

Mission Index Criteria Attribution (MICA) User Guide

MARCH 2025

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Mission Index Criteria Attribution (MICA)

Fannie Mae developed the Mission Index Criteria Attribution (MICA) disclosure supplement and accompanying MICA Engine and Excel-based tool for **impact investors to derive enhanced insights** into the representation of specific populations of Mission borrowers in their portfolios.

The MICA disclosure supplement and CUSIP mapping file are **available on PoolTalk®** for v1.0 and v1.1. We anticipate publishing updates to the MICA disclosure supplement quarterly in the month following quarter end. Versions 1.0/1.1 contain Fannie Mae MBS only; Resecuritizations, i.e., Supers®, Megas®, and REMICs are excluded.

There are two options available to **automate the impact estimation process for a portfolio**: the MICA Engine and the Excel-based tool.

- The **MICA Engine is available via Data Dynamics®**, our free analytics platform. Aggregated portfolio-level estimates will be calculated for Fannie Mae MBS, Supers, and Megas and Freddie Mac MBS and Supers. Fannie Mae and Freddie Mac Real Estate Mortgage Investment Conduit (REMIC) and grantor trust securities are not currently eligible for estimation but are being considered as a future enhancement.
- The **Excel-based tool** is designed to be downloaded to your machine, performs calculations locally, and does not contain any macros. Only Fannie Mae MBS is available through the Excel tool.

The MICA resources empower investors to quantify the estimated impact of their portfolio investments on specific populations of Mission borrowers.



MICA User Notes

MBS pools are evaluated based on the version of the Mission Index that was active at the time of pool issuance (the version used to calculate that pool's Mission Index disclosures).¹

- Mission Index **v1.0**: Fannie Mae pools issued from Jan-2010 through Feb-2024.
 - Mission Index **v1.1**: Fannie Mae pools issued beginning in Mar-2024.
 - The Minority Borrower criterion will not be estimated for Mission Index v1.0. Users will be able to estimate the representation of the other seven v1.0 criteria in their portfolio holdings.
-

The v1.0 Disclosure Supplement and CUSIP mappings capture Fannie Mae v1.0 Level 1 securities


- No updates or changes will be made to the v1.0 Disclosure Supplement and CUSIP mappings. Therefore, no changes need to be made to the v1.0DSCL and v1.0CUSIPs tabs in the MICA Excel-based tool.

¹ Mission Index disclosures are comprised of the Mission Criteria Share (MCS) and Mission Density Score (MDS).



Access the MICA Engine in Data Dynamics

The MICA Engine automates the MICA calculation methodology for portfolios of eligible Fannie Mae and Freddie Mac CUSIPs. Interested users can log in or create a free account in [Data Dynamics](#).

 Data Dynamics

MBS

REPORTS

MESSAGES 5


DOWNLOAD DATA

RESOURCES

Mortgage-Backed Securities (MBS)


Single-Family

Multifamily




Prepayment Snapshot

A tool showing cohort-level prepayment speeds with filters and history




Benchmark CPR® Dashboard

A tool allowing market participants to view Fannie Mae's proprietary prepayment metric, the Benchmark CPR®, for sellers and servicers.




MBS Cohort Analyzer

Analyze historical prepayments for user-defined agency MBS collateral cohorts




MBS Pool Details

This dashboard provides enhanced reporting of MBS pool-level characteristics.




MBS Float Dashboard

A dashboard providing insight into the outstanding float of MBS by coupon/vintage cohort, including balance, characteristics, and prepayment speeds.




Forbearance and Delinquency Dashboard

MBS pool-level reporting on the share of loans in forbearance and the share of loans in delinquency



Structured Transactions Issuance Analytics

The purpose of this tableau report is to provide market participants with comprehensive daily volumes and analytics for Structured Transactions products (SUPERS, Megs, Remics)



Mission Index Criteria Attribution® (MICA) Engine




This application estimates the representation of specific populations of Mission borrowers in a portfolio using the MICA methodology.



Upload Portfolio Detail to the Interface

- Upload your portfolio detail to the interface in .csv format.
- The file must contain a header row with columns in the following order:
 - CUSIP
 - Owned original face
 - Portfolio ID/name (optional)
- Maximum of 10,000 CUSIPs and 100 unique portfolio IDs (1MB size limit).
- **Any** CUSIPs can be uploaded, but only **eligible** CUSIPs will be processed by the MICA Engine.
- The audit log provides detail on CUSIP-level eligibility.
- Users have the option to upload a new input file or proceed to the portfolio summary based on the existing input file.

