



Credit Performance Analytics (CPA)

User Guide

April 2026



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Introducing Credit Performance Analytics (CPA)

Introducing a more flexible credit performance analytics platform than ever before

- Fully customizable analytics platform designed to deliver deeper insights and more personalized credit performance analysis
- Builds on the strength of Data Dynamics with advanced performance, intuitive visualization, and flexible reporting
- Enhances and consolidates functionality previously available in legacy CAS, CIRT, and SF dashboards
- Allows users to define and save custom loan populations once and reuse them across dashboards and time horizons, facilitating efficient and repeatable analysis



What's New?

Define and save custom cohorts

Apply flexible additional filters within dashboards for even more customized analysis

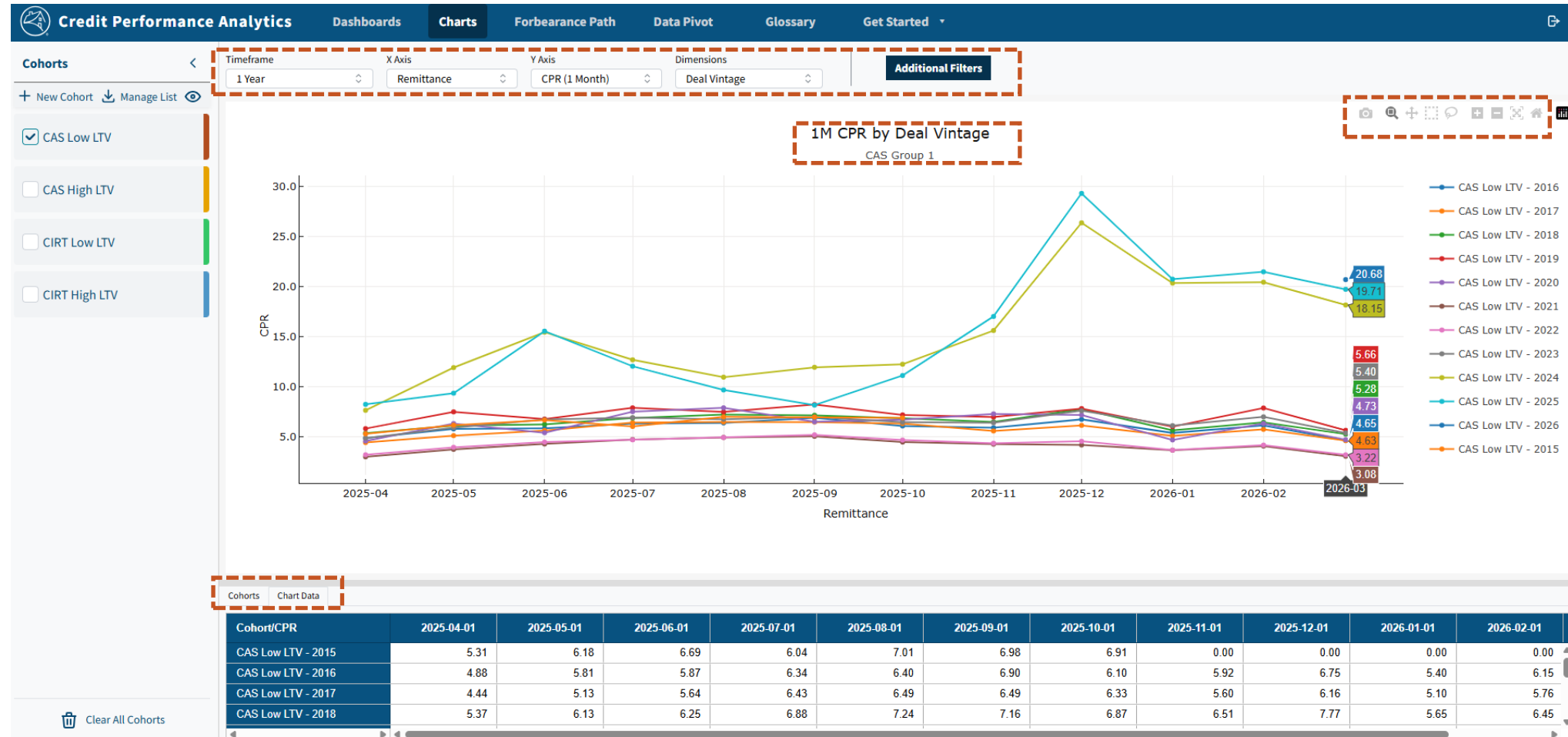
The screenshot shows the 'Create New Cohort' interface in the Credit Performance Analytics dashboard. The top navigation bar includes 'Credit Performance Analytics', 'Dashboards', 'Charts', 'Forbearance Path', 'Data Pivot', 'Glossary', and 'Get Started'. The left sidebar has 'Cohorts' with '+ New Cohort' and 'Manage List' options. The main content area is titled 'Create New Cohort' and features a 'Dataset' selector with 'CAS', 'CIRT', 'SFLP', and 'HARP LP' options. Below this is the 'COHORT ATTRIBUTES' section, which includes a search bar and a list of attribute categories: All, Deal, Property, Loan, Performance, Borrower, and Programs. The 'Deal' category is selected, showing a 'Deal Vintage' filter with a year range from 2025 to 2014, where 2022, 2021, and 2020 are highlighted. A 'Clear Selected Values' button is present. The 'Cohort Definition' panel on the right shows filters for CLTV (set to < 60, 65, 70, 75), Purpose (Purchase), First Time Homebuyer (Yes), and Deal Vintage (2022, 2021, 2020). At the bottom, the 'Cohort Name' field displays 'CAS 2020-22|CLTV0-75|Purch|FTB:Yes', with an 'Auto-Generate Name' button, 'Cancel', and 'Save' buttons. A 'Clear All Attributes' button is located at the bottom right of the definition panel.



What's New?

Create tailored performance charts

Plot performance insights and export underlying data



What's New?

