

Supplement to Summary Prospectus dated 12/04/2020**GREAT-WEST FUNDS, INC.****Great-West Large Cap Growth Fund****Institutional Class Ticker: MXGSX****Investor Class Ticker: MXLGX**

(the “Fund”)

Supplement dated December 4, 2020 to the Prospectus, Summary Prospectus and Statement of Additional Information (“SAI”) for the Fund, each dated April 29, 2020, as supplemented.

Amundi Pioneer Asset Management, Inc. (“Amundi Pioneer”) currently serves as a Sub-Adviser to the Fund. On January 1, 2021 (the “Effective Date”), Amundi Pioneer will change its name to “Amundi Asset Management US, Inc.”

As of the Effective Date, all references to “Amundi Pioneer Asset Management, Inc.” and “Amundi Pioneer” are hereby deleted in their entirety and replaced with “Amundi Asset Management US, Inc.”

Additionally, effective immediately, Holly Fleiss, Larry H. Lee and Joseph Wilson have been added as portfolio managers to the Fund. The following changes are made to the Prospectus, Summary Prospectus, and SAI, as applicable:

The table titled “Portfolio Managers” on page 4 of the Prospectus and Summary Prospectus for the Fund is hereby deleted in its entirety and replaced with the following:

Name	Title	Portfolio Manager of Fund Since
Amundi		
Andrew Acheson	Managing Director, Director of Growth, U.S.	2013
Paul Cloonan, CFA	Senior Vice President	2013
JPMorgan		
Giri Devulapally, CFA	Managing Director	2013
Holly Fleiss	Executive Director	2020
Larry H. Lee	Managing Director	2020
Joseph Wilson	Managing Director	2020

Under the “JPMorgan” sub-section of the “Sub-Adviser” section on page 10 of the Prospectus, the following paragraphs are hereby incorporated:

- Holly Fleiss, executive director, is a research analyst and portfolio manager within the U.S. Equity Group. Ms. Fleiss joined JPMorgan in 2012 and covers the health care sector; she is also a co-portfolio manager of the JPMorgan Large Cap Growth Strategy. Prior to joining the firm, Ms. Fleiss spent five years as a buy side analyst at HealthCor Management, focusing on the biotechnology, specialty and pharmaceutical sectors. Prior to that, Ms. Fleiss spent three years at ThinkPanmure and UBS, where she focused on biotechnology, specialty and pharmaceutical stocks as part of a specialized life sciences team advising institutional and ultra-high net worth brokerage clients. Ms. Fleiss holds a B.A. and M.A. in Psychological and Brain Sciences from The Johns Hopkins University.
- Larry H. Lee, managing director, is a research analyst and portfolio manager within the U.S. Equity Group. Mr. Lee joined JPMorgan in 2006 and covers the financials and business services sector; he is also a co-portfolio manager of the JPMorgan Large Cap Growth Strategy. Prior to joining the firm, Mr. Lee spent eleven years as a sell side analyst at several firms, including CIBC World Markets, Merrill Lynch and Banc of America Securities, primarily focused on the business services sector. He holds a B.A. in Economics from Stanford University and an M.B.A. from University of Chicago.
- Joseph Wilson, managing director, is a research analyst and portfolio manager within the U.S. Equity Group.

Mr. Wilson joined JPMorgan in 2014 and covers the technology sector; he is also a co-portfolio manager of the JPMorgan Large Cap Growth Strategy and the lead portfolio manager on the JPMorgan U.S. Technology Strategy. Prior to joining the firm, Mr. Wilson spent six years as a buy side analyst for UBS Global Asset Management, where he covered the technology sector for the Large Cap Growth team from 2010 to 2014, and the Mid Cap Growth team in 2009. Prior to that, he worked at RBC Capital Markets as a sell side research associate covering enterprise, infrastructure and security software. Mr. Wilson holds a B.A. in Finance from the University of St. Thomas and an M.B.A. from the University of St. Thomas Opus College of Business.

