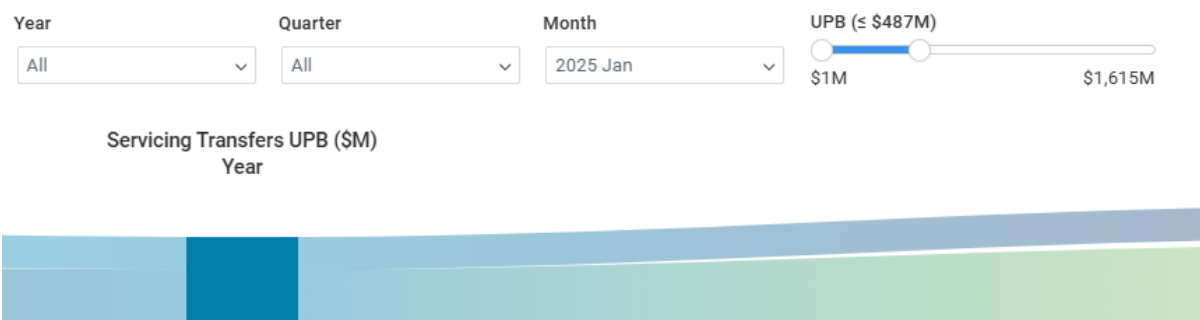
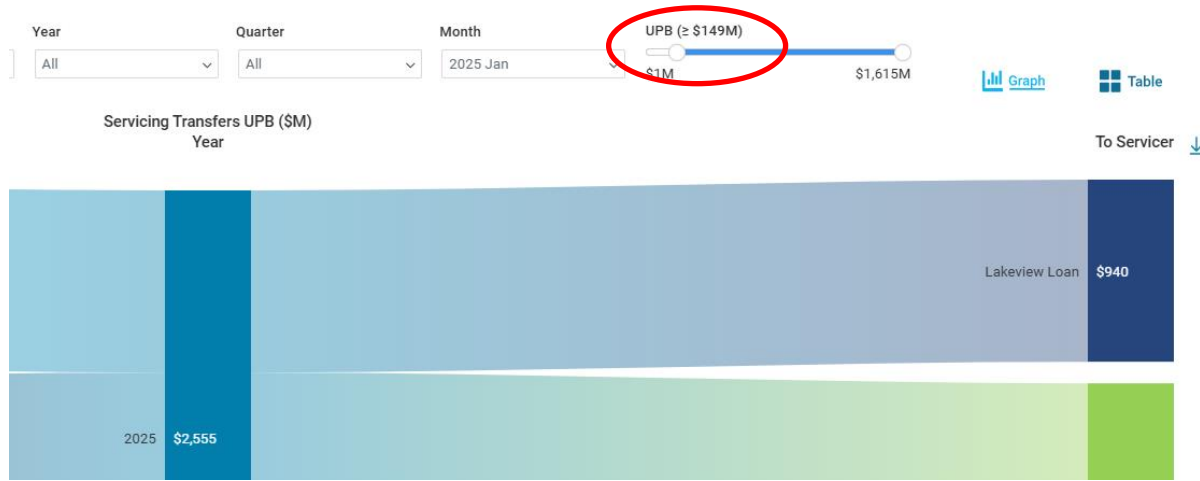
Additionally, the boxes automatically filter selectable ranges when relevant. Selecting specific years, for instance, will make only quarters and months in those specific years selectable. The same goes for selecting quarters, which in turn will allow only months that fall in those quarters to be selected.



Note that selecting months first will not prevent other quarters from being selected, nor will selecting quarters prevent other years from being selected. If a month or quarter is selected, then the year or quarter range is modified to prevent the selected months/quarters from being shown; the selected months/quarters will disappear from their respective boxes but will remain selected if the range expands to allow them to be shown again.

UPB

The UPB slider allows the user to select a range of servicing rights transfers to display, based on minimum or maximum UPB size. If the servicing rights transfer has a UPB within the selected range, it will be displayed; servicing rights transfers outside the selected UPB range will be excluded. The range of the slider is automatically adjusted to the sizes of the transfers as determined by the other filters currently applied.



Note that only a consecutive range of UPBs can be selected.

