

# iShares<sup>®</sup> Trust

## Statement of Additional Information

Dated June 29, 2018

(as revised March 28, 2019)

This combined Statement of Additional Information (“SAI”) is not a prospectus. It should be read in conjunction with the current prospectuses (each, a “Prospectus” and collectively, the “Prospectuses”) for the following series of iShares Trust (the “Trust”):

<u>Fund</u>	<u>Ticker</u>	<u>Listing Exchange</u>
iShares 1-3 Year Treasury Bond ETF	SHY	NASDAQ
iShares 3-7 Year Treasury Bond ETF	IEI	NASDAQ
iShares 7-10 Year Treasury Bond ETF	IEF	NASDAQ
iShares 10-20 Year Treasury Bond ETF	TLH	NYSE Arca
iShares 20+ Year Treasury Bond ETF	TLT	NASDAQ
iShares Agency Bond ETF	AGZ	NYSE Arca
iShares Broad USD Investment Grade Corporate Bond ETF	USIG	NASDAQ
iShares California Muni Bond ETF	CMF	NYSE Arca
iShares Core 5-10 Year USD Bond ETF	IMTB	NYSE Arca
iShares Core 10+ Year USD Bond ETF	ILTB	NYSE Arca
iShares Core U.S. Aggregate Bond ETF	AGG	NYSE Arca
iShares ESG 1-5 Year USD Corporate Bond ETF	SUSB	NASDAQ
iShares ESG USD Corporate Bond ETF	SUSC	NASDAQ
iShares Government/Credit Bond ETF	GBF	NYSE Arca
iShares iBoxx \$ High Yield Corporate Bond ETF	HYG	NYSE Arca
iShares iBoxx \$ Investment Grade Corporate Bond ETF	LQD	NYSE Arca
iShares Intermediate Government/Credit Bond ETF	GVI	Cboe BZX
iShares Intermediate-Term Corporate Bond ETF	IGIB	NASDAQ
iShares Long-Term Corporate Bond ETF	IGLB	NYSE Arca
iShares MBS ETF	MBB	NASDAQ
iShares National Muni Bond ETF	MUB	NYSE Arca
iShares New York Muni Bond ETF	NYF	NYSE Arca
iShares Short-Term Corporate Bond ETF	IGSB	NASDAQ
iShares Short-Term National Muni Bond ETF	SUB	NYSE Arca
iShares Short Treasury Bond ETF	SHV	NASDAQ

The Prospectuses for the above-listed funds (each, a “Fund” and collectively, the “Funds”) are dated June 29, 2018, as amended and supplemented from time to time. Capitalized terms used herein that are not defined have the same meaning as in the applicable Prospectus, unless otherwise noted. The Financial Statements and Notes contained in the applicable Annual Report and Semi-Annual Report of the Trust for the Funds are incorporated by reference into and are deemed to be part of this SAI. A copy of each Fund’s Prospectus, Annual Report and Semi-Annual Report may be obtained without charge by writing to the Trust’s distributor, BlackRock Investments, LLC (the “Distributor” or “BRIL”), 1 University Square Drive, Princeton, NJ 08540, calling 1-800-iShares (1-800-474-2737) or visiting [www.iShares.com](http://www.iShares.com). Each Fund’s Prospectus is incorporated by reference into this SAI.

References to the Investment Company Act of 1940, as amended (the “Investment Company Act” or the “1940 Act”), or other applicable law, will include any rules promulgated thereunder and any guidance, interpretations or modifications by the Securities and Exchange Commission (the “SEC”), SEC staff or other authority with appropriate jurisdiction, including court interpretations, and exemptive, no action or other relief or permission from the SEC, SEC staff or other authority.

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## TABLE OF CONTENTS

	<u>Page</u>
General Description of the Trust and its Funds	1
Exchange Listing and Trading	2
Investment Strategies and Risks	3
Asset-Backed and Commercial Mortgage-Backed Securities	5
Bonds	5
Borrowing	5
Brady Bonds	6
Corporate Bonds	6
Diversification Status	6
Futures, Options on Futures and Securities Options	7
High Yield Securities	8
Illiquid Investments	9
Lending Portfolio Securities	10
Mortgage-Backed Pass-Through Securities	10
Municipal Insurance	11
Municipal Securities	12
Non-U.S. Securities	13
Privately-Issued Securities	13
Ratings	13
Regulation Regarding Derivatives	14
Repurchase Agreements	15
Reverse Repurchase Agreements	15
Securities of Investment Companies	15
Short-Term Instruments and Temporary Investments	16
Sovereign and Quasi-Sovereign Obligations	16
Swap Agreements	16
U.S. Government Obligations	17
U.S.-Registered Securities of Non-U.S. Issuers	17
Future Developments	17
General Considerations and Risks	17
Agency Debt Risk	17
Borrowing Risk	18
Call Risk	18
Custody Risk	18
Extension Risk	18
Issuer Insolvency Risk	18

	<u>Page</u>
Liquidity Risk Management Rule Risk	19
Municipal Market Disruption Risk	19
Operational Risk	19
Prepayment Risk	19
Repurchase Agreement Risk	20
Risk of Derivatives	20
Risk of Futures and Options on Futures Transactions	20
Risk of Investing in Non-U.S. Agency Debt Securities	21
Risk of Investing in Non-U.S. Debt Securities	21
Risk of Swap Agreements	22
Securities Lending Risk	22
Special Considerations Regarding Investments in California Municipal Securities	22
Special Considerations Regarding Investments in New York Municipal Securities	38
Supranational Entities Risk	72
Tax Risks Associated with Municipal Securities	72
U.S. Economic Trading Partners Risk	72
U.S. Treasury Obligations Risk	73
Valuation Risk	73
Risk of Investing in Asia	73
Risk of Investing in Australasia	74
Risk of Investing in Central and South America	74
Risk of Investing in Developed Countries	74
Risk of Investing in Emerging Markets	75
Risk of Investing in Europe	76
Risk of Investing in the Middle East	77
Risk of Investing in North America	78
Risk of Investing in the Automotive Sub-Industry	78
Risk of Investing in the Basic Materials Industry	78
Risk of Investing in the Capital Goods Industry	78
Risk of Investing in the Consumer Cyclical Industry	79
Risk of Investing in the Consumer Goods Industry	79
Risk of Investing in the Consumer Services Industry	79
Risk of Investing in the Consumer Staples Sector	79
Risk of Investing in the Energy Sector	79
Risk of Investing in the Financials Sector	80
Risk of Investing in the Healthcare Sector	81
Risk of Investing in the Industrials Sector	81

	<u>Page</u>
Risk of Investing in the Insurance Industry	82
Risk of Investing in the Media Sub-Industry	82
Risk of Investing in Municipal Securities in the Utilities Sector	82
Risk of Investing in the Oil and Gas Industry	82
Risk of Investing in the Pharmaceuticals Industry	82
Risk of Investing in the Real Estate Industry	82
Risk of Investing in the Retail Industry	84
Risk of Investing in the Technology Sector	84
Risk of Investing in the Telecommunications Sector	84
Risk of Investing in the Transportation Infrastructure Industry	85
Risk of Investing in the Utilities Sector	85
Proxy Voting Policy	85
Portfolio Holdings Information	86
Construction and Maintenance of the Underlying Indexes	87
The Bloomberg Barclays Indexes	87
Bloomberg Barclays MSCI US Corporate 1-5 Year ESG Focus Index	87
Bloomberg Barclays MSCI US Corporate ESG Focus Index	88
Bloomberg Barclays U.S. Agency Bond Index	89
Bloomberg Barclays U.S. Aggregate Bond Index	89
Bloomberg Barclays U.S. Government/Credit Bond Index	90
Bloomberg Barclays U.S. Intermediate Government/Credit Bond Index	90
Bloomberg Barclays U.S. MBS Index	90
Bloomberg Barclays U.S. Universal 5-10 Year Index	91
Bloomberg Barclays U.S. Universal 10+ Year Index	91
The ICE <sup>®</sup> BofAML <sup>®</sup> Bond Indexes	92
ICE BofAML 1-5 Year US Corporate Index	92
ICE BofAML 5-10 Year US Corporate Index	92
ICE BofAML 10+ Year US Corporate Index	92
ICE BofAML US Corporate Index	93
The ICE U.S. Treasury Bond Index Series <sup>™</sup>	93
ICE U.S. Treasury 1-3 Year Bond Index	93
ICE U.S. Treasury 3-7 Year Bond Index	93
ICE U.S. Treasury 7-10 Year Bond Index	93
ICE U.S. Treasury 10-20 Year Bond Index	94
ICE U.S. Treasury 20+ Year Bond Index	94
ICE U.S. Treasury Short Bond Index	94
The Markit iBoxx Indexes	94

	<u>Page</u>
Markit iBoxx <sup>®</sup> USD Liquid High Yield Index	94
Markit iBoxx <sup>®</sup> USD Liquid Investment Grade Index	95
The S&P Indexes	95
S&P California AMT-Free Municipal Bond Index <sup>™</sup>	96
S&P National AMT-Free Municipal Bond Index <sup>™</sup>	97
S&P New York AMT-Free Municipal Bond Index <sup>™</sup>	97
S&P Short Term National AMT-Free Municipal Bond Index <sup>™</sup>	98
Investment Restrictions	99
Continuous Offering	103
Management	103
Trustees and Officers	103
Committees of the Board of Trustees	110
Remuneration of Trustees and Advisory Board Members	114
Control Persons and Principal Holders of Securities	118
Potential Conflicts of Interest	128
Legal Proceedings	136
Investment Advisory, Administrative and Distribution Services	136
Investment Adviser	136
Portfolio Managers	139
Codes of Ethics	142
Anti-Money Laundering Requirements	143
Administrator, Custodian and Transfer Agent	143
Distributor	144
Securities Lending	144
Payments by BFA and its Affiliates	151
Determination of Net Asset Value	153
Brokerage Transactions	155
Additional Information Concerning the Trust	161
Shares	161
DTC as Securities Depository for Shares of the Funds	161
Distribution of Shares	162
Creation and Redemption of Creation Units	163
General	163
Fund Deposit	164
Cash Purchase Method	165
Procedures for Creation of Creation Units	165
Role of the Authorized Participant	165

	<u>Page</u>
Placement of Creation Orders	165
Purchase Orders	166
Timing of Submission of Purchase Orders	166
Acceptance of Orders for Creation Units	166
Issuance of a Creation Unit	167
Costs Associated with Creation Transactions	167
Redemption of Creation Units	168
Cash Redemption Method	169
Costs Associated with Redemption Transactions	169
Placement of Redemption Orders	170
Taxation on Creations and Redemptions of Creation Units	171
Taxes	171
Regulated Investment Company Qualifications	172
Taxation of RICs	172
Net Capital Loss Carryforwards	172
Excise Tax	173
Taxation of U.S. Shareholders	173
Sales of Shares	175
Backup Withholding	175
Sections 351 and 362	175
Tax-Exempt Interest Income	175
Taxation of Certain Derivatives	177
Market Discount	177
Non-U.S. Investments	177
Original Issue Discount	178
Reporting	178
Taxation of Non-U.S. Shareholders	178
Financial Statements	179
Miscellaneous Information	179
Counsel	179
Independent Registered Public Accounting Firm	179
Shareholder Communications to the Board	179
Regulation Under the Alternative Investment Fund Managers Directive	180
Investors' Rights	180
Appendix A1 - iShares ETFs Proxy Voting Policy	A-1
Appendix A2 – iShares Sustainable ETFs Proxy Voting Policy	A-2
Appendix A3 – BlackRock Proxy Voting Policies	A-4

	<u>Page</u>
Appendix A4 – Supplemental BlackRock Sustainable Proxy Voting Guidelines	A-14
Appendix B – Description of Fixed-Income Ratings	B-1

# General Description of the Trust and its Funds

The Trust currently consists of more than 280 investment series or portfolios. The Trust was organized as a Delaware statutory trust on December 16, 1999 and is authorized to have multiple series or portfolios. The Trust is an open-end management investment company registered with the SEC under the 1940 Act. The offering of the Trust's shares is registered under the Securities Act of 1933, as amended (the "1933 Act"). This SAI relates to the following Funds:

- iShares 1-3 Year Treasury Bond ETF
- iShares 3-7 Year Treasury Bond ETF
- iShares 7-10 Year Treasury Bond ETF
- iShares 10-20 Year Treasury Bond ETF
- iShares 20+ Year Treasury Bond ETF
- iShares Agency Bond ETF
- iShares Broad USD Investment Grade Corporate Bond ETF<sup>1</sup>
- iShares California Muni Bond ETF
- iShares Core 5-10 Year USD Bond ETF
- iShares Core 10+ Year USD Bond ETF
- iShares Core U.S. Aggregate Bond ETF
- iShares ESG 1-5 Year USD Corporate Bond ETF
- iShares ESG USD Corporate Bond ETF
- iShares Government/Credit Bond ETF
- iShares iBoxx \$ High Yield Corporate Bond ETF
- iShares iBoxx \$ Investment Grade Corporate Bond ETF
- iShares Intermediate Government/Credit Bond ETF
- iShares Intermediate-Term Corporate Bond ETF<sup>2</sup>
- iShares Long-Term Corporate Bond ETF<sup>3</sup>
- iShares MBS ETF
- iShares National Muni Bond ETF
- iShares New York Muni Bond ETF
- iShares Short-Term Corporate Bond ETF<sup>4</sup>
- iShares Short-Term National Muni Bond ETF
- iShares Short Treasury Bond ETF

<sup>1</sup> On August 1, 2018, the name of the Fund changed from the iShares U.S. Credit Bond ETF to the iShares Broad USD Investment Grade Corporate Bond ETF and the Fund's Underlying Index changed from the Bloomberg Barclays U.S. Credit Bond Index to the ICE BofAML US Corporate Index.

<sup>2</sup> On August 1, 2018, the name of the Fund changed from the iShares Intermediate Credit Bond ETF to the iShares Intermediate-Term Corporate Bond ETF and the Fund's Underlying Index changed from the Bloomberg Barclays U.S. Intermediate Credit Bond Index to the ICE BofAML 5-10 Year US Corporate Index.

<sup>3</sup> On August 1, 2018, the name of the Fund changed from the iShares 10+ Year Credit Bond ETF to the iShares Long-Term Corporate Bond ETF and the Fund's Underlying Index changed from the Bloomberg Barclays U.S. Long Credit Index to the ICE BofAML 10+ Year US Corporate Index.

<sup>4</sup> On August 1, 2018, the name of the Fund changed from the iShares 1-3 Year Credit Bond ETF to the iShares Short-Term Corporate Bond ETF and the Fund's Underlying Index changed from the Bloomberg Barclays U.S. 1-3 Year Credit Bond Index to the ICE BofAML 1-5 Year US Corporate Index.

Each Fund is managed by BlackRock Fund Advisors ("BFA"), an indirect wholly-owned subsidiary of BlackRock, Inc., and generally seeks to track the investment results of the specific benchmark index identified in the applicable Prospectus for that Fund (each, an "Underlying Index").



Each Fund offers and issues shares at their net asset value per share (“NAV”) only in aggregations of a specified number of shares (each, a “Creation Unit”), generally in exchange for a designated portfolio of securities (including any portion of such securities for which cash may be substituted) included in its Underlying Index (the “Deposit Securities”), together with the deposit of a specified cash payment (the “Cash Component”). Shares of the Funds are listed for trading on national securities exchanges such as Cboe BZX Exchange, Inc. (“Cboe BZX”) (formerly known as BATS Exchange, Inc.), The Nasdaq Stock Market, LLC (“NASDAQ”) or NYSE Arca, Inc. (“NYSE Arca”) (each a “Listing Exchange”). Shares of each Fund are traded in the secondary market and elsewhere at market prices that may be at, above or below the Fund’s NAV. Shares are redeemable only in Creation Units by Authorized Participants (as defined in the *Portfolio Holdings Information* section of this SAI), and, generally, in exchange for portfolio securities and a Cash Amount (as defined in the *Redemption of Creation Units* section of this SAI). Creation Units typically are a specified number of shares, generally ranging from 50,000 to 100,000 shares or multiples thereof.

The Trust reserves the right to permit or require that creations and redemptions of shares are effected fully or partially in cash and reserves the right to permit or require the substitution of Deposit Securities in lieu of cash. Shares may be issued in advance of receipt of Deposit Securities, subject to various conditions, including a requirement that the Authorized Participant maintain with the Trust a cash deposit equal to at least 105% and up to 115%, which percentage BFA may change from time to time, of the market value of the omitted Deposit Securities. The Trust may use such cash deposit at any time to purchase Deposit Securities. See the *Creation and Redemption of Creation Units* section of this SAI. Transaction fees and other costs associated with creations or redemptions that include a cash portion may be higher than the transaction fees and other costs associated with in-kind creations or redemptions. In all cases, conditions with respect to creations and redemptions of shares and fees will be limited in accordance with the requirements of SEC rules and regulations applicable to management investment companies offering redeemable securities.

Section 12(d)(1) of the 1940 Act restricts investments by investment companies, including foreign investment companies, in the securities of other investment companies. Registered investment companies are permitted to invest in the Funds beyond the limits set forth in Section 12(d)(1), subject to certain terms and conditions set forth in SEC rules or in an SEC exemptive order issued to the Trust. In order for a registered investment company to invest in shares of the Funds beyond the limitations of Section 12(d)(1) pursuant to the exemptive relief obtained by the Trust, the registered investment company must enter into an agreement with the Trust. Foreign investment companies are permitted to invest in the Funds only up to the limits set forth in Section 12(d)(1), subject to any applicable SEC no-action relief.

## Exchange Listing and Trading

A discussion of exchange listing and trading matters associated with an investment in each Fund is contained in the *Shareholder Information* section of each Fund’s Prospectus. The discussion below supplements, and should be read in conjunction with, that section of the applicable Prospectus.

Shares of each Fund are listed for trading, and trade throughout the day, on the applicable Listing Exchange and in other secondary markets. Shares of certain Funds may also be listed on certain non-U.S. exchanges. There can be no assurance that the requirements of the Listing Exchange necessary to maintain the listing of shares of any Fund will continue to be met. The Listing Exchange may, but is not required to, remove the shares of a Fund from listing if, among other things: (i) following the initial 12-month period beginning upon the commencement of trading of Fund shares, there are fewer than 50 record and/or beneficial owners of shares of a Fund for 30 or more consecutive trading days, (ii) the value of the Underlying Index on which a Fund is based is no longer calculated or available, or (iii) any other event shall occur or condition shall exist that, in the opinion of the Listing Exchange, makes further dealings on the Listing Exchange inadvisable. The Listing Exchange will also remove shares of a Fund from listing and trading upon termination of such Fund or in the event a Fund does not comply with the continuous listing standards of the Listing Exchange, as described in the Fund’s Prospectus.

As in the case of other publicly-traded securities, when you buy or sell shares of a Fund through a broker, you may incur a brokerage commission determined by that broker, as well as other charges.

In order to provide additional information regarding the indicative value of shares of the Funds, the Listing Exchange or a market data vendor disseminates information every 15 seconds through the facilities of the Consolidated Tape Association, or through other widely disseminated means, an updated indicative optimized portfolio value (“IOPV”) for the Funds as

calculated by an information provider or market data vendor. The Trust is not involved in or responsible for any aspect of the calculation or dissemination of the IOPV and makes no representation or warranty as to the accuracy of the IOPV.

An IOPV has a fixed-income securities component and a cash component. The fixed-income securities values included in an IOPV are the values of the Deposit Securities for a Fund. While the IOPV reflects the current value of the Deposit Securities required to be deposited in connection with the purchase of a Creation Unit, it does not necessarily reflect the precise composition of the current portfolio of securities held by the Fund at a particular point in time because the current portfolio of the Fund may include securities that are not a part of the current Deposit Securities. Therefore, a Fund's IOPV disseminated during the Listing Exchange trading hours should not be viewed as a real-time update of the Fund's NAV, which is calculated only once a day.

The cash component included in an IOPV consists of estimated accrued interest, dividends and other income, less expenses. If applicable, each IOPV also reflects changes in currency exchange rates between the U.S. dollar and the applicable currency.

The Trust reserves the right to adjust the share prices of the Funds in the future to maintain convenient trading ranges for investors. Any adjustments would be accomplished through stock splits or reverse stock splits, which would have no effect on the net assets of the Funds or an investor's equity interest in the Funds.

## Investment Strategies and Risks

Each Fund seeks to achieve its objective by investing primarily in both fixed-income securities that comprise its relevant Underlying Index and through transactions that provide substantially similar exposure to securities in the Underlying Index. Each Fund operates as an index fund and is not actively managed. Adverse performance of a security in a Fund's portfolio will ordinarily not result in the elimination of the security from the Fund's portfolio.

Each Fund engages in representative sampling, which is investing in a sample of securities selected by BFA to have a collective investment profile similar to that of the Fund's Underlying Index. Securities selected have aggregate investment characteristics (based on market capitalization and industry weightings), fundamental characteristics (such as yield, credit rating, maturity and duration) and liquidity measures similar to those of the Underlying Index. A fund that uses representative sampling generally does not hold all of the securities that are in its underlying index.

Although the Funds do not seek leveraged returns, certain instruments used by the Funds may have a leveraging effect as described below.

Each of the iShares 1-3 Year Treasury Bond ETF, iShares 3-7 Year Treasury Bond ETF, iShares 7-10 Year Treasury Bond ETF, iShares 10-20 Year Treasury Bond ETF, iShares 20+ Year Treasury Bond ETF and iShares Short Treasury Bond ETF (the "Treasury Bond Funds") generally invests at least 90% of its assets in the bonds of its Underlying Index and at least 95% of its assets in U.S. government bonds. Each Treasury Bond Fund may invest up to 10% of its assets in U.S. government bonds not included in its Underlying Index, but which BFA believes will help the Treasury Bond Fund track its Underlying Index. For example, a Treasury Bond Fund may invest in bonds not included in its Underlying Index in order to reflect changes in the relevant Underlying Index (such as reconstitutions, additions and deletions). Each Treasury Bond Fund also may invest up to 5% of its assets in repurchase agreements collateralized by U.S. government obligations and in cash and cash equivalents, including shares of money market funds advised by BFA or its affiliates ("BlackRock Cash Funds").

Each of the iShares Broad USD Investment Grade Corporate Bond ETF, iShares Government/Credit Bond ETF, iShares Intermediate Government/Credit Bond ETF, iShares Intermediate-Term Corporate Bond ETF and iShares Short-Term Corporate Bond ETF generally invests at least 90% of its assets in the securities of its Underlying Index. For example, a Fund may invest in bonds not included in its Underlying Index in order to reflect changes in its Underlying Index (such as reconstitutions, additions and deletions). Each of the iShares Broad USD Investment Grade Corporate Bond ETF, iShares Government/Credit Bond ETF, iShares Intermediate Government/Credit Bond ETF, iShares Intermediate-Term Corporate Bond ETF and iShares Short-Term Corporate Bond ETF may invest the remainder of its assets in certain futures, options and swap contracts, cash and cash equivalents, including shares of BlackRock Cash Funds, as well as in securities not included in its Underlying Index, but which BFA believes will help the Fund track its Underlying Index.

Each of the iShares Core 5-10 Year USD Bond ETF, iShares Core 10+ Year USD Bond ETF, iShares ESG 1-5 Year USD Corporate Bond ETF, iShares ESG USD Corporate Bond ETF, iShares iBoxx \$ High Yield Corporate Bond ETF and iShares Long-Term

Corporate Bond ETF generally will invest at least 90% of its assets in the component securities of the Underlying Index and may invest up to 10% of its assets in certain futures, options and swap contracts, cash and cash equivalents, including shares of BlackRock Cash Funds, as well as in securities not included in the Underlying Index, but which BFA believes will help the Fund track the Underlying Index. From time to time when conditions warrant, however, the Fund may invest at least 80% of its assets in the component securities of the Underlying Index and may invest up to 20% of its assets in certain futures, options and swap contracts, cash and cash equivalents, including shares of BlackRock Cash Funds, as well as in securities not included in the Underlying Index, but which BFA believes will help the Fund track the Underlying Index.

The iShares Agency Bond ETF generally will invest at least 90% of its assets in the component securities of the Underlying Index and may invest up to 10% of its assets in certain futures, options and swap contracts, cash and cash equivalents, including shares of BlackRock Cash Funds, as well as in securities not included in the Underlying Index, but which BFA believes will help the Fund track the Underlying Index. From time to time when conditions warrant, however, the Fund may invest at least 80% of its assets in the component securities of the Underlying Index and may invest up to 20% of its assets in certain futures, options and swap contracts, cash and cash equivalents, including shares of BlackRock Cash Funds, as well as in securities not included in the Underlying Index, but which BFA believes will help the Fund track the Underlying Index. For example, the Fund may invest in securities not included in the Underlying Index in order to reflect various corporate actions (such as mergers) and other changes in the Underlying Index (such as reconstitutions, additions and deletions).

The iShares Core U.S. Aggregate Bond ETF generally seeks to track the performance of its Underlying Index by investing at least 90% of its net assets in component securities of its Underlying Index and in investments that have economic characteristics that are substantially identical to the economic characteristics of the component securities of its Underlying Index (i.e., TBAs). The Fund may invest up to 10% of its portfolio in bonds not included in its Underlying Index, but which BFA believes will help the Fund track its Underlying Index, as well as in certain futures, options and swap contracts, cash and high-quality, liquid short-term instruments, including shares of BlackRock Cash Funds. For example, the Fund may invest in securities not included in the Underlying Index in order to reflect various corporate actions (such as mergers) and other changes in the Underlying Index (such as reconstitutions, additions and deletions).

The iShares iBoxx \$ Investment Grade Corporate Bond ETF generally invests at least 90% of its assets in component securities of its Underlying Index and at least 95% of its assets in investment-grade corporate bonds. However, the Fund may at times invest up to 20% of its assets in certain futures, options and swap contracts, cash and cash equivalents as well as bonds not included in its relevant Underlying Index but which BFA believes will help the Fund track its Underlying Index and which are either: (i) included in the broader index upon which the Underlying Index is based (i.e., the Markit iBoxx USD Index); or (ii) new issues which BFA believes are entering or about to enter the Underlying Index or the Markit iBoxx USD Index. The Fund may invest up to 5% of its assets in repurchase agreements collateralized by U.S. government obligations and in cash and cash equivalents, including shares of BlackRock Cash Funds.

The iShares MBS ETF seeks to track the performance of its Underlying Index by investing at least 90% of its assets in the securities of its Underlying Index and in investments that provide substantially similar exposure to securities in the Underlying Index. The Fund may invest the remainder of its assets in certain futures, options and swap contracts, cash and cash equivalents, including shares of BlackRock Cash Funds, as well as in securities not included in the Underlying Index, but which BFA believes will help the Fund track the Underlying Index.

Each of the iShares California Muni Bond ETF, iShares National Muni Bond ETF, iShares New York Muni Bond ETF and iShares Short-Term National Muni Bond ETF (the “Municipal Bond Funds”) generally will invest at least 90% of its assets in the component securities of the Underlying Index and may invest up to 10% of its assets in certain futures, options and swap contracts, cash and cash equivalents, including shares of BlackRock Cash Funds, as well as in securities not included in the Underlying Index, but which BFA believes will help the Fund track the Underlying Index. From time to time when conditions warrant, however, the Fund may invest at least 80% of its assets in the component securities of the Underlying Index and may invest up to 20% of its assets in certain futures, options and swap contracts, cash and cash equivalents, including shares of BlackRock Cash Funds, as well as in securities not included in the Underlying Index, but which BFA believes will help the Fund track the Underlying Index. For example, each Municipal Bond Fund may invest in municipal bonds not included in its Underlying Index in order to reflect prospective changes in its Underlying Index (such as index reconstitutions, additions and deletions). Each of the iShares California Muni Bond ETF and iShares New York Muni Bond ETF generally holds municipal bond securities issued by its respective state and local municipalities whose interest payments are exempt from U.S. federal and state income tax, the federal alternative minimum tax (“AMT”), and the federal Medicare contribution tax of 3.8% on “net investment income.” Each of the iShares National Muni Bond ETF and iShares Short-Term National Muni Bond ETF will

generally hold municipal bond securities issued by state and local municipalities whose interest payments are exempt from U.S. federal income tax, the federal AMT, and the federal Medicare contribution tax of 3.8% on “net investment income.” In addition, each Municipal Bond Fund intends to invest any cash assets in one or more affiliated municipal money market funds, which may be advised by BFA or its affiliates.

**Asset-Backed and Commercial Mortgage-Backed Securities.** Certain of the Funds may invest in asset-backed securities (“ABS”) and commercial mortgage-backed securities (“CMBS”). ABS are securities backed by installment contracts, credit-card receivables or other assets. CMBS are securities backed by commercial real estate properties. Both ABS and CMBS represent interests in “pools” of assets in which payments of both interest and principal on the securities are made on a regular basis. The payments are, in effect, “passed through” to the holder of the securities (net of any fees paid to the issuer or guarantor of the securities). The average life of ABS and CMBS varies with the maturities of the underlying instruments and, as a result of prepayments, can often be less than the original maturity of the assets underlying the securities. For this and other reasons, the stated maturity of an ABS or CMBS may be shortened, and the security’s total return may be difficult to predict precisely.