Explore data with greater flexibility

Uncover trends across performance metrics and focused cohorts

Credit Performance Analytics | Dashboards | Charts | Forbearance Path | **Data Pivot** | Glossary | Get Started

Cohorts | Deals | Profile | Risk Layers | **Delinquency** | Loss Mit | Loan Terminations | Active Forbearance | Active Mod | Loss Severity %

Cohort: CAS Low LTV | Remittance Period: 2026-03 | Issuance: | Additional Filters: DTI: 15, 20, 25, 30, 35, 40, 45, 50

Vertical Dimension 1: Deal Vintage | Vertical Dimension 2: Purpose | Horizontal Dimension: DTI | Metric: % D60+ | Values: ABS | Pct Row | Pct Table | Heat Map:

Deal Vintage	Purpose	< (10, 15]	< (15, 20]	< (20, 25]	< (25, 30]	< (30, 35]	< (35, 40]	< (40, 45]	< (45, 50]
2016	Purchase	0.123	0.209	0.548	0.648	0.665	1.026	1.444	0.804
	Refi	0.543	0.425	0.256	0.736	0.851	0.951	1.101	0.486
	C/O Refi	0.275	1.504	0.668	0.815	1.434	1.606	1.771	1.345
2017	Purchase	0.268	0.224	0.403	0.402	0.633	0.933	1.278	1.206
	Refi	0.028	0.194	0.386	0.446	0.816	0.901	1.110	0.600
	C/O Refi	0.684	0.363	0.782	1.028	1.150	1.512	1.556	1.280
2018	Purchase	0.697	0.383	0.491	0.577	1.101	1.504	1.697	2.029
	Refi	0.000	0.780	0.475	1.372	1.232	1.869	1.885	1.699
	C/O Refi	0.890	1.187	1.284	1.331	1.772	2.137	2.569	2.829
2019	Purchase	0.250	0.864	0.769	0.763	0.895	1.538	2.760	2.939
	Refi	3.941	0.392	0.216	1.710	1.968	3.493	3.053	2.853
	C/O Refi	0.000	2.365	1.739	1.673	2.513	2.872	3.122	3.270
2020	Purchase	0.480	0.371	0.568	0.555	0.495	0.715	1.833	1.711
	Refi	1.406	0.000	1.101	0.936	1.934	1.014	0.927	1.099
	C/O Refi	0.000	1.996	0.705	1.342	0.645	2.544	2.660	3.319
2021	Purchase	0.039	0.141	0.213	0.343	0.412	0.524	0.933	0.481
	Refi	0.086	0.109	0.116	0.222	0.235	0.369	0.398	0.462
	C/O Refi	0.056	0.201	0.224	0.304	0.431	0.625	0.755	0.620
2022	Purchase	0.203	0.205	0.241	0.365	0.466	0.696	1.026	0.912
	Refi	0.105	0.092	0.204	0.309	0.386	0.523	0.689	0.779
	C/O Refi	0.191	0.250	0.364	0.578	0.677	0.955	1.236	0.951



Get started with CPA

A launchpad for credit performance analysis

The screenshot shows the CPA interface with a dark blue header containing navigation links: Credit Performance Analytics, Dashboards, Charts, Forb Outcomes, Pivot, Glossary, and Get Started. A left sidebar has a 'Cohorts' section with '+ New Cohort' and 'Manage List' options. The main content area features a 'Welcome' message, a 'Next-Level Intelligence for Better Decisions' section with three bullet points, and a 'Quick Start' section with three options: 'Preloaded Cohort List', 'Video Tutorial', and 'User Guide'. Three callout boxes are overlaid: 'Start with predefined cohorts or create your own' points to the 'Preloaded Cohort List' button; 'Watch a guided walkthrough' points to the 'Video Tutorial' button; and 'Review a summary of analytical capabilities' points to the 'User Guide' button.

Cohorts

+ New Cohort ↓ Manage List

Welcome

Credit Performance Analytics (CPA) is a brand new offering from MachineSP, a credit analytics platform designed to deliver deeper insights and more personalized functionality in the form of dashboards, reports, and flexible reporting. CPA is built by MachineSP.

Next-Level Intelligence for Better Decisions

- Create Fully Customized Cohorts: Define population groupings using any combination of attributes, filters, and performance metrics.
- Store Personalized Cohorts: Quickly store and reuse custom cohort definitions for future analysis.
- Advanced Drill-Down & Segmentation: Explore granular details across portfolios, regions, and risk tiers with ease.
- Integrated Reporting & Export Functionality: Generate tailored reports and export insights directly for stakeholder use in presentations and otherwise.

Quick Start

Start with a list of preloaded cohorts (population groups)

Preloaded Cohort List

Watch a video on how CPA works

Video Tutorial

Go in-depth with CPA

User Guide

Clear All Cohorts



Create a custom cohort

A cohort is a defined loan population that can be analyzed consistently across dashboards and saved for future analysis

The screenshot shows the 'Create New Cohort' interface. On the left, a 'Cohorts' sidebar contains a '+ New Cohort' button (callout 1) and a 'Manage List' button (callout 6). The main area is titled 'Create New Cohort' and features a 'Dataset' selector with options 'CAS', 'CIRT', 'SFLP', and 'HARP LP' (callout 2). Below this is the 'COHORT ATTRIBUTES' section, which includes a search bar and a list of attribute categories: 'All', 'Deal' (selected), 'Property', 'Loan', 'Performance', 'Borrower', and 'Programs' (callout 3). To the right of the list are filters for 'Deal Name', 'Deal Type' (selected), and 'Deal Vintage', with sub-filters for 'Benchmark', 'Benchmark G1', 'Benchmark G2', 'HRP', and 'SBT'. A 'Clear Selected Values' button is also present. At the bottom, there is a 'Cohort Name' input field containing 'Cohort 1' (callout 4), an 'Auto-Generate Name' button, a 'Cancel' button, and a 'Save' button (callout 5). A final callout (6) points to the 'Manage List' button in the sidebar, indicating that saving the cohort will make it available in the list.



Save a custom cohort list

Saved cohort lists can be reused across dashboards, reports, and time periods without being rebuilt

The screenshot displays the 'Credit Performance Analytics' dashboard. On the left, a 'Cohorts' sidebar shows a list of cohorts with checkboxes for 'Portfolio 1', 'Portfolio 2', and 'Portfolio 3'. An orange dashed box highlights these three items, and a blue callout box below them says 'Save customized cohorts as a list'. The main area shows a 'Manage Lists' dialog box with a table of lists. The table has columns for Name, Description, Last Updated, and Actions. The first row is 'Portfolio Surveillance' with a description 'Perform surveillance on Portfolios 1-3' and a 'Last Updated' date of '4/13/2026, 1:32:19 PM'. The second row is 'Sample Cohorts' with a description 'CAS and CIRT low/high LTV cohorts.' and a 'Last Updated' date of '4/21/2026, 12:00:00 PM'. The 'Actions' column for the first row contains 'Save As', 'Save', and 'Delete' buttons, while the second row contains 'Load' and 'Delete' buttons. The background shows a data table with columns for Deal Name and various metrics.

