

**MANAGED ACCOUNT SERIES II**  
BlackRock U.S. Mortgage Portfolio  
(the “Fund”)

**Supplement dated October 29, 2021 to  
the Summary Prospectus, the Prospectus and the Statement of Additional Information of the Fund,  
each dated August 27, 2021, as supplemented to date**

The Board of Trustees of Managed Account Series II approved certain changes to the Fund’s fundamental investment restrictions, which required shareholder approval. At a special meeting held on October 26, 2021, shareholders of the Fund approved the changes to the Fund’s fundamental investment restrictions. Such changes include an amendment to the Fund’s concentration policy to provide that the Fund will concentrate (i.e., invest more than 25% of its assets) in non-agency mortgage-backed securities.

**Effective immediately, the following changes are made to the Fund’s Summary Prospectus, Prospectus and Statement of Additional Information:**

**The first sentence of the third paragraph in the section of the Summary Prospectus entitled “Key Facts About BlackRock U.S. Mortgage Portfolio—Principal Investment Strategies of the Fund,” the first sentence of the third paragraph in the section of the Prospectus entitled “Fund Overview—Key Facts About BlackRock U.S. Mortgage Portfolio—Principal Investment Strategies of the Fund” and the first sentence of the sixth paragraph in the section of the Prospectus entitled “Details About the Fund—How the Fund Invests—Principal Investment Strategies” are deleted in their entirety and replaced with the following:**

The Fund may invest in non-agency securities issued by banks and other financial institutions, including non-agency mortgage-related securities.

**The seventh sentence of the sixth paragraph in the section of the Statement of Additional Information entitled “Investment Objectives and Policies” is deleted in its entirety and replaced with the following:**

The Fund may invest in non-agency securities issued by banks and other financial institutions, including non-agency mortgage-related securities.

**The section of the Statement of Additional Information entitled “Investment Restrictions” is deleted in its entirety and replaced with the following:**

## **II. Investment Restrictions**

The Trust, on behalf of the Fund, has adopted restrictions and policies relating to the investment of the Trust’s assets and its activities. Certain of the restrictions are fundamental policies of the Fund and may not be changed without the approval of the holders of a majority of the Fund’s outstanding voting securities (which for this purpose and under the Investment Company Act means the lesser of (i) 67% of the shares represented at a meeting at which more than 50% of the outstanding shares are represented or (ii) more than 50% of the outstanding shares). The Trust, on behalf of the Fund, has also adopted certain non-fundamental investment restrictions which may be changed by the Board of Trustees without shareholder approval.

Set forth below are the fundamental and non-fundamental investment restrictions of the Fund. Unless otherwise provided, all references below to the assets of the Fund are in terms of the current market value.

Under these fundamental investment restrictions, the Fund may not:

1. Concentrate its investments in a particular industry, as that term is used in the Investment Company Act; provided, that the Fund will invest at least 25% of its total assets in non-agency mortgage-backed securities, which for purposes of this investment restriction the Fund will treat as an industry or group of industries.

2. Borrow money, except as permitted under the Investment Company Act.
3. Issue senior securities to the extent such issuance would violate the Investment Company Act.
4. Purchase or hold real estate, except the Fund may purchase and hold securities or other instruments that are secured by, or linked to, real estate or interests therein, securities of real estate investment trusts, mortgage-related securities and securities of issuers engaged in the real estate business, and the Fund may purchase and hold real estate as a result of the ownership of securities or other instruments.
5. Underwrite securities issued by others, except to the extent that the sale of portfolio securities by the Fund may be deemed to be an underwriting or as otherwise permitted by applicable law.
6. Purchase or sell commodities or commodity contracts, except as permitted by the Investment Company Act.
7. Make loans to the extent prohibited by the Investment Company Act.
8. Make any investment inconsistent with the Fund's classification as a diversified company under the Investment Company Act.

***Notations Regarding the Fund's Fundamental Investment Restrictions***

The following notations are not considered to be part of the Fund's fundamental investment restrictions and are subject to change without shareholder approval.

With respect to the fundamental policy relating to concentration set forth in (1) above, the Investment Company Act does not define what constitutes "concentration" in an industry. The Commission staff has taken the position that investment of 25% or more of a fund's total assets in one or more issuers conducting their principal activities in the same industry or group of industries constitutes concentration. It is possible that interpretations of concentration could change in the future. The policy in (1) above will be interpreted to refer to concentration as that term may be interpreted from time to time. The policy also will be interpreted to permit investment without limit in the following: securities of the U.S. government and its agencies or instrumentalities; securities of state, territory, possession or municipal governments and their authorities, agencies, instrumentalities or political subdivisions; and repurchase agreements collateralized by any such obligations. Accordingly, issuers of the foregoing securities will not be considered to be members of any industry. There also will be no limit on investment in issuers domiciled in a single jurisdiction or country. Finance companies will be considered to be in the industries of their parents if their activities are primarily related to financing the activities of the parents. Each foreign government will be considered to be a member of a separate industry. With respect to the Fund's industry classifications, the Fund currently utilizes any one or more of the industry sub-classifications used by one or more widely recognized market indexes or rating group indexes, and/or as defined by Fund management. The policy also will be interpreted to give broad authority to the Fund as to how to classify issuers within or among industries.