Beginning in the second half of 2007 through 2009, the market for ABS and mortgage-backed pass-through securities (“MBS”) experienced substantially, often dramatically, lower valuations and reduced liquidity. These instruments continue to be subject to liquidity constraints, price volatility, credit downgrades and increases in default rates and, therefore, may be more difficult to value and more difficult to dispose of than previously.

**Bonds.** Each Fund invests a substantial portion of its assets in U.S. dollar-denominated bonds. A bond is an interest-bearing security issued by a U.S. or non-U.S. company, or U.S. or non-U.S. governmental unit. The issuer of a bond has a contractual obligation to pay interest at a stated rate on specific dates and to repay principal (the bond’s face value) periodically or on a specified maturity date. Bonds generally are used by corporations and governments to borrow money from investors.

An issuer may have the right to redeem or “call” a bond before maturity, in which case a fund may have to reinvest the proceeds at lower market rates. Similarly, a fund may have to reinvest interest income or payments received when bonds mature, sometimes at lower market rates. Most bonds bear interest income at a “coupon” rate that is fixed for the life of the bond. The value of a fixed-rate bond usually rises when market interest rates fall, and falls when market interest rates rise. Accordingly, a fixed-rate bond’s yield (income as a percent of the bond’s current value) may differ from its coupon rate as its value rises or falls. When an investor purchases a fixed-rate bond at a price that is greater than its face value, the investor is purchasing the bond at a premium. Conversely, when an investor purchases a fixed-rate bond at a price that is less than its face value, the investor is purchasing the bond at a discount. Fixed-rate bonds that are purchased at a discount pay less current income than securities with comparable yields that are purchased at face value, with the result that prices for such fixed-rate securities can be more volatile than prices for such securities that are purchased at face value. Other types of bonds bear interest at an interest rate that is adjusted periodically. Interest rates on “floating rate” or “variable rate” bonds may be higher or lower than current market rates for fixed-rate bonds of comparable quality with similar final maturities. Because of their adjustable interest rates, the value of “floating rate” or “variable rate” bonds fluctuates much less in response to market interest rate movements than the value of fixed-rate bonds, but their value may decline if their interest rates do not rise as much, or as quickly, as interest rates in general. Each Fund may treat some of these bonds as having a shorter maturity for purposes of calculating the weighted average maturity of its investment portfolio. Generally, prices of higher quality issues tend to fluctuate less with changes in market interest rates than prices of lower quality issues and prices of longer maturity issues tend to fluctuate more than prices of shorter maturity issues. Bonds may be senior or subordinated obligations. Senior obligations generally have the first claim on a corporation’s earnings and assets and, in the event of liquidation, are paid before subordinated obligations. Bonds may be unsecured (backed only by the issuer’s general creditworthiness) or secured (backed by specified collateral).

**Borrowing.** Each Fund may borrow for temporary or emergency purposes, including to meet payments due from redemptions or to facilitate the settlement of securities or other transactions. Under normal market conditions, any borrowing by a Fund will not exceed 10% of the Fund’s net assets; however, each Fund generally does not intend to borrow money.

The purchase of securities while borrowings are outstanding may have the effect of leveraging a Fund. The incurrence of leverage increases a Fund’s exposure to risk, and borrowed funds are subject to interest costs that will reduce net income. Purchasing securities while borrowings are outstanding creates special risks, such as the potential for greater volatility in the net asset value of Fund shares and in the yield on a Fund’s portfolio. In addition, the interest expenses from borrowings may

exceed the income generated by a Fund's portfolio and, therefore, the amount available (if any) for distribution to shareholders as dividends may be reduced. BFA may determine to maintain outstanding borrowings if it expects that the benefits to a Fund's shareholders will outweigh the current reduced return.

Certain types of borrowings by a Fund must be made from a bank or may result in a Fund being subject to covenants in credit agreements relating to asset coverage, portfolio composition requirements and other matters. It is not anticipated that observance of such covenants would impede BFA's management of a Fund's portfolio in accordance with a Fund's investment objectives and policies. However, a breach of any such covenants not cured within the specified cure period may result in acceleration of outstanding indebtedness and require a Fund to dispose of portfolio investments at a time when it may be disadvantageous to do so.

**Brady Bonds.** Certain of the Funds may invest in Brady bonds. Brady bonds are securities created through the exchange of existing commercial bank loans to public and private entities in certain emerging markets for new bonds in connection with debt restructurings. Brady bonds have been issued since 1989. In light of the history of defaults of countries issuing Brady bonds on their commercial bank loans, investments in Brady bonds may be viewed as speculative and subject to the same risks as emerging market securities. Brady bonds may be fully or partially collateralized or uncollateralized, are issued in U.S. dollars and are actively traded in over-the-counter ("OTC") secondary markets. Incomplete collateralization of interest or principal payment obligations results in increased credit risk. U.S. dollar-denominated collateralized Brady bonds, which may be either fixed-rate or floating rate bonds, are generally collateralized by U.S. Treasury securities.

**Corporate Bonds.** Each Fund (other than the Treasury Bond Funds and the Municipal Bond Funds) may invest in investment-grade and/or high yield corporate bonds. High yield corporate bonds may be deemed speculative and more volatile than higher rated securities of similar maturity. The investment return of corporate bonds reflects interest earned on the security and changes in the market value of the security. The market value of a corporate bond may be affected by changes in the market rate of interest, the credit rating of the corporation, the corporation's performance and perceptions of the corporation in the marketplace. There is a risk that the issuers of the securities may not be able to meet their obligations on interest or principal payments at the time called for by an instrument.

**Diversification Status.** The following table sets forth the diversification status of each Fund:

#### Diversified Funds

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iShares 1-3 Year Treasury Bond ETF  
iShares 3-7 Year Treasury Bond ETF  
iShares 7-10 Year Treasury Bond ETF  
iShares 10-20 Year Treasury Bond ETF  
iShares 20+ Year Treasury Bond ETF  
iShares Agency Bond ETF  
iShares Broad USD Investment Grade Corporate Bond  
ETF  
iShares Core 10+ Year USD Bond ETF  
iShares Core U.S. Aggregate Bond ETF  
iShares Government/Credit Bond ETF  
iShares iBoxx \$ High Yield Corporate Bond ETF  
iShares iBoxx \$ Investment Grade Corporate Bond  
ETF  
iShares Intermediate Government/Credit Bond ETF  
iShares Intermediate-Term Corporate Bond ETF  
iShares Long-Term Corporate Bond ETF  
iShares MBS ETF

#### Non-Diversified Funds

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iShares California Muni Bond ETF  
iShares Core 5-10 Year USD Bond ETF  
iShares ESG 1-5 Year USD Corporate Bond ETF  
iShares ESG USD Corporate Bond ETF  
iShares New York Muni Bond ETF

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Diversified Funds

iShares National Muni Bond ETF

iShares Short-Term Corporate Bond ETF

iShares Short-Term National Muni Bond ETF

iShares Short Treasury Bond ETF

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Non-Diversified Funds

A fund classified as “diversified” under the 1940 Act 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 may invest more than 5% of its assets in one issuer. Under the 1940 Act, a fund cannot change its classification from diversified to non-diversified without shareholder approval.

A “non-diversified” fund is a fund that is not limited by the 1940 Act with regard to the percentage of its assets that may be invested in the securities of a single issuer. The securities of a particular issuer (or securities of issuers in particular industries) may constitute a significant percentage of the underlying index of such a fund and, consequently, the fund’s investment portfolio. This may adversely affect a fund’s performance or subject the fund’s shares to greater price volatility than that experienced by more diversified investment companies.

Each Fund (whether diversified or non-diversified) intends to maintain the required level of diversification and otherwise conduct its operations so as to qualify as a regulated investment company (“RIC”) for purposes of the U.S. Internal Revenue Code of 1986, as amended (the “Internal Revenue Code”), and to relieve the Fund of any liability for U.S. federal income tax to the extent that its earnings are distributed to shareholders, provided that the Fund satisfies a minimum distribution requirement. Compliance with the diversification requirements of the Internal Revenue Code may limit the investment flexibility of certain Funds and may make it less likely that the Funds will meet their respective investment objectives.

**Futures, Options on Futures and Securities Options.** Futures contracts, options on futures and securities options may be used by a Fund to simulate investment in its Underlying Index, to facilitate trading or to reduce transaction costs. Each Fund may enter into futures contracts and options on futures that are traded on a U.S. or non-U.S. futures exchange. Each Fund will not use futures, options on futures or securities options for speculative purposes. Each Fund intends to use futures and options on futures in accordance with Rule 4.5 of the Commodity Futures Trading Commission (the “CFTC”) promulgated under the Commodity Exchange Act (“CEA”). BFA, with respect to certain Funds, has claimed an exclusion from the definition of the term “commodity pool operator” in accordance with Rule 4.5 so that BFA, with respect to such Funds, is not subject to registration or regulation as a commodity pool operator under the CEA. See the *Regulation Regarding Derivatives* section of this SAI for more information.

Futures contracts provide for the future sale by one party and purchase by another party of a specified amount of a specific instrument or index at a specified future time and at a specified price. Stock index contracts are based on investments that reflect the market value of common stock of the firms included in the investments. Each Fund may enter into futures contracts to purchase securities indexes when BFA anticipates purchasing the underlying securities and believes prices will rise before the purchase will be made. Upon entering into a futures contract, a Fund will be required to deposit with the broker an amount of cash or cash equivalents known as “initial margin,” which is similar to a performance bond or good faith deposit on the contract and is returned to the Fund upon termination of the futures contract if all contractual obligations have been satisfied. Subsequent payments, known as “variation margin,” will be made to and from the broker daily as the price of the instrument or index underlying the futures contract fluctuates, making the long and short positions in the futures contract more or less valuable, a process known as “marking-to-market.” At any time prior to the expiration of a futures contract, each Fund may elect to close the position by taking an opposite position, which will operate to terminate the Fund’s existing position in the contract. To the extent required by law, each Fund will segregate liquid assets in an amount equal to its delivery obligations under the futures contracts. An option on a futures contract, as contrasted with a direct investment in such a contract, gives the purchaser the right, but no obligation, in return for the premium paid, to assume a position in the underlying futures contract at a specified exercise price at any time prior to the expiration date of the option. Upon exercise of an option, the delivery of the futures position by the writer of the option to the holder of the option will be accompanied by delivery of the accumulated balance in the writer’s futures margin account that represents the amount by which the market price of the futures contract exceeds (in the case of a call) or is less than (in the case of a put) the exercise price of the option

on the futures contract. The potential for loss related to the purchase of an option on a futures contract is limited to the premium paid for the option plus transaction costs. Because the value of the option is fixed at the point of sale, there are no daily cash payments by the purchaser to reflect changes in the value of the underlying contract; however, the value of the option changes daily and that change would be reflected in the NAV of each Fund. The potential for loss related to writing call options is unlimited. The potential for loss related to writing put options is limited to the agreed-upon price per share, also known as the “strike price,” less the premium received from writing the put. Certain of the Funds may purchase and write put and call options on futures contracts that are traded on an exchange as a hedge against changes in value of their portfolio securities or in anticipation of the purchase of securities, and may enter into closing transactions with respect to such options to terminate existing positions. There is no guarantee that such closing transactions can be effected.

Securities options may be used by a Fund to obtain access to securities in its Underlying Index or to dispose of securities in its Underlying Index at favorable prices, to invest cash in a securities index that offers similar exposure to that provided by its Underlying Index or otherwise to achieve the Fund’s objective of tracking its Underlying Index. A call option gives a holder the right to purchase a specific security at a specified price (“exercise price”) within a specified period of time. A put option gives a holder the right to sell a specific security at an exercise price within a specified period of time. The initial purchaser of a call option pays the “writer” a premium, which is paid at the time of purchase and is retained by the writer whether or not such option is exercised. Each Fund may purchase put options to hedge its portfolio against the risk of a decline in the market value of securities held and may purchase call options to hedge against an increase in the price of securities it is committed to purchase. Each Fund may write put and call options along with a long position in options to increase its ability to hedge against a change in the market value of the securities it holds or is committed to purchase. Each Fund may purchase or sell securities options on a U.S. or non-U.S. securities exchange or in the OTC market through a transaction with a dealer. Options on a securities index are typically settled on a net basis based on the appreciation or depreciation of the index level over the strike price. Options on single name securities may be cash- or physically-settled, depending upon the market in which they are traded. Options may be structured so as to be exercisable only on certain dates or on a daily basis. Options may also be structured to have conditions to exercise (*i.e.*, “Knock-in Events”) or conditions that trigger termination (*i.e.*, “Knock-out Events”). Investments in futures contracts and other investments that contain leverage may require each Fund to maintain liquid assets in an amount equal to its delivery obligations under these contracts and other investments. Generally, each Fund maintains an amount of liquid assets equal to its obligations relative to the position involved, adjusted daily on a marked-to-market basis. With respect to futures contracts that are contractually required to “cash-settle,” each Fund maintains liquid assets in an amount at least equal to the Fund’s daily marked-to-market obligation (*i.e.*, each Fund’s daily net liability, if any), rather than the contracts’ notional value (*i.e.*, the value of the underlying asset). By maintaining assets equal to its net obligation under cash-settled futures contracts, each Fund may employ leverage to a greater extent than if the Fund were required to set aside assets equal to the futures contracts’ full notional value. Each Fund bases its asset maintenance policies on methods permitted by the SEC and its staff and may modify these policies in the future to comply with any changes in the guidance articulated from time to time by the SEC or its staff. Changes in SEC guidance regarding the use of derivatives by registered investment companies may adversely impact a Fund’s ability to invest in futures, options or other derivatives or make investments in such instruments more expensive.

**High Yield Securities.** Certain Funds may invest in non-investment grade securities. Non-investment grade or “high yield” fixed-income or convertible securities, commonly known to investors as “junk bonds” or “high yield bonds,” are generally debt securities that are rated below investment grade by one or more of the major rating agencies or are unrated securities that BFA believes are of comparable quality. While generally providing greater income and opportunity for gain, non-investment grade debt securities may be subject to greater risks than securities that have higher credit ratings, including a high risk of default, and their yields will fluctuate over time. High yield securities will generally be in the lower rating categories of recognized rating agencies (rated below Baa3 by Moody’s Investors Service, Inc. (“Moody’s”) and below BBB- by Standard & Poor’s® Financial Services LLC, a subsidiary of S&P Global (“S&P Global Ratings”) or Fitch Ratings, Inc. (“Fitch”)) or be unrated. The credit rating of a high yield security does not necessarily address its market value risk, and ratings may from time to time change, positively or negatively, to reflect developments regarding the issuer’s financial condition. High yield securities are considered to be speculative with respect to the capacity of the issuer to timely repay principal and pay interest in accordance with the terms of the obligation and may have more credit risk than higher rated securities.

The major risks of high yield bond investments include the following:

- High yield bonds may be issued by less creditworthy companies. These securities are vulnerable to adverse changes in the issuer’s industry and to general economic conditions. Issuers of high yield bonds may be unable to meet their

interest or principal payment obligations because of an economic downturn, specific issuer developments or the unavailability of additional financing.

- The issuers of high yield bonds may have a larger amount of outstanding debt relative to their assets than issuers of investment grade bonds. If the issuer experiences financial stress, it may be unable to meet its debt obligations. The issuer's ability to pay its debt obligations also may be lessened by specific issuer developments, or the unavailability of additional financing. Issuers of high yield securities are often in the growth stage of their development and/or involved in a reorganization or takeover.
- High yield bonds are frequently ranked junior to claims by other creditors. If the issuer cannot meet its obligations, the senior obligations are generally paid off before the junior obligations, which will potentially limit a Fund's ability to fully recover principal, to receive interest payments when senior securities are in default or to receive restructuring benefits paid to holders of more senior classes of debt. Thus, investors in high yield securities frequently have a lower degree of protection with respect to principal and interest payments than do investors in higher rated securities.
- High yield bonds frequently have redemption features that permit an issuer to repurchase the security from a Fund before it matures. If an issuer redeems the high yield bonds, a Fund may have to invest the proceeds in bonds with lower yields and may lose income.
- Prices of high yield bonds are subject to extreme fluctuations. Negative economic developments may have a greater impact on the prices of high yield bonds than on those of other higher rated fixed-income securities.
- High yield bonds may be less liquid than higher rated fixed-income securities even under normal economic conditions. Under certain economic and/or market conditions, a Fund may have difficulty disposing of certain high yield securities due to the limited number of investors in that sector of the market. There are fewer dealers in the high yield bond market, and there may be significant differences in the prices quoted for high yield bonds by dealers, and such quotations may not be the actual prices available for a purchase or sale. Because high yield bonds are less liquid, judgment may play a greater role in the prices and values generated for such securities than in the case of securities trading in a more liquid market.
- The secondary markets for high yield securities generally are not as liquid as the secondary markets for higher rated securities. The secondary markets for high yield securities generally are concentrated in relatively few market makers and participants in the markets are mostly institutional investors, including insurance companies, banks, other financial institutions and mutual funds. In addition, the trading volume for high yield securities is generally lower than that for higher rated securities and the secondary markets could contract under adverse market or economic conditions independent of any specific adverse changes in the condition of a particular issuer. Under certain economic and/or market conditions, a Fund may have difficulty disposing of certain high yield securities due to the limited number of investors in that sector of the market. A less liquid secondary market may adversely affect the market price of the high yield security, which may result in increased difficulty selling the particular issue and obtaining accurate market quotations on the issue when valuing a Fund's assets. Market quotations on high yield securities are available only from a limited number of dealers, and such quotations may not be the actual prices available for a purchase or sale. When the secondary market for high yield securities becomes more illiquid, or in the absence of readily available market quotations for such securities, the relative lack of reliable objective data makes it more difficult to value such securities, and judgment plays a more important role in determining such valuations.
- A Fund may incur expenses to the extent necessary to seek recovery upon default or to negotiate new terms with a defaulting issuer.
- The high yield bond markets may react strongly to adverse news about an issuer or the economy, or to the perception or expectation of adverse news, whether or not it is based on fundamental analysis. Additionally, prices for high yield securities may be affected by legislative and regulatory developments. These developments could adversely affect a Fund's net asset value and investment practices, the secondary market for high yield securities, the financial condition of issuers of these securities and the value and liquidity of outstanding high yield securities, especially in a thinly traded market. For example, federal legislation requiring the divestiture by federally insured savings and loan associations of their investments in high yield bonds and limiting the deductibility of interest by certain corporate issuers of high yield bonds adversely affected the market in the past.

**Illiquid Investments.** Each Fund may invest up to an aggregate amount of 15% of its net assets in illiquid investments. An illiquid investment is any investment that a Fund reasonably expects cannot be sold or disposed of in current market conditions in seven calendar days or less without significantly changing the market value of the investment. The liquidity of



an investment will be determined based on relevant market, trading and investment specific considerations as set out in the Funds' liquidity risk management program (the "Liquidity Program") as required by Rule 22e-4 under the 1940 Act (the "Liquidity Rule"). Illiquid investments may trade at a discount to comparable, more liquid investments and a Fund may not be able to dispose of illiquid investments in a timely fashion or at their expected prices. If illiquid investments exceed 15% of a Fund's net assets, the Liquidity Rule and the Liquidity Program will require that certain remedial actions be taken.

**Lending Portfolio Securities.** Each Fund may lend portfolio securities to certain borrowers that BFA determines to be creditworthy, including borrowers affiliated with BFA. The borrowers provide collateral that is maintained in an amount at least equal to the current market value of the securities loaned. No securities loan shall be made on behalf of a Fund if, as a result, the aggregate value of all securities loaned by the particular Fund exceeds one-third of the value of such Fund's total assets (including the value of the collateral received). A Fund may terminate a loan at any time and obtain the return of the securities loaned. Each Fund receives, by way of substitute payment, the value of any interest or cash or non-cash distributions paid on the loaned securities that it would have received if the securities were not on loan.

With respect to loans that are collateralized by cash, the borrower may be entitled to receive a fee based on the amount of cash collateral. The Funds are typically compensated by the difference between the amount earned on the reinvestment of cash collateral and the fee paid to the borrower. In the case of collateral other than cash, a Fund is typically compensated by a fee paid by the borrower equal to a percentage of the market value of the loaned securities. Any cash collateral may be reinvested in certain short-term instruments either directly on behalf of each lending Fund or through one or more joint accounts or money market funds, including those affiliated with BFA; such investments are subject to investment risk.

Each Fund conducts its securities lending pursuant to an exemptive order from the SEC permitting it to lend portfolio securities to borrowers affiliated with the Fund and to retain an affiliate of the Fund to act as securities lending agent. To the extent that a Fund engages in securities lending, BlackRock Institutional Trust Company, N.A. ("BTC") acts as securities lending agent for the Fund, subject to the overall supervision of BFA. BTC administers the lending program in accordance with guidelines approved by the Trust's Board of Trustees (the "Board," the trustees of which are the "Trustees").

Securities lending involves exposure to certain risks, including operational risk (*i.e.*, the risk of losses resulting from problems in the settlement and accounting process), "gap" risk (*i.e.*, the risk of a mismatch between the return on cash collateral reinvestments and the fees a Fund has agreed to pay a borrower), and credit, legal, counterparty and market risk. If a securities lending counterparty were to default, a Fund would be subject to the risk of a possible delay in receiving collateral or in recovering the loaned securities, or to a possible loss of rights in the collateral. In the event a borrower does not return a Fund's securities as agreed, the Fund may experience losses if the proceeds received from liquidating the collateral do not at least equal the value of the loaned security at the time the collateral is liquidated, plus the transaction costs incurred in purchasing replacement securities. This event could trigger adverse tax consequences for a Fund. A Fund could lose money if its short-term investment of the collateral declines in value over the period of the loan. Substitute payments for dividends received by a Fund for securities loaned out by the Fund will not be considered qualified dividend income. BTC will take into account the tax effects on shareholders caused by this difference in connection with a Fund's securities lending program. Substitute payments received on tax-exempt securities loaned out will not be tax-exempt income.

**Mortgage-Backed Pass-Through Securities.** A significant portion of the Bloomberg Barclays U.S. Aggregate Bond Index and the entire Bloomberg Barclays U.S. MBS Index represent the U.S. agency mortgage-backed pass-through segment of the U.S. investment-grade bond market. Therefore, a substantial portion of each of the iShares Core U.S. Aggregate Bond ETF's and iShares MBS ETF's assets is invested to seek exposure to a representative sample of U.S. agency MBS included in such indexes. The iShares Core 5-10 Year USD Bond ETF may invest in MBS issued by Federal National Mortgage Association ("Fannie Mae"), the Federal Home Loan Mortgage Corporation ("Freddie Mac") and the Federal Home Loan Bank System ("FHLB"). The term "U.S. agency mortgage-backed pass-through security" refers to a category of pass-through securities backed by pools of mortgages and issued by one of several U.S. government-sponsored enterprises, such as Fannie Mae, Freddie Mac or the Government National Mortgage Association ("Ginnie Mae"). In the basic mortgage-backed pass-through structure, mortgages with similar issuer, term and coupon characteristics are collected and aggregated into a "pool" consisting of multiple mortgage loans. The pool is assigned a CUSIP number and undivided interests in the pool are traded and sold as pass-through securities. The holder of the security is entitled to a *pro rata* share of principal and interest payments (including unscheduled prepayments) from the pool of mortgage loans.

An investment in a specific pool of pass-through securities requires an analysis of the specific prepayment risk of mortgages within the covered pool (since mortgagors typically have the option to prepay their loans). The level of prepayments on a

pool of MBS is difficult to predict and can impact the subsequent cash flows, value and yield of the mortgage pool. In addition, when trading specific mortgage pools, precise execution, delivery and settlement arrangements must be negotiated for each transaction. These factors combine to make trading in mortgage pools somewhat cumbersome.

For these and other reasons, the iShares Core 5-10 Year USD Bond ETF, iShares Core U.S. Aggregate Bond ETF and iShares MBS ETF seek to obtain exposure to the fixed-rate portion of the U.S. agency MBS, which represent a significant portion of their respective Underlying Indexes, in whole or in part through the use of to-be-announced (“TBA”) transactions. “TBA” refers to a commonly used mechanism for the forward settlement of U.S. agency MBS, and not to a separate type of MBS. Most transactions in fixed-rate MBS occur through the use of TBA transactions. TBA transactions generally are conducted in accordance with widely-accepted guidelines which establish commonly observed terms and conditions for execution, settlement and delivery. In a TBA transaction, the buyer and seller decide on general trade parameters, such as agency, settlement date, par amount, and price. The actual pools delivered generally are determined two days prior to settlement date. Each of the iShares Core 5-10 Year USD Bond ETF, iShares Core U.S. Aggregate Bond ETF and iShares MBS ETF may use TBA transactions in several ways. For example, each Fund may regularly enter into TBA agreements and “roll over” such agreements prior to the settlement date stipulated in such agreements. This type of TBA transaction is sometimes known as a “TBA roll.” In a TBA roll, each Fund generally will sell the obligation to purchase the pools stipulated in the TBA agreement prior to the stipulated settlement date and will enter into a new TBA agreement for future delivery of pools of MBS. In addition, each Fund may enter into TBA agreements and settle such transactions on the stipulated settlement date by accepting actual receipt or delivery of the pools of MBS stipulated in the TBA agreement. The iShares Core 5-10 Year USD Bond ETF, iShares Core U.S. Aggregate Bond ETF and iShares MBS ETF are not required to use TBA transactions to gain exposure to mortgage pools, and each Fund may choose to purchase those interests in any manner believed by BFA to be in the best interest of the Fund. Each Fund’s use of TBA rolls may cause the Fund to experience higher portfolio turnover, higher transaction costs, and to pay higher capital gain distributions to shareholders (which may be taxable) than other Funds described in this SAI that do not use TBA rolls.

The iShares Core 5-10 Year USD Bond ETF, iShares Core U.S. Aggregate Bond ETF and iShares MBS ETF intend to invest cash pending settlement of any TBA transactions in money market instruments, repurchase agreements or other high-quality, liquid short-term instruments, including money market funds advised by BFA. Each Fund will assume its *pro rata* share of fees and expenses of any money market fund that it may invest in, in addition to each Fund’s own fees and expenses.

**Municipal Insurance.** A municipal security may be covered by insurance that guarantees the bond’s scheduled payment of interest and repayment of principal. This type of insurance may be obtained by either (i) the issuer at the time the bond is issued (primary market insurance), or (ii) another party after the bond has been issued (secondary market insurance).

Both primary and secondary market insurance guarantee timely and scheduled repayment of all principal and payment of all interest on a municipal security in the event of default by the issuer, and cover a municipal security to its maturity, enhancing its credit quality and value.

Municipal security insurance does not insure against market fluctuations or fluctuations in each of the Municipal Bond Funds’ share price. In addition, a municipal security insurance policy will not cover: (i) repayment of a municipal security before maturity (redemption), (ii) nonpayment of principal or interest caused by negligence or bankruptcy of the paying agent, or (iii) prepayment or payment of an acceleration premium (except for a mandatory sinking fund redemption) or any other provision of a bond indenture that advances the maturity of the bond. A mandatory sinking fund redemption may be a provision of a municipal security issue whereby part of the municipal security issue may be retired before maturity.

Because a significant portion of the municipal securities issued and outstanding are insured by a small number of insurance companies, an event involving one or more of these insurance companies could have a significant adverse effect on the value of the securities insured by that insurance company and on the municipal markets as a whole.

Certain significant providers of insurance for municipal securities have recently incurred significant losses as a result of exposure to sub-prime mortgages and other lower credit quality investments that have experienced recent defaults or otherwise suffered extreme credit deterioration. As a result, such losses have reduced the insurers’ capital and called into question their continued ability to perform their obligations under such insurance if they are called upon to do so in the future. While an insured municipal security will typically be deemed to have the rating of its insurer, if the insurer of a municipal security suffers a downgrade in its credit rating or if the market discounts the value of the insurance provided by the insurer, the value of the municipal security would be more, if not entirely, dependent on the rating of the municipal security independent of insurance.

**Municipal Securities.** Certain of the Funds may invest in municipal securities, the interest payments of which are subject to U.S. federal income tax. Certain of the Funds invest in securities issued in the U.S. market by U.S. states and territories, municipalities and other political subdivisions, agencies, authorities and instrumentalities of states and multi-state agencies or authorities. The municipal securities which the Funds may purchase include general obligation bonds and limited obligation bonds (or revenue bonds), including industrial development bonds issued pursuant to former U.S. federal tax law. General obligation bonds are obligations involving the credit of an issuer possessing taxing power and are payable from such issuer's general revenues and not from any particular source. Limited obligation bonds are payable only from the revenues derived from a particular facility or class of facilities or, in some cases, from the proceeds of a special excise or other specific revenue source. Industrial development bonds generally are also revenue bonds and thus are not payable from the issuer's general revenues. The credit and quality of industrial development bonds are usually related to the credit of the corporate user of the facilities. Payment of interest on and repayment of principal of such bonds is the responsibility of the corporate user (and/or any guarantor). The Funds may invest in private activity bonds, which are bonds issued by or on behalf of public authorities to obtain funds to provide privately operated housing facilities, airport, mass transit or port facilities, sewage disposal, solid waste disposal or hazardous waste treatment or disposal facilities and certain local facilities for water supply, gas or electricity. Other types of private activity bonds, the proceeds of which are used for the construction, equipment, repair or improvement of privately operated industrial or commercial facilities, may constitute municipal securities, although the current U.S. federal tax laws place substantial limitations on the size of such issues.

