

T. Rowe Price QM U.S. Value Equity Fund

Supplement to Prospectus and Summary Prospectus dated May 1, 2022

Effective April 5, 2023, the fund's name will change from the T. Rowe Price QM U.S. Value Equity Fund to the T. Rowe Price Integrated U.S. Large-Cap Value Equity Fund. All references throughout the prospectus and summary prospectus to the QM U.S. Value Equity Fund are replaced by reference to the Integrated U.S. Large-Cap Value Equity Fund.

In connection with this change, effective April 5, 2023, the first three paragraphs under "Principal Investment Strategies" beginning on page 2 will be replaced with the following:

Under normal conditions, the fund invests at least 80% of its net assets (including any borrowings for investment purposes) in equity securities issued by large-cap U.S. companies. The fund expects to invest predominantly in the common stocks of companies that appear to be undervalued by various measures.

The fund defines a large-cap company as one whose market capitalization falls within the market capitalization range of the Russell 1000[®] Index. As of December 31, 2022, the market capitalization range for the Russell 1000[®] Index was approximately \$0.65 to \$2,066.94 billion.

The fund's integrated approach to investing combines fundamental analysis and quantitative models to identify stocks that could be included in the portfolio. Stocks are selected based on a variety of metrics such as a company's valuation, profitability, stability, earnings quality, management capital allocation actions, and indicators of near-term appreciation potential.

In addition, effective April 5, 2023, the first three paragraphs under "Principal Investment Strategies" beginning on page 10 of the prospectus will be replaced with the following:

Under normal conditions, the fund invests at least 80% of its net assets (including any borrowings for investment purposes) in equity securities issued by large-cap U.S. companies. The fund expects to invest predominantly in the common stocks of companies that appear to be undervalued by various measures. Shareholders will receive at least 60 days' prior notice of a change in the policy. The fund expects to invest predominantly in the common stocks of companies that appear to be undervalued by various measures.

The fund defines a large-cap company as one whose market capitalization falls within the market capitalization range of the Russell 1000[®] Index. As of December 31, 2022, the market capitalization range for the Russell 1000[®] Index was approximately \$0.65 to \$2,066.94 billion. The market capitalization of the companies in the fund's portfolio and the Russell index changes over time; the fund will not automatically sell or cease to purchase stock of a company it already owns just because the company's market capitalization falls below the market capitalization range of companies in the Russell index.

The fund's integrated approach to investing combines fundamental analysis and quantitative models to identify stocks that could be included in the portfolio. The fund draws on the adviser's experience in large-cap investing and takes into account

both its quantitative and fundamental research capabilities. The portfolio is typically constructed in a “bottom up” manner, an approach that focuses more on evaluations of individual stocks than on analyses of overall economic trends and market cycles. Stocks are selected based on a variety of metrics such as a company’s valuation, profitability, stability, earnings quality, management capital allocation actions, and indicators of near-term appreciation potential.

As part of the stock selection process, the adviser focuses primarily on companies whose securities, in the adviser’s opinion, are undervalued. The adviser employs various valuation metrics, such as price-to-earnings, price-to-cash flows, and price-to-book ratios, and compares these ratios with others in the relevant investing universe.

The date of this supplement is February 3, 2023.

F201-041 2/3/23



SUMMARY PROSPECTUS

May 1, 2022

TQMVMX TQVIX TQVAX	T. ROWE PRICE QM U.S. Value Equity Fund Investor Class I Class Advisor Class
--------------------------	---

The Securities and Exchange Commission (SEC) has not approved or disapproved these securities or passed upon the adequacy of this prospectus. Any representation to the contrary is a criminal offense.

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, shareholder reports, and other information about the fund online at [troweprice.com/prospectus](https://www.troweprice.com/prospectus). You can also get this information at no cost by calling **1-800-638-5660**, by sending an e-mail request to info@troweprice.com, or by contacting your financial intermediary. This Summary Prospectus incorporates by reference the fund's prospectus, dated May 1, 2022, as amended or supplemented, and Statement of Additional Information, dated May 1, 2022, as amended or supplemented.

Investment Objective(s)

The fund seeks long-term growth of capital.