Name	Description	Last Updated	Actions
Portfolio Surveillance	Perform surveillance on Portfolios 1-3	4/13/2026, 1:32:19 PM	Save As Save Delete
Sample Cohorts	CAS and CIRT low/high LTV cohorts.	4/21/2026, 12:00:00 PM	Load Delete



Load profile and performance dashboards

Access insights into cohort profile and performance

1

Dive into analysis by selecting a data view from the toolbar at top

2

Select from available dashboard options

3

Switch between cohorts

4

Toggle between remittance periods

5

Switch to At-Issuance view

Cohort	Active	% P	% of	WA Note Rate	WA FICO	CL FICO	LTV	CLTV	WA DTI	% Investor
CAS Low LTV	6,542	26	2.07	3.980	753	757	75	75	34	13.9
CAS High LTV	2,335	54	2.25	3.991	753	756	75	76	34	12.8
CIRT Low LTV	7,621	50	0.89	4.176	748	751	75	76	34	14.2
CIRT High LTV	6,381	56	2.00	4.169	746	750	75	76	34	13.1
CAS 2017 C01 G1	9,252.5	16.05	2.07	3.982	750	754	75	76	34	11.5
CAS 2017 C03 G1	10,471.1	19.31	1.46	3.769	755	758	75	76	33	8.9
CAS 2017 C05 G1	12,006.7	21.12	1.70	3.711	754	757	75	75	34	9.1
CAS 2017 C06 G1	3,991.0	18.60	0.57	3.967	747	750	75	75	35	12.3
CAS 2017 C07 G1	3,967.9	19,806	15.33	4.320	742	744	75	75	36	15.4
CAS 2018 C01 G1	8,548.6	41,671	15.22	4.323	743	744	76	76	35	12.9
CAS 2018 C03 G1	6,499.5	30,981	16.88	4.223	742	742	75	76	36	12.8
CAS 2018 C05 G1	6,044.8	28,380	17.16	4.244	741	741	75	76	37	12.1
CAS 2018 C06 G1	2,613.5	12,787	14.33	4.556	734	731	75	75	38	14.6
CAS 2018 R07 G1	3,670.4	18,274	12.70	4.775	732	727	75	76	39	14.1
CAS 2019 R05 G1	3,198.0	16,757	11.63	5.068	728	721	75	76	39	14.1
CAS 2019 R07 G1	4,411.3	21,377	14.36	4.615	739	733	75	76	37	12.2
CAS 2020 R01 G1	6,073.1	26,143	17.92	4.243	746	744	75	76	36	8.5
CAS 2021 R01 G1	57,204.3	192,344	69.69	2.965	762	760	74	74	33	6.6
CAS 2021 R03 G1	28,537.5	94,346	72.64	2.892	761	758	74	74	34	7.4
CAS 2022 R01 G1	44,323.5	145,866	73.12	2.871	759	757	74	74	34	7.5
CAS 2022 R03 G1	37,462.4	124,853	75.47	2.942	757	755	74	74	34	6.7
CAS 2022 R04 G1	30,596.9	97,318	75.36	3.119	756	752	74	75	34	4.2
CAS 2022 R06 G1	21,156.5	69,378	76.40	3.167	752	747	75	75	35	3.0
CAS 2022 R07 G1	26,107.1	84,949	77.44	3.148	749	743	74	75	35	2.3
CAS 2022 R08 G1	17,505.4	57,025	78.04	3.126	748	741	74	74	36	6.4
CAS 2023 R01 G1	19,900.7	58,724	81.10	3.278	748	740	74	75	36	7.2
CAS 2023 R02 G1	17,662.7	55,308	80.77	3.583	744	736	74	75	37	9.2
CAS 2023 R04 G1	18,282.4	57,902	81.88	3.974	744	736	75	75	37	10.3
CAS 2023 R05 G1	17,502.4	54,608	81.34	4.775	749	740	75	76	37	11.1
CAS 2023 R06 G1	17,264.0	54,091	80.20	5.494	750	739	76	76	38	10.8



Additional customization options

These options allow users to drill further into results without changing the underlying cohort definition

Credit Performance Analytics | Dashboards | Charts | Forbearance Path | Data Pivot | Glossary | Get Started

Cohorts | Profile | Risk Layers | Delinquency | Loss Mit | Loan Terminations | Active Forbearance | Active Mod | Loss Severity %

Cohort: CAS Low LTV | Remittance Period: 2026-03 | Dimension: Deal Vintage | Issuance: | Additional Filters:

Further refine cohort with Additional Filters

Group selected cohort by dimension

All CAS Low LTV loans are now segmented by Deal Vintage

Deal Vintage	Iss UPB	Curr UPB	Active Loans	% of Pool Factor	% of Cohort UPB	% of Active UPB	% SFHA	WA Note Rate	WA FICO	WA Curr FICO	WA LTV	WA CLTV	WA DTI	% Investor
2016	22,883.9	17,022.5	110,930		5.32	3.41	4.100	750	753	75	76	34	13.7	
2017	39,689.2	30,516.3	181,027		8.69	3.20	3.878	751	754	75	75	34	10.6	
2018	27,376.8	22,285.7	132,093		6.34	3.66	4.367	740	739	75	76	37	13.0	
2019	7,609.3	6,536.2	38,134		1.83	4.10	4.806	735	728	75	76	38	13.0	
2020	6,073.1	5,196.4	26,143	17.92	0.95	1.25	3.63	4.243	746	744	75	76	36	8.5
2021	85,741.8	75,651.4	28		13.76	2.72	2.940	762	759	74	74	34	6.8	
2022	177,151.8	158,937.9	57		27.80	2.87	3.031	755	751	74	74	34	5.3	
2023	106,050.1	99,185.9	32		15.81	3.09	4.466	748	739	75	75	37	9.9	
2024	56,596.4	54,039.3	17		8.27	3.37	6.560	758	749	76	76	38	9.9	
2025	59,151.0	57,793.3	17		8.39	2.92	6.610	761	754	76	76	38	8.4	
2026	17,773.2	17,729.5	52,831	97.99	3.25	2.53	6.661	759	753	76	76	38	7.3	

Cohort: CAS Low LTV | Remittance Period: 2026-03 | Dimension: Deal Vintage | Issuance: | Additional Filters: Interest Rate Buydown: Moderate, Significant

Filters that have been applied will appear on display

Same CAS Low LTV cohort is now filtered to only loans with an Interest Rate Buydown

Deal Vintage	Iss UPB	Curr UPB	Active Loans	% Pool Factor	% of Cohort UPB	% of Active UPB	% SFHA	WA Note Rate	WA FICO	WA Curr FICO	WA LTV	WA CLTV	WA DTI	% Investor
2023	279.5	265.5	729	64.11	4.85	0.27	1.29	6.483	759	750	77	77	39	0.0
2024	2,131.1	2,038.6	5,164	65.38	37.25	3.77	2.24	6.533	759	751	77	77	39	0.0
2025	2,360.3	2,313.3	5,476	77.97	42.27	4.00	1.96	6.535	763	757	77	77	39	0.0
2026	857.4	855.3	2,006	97.38	15.63	4.82	2.06	6.490	765	759	77	77	39	0.0



Perform due diligence on new transactions

This view focuses on how a new transaction looks at issuance relative to previously issued transactions