Municipal notes are shorter-term municipal debt obligations. They may provide interim financing in anticipation of tax collection, receipt of grants, bond sales or revenue receipts. If there is a shortfall in the anticipated proceeds, repayment on a municipal note may be delayed or the note may not be fully repaid, and the Funds may lose money.

Municipal commercial paper is generally unsecured and issued to meet short-term financing needs. The lack of security presents some risk of loss to the Funds since, in the event of an issuer's bankruptcy, unsecured creditors are repaid only out of the assets, if any, that remain after secured creditors are repaid.

Tender option bonds are synthetic floating rate or variable rate securities issued when long-term bonds are purchased in the primary or secondary market and then deposited into a trust. Custodial receipts are then issued to investors, such as the Funds, evidencing ownership interests in the trust. The remarketing agent for the trust sets a floating or variable rate on typically a weekly basis. The sponsor of a highly leveraged tender option bond trust generally will retain a liquidity provider to purchase the short-term floating rate interests at their original purchase price upon the occurrence of certain specified events. However, the liquidity provider may not be required to purchase the floating rate interests upon the occurrence of certain other events, for example, the downgrading of the municipal bonds owned by the tender option bond trust below investment-grade or certain events that indicate the issuer of the bonds may be entering bankruptcy. The general effect of these provisions is to pass to the holders of the floating rate interests the most severe credit risks associated with the municipal bonds owned by the tender option bond trust and to leave with the liquidity provider the interest rate risk (subject to a cap) and certain other risks associated with the municipal bonds. Tender option bonds may be considered derivatives, and may expose the Funds to the same risks as investments in derivatives, as well as risks associated with leverage, especially the risk of increased volatility. To the extent the Funds invest in tender option bonds, they also are exposed to credit risk associated with the liquidity provider retained by the sponsor of a tender bond option trust.

Variable rate demand obligations ("VRDOs") are tax-exempt obligations that contain a floating or variable interest rate adjustment formula and a right of demand on the part of the holder thereof to receive payment of the unpaid principal balance plus accrued interest upon a short notice period not to exceed seven days. There is the possibility that because of default or insolvency the demand feature of VRDOs may not be honored. The interest rates are adjustable at intervals (ranging from daily to up to one year) to some prevailing market rate for similar investments, such adjustment formula being calculated to maintain the market rate of the VRDOs at approximately the par value of the VRDOs on the adjustment date. The adjustments typically are based upon the Public Securities Association Index or some other appropriate interest rate adjustment index.

Because of the interest rate adjustment formula, VRDOs are not comparable to fixed-rate securities. During periods of declining interest rates, a Fund's yield on a VRDO will decrease and its shareholders will forego the opportunity for capital appreciation. During periods of rising interest rates, however, a Fund's yield on a VRDO will increase and its shareholders will have a reduced risk of capital depreciation.

The market for municipal bonds may be less liquid than for taxable bonds. This means that it may be harder to buy and sell municipal securities, especially on short notice, than non-municipal securities. In addition, the municipal securities market is generally characterized as a buy and hold investment strategy. As a result, the accessibility of municipal securities in the market is generally greater closer to the original date of issue of the securities and lessens as the securities move further away from such issuance date.

Some longer-term municipal securities give the investor the right to “put” or sell the security at par (face value) within a specified number of days following the investor’s request - usually one to seven days. This demand feature enhances a security’s liquidity by shortening its effective maturity and enables it to trade at a price equal to or very close to par. If a demand feature terminates prior to being exercised, a Fund would hold the longer-term security, which could experience substantially more volatility.

Municipal securities are subject to credit and market risk. Generally, prices of higher quality issues tend to fluctuate more with changes in market interest rates than prices of lower quality issues and prices of longer maturity issues tend to fluctuate more than prices of shorter maturity issues.

Prices and yields on municipal securities are dependent on a variety of factors, including general money-market conditions, the financial condition of the issuer, general conditions of the municipal security market, the size of a particular offering, the maturity of the obligation and the rating of the issue. A number of these factors, including the ratings of particular issues, are subject to change from time to time. Information about the financial condition of an issuer of municipal securities may not be as extensive as that which is made available by corporations whose securities are publicly-traded. As a result, municipal securities may be more difficult to value than securities of public corporations.

Obligations of issuers of municipal securities are subject to insolvency concerns and, unlike obligations of corporate issuers, may not be subject to resolution in the event of insolvency or default through a bankruptcy proceeding. The U.S. Congress or state legislatures may seek to extend the time for payment of principal or interest, or both, or to impose other constraints upon enforcement of such obligations. In addition, municipal securities are subject to the risk that their tax treatment could be changed, thereby affecting the value of outstanding municipal securities. There is also the possibility that as a result of litigation or other conditions, such as passing of a referendum, the power or ability of issuers to meet their obligations for the payment of interest and principal on their municipal securities may be materially affected or their obligations may be found to be invalid or unenforceable. Such litigation or conditions may from time to time have the effect of introducing uncertainties in the market for municipal securities or certain segments thereof, or of materially affecting the credit risk with respect to particular bonds. Adverse economic, business, legal or political developments might affect all or a substantial portion of a Fund’s municipal securities in the same manner.

**Non-U.S. Securities.** Certain of the Funds may invest in certain obligations or securities of non-U.S. issuers. An issuer of a security may be deemed to be located in a particular country if: (i) the principal trading market for the security is in such country, (ii) the issuer is organized under the laws of such country, (iii) the issuer derives at least 50% of its revenues or profits from such country or has at least 50% of its assets situated in such country or, (iv) the issuer is the government of the particular country.

**Privately-Issued Securities.** The iShares Core 5-10 Year USD Bond ETF and iShares Core 10+ Year USD Bond ETF may not invest in private placements, but may invest in certain bonds registered with the SEC or exempt from registration at the time of issuance, or offered pursuant to Rule 144A under the 1933 Act with or without registration rights (“Rule 144A Bonds”). The iShares Broad USD Investment Grade Corporate Bond ETF, iShares Core 5-10 Year USD Bond ETF, iShares Core 10+ Year USD Bond ETF, iShares Core U.S. Aggregate Bond ETF, iShares Government/Credit Bond ETF, iShares iBoxx \$ High Yield Corporate Bond ETF, iShares iBoxx \$ Investment Grade Corporate Bond ETF, iShares Intermediate Government/Credit Bond ETF, iShares Intermediate-Term Corporate Bond ETF, iShares Long-Term Corporate Bond ETF and iShares Short-Term Corporate Bond ETF may invest in privately-issued securities, including those that may be resold only in accordance with Rule 144A or Regulation S under the 1933 Act (“Restricted Securities”). Rule 144A Bonds and Restricted Securities are not publicly-traded and are subject to a variety of restrictions, which limit a purchaser’s ability to acquire or resell such securities. Accordingly, the liquidity of the market for specific Rule 144A Bonds and Restricted Securities may vary. Delay or difficulty in selling such securities may result in a loss to a Fund.

**Ratings.** An investment-grade rating generally means the security or issuer is rated investment-grade by one or more of Moody’s, S&P Global Ratings, Fitch, or another credit rating agency designated as a nationally-recognized statistical rating organization by the SEC, or is unrated but considered to be of equivalent quality by BFA. Generally, bonds rated Baa3 or above

by Moody's or BBB- or above by S&P Global Ratings and Fitch are considered "investment-grade" securities, bonds rated Baa are considered medium grade obligations subject to moderate credit risk and may possess certain speculative characteristics, while bonds rated BBB are regarded as having adequate capacity to meet financial commitments.

Subsequent to purchase by a Fund, a rated security may cease to be rated or its rating may be reduced below an investment-grade rating. Bonds rated lower than Baa3 by Moody's or BBB- by S&P Global Ratings or Fitch are considered below investment-grade quality and are obligations of issuers that are generally considered predominantly speculative with respect to the issuer's capacity to pay interest and repay principal according to the terms of the obligation and, therefore, carry greater investment risk, including the possibility of issuer default and bankruptcy and increased market price volatility. Such lower-rated securities are commonly referred to as "junk bonds" and are subject to a substantial degree of credit risk. Please see Appendix B of this SAI for a description of each rating category of Moody's, S&P Global Ratings and Fitch and BFA's treatment of investments that are not rated by any of the rating agencies.

**Regulation Regarding Derivatives.** The CFTC subjects advisers to registered investment companies to regulation by the CFTC if a fund that is advised by the adviser either (i) invests, directly or indirectly, more than a prescribed level of its liquidation value in CFTC-regulated futures, options and swaps ("CFTC Derivatives"), or (ii) markets itself as providing investment exposure to such instruments. The CFTC also subjects advisers to registered investment companies to regulation by the CFTC if the registered investment company invests in one or more commodity pools. To the extent a Fund uses CFTC Derivatives, it intends to do so below such prescribed levels and intends not to market itself as a "commodity pool" or a vehicle for trading such instruments.

BFA has claimed an exclusion from the definition of the term "commodity pool operator" under the CEA pursuant to Rule 4.5 under the CEA with respect to the iShares 1-3 Year Treasury Bond ETF, iShares 3-7 Year Treasury Bond ETF, iShares 7-10 Year Treasury Bond ETF, iShares 10-20 Year Treasury Bond ETF, iShares 20+ Year Treasury Bond ETF, iShares Agency Bond ETF, iShares Broad USD Investment Grade Corporate Bond ETF, iShares California Muni Bond ETF, iShares ESG 1-5 Year USD Corporate Bond ETF, iShares Government/Credit Bond ETF, iShares iBoxx \$ Investment Grade Corporate Bond ETF, iShares Intermediate Government/Credit Bond ETF, iShares Long-Term Corporate Bond ETF, iShares National Muni Bond ETF, iShares New York Muni Bond ETF, iShares Short-Term National Muni Bond ETF and iShares Short Treasury Bond ETF. BFA is not, therefore, subject to registration or regulation as a "commodity pool operator" under the CEA with respect to the Funds.

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 ("Dodd-Frank Act") in the U.S. and under comparable regimes in Europe, Asia and other non-U.S. jurisdictions. Swaps, non-deliverable forwards and certain other derivatives traded in the over-the-counter ("OTC") market are subject to variation margin requirements, and initial margining requirements will be phased in through 2020. Implementation of the margining and other provisions of the Dodd-Frank Act regarding clearing, mandatory trading, reporting and documentation of swaps and other derivatives have impacted and may continue to impact the costs to a Fund of trading these instruments and, as a result, may affect returns to investors in a Fund.

As a result of regulatory requirements under the 1940 Act, each Fund is required to maintain an amount of liquid assets, accrued on a daily basis, having an aggregate value at least equal to the value of a Fund's obligations under the applicable derivatives contract. To the extent that derivatives contracts are settled on a physical basis, a Fund will generally be required to maintain an amount of liquid assets equal to the notional value of the contract. On the other hand, in connection with derivatives contracts that are performed on a net basis, a Fund will generally be required to maintain liquid assets, accrued daily, equal only to the accrued excess, if any, of a Fund's obligations over those of its counterparty under the contract. Accordingly, reliance by a Fund on physically-settled derivatives contracts may adversely impact investors by requiring a Fund to set aside a greater amount of liquid assets than would generally be required if a Fund were relying on cash-settled derivatives contracts.

The iShares Core 5-10 Year USD Bond ETF, iShares Core 10+ Year USD Bond ETF, iShares Core U.S. Aggregate Bond ETF, iShares ESG USD Corporate Bond ETF, iShares iBoxx \$ High Yield Corporate Bond ETF, iShares Intermediate-Term Corporate Bond ETF, iShares MBS ETF and iShares Short-Term Corporate Bond ETF (the "No-Action Letter Funds") may also have investments in "underlying funds" (and such underlying funds themselves may invest in underlying funds) not advised by BFA (which for purposes of the no-action letter referenced below may include certain securitized vehicles, mortgage real estate investment trusts and/or investment companies that may invest in CFTC Derivatives), and therefore may be viewed by the CFTC as commodity pools. BFA has no transparency into the holdings of these underlying funds because they are not advised by BFA. To address this issue of lack of transparency, the CFTC staff issued a no-action letter on November 29, 2012

permitting the adviser of a fund that invests in such underlying funds and that would otherwise have filed a claim of exclusion pursuant to CFTC Rule 4.5 to delay registration as a “commodity pool operator” until six months from the date on which the CFTC issues additional guidance on the treatment of CFTC Derivatives held by underlying funds. BFA, the adviser of the No-Action Letter Funds, has filed a claim with the CFTC for such Funds to rely on this no-action relief. Accordingly, BFA is not currently subject to registration or regulation as a “commodity pool operator” under the CEA in respect of such Funds.

**Repurchase Agreements.** A repurchase agreement is an instrument under which the purchaser (*i.e.*, a Fund) acquires the security and the seller agrees, at the time of the sale, to repurchase the security at a mutually agreed-upon time and price, thereby determining the yield during the purchaser’s holding period. Repurchase agreements may be construed to be collateralized loans by the purchaser to the seller secured by the securities transferred to the purchaser. If a repurchase agreement is construed to be a collateralized loan, the underlying securities will not be considered to be owned by a Fund but only to constitute collateral for the seller’s obligation to pay the repurchase price, and, in the event of a default by the seller, the Fund may suffer time delays and incur costs or losses in connection with the disposition of the collateral.

In any repurchase transaction, the collateral for a repurchase agreement may include: (i) cash items; (ii) obligations issued by the U.S. government or its agencies or instrumentalities; or (iii) obligations that, at the time the repurchase agreement is entered into, are determined to (A) have exceptionally strong capacity to meet their financial obligations and (B) are sufficiently liquid such that they can be sold at approximately their carrying value in the ordinary course of business within seven days.

Repurchase agreements pose certain risks for a Fund that utilizes them. Such risks are not unique to the Funds, but are inherent in repurchase agreements. The Funds seek to minimize such risks, but because of the inherent legal uncertainties involved in repurchase agreements, such risks cannot be eliminated. Lower quality collateral and collateral with a longer maturity may be subject to greater price fluctuations than higher quality collateral and collateral with a shorter maturity. If the repurchase agreement counterparty were to default, lower quality collateral may be more difficult to liquidate than higher quality collateral. Should the counterparty default and the amount of collateral not be sufficient to cover the counterparty’s repurchase obligation, a Fund would likely retain the status of an unsecured creditor of the counterparty (*i.e.*, the position a Fund would normally be in if it were to hold, pursuant to its investment policies, other unsecured debt securities of the defaulting counterparty) with respect to the amount of the shortfall. As an unsecured creditor, a Fund would be at risk of losing some or all of the principal and income involved in the transaction.

**Reverse Repurchase Agreements.** Reverse repurchase agreements involve the sale of securities with an agreement to repurchase the securities at an agreed-upon price, date and interest payment and have the characteristics of borrowing. Generally, the effect of such transactions is that a Fund can recover all or most of the cash invested in the portfolio securities involved during the term of the reverse repurchase agreement, while in many cases the Fund is able to keep some of the interest income associated with those securities. Such transactions are advantageous only if a Fund has an opportunity to earn a rate of interest on the cash derived from these transactions that is greater than the interest cost of obtaining the same amount of cash. Opportunities to realize earnings from the use of the proceeds equal to or greater than the interest required to be paid may not always be available, and a Fund intends to use the reverse repurchase technique only when BFA believes it will be advantageous to the Fund. The use of reverse repurchase agreements may exaggerate any increase or decrease in the value of a Fund’s assets. A Fund’s exposure to reverse repurchase agreements will be covered by liquid assets having a value equal to or greater than the Fund’s obligations under such commitments. The use of reverse repurchase agreements is a form of leverage, and the proceeds obtained by a Fund through reverse repurchase agreements may be invested in additional securities.

**Securities of Investment Companies.** Each Fund may invest in the securities of other investment companies (including money market funds) to the extent permitted by law, regulation, exemptive order or SEC staff guidance. Under the 1940 Act, a fund’s investment in investment companies is limited to, subject to certain exceptions, (i) 3% of the total outstanding voting stock of any one investment company, (ii) 5% of the fund’s total assets with respect to any one investment company, and (iii) 10% of the fund’s total assets with respect to investment companies in the aggregate. To the extent allowed by law or regulation, the Funds intend from time to time to invest their assets in securities of investment companies, including, but not limited to, money market funds, including those advised by BFA or otherwise affiliated with BFA, in excess of the limits discussed above. Other investment companies in which a Fund invests can be expected to incur fees and expenses for operations, such as investment advisory and administration fees, which would be in addition to those incurred by a Fund. Pursuant to guidance issued by the SEC staff, fees and expenses of money market funds used for cash collateral received in connection with loans of securities are not treated as Acquired Fund Fees and Expenses, which reflect a Fund’s *pro rata* share

of the fees and expenses incurred by investing in other investment companies (as disclosed in the Prospectus, as applicable). The iShares National Muni Bond ETF may invest in shares of other iShares funds that provide substantially similar exposure to the securities in its Underlying Index. BFA will not charge advisory fees on that portion of the iShares National Muni Bond ETF's assets invested in shares of other iShares funds. The iShares Core U.S. Aggregate Bond ETF may invest in shares of other registered investment companies advised by BFA, or its affiliates that provide substantially similar exposure to the securities in its Underlying Index. BFA will not charge advisory fees on that portion of the iShares Core U.S. Aggregate Bond ETF's assets invested in shares of other registered investment companies advised by BFA, or its affiliates.

**Short-Term Instruments and Temporary Investments.** Each Fund may invest in short-term instruments, including variable rate demand notes, short-term municipal securities, short-term municipal money market funds and money market instruments, on an ongoing basis to provide liquidity or for other reasons. Money market instruments are generally short-term investments that may include, but are not limited to: (i) shares of money market funds (including those advised by BFA or otherwise affiliated with BFA); (ii) obligations issued or guaranteed by the U.S. government, its agencies or instrumentalities (including government-sponsored enterprises); (iii) negotiable certificates of deposit, bankers' acceptances, fixed-time deposits and other obligations of U.S. and non-U.S. banks (including non-U.S. branches) and similar institutions; (iv) commercial paper rated, at the date of purchase, "Prime-1" by Moody's, "F-1" by Fitch or "A-1" by S&P Global Ratings, or if unrated, of comparable quality as determined by BFA; (v) non-convertible corporate debt securities (e.g., bonds and debentures) with remaining maturities at the date of purchase of not more than 397 days and that have been determined to present minimal credit risks, in accordance with the requirements set forth in Rule 2a-7 under the 1940 Act; (vi) repurchase agreements; and (vii) short-term U.S. dollar-denominated obligations of non-U.S. banks (including U.S. branches) that, in the opinion of BFA, are of comparable quality to obligations of U.S. banks that may be purchased by a Fund. Any of these instruments may be purchased on a current or forward-settled basis. Time deposits are non-negotiable deposits maintained in banking institutions for specified periods of time at stated interest rates. Bankers' acceptances are time drafts drawn on commercial banks by borrowers, usually in connection with international transactions.

**Sovereign and Quasi-Sovereign Obligations.** Certain of the Funds may invest in sovereign and quasi-sovereign obligations. An investment in sovereign debt obligations involves special risks not present in corporate debt obligations. Sovereign debt includes securities issued or guaranteed by a foreign sovereign government. Quasi-sovereign debt includes securities issued or guaranteed by an entity affiliated with or backed by a sovereign government. Quasi-sovereign debt obligations are typically less liquid and less standardized than sovereign debt obligations. The issuer of the sovereign debt that controls the repayment of the debt may be unable or unwilling to repay principal or interest when due, and a Fund may have limited recourse in the event of a default. Similar to other issuers, changes to the financial condition or credit rating of a non-U.S. government may cause the value of a sovereign debt to decline. During periods of economic uncertainty, the market prices of sovereign debt obligations may be more volatile than prices of U.S. debt obligations, which may affect a Fund's NAV. In the past, certain emerging market countries have encountered difficulties in servicing their debt obligations, withheld payments of principal and interest and declared moratoria on the payment of principal and interest on their sovereign debts. Several sovereign issuers have experienced volatility and adverse trends due to concerns about rising government debt levels, including Greece, Ireland, Italy, Portugal and Spain. In the past, sovereign issuers have also defaulted on their debt obligations, including Russia, Argentina, Indonesia and Uruguay.

A sovereign debtor's willingness or ability to repay principal and pay interest in a timely manner may be affected by, among other factors, its cash flow situation, the extent of its non-U.S. currency reserves, the availability of sufficient foreign exchange, the relative size of the debt service burden, the sovereign debtor's policy toward principal international lenders and local political constraints. Sovereign debtors may also be dependent on expected disbursements from foreign governments, multilateral agencies and other entities to reduce principal and interest arrears on their debt. The failure of a sovereign debtor to implement economic reforms, achieve specified levels of economic performance or repay principal or interest when due may result in the cancellation of third-party commitments to lend funds to the sovereign debtor, which may further impair such debtor's ability or willingness to service its debts. Quasi-sovereign debt obligations are typically less liquid and less standardized than government debt.

**Swap Agreements.** Swap agreements are contracts between parties in which one party agrees to make periodic payments to the other party based on the change in market value or level of a specified rate, index or asset. In return, the other party agrees to make periodic payments to the first party based on the return of a different specified rate, index or asset. Swap agreements will usually be performed on a net basis, with a Fund receiving or paying only the net amount of the two

payments. The net amount of the excess, if any, of a Fund's obligations over its entitlements with respect to each swap is accrued on a daily basis, and an amount of liquid assets having an aggregate value at least equal to the accrued excess will be maintained by the Fund.

Certain of the Funds may enter into currency, interest rate or index swaps. The use of currency, interest rate and index swaps is a highly specialized activity that involves investment techniques and risks different from those associated with ordinary portfolio security transactions. These transactions generally do not involve the delivery of securities or other underlying assets.

**U.S. Government Obligations.** Certain of the Funds may invest in various types of U.S. government obligations. U.S. government obligations are a type of bond and include securities issued or guaranteed as to principal and interest by the U.S. government, its agencies or instrumentalities. Payment of principal and interest on U.S. government obligations (i) may be backed by the full faith and credit of the U.S. or (ii) may be backed solely by the issuing or guaranteeing agency or instrumentality itself (as with Fannie Mae, Freddie Mac and Federal Home Loan Bank notes). In the latter case, each Fund must look principally to the agency or instrumentality issuing or guaranteeing the obligation for ultimate repayment, which agency or instrumentality may be privately owned. There can be no assurance that the U.S. government would provide financial support to its agencies or instrumentalities where it is not obligated to do so. As a general matter, the value of debt instruments, including U.S. government obligations, declines when market interest rates increase and rises when market interest rates decrease. Certain types of U.S. government obligations are subject to fluctuations in yield or value due to their structure or contract terms.

**U.S.-Registered Securities of Non-U.S. Issuers.** The Funds (other than the iShares Agency Bond ETF, iShares MBS ETF, Municipal Bond Funds and Treasury Bond Funds) may invest in U.S.-registered, U.S. dollar-denominated bonds of non-U.S. governments, agencies, supranational entities and corporate issuers. The iShares Broad USD Investment Grade Corporate Bond ETF, iShares Core 5-10 Year USD Bond ETF, iShares Core 10+ Year USD Bond ETF, iShares Core U.S. Aggregate Bond ETF, iShares ESG 1-5 Year Corporate Bond ETF, iShares ESG USD Corporate Bond ETF, iShares Government/Credit Bond ETF, iShares iBoxx \$ High Yield Corporate Bond ETF, iShares iBoxx \$ Investment Grade Corporate Bond ETF, iShares Intermediate Government/Credit Bond ETF, iShares Intermediate-Term Corporate Bond ETF, iShares Long-Term Corporate Bond ETF and iShares Short-Term Corporate Bond ETF may invest in Restricted Securities issued by non-U.S. issuers. Investing in U.S.-registered, U.S. dollar-denominated bonds or Restricted Securities issued by non-U.S. issuers involves some risks and considerations not typically associated with investing in U.S. issuers. These include differences in accounting, auditing and financial reporting standards; the possibility of expropriation or confiscatory taxation; adverse changes in investment or exchange control regulations; political instability, which could affect U.S. investments in foreign countries; and potential restrictions of the flow of international capital. Non-U.S. issuers may be subject to less governmental regulation than U.S. issuers. In addition, the risk that the issuer may fail to meet its obligations on these securities may be affected by fluctuations in non-U.S. currency exchange rates between the issuer's local currency and the U.S. dollar. Moreover, individual non-U.S. economies may differ favorably or unfavorably from the U.S. economy in such respects as growth of gross domestic product ("GDP"), rate of inflation, capital reinvestment, resource self-sufficiency and balance of payment positions.

**Future Developments.** The Board may, in the future, authorize each Fund to invest in securities contracts and investments other than those listed in this SAI and in the applicable Prospectus, provided they are consistent with each Fund's investment objective and do not violate any investment restrictions or policies.

## General Considerations and Risks

A discussion of some of the principal risks associated with an investment in a Fund is contained in each Fund's Prospectus. An investment in a Fund should be made with an understanding that the value of the Fund's portfolio securities may fluctuate in accordance with changes in the financial condition of the issuers of the portfolio securities, the value of bonds in general, and other factors that affect the market.

**Agency Debt Risk.** Certain of the Funds may invest in unsecured bonds or debentures issued by U.S. government agencies, including Fannie Mae or Freddie Mac. Bonds or debentures issued by U.S. government agencies, including Fannie Mae and Freddie Mac, are generally backed only by the general creditworthiness and reputation of the government agency issuing the bond or debenture and are not backed by the full faith and credit of the U.S. government. Ginnie Mae securities are generally backed by the full faith and credit of the U.S. government.



Some government agencies, including Fannie Mae and Freddie Mac, purchase and guarantee residential mortgages and form MBS that they issue to the market. These agencies also hold their own MBS as well as those of other institutions with funding from the agency debentures they issue. Recent events in the markets for MBS have adversely affected the value of those MBS held and/or issued by these agencies.

**Borrowing Risk.** Borrowing may exaggerate changes in the net asset value of Fund shares and in the return on a Fund's portfolio. Borrowing will cost a Fund interest expense and other fees. The costs of borrowing may reduce a Fund's return. Borrowing may cause a Fund to liquidate positions when it may not be advantageous to do so to satisfy its obligations.

**Call Risk.** During periods of falling interest rates, an issuer of a callable bond held by certain Funds may "call" or repay the security before its stated maturity, and a Fund may have to reinvest the proceeds in securities with lower yields, which would result in a decline in the Fund's income, or in securities with greater risks or with other less favorable features.

**Custody Risk.** Custody risk refers to the risks inherent in the process of clearing and settling trades and to the holding of securities, cash and other assets by local banks, agents and depositories. Low trading volumes and volatile prices in less developed markets make trades harder to complete and settle, and governments or trade groups may compel local agents to hold securities in designated depositories that may not be subject to independent evaluation. Local agents are held only to the standards of care of their local markets, and thus may be subject to limited or no government oversight. Communications between the U.S. and emerging market countries may be unreliable, increasing the risk of delayed settlements or losses of security certificates. In general, the less developed a country's securities market is, the greater the likelihood of custody problems. Practices in relation to the settlement of securities transactions in emerging markets involve higher risks than those in developed markets, in part because of the use of brokers and counterparties that are often less well capitalized, and custody and registration of assets in some countries may be unreliable. The possibility of fraud, negligence or undue influence being exerted by the issuer or refusal to recognize ownership exists in some emerging markets, and, along with other factors, could result in ownership registration being lost. In addition, the laws of certain countries may put limits on a Fund's ability to recover its assets if a foreign bank or depository or issuer of a security or an agent of any of the foregoing goes bankrupt. A Fund would absorb any loss resulting from such custody problems and may have no successful claim for compensation.

**Extension Risk.** During periods of rising interest rates, certain debt obligations may be paid off substantially more slowly than originally anticipated and the value of those securities may fall sharply, resulting in a decline in a Fund's income and potentially in the value of a Fund's investments.

**Issuer Insolvency Risk.** Each Fund's potential exposure to financially or operationally troubled issuers involves a high degree of credit and market risk, which may be heightened during an economic downturn or recession. Should an issuer of securities held by a Fund become involved in a bankruptcy proceeding, reorganization or financial restructuring, a wide variety of considerations make an evaluation of the outcome of a Fund's exposure to the issuer uncertain.