Fees and Expenses

This table describes the fees and expenses that you may pay if you buy, hold, and sell shares of the fund. **You may also incur brokerage commissions and other charges when buying or selling shares of the fund, which are not reflected in the table or example below.**

Fees and Expenses of the Fund

	Investor Class	I Class	Advisor Class
Shareholder fees (fees paid directly from your investment)			
Maximum account fee	\$20 ^a	—	—
Annual fund operating expenses (expenses that you pay each year as a percentage of the value of your investment)			
Management fees	0.48 %	0.48 %	0.48 %
Distribution and service (12b-1) fees	—	—	0.25
Other expenses	1.03	0.88 ^c	1.05
Total annual fund operating expenses	1.51 ^b	1.36 ^b	1.78 ^b
Fee waiver/expense reimbursement	(0.79) ^d	(0.83) ^c	(0.79) ^e
Total annual fund operating expenses after fee waiver/expense reimbursement	0.72^{b,d}	0.53^{b,c}	0.99^{b,e}

^a Subject to certain exceptions, accounts with a balance of less than \$10,000 are charged an annual \$20 fee.

^b Restated to reflect current fees.

^c T. Rowe Price Associates, Inc., has contractually agreed (through April 30, 2024) to pay the operating expenses of the fund's I Class excluding management fees; interest; expenses related to borrowings, taxes, and brokerage; nonrecurring, extraordinary expenses; and acquired fund fees and expenses ("I Class Operating Expenses"), to the extent the I Class Operating Expenses exceed 0.05% of the class' average daily net assets. The agreement may only be terminated at any time after April 30, 2024, with approval by the fund's Board of Directors. Any expenses paid under this agreement (and a previous limitation of 0.05%) are subject to reimbursement to T. Rowe Price Associates, Inc., by the fund whenever the fund's I Class Operating Expenses are below 0.05%. However, no reimbursement will be made more than three years from the date such amounts were initially waived or reimbursed. The fund may only make repayments to T. Rowe Price Associates, Inc., if such repayment does not cause the I Class Operating Expenses (after the repayment is taken into account) to exceed the lesser of: (1) the limitation on I Class Operating Expenses in place at the time such amounts were waived or (2) the current expense limitation on I Class Operating Expenses.

^d T. Rowe Price Associates, Inc., has contractually agreed (through April 30, 2024) to waive its fees and/or bear any expenses (excluding interest; expenses related to borrowings, taxes, and brokerage; nonrecurring, extraordinary expenses; and acquired fund fees and expenses) that would cause the class' ratio of expenses to average daily net assets to exceed 0.72%. The agreement may only be terminated at any time after April 30, 2024, with approval by the fund's Board of Directors. Fees waived and expenses paid under this agreement (and a previous limitation of 0.72%) are subject to reimbursement to T. Rowe Price Associates, Inc., by the fund whenever the class' expense ratio is below 0.72%. However, no reimbursement will be made more than three years from the date such amounts were initially waived or reimbursed. The fund may only make repayments to T. Rowe Price Associates, Inc., if such repayment does not cause the class' expense ratio (after the repayment is taken into account) to exceed the lesser of: (1) the expense limitation in place at the time such amounts were waived or (2) the class' current expense limitation.

- ^e T. Rowe Price Associates, Inc., has contractually agreed (through April 30, 2024) to waive its fees and/or bear any expenses (excluding interest; expenses related to borrowings, taxes, and brokerage; nonrecurring, extraordinary net expenses; and acquired fund fees and expenses) that would cause the class' ratio of expenses to average daily net assets to exceed 0.99%. The agreement may only be terminated at any time after April 30, 2024, with approval by the fund's Board of Directors. Fees waived and expenses paid under this agreement (and a previous limitation of 0.99%) are subject to reimbursement to T. Rowe Price Associates, Inc., by the fund whenever the class' expense ratio is below 0.99%. However, no reimbursement will be made more than three years from the date such amounts were initially waived or reimbursed. The fund may only make repayments to T. Rowe Price Associates, Inc., if such repayment does not cause the class' expense ratio (after the repayment is taken into account) to exceed the lesser of: (1) the expense limitation in place at the time such amounts were waived or (2) the class' current expense limitation.

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, that your investment has a 5% return each year, and that the fund's operating expenses remain the same. The example also assumes that any current expense limitation arrangement remains in place for the period noted in the previous table; therefore, the figures have been adjusted to reflect fee waivers or expense reimbursements only in the periods for which the expense limitation arrangement is expected to continue. Although your actual costs may be higher or lower, based on these assumptions your costs would be:

	1 Year	3 Years	5 Years	10 Years
Investor Class	\$ 74	\$ 317	\$ 669	\$ 1,662
I Class	54	262	581	1,486
Advisor Class	101	402	812	1,960

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 the fund's 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 41.5% of the average value of its portfolio.