Credit Performance Analytics | Dashboards | Charts | Forbearance Path | Data Pivot | Glossary | Get Started

Cohorts | Profile | Risk Layers | Delinquency | Loss Mit | Loan Terminations | Active Forbearance | Active Mo | Transitions | Roll Rates

Cohort: CAS Low LTV | Remittance Period: 2026-03 | Dimension: Deal Name | Issuance: | 30, 35, 40, 45, 50

Toggle to Issuance view

Deal Name	Iss UPB	Curr UPB	Active Loans	% Pool Factor	% of Cohort UPB	% of Active UPB	% SFHA	WA Note Rate	WA FICO	WA Curr FICO	WA LTV	WA CLTV	WA DTI	% Investor	% Cashout
CAS 2026 R02 G1	18,044.9	18,044.9	53,431	100.00	1.22	99.73	2.97	6.666	759	752	76	76	38	7.2	10.8
CAS 2025 R06 G1	17,126.0	17,126.0	48,258	100.00	1.15	99.66	2.66	6.312	761	754	75	75	38	6.8	8.7
CAS 2025 R04 G1	16,960.3	16,960.3	49,182	100.00	1.14	99.67	2.79	6.635	761	754	75	76	38	7.6	7.9
CAS 2025 R02 G1	16,946.1	16,946.1	48,877	100.00	1.14	99.68	2.91	6.926	762	755	76	76	38	8.1	6.6
CAS 2025 R01 G1	17,336.1	17,336.1	51,693	100.00	1.17	99.61	3.06	6.816	760	753	76	76	38	10.4	7.8
CAS 2024 R06 G1	16,515.9	16,515.9	49,648	100.00	1.11	99.67	3.01	7.176	758	751	76	76	38	9.1	7.0
CAS 2024 R04 G1	18,499.0	18,499.0	53,477	100.00	1.25	99.67	3.20	6.742	760	752	76	76	37	9.1	7.9
CAS 2024 R02 G1	18,530.4	18,530.4	55,429	100.00	1.25	99.58	3.47	6.423	760	753	76	76	37	10.0	8.8
CAS 2024 R01 G1	19,113.5	19,113.5	59,631	100.00	1.29	99.60	3.39	6.358	753	748	76	76	38	10.9	11.4
CAS 2023 R08 G1	18,812.5	18,812.5	60,099	100.00	1.27	99.64	3.07	6.103	752	747	76	76	38	11.3	15.1
CAS 2023 R06 G1	20,217.7	20,217.7	64,175	100.00	1.36	99.63	3.16	5.519	749	746	76	76	38	11.0	19.7
CAS 2023 R05 G1	20,146.2	20,146.2	63,659	100.00	1.36	99.61	3.40	4.792	748	746	75	76	37	11.1	26.3
CAS 2023 R04 G1	20,810.8	20,810.8	66,692	100.00	1.40	99.61	3.16	3.983	744	744	75	75	37	10.3	41.7
CAS 2023 R02 G1	20,184.7	20,184.7	64,039	100.00	1.36	99.62	3.19	3.593	743	742	74	75	37	9.1	43.8
CAS 2023 R01 G1	22,539.7	22,539.7	67,413	100.00	1.52	99.63	2.84	3.289	747	745	74	75	36	7.3	38.2
CAS 2022 R08 G1	20,324.4	20,324.4	67,353	100.00	1.37	99.62	2.79	3.136	747	746	74	74	36	6.4	35.6
CAS 2022 R07 G1	30,425.1	30,425.1	100,692	100.00	2.05	99.59	2.78	3.159	748	747	74	75	35	2.4	31.3
CAS 2022 R06 G1	24,876.8	24,876.8	82,983	100.00	1.68	99.51	2.99	3.179	751	749	75	75	35	3.0	27.6
CAS 2022 R04 G1	36,260.9	36,260.9	117,245	100.00	2.44	99.51	3.01	3.131	756	752	74	75	35	4.2	26.2
CAS 2022 R03 G1	44,127.8	44,127.8	149,454	100.00	2.97	99.43	3.14	2.954	756	755	74	74	34	6.8	24.7
CAS 2022 R01 G1	53,436.6	53,436.6	178,836	100.00	3.60	99.42	2.94	2.884	758	757	74	74	34	7.6	24.3
CAS 2021 R03 G1	34,576.8	34,576.8	116,211	100.00	2.33	99.41	2.91	2.906	759	759	74	74	34	7.5	22.3
CAS 2021 R01 G1	71,878.1	71,878.1	245,259	100.00	4.84	99.41	2.78	2.983	760	760	74	74	34	6.7	21.6
CAS 2020 R01 G1	28,894.2	28,894.2	104,805	100.00	1.95	99.63	3.00	4.280	750	748	75	76	36	6.0	24.2
CAS 2019 R07 G1	26,159.4	26,159.4	101,789	100.00	1.76	99.57	3.37	4.609	747	745	76	76	37	8.4	26.6
CAS 2019 R05 G1	23,666.0	23,666.0	97,648	100.00	1.59	99.61	3.42	5.069	741	740	76	76	38	9.4	29.7
CAS 2019 R03 G1	21,411.8	21,411.8	88,621	100.00	1.44	99.65	3.42	4.953	743	741	76	76	38	8.8	27.3
CAS 2019 R02 G1	26,288.6	26,288.6	106,674	100.00	1.77	99.66	3.29	4.895	744	742	76	76	37	9.3	25.6
CAS 2018 R07 G1	24,170.3	24,170.3	98,156	100.00	1.63	99.63	3.45	4.802	742	740	76	76	38	10.4	28.0



Filter to populations of interest

This example shows how additional filters can be used to isolate specific loan features within a cohort

Profile Risk Layers Delinquency Loss Mit Loan Terminations Active Forbearance Active Mod Loss Severity % Transitions Roll Rates

Cohort CAS Low LTV Remittance Period 2026-03 Dimension Deal Name Issuance **Additional Filters** Interest Rate Buydown: Moderate, Significant

