

BlackRock U.S. Mortgage Portfolio Institutional Shares | MSUMX Annual Shareholder Report — April 30, 2025



This annual shareholder report contains important information about BlackRock U.S. Mortgage Portfolio (the “Fund”) for the period of May 1, 2024 to April 30, 2025. You can find additional information about the Fund at blackrock.com/fundreports. You can also request this information by contacting us at (800) 441-7762.

This report describes changes to the Fund that occurred during the reporting period.

What were the Fund costs for the last year?

(based on a hypothetical \$10,000 investment)

Class name	Costs of a \$10,000 investment	Costs paid as a percentage of a \$10,000 investment
Institutional Shares	\$47	0.45%

How did the Fund perform last year?

- For the reporting period ended April 30, 2025, the Fund's Institutional Shares returned 10.22%.
- For the same period, the Bloomberg U.S. Aggregate Bond Index returned 8.02% and the Bloomberg U.S. Mortgage-Backed Securities Index returned 8.99%.

What contributed to performance?

The Fund's allocation to non-agency residential mortgage-backed securities (“RMBS”), including subsectors such as legacy RMBS, single family rentals, and non-performing or re-performing loans made the largest contribution to performance. Positions in commercial mortgage-backed securities, particularly AAA rated issues and single-asset-single-borrower securities, were also additive. An allocation to agency collateralized mortgage obligations further helped results.

What detracted from performance?

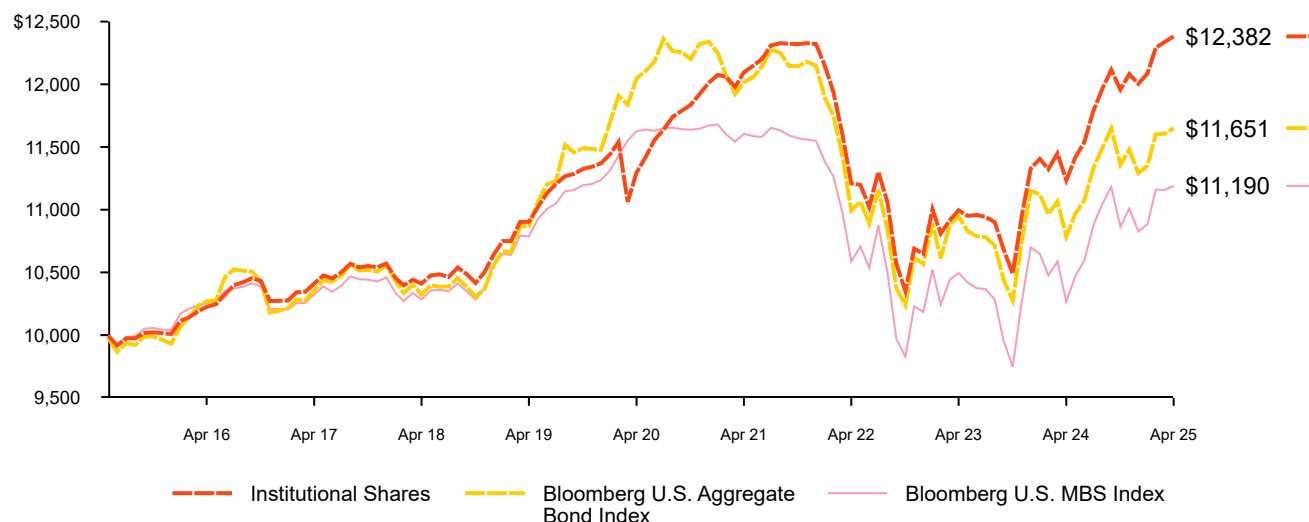
An underweight in agency mortgage-backed passthrough securities detracted, as did duration management strategies in the third quarter of 2024 and the first quarter of 2025. (Duration is a measure of interest rate sensitivity.)

The views expressed reflect the opinions of BlackRock as of the date of this report and are subject to change based on changes in market, economic or other conditions. These views are not intended to be a forecast of future events and are no guarantee of future results.

Fund performance

Cumulative performance: May 1, 2015 through April 30, 2025

Initial Investment of \$10,000



See “Average annual total returns” for additional information on fund performance.

Average annual total returns

	1 Year	5 Years	10 Years
Institutional Shares.....	10.22%	1.85%	2.16%
Bloomberg U.S. Aggregate Bond Index.....	8.02	(0.67)	1.54
Bloomberg U.S. MBS Index.....	8.99	(0.76)	1.13

Key Fund statistics

Net Assets.....	\$396,751,648
Number of Portfolio Holdings.....	904
Net Investment Advisory Fees.....	\$1,545,206
Portfolio Turnover Rate.....	285%

The Fund has added the Bloomberg U.S. Aggregate Bond Index in response to new regulatory requirements.