Under the “Other Accounts Managed” sub-section of the J.P. Morgan Investment Management Inc. section on page 63 of the SAI, the table related to other accounts managed by the portfolio managers is hereby deleted in its entirety and replaced with the following:

Portfolio Manager	AUM Based Fees*						Performance Based Fees					
	Registered Investment Companies		Other Pooled Investment Vehicles		Other Accounts		Registered Investment Companies		Other Pooled Investment Vehicles		Other Accounts	
	Number of Accounts	Total Assets (\$m)	Number of Accounts	Total Assets (\$m)	Number of Accounts	Total Assets (\$m)	Number of Accounts	Total Assets (\$m)	Number of Accounts	Total Assets (\$m)	Number of Accounts	Total Assets (\$m)
Giri Devulapally, CFA	4	\$18,999	2	\$1,147	8	\$1,938	0	\$0	0	\$0	0	\$0
Holly Fleiss**	4	\$28,858	2	\$2,251	17	\$4,448	0	\$0	0	\$0	0	\$0
Larry H. Lee**	4	\$28,858	2	\$2,251	17	\$4,448	0	\$0	0	\$0	0	\$0
Joseph Wilson**	4	\$28,858	4	\$5,886	20	\$8,660	0	\$0	0	\$0	0	\$0

* The total value and number of accounts managed by a portfolio manager may include sub-accounts of asset allocation, multi-managed and other accounts.

**The information is provided as of October 31, 2020

Under the “Ownership of Securities” section on page 65 of the SAI, the disclosure is hereby deleted in its entirety and replaced with the following:

“The portfolio managers did not own any shares of the Fund as of December 4, 2020.”

This Supplement must be accompanied by or read in conjunction with the current Prospectus, Summary Prospectus and SAI for the Fund, each dated April 29, 2020, as supplemented.

Please keep this Supplement for future reference.

Great-West Large Cap Growth Fund
Institutional Class Ticker: MXGSX
Investor Class Ticker: MXLGX
 (the “Fund”)

Summary Prospectus
April 29, 2020

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 and other information about the Fund, including the Statement of Additional Information and most recent reports to shareholders, online at www.greatwestfunds.com/prospectus.html. You can also get this information at no cost by calling (866) 831-7129 or by sending an email request to email@greatwestfunds.com. The current Prospectus and Statement of Additional Information, both dated April 29, 2020, are incorporated by reference as a matter of law into this Summary Prospectus, which means they are legally part of this Summary Prospectus.

Fund shares are available only through investments in certain variable annuity contracts and variable life insurance policies (“variable contracts”), individual retirement accounts (“IRAs”), qualified retirement plans (“retirement plans”) and college savings programs (collectively, “Permitted Accounts”). This Summary Prospectus is not intended for use by other investors. This Summary Prospectus should be read together with the

prospectus or disclosure document for the Permitted Account.

Internet Delivery of Shareholder Reports: Beginning on January 1, 2021, as permitted by regulations adopted by the Securities and Exchange Commission ("SEC"), paper copies of the Fund's annual and semi-annual shareholder reports will no longer be sent by mail, unless you specifically request paper copies of the reports. Instead, the reports will be made available on the Fund's website (www.greatwestfunds.com), and you will be notified by mail each time a report is posted and provided with a website link to access the report.

If you already elected to receive shareholder reports electronically, you will not be affected by this change and you need not take any action. You may elect to receive shareholder reports and other communications from your financial intermediary electronically by contacting your financial intermediary.

You may elect to receive all future reports in paper free of charge. You can call (866) 345-5954 or make elections online at www.fundreports.com to let your financial intermediary know you wish to continue to receive paper copies of your shareholder reports. Your election to receive reports in paper will apply to all funds held in your account.

Investment Objective

The Fund seeks long-term growth of capital.

Fees and Expenses of the Fund

This table describes the fees and expenses that you may pay if you buy and hold shares of the Fund. This table does not reflect the fees and expenses of any Permitted Account. If the fees and expenses imposed by a Permitted Account were reflected, the fees and expenses shown below would be higher.

Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment)

	Institutional Class	Investor Class	Class L
Management Fees	0.64%	0.64%	0.64%
Distribution and Service (12b-1) Fees	0.00%	0.00%	0.25%
Total Other Expenses	0.01%	0.38%	0.38%
Shareholder Services Fees	0.00%	0.35%	0.35%
Other Expenses ¹	0.01%	0.03%	0.03%
Total Annual Fund Operating Expenses	0.65%	1.02%	1.27%
Fee Waiver and Expense Reimbursement ²	0.00%	0.02%	0.02%
Total Annual Fund Operating Expenses After Fee Waiver and Expense Reimbursement	0.65%	1.00%	1.25%

¹ Other Expenses are estimated for Class L shares because the class has not yet commenced operations.