Deal Name	Iss UPB	Curr UPB	Active Loans	% Pool Factor	% of Cohort UPB	% of Active UPB	% SFHA	WA Note Rate	WA FICO	WA Curr FICO	WA LTV	WA CLTV	WA DTI	% Investor
CAS 2023 R08 G1	414.2	414.2	1,077	100.00	5.61	2.19	1.57	6.630	759	751	77	77	39	0.0
CAS 2024 R01 G1	1,109.6	1,109.6	2,778	100.00	15.04	5.78	2.31	6.404	757	749	77	77	39	0.0
CAS 2024 R02 G1	645.2	645.2	1,528	100.00	8.75	3.47	2.60	6.432	761	753	76	77	38	0.0
CAS 2024 R04 G1	533.5	533.5	1,182	100.00	7.23	2.87	1.87	6.744	762	754	76	77	39	0.0
CAS 2024 R06 G1	829.8	829.8	1,918	100.00	11.25	5.01	1.93	7.342	762	755	76	77	39	0.0
CAS 2025 R01 G1	921.3	921.3	2,082	100.00	12.49	5.29	2.91	6.775	763	756	76	77	39	0.0
CAS 2025 R02 G1	747.1	747.1	1,695	100.00	10.13	4.39	2.02	6.945	764	757	77	77	39	0.0
CAS 2025 R04 G1	679.9	679.9	1,538	100.00	9.22	4.00	1.24	6.550	764	757	77	77	38	0.0
CAS 2025 R06 G1	618.4	618.4	1,395	100.00	8.38	3.60	1.24	6.242	765	758	77	77	39	0.0
CAS 2026 R02 G1	878.3	878.3	2,050	100.00	11.91	4.85	1.24	6.242	765	758	77	77	39	0.0

Filter cohort to loans with buydowns using **Additional Filters**

Deal-level share of temporary buydowns at issuance

Group cohort by Buydown Type using **Dimension** dropdown

Profile Risk Layers Delinquency Loss Mit Loan Terminations Active Forbearance Active Mod Loss Severity % Transitions Roll Rates

Cohort CAS Low LTV Remittance Period 2026-03 Dimension Interest Rate Buydc Issuance **Additional Filters** Deal Vintage: 2024, 2025

IR Buydown Type	Iss UPB	Curr UPB	Active Loans	% Pool Factor	% of Cohort UPB	% of Active UPB	% SFHA	WA Note Rate	WA FICO	WA Curr FICO	WA LTV	WA CLTV	WA DTI	% Investor	% Cashout
Moderate	5,503.3	5,503.3	12,832	100.00	3.89	82.44	2.02	6.704	762	754	77	77	39	0.0	0.0
Significant	581.5	581.5	1,284	100.00	0.41	82.87	2.73	6.529	762	754	76	76	39	0.0	0.0
Not Applicable	125,149.2	125,149.2	128,704	100.00	95.70	79.15	3.12	6.664	759	753	76	76	38	9.5	8.7

Compare profile of loans with and without temporary buydowns

Compare two transactions across dimensions

Data Pivot allows you to analyze one deal or compare two deals across a distribution of key metrics

The screenshot displays the 'Data Pivot' section of the 'Credit Performance Analytics' dashboard. The interface includes a navigation bar with 'Dashboards', 'Charts', 'Forbearance Path', 'Data Pivot', 'Glossary', and 'Get Started'. Below the navigation bar, there are filters for 'Cohorts' (Deals, Profile, Risk Layers, Delinquency, Loss Mit, Loan Terminations, Active Forbearance, Active Mod, Loss Severity %) and 'Deal 1' (CAS 2026 R02 G1) and 'Deal 2' (CAS 2025 R06 G1). The 'Remittance Period' is set to 2026-03, and the 'Issuance' toggle is turned on. The 'Additional Filters' section is also visible.

The main data table is a pivot table with the following dimensions and metrics:

- Vertical Dimension 1: CLTV
- Vertical Dimension 2: Orig FICO
- Horizontal Dimension: DTI
- Metric: Iss UPB
- Values: ABS, Pct Row, Pct Table

The table shows the distribution of Iss UPB across CLTV, FICO, and DTI buckets for two deals. The columns represent DTI buckets, and the rows represent CLTV buckets. The 'Grand Total' column shows the overall distribution.

Annotations highlight key features:

- Compare the new transaction to prior deals:** Points to the 'Deal 1' and 'Deal 2' selection area.
- Select dimensions across which to compare:** Points to the 'Vertical Dimension 1', 'Vertical Dimension 2', and 'Horizontal Dimension' dropdowns.
- Select the metric to compare:** Points to the 'Metric' dropdown.
- Specify how to display the selected metric:** Points to the 'Values' dropdown.
- Here, we compare the Issuance UPB distribution for the selected deals across CLTV, FICO, and DTI buckets:** Points to the main data table.

CLTV	FICO	(0, 10]	(10, 15]	(15, 20]	(20, 25]	(25, 30]	(30, 35]	(35, 40]	(40, 45]	(45, 50]	Grand Total
(60, 65]	Missing	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	[0, 620)								0.01	-0.03	-0.07
	[620, 640)								0.20	0.10	0.59
	[640, 660)								0.11	0.24	0.51
	[660, 680)			-0.02	-0.08	0.13	-0.02	0.06	0.29	0.45	0.93
	[680, 700)			0.00				-0.03	0.09	0.24	0.42
	[700, 720)			0.07				-0.04	-0.04	0.12	0.02
	[720, 740)	0.00	0.01	-0.06				-0.08	0.25	0.15	0.27
	[740, 760)	-0.02	-0.02	-0.04				-0.05	0.18	0.79	0.44
	[760, 780)	0.02	0.27	-0.11				-0.32	0.20	1.00	0.37
	[780, 800)	-0.04	-0.05	-0.45				-0.28	0.08	-0.52	-3.36
	[800+)	0.01	-0.09	0.16	-0.03	-0.26	-0.21	-0.23	0.24	0.27	-0.14
(65, 70]	Missing	-0.01	0.00	-0.02	-0.01	-0.04	-0.02	0.05	-0.01	0.00	-0.06
	[0, 620)	0.00	0.00	0.00	0.01	-0.02	0.01	0.01	-0.04	0.05	0.01
	[620, 640)	-0.02	-0.01	-0.01	-0.01	-0.09	0.01	0.22	0.29	0.24	0.61
	[640, 660)	-0.02	0.01	0.01	0.08	-0.04	0.11	0.00	0.09	0.10	0.35
	[660, 680)	0.01	0.01	-0.01	0.01	0.04	-0.16	0.01	-0.07	0.18	0.02
	[680, 700)	0.01	0.04	-0.02	0.02	0.04	0.00	0.13	0.09	0.28	0.60
	[700, 720)	0.03	-0.05	0.04	0.01	0.13	-0.37	0.03	-0.05	-0.18	-0.42
	[720, 740)	-0.03	-0.05	-0.05	-0.01	-0.06	-0.20	0.13	0.13	-0.08	-0.22
	[740, 760)	0.01	-0.09	-0.07	0.05	-0.12	-0.22	-0.53	-0.44	-0.37	-1.78
	[760, 780)	0.02	-0.09	-0.02	-0.49	-0.23	0.01	0.09	0.03	-0.24	-0.92
	[780, 800)	-0.04	-0.04	0.16	-0.05	-0.18	0.06	-0.34	0.72	0.33	0.61
	[800+)	-0.05	0.04	-0.16	0.18	0.28	-0.18	-0.04	0.25	0.88	1.20