During the period of a bankruptcy proceeding, reorganization or financial restructuring, it is unlikely that each Fund will receive any interest payments on the securities of the issuer. Each Fund will be subject to significant uncertainty as to whether the reorganization or restructuring will be completed, and each Fund may bear certain extraordinary expenses to protect and recover its investment. Each Fund will also be subject to significant uncertainty as to when and in what manner and for what value the obligations evidenced by the securities of the issuer held by each Fund will eventually be satisfied. Even if a plan of reorganization or restructuring is adopted with respect to the securities of the issuer held by each Fund, there can be no assurance that the securities or other assets received by each Fund in connection with such plan of reorganization or restructuring will not have a lower value or income potential than may have been anticipated or no value. A Fund may be unable to enforce its claims or rights in any collateral or may have its claims or security interest in any collateral challenged, disallowed or subordinated to the claims or security interests of other creditors. In addition, amendments to the U.S. Bankruptcy Code or other relevant laws could alter the expected outcome or introduce greater uncertainty regarding the outcome of each Fund's securities holdings in the issuer. In a bankruptcy proceeding, a reorganization or restructuring, the securities of the issuer held by each Fund could be re-characterized or each Fund may receive different securities or other assets, including equity securities. These types of equity securities include, but are not limited to: common stock; preferred stock (including convertible preferred stock); bonds, notes and debentures convertible into common or preferred stock; stock purchase warrants and rights; equity interests in trusts; and depositary receipts. Equity securities are subject to changes in value, and their value may be more volatile than those of other asset classes. Holders of equity securities are subject to more risk than holders of debt securities because the status of equity holders is subordinate to debtholders in an issuer's capital

structure. The value of equity securities received by each Fund could decline if the financial condition of the issuer deteriorates or if overall market and economic conditions, or conditions within the issuer's region or industry, deteriorate. Equity securities received by a Fund through a bankruptcy proceeding, reorganization or restructuring of an issuer would not be component securities of a Fund's Underlying Index, which could subject a Fund to additional tracking error risk.

To the extent that each Fund receives other assets in connection with a bankruptcy proceeding, reorganization or financial restructuring, each Fund may also be subject to additional risks associated with the assets received. One example of assets that each Fund could receive is an interest in one or more loans made to the issuer as part of a workout agreed to by a consortium of lienholders and creditors of the issuer. Each Fund may receive such interests in loans to the extent permitted by the 1940 Act.

Securities or other assets received in a reorganization or restructuring typically entail a higher degree of risk than investments in securities of issuers that have not undergone a reorganization or restructuring and may be subject to heavy selling or downward pricing pressure after completion of the reorganization or restructuring. The post-reorganization/restructuring assets and securities may also be illiquid and difficult to sell or value. If each Fund participates in negotiations with respect to a plan of reorganization or restructuring with respect to securities of the issuer held by each Fund, each Fund also may be restricted from disposing such securities for a period of time. If each Fund becomes involved in such proceedings, each Fund may have more active participation in the affairs of the issuer than that assumed generally by an investor.

**Liquidity Risk Management Rule Risk.** In October 2016, the SEC adopted the Liquidity Rule requiring open-end funds, including exchange-traded funds ("ETFs") such as the Funds, to establish a liquidity risk management program and enhance disclosures regarding fund liquidity. Effective December 1, 2018, as required by the Liquidity Rule, the Funds have implemented the initial portions of the Funds' Liquidity Program, and the Board, including a majority of the Independent Trustees of the Funds, has appointed BFA as the liquidity risk program administrator of the Liquidity Program. Under the Liquidity Program, BFA, assesses, manages, and periodically reviews each Fund's liquidity risk. Certain aspects of the Liquidity Program were implemented effective December 1, 2018, while the entire Program will take effect on June 1, 2019. There are exclusions from certain portions of the liquidity risk management program requirements for "in-kind" ETFs, as defined in the Liquidity Rule.

**Municipal Market Disruption Risk.** The value of municipal securities may be affected by uncertainties in the municipal market related to legislation or litigation involving the taxation of municipal securities or the rights of municipal securities holders in the event of a bankruptcy. Proposals to restrict or eliminate the U.S. federal income tax exemption for interest on municipal securities are introduced before the U.S. Congress from time to time. Proposals also may be introduced before state legislatures that would affect the state tax treatment of a municipal fund's distributions. If such proposals were enacted, the availability of municipal securities and the value of a Municipal Bond Fund's holdings would be affected, and the Trustees would reevaluate the Fund's investment objective and policies. Municipal bankruptcies are relatively rare, and certain provisions of the U.S. Bankruptcy Code governing such bankruptcies are unclear and remain untested. Further, the application of state law to municipal issuers could produce varying results among the states or among municipal securities issuers within a state. These legal uncertainties could affect the municipal securities market generally, certain specific segments of the market, or the relative credit quality of particular securities. Any of these effects could have a significant impact on the prices of some or all of the municipal securities held by a Municipal Bond Fund.

**Operational Risk.** BFA and a Fund's other service providers may experience disruptions or operating errors such as processing errors or human errors, inadequate or failed internal or external processes, or systems or technology failures, that could negatively impact the Funds. While service providers are required to have appropriate operational risk management policies and procedures, their methods of operational risk management may differ from a Fund's in the setting of priorities, the personnel and resources available or the effectiveness of relevant controls. BFA, through its monitoring and oversight of service providers, seeks to ensure that service providers take appropriate precautions to avoid and mitigate risks that could lead to disruptions and operating errors. However, it is not possible for BFA or the other Fund service providers to identify all of the operational risks that may affect a Fund or to develop processes and controls to completely eliminate or mitigate their occurrence or effects.

**Prepayment Risk.** During periods of falling interest rates, issuers of certain debt obligations may repay principal prior to the security's maturity, which may cause a Fund to have to reinvest in securities with lower yields or higher risk of default, resulting in a decline in the Fund's income or return potential. Also, if a security subject to prepayment had been purchased at a premium, the value of the premium would be lost in the event of prepayment.

**Repurchase Agreement Risk.** A repurchase agreement is an instrument under which the purchaser (*i.e.*, a Fund) acquires a security and the seller agrees, at the time of the sale, to repurchase the security at a mutually agreed upon time and price. Repurchase agreements may be construed to be collateralized loans by the purchaser to the seller secured by the securities transferred to the purchaser. If a repurchase agreement is construed to be a collateralized loan, the underlying securities will not be considered to be owned by a Fund but only to constitute collateral for the seller's obligation to pay the repurchase price. If the seller defaults on its obligation under the agreement, a Fund may suffer delays and incur costs or lose money in exercising its rights under the agreement. If the seller fails to repurchase the security and the market value of the security declines, a Fund may lose money.

**Risk of Derivatives.** A derivative is a financial contract, the value of which depends on, or is derived from, the value of an underlying asset, such as a security, a commodity (such as gold or silver), a currency or an index (a measure of value or rates, such as the S&P 500 or the prime lending rate). Each Fund may invest in variable rate demand notes and obligations, and tender option bonds, which may be considered derivatives. Compared to conventional securities, derivatives can be more sensitive to changes in interest rates or to sudden fluctuations in market prices and thus a Fund's losses may be greater if it invests in derivatives than if it invests only in conventional securities. Derivatives are also subject to counterparty risk, which is the risk that the other party in the transaction will not fulfill its contractual obligations. Derivatives generally involve the incurrence of leverage. To address such leverage and to prevent a Fund from being deemed to have issued senior securities as a result of an investment in derivatives, such Fund will segregate liquid assets equal to its obligations under the derivatives throughout the life of the investment.

When a derivative is used as a hedge against a position that a Fund holds or is committed to purchase, any loss generated by the derivative generally should be substantially offset by gains on the hedged investment, and vice versa. While hedging can reduce or eliminate losses, it can also reduce or eliminate gains, and in some cases, hedging can cause losses that are not offset by gains, and the Fund will recognize losses on both the investment and the hedge. Hedges are sometimes subject to imperfect matching between the derivative and the underlying security, and there can be no assurance that a Fund's hedging transactions, which entail additional transaction costs, will be effective.

**Risk of Futures and Options on Futures Transactions.** There are several risks accompanying the utilization of futures contracts and options on futures contracts. A position in futures contracts and options on futures contracts may be closed only on the exchange on which the contract was made (or a linked exchange). While each Fund plans to utilize futures contracts only if an active market exists for such contracts, there is no guarantee that a liquid market will exist for the contract at a specified time. Furthermore, because, by definition, futures contracts project price levels in the future and not current levels of valuation, market circumstances may result in a discrepancy between the price of the bond index future and the movement in the relevant Underlying Index. In the event of adverse price movements, a Fund would continue to be required to make daily cash payments to maintain its required margin. In such situations, if a Fund has insufficient cash, it may have to sell portfolio securities to meet daily margin requirements at a time when it may be disadvantageous to do so. In addition, a Fund may be required to deliver the instruments underlying the futures contracts it has sold.

The risk of loss in trading futures contracts or uncovered call options in some strategies (*e.g.*, selling uncovered bond index futures contracts) is potentially unlimited. Each Fund does not plan to use futures and options contracts in this way. The risk of a futures position may still be large as traditionally measured due to the low margin deposits required. In many cases, a relatively small price movement in a futures contract may result in immediate and substantial loss or gain to the investor relative to the size of a required margin deposit. Each Fund, however, intends to utilize futures and options contracts in a manner designed to limit its risk exposure to levels comparable to a direct investment in the types of bonds in which it invests.

Utilization of futures and options on futures by a Fund involves the risk of imperfect or even negative correlation to its Underlying Index if the index underlying the futures contract differs from the Underlying Index. There is also the risk of loss by a Fund of margin deposits in the event of bankruptcy of a broker with whom a Fund has an open position in the futures contract or option. The purchase of put or call options will be based upon predictions by BFA as to anticipated trends, which predictions could prove to be incorrect.

Because the futures market generally imposes less burdensome margin requirements than the securities market, an increased amount of participation by speculators in the futures market could result in price fluctuations. Certain financial futures exchanges limit the amount of fluctuation permitted in futures contract prices during a single trading day. The daily limit establishes the maximum amount by which the price of a futures contract may vary either up or down from the

previous day's settlement price at the end of a trading session. Once the daily limit has been reached in a particular type of contract, no trades may be made on that day at a price beyond that limit. It is possible that futures contract prices could move to the daily limit for several consecutive trading days with little or no trading, thereby preventing prompt liquidation of futures positions and subjecting each Fund to substantial losses. In the event of adverse price movements, each Fund would be required to make daily cash payments of variation margin.

**Risk of Investing in Non-U.S. Agency Debt Securities.** Certain of the Funds invest in uncollateralized bonds issued by agencies, subdivisions or instrumentalities of foreign governments. Bonds issued by these foreign government agencies, subdivisions or instrumentalities are generally backed only by the creditworthiness and reputation of the entities issuing the bonds and may not be backed by the full faith and credit of the foreign government. Moreover, a foreign government that explicitly provides its full faith and credit to a particular entity may be, due to changed circumstances, unable or unwilling to actually provide that support. If a non-U.S. agency is unable to meet its obligations, the performance of a Fund will be adversely impacted. A non-U.S. agency's operations and financial condition are influenced by the foreign government's economic and other policies. Changes to the financial condition or credit rating of a foreign government may cause the value of debt issued by that particular foreign government's agencies, subdivisions or instrumentalities to decline. During periods of economic uncertainty, the trading of non-U.S. agency bonds may be less liquid while market prices may be more volatile than prices of U.S. agency bonds. Additional risks associated with non-U.S. agency investing include differences in accounting, auditing and financial reporting standards, adverse changes in investment or exchange control regulations, political instability, which could affect U.S. investments in foreign countries and cause restrictions on the flow of international capital.

**Risk of Investing in Non-U.S. Debt Securities.** Certain of the Funds may invest in non-U.S. debt securities as determined by the respective index provider. An investment in a Fund involves risks associated with investing in a portfolio of debt securities traded on foreign exchanges and OTC in the respective countries covered by a Fund. These risks typically include market fluctuations caused by such factors as economic and political developments, changes in interest rates and perceived trends in bond prices. Investing in a fund whose portfolio contains securities of non-U.S. issuers involves certain risks and considerations not typically associated with investing in the securities of U.S. issuers. These risks include generally less liquid and less efficient securities markets; generally greater price volatility; less publicly available information about issuers; the imposition of withholding or other taxes; the imposition of restrictions on the expatriation of funds or other assets of a Fund; higher transaction and custody costs; delays and risks attendant in settlement procedures; difficulties in enforcing contractual obligations; lower liquidity and significantly smaller market capitalization of most non-U.S. securities markets; different accounting and disclosure standards; lower levels of regulation of the securities markets; more substantial government interference with the economy; higher rates of inflation; greater social, economic, and political uncertainty; the risk of nationalization or expropriation of assets; and different bankruptcy and insolvency regimes which may stay or prevent recovery in the event of an issuer's default.

*Russia Sanctions.* The U.S. and the Economic and Monetary Union (the "EMU") of the European Union (the "EU"), along with the regulatory bodies of a number of countries including Japan, Australia, Norway, Switzerland and Canada (collectively, "Sanctioning Bodies"), have imposed economic sanctions, which can consist of prohibiting certain securities trades, prohibiting certain private transactions in the energy sector, asset freezes and prohibition of all business, against certain Russian individuals and Russian corporate entities. The Sanctioning Bodies could also institute broader sanctions on Russia. These sanctions, or even the threat of further sanctions, may result in the decline of the value and liquidity of Russian securities, a weakening of the ruble or other adverse consequences to the Russian economy. These sanctions could also result in the immediate freeze of Russian securities and/or funds invested in prohibited assets, impairing the ability of a Fund to buy, sell, receive or deliver those securities and/or assets. Additional sanctions against Russia have been, and may in the future be, imposed by the U.S. or other countries.

The sanctions against certain Russian issuers include prohibitions on transacting in or dealing in issuances of debt or equity of such issuers. Compliance with each of these sanctions may impair the ability of a Fund to buy, sell, hold, receive or deliver the affected securities or other securities of such issuers. If it becomes impracticable or unlawful for a Fund to hold securities subject to, or otherwise affected by, sanctions (collectively, "affected securities"), or if deemed appropriate by BFA, a Fund may prohibit in-kind deposits of the affected securities in connection with creation transactions and instead require a cash deposit, which may also increase a Fund's transaction costs. A Fund may also be legally required to freeze assets in a blocked account.

Also, if an affected security is included in a Fund's Underlying Index, a Fund may, where practicable, seek to eliminate its holdings of the affected security by employing or augmenting its representative sampling strategy to seek to track the investment results of its Underlying Index. The use of (or increased use of) a representative sampling strategy may increase a Fund's tracking error risk. If the affected securities constitute a significant percentage of the Underlying Index, a Fund may not be able to effectively implement a representative sampling strategy, which may result in significant tracking error between a Fund's performance and the performance of its Underlying Index.

Current or future sanctions may result in Russia taking counter measures or retaliatory actions, which may further impair the value and liquidity of Russian securities. These retaliatory measures may include the immediate freeze of Russian assets held by a Fund. In the event of such a freeze of any Fund assets, including depository receipts, a Fund may need to liquidate non-restricted assets in order to satisfy any Fund redemption orders. The liquidation of Fund assets during this time may also result in a Fund receiving substantially lower prices for its securities.

These sanctions may also lead to changes in a Fund's Underlying Index. A Fund's index provider may remove securities from its Underlying Index or implement caps on the securities of certain issuers that have been subject to recent economic sanctions. In such an event, it is expected that a Fund will rebalance its portfolio to bring it in line with its Underlying Index as a result of any such changes, which may result in transaction costs and increased tracking error. These sanctions, the volatility that may result in the trading markets for Russian securities and the possibility that Russia may impose investment or currency controls on investors may cause a Fund to invest in, or increase a Fund's investments in, depository receipts that represent the securities of its Underlying Index. These investments may result in increased transaction costs and increased tracking error.

**Risk of Swap Agreements.** The risk of loss with respect to swaps is generally limited to the net amount of payments that a Fund is contractually obligated to make. Swap agreements are subject to the risk that the swap counterparty will default on its obligations. If such a default occurs, a Fund will have contractual remedies pursuant to the agreements related to the transaction. However, such remedies may be subject to bankruptcy and insolvency laws, which could affect such Fund's rights as a creditor (e.g., a Fund may not receive the net amount of payments that it is contractually entitled to receive).

A Fund is required to post and collect variation margin (comprised of specified liquid securities subject to haircuts) in connection with trading of OTC swaps. Implementation of regulations requiring posting of initial margin is being phased in through 2020. These requirements may raise the costs for a Fund's investment in swaps.

**Securities Lending Risk.** A Fund may engage in securities lending. Securities lending involves the risk that a Fund may lose money because the borrower of the loaned securities fails to return the securities in a timely manner or at all. A Fund could also lose money in the event of a decline in the value of collateral provided for loaned securities or a decline in the value of any investments made with cash collateral. These events could also trigger adverse tax consequences for a Fund.

### Special Considerations Regarding Investments in California Municipal Securities

Following is a brief summary of some of the factors that may affect the financial condition of the State of California (referred to herein as the "State" or "California") and its political subdivisions. The summary is neither a complete nor a comprehensive description of these factors or an analysis of financial conditions and may not be indicative of the financial condition of issuers of obligations or any particular projects financed with the proceeds of such obligations. Many factors not included in the summary, such as the national economy, changes in federal tax law as well as federal policies related to health care and immigration, social and environmental policies and conditions, developments in municipal bankruptcies and the national and international markets for products produced in California, could have an adverse impact on the financial condition of California and its political subdivisions. It is not possible to predict whether and to what extent those factors may affect the financial condition of California and its political subdivisions.

**The following summary is based upon the most recent publicly available budget documents and offering statements relating to public debt offerings of the State. This summary has not been updated nor will it be updated during the year. Neither the Fund nor its legal counsel has independently verified this information.**

#### Overview

The State labor market conditions have improved significantly since the depths of the recession. California's unemployment rate increased from 6.1 percent at the start of 2008 to a high of 12.5 percent in the last four months of 2010. As of March

2018, the State’s unemployment rate was preliminarily estimated to be 4.3 percent, approximately 0.2 percent higher than the national average of 4.1 percent, representing one of the lowest monthly unemployment rates for the State since the United States Bureau of Labor Statistics began reporting such numbers in 1976.

California’s budget position continues to be strong. Although the State has faced serious budgetary problems in the past resulting from structural imbalances, the State significantly improved its general fiscal condition with the approval by the voters in November 2012 of a seven-year personal income tax increase and a four-year sales tax increase (collectively known as “Proposition 30”). In November 2016, voters approved an extension of the Proposition 30 personal income tax increases but the sales tax increase expired on December 31, 2016. See “The State Budget — Proposition 30 and Proposition 55” below.

The State’s fiscal year begins on July 1 and ends on June 30 of the following year. The annual budget is proposed by the Governor by January 10 of each year for the next fiscal year (the “Governor’s Budget”). State law also requires the Governor to update the Governor’s Budget projections and budgetary proposals by May 14 of each year (the “May Revision”). The 2018-19 May Revision (the “2018-19 May Revision”) was released by the Governor on May 11, 2018. The State’s General Fund (as defined below) budget has achieved structural balance for the last several fiscal years, while also building up reserves. The 2018-19 May Revision projects a Special Fund for Economic Uncertainties (“SFEU”) balance of approximately \$7.3 billion as of June 30, 2018 and an SFEU balance of approximately \$3.3 billion as of June 30, 2019 if proposed budget solutions are adopted. See “The State Budget — Status of State General Fund; 2018-19 Governor’s Budget; 2018-19 May Revision” below. The 2018-19 May Revision funds the Budget Stabilization Account (“BSA”) to 100% of its constitutional target (\$13.8 billion) through an optional \$2.6 billion deposit to that fund in addition to the \$1.7 billion mandatory deposit. Overall, the State’s combined discretionary and mandatory budget reserves are proposed to grow to almost \$17 billion which is approximately 12.7% of estimated State General Fund revenues. General fiscal impacts of the changes in federal tax law were briefly addressed in the 2018-19 May Revision. The 2018-19 May Revision reflects the anticipated receipt of \$8 billion in higher revenues through Fiscal Year 2018-19 compared to the proposed 2018-19 Governor’s Budget. See “The State Budget — Status of State General Fund; 2018-19 Governor’s Budget; 2018-19 May Revision” below.

Many local governments continue to face budget constraints due to limited taxing powers, among other factors. Unfunded pension and other post-retirement liabilities also weigh heavily upon the State as well as many local jurisdictions, and have been the principal cause of several well-publicized municipal bankruptcy filings.

## Economic Factors

California is by far the most populous state in the nation, almost 40 percent larger than Texas, the second-ranked state, according to the most recent population estimates released by the United States Census Bureau. The January 2018 estimate of the State’s population is 39.8 million, which represents over 12 percent of the total United States population.

California’s economy, the largest among the 50 states and one of the largest and most diverse in the world, has major components in high technology, trade, entertainment, agriculture, manufacturing, government, tourism, construction and services. The relative proportion of the various components of the California economy closely resembles the make-up of the national economy.

State total personal income has made substantial gains since the end of the financial crisis in 2009, during which the State experienced the first decline in total personal income on a year-over-year basis since 1938. From 2009 through 2017, State total personal income grew by an average annual rate of approximately 5.0%. In January 2018, the Department of Finance reported that total personal income increased approximately 3.1 percent in 2016 and estimated that it increased approximately 4.1 percent in 2017. In the forecasts included in the proposed 2018-19 Governor’s Budget, the State projected personal income to grow by 3.9 percent in 2018 and 4.8 percent in 2019.

State taxable sales have also grown steadily since 2009, at an average annual rate of 5.6% through 2015. However, the expiration of the Proposition 30 sales tax increase and increased percentages diverted to local governments have reduced the amount of sales tax available to the State’s General Fund. See “The State Budget — Proposition 30 and Proposition 55,” and “Local Governments—Realigning Services to Local Governments” below. Nevertheless, sales and use taxes remain a principal source of General Fund revenues. See “Recent Financial Results” below for a discussion of the percentage of State General Fund revenues that are derived from sales and use taxes. Total taxable transactions for the State were estimated at \$649 billion for 2016 by the California State Board of Equalization, an increase of 2.4 percent over the prior year. Annual taxable sale transactions for the State for 2017 are not yet available. As of January 2018, the State projected taxable sales to grow by 4.6 percent in fiscal year 2017-18 and 4.0 percent in fiscal year 2018-19.

The statewide median home price for existing single-family homes fell to a low of approximately \$300,000 in calendar year 2011. In October 2017, the statewide median home price was \$549,560, which was an increase of 7.6 percent from a year earlier and well above the statewide median home price for calendar year 2016 of \$501,560. This statewide median home price remains lower than the pre-recession peak median price of \$594,530, however, the Department of Finance reported in December 2017 that the gap between U.S. and California home prices has widened from 7 percent in 1970 to more than 120 percent in October 2017.

Residential building permitting, which suffered a long, steady decline from calendar years 2006 through 2009, has increased steadily over the years since, from 44,762 in 2010 (approximately \$13.7 billion valuation) to 100,961 in 2016 (approximately \$31.2 billion valuation), reflecting an average annual growth rate of 15.5%, but still down from a pre-recession figure of 164,187 (approximately \$38.2 billion valuation) in 2006.

After slowing sharply in 2009, nonresidential construction increased steadily over the past several years, from a total valuation of approximately \$11.2 billion in 2010 to \$27.4 billion in 2016, reflecting an average annual growth rate of 16.9% and surpassing the pre-recession high of \$22.5 billion in 2007. Annual nonresidential construction data for 2017 is not yet available.

### Constitutional Limitations on Taxes, Other Charges, Appropriations and General Fund Revenues

Over the years, a number of constitutional amendments have been enacted, often through voter initiatives, which have increased the difficulty of raising State taxes or restricted the use of State Treasury General Fund (the “General Fund”) revenues. Some of the more significant of these approved constitutional amendments are described below. Because of the complex nature of these initiatives and the ambiguities and possible inconsistencies in their terms, it is not possible to predict with certainty the impact on California debt obligations or on the ability of the State or local governments to pay debt service on such California debt obligations. Further initiatives or legislative changes in laws or the California Constitution may also affect the ability of the State or local issuers to repay their obligations.

**Limitation on Property Taxes.** Certain California debt obligations may be obligations of issuers that rely in whole or in part, directly or indirectly, on *ad valorem* property taxes as a source of revenue. The taxing powers of California local governments and districts are limited by Article XIII A of the California Constitution (“Article XIII A”), enacted by the voters in 1978 and commonly known as “Proposition 13.” Briefly, Article XIII A limits the rate of *ad valorem* property taxes to 1 percent of full cash value of real property and generally restricts the reassessment of property to 2 percent per year, except upon new construction or change of ownership (subject to a number of exemptions).

Taxing entities, however, may raise *ad valorem* taxes above the 1 percent limit to pay debt service on voter-approved bonded indebtedness.

Under Article XIII A, the basic 1 percent *ad valorem* tax levy is applied against the assessed value of property as of the owner’s date of acquisition (or as of March 1, 1975, if acquired earlier), subject to certain adjustments. This system has resulted in widely varying amounts of tax on similarly situated properties. Several lawsuits were filed challenging the acquisition-based assessment system of Proposition 13, but it was upheld by the U.S. Supreme Court in 1992.

Article XIII A prohibits local governments from raising revenues through *ad valorem* taxes above the 1 percent limit; it also requires voters of any governmental units to give two-thirds approval to levy certain taxes. For further discussion on Proposition 13, see “Local Governments — Constitutional and Statutory Limitations on Local Government” below. For further discussion on voter approval requirements under Article XIII A, see “— Voter Requirements for Taxes and Fees” below.

**Limitations on Other Taxes, Fees and Charges.** On November 5, 1996, the voters of the State approved Proposition 218, called the “Right to Vote on Taxes Act.” Proposition 218 added Article XIII C (“Article XIII C”) and Article XIII D (“Article XIII D”) to the State Constitution, which contain a number of provisions affecting the ability of local agencies to levy and collect both existing and future taxes, assessments, fees and charges.

Article XIII C requires that all new or increased local taxes be submitted to the voters before they become effective. Proposition 26, discussed below under the caption entitled “— Voter Requirements for Taxes and Fees,” amended Article XIII C by adding an expansive definition of “taxes” to include many regulatory fees currently imposed by the State and its municipalities. Taxes for general governmental purposes require a majority vote and taxes for specific purposes require a two-thirds vote.

Article XIID contains several provisions making it generally more difficult for local agencies to levy and maintain “assessments” for municipal services and programs. Article XIID also contains several provisions affecting “fees” and “charges,” defined for purposes of Article XIID to mean “any levy other than an *ad valorem* tax, a special tax, or an assessment, imposed by a local government upon a parcel or upon a person as an incident of property ownership, including a user fee or charge for a property related service.” All new and existing property related fees and charges must conform to requirements prohibiting, among other things, fees and charges that generate revenues exceeding the funds required to provide the property related service or are used for unrelated purposes. Article XIID imposes notice, hearing and protest procedures for levying or increasing property related fees and charges, and, except for fees or charges for sewer, water and refuse collection services (or fees for electrical and gas service, which are not treated as “property related” for purposes of Article XIID), no property related fee or charge may be imposed or increased without majority approval by the property owners subject to the fee or charge or, at the option of the local government, two-thirds voter approval by the electorate residing in the affected area.

In addition to the provisions described above, Article XIIC removes limitations on the initiative power in matters of local taxes, assessments, fees and charges. Consequently, local voters, by future initiative, could repeal, reduce or prohibit the future imposition or increase of any local tax, assessment, fee or charge. It is unclear how this right of local initiative may be used in cases where taxes or charges have been or will be specifically pledged to secure debt issues.

**Limitations on the State’s Ability to Transfer Funds from Local Agencies.** On November 2, 2010, voters in the State approved Proposition 22, a Constitutional initiative. Proposition 22, known as the “Local Taxpayer, Public Safety, and Transportation Protection Act of 2010,” eliminated or reduced the State’s authority to (i) temporarily shift property taxes from cities, counties and special districts to schools, (ii) use vehicle license fee revenues to reimburse local governments for state-mandated costs (the State will have to use other revenues to reimburse local governments), (iii) redirect property tax increment from redevelopment agencies (which have since been dissolved, see “Obligations of Other Issuers—Tax Increment and the Dissolution of Redevelopment Agencies” below) to any other local government, (iv) use State fuel tax revenues to pay debt service on State transportation bonds, or (v) borrow or change the distribution of State fuel tax revenues.

**Voter Requirements for Taxes and Fees.** Proposition 26, known as the “Supermajority Vote to Pass New Taxes and Fees Act” was approved by State voters on November 2, 2010. Proposition 26 amended provisions of Article XIII A and Article XIIC governing the imposition of taxes. Proposition 26 requires a two-thirds supermajority vote in the California State Legislature (the “State Legislature”) prior to the imposition of any change in State statute which results in any taxpayer paying a higher tax. This requirement eliminated the prior practice that allowed, via majority vote, one tax to be increased if another tax is lowered by an equivalent amount. Furthermore, any increase in a fee beyond the amount needed to provide the specific service or benefit is deemed a “tax,” and thus would require two-thirds vote of any governmental units for passage. Finally, Proposition 26 applies retroactively to any measures passed on or after January 1, 2010. Thus, any tax or fee that was adopted after January 1, 2010 with a majority vote that would have required a two-thirds vote were Proposition 26 in place, was repealed on November 2, 2011, unless readopted by the necessary two-thirds vote.

**Appropriations Limits.** The State and its local governments are subject to an annual “appropriations limit” imposed by Article XIII B of the California Constitution (“Article XIII B”), enacted by the voters in 1979 and significantly amended by Propositions 98 and 111 in 1988 and 1990, respectively. Article XIII B prohibits the State or any covered local government from spending “appropriations subject to limitation” in excess of the appropriations limit imposed. “Appropriations subject to limitation” are authorizations to spend “proceeds of taxes,” which consist of tax revenues and certain other funds, including proceeds from regulatory licenses, user charges or other fees, to the extent that such proceeds exceed the cost of providing the product or service, but “proceeds of taxes” exclude most State subventions to local governments. No limit is imposed on appropriations of funds which are not “proceeds of taxes,” such as reasonable user charges or fees, and certain other non-tax funds, including bond proceeds.