With respect to the fundamental policy relating to borrowing money set forth in (2) above, the Investment Company Act permits the Fund to borrow money in amounts of up to one-third of the Fund's total assets from banks for any purpose, and to borrow up to 5% of the Fund's total assets from banks or other lenders for temporary purposes. (The Fund's total assets include the amounts being borrowed.) In addition, the Fund has received an exemptive order from the SEC permitting it to borrow through the Interfund Lending Program (discussed below), subject to the conditions of the exemptive order. To limit the risks attendant to borrowing, the Investment Company Act requires the Fund to maintain at all times an "asset coverage" of at least 300% of the amount of its borrowings. Asset coverage means the ratio that the value of the Fund's total assets (including amounts borrowed), minus liabilities other than borrowings, bears to the aggregate amount of all borrowings. Borrowing money to increase portfolio holdings is known as "leveraging." Certain trading practices and

investments, such as reverse repurchase agreements, may be considered to be borrowings or involve leverage and thus are subject to the Investment Company Act restrictions. In accordance with Commission staff guidance and interpretations, when the Fund engages in such transactions, the Fund instead of maintaining asset coverage of at least 300%, may segregate or earmark liquid assets, or enter into an offsetting position, in an amount at least equal to the Fund's exposure, on a mark-to-market basis, to the transaction (as calculated pursuant to requirements of the Commission). The policy in (2) above will be interpreted to permit the Fund to engage in trading practices and investments that may be considered to be borrowing or to involve leverage to the extent permitted by the Investment Company Act and to permit the Fund to segregate or earmark liquid assets or enter into offsetting positions in accordance with the Investment Company Act. Short-term credits necessary for the settlement of securities transactions and arrangements with respect to securities lending will not be considered to be borrowings under the policy. Practices and investments that may involve leverage but are not considered to be borrowings are not subject to the policy.

With respect to the fundamental policy relating to underwriting set forth in (5) above, the Investment Company Act does not prohibit the Fund from engaging in the underwriting business or from underwriting the securities of other issuers; in fact, in the case of diversified funds, the Investment Company Act permits the Fund to have underwriting commitments of up to 25% of its assets under certain circumstances. Those circumstances currently are that the amount of the Fund's underwriting commitments, when added to the value of the Fund's investments in issuers where the Fund owns more than 10% of the outstanding voting securities of those issuers, cannot exceed the 25% cap. A fund engaging in transactions involving the acquisition or disposition of portfolio securities may be considered to be an underwriter under the Securities Act of 1933, as amended (the "Securities Act"). Although it is not believed that the application of the Securities Act provisions described above would cause the Fund to be engaged in the business of underwriting, the policy in (5) above will be interpreted not to prevent the Fund from engaging in transactions involving the acquisition or disposition of portfolio securities, regardless of whether the Fund may be considered to be an underwriter under the Securities Act or is otherwise engaged in the underwriting business to the extent permitted by applicable law.

With respect to the fundamental policy relating to lending set forth in (7) above, the Investment Company Act does not prohibit the Fund from making loans (including lending its securities); however, Commission staff interpretations currently prohibit funds from lending more than one-third of their total assets (including lending its securities), except through the purchase of debt obligations or the use of repurchase agreements. In addition, collateral arrangements with respect to options, forward currency and futures transactions and other derivative instruments (as applicable), as well as delays in the settlement of securities transactions, will not be considered loans.

The Fund is currently classified as a diversified fund under the Investment Company Act. This means that the Fund may not purchase securities of an issuer (other than (i) obligations issued or guaranteed by the U.S. government, its agencies or instrumentalities and (ii) securities of other investment companies) if, with respect to 75% of its total assets, (a) more than 5% of the Fund's total assets would be invested in securities of that issuer or (b) the Fund would hold more than 10% of the outstanding voting securities of that issuer. With respect to the remaining 25% of its total assets, the Fund can invest more than 5% of its assets in one issuer. Under the Investment Company Act, the Fund cannot change its classification from diversified to non-diversified without shareholder approval.

Under its non-fundamental investment restrictions, which may be changed by the Board of Trustees without shareholder approval, the Fund may not:

a. Purchase securities of other investment companies, except to the extent permitted by the Investment Company Act. As a matter of policy, however, the Fund will not purchase shares of any registered open-end investment company or registered unit investment trust, in reliance on Section 12(d)(1)(F) or (G) (the "fund of funds" provisions) of the Investment Company Act, at any time the Fund has knowledge that its shares are purchased by another investment company investor in reliance on the provisions of subparagraph (G) of Section 12(d)(1).

b. Make short sales of securities or maintain a short position, except to the extent permitted by the Fund's Prospectus and Statement of Additional Information, as amended from time to time, and applicable law.

Unless otherwise indicated, all limitations under the Fund's fundamental or non-fundamental investment restrictions apply only at the time that a transaction is undertaken. Any change in the percentage of the Fund's assets invested in certain securities or other instruments resulting from market fluctuations or other changes in the Fund's total assets will not require the Fund to dispose of an investment until BlackRock determines that it is practicable to sell or close out the investment without undue market or tax consequences.