Many ways to analyze loan performance

Group by dimensions – then drill into populations of interest for deeper understanding of performance drivers

Credit Performance Analytics | Dashboards | Charts | Forbearance Path | Data Pivot | Glossary | Get Started

Cohorts | Profile | Risk Layers | **Delinquency** | Loss Mit | Loan Terminations | Active Forbearance | Active Mod | Loss Severity % | Transitions | Roll Rates

Cohort: CAS Low LTV | Remittance Period: 2016-2026 | Dimension: Deal Vintage | Issuance: | Additional Filters

Select the Delinquency dashboard view

Deal	Curr UPB	Active Loans	% of Cohort UPB	% of Cohort Loans	% Current	% D30	% D60	% D90	% D120	% D150	% D30+	% D60+
2016	17,022.5	110,930	3.12	5.32	97.996	1.030	0.313	0.138	0.062	0.061	2.000	0.970
2017	39,689.2	30,516.3	5.60	8.69	98.150	0.976	0.269	0.113	0.075	0.060	1.847	0.871
2018	27,376.8	22,285.7	4.09	6.34	96.899	1.526	0.503	0.211	0.141	0.112	3.094	1.568
2019	7,609.3	6,536.2	1.20	1.83	95.856	1.896	0.660	0.318	0.239	0.145	4.141	2.245
2020	6,073.1	5,196.4	0.95	1.25	97.488	1.201	0.428	0.139	0.111	0.093	2.512	1.311
2021	85,741.8	75,651.4	13.88	13.76	99.085	0.536	0.118	0.059	0.045	0.024	0.914	0.379
2022	177,151.8	158,937.9	29.17	27.80	98.660	0.739	0.201	0.095	0.057	0.049	1.340	0.601
2023	106,050.1	99,185.9	18.20	15.81	97.771	1.090	0.343	0.176	0.112	0.105	2.229	1.139
2024	56,596.4	54,039.3	9.92	8.27	98.485	0.730	0.216	0.129	0.099	0.078	1.515	0.785
2025	59,151.0	57,793.3	10.61	8.39	99.127	0.530	0.122	0.071	0.044	0.038	0.873	0.342
2026	17,773.2	17,729.5	3.25	2.53	99.750	0.250	0.000	0.000	0.000	0.000	0.250	0.000

View risk layer distribution of selected cohort

Risk Layers | Delinquency | Loss Mit | Loan Terminations | Active Forbearance | Active Mod | Loss Severity % | Transitions | Roll Rates

Cohort: CAS Low LTV | Remittance Period: | Dimension: Deal Vintage | Issuance: | Additional Filters: **Dq Status: 60, 90, 120, 150, 180+**

Filter to the D60+ delinquent population

Deal Vintage	Active Loans	% of Cohort UPB	% of Active UPB	WA Risk Layer	% Investor	% DTI > 45	% FICO < 680	% Cashout	
2016	899	4.09	0.95	0.80	7.5	4.9	35.0	32.5	
2017	293.1	262.3	1,352	6.66	0.86	6.5	8.3	36.4	33.3
2018	365.0	341.2	1,685	8.66	1.53	1.14	6.3	26.8	37.9
2019	148.6	143.7	657	3.65	2.20	1.17	7.8	33.8	36.4
2020	70.0	66.8	277	1.70	1.29	1.06	3.0	28.4	37.4
2021	306.3	283.3	1,104	7.20	0.37	0.76	6.6	15.3	27.3
2022	1,010.9	948.2	3,371	24.08	0.60	0.90	2.9	19.8	36.5
2023	1,152.1	1,114.6	3,505	28.31	1.12	1.13	5.3	27.5	47.2
2024	424.2	418.9	1,304	10.64	0.78	0.88	5.8	33.8	20.3
2025	199.1	197.3	648	5.01	0.34	0.97	5.1	33.6	29.2

Compare attributes of seriously delinquent loans



Perform targeted surveillance

Isolate populations of interest and analyze transitions between delinquency states over time

Analytics | **Dashboards** | Charts | Forbearance Path | Data Pivot | Glossary | Get Started

Profile | Risk Layers | Delinquency | Loss Mit | Loan Terminations | Active Forbearance | Active Mod | Loss Severity % | **Transitions** | Roll Rates

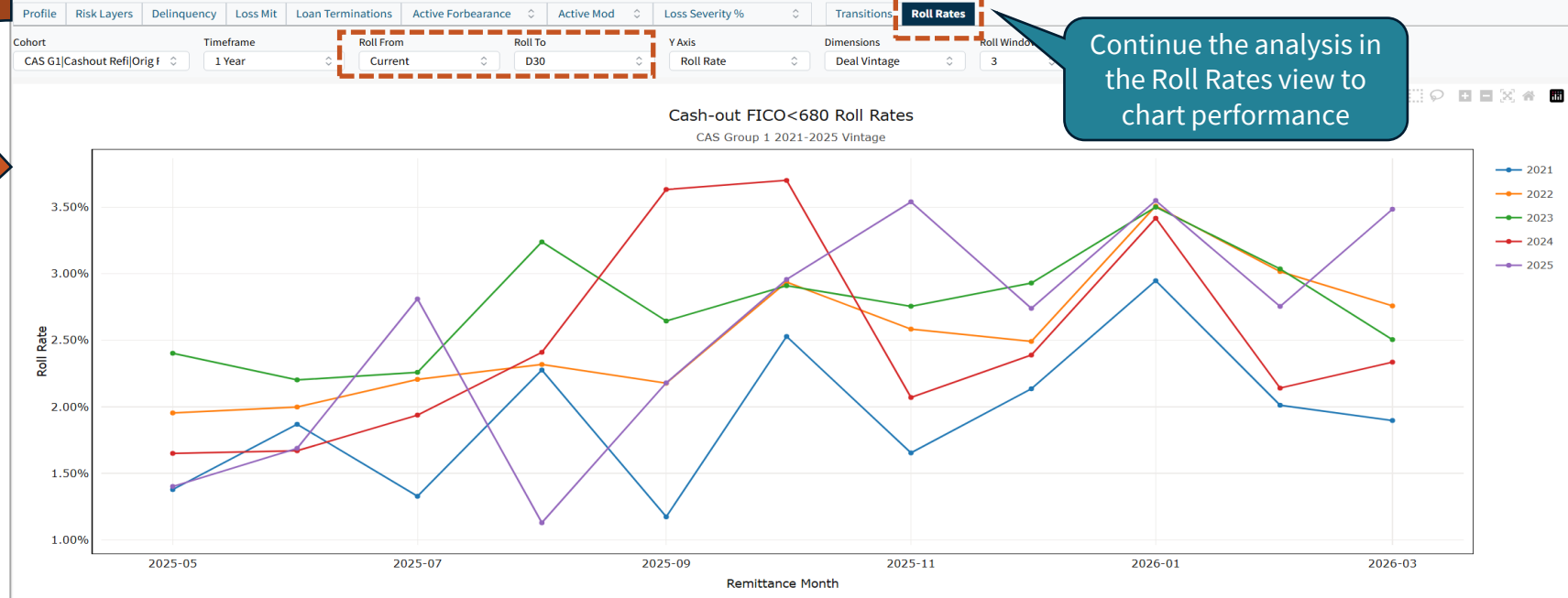
Delinquency | Loss Mit (ADR) | Loss Mit (BAP) | Cohort: CAS G1|Cashout Refi|Orig f | Remittance Period: 2026-03 | Metric: % Curr UPB | Roll Window: 3