	A	B	C
1	CUSIP	Owned Original Face	Portfolio ID
2	3140QUD37	143,882,525	Fannie Mae Portfolio A
3	3140QUD60	99,125,541	Fannie Mae Portfolio A
4	3140QUD78	99,496,567	Fannie Mae Portfolio A
5	3140QUEA0	45,663,354	Fannie Mae Portfolio A
6	3140QUDZ6	80,829,152	Fannie Mae Portfolio A
7	3140QUJ56	126,948,223	Fannie Mae Portfolio A
8	3140QUJ72	103,050,031	Fannie Mae Portfolio A
9	3140QUJ98	36,947,133	Fannie Mae Portfolio A
10	3140QUPN0	91,403,946	Fannie Mae Portfolio A
11	3140QUPY6	127,573,127	Fannie Mae Portfolio A

Name	Status	Date modified	Type
 Fannie Mae Portfolio A	 	3/16/2025 4:27 PM	Microsoft Excel Comma Separated Values File

Fannie Mae Portfolio A.csv 03/16/2025 04:46 PM			Audit Log Run New Data Calculate Summary
Portfolio Name	Total CUSIPs	Not Scored	
Fannie Mae Portfolio A	50	6	

CUSIPs that are not Fannie Mae MBS, Supers, and Megs or Freddie Mac MBS and Supers issued in or after January 2010 or if they are issued after the end of the most recent quarterly disclosure are ineligible. The audit log will provide additional guidance if the inputs provided do not conform to expectations.



View combined results or select a specific portfolio


Review aggregated portfolio-level MICA calculations

Total Pools Uploaded: Total portfolio-level CUSIP count
Total Pools Scored: Total eligible CUSIPs in portfolio


Scored Current UPB: The owned UPB of CUSIPs that was successfully scored

Scored Current Holdings

Loan: The estimated current count of loans that was successfully scored

Portfolio List: Combined Portfolio 

Portfolio Current Ownership	Mission Index v1.0	Mission Index v1.1	Mission Index v1.0 & v1.1
Pool Count	45	38	1
Scored Current UPB (Owned)	\$21,885,151	\$36,014,138	\$970,962
Scored Current Holdings Loan (Est)	82.9	132.0	2.5

 Loan counts are rounded to the first decimal point. If loan count appears as 0.0 but percentages are populated, this signifies that loan counts are small and are non-zero.

Download portfolio-level graphics or CUSIP-level detail

Summary of uploaded pools by Mission Index version (including unscored pools)

Summary of Mission loans by Mission Index version as a share of all loans in the portfolio

Summary of criteria-level loan estimates by Mission Index version

Pools Scored by Mission Index Version

Combined Portfolio

Mission Index Version	Count	Percentage
Mission Index 1.0 - 45	45	55%
Mission Index 1.1 - 38	38	38%
Mission Index 1.0 & 1.1 - 1	1	1%
Unscored Pools - 6	6	6%

E

Mission Loans as a Percent of All Loans by Mission Index Version

Combined Portfolio

■ Mission Index 1.0 - 69.6%

■ Mission Index 1.1 - 59.1%

Mission Index Version	Percentage
Mission Index 1.0	69.6%
Mission Index 1.1	59.1%
Unlabeled	71.3%

F

Mission Index Criteria Distribution (By Loan Counts)