**Shareholders should retain this Supplement for future reference.**

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## Summary Prospectus

### Managed Account Series II | Investor and Institutional Shares

- **BlackRock U.S. Mortgage Portfolio**

Investor A: BMPAX • Investor C: BMPCX • Institutional: MSUMX

Before you invest, you may want to review the Fund's prospectus, which contains more information about the Fund and its risks. You can find the Fund's prospectus (including amendments and supplements), reports to shareholders and other information about the Fund, including the Fund's statement of additional information, online at <http://www.blackrock.com/prospectus>. You can also get this information at no cost by calling (800) 441-7762 or by sending an e-mail request to [prospectus.request@blackrock.com](mailto:prospectus.request@blackrock.com), or from your financial professional. The Fund's prospectus and statement of additional information, both dated August 27, 2021, as amended and supplemented from time to time, are incorporated by reference into (legally made a part of) this Summary Prospectus.

*This Summary Prospectus contains information you should know before investing, including information about risks. Please read it before you invest and keep it for future reference.*

*The Securities and Exchange Commission has not approved or disapproved these securities or passed upon the adequacy of this Summary Prospectus. Any representation to the contrary is a criminal offense.*

**Not FDIC Insured • May Lose Value • No Bank Guarantee**

# Summary Prospectus

## Key Facts About BlackRock U.S. Mortgage Portfolio

### Investment Objective

The investment objective of the BlackRock U.S. Mortgage Portfolio (the “Fund”) is to seek high total return.

### Fees and Expenses of the Fund

This table describes the fees and expenses that you may pay if you buy, hold and sell shares of the Fund. **You may pay other fees, such as brokerage commissions and other fees to your financial professional or your selected securities dealer, broker, investment adviser, service provider or industry professional (including BlackRock Advisors, LLC (“BlackRock”) and its affiliates) (each a “Financial Intermediary”), which are not reflected in the table and example below.** You may qualify for sales charge discounts if you and your family invest, or agree to invest in the future, at least \$25,000 in the fund complex advised by BlackRock or its affiliates. More information about these and other discounts is available from your Financial Intermediary and in the “Details About the Share Classes” and the “Intermediary-Defined Sales Charge Waiver Policies” sections on pages 26 and A-1, respectively, of the Fund’s prospectus and in the “Purchase of Shares” section on page II-86 of Part II of the Fund’s Statement of Additional Information.

<b>Shareholder Fees (fees paid directly from your investment)</b>	<b>Investor A Shares</b>	<b>Investor C Shares</b>	<b>Institutional Shares</b>
Maximum Sales Charge (Load) Imposed on Purchases (as percentage of offering price)	4.00%	None	None
Maximum Deferred Sales Charge (Load) (as percentage of offering price or redemption proceeds, whichever is lower)	None <sup>1</sup>	1.00% <sup>2</sup>	None
<b>Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment)</b>	<b>Investor A Shares</b>	<b>Investor C Shares</b>	<b>Institutional Shares</b>
Management Fee <sup>3</sup>	0.40%	0.40%	0.40%
Distribution and/or Service (12b-1) Fees	0.25%	1.00%	None
Other Expenses	0.25%	0.26%	0.18%
Total Annual Fund Operating Expenses	0.90%	1.66%	0.58%
Fee Waivers and/or Expense Reimbursements <sup>3,4</sup>	(0.20)%	(0.21)%	(0.13)%
Total Annual Fund Operating Expenses After Fee Waivers and/or Expense Reimbursements <sup>3,4</sup>	0.70%	1.45%	0.45%

<sup>1</sup> A contingent deferred sales charge (“CDSC”) of 0.75% is assessed on certain redemptions of Investor A Shares made within 18 months after purchase where no initial sales charge was paid at the time of purchase as part of an investment of \$1,000,000 or more.

<sup>2</sup> There is no CDSC on Investor C Shares after one year.

<sup>3</sup> As described in the “Management of the Fund” section of the Fund’s prospectus beginning on page 43, BlackRock has contractually agreed to waive the management fee with respect to any portion of the Fund’s assets estimated to be attributable to investments in other equity and fixed-income mutual funds and exchange-traded funds managed by BlackRock or its affiliates that have a contractual management fee, through June 30, 2023. In addition, BlackRock has contractually agreed to waive its management fees by the amount of investment advisory fees the Fund pays to BlackRock indirectly through its investment in money market funds managed by BlackRock or its affiliates, through June 30, 2023. The contractual agreements may be terminated upon 90 days’ notice by a majority of the non-interested trustees of Managed Account Series II (the “Trust”) or by a vote of a majority of the outstanding voting securities of the Fund.