Additional Features

Graph View vs. Table View

You can view the data in Graph or Table form by selecting the desired format with the buttons on the right-side of the screen. The default is the Graph view. The Table view provides the same information as the Graph view, but in text form. Below is an example of what the Table view may look like:

Servicing Rights Transfers ^U

Agency

Freddie Mac

From Servicer

All

To Servicer

All

View By

Year

Year

All

Quarter

All

Month

2025 Jan

UPB (All)

\$1M

\$1.615M

LM

Graph

Table

From Servicer	Year	To Servicer	Servicing Rights Transfers (USD)	
Acopia LLC	2025	PNC Bank	\$12M	
American Pacific Mortgage	2025	Lakeview Loan	\$61M	
Lakeview Loan	2025	Flagstar Bank	\$2M	
		Rocket Mortgage	\$1M	
Movement Mortgage	2025	Lakeview Loan	\$940M	
		NEXUS NOVA LLC	\$19M	
Nationstar Mortgage	2025	Lakeview Loan	\$2M	
		MARLIN MORTGAGE CAPITAL, LLC	\$3M	
		Onslow Bay	\$2M	
		PINGORA LOAN SERVICING, LLC	\$6M	
PHH Mortgage	2025	Bungalow Funding	\$119M	
		Onslow Bay	\$7M	
Provident Funding	2025	PAM MSR Trust	\$1,615M	
SENECA MORTGAGE SERVICING LLC	2025	Homeamerican Mortgage	\$1M	

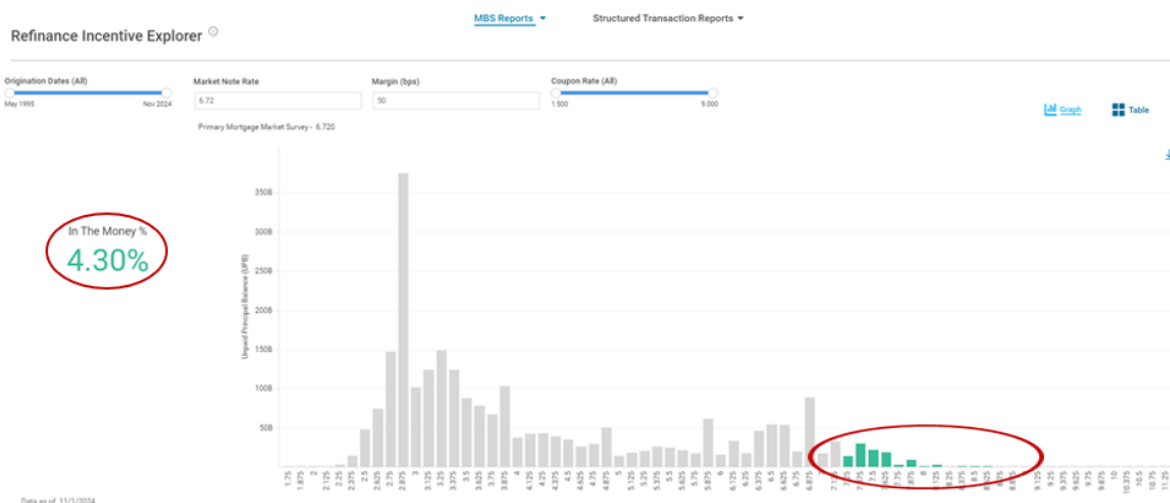


Refinance Incentive Explorer Dashboard

The Chart Interface

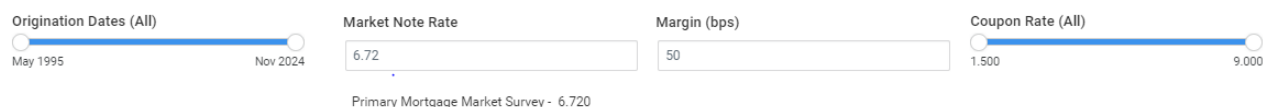
Below is an example of what the Refinance Incentive Explorer Dashboard will look like. At the top of the dashboard, there are four characteristics that the user may input. Below them is a chart displaying the volume of Freddie Mac's outstanding securitized 30-year TBA loans. The loans are binned together by weighted average coupon (WAC) in 1/8th percentage point increments for readability. The loans in green are in-the-money or have a refinance incentive based upon the inputted characteristics, while the loans in grey are out-of-the-money and lack a refinance incentive under the current settings. To the left of the chart is a dynamically updating number displaying the percentage of loans that are in the money under the set criteria.