Among the expenditures not included in the Article XIII B appropriations limit are (i) the debt service cost of bonds issued or authorized prior to January 1, 1979, or subsequently authorized by the voters, (ii) appropriations to comply with mandates of courts or the federal government, (iii) appropriations for certain capital outlay projects, (iv) appropriations by the State of post-1989 increases in gasoline taxes and vehicle weight fees, and (v) appropriations made in certain cases of emergency.

The appropriations limit for each year is adjusted annually to reflect changes in cost of living and population, and any transfers of service responsibilities between government units.



“Excess” revenues are measured over a two year cycle. Local governments must return any excess to taxpayers by rate reductions. The State must refund 50 percent of any excess, with the other 50 percent paid to schools and community colleges.

With more liberal annual adjustment factors since 1988, and depressed revenues in the early 1990s because of a recession, few governments have been operating near their spending limits, but this condition may change over time. Local governments may by voter approval exceed their spending limits for up to four years. The Department of Finance estimated in January 2018 that the State was \$16.2 billion under the limit in fiscal year 2016-17 and projected the State would be approximately \$11.7 billion and \$12.0 billion under its limit in fiscal years 2017-18 and 2018-19, respectively.

***Dedication of General Fund Revenues to Schools.*** The single largest portion of the State budget is support for K-12 public schools and community college districts. Proposition 98, an initiative measure adopted originally in 1988, mandates that a set percentage of General Fund revenues be spent for K-14 schools, with the balance of school funding provided by a share of local property taxes. Proposition 98 is extremely complex, and results in significant fiscal problems when, General Fund revenues fall short of the projections on which the original appropriations to schools were made. For further discussion regarding Proposition 98, see “Proposition 98 and K-14 Funding” below.

### Obligations of the State

The State has always paid when due the principal of and interest on its general obligation bonds, general obligation commercial paper notes, lease-revenue obligations and short-term obligations, including revenue anticipation notes and revenue anticipation warrants. The State Constitution prohibits the creation of general obligation indebtedness of the State unless a bond measure is approved by a majority of the electorate voting at a general election or a direct primary.

***Capital Facilities Financing.*** The State builds and acquires capital facilities primarily through the use of general obligation bonds and lease-purchase borrowing. Under the State Constitution, debt service on outstanding general obligation bonds is the second charge to the General Fund after support of the public school system and public institutions of higher education. Since 2006, the voters and/or the State Legislature have authorized a significant amount of new general obligation bonds, lease revenue bonds and other General Fund-supported debt. From July 1, 2006 to February 1, 2018, the State aggregate principal amount of outstanding obligations primarily supported by the General Fund rose from \$44.8 billion to approximately \$83.0 billion. This outstanding debt consists of approximately \$73.8 billion of general obligation bonds and approximately \$9.2 billion of lease-revenue bonds. Moreover, as of February 1, 2018, the State had approximately \$36.3 billion of authorized and unissued General Fund-supported general obligation bonds (\$32.1 billion) and lease revenue bonds (\$4.2 billion).

Based upon estimates included in the State’s most recent general obligation bond disclosure, debt service on General Fund-supported general obligation bonds and lease-revenue debt is estimated to equal approximately 6.3 percent of General Fund revenues in fiscal year 2017-18 and 6.3 percent of General Fund revenues in fiscal year 2018-19. This amount fluctuates as assumptions for future debt issuance and revenue projections are updated from time to time. This debt service cost is net of reimbursement from various special funds and subsidy payments from the federal government for taxable “Build America Bonds.”

***Future Bond Issuance Plans.*** The amount of outstanding General Fund-supported debt, primarily general obligation bonds, may increase in coming years given the amount of authorized and unissued General Fund-supported bonds the State can issue. See “— Capital Facilities Financing” above. Based upon estimates included in the proposed 2018-19 Governor’s Budget, approximately \$3.9 billion of such obligations will be issued in fiscal year 2017-18 (consisting of approximately \$3.2 billion of new money general obligation bonds and approximately \$707 million of lease revenue bonds). However, the exact amount that may be issued will depend on market conditions, overall budget constraints and other factors. The State also expects to issue refunding bonds as markets warrant.

***Cash Management.*** As part of its cash management program, the State has regularly issued short-term obligations to meet cash flow needs. External borrowing is typically done with revenue anticipation notes that are payable later in the fiscal year in which they are issued. The State issued \$2.8 billion of revenue anticipation notes for fiscal year 2014-15, all of which have been repaid. The State did not issue revenue anticipation notes in fiscal year 2015-16 or fiscal year 2016-17 and is not expected to issue revenue anticipation notes in fiscal year 2017-18 or 2018-19.

The State is also authorized under certain circumstances to issue revenue anticipation warrants that are payable in the succeeding fiscal year, as well as registered refunding warrants issued to refund revenue anticipation warrants. The State has issued revenue anticipation warrants to bridge short-term cash flow shortages in five years since 1992. From time to time, the State Legislature has deferred various payments due under State statute, in order to more closely align the State's revenues with its expenditures. This technique has been used in past budgets, in order to reduce the State's need for external borrowing to bridge any cash flow deficit. Further, State law gives the State Controller some flexibility to delay payments to various payees, including State vendors, when the State Controller foresees a relatively short-term cash flow shortage. In addition, the State issued IOUs in lieu of cash payments in July and August 2009, the second such issuance since the 1930s. For information regarding the State's recent cash management programs, see "Recent Financial Results" below.

### **Obligations of State Agencies**

A number of State agencies and authorities issue obligations secured or payable from specified revenue streams. These obligations are not payable from the General Fund and carry different ratings than the State's general obligation bonds. None of these revenue bonds are backed by the State's faith and credit or taxing power. As of December 31, 2017, the various State revenue bond financing programs had approximately \$33.8 billion in outstanding bonds and the various State financing authorities had approximately \$31.7 billion of outstanding revenue bonds. The Regents of the University of California has been one of the largest issuers of revenue bonds in recent years, with approximately \$18.3 billion of outstanding revenue bonds secured by certain revenues of the University of California, as of December 31, 2017. Other State agencies and authorities with significant bond programs include the State Department of Water Resources which had approximately \$6.4 billion of outstanding revenue bonds secured by power and water users, and the California Housing Finance Agency had approximately \$1.6 billion of outstanding revenue bonds secured by mortgage loans made for single family and multi-family housing units, as of December 31, 2017.

### **Recent Financial Results**

Historically, the principal sources of General Fund revenues are personal income tax, sales and use tax and corporation tax. Based on the most recent figures provided in the proposed 2018-19 Governor's Budget, these sources are expected to contribute approximately 69.4 percent, 19.4 percent and 8.3 percent, respectively, of total General Fund revenues and transfers in fiscal year 2018-19. The State's personal income tax structure is highly progressive. In the State's general obligation bond disclosure in November 2017, the State noted that the top 1 percent of taxpayers paid approximately 47.6 percent of the total personal income tax in tax year 2015. The personal income tax was made even more progressive with the passage of Proposition 30, which imposed additional taxes on earnings over \$250,000, resulting in an income tax of 12.3 percent on earnings over \$1 million. In November 2016 the voters in the State approved an extension of this portion of Proposition 30 through the end of calendar year 2030. A large portion of personal income tax receipts is derived from capital gains realizations and stock option income. These revenue sources can be particularly volatile.

Along with personal income taxes, sales and use taxes and corporation taxes are subject to economic fluctuations as well, and were adversely affected during the financial crisis that ended in 2009. However, total personal income taxes, sales and use taxes and corporation taxes have grown steadily since 2009, from \$76.7 billion in fiscal year 2008-09 to an estimated \$128.6 billion in fiscal year 2017-18 according to the 2018-19 May Revision, reflecting an average annual growth rate of 6.0%. Moreover, compared to the rest of the nation, California relies less on the property tax as a source of revenues, because of Proposition 13. See "Constitutional Limitations on Taxes, Other Charges, Appropriations and General Fund Revenues – Limitation on Property Taxes" above.

The State is required to maintain the SFEU, derived from General Fund revenues, as a reserve to meet cash needs of the General Fund, but the SFEU is required to be replenished as soon as sufficient revenues are available. Year-end balances in the SFEU are included for financial reporting purposes in the General Fund balance. As of June 30, 2011 and 2012, recurring cash flow shortfalls resulted in SFEU deficits of approximately \$3.9 billion and \$3.6 billion, respectively. SFEU balances have improved with higher than expected capital gains revenue in recent years. The 2018-19 May Revision projects an SFEU balance of approximately \$7.3 billion as of June 30, 2018 and an SFEU balance of approximately \$3.2 billion as of June 30, 2019 if proposed budget solutions are adopted. See "The State Budget — Status of State General Fund; 2018-19 Governor's Budget; 2018-19 May Revision" below. The 2018-19 May Revision funds the BSA to 100% of its constitutional target through an optional \$2.6 billion deposit to that fund in addition to the \$1.5 billion mandatory deposit. Overall, the State's combined discretionary and mandatory budget reserves are proposed to grow to almost \$17 billion which is about 12.7% of estimated State General Fund revenues. The proposed 2018-19 Governor's Budget also includes a pay down of accumulated debts and

liabilities to counter the potential fiscal impact of federal policy changes on California and the potential end of an economic expansion that has surpassed historical averages.

The last seven budget acts were each enacted timely, a process whereby the Governor’s Budget is revised and finalized according to the schedule outlined below (the “Budget Act”). See “The State Budget— Overview” below.

### Proposition 98 and K-14 Funding

Throughout the 1980s, State spending increased rapidly as the State population and economy also grew rapidly. Such spending included increased spending for many assistance programs to local governments, which were constrained by Proposition 13 and other laws. The largest State assistance program is to local public school districts. In 1988, the voters of the State approved Proposition 98, a combined initiative constitutional amendment and statute, which (subject to suspension by a two-thirds vote of the State Legislature and the Governor) guarantees local school districts and community college districts a minimum share of General Fund revenues (the “Proposition 98 Guarantee”). The Proposition 98 Guarantee is calculated each fiscal year using one of three “tests” that apply under varying fiscal and economic conditions. The 2017-18 Budget Act provides that approximately 42 percent of General Fund revenues in fiscal year 2017-18 were directed to K-14 programs covered by the Proposition 98 Guarantee. For fiscal year 2017-18, the Proposition 98 Guarantee is \$74.5 billion, of which \$52.6 billion is payable from the General Fund, although the proposed 2018-19 Governor’s Budget revises such estimates to be approximately \$75.2 billion and \$53.5 billion, respectively. The 2017-18 Budget Act Proposition 98 Guarantee level was an increase of \$3.1 billion over the 2016-17 Budget Act level. For further information on the limitations on General Fund revenues imposed by Proposition 98, see “Constitutional Limitations on Taxes, Other Charges, Appropriations and General Fund Revenues — Dedication of General Fund Revenues to Schools” above.

### State and Local Pension and Post-Retirement Liabilities

**State.** The financial condition of the State and its localities is also subject to pension and other post-retirement benefit risks. The pension funds managed by the State’s retirement systems, the California Public Employees’ Retirement System (“CalPERS”) and the California State Teachers’ Retirement System (“CalSTRS”), sustained significant investment losses during the financial crisis and currently have substantial unfunded liabilities which will require increased contributions from the General Fund in future years. Fiscal year 2017-18 General Fund contributions to CalPERS and CalSTRS (as of April 2018) are estimated to be approximately \$3.4 billion and \$2.8 billion, respectively. The combined contributions which include contributions for California State University (“CSU”) represent approximately 5.0 percent of all General Fund expenditures for fiscal year 2017-18. The combined contributions to CalPERS and CalSTRS which include contributions for CSU in fiscal year 2018-19, represent about 5.1 percent of all proposed General Fund expenditures in fiscal year 2018-19. In addition to the combined contributions, the State will also be making a one-time \$6 billion supplemental payment to CalPERS in fiscal year 2017-18 by borrowing from other internal funds. The General Fund share of the repayment of this supplemental payment (\$3.6 billion) will come from Proposition 2 revenues allocated for supplemental payments to pay down long-term liabilities. See “The State Budget — Constraints on the Budget Process — Revisions to Balanced Budget Amendment.” As of the proposed 2018-19 Governor’s Budget, total savings over the next two decades for the General Fund and the special funds that contribute to CalPERS, net of principal of an interest payments on the loan, is estimated to be \$4.8 billion assuming actuarial and investment assumptions are realized.

The State also provides other post-employment health care and dental benefits to its employees and certain of their spouses and dependents (hereinafter referred to as “OPEB”), which benefits utilize a “pay-as-you-go” funding policy. Fiscal year 2017-18 General Fund contributions to OPEB (as of April 2018) were estimated to be approximately \$2.1 billion or approximately 1.7 percent of all General Fund expenditures for fiscal year 2017-18.

The recent economic recession called into question the reliability of assumed rates of return used to determine actuarial unfunded pension liabilities. Prior to 2012, CalPERS and CalSTRS had used an assumed 7.75 percent rate of return to calculate their respective unfunded liabilities. However, at meetings in 2012, the CalSTRS Board and the CalPERS Board, respectively, voted to lower the investment earnings assumption to 7.50 percent (a reduction of 0.25 percent) commencing for actuarial valuations dated June 30, 2011. These assumption changes resulted in significant increases in unfunded liability. The assumption changes for CalPERS also increased retirement contributions for many local agencies which contract with CalPERS to manage their pension programs. In December of 2016 the CalPERS Board voted to lower the investment earnings assumptions for 2017-18 to 7.375%, for 2018-19 to 7.25%, for 2019-20 to 7.0% and for 2020-21 to 7.0%. These assumption changes will result in additional increases of unfunded liabilities for the systems.

The most recent CalPERS and CalSTRS investment returns have varied widely and their respective 10-year time weighted average returns are below even the lower assumed rates of return adopted by their Boards. CalPERS reported an 11.2 percent return on investments for the twelve months ended June 30, 2017 compared to investment returns of 18.4 percent, 2.4 percent and 0.6 percent in fiscal years 2013-14, 2014-15 and 2015-16, respectively. CalSTRS reported a 13.4 percent return on investments for the twelve months ended June 30, 2017 in its comprehensive annual financial report for fiscal year 2016-17 compared to investment returns of 18.7 percent, 4.8 percent and 1.4 percent in fiscal years 2013-14, 2014-15 and 2015-16, respectively. Based on those expected returns for the twelve months ended June 30, 2017, CalPERS estimated 3-year, 5-year and 10-year time weighted average returns of 4.6, 8.8 and 4.4 percent, respectively, and CalSTRS reported 3-year, 5-year and 10-year time weighted average returns of 6.3, 10.1 and 5.0 percent, respectively.

The CalPERS Board reported an unfunded accrued liability allocable to state employees (excluding judges and elected officials), as of June 30, 2016, of \$59.5 billion on a market value of assets (“MVA”) basis. CalPERS no longer measures on an actuarial value of assets (“AVA”) basis. CalSTRS reported the unfunded accrued actuarial liability of its Defined Benefit Plan as of June 30, 2016 at \$96.7 billion on an AVA basis, and \$101.6 billion on an MVA basis, reflecting new investment return assumptions adopted by CalSTRS in February 2017.

In April 2013, CalPERS approved new actuarial policies that are aimed at returning the CalPERS system to fully-funded status within 30 years. These new policies include a rate-smoothing method with a 30-year fixed amortization period for gains and losses (rather than the current 30-year rolling amortization method). CalPERS delayed the implementation of the new policy until fiscal year 2015-16 for the State, schools and all public agencies. In February 2014, the CalPERS Board approved new demographic assumptions that take into account increased life expectancies (2.1 years for men; 1.6 years for women) and to fully phase in the resulting increased costs to the State (of approximately \$1.2 billion per year) within 3 years. All of these policies have or are projected to increase required State and local contributions to CalPERS. See “—Local” below for a discussion of steps taken to eliminate the current CalSTRS unfunded liability.

The State’s most recent OPEB actuarial accrued liability report estimated an approximately \$91.5 billion actuarial accrued liability (virtually all unfunded) as of June 30, 2017 (compared to \$76.7 billion estimated as of June 30, 2016). Government Accounting Standards Board (“GASB”) Statements 74 and 75, each of which affects OPEB financial reporting, were issued in June 2015. As a result, there is an increased focus on OPEB liability as GASB Statement No. 74 became effective for fiscal years beginning after June 15, 2016 and GASB Statement No. 75 becomes effective for fiscal years beginning after June 15, 2017. In January 2016, the State Controller noted that, if OPEB funding is left unchanged, the OPEB actuarial accrued liability could rise to more than \$100 billion by fiscal year 2020-21 and to more than \$300 billion by fiscal year 2047-48. The Governor has proposed prefunding the entire unfunded liability by fiscal year 2044-45. Statutory language passed as part of the 2015-16 Budget Act contains the framework designed to support the elimination of the unfunded OPEB actuarial accrued liability through the use of a prefunding trust fund to pay for future retiree health benefits. As of April 2018, the State had approximately \$570 million set aside in the prefunding trust fund. By the end of fiscal year 2017-18, the State projects the trust fund balance will approach \$1 billion.

In the future the State may be forced to significantly increase its pension fund and post-retirement benefit contributions, reducing discretionary funds available for other State programs. In addition, the State’s credit ratings may be adversely affected if the State does not reduce or manage these unfunded liabilities. See “Bond Ratings” below.

**Local.** Many local governments in the State, many of which are current members of CalPERS, face similar and, in many cases, more severe issues relating to unfunded pension and post-retirement benefit (OPEB) liabilities. The credit ratings, and even solvency of these local governments may be at risk in the future if these liabilities are not appropriately addressed through wage concessions and restructuring of benefits. Cities are particularly at risk because one of their primary missions is safety, and safety personnel labor and retirement benefit costs are significantly greater than labor and retirement costs of general municipal employees. Three cities, Vallejo, Stockton and San Bernardino, entered bankruptcy under Chapter 9 of the Federal bankruptcy code, largely as a result of escalating labor cost and unfunded pension and post-retirement liabilities. All three of these cities have agreements with CalPERS to administer their pension obligation, and their respective obligations to CalPERS have proven to be a pivotal reason for their insolvency. Other cities (including other cities that contract with CalPERS) and counties have expressed public concerns about their ability to meet their unfunded pension and other post-retirement liabilities, and a willingness to entertain bankruptcy as an option to resolve their fiscal problems. One federal bankruptcy judge stated that obligations to CalPERS could be adjusted in federal bankruptcy proceedings; however, the plan of adjustment in those proceedings was confirmed without reducing such obligations to CalPERS. Any definitive ruling that allowed obligations to CalPERS to be adjusted downward might encourage other financially-stressed municipalities to

explore a Chapter 9 bankruptcy. There can be no assurance that the fiscal stress and cash pressures currently facing certain of the State's localities will not continue or become more difficult, particularly if the economic recovery falters.

School districts in the State are required to make contributions to CalSTRS for their teachers and staff. In June 2014, the Governor signed Chapter 47, Statutes of 2014 ("AB 1469"), which increased statutorily required contributions to CalSTRS from the State, school districts, and teachers beginning July 1, 2014. The AB 1469 funding plan includes additional increases in contribution rates for the State, school districts, and teachers over the next several years in order to eliminate the current CalSTRS unfunded liability by 2045-46. The increased funding requirements imposed upon local school districts will continue to increase through fiscal year 2020-21 and may have an adverse effect on their financial condition.

**Pension Reform.** In September 2012, the Governor signed into law a comprehensive pension reform package affecting State and local government known as California Public Employees' Pension Reform Act of 2013 ("PEPRA"), which became effective January 1, 2013. PEPRA implements lower defined-benefit formulas with higher retirement ages for new State employees hired on or after January 1, 2013, and includes provisions to increase employee contributions. The State Legislature passed and the Governor signed AB 1469 in June 2014 to increase required State contributions to CalSTRS. See "— Local" above. OPEB costs were not addressed in PEPRA; however, the State has disclosed that the higher retirement ages included in PEPRA will reduce OPEB liabilities in the long term.

The Legislative Analyst's Office's (the "LAO") analysis of PEPRA concluded that the legislation would have little or no immediate effect on State finances. However, in a 2012 actuarial analysis of PEPRA, CalPERS projected total savings to the State of between \$10.3 billion and \$12.6 billion over the next 30 years due primarily to increased employee contributions and, as the workforce turns over, lower benefit formulas that will gradually reduce normal costs. Total savings to the State and local governments combined have been reported at between \$40 billion and \$60 billion over the next 30 years. See also "State and Local Pension and Post-Retirement Liabilities—State" for discussion of the \$6 billion supplemental payment to be made to CalPERS in fiscal year 2017-18.

California courts have been largely supportive of the vested or earned pension rights of State and local employees. Thus, pension reform efforts have been focused largely on limitations on future benefits for new employees, bringing limited, if any, immediate financial relief. Both constitutional initiatives and State legislation have been circulated or proposed attempting to reform the State's pension systems on the State and local basis.

## The State Budget

**Overview.** The State's fiscal year begins on July 1 and ends on June 30 of the following year. The Governor's Budget is proposed by the Governor by January 10 of each year for the next fiscal year. Under State law, the Governor's Budget cannot provide for projected expenditures in excess of projected revenues for the ensuing fiscal year. State law also requires the Governor to produce the May Revision by May 14 of each year. The May Revision updates the Governor's Budget projections and budgetary proposals. The May Revision is generally the basis for final negotiations between the Governor and the State Legislature to reach agreement on appropriations and other legislation to fund State government and thus finalizing the Budget Act for upcoming fiscal year. The budget must be balanced, as required by Proposition 58 (discussed below) and pursuant to Proposition 25, enacted on November 2, 2010, must be approved by a majority (instead of two-thirds, under prior law) of each house of the State Legislature. State law requires the Governor to sign the budget by the start of the fiscal year on July 1, a requirement that, prior to Proposition 25's enactment, had only been met 12 times in the preceding three decades. Following enactment of Proposition 25, the State Legislature has approved and Governor Brown has signed Budget Acts before the start of each such fiscal year.

**Constraints on the Budget Process.** Recent State Constitutional amendments approved by State voters have affected the budget process. Several such amendments are described below.

**Balanced Budget Amendment (Proposition 58 and Proposition 2).** On March 2, 2004, voters approved Proposition 58; a constitutional amendment called the "Balanced Budget Amendment," which requires the State to enact a balanced budget and establish a special reserve and restricts future borrowing to cover fiscal year-end deficits. As a result of the provisions requiring the enactment of a balanced budget and restricting borrowing, the State would in some cases have to take more immediate actions to correct budgetary shortfalls. Proposition 58 requires the State Legislature to pass a balanced budget and provides for mid-year adjustments in the event that the budget falls out of balance and the Governor calls a special legislative session to address the shortfall. The balanced budget determination is made by subtracting expenditures from all available resources, including prior-year balances.

Under Proposition 58, if the Governor determines that the State is facing substantial revenue shortfalls or spending increases, the Governor is authorized to declare a fiscal emergency. The Governor would then be required to propose legislation to address the emergency and call the State Legislature into special session for that purpose. If the State Legislature fails to pass and send to the Governor legislation to address the fiscal emergency within 45 days, the State Legislature would be prohibited from acting on any other bills or adjourning in joint recess until such legislation is passed.

Proposition 58 also established the BSA, a special reserve account funded by annual transfers of specified amounts from the General Fund, unless suspended or reduced by the Governor or until a specified maximum amount has been deposited. Until the 2014-15 Budget Act, the Governor had suspended the annual transfer of money from the General Fund to the BSA every year since 2007. In November 2014, voters approved a constitutional amendment (“Proposition 2”) intended to strengthen the BSA by, among other things, basing deposits on when capital gains revenues rise above 8 percent, creating a Proposition 98 reserve and doubling the maximum size of the BSA from 5 percent to 10 percent of General Fund revenues. Funding for the BSA is estimated by the proposed 2018-19 Governor’s Budget to be approximately \$8.4 billion as of June 30, 2018 and approximately \$13.5 billion as of June 30, 2019 or 100 percent of its constitutional target. Certain other provisions of Proposition 58 relating to the BSA were replaced by the provisions of Proposition 2. See “— Revisions to Balanced Budget Amendment” below.

Proposition 58 also prohibits certain future borrowing to cover fiscal year-end deficits. This restriction applies to general obligation bonds, revenue bonds, and certain other forms of long-term borrowing. The restriction does not apply to certain other types of borrowing, such as short-term borrowing to cover cash shortfalls in the General Fund (including revenue anticipation notes or revenue anticipation warrants currently used by the State), or inter-fund borrowings.

***Additional Revisions to Balanced Budget Amendment (Proposition 2).*** In addition to the provisions described above, other provisions of Proposition 58 relating to the BSA were replaced by the provisions of Proposition 2. Proposition 2 requires that 1.5 percent of annual General Fund revenues be deposited each year into the BSA until the BSA balance reaches an amount equal to 10 percent of General Fund revenues. Proposition 2 also requires that half of the revenues that otherwise would have been deposited into the BSA through fiscal year 2030-31 be used for supplemental payments to pay down long-term liabilities. After fiscal year 2030-31 that half of the revenues that otherwise would have been deposited into the BSA may be used for either supplemental debt payments or savings. Proposition 2 further requires that withdrawal of funds from the BSA be only for a disaster or if spending remains at or below the highest level of spending from the prior three years. Proposition 2 limits the maximum amount that could be withdrawn in the first year of a recession to half of the BSA’s balance. It also requires the State to provide a multiyear budget forecast to help better manage the State’s longer term finances and to create a Proposition 98 reserve, whereby spikes in funding are to be saved for future years to smooth school spending and minimize future cuts.

***State-Local Fiscal Relations.*** The enactment of Proposition 1A in November 2004 (“Proposition 1A of 2004”) and Proposition 22, or the “Local Taxpayer, Public Safety, and Transportation Protection Act of 2010” (“Proposition 22”), in November 2010, significantly changed the fiscal relationship between the State and local governments by severely limiting the State’s access to local funding sources.

Specifically, Proposition 1A of 2004 amended the State Constitution to, among other things, reduce the State’s access to property tax, sales tax and vehicle license fee revenues raised by local governments. Proposition 1A of 2004 also prohibits the State from mandating activities on cities, counties or special districts without providing funding to comply with the mandates. If the State does not provide funding for the activity that has been mandated, the requirement to abide by the mandate is suspended.

In addition, Proposition 22 prohibits the State Legislature, among other things, from taking or reallocating money raised by local governments for local purposes, from making changes in the allocation of property taxes among local governments designed to aid State finances, from using State fuel tax revenues to pay debt service on State transportation bonds, from borrowing or changing the distribution of State fuel tax revenues, and from using vehicle licensing fee revenues to reimburse local governments for State-mandated costs. The inability of the State to borrow or redirect funds from these sources, as it has in recent fiscal years, will reduce the State’s flexibility in reaching budget solutions in the future. On the other hand, both Proposition 1A and Proposition 22 made the allocation of revenues to local jurisdictions more predictable.

***Proposition 30 and Proposition 55.*** On November 6, 2012, voters approved “The Schools and Local Public Safety Protection Act of 2012” (also known as “Proposition 30”), which provided temporary increases in personal income tax rates for high-income taxpayers and a temporary increase in the State’s sales tax rate. A portion of the tax increases has been and will be

used to pay for the State's Proposition 98 school funding obligations. See "Proposition 98 and K-14 Funding" above. The sales tax portion of Proposition 30 expired on December 31, 2016. In November 2016 voters approved Proposition 55 which extends the personal income tax portion of Proposition 30 until December 31, 2030.

The State estimates that the additional revenue from the personal income tax increase in Proposition 30/55 was \$7.0 billion in fiscal year 2016-17 and the State projects that revenue from the personal income tax increase in Proposition 30/55 will be \$7.3 billion for fiscal year 2017-18, \$7.4 billion in fiscal year 2018-19, \$7.5 billion in fiscal year 2019-20 and \$7.7 billion in fiscal year 2020-21. The 2018-19 May Revision includes a brief overview of the projected effects of this federal tax reform on the state's General Fund. See "The State Budget — Status of State General Fund; 2018-19 Governor's Budget; 2018-19 May Revision" below.

**Health Care Reform.** The federal Affordable Care Act (the "ACA") may continue to result in a significant net increase of General Fund program costs. The federal administration and leaders in Congress continue to consider and propose numerous changes to health and human services programs. Many of the proposals could have far-reaching impacts on health care in California with significant impacts to Medicaid (Medi-Cal in California). Medi-Cal is a federal program that provides comprehensive health care to nearly 13.5 million Californians.

A complete repeal of the ACA, without a companion replacement program, would not only affect millions of Californians' health benefits and the state and local health care delivery system, but would also disrupt the private insurance market in California. The potential economic impacts of any repeal or replacement of the ACA as proposed by the Trump Administration are unpredictable and may have an adverse overall fiscal impact on the State and its instrumentalities. The actual fiscal impact will depend on final enacted legislation, if any, and may also be materially affected by policy choices made by the State to address any proposed or enacted federal legislation. However, in 2017, Congress attempted several times to repeal the ACA and consequently drop health care coverage for millions of Californians. The proposed 2018-19 Governor's Budget noted that such actions, if successful, would have cost the General Fund tens of billions of dollars annually—more than doubling the cost of Medi-Cal when fully implemented.