<sup>4</sup> As described in the “Management of the Fund” section of the Fund’s prospectus beginning on page 43, BlackRock has contractually agreed to waive and/or reimburse fees or expenses in order to limit Total Annual Fund Operating Expenses After Fee Waivers and/or Expense Reimbursements (excluding Dividend Expense, Interest Expense, Acquired Fund Fees and Expenses and certain other Fund expenses) to 0.70% (for Investor A Shares), 1.45% (for Investor C Shares) and 0.45% (for Institutional Shares) of average daily net assets through June 30, 2023. The contractual agreement may be terminated upon 90 days’ notice by a majority of the non-interested trustees of the Trust or by a vote of a majority of the outstanding voting securities of the Fund.

### Example:

This Example is intended to help you compare the cost of investing in the Fund with the cost of investing in other mutual funds. The Example assumes that you invest \$10,000 in the Fund for the time periods indicated and then redeem all of your shares at the end of those periods. The Example also assumes that your investment has a 5%

return each year and that the Fund's operating expenses remain the same. Although your actual costs may be higher or lower, based on these assumptions your costs would be:

	<b>1 Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>
Investor A Shares	\$469	\$656	\$860	\$1,446
Investor C Shares	\$248	\$503	\$882	\$1,745
Institutional Shares	\$ 46	\$173	\$311	\$ 713

You would pay the following expenses if you did not redeem your shares:

	<b>1 Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>
Investor C Shares	\$148	\$503	\$882	\$1,745

### **Portfolio Turnover:**

The Fund pays transaction costs, such as commissions, when it buys and sells securities (or "turns over" its portfolio). A higher portfolio turnover rate may indicate higher transaction costs and may result in higher taxes when shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses or in the Example, affect the Fund's performance. During the most recent fiscal year, the Fund's portfolio turnover rate was 1,196% of the average value of its portfolio.

### ***Principal Investment Strategies of the Fund***

The Fund invests primarily in mortgage-related securities. The securities in which the Fund may invest include U.S. government securities, U.S. government agency securities, securities issued by U.S. government instrumentalities and U.S. government-sponsored enterprises, and other mortgage-backed securities or mortgage-related securities issued by the U.S. government or by private issuers. Under normal circumstances, the Fund will invest at least 80% of its assets in mortgage-backed securities and other mortgage-related securities that are issued by issuers located in the United States.

The Fund seeks to achieve its investment objective by selecting securities of any maturity issued or guaranteed by the U.S. government, by various agencies of the U.S. government, by various instrumentalities that have been established or are sponsored by the U.S. government, or securities issued by banks or other financial institutions. Some of these securities are issued and/or guaranteed by the U.S. government and are supported by the full faith and credit of the United States. Other securities are issued or guaranteed by Federal agencies or government-sponsored enterprises and are not direct obligations of the United States, and are not backed by the full faith and credit of the United States, but involve sponsorship or guarantees by government agencies or enterprises.

The Fund may invest in non-agency securities issued by banks and other financial institutions, including up to 25% of its total assets in non-agency mortgage-related securities. Non-agency securities are not backed by the full faith and credit of the United States and do not involve sponsorship or guarantees by government agencies or enterprises. The Fund may invest in non-agency mortgage-related securities that are rated below investment grade (commonly known as "junk bonds") or securities determined by Fund management to be of similar quality. For purposes of determining a bond's credit rating, split rated bonds will be considered to have the higher credit rating.

The Fund may also participate in to be announced ("TBA") transactions and enter into dollar rolls. A TBA transaction is a method of trading mortgage-backed securities where the buyer and seller agree upon general trade parameters such as agency, settlement date, par amount and price at the time the contract is entered into but the mortgage-backed securities are delivered in the future, generally 30 days later. The actual pools of mortgage-backed securities delivered in a TBA transaction typically are not determined until two days prior to settlement date. A dollar roll transaction involves a sale by the Fund of a mortgage-backed or other security concurrently with an agreement by the Fund to repurchase a similar security at a later date at an agreed-upon price. The securities that are repurchased will bear the same interest rate and stated maturity as those sold, but pools of mortgages collateralizing those securities may have different prepayment histories than those sold.

The Fund may use derivatives, including options, futures, swaps and forward foreign exchange transactions, both to seek to increase the return of the Fund and to hedge (or protect) the value of its assets against adverse movements in interest rates and movements in the securities markets. In order to manage cash flows into or out of the Fund effectively, the Fund may buy and sell financial futures contracts or options on such contracts. Derivatives are financial instruments whose value is derived from another security, a currency or an index such as the Bloomberg Barclays U.S. Mortgage-Backed Securities Index. The Fund may also invest in indexed and inverse securities.

The Fund may engage in active and frequent trading of portfolio securities to achieve its primary investment strategies.

## ***Principal Risks of Investing in the Fund***

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Risk is inherent in all investing. The value of your investment in the Fund, as well as the amount of return you receive on your investment, may fluctuate significantly from day to day and over time. You may lose part or all of your investment in the Fund or your investment may not perform as well as other similar investments. The following is a summary description of principal risks of investing in the Fund. The order of the below risk factors does not indicate the significance of any particular risk factor.

■ **Debt Securities Risk** — Debt securities, such as bonds, involve interest rate risk, credit risk, extension risk, and prepayment risk, among other things.