Investments, Risks, and Performance

Principal Investment Strategies

Under normal conditions, the fund invests at least 80% of its net assets (including any borrowings for investment purposes) in equity securities issued by U.S. companies. The fund expects to invest predominantly in common stocks and may invest in companies of any market capitalization, but will generally focus on large- and mid-cap companies that appear to be undervalued by various measures.

The "QM" in the fund's name reflects the concept that the fund employs a "quantitative management" strategy relying on quantitative models developed by the adviser to help identify stocks that could be included in the portfolio. Based on these models, the portfolio is typically constructed in a "bottom up" manner, an approach that focuses more on evaluations of individual stocks than on analyses of overall economic trends and market cycles. Stocks are ranked on metrics that capture their valuation, profitability, stability, management capital

allocation actions, and indicators of near term appreciation potential. As part of the stock selection process, the adviser focuses primarily on companies whose securities, in the adviser's opinion, are undervalued. The adviser employs various valuation metrics, such as price-to-earnings, price-to-cash flows, and price-to-book ratios, and compares these ratios with others in the relevant investing universe. The portfolio is generally constructed by buying higher-ranked stocks and selecting stocks to sell from those that have a lower rank, subject to overall risk controls and desired portfolio characteristics.

The adviser monitors the quantitative models and reviews the security selection results for certain qualitative factors (such as regulatory impacts to a company) and portfolio risk characteristics in the process of portfolio construction. Sector allocations are driven primarily by the quantitative models and security selection. In building the quantitative models and adjusting them as needed, the fund draws on the adviser's experience in value investing and takes into account both its quantitative and fundamental research capabilities.

While most assets will typically be invested in U.S. equity securities, the fund may invest up to 20% of its total assets in foreign securities, including securities of emerging market issuers. The fund may at times invest significantly in certain sectors, including the financials and health care sectors.

Principal Risks

As with any fund, there is no guarantee that the fund will achieve its objective(s). The fund's share price fluctuates, which means you could lose money by investing in the fund. The principal risks of investing in this fund, which may be even greater in bad or uncertain market conditions, are summarized as follows:

Quantitative models The fund's reliance on quantitative models and the analysis of specific metrics to construct the fund's portfolio could cause the adviser to be unsuccessful in selecting companies for investment or determining the weighting of particular stocks in the portfolio. The impact of these metrics on a stock's performance can be difficult to predict and stocks that previously possessed certain desirable quantitative characteristics may not continue to demonstrate those same characteristics in the future. In addition, relying on quantitative models entails the risk that the models themselves may be limited or incorrect, the data on which the models rely may be incorrect or incomplete, or the models may not be implemented as intended by the adviser. Any of these factors could cause the fund to underperform funds with similar strategies that do not select stocks based on quantitative analysis.

Stock investing Stocks generally fluctuate in value more than bonds and may decline significantly over short time periods. There is a chance that stock prices overall will decline because stock markets tend to move in cycles, with periods of rising and falling prices. The value of stocks held by the fund may decline due to general weakness or volatility in the stock markets in which the fund invests or because of factors that affect a particular company or industry.

Market conditions The value of the fund's investments may decrease, sometimes rapidly or unexpectedly, due to factors affecting an issuer held by the fund, particular industries, or the overall securities markets. A variety of factors can increase the volatility of the fund's holdings

and markets generally, including political or regulatory developments, recessions, inflation, rapid interest rate changes, war, military conflict, or acts of terrorism, natural disasters, and outbreaks of infectious illnesses or other widespread public health issues such as the coronavirus pandemic and related governmental and public responses (including sanctions). Certain events may cause instability across global markets, including reduced liquidity and disruptions in trading markets, while some events may affect certain geographic regions, countries, sectors, and industries more significantly than others. Government intervention in markets may impact interest rates, market volatility, and security pricing. These adverse developments may cause broad declines in market value due to short-term market movements or for significantly longer periods during more prolonged market downturns.

Value investing The fund's value approach to investing could cause it to underperform other stock funds that employ a different investment style. The intrinsic value of a stock with value characteristics may not be fully recognized by the market for a long time or a stock judged to be undervalued may be appropriately priced at a low level. Value stocks may fail to appreciate for long periods and may never reach what the adviser believes are their full market values.