Prev Delq	Current	D30	D60	D90	D120	D150	D180+	Credit Event	Prepay	Removal	Grand Total
Current	94.47	2.64	0.59	0.23	0.00	0.00	0.00	0.00	2.06	0.00	100.00
D30	41.38	33.17	12.72	4.96	5.62	0.00	0.00	2.04	0.00	100.00	
D60	24.97	17.42	23.89	7.40	6.95	17.40	0.00	1.46	0.00	100.00	
D90	23.21	9.08	8.78	9.41	11.14	11.63	0.00	0.26	0.00	100.00	
D120	23.41	2.08	0.89	1.63	3.50	16.90	0.00	3.04	0.00	100.00	
D150	27.81	4.15	2.14	1.90	0.00	3.25	0.00	2.78	0.00	100.00	
D180+	19.74	1.23	0.88	0.19	0.00	0.00	71.79	1.88	4.30	0.00	100.00
Missing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	100.00

Analyze transitions between states of delinquency

See how quickly loans are transitioning from one delinquency state to another

Here, we drill into a newly defined cohort of CAS Group 1 cash-out loans with FICO<680



Continue the analysis in the Roll Rates view to chart performance



Visualize a time series of performance

Charts are best used to visualize trends over time and export results for sharing

Credit Performance Analytics | Dashboards | **Charts** | Forbearance Path | Data Pivot | Glossary | Get Started

Cohorts

- CAS Low LTV
- CAS High LTV
- CIRT Low LTV
- CIRT High LTV

Timeframe: 1 Year | X Axis: Remittance | Y Axis: Delq 60+ | Dimensions: Orig FICO | Additional Filters

Customize chart title

Select from a variety of metric to visualize

Segment cohort to isolate performance drivers

Export chart image

Right-click the chart to export underlying data

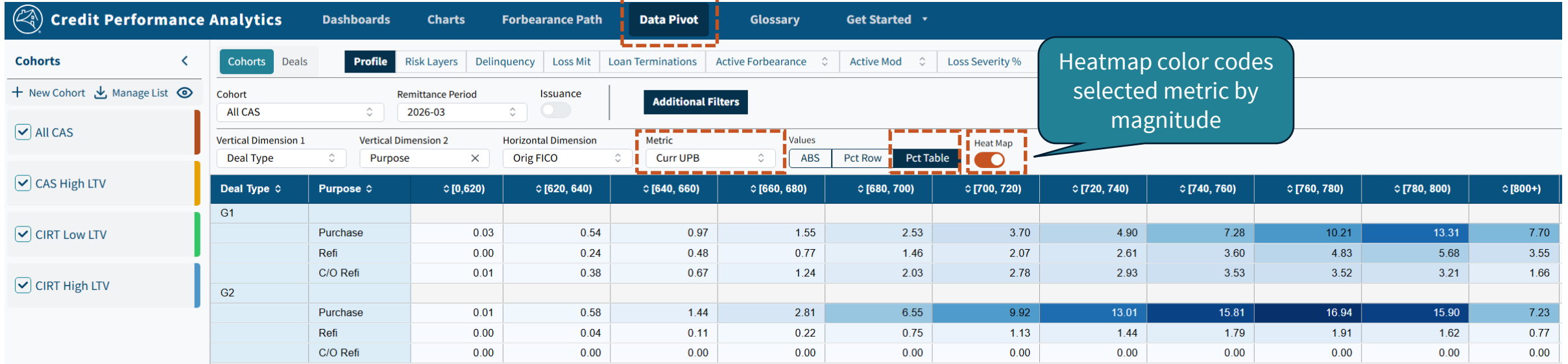
% 60D+ by FICO Bucket
CAS Group 1

Cohort/D60+	2025-04-01	2025-05-01	2025-06-01	2025-07-01	2025-08-01	2025-09-01	2025-10-01	2025-11-01	2025-12-01	2026-01-01	2026-02-01	2026-03-01
CAS Low LTV - Missing	0.702	0.647	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661
CAS Low LTV - [0, 620)	3.221	3.563	3.214	3.214	3.214	3.214	3.214	3.214	3.214	3.214	3.214	3.214
CAS Low LTV - [620, 640)	4.555	4.301	4.296	4.296	4.296	4.296	4.296	4.296	4.296	4.296	4.296	4.296
CAS Low LTV - [640, 660)	3.465	3.321	3.218	3.218	3.218	3.218	3.218	3.218	3.218	3.218	3.218	3.218



Slice and dice cohort metrics by variety of attributes

Data Pivot is useful for comparing metrics across multiple dimensions in a single table