*Interest Rate Risk* — The market value of bonds and other fixed-income securities changes in response to interest rate changes and other factors. Interest rate risk is the risk that prices of bonds and other fixed-income securities will increase as interest rates fall and decrease as interest rates rise.

The Fund may be subject to a greater risk of rising interest rates due to the current period of historically low rates. For example, if interest rates increase by 1%, assuming a current portfolio duration of ten years, and all other factors being equal, the value of the Fund's investments would be expected to decrease by 10%. The magnitude of these fluctuations in the market price of bonds and other fixed-income securities is generally greater for those securities with longer maturities. Fluctuations in the market price of the Fund's investments will not affect interest income derived from instruments already owned by the Fund, but will be reflected in the Fund's net asset value. The Fund may lose money if short-term or long-term interest rates rise sharply in a manner not anticipated by Fund management.

To the extent the Fund invests in debt securities that may be prepaid at the option of the obligor (such as mortgage-backed securities), the sensitivity of such securities to changes in interest rates may increase (to the detriment of the Fund) when interest rates rise. Moreover, because rates on certain floating rate debt securities typically reset only periodically, changes in prevailing interest rates (and particularly sudden and significant changes) can be expected to cause some fluctuations in the net asset value of the Fund to the extent that it invests in floating rate debt securities.

These basic principles of bond prices also apply to U.S. Government securities. A security backed by the "full faith and credit" of the U.S. Government is guaranteed only as to its stated interest rate and face value at maturity, not its current market price. Just like other fixed-income securities, government-guaranteed securities will fluctuate in value when interest rates change.

A general rise in interest rates has the potential to cause investors to move out of fixed-income securities on a large scale, which may increase redemptions from funds that hold large amounts of fixed-income securities. Heavy redemptions could cause the Fund to sell assets at inopportune times or at a loss or depressed value and could hurt the Fund's performance.

*Credit Risk* — Credit risk refers to the possibility that the issuer of a debt security (i.e., the borrower) will not be able to make payments of interest and principal when due. Changes in an issuer's credit rating or the market's perception of an issuer's creditworthiness may also affect the value of the Fund's investment in that issuer. The degree of credit risk depends on both the financial condition of the issuer and the terms of the obligation.

*Extension Risk* — When interest rates rise, certain obligations will be paid off by the obligor more slowly than anticipated, causing the value of these obligations to fall.

*Prepayment Risk* — When interest rates fall, certain obligations will be paid off by the obligor more quickly than originally anticipated, and the Fund may have to invest the proceeds in securities with lower yields.

■ **Derivatives Risk** — The Fund's use of derivatives may increase its costs, reduce the Fund's returns and/or increase volatility. Derivatives involve significant risks, including:

*Volatility Risk* — Volatility is defined as the characteristic of a security, an index or a market to fluctuate significantly in price within a short time period. A risk of the Fund's use of derivatives is that the fluctuations in their values may not correlate with the overall securities markets.

*Counterparty Risk* — Derivatives are also subject to counterparty risk, which is the risk that the other party in the transaction will not fulfill its contractual obligation.

*Market and Illiquidity Risk* — The possible lack of a liquid secondary market for derivatives and the resulting inability of the Fund to sell or otherwise close a derivatives position could expose the Fund to losses and could make derivatives more difficult for the Fund to value accurately.

*Valuation Risk* — Valuation may be more difficult in times of market turmoil since many investors and market makers may be reluctant to purchase complex instruments or quote prices for them.

*Hedging Risk* — Hedges are sometimes subject to imperfect matching between the derivative and the underlying security, and there can be no assurance that the Fund's hedging transactions will be effective. The use of hedging may result in certain adverse tax consequences.

*Tax Risk* — Certain aspects of the tax treatment of derivative instruments, including swap agreements and commodity-linked derivative instruments, are currently unclear and may be affected by changes in legislation, regulations or other legally binding authority. Such treatment may be less favorable than that given to a direct investment in an underlying asset and may adversely affect the timing, character and amount of income the Fund realizes from its investments.

*Regulatory Risk* — Derivative contracts, including, without limitation, swaps, currency forwards and non-deliverable forwards, are subject to regulation under the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act") in the United States and under comparable regimes in Europe, Asia and other non-U.S. jurisdictions. Under the Dodd-Frank Act, certain derivatives are subject to margin requirements and swap dealers are required to collect margin from the Fund with respect to such derivatives. Specifically, regulations are now in effect that require swap dealers to post and collect variation margin (comprised of specified liquid instruments and subject to a required haircut) in connection with trading of over-the-counter ("OTC") swaps with the Fund. Shares of investment companies (other than certain money market funds) may not be posted as collateral under these regulations. Requirements for posting of initial margin in connection with OTC swaps will be phased-in through at least 2021. In addition, regulations adopted by global prudential regulators that are now in effect require certain bank-regulated counterparties and certain of their affiliates to include in certain financial contracts, including many derivatives contracts, terms that delay or restrict the rights of counterparties, such as the Fund, to terminate such contracts, foreclose upon collateral, exercise other default rights or restrict transfers of credit support in the event that the counterparty and/or its affiliates are subject to certain types of resolution or insolvency proceedings. The implementation of these requirements with respect to derivatives, as well as regulations under the Dodd-Frank Act regarding clearing, mandatory trading and margining of other derivatives, may increase the costs and risks to the Fund of trading in these instruments and, as a result, may affect returns to investors in the Fund.