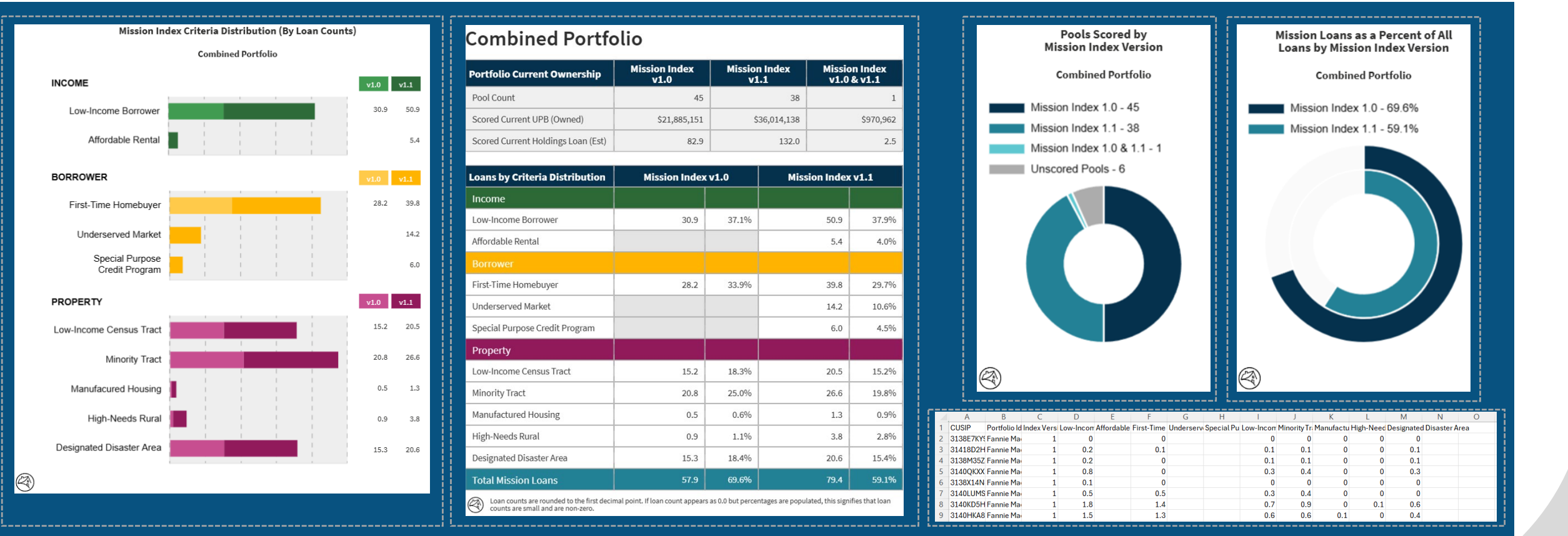
Combined Portfolio

Category	Criteria	v1.0	v1.1
INCOME	Low-Income Borrower	30.9	50.9
	Affordable Rental	5.4	
BORROWER	First-Time Homebuyer	28.2	39.8
	Underserved Market	14.2	

Download MICA Portfolio Analytics for Use

Combined and portfolio-specific components of the MICA report can be downloaded individually for use.

"Combined Portfolio " Pack CUSIP Report Audit Log Run New Data





Access the MICA Excel-based Tool

The [MICA Excel-based tool](#) is designed to be downloaded to the user's machine, performs all calculations locally, and needs to be updated quarterly with the most recent disclosure supplement. It can only accommodate Fannie Mae MBS.

Mission Index Criteria Attribution (MICA) Resources

The MICA disclosure supplement empowers investors to quantify the estimated impact of their portfolio investments on specific populations of Mission borrowers. The **MICA Engine**, available through Data Dynamics®, offers a simple solution to upload your portfolio for instant results.

Use the MICA Engine for Fannie Mae MBS, Supers and Megs and Freddie Mac MBS and Supers.

- MICA v1.0/v1.1 Disclosure Supplements (available in **PoolTalk®** under Data Collections > Social Disclosures)
- **Methodology** 
- **User guide** 
- **MICA Engine**
- **Excel-based tool**



Update Portfolio Detail for Estimation

To update portfolio detail:

1. Select the **portfolio** tab.
2. Delete the contents of the yellow cells.
3. For each security in the portfolio, **paste the following attributes** in the yellow cells:

- 1 CUSIP
- 2 Owned original face amount in dollars
- 3 Current security factor of the security in decimals

4. Confirm that the count in cell E1 equals the expected number of portfolio securities.

- Owned original face amount and current security factor must be populated for all securities to estimate current criteria representation.
- The spreadsheet can support a portfolio with up to 2,500 securities.
- Although any type of security can be included, only Fannie Mae pools will be analyzed. The spreadsheet will automatically ignore ineligible securities.