The data represented in this dashboard always reflects the outstanding loan population as of the latest available factor date.



Input Parameters

The chart can be modified with several parameters: Origination Dates, Market Note Rate, Margin (bps), and Coupon Rate. The slides for the Origination Dates and Coupon Rate allows for a range of dates or coupons to be selected at a time. Market Note Rate and Margin allow the user to input the desired value.



Origination Dates

The Origination Dates slider allows the user to select a range of dates from the earliest originated loans of Freddie's outstanding 30-year portfolio to the present month. The dashboard also permits the user to select a single month of issuance. The most recent month of data will be updated on the evening of the 5th business day.



Refinance Incentive Explorer

[MBS Reports](#)[Structured Transaction Reports](#)

Origination Dates (All)
May 1995 Nov 2024

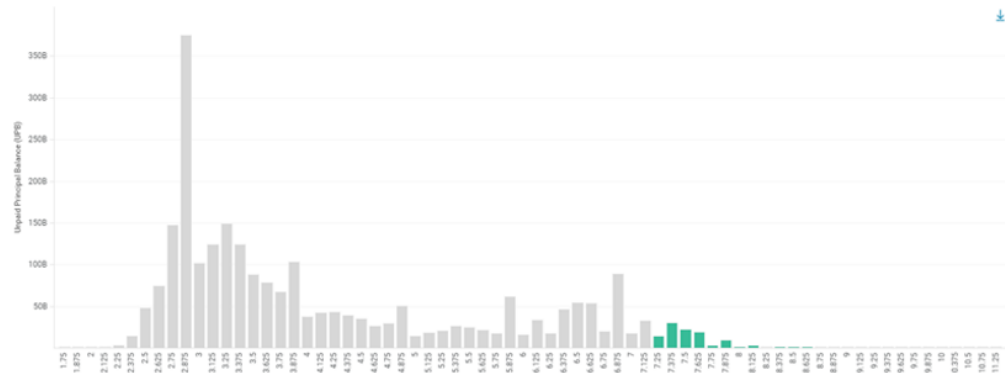
Market Note Rate
6.72
Primary Mortgage Market Survey - 6.720

Margin (bps)
50

Coupon Rate (All)
1.500 9.000

[Graph](#)[Table](#)

In The Money %
4.30%



Data as of 11/1/2024

Refinance Incentive Explorer

[MBS Reports](#)[Structured Transaction Reports](#)

Origination Dates (Nov 2020 - Nov 2024)
May 1995 Nov 2024

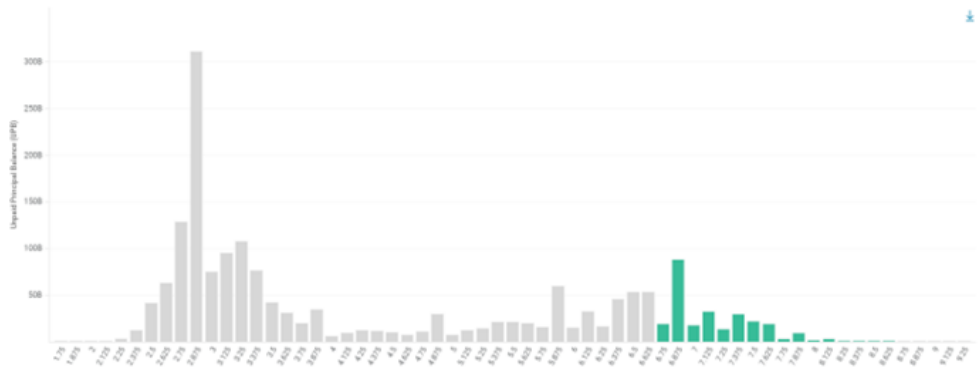
Market Note Rate
2.75
Primary Mortgage Market Survey - 6.720

Margin (bps)
50

Coupon Rate (All)
1.500 9.000

[Graph](#)[Table](#)

In The Money %
14.77%



Data as of 11/1/2024

Market Note Rate

The Market Note Rate box allows the user to input any market note rate, with one basis point of precision. Below the Market Note Rate box, the current Primary Mortgage Market Survey rate is displayed so the user may easily calculate the percent in the money. The PMMS rate will be updated every Thursday in the afternoon.