On October 28, 2020, the SEC adopted new regulations governing the use of derivatives by registered investment companies ("Rule 18f-4"). The Fund will be required to implement and comply with Rule 18f-4 by August 19, 2022. Once implemented, Rule 18f-4 will impose limits on the amount of derivatives a fund can enter into, eliminate the asset segregation framework currently used by funds to comply with Section 18 of the Investment Company Act of 1940, as amended (the "Investment Company Act"), treat derivatives as senior securities and require funds whose use of derivatives is more than a limited specified exposure amount to establish and maintain a comprehensive derivatives risk management program and appoint a derivatives risk manager.

- **Dollar Rolls Risk** — Dollar rolls involve the risk that the market value of the securities that the Fund is committed to buy may decline below the price of the securities the Fund has sold. These transactions may involve leverage.
- **High Portfolio Turnover Risk** — The Fund may engage in active and frequent trading of its portfolio securities. High portfolio turnover (more than 100%) may result in increased transaction costs to the Fund, including brokerage commissions, dealer mark-ups and other transaction costs on the sale of the securities and on reinvestment in other securities. The sale of Fund portfolio securities may result in the realization and/or distribution to shareholders of higher capital gains or losses as compared to a fund with less active trading policies. These effects of higher than normal portfolio turnover may adversely affect Fund performance. In addition, investment in mortgage dollar rolls and participation in TBA transactions may significantly increase the Fund's portfolio turnover rate. A TBA transaction is a method of trading mortgage-backed securities where the buyer and seller agree upon general trade parameters such as agency, settlement date, par amount, and price at the time the contract is entered into but the mortgage-backed securities are delivered in the future, generally 30 days later.
- **Illiquid Investments Risk** — The Fund may invest up to an aggregate amount of 15% of its net assets in illiquid investments. An illiquid investment is any investment that the Fund reasonably expects cannot be sold or disposed of in current market conditions in seven calendar days or less without the sale or disposition significantly changing the market value of the investment. The Fund's illiquid investments may reduce the returns of the Fund because it may be difficult to sell the illiquid investments at an advantageous time or price. An investment may be illiquid due to, among other things, the reduced number and capacity of traditional market participants to make a market in fixed-income securities or the lack of an active trading market. To the extent that the Fund's principal investment strategies involve derivatives or securities with substantial market and/or credit risk, the Fund will tend to have the greatest exposure to the risks associated with illiquid investments. Liquid investments may become illiquid after purchase by the Fund, particularly during periods of market turmoil. Illiquid investments may be harder to value, especially in changing markets, and if the Fund is forced to sell these investments to meet redemption requests or

for other cash needs, the Fund may suffer a loss. This may be magnified in a rising interest rate environment or other circumstances where investor redemptions from fixed-income mutual funds may be higher than normal. In addition, when there is illiquidity in the market for certain securities, the Fund, due to limitations on illiquid investments, may be subject to purchase and sale restrictions.

- **Indexed and Inverse Securities Risk** — Indexed and inverse securities provide a potential return based on a particular index of value or interest rates. The Fund's return on these securities will be subject to risk with respect to the value of the particular index. These securities are subject to leverage risk and correlation risk. Certain indexed and inverse securities have greater sensitivity to changes in interest rates or index levels than other securities, and the Fund's investment in such instruments may decline significantly in value if interest rates or index levels move in a way Fund management does not anticipate.
- **Junk Bonds Risk** — Although junk bonds generally pay higher rates of interest than investment grade bonds, junk bonds are high risk investments that are considered speculative and may cause income and principal losses for the Fund.
- **Leverage Risk** — Some transactions may give rise to a form of economic leverage. These transactions may include, among others, derivatives, and may expose the Fund to greater risk and increase its costs. The use of leverage may cause the Fund to liquidate portfolio positions when it may not be advantageous to do so to satisfy its obligations or to meet any required asset segregation requirements. Increases and decreases in the value of the Fund's portfolio will be magnified when the Fund uses leverage.
- **Market Risk and Selection Risk** — Market risk is the risk that one or more markets in which the Fund invests will go down in value, including the possibility that the markets will go down sharply and unpredictably. The value of a security or other asset may decline due to changes in general market conditions, economic trends or events that are not specifically related to the issuer of the security or other asset, or factors that affect a particular issuer or issuers, exchange, country, group of countries, region, market, industry, group of industries, sector or asset class. Local, regional or global events such as war, acts of terrorism, the spread of infectious illness or other public health issues like pandemics or epidemics, recessions, or other events could have a significant impact on the Fund and its investments. Selection risk is the risk that the securities selected by Fund management will underperform the markets, the relevant indices or the securities selected by other funds with similar investment objectives and investment strategies. This means you may lose money.