On September 17, 2018, the Fund acquired all of the assets, subject to the liabilities, of BlackRock U.S. Mortgage Portfolio (the "Predecessor Fund"), a series of Managed Account Series, through a tax-free reorganization (the "Reorganization"). The Predecessor Fund is the performance and accounting survivor of the Reorganization.

Past performance is not an indication of future results. Performance results may include adjustments made for financial reporting purposes in accordance with U.S. generally accepted accounting principles. Performance results do not reflect the deduction of taxes that a shareholder would pay on fund distributions or on the redemption or sale of fund shares. Visit blackrock.com for more recent performance information.

What did the Fund invest in?

(as of April 30, 2025)

Portfolio composition

Investment Type	Percent of Total Investments ^(a)
Non-Agency Mortgage-Backed Securities.....	47.1%
U.S. Government Sponsored Agency Securities.....	30.4
Asset-Backed Securities.....	22.5

Credit quality allocation

Credit Rating ^(b)	Percent of Total Investments ^(a)
AAA/Aaa ^(c)	37.1%
AA/Aa.....	10.7
A.....	0.7
BBB/Baa.....	2.0
BB/Ba.....	1.5
B.....	0.8
CCC/Caa.....	3.8
CC/Ca.....	2.4
C.....	1.5
D.....	0.1
N/R.....	39.4

^(a) Excludes short-term securities, short investments and options, if any.

^(b) For purposes of this report, credit quality ratings shown above reflect the highest rating assigned by either S&P Global Ratings or Moody's Investors Service, Inc. if ratings differ. These rating agencies are independent, nationally recognized statistical rating organizations and are widely used. Investment grade ratings are credit ratings of BBB/Baa or higher. Below investment grade ratings are credit ratings of BB/Ba or lower. Investments designated N/R are not rated by either rating agency. Unrated investments do not necessarily indicate low credit quality. Credit quality ratings are subject to change.

^(c) The investment adviser evaluates the credit quality of unrated investments based upon certain factors including, but not limited to, credit ratings for similar investments and financial analysis of sectors, individual investments and/or issuers. Using this approach, the investment adviser has deemed unrated U.S. Government Sponsored Agency Securities and U.S. Treasury Obligations to be of similar credit quality as investments rated AAA/Aaa.

Material fund changes

This is a summary of planned changes to the Fund since April 30, 2024. For more complete information, you may review the Fund's next prospectus, which we expect to be available approximately 120 days after April 30, 2025 at blackrock.com/fundreports or upon request by contacting us at (800) 441-7762.

On June 5, 2025, the Fund's Board approved a change in the name of the Fund to BlackRock Securitized Income Fund and certain changes to the Fund's investment strategies and investment process, including a change to the Fund's 80% policy. Under normal circumstances, the Fund will invest at least 80% of the Fund's net assets, plus any borrowings for investment purposes, in securitized assets and derivatives that provide investment exposure to such securities or to one or more market risk factors associated with such assets. These changes are expected to become effective on or about August 5, 2025. Additionally, the Board approved a subsequent reorganization of the Fund into a newly created ETF to be named iShares Securitized Income Active ETF. The newly created ETF will have an identical investment objective and identical investment strategies and policy as the repositioned Fund. The reorganization is expected to close as of the close of trading on the New York Stock Exchange on January 23, 2026.

Additional information

If you wish to view additional information about the Fund, including but not limited to financial statements, the Fund's prospectus, and proxy voting policies and procedures, please visit blackrock.com/fundreports. For proxy voting records, visit blackrock.com/proxyrecords.

Householding

The Fund will mail only one copy of shareholder documents, including prospectuses, annual and semi-annual reports and proxy statements, to shareholders with multiple accounts at the same address. This practice is commonly called “householding” and is intended to reduce expenses and eliminate duplicate mailings of shareholder documents. Mailings of your shareholder documents may be househanded indefinitely unless you instruct us otherwise. If you do not want the mailing of these documents to be combined with those for other members of your household, please call the Fund at (800) 441-7762.

The Fund is not sponsored, endorsed, issued, sold, or promoted by Bloomberg Index Services Limited and its affiliates, nor does this company make any representation regarding the advisability of investing in the Fund. BlackRock is not affiliated with the company listed above.

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