Large- and mid-cap stocks Securities issued by large-cap and mid-cap companies tend to be less volatile than securities issued by smaller companies. However, larger companies may not be able to attain the high growth rates of successful smaller companies, especially during strong economic periods, and may be unable to respond as quickly to competitive challenges. The fund's share price could fluctuate more than the share price of a fund that invests only in large companies as stocks of mid-cap companies entail greater risk and are usually more volatile than stocks of large-cap companies.

Sector exposure At times, the fund may have a significant portion of its assets invested in securities of issuers conducting business in a broadly related group of industries within the same economic sector. Issuers in the same economic sector may be similarly affected by economic or market events, making the fund more vulnerable to unfavorable developments in that economic sector than funds that invest more broadly.

Banks and financial companies Because the fund may invest significantly in banks and financial companies, the fund is more susceptible to adverse developments affecting such companies and may perform poorly during a downturn that impacts the financials sector. Banks and other financial services companies can be adversely affected by, among other things, regulatory changes, interest rate movements, the availability of capital and cost to borrow, and the rate of debt defaults.

Healthcare sector The profitability of healthcare companies may be adversely affected by extensive government regulations, restrictions on government reimbursement for medical expenses, rising costs of medical products and services, pricing pressure, an increased emphasis on outpatient services, a limited number of products, industry innovation, changes in technologies and other market developments. A number of issuers in the healthcare sector have recently merged or otherwise experienced consolidation. The effects of this trend toward consolidation are unknown and may be far-reaching. Many healthcare companies are heavily dependent on patent protection. The expiration of a company's patents may adversely affect

that company's profitability. Many healthcare companies are subject to extensive litigation based on product liability and similar claims. Healthcare companies are subject to competitive forces that may make it difficult to raise prices and, in fact, may result in price discounting. Many new products in the healthcare sector may be subject to regulatory approvals. The process of obtaining such approvals may be long and costly, and such efforts ultimately may be unsuccessful. Companies in the healthcare sector may be thinly capitalized and may be susceptible to product obsolescence.

Foreign investing Investments in the securities of non-U.S. issuers may be adversely affected by local, political, social, and economic conditions overseas; greater volatility; reduced liquidity; or decreases in foreign currency values relative to the U.S. dollar. The risks of investing outside the U.S. are heightened for any investments in emerging markets, which are susceptible to greater volatility than investments in developed markets.

Active management The fund's overall investment program and holdings selected by the fund's investment adviser may underperform the broad markets, relevant indices, or other funds with similar objectives and investment strategies.

Cybersecurity breaches The fund could be harmed by intentional cyberattacks and other cybersecurity breaches, including unauthorized access to the fund's assets, customer data and confidential shareholder information, or other proprietary information. In addition, a cybersecurity breach could cause one of the fund's service providers or financial intermediaries to suffer unauthorized data access, data corruption, or loss of operational functionality.

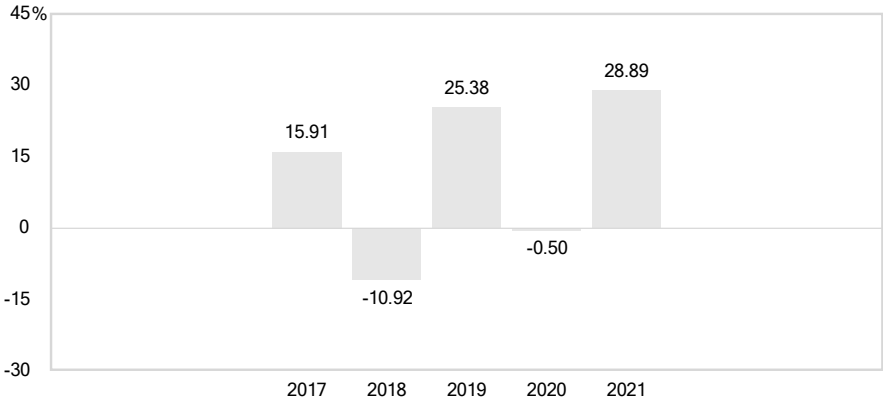
Performance

The following performance information provides some indication of the risks of investing in the fund. The fund's performance information represents only past performance (before and after taxes) and is not necessarily an indication of future results.

The following bar chart illustrates how much returns can differ from year to year by showing calendar year returns and the best and worst calendar quarter returns during those years for the fund's Investor Class. Returns for other share classes vary since they have different expenses.