A recent outbreak of an infectious coronavirus has developed into a global pandemic that has resulted in numerous disruptions in the market and has had significant economic impact leaving general concern and uncertainty. The impact of this coronavirus, and other epidemics and pandemics that may arise in the future, could affect the economies of many nations, individual companies and the market in general ways that cannot necessarily be foreseen at the present time.

- **Mortgage- and Asset-Backed Securities Risks** — Mortgage- and asset-backed securities represent interests in “pools” of mortgages or other assets, including consumer loans or receivables held in trust. Mortgage- and asset-backed securities are subject to credit, interest rate, prepayment and extension risks. These securities also are subject to risk of default on the underlying mortgage or asset, particularly during periods of economic downturn. Small movements in interest rates (both increases and decreases) may quickly and significantly reduce the value of certain mortgage-backed securities.
- **Non-Agency Securities Risk** — There are no direct or indirect government or agency guarantees of payments in mortgage pools created by non-government issuers. Non-agency securities are also not subject to the same underwriting requirements for the underlying mortgages that are applicable to those mortgage-related securities that have a government or government-sponsored entity guarantee. In addition, a substantial portion of the non-agency securities in which the Fund invests may be rated below investment grade (commonly known as “junk bonds”).

Non-agency mortgage-related securities are not traded on an exchange and there may be a limited market for the securities, especially when there is a perceived weakness in the mortgage and real estate market sectors. Without an active trading market, the non-agency mortgage-related securities held in the Fund's portfolio may be particularly difficult to value because of the complexities involved in assessing the value of the underlying mortgage loans.

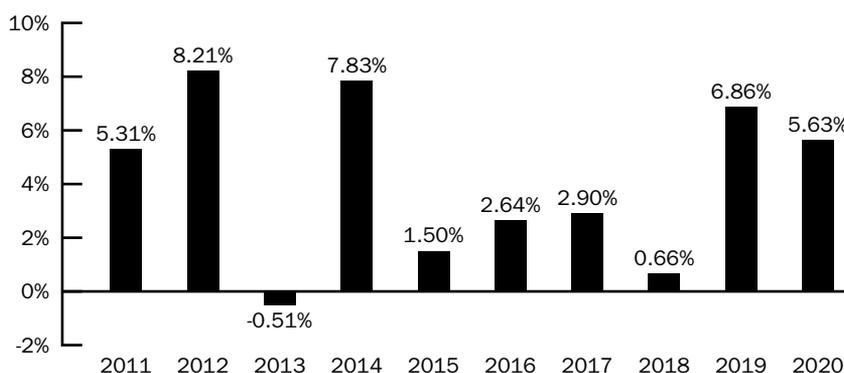
## **Performance Information**

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The information shows you how the Fund's performance has varied year by year and provides some indication of the risks of investing in the Fund. The Fund acquired all of the assets, subject to the liabilities, of BlackRock U.S. Mortgage Portfolio, a series of Managed Account Series (the “Predecessor Fund”), in a reorganization on September 17, 2018 (the “Reorganization”). The table compares the Fund's performance to that of the Bloomberg Barclays U.S. Mortgage-Backed Securities Index. The Fund adopted the performance of the Predecessor Fund as a result of the Reorganization on September 17, 2018. The performance information below is based on the

performance of the Predecessor Fund for periods prior to the date of the Reorganization. The Predecessor Fund had the same investment objectives, strategies and policies, portfolio management team and contractual arrangements, including the same contractual fees and expenses, as the Fund as of the date of the Reorganization. The returns for Institutional Shares are based on the performance of its predecessor class. To the extent that dividends and distributions have been paid by the Fund, the performance information for the Fund in the chart and table assumes reinvestment of the dividends and distributions. As with all such investments, past performance (before and after taxes) is not an indication of future results. Sales charges are not reflected in the bar chart. If they were, returns would be less than those shown. However, the table includes all applicable fees and sales charges. If the Fund's investment manager and its affiliates had not waived or reimbursed certain Fund expenses during these periods, the Fund's returns would have been lower. Updated information on the Fund's performance, including its current net asset value, can be obtained by visiting <http://www.blackrock.com> or can be obtained by phone at 800-882-0052.

**Institutional Shares**  
**ANNUAL TOTAL RETURNS**  
**BlackRock U.S. Mortgage Portfolio**  
**As of 12/31**



During the ten-year period shown in the bar chart, the highest return for a quarter was 4.47% (quarter ended June 30, 2020) and the lowest return for a quarter was -2.71% (quarter ended March 31, 2020). The year-to-date return as of June 30, 2021 was 1.59%.