² GWCM has contractually agreed to waive management fees or reimburse expenses if total annual fund operating expenses of any Class exceed 0.65% of the Class's average daily net assets, excluding Distribution and Service (12b-1) Fees, Shareholder Services Fees, brokerage expenses, taxes, dividend interest on short sales, interest expenses, and any extraordinary expenses, including litigation costs (the "Expense Limit"). The agreement's current term ends on April 30, 2021 and automatically renews for one-year terms unless it is terminated by Great-West Funds or GWCM upon written notice

within 90 days of the end of the current term or upon termination of the investment advisory agreement. Under the agreement, GWCM may recoup, subject to Board approval, these waivers and reimbursements in future periods, not exceeding three years following the particular waiver/reimbursement, provided Total Annual Fund Operating Expenses of the Class plus such recoupment do not exceed the lesser of the Expense Limit that was in place at the time of the waiver/reimbursement or the Expense Limit in place at the time of recoupment.

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 does not reflect the fees and expenses of any Permitted Account. If the fees and expenses of any Permitted Account were reflected, the fees and expenses in the Example would be higher.

The Example assumes that you invest \$10,000 in the Fund for the time periods indicated and applies whether you hold or redeem all of your shares at the end of each period. The Example also assumes that the Expense Limit is in place for the first year, that your investment has a 5% return each year, that all dividends and capital gains are reinvested, and that the Fund's operating expenses are the amount shown in the fee table and remain the same for the years shown. 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
Institutional Class	\$66	\$208	\$362	\$810
Investor Class	\$102	\$323	\$561	\$1,246
Class L	\$127	\$401	\$695	\$1,532

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 generally indicates higher transaction costs. 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 turnover rate was 32% of the average value of its portfolio.

Principal Investment Strategies

Below is a summary of the principal investment strategies of the Fund.

The Fund will, under normal circumstances, invest 80% of its net assets (plus the amount of any borrowings for investment purposes) in securities selected for their growth potential with market capitalizations of \$4 billion or more at the time of purchase. If the market capitalization of a company held by the Fund moves outside this range, the Fund may, but is not required to, sell the securities. The Fund may invest in foreign securities, which may include investments in emerging markets, without limit within the parameters of the Fund's specific investment policies. The Fund may also hold cash or other short-term investments. Derivatives, which are instruments that have a value based on another instrument, exchange rate or index, may be used as substitutes for securities in which the Fund can invest. To the extent the Fund uses derivatives, the Fund will primarily use futures contracts to more effectively gain targeted equity exposure from its cash positions.

The Fund's investment portfolio is managed by two sub-advisers: Amundi Pioneer Asset Management, Inc. ("Amundi Pioneer") and J.P. Morgan Investment Management Inc. ("JPMorgan") (each, a "Sub-Adviser," and collectively, the "Sub-Advisers"). The Sub-Advisers seek to invest in securities of issuers with above average potential for growth.

The Fund's investment adviser, Great-West Capital Management, LLC ("GWCM") maintains a strategic asset allocation of the Fund's assets with each Sub-Adviser and reviews the asset allocations on a quarterly basis, or more frequently as deemed necessary. As of the date of this Prospectus, the target asset allocation is a 50% allocation of the Fund's assets to Amundi Pioneer and a 50% allocation of the Fund's assets to JPMorgan. Notwithstanding the target allocation, GWCM may change the asset allocations at any time and without shareholder notice or approval.

Principal Investment Risks

Below is a summary of the principal investment risks of investing in the Fund. These risks are presented in an order that reflects GWCM's current assessment of relative importance, but this assessment could change over time as the Fund's portfolio changes or in light of changes in the market or the economic environment, among other things. The Fund is not required to and will not update this prospectus solely because its assessment of the relative importance of the principal risks of investing in the Fund changes.

Equity Securities Risk - The value of a company's stock may fall as a result of factors which directly relate to that company, such as lower demand for the company's products or services or poor management decisions. In addition, a company's stock generally pays dividends only after the company makes required payments to holders of its bonds and other debt. For this reason, the value of the stock will usually react more strongly than bonds and other debt to actual or perceived changes in a company's financial condition or progress.