1	CUSIP	Owned Original Face	Current Factor		100
2	3140K25X8	\$ 1,074,453.02	0.93070612		
3	3140LNYM3	\$ 1,062,481.33	0.94119301		
4	3138WK2T1	\$ 3,947,151.59	0.25334725		
5	3138MJY6	\$ 2,386,795.71	0.41897176		
6	3138YNDH7	\$ 11,497,969.23	0.08697188		
7	3140M5BK0	\$ 1,084,815.94	0.92181536		
8	3140QBGY8	\$ 2,366,440.63	0.42257557		
9	3138A8RA6	\$ 4,456,786.77	0.2243769		
10	3138WW4R7	\$ 3,345,254.59	0.29893091		
11	3140QKPW2	\$ 1,187,598.98	0.84203508		
12	3138AN2C6	\$ 16,831,421.03	0.05941269		
13	3140LQZB9	\$ 1,545,274.80	0.64713409		
14	3140L8MP2	\$ 1,182,842.98	0.84542075		
15	3140QPPJ0	\$ 1,051,380.48	0.95113046		
16	3140LQZ60	\$ 1,254,524.65	0.79711467		
17	3140N6U67	\$ 1,003,119.17	0.99689053		
18	3140MSW50	\$ 1,014,572.38	0.98563692		
19	3140KKHM9	\$ 1,701,911.55	0.5875746		
20	3140JPCB9	\$ 7,738,817.99	0.1292187		
21	3140F5C92	\$ 3,939,525.91	0.25383765		
22	31418EDC1	\$ 1,041,343.28	0.96029813		
23	3140K32H4	\$ 1,456,009.13	0.68680888		
24	3138LXXZ7	\$ 3,995,929.27	0.25025468		
25	3138Y2QN6	\$ 2,269,139.09	0.44069577		
26	3138XUZ21	\$ 3,302,627.59	0.30278921		
27	3138MJYJ2	\$ 14,008,262.63	0.07138644		
28	3140MNY75	\$ 1,010,214.88	0.98988841		
29	3140HALH1	\$ 2,089,914.95	0.47848837		
30	3140LPNB4	\$ 1,163,987.10	0.85911605		
31	3138YKXZ1	\$ 3,081,745.49	0.32449143		
32	3140KMWH9	\$ 1,335,689.95	0.74867674		
33	31417GAX4	\$ 3,414,781.33	0.29284452		
34	3138AG2Y3	\$ 4,882,764.10	0.20480203		
35	3140F86W2	\$ 5,748,118.81	0.17396996		
36	3140KSU39	\$ 1,188,753.77	0.8412171		
37	3140LWKH9	\$ 1,094,028.81	0.91405271		
38	3140KLHX3	\$ 1,903,220.26	0.52542526		
39	3138LUFE0	\$ 4,610,267.57	0.21690715		
40	3140E0LE3	\$ 9,612,756.82	0.10402843		
41	3138YYL92	\$ 2,654,885.70	0.37666405		
42	31417GE69	\$ 5,417,748.79	0.18457851		
		instructions	summary	portfolio	v1.0DSCL v1.0CUSIPs



Portfolio Estimation Summary

The summary tab provides the portfolio impact estimates for both v1.0 and v1.1 pools.

	Mission Index - Version 1.0			Mission Index - Version 1.1	
A	Waterfall Validation	PASS	E	Waterfall Validation	NONE
B	Scoring Analysis			Scoring Analysis	
	Total Pool Count	100		Total Pool Count	100
	Scored Pool Count	100		Scored Pool Count	-
	Scored Percent (By Pool Count)	100.0%		Scored Percent (By Pool Count)	0.0%
	Total Current UPB (Owned)	\$ 100,000,000		Total Current UPB (Owned)	\$ 100,000,000
	Scored Current UPB (Owned)	\$ 100,000,000		Scored Current UPB (Owned)	\$ -
	Scored Percent (By Owned Current UPB)	100.0%		Scored Percent (By Owned Current UPB)	0.0%
	Scored Issuance Loan Count	23,389		Scored Issuance Loan Count	-
	Scored Current Holdings Loan Count (Est)	554.2		Scored Current Holdings Loan Count (Est)	-
C	Estimated Loan Counts (Issuance, Full Ownership)			Estimated Loan Counts (Issuance, Full Ownership)	
	Mission Loans	13,287.0		Mission Loans	-
	Income			Income	-
	Income: Low Income Borrower (≤80 AMI)	6,570.6		Income: Low Income Borrower (≤80 AMI)	-
	Income: Affordable Rental			Income: Affordable Rental	-
	Borrower			Borrower	-
	Borrower: FTHB (≤120 AMI)	3,728.4		Borrower: FTHB (≤100 AMI)	-
	Borrower: Underserved Markets			Borrower: Underserved Markets	-
	Borrower: Special Purpose Credit Program			Borrower: Special Purpose Credit Program	-
	Property			Property	-
	Property: Low Income Area (≤120 AMI)	2,619.6		Property: Low Income Area (≤100 AMI)	-
	Property: Minority Tract (≤120 AMI)	3,265.4		Property: Minority Tract (≤100 AMI)	-
	Property: Manufactured Housing (≤120 AMI)	112.6		Property: Manufactured Housing (≤100 AMI)	-
	Property: High Needs Rural (≤120 AMI)	227.2		Property: High Needs Rural	-
	Property: Designated Disaster Area (≤120 AMI)	3,155.3		Property: Designated Disaster Area (≤100 AMI)	-
D	Estimated Loan Counts (Current, Portfolio Ownership)			Estimated Loan Counts (Current, Portfolio Ownership)	
	Mission Loans	339.5		Mission Loans	-
	Income			Income	-
	Income: Low Income Borrower (≤80 AMI)	212.2		Income: Low Income Borrower (≤80 AMI)	-
	Income: Affordable Rental			Income: Affordable Rental	-
	Borrower			Borrower	-
	Borrower: FTHB (≤120 AMI)	85.0		Borrower: FTHB (≤100 AMI)	-
	Borrower: Underserved Markets			Borrower: Underserved Markets	-
	Borrower: Special Purpose Credit Program			Borrower: Special Purpose Credit Program	-
	Property			Property	-
	Property: Low Income Area (≤120 AMI)	75.8		Property: Low Income Area (≤100 AMI)	-
	Property: Minority Tract (≤120 AMI)	85.9		Property: Minority Tract (≤100 AMI)	-
	Property: Manufactured Housing (≤120 AMI)	4.0		Property: Manufactured Housing (≤100 AMI)	-
	Property: High Needs Rural (≤120 AMI)	8.0		Property: High Needs Rural	-
	Property: Designated Disaster Area (≤120 AMI)	82.0		Property: Designated Disaster Area (≤100 AMI)	-
<div> <div>instructions</div> <div>summary</div> <div>portfolio</div> <div>v1.0DSCL</div> <div>v1.0CUSIPs</div> <div>v1.0Engine</div> <div>v1.1DSCL</div> <div>v1.1CUSIPs</div> <div>v1.1Engine</div> <div>updates</div> </div>					