Refinance Incentive Explorer

MBS Reports

Structured Transaction Reports

Origination Dates (Nov 2020 - Nov 2024)

May 1995

Nov 2024

Market Note Rate

6.25

Margin (bps)

50

Coupon Rate (AR)

1.500

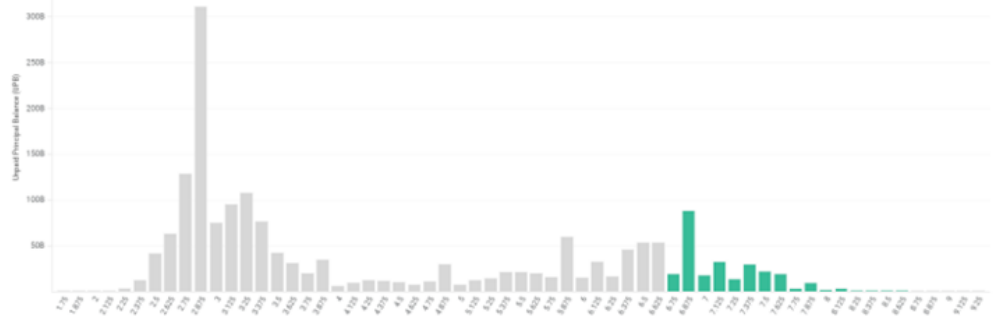
5.000

Primary Mortgage Market Survey - 6.750

Graph

Table

In The Money %
14.77%



Data as of 11/1/2024

Refinance Incentive Explorer

MBS Reports

Structured Transaction Reports

Origination Dates (Nov 2024)

May 1995

Nov 2024

Market Note Rate

6.72

Margin (bps)

50

Coupon Rate (AR)

1.500

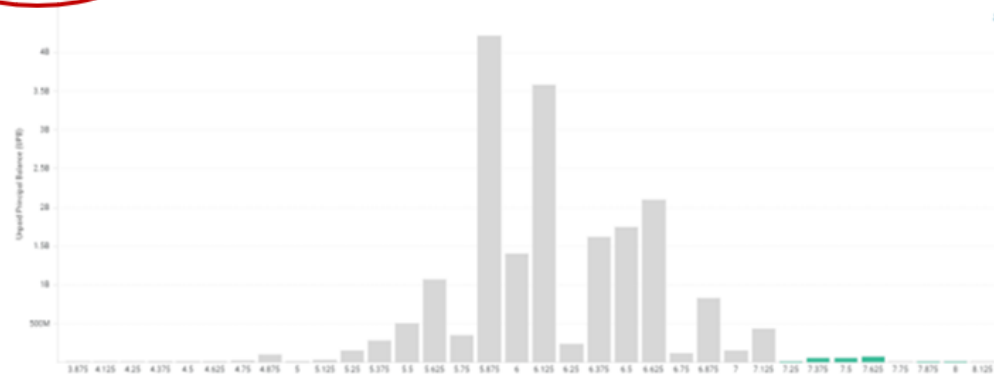
5.000

Primary Mortgage Market Survey - 6.750

Graph

Table

In The Money %
1.21%



Data as of 11/1/2024

Margin

The Margin box allows the user to input any number for the refinance incentive in basis points. The value is defaulted to 50 basis points of incentive required for the borrower to be in the money.