Growth Stock Risk - Growth stocks can be volatile for several reasons. Since they usually reinvest a high proportion of earnings in their own business, they may not pay the dividends usually associated with value stocks that can cushion their decline in a falling market. Also, since investors buy these stocks because of the expected superior earnings growth, earnings disappointments may result in sharp price declines.

Market Risk - The value of the Fund's investments may decrease, sometimes rapidly or unexpectedly, due to factors affecting specific issuers held by the Fund, particular industries represented in the Fund's portfolio, 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 or acts of terrorism, natural disasters, outbreaks of infectious illnesses or other widespread public health issues, or adverse investor sentiment generally. 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. These adverse developments may cause broad declines in an issuer's value due to short-term market movements or for significantly longer periods during more prolonged market downturns.

Foreign Securities Risk - Foreign markets can be more volatile than the U.S. market due to increased risks of adverse issuer, political, regulatory, market, currency valuation or economic developments. In addition, emerging markets may be more volatile and less liquid than the markets of more mature economies, and the securities of emerging markets issuers often are subject to rapid and large changes in price.

Developing and Emerging Markets Risk – The risk that markets of developing and emerging market countries are less developed and less liquid, subject to greater price volatility and generally subject to increased economic, political, regulatory and other uncertainties than more developed markets.

Currency Risk - Adverse fluctuations in exchange rates between the U.S. dollar and other currencies may cause the Fund to lose money on investments denominated in foreign currencies.

Derivatives Risk - The Fund may invest in derivative instruments, including but not limited to, futures contracts. Using derivatives can disproportionately increase losses and reduce opportunities for gains when security prices, currency rates or interest rates are changing. The Fund may not fully benefit from or may lose money on derivatives if changes in their value do not correspond accurately to changes in the value of the Fund's holdings. The other parties to certain derivative contracts present the same types of credit risk as issuers of fixed income securities. Derivatives can also make a fund less liquid and harder to value, especially in declining markets, and may increase the Fund's volatility. There can be no assurance that the Fund's use of derivative contracts will work as intended, and it is possible for the Fund to lose more than its original investment.

Management Risk - A strategy used by the portfolio managers may fail to produce the intended results.

Multi-Manager Risk - Each Sub-Adviser makes investment decisions independently. It is possible that the Sub-Advisers' security selection processes may not complement one another and the Fund may have buy and sell transactions in the same security on the same day.

An investment in the Fund is not a deposit with a bank, is not insured, endorsed or guaranteed by the FDIC or any government agency, and is subject to the possible loss of your original investment.