- A Waterfall Validation** in cell B2 will show PASS in green to confirm that each pool was mapped to one cohort and that the output is valid.
- B Scoring Analysis** is a summary of the pools analyzed in each version of the Mission Index.
- Total Pool Count:** total number of pools in the portfolio
 - Scored Pool Count:** total number of v1.0 pools in the portfolio
 - Scored Percent (By Pool Count):** v1.0 pools as a percentage of all portfolio pools
 - Total Current UPB (Owned):** total current UPB of all portfolio pools adjusted for ownership percentage
 - Scored Current UPB (Owned):** total current UPB of v1.0 portfolio pools adjusted for ownership percentage
 - Scored Percent (By Owned Current UPB):** total current UPB of v1.0 portfolio pools adjusted for ownership percentage as a percent of the current UPB of all portfolio pools adjusted for ownership percentage
 - Scored Issuance Loan Count:** total loan count at issuance of v1.0 portfolio pools
 - Scored Current Holdings Loan Count (Est):** total loan count of v1.0 portfolio pools adjusted for current factor and ownership percentage
- C Estimated Loan Counts (Issuance, Full Ownership)** is a summary of the estimated representation of Mission Criteria in the portfolio pools **at issuance and assuming 100% ownership of the pool**.
- This sample portfolio of 100 pools is estimated to contain 13,287.0 Mission loans at issuance. At issuance, the portfolio pools contained approx. 6,570.6 loans to low-income borrowers and approx. 3,728.4 loans to first-time homebuyers with incomes ≤ 120 AMI. The portfolio pools also contained approx. 112.6 loans for manufactured housing.
- D Estimated Loan Counts (Current, Portfolio Ownership)** is a summary of the **current** estimated representation of Mission Criteria in the portfolio pools **assuming actual portfolio ownership percentage of the pool**.
- This sample portfolio of 100 pools is estimated to contain 339.5 Mission loans as of the most recent disclosure, adjusted for ownership percentage. Adjusted for ownership, the portfolio currently supports approx. 212.2 low-income borrowers and approx. 85.0 first-time homebuyers with incomes ≤ 120 AMI. The portfolio supports approx. 4.0 loans for manufactured housing.
- E Mission Index - Version 1.1** summary provides estimation output for the portion of the portfolio pools issued under Mission Index v1.1.



v1.1 Disclosure Supplement and CUSIP Mappings

Users can follow these instructions to update the relevant MICA v1.1 tabs in the Excel tool when available for Fannie Mae Mission Index v1.1 pools.

v1.1 Disclosure Supplement

1. Select the **v1.1DSCL** tab.
2. Delete the contents of columns A through Q.
3. Copy the contents including headers of the disclosure supplement file when available.
4. Paste the copied disclosure supplement file contents into columns A through Q of the v1.1DSCL tab.
5. Confirm that row 1 contains the disclosure supplement file header.

v1.1 CUSIP Mapping

1. Select the **v1.1CUSIPs** tab.
2. Delete the contents of columns A through I.
3. Copy the contents including headers of the CUSIP mapping file when available.
4. Paste the copied CUSIP mapping file contents into columns A through I of the v1.1CUSIPs tab.
5. Confirm that row 1 contains the CUSIP mapping file header.





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