It is not clear whether any of these federal proposals will ultimately be approved or when they would take effect. As such, the proposed 2018-19 Governor's Budget continues to reflect existing state and federal law. The State continues to implement the ACA through the State's insurance exchange (Covered California) and through the two part (mandatory and optional) expansion of Medi-Cal. As of January 1, 2018, California is responsible for 6 percent of these costs with California's contribution generally increasing each fiscal year until fiscal year 2020-21, when the State will pay 10 percent of the total costs. The federal government committed to pay nearly 100 percent of the costs of this optional expansion for the first three years. The State's estimated share of the costs of the optional expansion are approximately \$22.9 billion (\$1.6 billion from the General Fund) for fiscal year 2018-19. By fiscal year 2020-21, the General Fund share for the optional expansion is projected to be \$2.5 billion.

The ACA also required individuals to buy health insurance or pay a tax penalty as an incentive for younger and healthier people to sign up for health care and make it more affordable. Covered California, the State's health insurance marketplace, has provided individual health insurance through private plans supported by federally funded tax subsidies and products for individuals and small businesses since 2014. It is a self-sustaining entity funded through fees assessed on the participating health plans. The federal tax reform bill, passed in December 2017, eliminated penalties for the individual mandate starting in 2019. Repeal of the individual mandate may result in disruptions to the health care market in California.

The net impact of the ACA on the General Fund continues to depend on a variety of factors, including the nature and extent of any repeal or replacement, levels of individual and employer participation, changes in insurance premiums, and expected savings from the reform as beneficiaries in current State-only programs receive coverage through Medi-Cal or Covered California.

#### **Status of State General Fund; 2018-19 Governor's Budget; 2018-19 May Revision**

On January 10, 2018, the Governor proposed a state budget for fiscal year 2018-19. The proposed 2018-19 Governor's Budget projected a healthy one-time surplus for the State while also warning of uncertain times including the ramifications of the recently enacted federal tax bill. Amongst other uses of this one-time surplus, the proposed 2018-19 Governor's Budget proposed to fund the BSA (also known as the State's "rainy day fund") to 100 percent of its constitutional target.

The proposed 2018-19 Governor’s Budget noted that California’s fiscal stability could easily be overwhelmed by actions of the federal government and that California’s relationship with the federal government has never been more uncertain. Notably, the economic and revenue forecasts of the proposed 2018-19 Governor’s Budget were finalized prior to the federal tax law changes enacted in December 2017. The proposed 2018-19 Governor’s Budget forecasts assumed no federal tax law changes. While there are some aspects of the federal tax law changes that could temporarily benefit the national economy, millions of Californians will be hurt by the limitation of the ability to deduct state and local taxes from their federal filings. The 2018-19 May Revision includes a brief overview of the projected impact of the changes on the state economy and revenues, but notes that the effect from changed behavior of businesses and wealthy individuals will only be apparent after 2018 taxes are filed in early calendar year 2019 (see “—2018-19 May Revision” below).

A summary of the condition of the State’s General Fund, including revised results from fiscal year 2016-17 and the 2018-19 May Revision numbers for fiscal years 2017-18 and 2018-19 are set forth below.

	General Fund Condition (Dollars in Millions)		2018-2019 May Revision		
	Revised 2016-17	Revised 2017 18 <sup>1</sup>	Percent Change	Proposed 2018-19 <sup>1</sup>	Percent Change
Prior-year General Fund balance	\$ 5,029	\$ 5,672		\$ 5,351	
Revenues and transfers	118,669	129,825	8.6%	133,518	2.8%
Expenditures	(119,087)	(127,046)	6.3%	(137,662)	7.8%
Ending General Fund Balance	\$ 4,611	\$ 8,451		\$ 4,402	
Encumbrances	(1,165)	(1,165)		(1,165)	
SFEU balance	\$ 3,445	\$ 7,286		\$ 3,273	
BSA balance	\$ 6,713	\$ 9,410		\$ 13,767	
Total Reserves	<u>\$ 10.158</u>	<u>\$ 16.696</u>		<u>\$ 17.004</u>	

<sup>1</sup> From 2018-19 May Revision

*LAO Overview of 2018-19 Governor’s Budget.* In its report on the proposed 2018-19 Governor’s Budget, the LAO observed that the proposed budget “places a high priority on building reserves” including an optional \$3.5 billion deposit to the BSA which brings that reserve fund to 100 percent of its constitutional target. However, the LAO observed that certain of the new infrastructure proposals in the proposed 2018-19 Governor’s Budget may carry “growing and significant costs” in later years despite the relatively small spending amounts included in the proposed budget. The LAO also correctly predicted that the State may have higher revenue estimates by the time of the 2018-19 May Revision. The LAO also thought at the time of the proposed 2018-19 Governor’s Budget that General Fund savings could be realized through the extension of certain federal programs being debated in Congress. The LAO also noted that although California state income taxes generally do not automatically conform to changes in federal tax law, the changes in federal tax law will result in various changes in state taxpayer liabilities and behavior including indirect and unintended changes.

*2018-19 May Revision.* The 2018-19 May Revision reflects the anticipated receipt of \$8 billion in higher revenues through Fiscal Year 2018-19 compared to the proposed 2018-19 Governor’s Budget. From this amount, the State must pay for substantially higher program costs and ongoing commitments made by it and expanded in recent years, such as Medi-Cal, Cal Grants, child care, In-Home Supportive Services and foster care reform. With the remaining funds, the 2018-19 May Revision proposes almost \$4 billion in one-time General Fund spending, focused in the areas of infrastructure (\$2 billion), homelessness (\$359 million) and mental health (\$312 million). The 2018-19 May Revision assumes the federal tax law changes will provide a temporary boost to the national economy and provide fiscal gains to many, especially the wealthiest, however, the 2018-19 May Revision projects that this boost is likely to come at a long-term cost as it will take economic growth from future years and increase income inequality. The 2018-19 May Revision notes that the full implications of federal tax law changes for the State’s taxpayers and on federal-state programs will not be known for many years.

*LAO Overview of May Revision.* In its report on the 2018-19 May Revision, the LAO observed that, since the proposed 2018-19 Governor’s Budget, the Governor’s revenue estimates increased substantially, but that a large portion of these revenue



increases are offset by formula-driven constitutional spending requirements and other increases resulting from caseload changes and federal requirements. After satisfying these higher spending requirements, the LAO estimates that the Governor had \$4.1 billion in discretionary resources to allocate in the 2018-19 May Revision. The LAO's initial assessment of the 2018-19 May Revision proposals suggests that there are reasons to believe the bottom line condition of the General Fund could be considerably better than the administration currently suggests by \$2.6 billion over a three-year period ending June 30, 2019, largely stemming from the LAO's higher estimates of personal income tax revenue in 2017-18 and 2018-19 (reflecting the LAO's higher projections of capital gains in 2017 and 2018 and higher wages and salaries in 2019). The LAO believes that the Governor's budget proposals provide for the State to be well-prepared to weather a mild recession, however, the LAO notes that the level of reserves would not be sufficient to fully cover the costs of a moderate or a severe recession which, if faced in the coming years, would require the State Legislature to take many billions of dollars in actions over a multiyear period to bring the budget back into balance.

### Future Budgets

The State's ability to balance its budget going forward may be affected by budget pressures, including particularly potential significant increases in required State contributions to pension funds or other post-employment benefits, increased debt service payments, potential adverse decisions in litigation, impact of federal tax legislation and deferred obligations to schools and local governments.

### Pending Litigation

There are currently numerous legal proceedings pending against the State, that if determined adversely against the State, could affect the State's expenditures, and in some cases, its revenues and cash flow. Information regarding some of the more significant litigation pending against the State would ordinarily be included in various public documents issued by the State, such as the official statements prepared in connection with the issuance of general obligation bonds of California. See "Additional Information" below for information on how to obtain such official statements.

### Bond Ratings

As of May 18, 2018, the following ratings for the State's general obligation bonds have been received from Moody's Investors Service, Inc. ("Moody's"), S&P Global Ratings, a Standard & Poor's Financial Services LLC business ("S&P") and Fitch, Inc. ("Fitch"):

<u>Moody's</u>	<u>S&amp;P</u>	<u>Fitch</u>
Aa3	AA-	AA-

These ratings apply only to the State's general obligation bonds and are not indicative of the ratings assigned to bonds issued by local governments, such as counties, cities, school districts and other local agencies of the State.

Any explanation of the significance of such ratings may be obtained only from the rating agency furnishing such ratings. There is no assurance that such ratings will continue for any given period of time or that they will not be revised downward or withdrawn entirely if, in the judgment of the particular rating agency, circumstances so warrant.

### Additional Information

Information regarding the State's financial condition is included in various public documents issued by the State, such as the official statements prepared in connection with the issuance of general obligation bonds of California. Such official statements may be obtained by contacting the State Treasurer's Office at (800) 900-3873 or at [www.buycaliforniabonds.com](http://www.buycaliforniabonds.com).

Periodic reports on revenues and/or expenditures during the fiscal year are issued by the Administration, the State Controller's Office and the LAO. The Department of Finance issues a monthly bulletin, which reports the most recent revenue receipts as reported by State departments, comparing those receipts to budget projections. The State Controller issues a monthly report on General Fund cash receipts and disbursements. These reports are normally released on the 10th day of every calendar month for the period ended on the last day of the prior month. The Administration also formally updates its budget projections three times during each fiscal year — in January, May and at the time of budget enactment. Currently, many of these bulletins and reports are available on the State's investor relations website ([www.buycaliforniabonds.com](http://www.buycaliforniabonds.com)) or

on the internet at websites maintained by the agencies and by contacting the agencies at their offices in Sacramento, California. Investors are cautioned that interim financial information is not necessarily indicative of results for a fiscal year.

Publications from the LAO can be read in full by accessing the LAO's website ([www.lao.ca.gov](http://www.lao.ca.gov)) or by contacting the LAO at (916) 445-4656.

Complete text of the Budget Acts may be found at the Electronic Budget website of the Department of Finance ([www.ebudget.ca.gov](http://www.ebudget.ca.gov)).

Complete text of the State Controller's monthly Summary Analysis may be accessed at the State Controller's website ([www.sco.ca.gov](http://www.sco.ca.gov)).

None of the information on the above websites is incorporated herein by reference.

## Local Governments

**General.** The primary units of local government in California are the 58 counties, which range in population from approximately 1,200 in Alpine County to approximately 10 million in Los Angeles County.

Counties are responsible for the provision of many basic services, including indigent health care, welfare, jails, and public safety in unincorporated areas. As of July 1, 2011, the California League of Cities reported that there are 482 incorporated cities in California and thousands of special districts formed for education, utilities, and other services.

To the extent the State is constrained by its obligation to schools under Proposition 98, or other fiscal considerations, the absolute level (or the rate of growth) of State assistance to local governments may be affected. Any such reductions in State aid could compound the serious fiscal constraints already experienced by many local governments, particularly counties and schools.

Many local governments are also facing substantial increases in pension liabilities and health care costs for retirees, as a result of generous retirements benefits granted during prior economic boom times. For more information regarding pension liabilities, see "State and Local Pension and Post-Retirement Liabilities" above. At the same time that local governments are facing rising labor and benefit costs, local governments are limited in their ability to levy and raise property taxes and other forms of taxes, fees or assessments, due to State Constitutional as well as (in some cases) local initiatives. In the case of school districts, contributions to CalSTRS are determined by the State legislature, and the State has enacted legislation to increase required contributions to pay rising pension costs. See "State and Local Pension and Post-Retirement Liabilities — Pension Reform" above. To the extent such increases exceed increases in State funding, school district finances have been and will continue to be adversely affected. As a consequence of these factors, local governments may increasingly be forced to cut local services to address budget shortfalls or to take even more drastic actions, such as a bankruptcy filing.

A Trump administration order that threatened to cut off federal funding to "sanctuary cities", many of which are located in California, was temporarily enjoined in April 2017. Although that order may be permanently enjoined, any similar proposal could have a material adverse impact on the financial condition of the affected cities, and potentially the State as a whole.

**Constitutional and Statutory Limitations on Local Government.** The fiscal condition of local governments was changed when Proposition 13, which added Article XIII A to the State Constitution, was approved by California voters in 1978. Proposition 13 reduced and limited the future growth of property taxes and limited the ability of local governments to impose "special taxes" (those devoted to a specific purpose) without two-thirds voter approval. Although Proposition 13 limited property tax growth rates, it also has had a smoothing effect on property tax revenues, ensuring greater stability in annual revenues than existed before Proposition 13 passed. For further information on Proposition 13, see "Constitutional Limitations on Taxes, Other Charges, Appropriations and General Fund Revenues — Limitation on Property Taxes" above.

Proposition 218, another constitutional amendment enacted by initiative in 1996, further limited the ability of local governments to raise taxes, fees, and other exactions. See "Constitutional Limitations on Taxes, Other Charges, Appropriations and General Fund Revenues — Limitations on Other Taxes, Fees and Charges" above. Proposition 62, a statutory initiative adopted by the voters on November 4, 1986, includes limitations on the ability of local governments to raise taxes that are similar to those included in the later constitutional amendments of Proposition 218.

In the aftermath of Proposition 13, the State provided aid to local governments from the General Fund to make up some of the loss of property tax moneys, including assuming principal responsibility for funding K-12 schools and community colleges. During the recession of the early 1990s, the State Legislature reduced the post-Proposition 13 aid to local government entities other than K-12 schools and community colleges by requiring cities and counties to transfer some of their property tax revenues to school districts. However, the State Legislature also provided additional funding sources, such as sales taxes, and reduced certain mandates for local services funded by cities and counties.

Beginning in 2000, and in part caused by the “internet bubble,” the State was faced with increasing financial stress and began to divert local revenue resources, including sales tax, vehicle license fees and redevelopment moneys, to the State coffers. The 2004-05 Budget Act, related legislation and the enactment of Proposition 1A in 2004 and Proposition 22 in 2010 dramatically changed the State-local fiscal relationship.

Proposition 1A of 2004 amended the State Constitution to, among other things, reduce the State Legislature’s authority over local government revenue sources by placing restrictions on the State’s access to local governments’ property, sales, and vehicle license fee revenues as of November 3, 2004. Proposition 22 supersedes Proposition 1A of 2004 and completely prohibits any future borrowing by the State from local government funds, and generally prohibits the State Legislature from making changes in local government funding sources. For further discussion regarding Proposition 22 and Proposition 1A of 2004, see “The State Budget — Constraints on the Budget Process — State-Local Fiscal Relations” above.

**Realigning Services to Local Governments.** Commencing with the 2011-12 Budget Act, the State implemented a realignment plan to shift certain State program costs to counties and provided a comparable amount of funds to support these new county commitments. Under the realignment plan, a total of \$6.3 billion in fiscal year 2011-12 was, and ongoing funds for such programs thereafter are required to be, provided to counties for court security, corrections and public safety, mental health services, substance abuse treatment, child welfare programs, adult protective services, and CalWORKS. Consequently, local governments, particularly counties, have borne an increased part of the financial burden of providing program services, including the risks of cost overruns, revenue declines and insufficient revenue growth. The State reported in April 2018 that, during fiscal year 2018-19, it expected to transfer approximately \$7.3 billion in sales tax revenues and \$700 million in vehicle license fee revenue to local governments under the realignment plan.

## Obligations of Other Issuers

**Other Issuers of California Debt Obligations.** There are a number of State agencies, instrumentalities and political subdivisions of the State that issue municipal obligations, some of which may be conduit revenue obligations payable from payments from private borrowers. These entities are subject to various economic risks and uncertainties, and the credit quality of the securities issued by them may vary considerably from the credit quality of obligations backed by the full faith and credit of the State. For example, assessment bonds may be adversely affected by a general decline in real estate values or a slowdown in real estate sales activity.

**California Long-Term Lease Obligations.** Based on a series of court decisions, certain long-term lease obligations, though typically payable from the General Fund or a municipality, are not considered “indebtedness” requiring voter approval. Such leases, however, are subject to “abatement” in the event the facility being leased is unavailable for beneficial use and occupancy by the municipality during the term of the lease. Abatement is not a default, and there may be no remedies available to the holders of the certificates evidencing the lease obligation in the event abatement occurs. The most common cases of abatement are failure to complete construction of the facility before the end of the period during which lease payments have been capitalized and uninsured casualty losses to the facility (e.g., due to earthquake). In the event abatement occurs with respect to a lease obligation, lease payments may be interrupted (if all available insurance proceeds and reserves are exhausted) and the certificates may not be paid when due. Further, lease obligations may represent executory contracts which could be rejected in a bankruptcy proceeding under Chapter 9 of the United States Bankruptcy Code. In recent bankruptcy proceedings involving the City of Stockton, the confirmed plan of adjustment included the discharge of lease obligations at significant discounts from their face value.

**Statutory Lien Securing General Obligation Bonds.** Certain local governments, particularly school districts, issue general obligation bonds secured by *ad valorem* property taxes. Effective January 1, 2016, provisions were added to the California Education Code and the California Government Code to provide that general obligation bonds issued and sold by local governments in California are secured by a statutory lien on the *ad valorem* property taxes levied and collected to pay the principal and interest on such general obligation bonds. A statutory lien provides bondholders with a security interest in *ad*

*valorem* property taxes intended to survive a bankruptcy of the local government. It is unclear whether these provisions apply to bonds issued prior to the effective date.

***Tax Increment and the Dissolution of Redevelopment Agencies.*** Until 2011, local redevelopment agencies throughout the State issued “tax allocation” bonds or similar obligations secured by the increase in assessed valuation of a redevelopment project area after the start of redevelopment activity. Throughout the years, redevelopment agencies issued billions of dollars of tax allocation bonds. In addition, the State has regularly borrowed or appropriated redevelopment tax increments to address its budget shortfalls.

In December 2011, the State Supreme Court upheld the validity of legislation, enacted earlier in 2011, that eliminated redevelopment agencies (as well as the issuance of tax allocation bonds) in the State. On February 1, 2012, all redevelopment agencies in California were dissolved and the process of unwinding their financial affairs began.

The legislation dissolving redevelopment agencies preserved the pledge of tax increment revenues to the payment of tax allocation bonds or tax allocation supported obligations. In addition, the passage of “clean-up” legislation has clarified many outstanding issues relating to the implementation of the legislation, and in particular the mechanics of assuring the payment of outstanding tax allocation obligations. In addition, the clean-up legislation has enabled many jurisdictions to refinance outstanding tax increment bonds.

Many jurisdictions (largely cities) with redevelopment agencies subsidized their general fund operations through the use of tax increment revenues. Consequently, the dissolution of redevelopment agencies and the reallocation of tax increment revenue to other taxing entities has resulted in additional fiscal stress for many of these local jurisdictions. Over time, however, the elimination of redevelopment agencies and the redirection of tax increment revenues to local taxing entities will provide additional discretionary revenues to the State as well as the local taxing entities.

***Other Considerations.*** The repayment of industrial development securities or single family mortgage revenue bonds secured by real property may be affected by California laws limiting foreclosure rights of creditors. Under California law, mortgage loans secured by single family homes can be prepaid at any time without penalty, except in the first five years of the loan, and subject to limits on the size of the penalty. Such prepayments may affect the ability of the issuer of single family mortgage bonds to repay the bonds. Securities backed by health care and hospital revenues may be affected by changes in State regulations governing cost reimbursements to health care providers under Medi-Cal (the State’s Medicaid program), including risks related to the policy of awarding exclusive contracts to certain hospitals. See “Obligations of State Agencies” and “Obligations of Other Issuers — Other Issuers of California Debt Obligations” above.

## Other Factors

***Earthquake Risk.*** Substantially all of California is within an active geologic region subject to major seismic activity. Northern California in 1989 and Southern California in 1994 experienced major earthquakes causing billions of dollars in damages. The federal government provided more than \$13 billion in aid for both earthquakes, and neither event has had any long-term negative economic impact. Any obligation in the California Fund could be affected by an interruption of revenues because of damaged facilities, or, consequently, income tax deductions for casualty losses or property tax assessment reductions. Compensatory financial assistance could be constrained by the inability of (i) an issuer to have obtained earthquake insurance coverage; (ii) an insurer to perform on its contracts of insurance in the event of widespread losses; or (iii) the federal or State government to appropriate sufficient funds within their respective budget limitations.

***Risk of Sea Level Changes and Flooding.*** In May 2009, the California Climate Change Center released a study, for informational purposes only, which was funded by various state agencies and the California Ocean Protection Council. The study posited that increases in sea level will be a significant consequence of climate change over the next century. The study evaluated the population, infrastructure, and property at risk from projected sea-level rise *if no actions are taken to protect the coast*. The study concluded that significant property in the State is at risk of flooding from 100-year flood events and estimated that the replacement value of this property would total nearly \$100 billion (in 2000 dollars). Since this study was released several municipalities in the State have conducted assessments of climate change vulnerability specific to their areas. These more specific local assessments of risks and potential mitigation strategies may be publicly available. A wide range of critical infrastructure in the State, such as roads, airports, hospitals, schools, emergency facilities, wastewater treatment plants, power plants, and wetlands is vulnerable to varying degrees depending on location and the feasibility of mitigation strategies. Continued development in vulnerable areas will put additional assets at risk and raise protection costs.

## Special Considerations Regarding Investments in New York Municipal Securities

The following information is a brief summary of factors affecting the economy of New York City (the “City” or “New York City”) or New York State (the “State”, “New York State”, “New York” or “NYS”) and does not purport to be a complete description of such factors. Other factors will affect issuers. The summary is based primarily upon the most recent publicly available offering statements relating to debt offerings of state and local issuers and other financial and demographic information, as of June 21, 2018 with respect to the City and February 28, 2018 with respect to the State, and it does not reflect recent developments since the dates of such offering statements and other information. The Fund has not independently verified this information.

**The State, some of its agencies, instrumentalities and public authorities and certain of its municipalities have sometimes faced serious financial difficulties that could have an adverse effect on the sources of payment for or the market value of the New York municipal bonds in which the Fund invests.**

### *New York City*

**General.** The City, with an estimated population of approximately 8.6 million, is an international center of business and culture. Its non-manufacturing economy is broadly based, with the banking, securities, insurance, technology, information, publishing, fashion, design, retailing, education and health care industries accounting for a significant portion of the City’s total employment earnings. Additionally, the City is a leading tourist destination. Manufacturing activity in the City is conducted primarily in apparel and printing.

For each of the 1981 through 2017 fiscal years, the City’s General Fund had an operating surplus, before discretionary and other transfers, and achieved balanced operating results as reported in accordance with then applicable generally accepted accounting principles (“GAAP”), after discretionary and other transfers and except for the application of Governmental Accounting Standards Board (“GASB”) Statement No. 49 (“GASB 49”), as described below. City fiscal years end on June 30 and are referred to by the calendar year in which they end. The City has been required to close substantial gaps between forecast revenues and forecast expenditures in order to maintain balanced operating results. There can be no assurance that the City will continue to maintain balanced operating results as required by State law without proposed tax or other revenue increases or reductions in City services or entitlement programs, which could adversely affect the City’s economic base.

As required by the New York State Financial Emergency Act For The City of New York (the “Financial Emergency Act”) and the New York City Charter, the City prepares a four-year annual financial plan, which is reviewed and revised on a quarterly basis and which includes the City’s capital, revenue and expense projections and outlines proposed gap-closing programs for years with projected budget gaps. The City’s current financial plan projects budget balance in the 2018 and 2019 fiscal years in accordance with GAAP except for the application of GASB 49. In 2010, the Financial Emergency Act was amended to waive the budgetary impact of GASB 49 by enabling the City to continue to finance with bond proceeds certain pollution remediation costs. The City’s current financial plan projects budget gaps for the 2020 through 2022 fiscal years. A pattern of current year balance and projected future year budget gaps has been consistent through the entire period since 1982, during which the City has achieved an excess of revenues over expenditures, before discretionary transfers, for each fiscal year.

For its normal operations, the City depends on aid from the State both to enable the City to balance its budget and to meet its cash requirements. There can be no assurance that there will not be delays or reductions in State aid to the City from amounts currently projected; that State budgets for future State fiscal years will be adopted by the April 1 statutory deadline, or interim appropriations will be enacted; or that any such reductions or delays will not have adverse effects on the City’s cash flow or expenditures. In addition, the City has made various assumptions with respect to federal aid. Future federal actions or inactions could have adverse effects on the City’s cash flow or revenues.

The Mayor is responsible for preparing the City’s financial plan which relates to the City and certain entities that receive funds from the City. The financial plan is modified quarterly. The City’s projections set forth in the financial plan are based on various assumptions and contingencies which are uncertain and which may not materialize. Such assumptions and contingencies include the condition of the international, national, regional and local economies, the provision of State and federal aid, the impact on City revenues and expenditures of any future federal or State legislation and policies affecting the City and the cost of pension structures and healthcare.

Implementation of the financial plan is dependent on the City’s ability to market successfully its bonds and notes. Implementation of the financial plan is also dependent upon the ability to market the securities of other financing entities

including the New York City Municipal Water Finance Authority (the “Water Authority”) and the New York City Transitional Finance Authority (“TFA”). The success of projected public sales of City, Water Authority, TFA and other bonds and notes will be subject to prevailing market conditions. Future developments in the financial markets generally, as well as future developments concerning the City, and public discussion of such developments, may affect the market for outstanding City general obligation bonds and notes.

The City Comptroller and other agencies and public officials, from time to time, issue reports and make public statements which, among other things, state that projected revenues and expenditures may be different from those forecast in the City’s financial plans.

**City Financial Plan.** For the 2017 fiscal year, the City’s General Fund had a total surplus of \$4.185 billion, before discretionary and other transfers, and achieved balanced operating results in accordance with GAAP, except for the application of GASB 49 as described above, after discretionary and other transfers. The 2017 fiscal year is the thirty-seventh consecutive year that the City has achieved balanced operating results when reported in accordance with GAAP, except for the application of GASB 49.

On June 7, 2017, the City submitted to the Control Board the financial plan for the 2018 through 2021 fiscal years (the “June 2017 Financial Plan”), which was consistent with the City’s capital and expense budgets as adopted for the 2018 fiscal year. Subsequently, the June 2017 Financial Plan was modified during the 2018 fiscal year. On June 14, 2018, the City submitted to the Control Board the financial plan for the 2019 through 2022 fiscal years, which is consistent with the City’s capital and expense budgets as adopted for the 2019 fiscal year, and a modification to the June 2017 Financial Plan with respect to the 2018 fiscal year (together, the “Financial Plan”).

The Financial Plan projects revenues and expenses for the 2018 and 2019 fiscal years balanced in accordance with GAAP, except for the application of GASB 49, and projects gaps of approximately \$3.26 billion, \$2.89 billion and \$2.29 billion in fiscal years 2020 through 2022, respectively. The June 2017 Financial Plan had projected revenues and expenses for the 2018 fiscal year balanced in accordance with GAAP, except for the application of GASB 49, and had projected gaps of approximately \$3.47 billion, \$2.81 billion and \$2.33 billion in fiscal years 2019 through 2021, respectively.

The Financial Plan reflects, since the June 2017 Financial Plan, increases in projected net revenues of \$2.61 billion, \$626 million, \$100 million and \$180 million in fiscal years 2018 through 2021, respectively. Changes in projected revenues include: (i) increases in real property tax revenues of \$402 million, \$250 million, \$390 million and \$683 million in fiscal years 2018 through 2021, respectively (inclusive of increases of \$53 million in fiscal years 2019 through 2021, respectively, which are included in the Citywide savings program described below); (ii) increases in personal income tax revenues of \$1.52 billion, \$305 million, \$345 million and \$224 million in fiscal years 2018 through 2021, respectively; (iii) decreases in business tax revenues of \$414 million, \$360 million, \$397 million and \$507 million in fiscal years 2018 through 2021, respectively; (iv) an increase in sales tax revenues of \$92 million in fiscal year 2018 and decreases in sales tax revenues of \$119 million, \$78 million and \$101 million in fiscal years 2019 through 2021, respectively; (v) increases in real estate transaction taxes of \$178 million and \$38 million in fiscal years 2018 and 2019, respectively, and decreases in real estate transaction taxes of \$103 million and \$73 million in fiscal years 2020 and 2021, respectively; (vi) decreases in State School Tax Relief Program (“STAR Program”) revenues of \$13 million, \$15 million, \$16 million and \$16 million in fiscal years 2018 through 2021, respectively; (vii) increases in hotel tax revenues of \$14 million, \$14 million, \$6 million and \$7 million in fiscal years 2018 through 2021, respectively; and (viii) a decrease in other tax revenues of \$10 million in fiscal year 2018 and increases in other tax revenues of \$122 million, \$117 million and \$108 million in fiscal years 2019 through 2021, respectively. Changes in projected revenues also include: (i) increases in tax audit revenues of \$449 million and \$335 million in fiscal years 2018 and 2019, respectively; and (ii) net increases in other revenues of \$395 million and \$56 million in fiscal years 2018 and 2019, respectively, and net decreases in other revenues of \$164 million and \$145 million in fiscal years 2020 and 2021, respectively (inclusive of additional increases of \$24 million, \$29 million, \$14 million and \$13 million in fiscal years 2018 through 2021, respectively, which are included in the Citywide Savings Program described below).