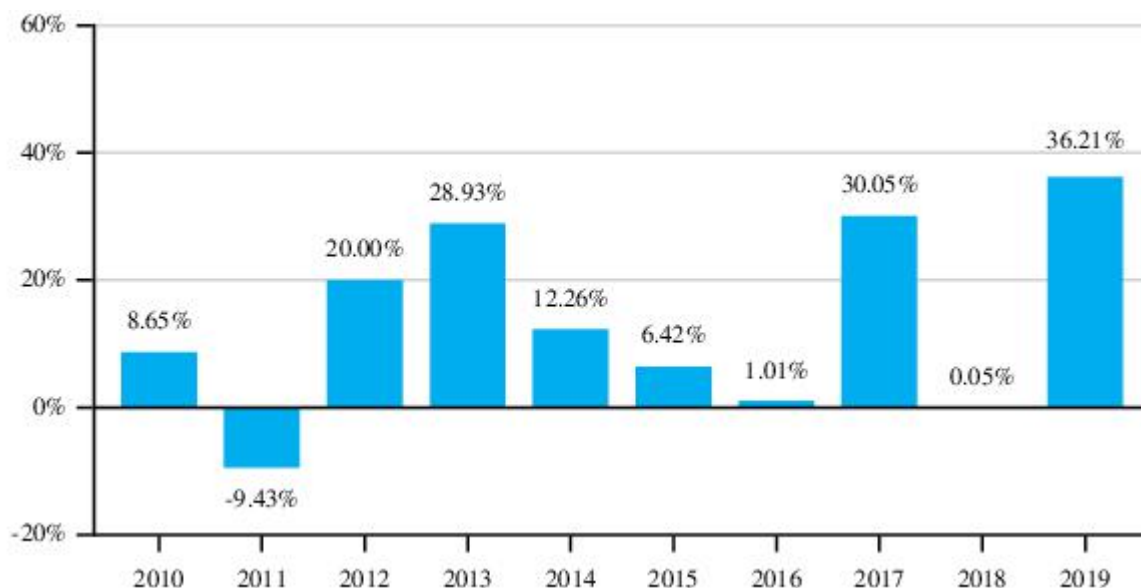
Performance

The bar chart and table below provide an indication of the risk of investment in the Fund by showing changes in the performance of the Fund's Investor Class shares for the last ten calendar years and by comparing the Fund's Institutional Class and Investor Class average annual total return to the performance of a broad-based securities market index and a secondary index. No Class L share performance data is provided because Class L shares have not commenced operations. Class L share performance information will appear in future versions of this Prospectus after Class L shares have annual returns for at least one complete calendar year. The returns shown below are historical and are not an indication of future performance. Total return figures assume reinvestment of dividends and capital gains distributions and include the effect of the Fund's recurring expenses, but do not include fees and expenses of any Permitted Account. If the fees and expenses of any Permitted Account were reflected, the performance shown would be lower.

On September 1, 2013, the Fund replaced the prior sub-adviser with the current Sub-Advisers. Consequently, the Fund's total returns shown below for the periods prior to September 1, 2013 are not necessarily indicative of the performance of the Fund, as it is currently managed.

Updated performance information may be obtained at www.greatwestfunds.com (the website does not form a part of this Prospectus).

Calendar Year Total Returns



	Quarter Ended	Total Return
Best Quarter	March 2012	17.97%
Worst Quarter	September 2011	-16.35%

Average Annual Total Returns for the Periods Ended December 31, 2019

	One Year	Five Years	Ten Years/ Since Inception
Institutional Class	36.78%	N/A	14.37%*
Russell 1000® Growth Index (reflects no deduction for fees, expenses or taxes)	36.39%	N/A	14.68%
S&P 500® Index (reflects no deduction for fees, expenses or taxes)	31.49%	N/A	12.11%
Investor Class	36.21%	13.76%	12.53%
Russell 1000® Growth Index (reflects no deduction for fees, expenses or taxes)	36.39%	14.63%	15.22%
S&P 500® Index (reflects no deduction for fees, expenses or taxes)	31.49%	11.70%	13.56%

* Since inception on May 1, 2015

Investment Adviser

GWCM

Sub-Advisers

Amundi Pioneer and JPMorgan

Portfolio Managers

Name	Title	Portfolio Manager of Fund Since
Amundi Pioneer		
Andrew Acheson	Managing Director, Director of Growth, U.S.	2013
Paul Cloonan, CFA	Senior Vice President	2013
JPMorgan		
Giri Devulapally, CFA	Managing Director	2013

Purchase and Sale of Fund Shares

The Fund is not sold directly to the general public, but instead may be offered as an underlying investment for Permitted Accounts. Permitted Accounts may place orders on any business day to purchase and redeem shares of the Fund based on instructions received from owners of variable contracts or IRAs, or from participants of retirement plans or college savings programs. Please contact your registered representative, IRA custodian or trustee, retirement plan sponsor or administrator, or college savings program for information concerning the procedures for purchasing and redeeming shares of the Fund.

The Fund does not have any initial or subsequent investment minimums. However, Permitted Accounts may impose investment minimums.

Tax Information

Currently, Permitted Accounts generally are not subject to federal income tax on any Fund distributions. Owners of variable contracts, retirement plan participants, and IRA owners are also generally not subject to federal income tax on Fund distributions until such amounts are withdrawn from the variable contract, retirement plan, or IRA. Distributions from a college savings program generally are not taxed provided that they are used to pay for qualified higher education expenses. More information regarding federal taxation of Permitted Account owners may be found in the applicable prospectus and/or disclosure documents for that Permitted Account.

Payments to Insurers, Broker-Dealers and Other Financial Intermediaries

Companies related to the Fund may make payments to insurance companies, broker-dealers and other financial intermediaries for the sale of Fund shares and/or other services. These payments may be a factor that an insurance company, broker-dealer or other financial intermediary considers in including the Fund as an investment option in a Permitted Account. These payments also 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, visit your financial intermediary's website, or consult the variable contract prospectus for more information.