**For the periods ended 12/31/20**  
**Average Annual Total Returns**

	<b>1 Year</b>	<b>5 Years</b>	<b>10 Years</b>
BlackRock U.S. Mortgage Portfolio — Institutional Shares			
Return Before Taxes	5.63%	3.71%	4.06%
Return After Taxes on Distributions	4.20%	2.26%	2.54%
Return After Taxes on Distributions and Sale of Fund Shares	3.30%	2.19%	2.48%
BlackRock U.S. Mortgage Portfolio — Investor A Shares			
Return Before Taxes	1.26%	2.63%	3.35%
BlackRock U.S. Mortgage Portfolio — Investor C Shares			
Return Before Taxes	3.59%	2.70%	3.16%
Bloomberg Barclays U.S. Mortgage-Backed Securities Index (Reflects no deduction for fees, expenses or taxes)	3.87%	3.05%	3.01%

After-tax returns are calculated using the historical highest individual federal marginal income tax rates and do not reflect the impact of state and local taxes. Actual after-tax returns depend on the investor's tax situation and may differ from those shown, and the after-tax returns shown are not relevant to investors who hold their shares through tax-deferred arrangements, such as 401(k) plans or individual retirement accounts. After-tax returns are shown for Institutional Shares only, and the after-tax returns for Investor A and Investor C Shares will vary.

**Investment Manager**

The Fund's investment manager is BlackRock Advisors, LLC (previously defined as "BlackRock").

**Portfolio Managers**

<b>Name</b>	<b>Portfolio Manager of the Fund Since*</b>	<b>Title</b>
Matthew Kraeger	2009	Managing Director of BlackRock, Inc.

<b>Name</b>	<b>Portfolio Manager of the Fund Since*</b>	<b>Title</b>
Siddharth Mehta	2016	Vice President of BlackRock, Inc.
Ibrahim Incoglu	2019	Managing Director of BlackRock, Inc.
Samir Lakhani	2019	Managing Director of BlackRock, Inc.

\* Includes management of the Predecessor Fund, as applicable.

### **Purchase and Sale of Fund Shares**

You may purchase or redeem shares of the Fund each day the New York Stock Exchange is open. To purchase or sell shares you should contact your Financial Intermediary, or, if you hold your shares through the Fund, you should contact the Fund by phone at (800) 441-7762, by mail (c/o BlackRock Funds, P.O. Box 9819, Providence, Rhode Island 02940-8019), or by the Internet at [www.blackrock.com](http://www.blackrock.com). The Fund's initial and subsequent investment minimums generally are as follows, although the Fund may reduce or waive the minimums in some cases:

	<b>Investor A and Investor C Shares</b>	<b>Institutional Shares</b>
<b>Minimum Initial Investment</b>	<p>\$1,000 for all accounts except:</p> <ul style="list-style-type: none"> <li>• \$50, if establishing an Automatic Investment Plan.</li> <li>• There is no investment minimum for employer-sponsored retirement plans (not including SEP IRAs, SIMPLE IRAs or SARSEPs).</li> <li>• There is no investment minimum for certain fee-based programs.</li> </ul>	<p>There is no minimum initial investment for:</p> <ul style="list-style-type: none"> <li>• Employer-sponsored retirement plans (not including SEP IRAs, SIMPLE IRAs or SARSEPs), state sponsored 529 college savings plans, collective trust funds, investment companies or other pooled investment vehicles, unaffiliated thrifts and unaffiliated banks and trust companies, each of which may purchase shares of the Fund through a Financial Intermediary that has entered into an agreement with the Fund's distributor to purchase such shares.</li> <li>• Clients of Financial Intermediaries that: (i) charge such clients a fee for advisory, investment consulting, or similar services or (ii) have entered into an agreement with the Fund's distributor to offer Institutional Shares through a no-load program or investment platform.</li> <li>• Clients investing through a self-directed IRA brokerage account program sponsored by a retirement plan record-keeper, provided that such program offers only mutual fund options and that the program maintains an account with the Fund on an omnibus basis.</li> </ul> <p>\$2 million for individuals and "Institutional Investors," which include, but are not limited to, endowments, foundations, family offices, local, city, and state governmental institutions, corporations and insurance company separate accounts who may purchase shares of the Fund through a Financial Intermediary that has entered into an agreement with the Fund's distributor to purchase such shares.</p> <p>\$1,000 for:</p> <ul style="list-style-type: none"> <li>• Clients investing through Financial Intermediaries that offer such shares on a platform that charges a transaction based sales commission outside of the Fund.</li> <li>• Tax-qualified accounts for insurance agents that are registered representatives of an insurance company's broker-dealer that has entered into an agreement with the Fund's distributor to offer Institutional Shares, and the family members of such persons.</li> </ul>
<b>Minimum Additional Investment</b>	\$50 for all accounts (with the exception of certain employer-sponsored retirement plans which may have a lower minimum).	No subsequent minimum.

## ***Tax Information***

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The Fund's dividends and distributions may be subject to U.S. federal income taxes and may be taxed as ordinary income or capital gains, unless you are a tax-exempt investor or are investing through a qualified tax-exempt plan described in section 401(a) of the Internal Revenue Code, in which case you may be subject to U.S. federal income tax when distributions are received from such tax-deferred arrangements.

## ***Payments to Broker/Dealers and Other Financial Intermediaries***

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If you purchase shares of the Fund through a Financial Intermediary, the Fund and BlackRock Investments, LLC, the Fund's distributor, or its affiliates may pay the Financial Intermediary for the sale of Fund shares and related services. These payments may create a conflict of interest by influencing the Financial Intermediary and your individual financial professional to recommend the Fund over another investment.

Ask your individual financial professional or visit your Financial Intermediary's website for more information.

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