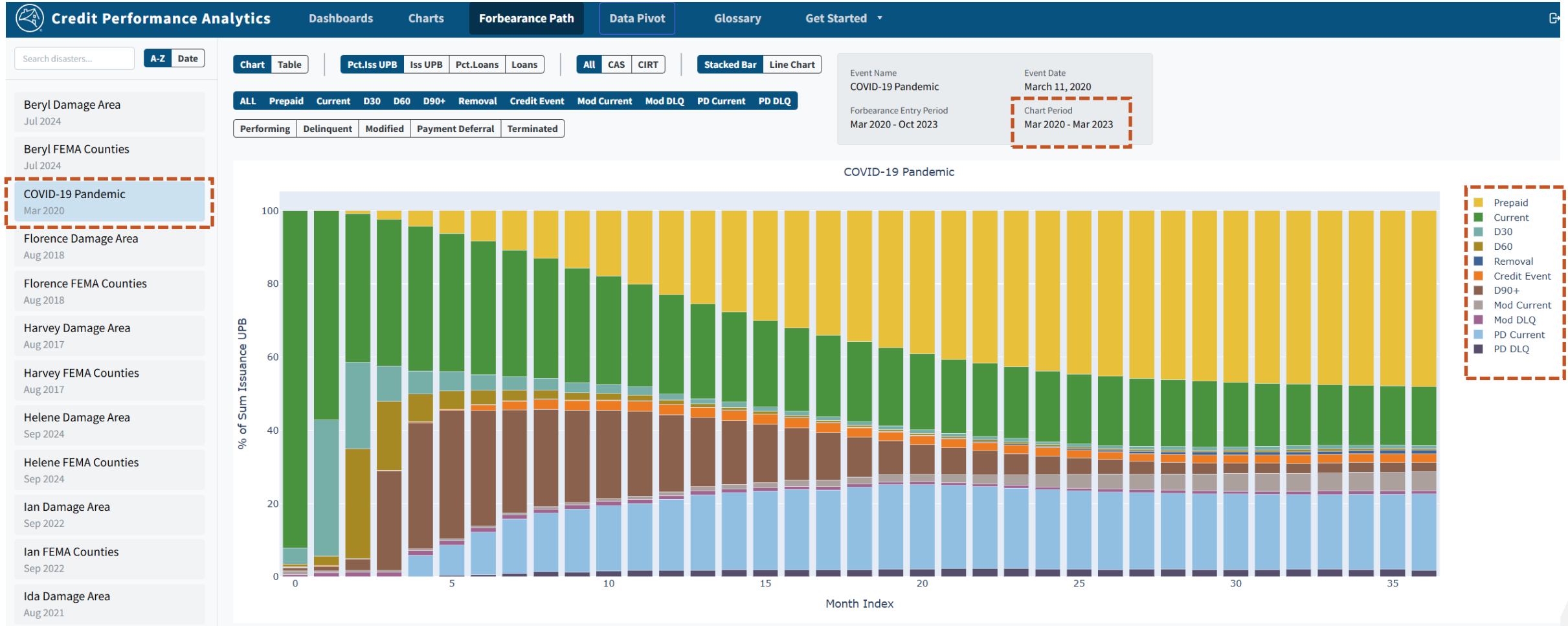
Heatmap color codes selected metric by magnitude

See the share of Current UPB for CAS Group 1 and Group 2 deals by loan purpose and FICO bucket



Analyze historical loss mitigation timelines

This view allows users to analyze the evolution of loan performance after key events



Apply all the same functionality to the historical dataset

Analyze the Fannie Mae Single-Family Historical Loan Performance dataset with the same filters, dimensions, and dashboards

Credit Performance Analytics
Dashboards
Charts
Forbearance Path
Data Pivot
Glossary
Get Started ▾

Cohorts
Profile
Risk Layers
Delinquency
Loss Mit
Loan Terminations
Active Forbearance ▾
Active Mod ▾
Loss Severity% ▾
Transitions
Roll Rates

+ New Cohort
↓ Manage List

LP All

CAS Low LTV

CAS High LTV

CIRT Low LTV

CIRT High LTV

Cohort
Activity Period
Dimension
Acquisition
Additional Filters

LP All
2025-09
Loan Vintage
🔍

Loan Vintage ▾	Orig UPB	Curr UPB	Active Loans	% of Cohort UPB	% of Cohort Loans	% Paid in Full	% Short Sale	% TPS	% DIL/REO	% Note Sale	% Cume Default	% RPL Sale	% Repurchased
1999	19,113.2	18.7	712	0.00	0.00	90.592	0.066	0.140	0.686	0.016	0.908	0.070	0.263
2000	160,748.6	108.5	3,733	0.00	0.02	94.387	0.053	0.101	0.710	0.018	0.883	0.059	0.179
2001	472,778.1	561.8	15,603	0.02	0.10	90.016	0.053	0.083	0.597	0.026	0.759	0.068	0.104
2002	564,730.2	1,425.0	32,065	0.04	0.21	84.641	0.063	0.095	0.604	0.044	0.806	0.096	0.097
2003	778,018.0	4,944.5	91,467	0.14	0.59	73.513	0.132	0.164	0.795	0.093	1.185	0.188	0.101
2004	274,072.4	2,801.2	43,841	0.08	0.28	74.885	0.426	0.261	1.671	0.186	2.545	0.453	0.149
2005	252,235.4	3,366.6	42,926	0.10	0.28	75.011	1.421	0.396	3.438	0.333	5.588	1.009	0.226
2006	198,670.2	2,549.4	28,698	0.07	0.19	77.346	2.224	0.411	4.932	0.424	7.990	1.589	0.382
2007	245,723.2	3,639.8	36,814	0.11	0.24	77.540	2.412	0.404	5.356	0.534	8.706	1.990	0.828
2008	315,014.9	3,801.1	37,856	0.11	0.24	83.500	1.135	0.203	2.593	0.295	4.227	0.967	0.708
2009	522,072.1	11,027.5	112,249	0.32	0.72	81.392	0.151	0.053	0.375	0.074	0.653	0.137	0.117
2010	432,358.5	12,545.2	133,723	0.37	0.86	76.753	0.038	0.034	0.139	0.042	0.253	0.097	0.071
2011	357,698.9	14,407.6	170,310	0.42	1.10	73.255	0.020	0.031	0.091	0.041	0.183	0.110	0.037
2012	608,112.1	57,593.0	536,231	1.68	3.46	60.180	0.010	0.022	0.053	0.020	0.105	0.083	0.050
2013	483,404.2	50,928.2	462,639	1.49	2.99	62.270	0.012	0.033	0.066	0.027	0.138	0.103	0.169
2014	311,590.0	25,815.3	234,573	0.75	1.51	73.420	0.019	0.051	0.091	0.039	0.201	0.122	0.162
2015	423,210.1	52,304.8	407,574	1.53	2.63	68.243	0.013	0.040	0.060	0.030	0.143	0.102	0.096
2016	555,054.0	97,711.4	680,802	2.86	4.40	62.653	0.009	0.033	0.038	0.029	0.108	0.125	0.053
2017	462,001.8	73,449.4	511,051	2.15	3.30	69.512	0.013	0.041	0.046	0.042	0.108	0.125	0.071
2018	419,624.0	55,151.4	363,099	1.61	2.34	77.625	0.017	0.048	0.045	0.051	0.108	0.125	0.099
2019	581,773.3	123,602.5	670,489	3.61	4.33	69.836	0.006	0.023	0.016	0.028	0.108	0.125	0.51
2020	1,401,090.5	741,508.7	3,246,949	21.68	20.96	33.450	0.001	0.011	0.006	0.007	0.108	0.125	0.24
2021	1,315,705.7	940,000.1	3,825,826	27.49	24.70	15.031	0.002	0.018	0.013	0.008	0.108	0.125	0.53
2022	540,075.9	419,617.5	1,506,238	12.27	9.72	13.270	0.020	0.045	0.037	0.016	0.108	0.125	0.284
2023	309,243.5	235,594.9	783,867	6.89	5.06	17.159	0.008	0.014	0.020	0.003	0.045	0.001	0.246

See cumulative statistics for loan terminations by historical vintage





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