The Financial Plan also reflects, since the June 2017 Financial Plan, a decrease in projected net expenditures of \$1.96 billion in fiscal year 2018 and increases in projected net expenditures of \$1.73 billion, \$553 million and \$739 million in fiscal years 2019 through 2021, respectively. Changes in projected expenditures include: (i) increases in agency expenses of \$871 million, \$1.74 billion, \$1.23 billion and \$1.33 billion in fiscal years 2018 through 2021, respectively; (ii) an increase of \$388 million in fiscal year 2019 as a result of City Council initiatives; (iii) an increase of \$106 million in fiscal year 2019 reflecting funding for the Fair Fares program through the City’s Human Resources Administration to provide reduced fares to low income subway and bus riders for the period from January through June 2019; (iv) decreases in debt service of \$91 million, \$37 million and \$47

million in fiscal years 2018, 2020 and 2021, respectively, and an increase in debt service of \$24 million in fiscal year 2019, in addition to debt service reductions in the Citywide Savings Program described below; (v) decreases in the labor reserve of \$40 million in fiscal year 2018 and \$75 million in each of fiscal years 2019 through 2021; (vi) increases in pension contributions of \$61 million and \$156 million in fiscal years 2018 and 2021, respectively, and decreases in pension contributions of \$20 million and \$39 million in fiscal years 2019 and 2020, respectively, primarily as a result of strong investment earnings in fiscal year 2017 offset by establishment of a reserve for potential costs associated with future audit recommendations; (vii) a decrease of \$1 million in fiscal year 2018 and increases of \$531 million, \$295 million and \$296 million in fiscal years 2019 through 2021, respectively, primarily reflecting the impact of the State Enacted Budget (as defined below); (viii) a decrease in the general reserve of \$1.18 billion in fiscal year 2018 and an increase in the general reserve of \$125 million in fiscal year 2019; (ix) a decrease in the capital stabilization reserve of \$250 million in fiscal year 2018; (x) a decrease of \$400 million in fiscal year 2018 reflecting a re-estimate of prior years' expenses and receivables; and (xi) an increase of \$100 million in contributions to the Retiree Health Benefits Trust in fiscal year 2018. Changes in projected net expenditures also include decreases in net expenditures (which reflect certain increases in revenues described above) of \$1.03 billion, \$1.09 billion, \$817 million and \$925 million in fiscal years 2018 through 2021, respectively, as a result of the Citywide Savings Program.

The Financial Plan also reflects the financial impact of a recent Consent Decree relating to lead-based paint and other health and safety concerns in New York City Housing Authority ("NYCHA") properties. The Consent Decree, which has been agreed to by the U.S. Attorney for the Southern District of New York, NYCHA and the City but has not yet been entered by the court, includes the appointment of a monitor to oversee NYCHA's progress toward complying with regulations relating to such health and safety concerns. In addition, the Consent Decree includes the City's commitment to provide a total of \$1 billion of capital funds in fiscal years 2019 through 2022, and \$200 million in capital funds in each subsequent fiscal year until such health and safety concerns have been addressed. Such funds are in addition to funding previously provided in the City's financial plan and Capital Commitment Plan. The Consent Decree also contemplates that \$550 million of funding from the State will be available to NYCHA to address such health and safety concerns.

The Financial Plan reflects, since the June 2017 Financial Plan, provision for \$4.58 billion for the prepayment in fiscal year 2018 of fiscal year 2019 expenses and an expenditure reduction of \$4.58 billion in fiscal year 2019.

Contracts with unions for the 2010-2017 round of collective bargaining, including with the District Council 37 of AFSME ("DC37") and the Patrolmen's Benevolent Association ("PBA"), representing approximately 50% of the City's workforce, have expired. Nearly all remaining contracts will have expired by the end of fiscal year 2019. The Financial Plan includes a reserve for collective bargaining containing funding for the settlements from the period beyond the 2010-2017 round of collective bargaining, assuming annual increases of 1% per year.

The Financial Plan does not reflect potential increases to City tax revenues as a direct result of the recently enacted Federal Tax Cuts and Jobs Act of 2017 ("TCJA") which, among other provisions, lowered corporate and personal income tax rates but limited the deductibility of state and local taxes and mortgage interest. Similarly, the Financial Plan does not reflect the impact of tax reform legislation included in the State Enacted Budget in response to the TCJA which is expected to offset, in whole or in part, potential increases in tax revenues to the City described above. Such legislation includes decoupling certain linkages between federal and local income tax and corporate taxes, increasing the opportunities for charitable contributions, and providing an option to employers to shift to an employer compensation tax and reduce State personal income taxes.

The Financial Plan does not currently include funding for the Fair Fares program beyond fiscal year 2019; however, it is expected that, prior to its expiration, funding sources will be identified for the continuation of the program.

The Financial Plan does not reflect future increases in the charter school per-pupil tuition rate, which if not offset by changes to State education aid to the City that occur each year during the State budget process, are preliminarily estimated to have no cost to the City in fiscal year 2019 and to cost the City \$119 million in fiscal year 2020, \$281 million in fiscal year 2021 and \$478 million in fiscal year 2022. These figures are based on preliminary data. Final figures that would determine the actual costs to the City will not be finalized until the time of the State budget process for the applicable year.

The Financial Plan assumes that the City's direct costs (including costs of New York City Health and Hospitals ("NYCHH") and the New York City Housing Authority ("NYCHA")) as a result of Superstorm Sandy ("Sandy") will largely be paid from non-City sources, primarily the federal government.

The City receives significant funding from the federal government for community development, social services, education and other purposes pursuant to various federal programs. The federal government has made and discussed a number of proposals which would lead to reductions in existing federal spending programs, including Medicaid, the repeal of the Affordable Care Act (“ACA”), reduction of funding for housing, including public housing, and changes to regulations affecting numerous industries in the City, including the financial services industry. The TCJA and other federal actions and proposed legislation could also affect the State budget and economy, which could have an impact on the City. It is not possible at this time to predict the form such proposals will ultimately take and, when taken as a whole, the effect they will have on the City’s economy and the Financial Plan.

From time to time, the City Comptroller, the Control Board staff, the Office of the State Deputy Comptroller for the City of New York (“OSDC”), the Independent Budget Office (“IBO”) and others issue reports and make public statements regarding the City’s financial condition, commenting on, among other matters, the City’s financial plans, projected revenues and expenditures and actions by the City to eliminate projected operating deficits. It is reasonable to expect that reports and statements will continue to be issued and may contain different perspectives on the City’s budget and economy and may engender public comment. For information on reports issued on the April 2018 Financial Plan (the “April Financial Plan”) and reports to be issued on the Financial Plan by the City Comptroller and others reviewing, commenting on and identifying various risks therein, see “Certain Reports” herein.

**Job Growth.** The City is a leading center for the banking and securities industry, life insurance, communications, fashion design, health care, education, technology, information services, hospitality and retail fields. Over the past two decades the City has experienced a number of business cycles. From 1992 to 2000, the City added 456,700 private sector jobs (growth of 17%). From 2000 to 2003, the City lost 173,100 private sector jobs (decline of 5%). From 2003 to 2008, the City added 257,400 private sector jobs (growth of 9%). From 2008 to 2009, the City lost 103,000 private sector jobs (decline of 3%). From 2009 to 2016, the City added 648,700 private sector jobs (growth of 21%). All such changes are based on average annual employment levels through and including the years referenced.

As of May 2018, total employment in the City was 4,508,500 compared to 4,431,000 in May 2017, an increase of 1.7% based on data provided by the New York State Department of Labor, which is not seasonally adjusted.

**Assumptions.** The Financial Plan is based on numerous assumptions, including the condition of the City’s and the region’s economies and the concomitant receipt of economically sensitive tax revenues in the amounts projected. The Financial Plan is subject to various other uncertainties and contingencies relating to, among other factors, the extent, if any, to which wage increases for City employees exceed the annual wage costs assumed; realization of projected earnings for pension fund assets and current assumptions with respect to wages for City employees affecting the City’s required pension fund contributions; the willingness and ability of the State to provide the aid contemplated by the Financial Plan and to take various other actions to assist the City; the ability of NYCHH and other such entities to maintain balanced budgets; the willingness of the federal government to provide the amount of federal aid contemplated in the Financial Plan; the impact on City revenues and expenditures of federal and State legislation affecting Medicare or other entitlement programs; adoption of the City’s budgets by the City Council in substantially the forms submitted by the Mayor; the ability of the City to implement cost reduction initiatives, and the success with which the City controls expenditures; the impact of conditions in the real estate market on real estate tax revenues; and the ability of the City and other financing entities to market their securities successfully in the public credit markets. Certain of these assumptions are reviewed in reports issued by the City Comptroller and other public officials. See “Certain Reports” herein.

The projections and assumptions contained in the Financial Plan are subject to revision, which may be substantial. No assurance can be given that these estimates and projections, which include actions the City expects will be taken but are not within the City’s control, will be realized.

**Real Estate Tax.** Projections of real estate tax revenues are based on a number of assumptions, including, among others, assumptions relating to the tax rate, the assessed valuation of the City’s taxable real estate, the delinquency rate, debt service needs, a reserve for uncollectible taxes and the operating limit.

Projections of real estate tax revenues include net revenues from the sale of real property tax liens of \$95 million in fiscal year 2018 and \$80 million in each of fiscal years 2019 through 2022. Projections of real estate tax revenues include the effects of the STAR Program which will reduce the real estate tax revenues by an estimated \$189 million in fiscal year 2018. Projections of real estate tax revenues reflect the estimated cost of extending the current tax reduction for owners of cooperative and



condominium apartments amounting to \$528 million, \$546 million, \$577 million, \$606 million and \$631 million in fiscal years 2018 through 2022, respectively.

The delinquency rate was 1.5% in fiscal year 2013, 1.4% in fiscal year 2014, 1.6% in fiscal year 2015, 1.4% in fiscal year 2016 and 1.3% in fiscal year 2017. The Financial Plan projects delinquency rates of 1.3% in fiscal year 2018, 1.6% in fiscal year 2019 and 1.8% in each of fiscal year 2020 and 2021, respectively, and 1.9% in fiscal year 2022.

On April 24, 2017, a lawsuit was filed challenging the City's real property tax system and valuation methodology. The action alleges that the City's real property tax system violates the State and federal constitutions as well as the Fair Housing Act. The action further alleges the valuation methodology as mandated by certain provisions of the State Real Property Tax Law results in a disparity and inequality in the amount of taxes paid by black and hispanic Class 1 property owners and renters. The City plans to mount a vigorous defense against all claims made in the action.

**Other Taxes.** The Financial Plan reflects the following assumptions regarding projected baseline revenues from Other Taxes: (i) with respect to the personal income tax, high growth in fiscal year 2018 reflecting the impact of changes in State law, stronger than expected bonus growth, and continued employment and wage gains, revenue declines in fiscal year 2019 reflecting a return to more typical levels, and growth in fiscal years 2020 through 2022 reflecting steady economic growth; (ii) with respect to the business corporation tax, a decline in growth in fiscal year 2018 resulting from lower than expected collections through April, rebounding growth in fiscal year 2019 supported by increasing corporate profits and high levels of Wall Street profitability, and weak and/or nearly flat growth for fiscal years 2020 through 2022 reflecting a slowdown in corporate profits; (iii) with respect to the unincorporated business tax, strong growth in fiscal year 2018 reflecting the continued high levels of hedge funds assets under management and a positive business environment, nearly flat growth in fiscal year 2019 reflecting the continued healthy levels of tax payments in both the finance and non-finance sectors, and trend growth for fiscal year 2020 through fiscal year 2022 reflecting steady economic growth; (iv) with respect to the sales tax, moderate growth in fiscal year 2018 reflecting employment and wage growth reduced by the payment to the State of \$200 million in sales tax otherwise payable to the City in order to provide the State with the benefit of savings from the refinancing of debt by STAR Corp., moderate growth in fiscal year 2019 reflecting employment gains and wage growth reduced by the payment to the State of \$150 million in sales tax otherwise payable to the City in order to provide the State with the benefit of savings from the refinancing of debt by STAR Corp., and moderate growth in fiscal years 2020 through 2022 reflecting employment gains and wage growth as well as continued healthy levels of tourist consumption; (v) with respect to the real property transfer tax, a slight decline in fiscal year 2018, as the volume of large commercial transactions drops from the high levels seen in the prior years and returning growth in fiscal years 2019 through 2022 reflecting steady economic growth; (vi) with respect to the mortgage recording tax, declines in fiscal years 2018 through 2020 as the volume of large commercial transactions drops from the high levels seen in the prior years and the commercial loan refinancing activity wanes, and growth in fiscal years 2021 through 2022 reflecting steady economic growth; and (vii) with respect to the commercial rent tax, growth in fiscal year 2018 reflecting employment gains and slower growth in fiscal year 2019 reflecting a recently enacted tax program that increased the base rent subject to tax providing relief for taxpayers and growth in fiscal years 2020 through 2022, as the local office market improves with employment gains.

**Intergovernmental Aid.** For its normal operations, the City depends on aid from the State both to enable the City to balance its budget and to meet its cash requirements. There can be no assurance that there will not be delays or reductions in State aid to the City from amounts currently projected; that State budgets for future State fiscal years will be adopted by the April 1 statutory deadline, or interim appropriations will be enacted; or that any such reductions or delays will not have adverse effects on the City's cash flow or expenditures. In addition, the City has made various assumptions with respect to federal aid. Future federal actions or inactions could have adverse effects on the City's cash flow or revenues.

**Personal Service Costs and Other Post-Employment Benefits.** The Financial Plan projects that the authorized number of City-funded full-time and full-time equivalent employees will increase from an estimated level of 278,440 as of June 30, 2018 to an estimated level of 281,449 by June 30, 2022.

Other Fringe Benefits includes \$2.405 billion, \$2.503 billion, \$2.661 billion, \$2.832 billion and \$2.975 billion in fiscal years 2018 through 2022, respectively, for post-employment benefits other than pensions ("OPEB") expenditures for current retirees, which costs are currently paid by the City on a pay-as-you-go basis.

The City has now reached settlements with all of its uniformed unions and over 99% of its workforce through the 2010-2017 round of collective bargaining. The Financial Plan reflects funding to cover the cost of settling the remaining unsettled unions through the 2010-2017 round of collective bargaining based on the pattern set by the settled contracts. Certain contracts

with unions for the 2010-2017 round of collective bargaining, including with DC37 and the PBA, representing approximately 50% of the City's workforce, have expired. Nearly all remaining contracts will have expired by the end of fiscal year 2019. For the period beyond the 2010-2017 round of collective bargaining, Negotiations with municipal unions concerning the next round of contracts are ongoing. The PBA has already filed for arbitration with the City over new contract terms. The Financial Plan includes a reserve for collective bargaining containing funding for the period beyond the 2010- 2017 round of collective bargaining, assumed to be 1% per year.

The amounts in the Financial Plan reflect the offsets from health insurance savings of \$1.3 billion in fiscal year 2018 and thereafter. The City achieved \$1 billion of health insurance savings in fiscal year 2017. These savings are pursuant to a collective bargaining agreement between the City and the Municipal Labor Committee ("MLC"). The City has the right to enforce the agreement through a binding arbitration process. If total health insurance savings through fiscal year 2018 are greater than \$3.4 billion, the first \$365 million of such additional savings is payable to union members as a one-time bonus or may be used for other purposes subject to negotiation. Any additional savings beyond such \$365 million is to be divided equally between the City and the unions.

**Administrative Other Than Personal Services Costs ("OTPS") and Energy.** The Financial Plan contains estimates of the City's administrative OTPS expenditures for general supplies and materials, equipment and selected contractual services, and the impact of agency gap-closing actions relating to such expenditures in the 2018 fiscal year. Thereafter, to account for inflation, administrative OTPS expenditures are projected to rise by 2.5% annually in fiscal years 2019 through 2022. Energy costs for each of the 2018 through 2022 fiscal years are assumed to vary annually, with total energy expenditures projected at \$907 million in fiscal year 2018 and increasing to \$974 million by fiscal year 2022.

**Public Assistance.** Of total cash assistance expenditures in the City, the City-funded portion is projected to be \$699 million, \$713 million in fiscal years 2018 and 2019, respectively, and \$719 million in each of fiscal years 2020 through 2022.

**Medical Assistance.** Medical assistance payments projected in the Financial Plan consist of payments to voluntary hospitals, skilled nursing facilities, intermediate care facilities, home care providers, pharmacies, managed care organizations, physicians and other medical practitioners. The City-funded portion of medical assistance payments is estimated at \$5.8 billion for the 2018 fiscal year.

The City-funded portion of medical assistance payments is expected to be \$5.8 billion in each of fiscal years 2019 through 2022. Such payments include the City's capped share of local Medicaid expenditures as well as Supplemental Medicaid payments to NYCHH.

**NYCHH.** NYCHH operates under its own section of the Financial Plan as a Covered Organization. NYCHH, which provides essential services to over 1.1 million New Yorkers annually, faces substantial near- and long-term financial challenges resulting from, among other things, changes in hospital reimbursement under the ACA and the statewide transition to managed care. On April 26, 2016, the City released "One New York: Health Care for Our Neighborhoods," a report outlining the City's plan to address NYCHH's financial shortfall.

In May 2018, NYCHH released a cash-based financial plan, which projected City-funded expenditures of \$666 million, \$917 million, \$919 million, \$920 million and \$920 million in fiscal years 2018 through 2022, respectively, in addition to the forgiveness of debt service and the City's contribution to supplemental Medicaid payments. The financial plan projected, before implementation of a gap closing program, total receipts of \$7.6 billion, \$7.1 billion, \$6.8 billion, \$6.6 billion and \$6.6 billion and total disbursements of \$8.5 billion, \$8.2 billion, \$8.4 billion, \$8.3 billion, and \$8.4 billion in fiscal years 2018 through 2022, respectively, resulting in projected operating gaps of \$900 million, \$1.1 billion, \$1.6 billion, \$1.7 billion and \$1.8 billion in those respective fiscal years. The financial plan also projects gap-closing initiatives that both generate revenue and reduce expenses. Revenue-generating initiatives total \$617 million, \$628 million, \$890 million, \$1.0 billion, and \$1.0 billion and expense-reducing initiatives total \$345 million, \$430 million, \$530 million, \$585 million and \$585 million in fiscal years 2018 through 2022, respectively.

**Other.** The projections set forth in the Financial Plan for OTPS-Other include the City's contributions to New York City Transit ("NYCT"), NYCHA, City University of New York ("CUNY") and subsidies to libraries and various cultural institutions. They also include projections for the cost of future judgments and claims which are discussed below under "Judgments and Claims." In the past, the City has provided additional assistance to certain Covered Organizations which had exhausted their financial resources prior to the end of the fiscal year. No assurance can be given that similar additional assistance will not be required in the future.

**New York City Transit.** NYCT operates under its own section of the Financial Plan as a Covered Organization. The financial plan for NYCT covering its 2017 through 2021 fiscal years was prepared in February 2018. The NYCT fiscal year coincides with the calendar year. The NYCT financial plan projects City assistance to the NYCT operating budget of \$350.4 million in 2017, increasing to \$403.4 million in 2021, in addition to real estate transfer tax revenue dedicated for NYCT use of \$602.8 million in 2017, increasing to \$623.0 million in 2021.

The NYCT financial plan includes additional revenues from a fare increase in 2019, the impact of labor settlements, updated inflation assumptions and initiatives to improve maintenance/operations and customer experience, including the Subway Action Plan, the MTA's emergency plan to address subway delays. After reflecting such revenues and changes, the NYCT financial plan projects \$10.3 billion in revenues and \$13.4 billion in expenses for 2017, leaving a budget gap of \$3.1 billion. After accounting for accrual adjustments and cash carried over from 2016, NYCT projects an operating budget surplus of \$47.2 million in 2017, and operating budget gaps of \$550.1 million in 2018, \$1.3 billion in 2019, \$2.4 billion in 2020 and \$3.9 billion in 2021.

In 2009, a Payroll Mobility Tax ("PMT") was enacted into State law to provide \$0.34 for every \$100 of payroll in the MTA's twelve-county service area. The PMT is currently expected to raise revenues for the MTA in the amount of \$1.0 billion in 2017, declining to \$878.8 million in 2021.

In September 2014, the MTA proposed the 2015-2019 Capital Program. The proposed plan included \$32.0 billion for all MTA agencies, including \$17.1 billion to be invested in the NYCT core system, and \$1.5 billion for NYCT network expansion. On October 2, 2014, the Capital Program Review Board ("CPRB") vetoed the proposed program without prejudice to permit additional time to resolve issues related to fully funding the program. On October 28, 2015, the MTA Board voted on and approved a revised 2015-2019 Capital Program. The revised plan included \$29.0 billion for all MTA agencies, including \$15.8 billion to be invested in the NYCT core system and \$535 million for NYCT network expansion. On April 20, 2016, the MTA Board voted on and approved another revised 2015-2019 Capital Program, which included \$29.5 billion for all MTA agencies, including \$15.8 billion to be invested in the NYCT core system and \$1.0 billion for NYCT network expansion. The additional City capital funding will be provided concurrently with the additional State capital funding. On May 24, 2017, the MTA Board voted on and approved a revised 2015-2019 Capital Program. The revised plan includes \$32.5 billion for all MTA agencies, including \$16.3 billion to be invested in the NYCT core system and \$1.7 billion for NYCT network expansion. This amendment was approved by the CPRB in July 2017. On December 13, 2017 the MTA Board voted on and approved a further revised 2015-2019 Capital Program. The revised plan includes \$32.8 billion for all MTA agencies, including \$16.7 billion to be invested in the NYCT core system and \$1.7 billion for NYCT network expansion. This amendment was not subject to CPRB approval. The 2015-2019 Capital Program expects \$8.5 billion from the State. On April 25, 2018 the MTA Board voted on and approved a further revised 2015-2019 Capital Program. The revised plan includes \$33.3 billion for all MTA agencies, including \$16.7 billion to be invested in the NYCT core system and \$1.7 billion for NYCT network expansion. This amendment was approved by the CPRB in May 2018.

The State has agreed to contribute \$8.6 billion towards the 2015-2019 Capital Program, which has not yet been fully reflected in the State's capital plan. The City has agreed to contribute \$2.7 billion (which has not yet been fully reflected in the City's capital plan), including \$164 million for the Subway Action Plan. The additional City capital funding will be provided concurrently with the additional State capital funding.

On June 29, 2017 Governor Cuomo announced the State would be increasing its contribution to the 2015- 2019 Capital Program by \$1 billion and signed an Executive Order declaring a State-wide disaster emergency related to the MTA. The Order temporarily suspends provisions of Public Authority, State Finance, and Environmental Conservation Laws if compliance "would prevent, hinder or delay action necessary to cope with the disaster." The Governor has not provided additional details or identified additional funding for the \$1 billion.

Various actions have been taken to increase funding to the MTA for NYCT. The State Enacted Budget, adopted on March 30, 2018, includes a requirement for the City to provide payments totaling an additional \$418 million to the MTA through calendar year 2018 to fund the Subway Action Plan described above, which is reflected in the Financial Plan, including \$164 million in capital funding, as discussed above, and \$254 million in expense funding. The State Enacted Budget also imposes an additional surcharge, starting in January 2019, on for-hire vehicles and taxis traveling below 96th Street in Manhattan, to be used to fund the Subway Action Plan and other MTA projects.

**Department of Education.** State law requires the City to provide City funds for the Department of Education ("DOE") each year in an amount not less than the amount appropriated for the preceding fiscal year, excluding amounts for debt service

and pensions for the DOE. Such City funding must be maintained, unless total City funds for the fiscal year are estimated to be lower than in the preceding fiscal year, in which case the mandated City funding for the DOE may be reduced by an amount up to the percentage reduction in total City funds.

**Judgments and Claims.** In the fiscal year ended on June 30, 2017, the City expended \$750.3 million for judgments and claims. The Financial Plan includes provisions for judgments and claims of \$711.6 million, \$697.0 million, \$711.9 million, \$727.1 million and \$742.3 million for the 2018 through 2022 fiscal years, respectively. These projections incorporate a substantial amount of claims costs attributed to NYCHH, estimated to be \$140 million in each year of the Financial Plan, for which NYCHH reimburses the City unless otherwise forgiven by the City, which was the case in fiscal years 2013 and 2016. The City is a party to numerous lawsuits and is the subject of numerous claims and investigations. The City has estimated that its potential future liability on account of outstanding claims against it as of June 30, 2017 amounted to approximately \$6.9 billion. This estimate was made by categorizing the various claims and applying a statistical model, based primarily on actual settlements by type of claim during the preceding ten fiscal years, and by supplementing the estimated liability with information supplied by the City's Corporation Counsel.

In addition to the above claims, numerous real estate tax *certiorari* proceedings involving allegations of inequality of assessment, illegality and overvaluation are currently pending against the City. The City's Financial Statements for the fiscal year ended June 30, 2017 include an estimate that the City's liability in the *certiorari* proceedings, as of June 30, 2017, could amount to approximately \$1,073 million. Provision has been made in the Financial Plan for estimated refunds of \$383 million in fiscal year 2018 and \$400 million in fiscal years 2019 through 2022, respectively.

**Certain Reports.** Set forth below are the summaries of the most recent reports of the City Comptroller, OSDC and the staff of the Control Board. These summaries do not purport to be comprehensive or definitive.

On May 24, 2018, the City Comptroller released a report entitled "Comments on New York City's Fiscal Year 2019 Executive Budget," commenting on the April Financial Plan. In the report, the City Comptroller projects net additional resources of \$636 million, \$213 million and \$52 million in fiscal years 2018, 2019 and 2022, respectively, and net risks of \$270 million and \$128 million in fiscal years 2020 and 2021, respectively, which, when added to the results projected in the April Financial Plan, would result in surpluses of approximately \$636 million and \$213 million in fiscal years 2018 and 2019, respectively, and gaps of approximately \$3.49 billion, \$2.99 billion and \$2.2 billion in fiscal years 2020 through 2022, respectively.

The differences from the April Financial Plan projections result in part from the City Comptroller's net expenditure projections, which are higher than the April Financial Plan projections by \$70 million, \$411 million, \$498 million, \$660 million and \$857 million in fiscal years 2018 through 2022, respectively, as a result of: (i) additional overtime expenditures of \$100 million in fiscal year 2018, \$153 million in fiscal year 2019, and \$150 million in each of fiscal years 2020 through 2022; (ii) increased expenditures associated with increases in charter school tuition rates of \$119 million, \$281 million and \$478 million in fiscal years 2020 through 2022, respectively; (iii) uncertainty of federal Medicaid reimbursement for special education services of \$50 million in each of fiscal years 2018 through 2022; (iv) increased expenditures associated with payments to parents who legally seek reimbursement for placing special needs children in non-public schools of \$60 million in each of fiscal years 2019 through 2022; (v) increased homeless shelter operation expenditures of \$33 million in fiscal year 2019 and \$42 million in each of fiscal years 2020 through 2022; and (vi) increased expenditures to support NYCHH of \$165 million in each of fiscal years 2019 through 2022. The report also projects (i) anticipated savings of \$38 million in each of fiscal years 2020 through 2022 due to expanded participation in the federal Community Eligibility Provision school food program; (ii) anticipated debt service savings from low interest rates on variable rate bonds of \$30 million in fiscal year 2018 and \$50 million in each of fiscal years 2019 through 2022; and (iii) decreased expenditures of \$50 million in fiscal year 2018 due to the assumption that the \$50 million fiscal year 2018 general reserve in the April Financial Plan will not be needed for budget balance.

The differences from the April Financial Plan projections also result from the City Comptroller's net revenue projections, which are higher than the April Financial Plan projections by \$706 million, \$624 million, \$228 million, \$532 million and \$909 million in fiscal years 2018 through 2022, respectively. The report identifies certain offsets to projected revenues: (i) property tax revenues will be higher by \$76 million, \$303 million, \$785 million and \$883 million in fiscal years 2019 through 2022, respectively; (ii) personal income tax revenues will be higher by \$730 million and \$182 million in fiscal years 2018 and 2019, respectively; (iii) business tax revenues will be higher by \$169 million, \$20 million, \$44 million and \$53 million in fiscal years 2019 through 2022, respectively; (iv) sales tax revenues will be higher by \$91 million, \$179 million, \$149 million and \$85 million in fiscal years 2019 through 2022, respectively; (v) real estate-related tax revenues will be higher by \$26 million in

fiscal year 2018; (vi) revenues from audit collections will be higher by \$100 million in fiscal year 2019 and \$200 million in each of fiscal years 2020 through 2022; (vii) Environmental Control Board fine revenues will be higher by \$20 million in each of fiscal years 2019 through 2022; (viii) Department of Buildings penalty revenues will be higher by \$4 million in each of fiscal years 2019 through 2022; and (ix) motor vehicle fine revenues will be higher by \$5 million in fiscal year 2019 and \$3 million in each of fiscal years 2020 through 2022. The report also identifies certain risks to projected revenues: (i) personal income tax revenues will be lower by \$117 million, \$190 million and \$260 million in fiscal years 2020 through 2022, respectively; (ii) real estate-related tax revenues will be lower by \$23 million, \$384 million, \$483 million and \$79 million in fiscal years 2019 through 2022, respectively; and (iii) revenues from audit collections will be lower by \$50 million in fiscal year 2018.