QM U.S. VALUE EQUITY FUND

Calendar Year Returns



	Quarter Ended	Total Return	Quarter Ended	Total Return	
Best Quarter	12/31/20	20.06%	Worst Quarter	3/31/20	-29.84%

The following table shows the average annual total returns for each class of the fund that has been in operation for at least one full calendar year, and also compares the returns with the returns of a relevant broad-based market index, as well as with the returns of one or more comparative indexes that have investment characteristics similar to those of the fund, if applicable.

In addition, the table shows hypothetical after-tax returns to demonstrate how taxes paid by a shareholder may influence returns. 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 an investor’s tax situation and may differ from those shown. After-tax returns shown are not relevant to investors who hold their fund shares through tax-deferred arrangements, such as a 401(k) account or an IRA. After-tax returns are shown only for the Investor Class and will differ for other share classes.

Average Annual Total Returns

	Periods ended December 31, 2021			Inception date 02/26/2016
	1 Year	5 Years	Since inception	
Investor Class				
Returns before taxes	28.89 %	10.67 %	13.04%	
Returns after taxes on distributions	28.12	9.72	12.12	
Returns after taxes on distributions and sale of fund shares	17.63	8.25	10.30	
I Class				02/26/2016
Returns before taxes	29.07	10.86	13.24	
Advisor Class				02/26/2016
Returns before taxes	28.47	10.37	12.73	
Russell 1000 [®] Value Index (reflects no deduction for fees, expenses, or taxes)	25.16	11.16	13.39 ^a	
Lipper Multi-Cap Value Funds Index	27.02	10.37	12.74 ^a	

^a Return since 2/26/16.

Updated performance information is available through troweprice.com.

Management

Investment Adviser T. Rowe Price Associates, Inc. (T. Rowe Price or Price Associates)

Portfolio Manager	Title	Managed Fund Since	Joined Investment Adviser
David Corris	Cochair of Investment Advisory Committee	2022	2021
Prashant G. Jeyaganesh	Cochair of Investment Advisory Committee	2022	2006
Vidya Kadiyam	Cochair of Investment Advisory Committee	2022	2008

Purchase and Sale of Fund Shares

The Investor Class and Advisor Class generally require a \$2,500 minimum initial investment (\$1,000 minimum initial investment if opening an IRA, a custodial account for a minor, or a small business retirement plan account). Additional purchases generally require a \$100 minimum. These investment minimums generally are waived for financial intermediaries and certain employer-sponsored retirement plans submitting orders on behalf of their customers. Advisor Class shares may generally only be purchased through a financial intermediary or retirement plan.

The I Class requires a \$500,000 minimum initial investment per fund per account registration, although the initial investment minimum generally is waived or reduced for financial

intermediaries, eligible retirement plans, certain client accounts for which T. Rowe Price or its affiliate has discretionary investment authority, qualifying directly held accounts, and certain other types of accounts.

For investors holding shares of the fund directly with T. Rowe Price, you may purchase, redeem, or exchange fund shares by mail; by telephone (1-800-225-5132 for IRAs and nonretirement accounts; 1-800-492-7670 for small business retirement plans; and 1-800-638-8790 for institutional investors and financial intermediaries); or, for certain accounts, by accessing your account online through **troweprice.com**.

If you hold shares through a financial intermediary or retirement plan, you must purchase, redeem, and exchange shares of the fund through your intermediary or retirement plan. You should check with your intermediary or retirement plan to determine the investment minimums that apply to your account.

Tax Information

Any dividends or capital gains are declared and paid annually, usually in December. Redemptions or exchanges of fund shares and distributions by the fund, whether or not you reinvest these amounts in additional fund shares, generally may be taxed as ordinary income or capital gains unless you invest through a tax-deferred account (in which case you will be taxed upon withdrawal from such account).

Payments to Broker-Dealers and Other Financial Intermediaries

If you purchase shares of the fund through a broker-dealer or other financial intermediary (such as a bank), the fund and its related companies may pay the intermediary for the sale of fund shares and related services. These payments may create a conflict of interest by influencing the broker-dealer or other intermediary and your salesperson to recommend the fund over another investment. Ask your salesperson or visit your financial intermediary's website for more information.

T.RowePrice®

T. Rowe Price Associates, Inc.
100 East Pratt Street
Baltimore, MD 21202

F201-045 5/1/22