Refinance Incentive Explorer

MBS Reports

Structured Transaction Reports

Origination Dates (All)
May 1995 Nov 2024

Market Note Rate
6.72

Margin (bps)
75

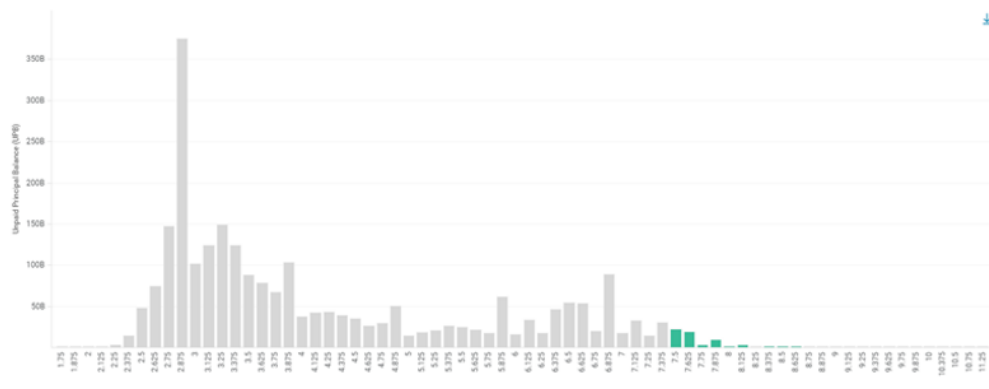
Coupon Rate (All)
1.500 9.000

Primary Mortgage Market Survey - 6.720

Graph

Table

In The Money %
2.78%



Date as of 11/1/2024

Coupon Rate

The Coupon Rate slider allows the user to select a range of coupons or an individual coupon to focus on a subset of the portfolio. The chart will update the range of displayed volume in response to the user input. The slider allows for up to three decimal places of precision in the coupon and any coupons ranging from 1.500 to 9.000%. This slider allows the user to select a single coupon at a time, but nearly all issuance is in 0.5% increments. Selecting a single coupon that is not in the .0 or .5 buckets will likely result in no results.

Refinance Incentive Explorer

MBS Reports

Structured Transaction Reports

Origination Dates (All)
May 1995 Nov 2024

Market Note Rate
6.72

Margin (bps)
50

Coupon Rate (All)
1.500 9.000

Primary Mortgage Market Survey - 6.720

Graph

Table

In The Money %
4.30%



Date as of 11/1/2024



Refinance Incentive Explorer

MBS Reports

Structured Transaction Reports

Origination Dates (All)
May 1995 Nov 2024

Market Note Rate
6.72

Margin (bps)
50

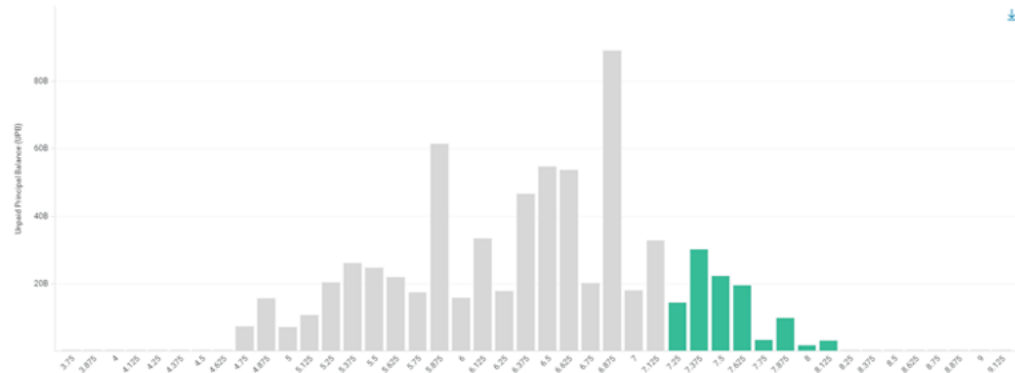
Coupon Rate (4.500 - 7.000)

Primary Mortgage Market Survey - 6.720

Graph

Table

In The Money %
14.97%



Data as of 11/1/2024

Additional Features

Graph View vs. Table View

You can view the data in Graph or Table form by selecting the desired format with the buttons on the right-side of the screen. The default is the Graph view. The Table view displays the UPB for each WAC bin as well as the overall total, with the bins out of the money to the left column and the bins in the money displayed in the right column. The image below is an example of what a Table view might look like.

Refinance Incentive Explorer

MBS Reports

Structured Transaction Reports

Origination Dates (All)
May 1995 Nov 2024

Market Note Rate
6.5

Margin (bps)
50

Coupon Rate (All)
1.500 9.000

Primary Mortgage Market Survey - 6.720

Graph

Table

In The Money %
6.33%

WAC	Out of the Money UPB	In the Money UPB
6	\$15,906M	-
6.125	\$33,324M	-
6.25	\$17,859M	-
6.375	\$46,618M	-
6.5	\$54,701M	-
6.625	\$53,839M	-
6.75	\$20,128M	-
6.875	\$89,224M	-
7	-	\$18,010M
7.125	-	\$32,874M
7.25	-	\$14,353M
7.375	-	\$30,272M
7.5	-	\$22,332M
7.625	-	\$19,577M
7.75	-	\$3,413M

Data as of 11/1/2024

UPB Tooltip

If the user hovers over any bin shown in the Graph View, a tooltip will display the weighted average coupon (WAC) as well as the Unpaid Principal Balance (UPB) for that bin. See an example below.



Refinance Incentive Explorer

MBS Reports

Structured Transaction Reports

Origination Dates (All)
May 1995 Nov 2024

Market Note Rate
6

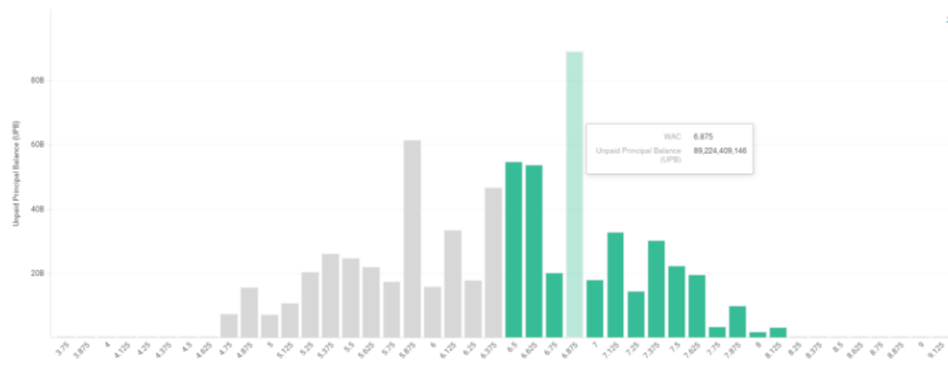
Margin (bps)
50

Coupon Rate (4.500 - 7.000)
1.500 9.000

Graph Table

Primary Mortgage Market Survey - 6.720

In The Money %
53.35%



Date as of 11/1/2024

Refinance Incentive Explorer

MBS Reports

Structured Transaction Reports

Origination Dates (All)
May 1995 Nov 2024

Market Note Rate
6.72

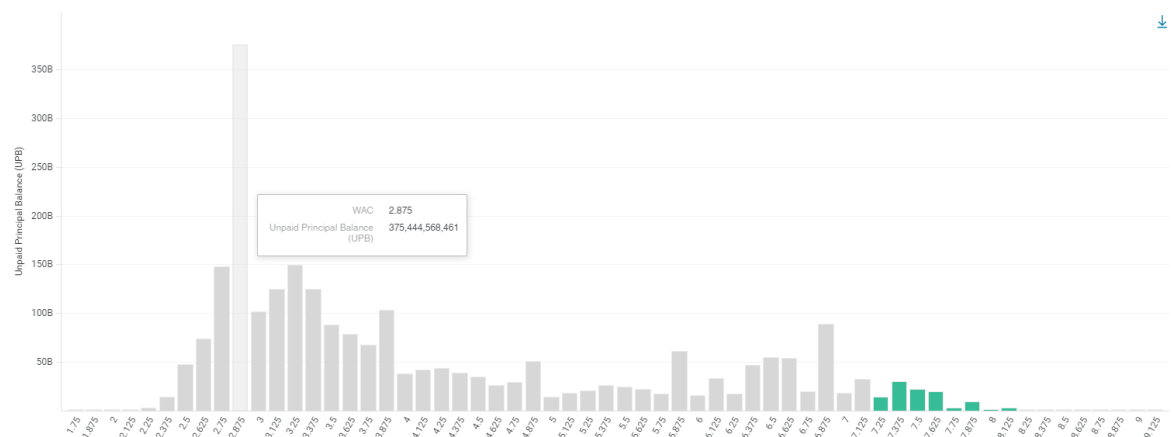
Margin (bps)
50

Coupon Rate (1.500 - 7.000)
1.500 9.000

Graph Table

Primary Mortgage Market Survey - 6.720

In The Money %
4.19%



Date as of 11/1/2024

Appendix

Collection Day Counts for Factor Months in 2019 – 2025

Starting in January of 2021, the collection day logic changed to include Saturdays and holidays, resulting in higher counts.

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
2019	N/A	21	19	21	22	20	20	22	22	20	22	19
2020	21	21	19	22	22	20	22	23	21	21	21	23
2021	29	24	24	27	26	25	26	25	26	27	25	26
2022	28	25	24	28	25	26	28	24	27	26	25	26
2023	27	25	24	28	24	27	28	24	29	24	26	27



2024	26	26	26	25	26	28	24	27	28	24	28	25
2025	27	27	24	25	26	27	25	28	26	25	28	24



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