The City Comptroller expects to issue a report on the Financial Plan in July 2018.

On June 1, 2018, the OSDC released a report on the April Financial Plan. The report states that projected outyear budget gaps are larger than those projected in February, primarily due to higher agency spending and State actions, but are still relatively small as a share of City fund revenue. The report notes that the City's economy is strong and the outyear budget gaps appear manageable under current conditions, but there are budgetary risks over the next few years. The outyear budget gaps assume uninterrupted economic growth and do not reflect the potential impact of future federal or State budget cuts; growing federal deficits may increase pressure to cut federal programs during the April Financial Plan period, which would adversely affect City residents and the City budget; the City has set aside resources to fund annual wage increases of 1 percent after expiration of current labor agreements but the actual cost will be determined through negotiation or arbitration; and the City could be called upon to increase financial support of NYCHH or provide additional funding for NYCHA for emergency repairs and other costs.

The OSDC report quantifies certain risks and offsets to the April Financial Plan. The report identifies net offsets of \$567 million and \$154 million in fiscal years 2018 and 2019, respectively, and net risks of \$99 million in each of fiscal years 2020 through 2022. When combined with the results projected in the April Financial Plan, the report estimates budget surpluses of \$567 million and \$154 million in fiscal years 2018 and 2019, respectively, and budget gaps of \$3.32 billion, \$2.96 billion and \$2.35 billion in fiscal years 2020 through 2022, respectively. The risks to the April Financial Plan identified in the report include: (i) increased homeless shelter operation expenditures of \$33 million in each of fiscal years 2019 through 2022; (ii) decreased federal Medicaid reimbursement for special education services of \$63 million in each of fiscal years 2018 through 2022; and (iii) increased uniformed services overtime costs of \$125 million in each of fiscal years 2019 through 2022. The report also identifies: (i) increased personal income tax revenues of \$525 million and \$200 million in fiscal years 2018 and 2019, respectively; (ii) increased business tax revenues of \$75 million in fiscal year 2018; (iii) increased real estate-related tax revenues of \$30 million in fiscal year 2018; (iv) additional debt service savings of \$75 million in fiscal year 2019 and \$22 million in each of fiscal years 2020 through 2022; and (v) additional miscellaneous revenues (including recurring resources such as fines and fees and nonrecurring resources such as proceeds from the sale of taxi medallions or City property) of \$100 million in each of fiscal years 2019 through 2022.

The OSDC expects to issue a report on the Financial Plan in July 2018.

On May 30, 2018, the staff of the Control Board issued a report reviewing fiscal year 2018 and examining changes in the City's budget during the fiscal year. The report states that since the adoption of the fiscal year 2018 budget, the forecast for City fund revenues increased by \$1.8 billion, with growth in nearly all major revenue components. The report notes that some of this unexpected growth is potentially nonrecurring due to behavioral reactions to federal tax reform and further notes that the City continues to use conservative revenue forecasts for fiscal years 2019 through 2022. With respect to expenditures, the City has identified over \$1 billion in savings since the adoption of the fiscal year 2018 budget, mostly from cost efficiencies and cost reestimates. Expenditures have increased by just over \$1 billion during fiscal year 2018 to fund new needs, the largest being in homeless services. The report also identifies certain risks. It states that the projected budget gaps of \$3.2 billion, \$2.9 billion and \$2.3 billion in fiscal years 2020 through 2022, respectively, could be understated if costs from the next round of collective bargaining are higher than assumed. Uncertainties in federal and State aid and continued pressure to support non-City agencies such as NYCHH, NYCHA and the New York City Transit Authority could also increase the outyear gaps. The report recommends that the City should continue its conservative revenue estimates and high level of reserves, continue to implement agency savings programs, limit new needs as much as possible, and, to the extent revenues continue to grow, make an additional contribution to the Retiree Health Benefits Trust.

The Control Board expects to issue a report on the Financial Plan on or about July 20, 2018.

**Outstanding General Obligation Indebtedness.** As of March 31, 2018, approximately \$37.65 billion of City general obligation bonds were outstanding.

As of March 31, 2018, \$2.72 billion aggregate principal amount of HYIC bonds were outstanding. Such bonds were issued to finance the extension of the Number 7 subway line and other public improvements. They are secured by and payable from payments in lieu of taxes and other revenues generated by development in the Hudson Yards area. To the extent such payments in lieu of taxes and other revenues are insufficient to pay interest on the HYIC bonds, the City has agreed to pay the amount of any shortfall in interest on such bonds, subject to appropriation. The Financial Plan provides \$0 in fiscal years 2018 through 2022 for such interest support payments. The City has no obligation to pay the principal of such bonds.

**Water and Sewer.** The City's financing program includes the issuance of water and sewer revenue bonds by the Water Authority which is authorized to issue bonds to finance capital investment in the City's water and sewer system. Pursuant to State law, debt service on Water Authority indebtedness is secured by water and sewer fees paid by users of the water and sewer system. Such fees are revenues of the Water Board, which holds a lease interest in the City's water and sewer system. After providing for debt service on obligations of the Water Authority and certain incidental costs, the revenues of the Water Board are paid to the City to cover the City's costs of operating the water and sewer system and as rental for the system. Beginning in fiscal year 2017, the City has not requested the rental payment due to the City from the Water Board. The City's Ten-Year Capital Strategy applicable to the City's water and sewer system covering fiscal years 2018 through 2027, projects City-funded water and sewer investment (which is expected to be financed with proceeds of Water Authority debt) at approximately \$19.2 billion. The 2018-2022 Capital Commitment Plan reflects total anticipated City-funded water and sewer commitments of \$14.0 billion which are expected to be financed with the proceeds of Water Authority debt.

**New York City Transitional Finance Authority.** The TFA is authorized to have outstanding \$13.5 billion of Future Tax Secured Bonds (excluding Recovery Bonds). The TFA may have outstanding Future Tax Secured Bonds in excess of \$13.5 billion provided that the amount of the Future Tax Secured Bonds, together with the amount of indebtedness contracted by the City, do not exceed the debt limit of the City. Future Tax Secured Bonds are issued for general City capital purposes and are secured by the City's personal income tax revenues and, to the extent such revenues do not satisfy specified debt ratios, sales tax revenues. In addition, the TFA is authorized to have outstanding \$9.4 billion of Building Aid Revenue Bonds to pay for a portion of the City's five-year educational facilities capital plan. Building Aid Revenue Bonds are secured by State building aid, which the Mayor has assigned to the TFA. The TFA expects to issue \$500 million, \$78 million, \$168 million and \$104 million of Building Aid Revenue Bonds in fiscal years 2019 through 2022, respectively.

Implementation of the financing program is dependent upon the ability of the City and other financing entities to market their securities successfully in the public credit markets which will be subject to prevailing market conditions at the times of sale. No assurance can be given that the credit markets will absorb the projected amounts of public bond sales. A significant portion of bond financing is used to reimburse the City's General Fund for capital expenditures already incurred. If the City and such other entities are unable to sell such amounts of bonds, it would have an adverse effect on the City's cash position. In addition, the need of the City to fund future debt service costs from current operations may also limit the City's capital program. The Ten-Year Capital Strategy for fiscal years 2018 through 2027 totals \$95.8 billion, of which approximately 93% is to be financed with funds borrowed by the City and such other entities. Congressional developments affecting federal taxation generally could reduce the market value of tax-favored investments and increase the debt-service costs of carrying out the major portion of the City's capital plan which is currently eligible for tax-exempt financing.

**Litigation.** The City has estimated that its potential future liability on account of outstanding claims against it as of June 30, 2017 amounted to approximately \$6.9 billion.

## *NEW YORK STATE*

**The New York Economy.** New York is the fourth most populous state in the nation<sup>1</sup> and has a relatively high level of personal wealth. The State's economy is diverse, with a comparatively large share of the nation's financial activities, information, education, and health services employment, and a very small share of the nation's farming and mining activity. The State's location and its air transport facilities and natural harbors have made it an important link in international commerce. Travel and tourism constitute an important part of the economy. Like the rest of the nation, New York has a declining proportion of its workforce engaged in manufacturing, and an increasing proportion engaged in service industries.

<sup>1</sup> Based on 2015 U.S. Census Bureau data, New York is the fourth most populous state in the nation, after California, Texas and Florida.

Manufacturing employment continues to decline as a share of total State employment, as in most other states, and as a result New York's economy is less reliant on this sector than in the past. However, it remains an important sector of the State economy, particularly for the upstate region, which hosts high concentrations of manufacturers of transportation and other types of equipment. As defined under the North American Industry Classification System (NAICS), the trade, transportation, and utilities supersector accounts for the second largest component of State nonagricultural employment, but only the fifth largest when measured by wage share. This sector accounts for less proportional employment and wages for the State than for the nation as a whole. New York City is the nation's leading center of banking and finance and, as a result, this is a far more important sector in the State than in the nation as a whole. Although this sector accounts for under one-tenth of all nonagricultural jobs in the State, it contributes about one-fifth of total wages. The remaining service-producing sectors include information, professional and business services, private education and healthcare, leisure and hospitality services, and other services. These industries combined account for half of all nonagricultural jobs in New York. Information, education and health, and other services account for a higher proportion of total State employment than for the nation as a whole. Farming is an important part of the economy in rural areas, although it constitutes only about 0.2 percent of total State output. Principal agricultural products of the State include milk and dairy products, greenhouse and nursery products, fruits, and vegetables. New York ranks among the nation's leaders in the production of these commodities.

Federal, State, and local governments together comprise the third largest sector in terms of nonagricultural jobs, with the bulk of the employment accounted for by local governments. Public education is the source of about 40 percent of total State and local government employment.

**Economic and Demographic Trends.** In calendar years 1990 through 1998, the State's rate of economic growth was somewhat slower than that of the nation. In particular, during the 1990-91 recession and post-recession period, the economies of the State and much of the rest of the Northeast were more heavily damaged than the nation as a whole and were slower to recover. However, the situation subsequently improved. In 1999, for the first time in 13 years, State employment growth surpassed that of the nation, and in 2000 the rates were essentially the same. In 2001, the September 11th attack resulted in a downturn in New York that was more severe than for the nation as a whole. In contrast, the State labor market fared better than that of the nation as a whole during the most recent downturn that began in 2008, though New York experienced a historically large wage decline in 2009. The State unemployment rate was higher than the national rate from 1991 to 2004, but the gap between them closed by the middle of 2006, with the State rate falling below that of the nation for much of the Great Recession, and remaining below through the end of 2011. The State unemployment rate rose above the national rate in early 2012, but fell below yet again in May 2015, where it has remained for much of the period since.

State per capita personal income has historically been significantly higher than the national average, although the ratio has varied substantially over time. Because New York City is an employment center for a multi-state region, State personal income measured on a residence basis understates the relative importance of the State to the national economy and the size of the base to which State taxation applies.

New York State's private sector labor market appears to be stabilizing after a period of deceleration that started at the end of 2015 and continued through the first half of 2017. This period of slower job growth coincided with slowdowns in both national and global growth that appear to have turned around during the second quarter of 2017. State private sector job growth of 1.3 percent is projected for 2018, following estimated growth of 1.4 percent in 2017.

Although the TCJA signed into law by President Trump on December 22, 2017 is expected to positively affect finance sector after-tax profits, recent equity market volatility could result in a lower volume of financial market activity if the volatility causes some investors to withdraw from trading altogether, which in turn could result in lower revenue growth for 2018. The New York State Division of the Budget (DOB) estimates finance and insurance sector bonus growth for Fiscal Year (FY) 2019 of 4.4 percent, following 4.3 percent growth for FY 2018, which includes the bonus season now in progress. FY 2019 growth in underlying non-bonus wages is projected at 4.1 percent, following an estimated 3.6 percent for FY 2018. Total State wage growth of 4.2 percent is projected for FY 2019, up from a downwardly revised 3.5 percent State wage growth for FY 2018.

Although the State's private-sector labor market appears to be stabilizing, there are many risks to the forecast. All the risks to the U.S. forecast apply to the State forecast as well, although as the nation's financial capital, both the volume of financial market activity and the volatility in equity markets pose a particularly large degree of uncertainty for New York. The uncertainty surrounding the macroeconomic outlook for the national and global economies is amplified in the financial markets, as demonstrated by recent events. Weaker and/or more volatile markets than anticipated could result in weaker

bonus growth and, hence, weaker wage growth overall, in addition to lower taxable capital gains realizations. In contrast, stronger equity markets, along with stronger national and global growth, could result in stronger employment and wage growth than is reflected in this forecast.

**The National Economy.** The U.S. economy posted another quarter of above trend growth of 2.6 percent in the fourth quarter of calendar year 2017. The economy has continued to rebound from a protracted national and global slowdown, as well as from the impact of the 2017 storms, Hurricanes Harvey, Irma and Maria. Consumer spending continues to be fueled by a strong labor market, with wages starting to show improvement as well, due in part to rising minimum wages both here in New York and in many other states. In addition, improving global growth, and energy prices that continue to hover near \$60 per barrel, will likely be sufficient to keep real U.S. Gross Domestic Product (GDP) growth for 2018 and 2019 above the average 2.2 percent growth that has persisted over the entire life of the economic expansion to date. The TCJA is also expected to contribute to growth over the remainder of 2018 and during 2019. DOB estimates real U.S. GDP growth of 2.6 percent for 2018 on an annual average basis.

With the early February 2018 release of the January 2018 employment report, the Bureau of Labor Statistics (BLS) published its annual benchmark revision, which resulted in an upward revision to the average monthly private sector job gain for 2017 to 180,000, just above the 2016 average of 178,000. Moreover, the national labor market posted another strong employment report in January, adding 196,000 private sector jobs. As a result, DOB's current outlook for the labor market reflects projected national average monthly job gains of 160,000 for 2018. However, DOB continues to expect employment growth to slow as the expansion matures. Total nonagricultural employment growth of 1.4 percent is projected for 2018, decelerating from the 1.6 percent growth experienced in 2017. Although the conventional unemployment rate has fallen to 4.1 percent, its lowest level in 17 years, broader measures of under-employment, including the percentage of the workforce working part-time, remain elevated, an indication that some labor market slack remains and that there is room for the unemployment rate to go down further.

Consistent with a tightening labor market, DOB projects wage growth of 3.7 percent for 2018, following growth of 3.1 percent for 2017. Overall personal income growth of 3.9 percent is estimated for 2018, following growth of 3.1 percent for 2017. In addition to stronger growth in pretax income, after-tax disposable income is expected to be lifted by income tax cuts. Based on the analysis by the nonpartisan Joint Committee on Taxation (JCT), the direct benefit of TCJA to U.S. households is estimated to total \$187 billion in 2018 and \$259 billion in 2019. However, there are several reasons why the benefits from the TCJA are expected to only marginally boost consumer spending. The personal income tax cuts were made temporary to conform with congressional "Pay-As-You-Go" budget rules and are largely directed toward wealthy households who have the largest marginal propensity to save. Moreover, the millions of employees approaching retirement are expected to add to their savings in preparation. As a result, consumer spending is only expected to increase by \$50 billion in 2018. After adjusting for increased imports, this additional spending is estimated to increase real GDP growth by about one tenth of a percentage point in both 2018 and 2019.

The TCJA's business tax cuts are expected to lift after-tax earnings, but only modestly lift investment spending. Research indicates that business investment is largely demand driven. Hence, without substantial evidence that U.S. households will significantly increase their spending plans, businesses are unlikely to risk additional capital. In addition, evidence from the 2004 repatriation holiday indicates that firms are more likely to allocate the preponderance of their tax cut proceeds toward dividend payouts and stock buybacks rather than toward investment. Moreover, the positive impact of the tax reductions is likely to be mitigated by rising long-term interest rates. On balance, projected real growth in business fixed investment has been revised up by 0.1 percentage point to 5.5 percent for 2018, following growth of 4.7 percent for 2017 and a decline of 0.6 percent for 2016.

DOB's forecast for nonresidential business fixed investment represents a substantial improvement relative to its recent performance, aided by increasing global demand for U.S. exports and expanded energy sector production. With the global economy entering a long-awaited period of synchronized growth, and the dollar remaining well below its most recent peak, export demand has been steadily increasing. As a result, real export growth for 2018 is projected to be 5.2 percent for 2018, following growth of 3.4 percent for 2017 and a decline of 0.3 percent for 2016.

Disruptions from Hurricanes Harvey and Irma drove gasoline prices higher and boosted headline inflation in the second half of 2017. However, the impact of the storms on inflation is expected to be transitory, with consumer price inflation expected to accelerate only modestly to 2.3 percent in 2018. Medical price inflation is projected to advance to 2.7 percent in 2018, following growth of 2.5 percent in 2017, still tame by historical standards. DOB projects that with inflation reaching the



Federal Reserve’s goal of 2 percent, the effective Federal funds rate will rise from its 1.0 percent annual average in 2017 to 1.8 percent in 2018 and 2.3 percent in 2019. These projections are consistent with three short-term rate hikes expected by the FOMC in 2018, and two more projected rate hikes in 2019.

The 10-year Treasury yield has been approaching 2.9 percent, a level that has not been breached since early 2014. Higher long-term interest rates help to steepen the yield curve and improve banking sector profits, but it represents a risk to the continued recovery of the housing market. Moreover, the TCJA eliminates the interest deduction on home equity debt and new mortgage debt in excess of \$750,000, and limits the combined deduction for state and local taxes (SALT) and property taxes to \$10,000, all of which could negatively affect the housing market. DOB projects real growth in residential fixed investment of 3.8 percent for 2018.

There are many risks to the Executive Budget Financial Plan (defined below) forecast. Since the middle of January 2018, equity market volatility has re-emerged after remaining at bay for virtually all of 2017. The S&P 500 stock index lost 10.2 percent of its value during the brief period between January 26, 2018 and February 8, 2018, although it has regained some of that value as of February 28, 2018. This correction may represent a harbinger of the turbulence to come as the global economy makes the transition away from low interest rates and bloated central bank balance sheets. Moreover, anxiety surrounding the long-term impact of the TCJA on Federal budget deficits and the national debt also appears to have permeated the investor mindset. Lower and more volatile equity prices can result in lower household spending both through the wealth effect and as a signal that rough waters are ahead.

On the positive side, stronger consumer spending and business investment than projected could result in stronger growth in employment, wages, and the overall economy. Stronger global growth than expected could have a similar impact, although that effect could be mitigated by trade wars, should they emerge in a substantial way. Additionally, a stronger housing market than projected could also result in stronger employment and income growth than currently projected, although substantially higher interest rates than expected could have the opposite effect.

**Annual Information Statement.** The Annual Information Statement, dated June 20, 2017 (the “AIS”) reflects the State’s Enacted Budget Financial Plan (the “Financial Plan” or “Enacted Budget”) for Fiscal Year (FY) 2018<sup>2</sup> and sets forth the State’s official Financial Plan projections for Fiscal Year 2018 through Fiscal Year 2021. The State updates the Annual Information Statement quarterly and released its first quarterly update on September 26, 2017, its second quarterly update on December 4, 2017 and its third quarterly update on February 28, 2018 (the “AIS Update”) which reflects the estimated impact of the Governor’s Executive Budget Financial Plan for Fiscal Year (FY) 2019, as amended and includes actual General Fund receipts and disbursements for FY 2017 and financial projections for FY 2018 through FY 2021 (the “Updated Financial Plan” or “Executive Budget Financial Plan”).

<sup>2</sup> The State fiscal year is identified by the calendar year in which it ends. For example, FY 2018 is the FY that began on April 1, 2017 and ends on March 31, 2018.

**Executive Budget.** The Governor submitted his FY 2019 Executive Budget proposal on January 16, 2018, and amendments through February 15, 2018 (the “Executive Budget”), as permitted by law. On February 15, 2018, DOB issued the Updated Financial Plan. The Updated Financial Plan includes updated estimates for the current fiscal year (FY 2018), and projections for FY 2019 through FY 2021, and initial projections for FY 2022, which reflect the estimated impact of the Executive Budget.

The projections for FY 2019 through FY 2022 assume the State Legislature enacts the Executive Budget in its entirety and without modification by the start of FY 2019, which begins on April 1, 2018. Executive Budget is awaiting action by the Legislature. There can be no assurance the Legislature will adopt all, or any specific portion, of the Executive Budget as proposed. Accordingly, there can be no assurance the fiscal impact of the FY 2019 budget, when adopted, will not differ materially and adversely from the estimates and projections contained in the Updated Financial Plan that are included in the AIS Update.

#### FY 2018

- Through December 31, 2017, the State received a one-time acceleration of personal income tax payments as taxpayers responded to Federal tax law changes that, starting in tax year 2018, limit the allowable aggregate itemized deduction of State and local income taxes (SALT), and local real property taxes, to a maximum of \$10,000 on Federal income tax returns. DOB estimates that approximately \$1.9 billion in tax receipts were accelerated from tax year 2018 to 2017 due to this behavioral response. The acceleration is expected to result in an identical reduction in Personal Income Tax (PIT) receipts in FY 2019. Accordingly, the increase in cash in FY 2018 that DOB attributes to the one-time acceleration of PIT

receipts will be carried forward for financial planning purposes and used to offset the anticipated corresponding loss of PIT receipts in FY 2019.

- DOB expects the Updated Financial Plan for FY 2018 to remain in balance on a cash basis in the General Fund, exclusive of the impact of the accelerated tax receipts.
- State Operating Funds disbursements are estimated at \$98.1 billion in FY 2018, consistent with the 2 percent annual spending growth benchmark. The calculation of SOF disbursements is consistent with the accounting of financial transactions in the FY 2018 Enacted Budget, as reflected in the AIS.

## FY 2019

- The FY 2019 budget must close a General Fund budget gap estimated at \$4.4 billion. The projected budget gap, while unremarkable compared to those recorded during and after the last recession, is the largest since FY 2012 in both absolute dollars and as a percentage of tax receipts. The budget gaps for future years, before accounting for proposed savings in the Executive Budget Financial Plan, are estimated at \$6.4 billion in FY 2020, \$8.1 billion in FY 2021, and \$8.4 billion in FY 2022.
- Several factors contribute to the size of the projected budget gaps, including persistent shortfalls in tax collections compared with DOB estimates.
- Beyond the projected budget gaps, actions by the Federal government pose a heightened risk to State finances. The enactment of Federal tax law changes is currently projected to add \$1.1 trillion to the Federal deficit over the next five years<sup>3</sup>, increasing the likelihood that Congress will seek material cuts in aid programs. Funding at risk includes, but is not limited to, health care subsidies required under the ACA, and Disproportionate Share Hospital aid. DOB is actively monitoring these risks.
- DOB estimates that the Executive Budget, if enacted as proposed, would eliminate the estimated General Fund budget gap of \$4.4 billion in FY 2019 and reduce subsequent budget gap projections to \$3.5 billion in FY 2020, \$5.2 billion in FY 2021, and \$5.1 billion in FY 2022. DOB estimates that if future budgets hold spending growth to 2 percent annually in State Operating Funds, the General Fund would have a budget gap of \$812 million in FY 2020 and \$429 million in FY 2021, and a surplus in FY 2022. These calculations assume that all savings from the reductions in spending are made available to the General Fund, and does not include the potential additional Federal cuts in aid programs described above.

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<sup>3</sup> Joint Committee on Taxation, Macroeconomic Analysis of the Conference Agreement for H.R. 1, the “Tax Cuts and Jobs Act” (JCX- 69-17), December 22, 2017.

**FY 2018 Financial Plan Update.** DOB estimates that the Updated Financial Plan provides for balanced operations in the General Fund in FY 2018. The State expects to end FY 2018 with a General Fund cash balance of \$9.2 billion, an increase of \$1.4 billion from FY 2017 results. DOB intends to make transfers of extraordinary monetary settlements (Extraordinary Monetary Settlements) on an as-needed basis each year as spending occurs from appropriations funded with the Extraordinary Monetary Settlements. Legislation approved in the FY 2017 Enacted Budget provides transfer authority from the General Fund to the Dedicated Infrastructure and Investment Fund (DIIF) through FY 2021.

**Receipts (Excluding Monetary Settlements).** General Fund receipts, including transfers from other funds, are estimated to total \$70.6 billion in FY 2018, an increase of \$5.0 billion (7.6 percent) from FY 2017 results. Estimated tax collections, including transfers of tax receipts to the General Fund after payment of debt service, total \$67.3 billion in FY 2018, an increase of \$5.0 billion (8.1 percent) from FY 2017 results.

The PIT receipts, including transfers after payment of debt service on State PIT Revenue Bonds, are estimated to total \$46.6 billion, an increase of \$3.8 billion (8.9 percent) from FY 2017. Roughly half of the increase is due to an acceleration of personal income tax payments due in calendar year 2018 as taxpayers responded to Federal tax law changes that, starting in tax year 2018, limit the allowable aggregate itemized deduction of State and local income taxes, and local real property taxes, to a maximum of \$10,000 on Federal income tax returns. Excluding this acceleration, PIT receipts are projected to grow \$1.9 billion (4.5 percent), mainly due to higher withholding and estimated payments attributable to the projected increase in wage and non-wage income. In addition, a decline in STAR Fund deposits associated with legislation included in the FY 2018 Enacted Budget increases General Fund tax receipts. These increases are partially offset by the first year of middle-income tax cuts enacted by the State in FY 2017.

Consumption/use tax receipts, including transfers after payment of debt service on the Local Government Assistance Corporation (LGAC) and Sales Tax Revenue Bonds, are estimated to total \$13.2 billion in FY 2018, an increase of \$606 million (4.8 percent) from FY 2017, which mainly reflects projected growth in disposable income and taxable consumption.

Business tax receipts are estimated at \$5.1 billion in FY 2018, an increase of \$347 million (7.3 percent) from FY 2017 results. The growth is primarily attributable to growth in corporate profits and increased audit receipts, partially offset by increased refunds as taxpayers continue to adjust to tax law changes made under the 2014 corporate tax reform.

Other tax receipts, including transfers after payment of debt service on Clean Water/Clean Air Bonds, are expected to total \$2.3 billion in FY 2018, an increase of \$248 million (12.1 percent) from FY 2017. This increase is mainly attributable to actual estate tax receipts through December 2017 that included one payment in excess of \$130 million.

Non-tax receipts and transfers are estimated at \$3.3 billion in FY 2018, a decrease of \$35 million from FY 2017, which largely reflects State Insurance Fund (SIF) reserves released in FY 2017 that do not recur in FY 2018.

General Fund receipts are affected by the deposit of dedicated taxes in other funds for debt service and other purposes, the transfer of balances among funds of the State, and other factors.

**General Fund Disbursements (Excluding Monetary Settlements).** General Fund disbursements, including transfers to other funds, are expected to total \$69.3 billion in FY 2018, an increase of \$3.4 billion (5.1 percent) from FY 2017. General Fund disbursements reflect conservative estimates of disbursements in each financial category, a practice that provides a cushion for potential receipts shortfalls and other unanticipated costs.

Local assistance spending is estimated at \$46.5 billion in FY 2018, an increase of \$2.1 billion (4.6 percent) from FY 2017. The increase is primarily driven by School Aid (\$1.3 billion on a State fiscal year basis) and by Medicaid and the Essential Plan (EP) (\$914 million).

General Fund personal and non-personal service costs are expected to total \$8.2 billion in FY 2018, an increase of \$105 million (1.3 percent) from FY 2017. Operating costs for many agencies are charged to several funds outside the General Fund, and are thus affected by varying levels of offsets and accounting reclassifications. On a State Operating Funds basis, most executive agencies are expected to hold operations spending at FY 2017 levels. The Updated Financial Plan estimates for State Operations are affected by the reclassification to Capital Projects Funds of certain personnel expenses related to maintenance and preservation of State assets; the costs of approved labor settlements, as well as the potential costs of unsettled labor agreements with State unions; and expected savings from agency management plans.

General State Charges (GSCs), which account for fringe benefits and certain fixed costs, are projected to increase by \$188 million (3.4 percent) over FY 2017. Health insurance costs for State employees and retirees are projected to increase by \$260 million (7 percent), reflective of medical inflation and enrollment levels. The State's annual pension payment is projected to grow by \$14 million (0.6 percent).

General Fund transfers to other funds are projected to total \$9.0 billion in FY 2018, an increase of \$1.0 billion (12.5 percent) from FY 2017. Transfers for capital projects (excluding transfers funded with Extraordinary Monetary Settlements) are projected to increase by \$857 million, reflecting the timing of reimbursement from bond proceeds and planned disbursements from the Dedicated Highway and Bridge Trust Fund (DHBTF). Debt service transfers are expected to increase by \$113 million, mainly due to year-to-year differences in the amount of debt service paid in one fiscal year but due in the following fiscal year.

General Fund disbursements are affected by the level of financing sources available in other funds, transfers of balances between funds of the State, and other factors that may change from year to year.

## FY 2018 General Fund Revisions

**Receipts Revisions.** General Fund receipts, including transfers from other funds, are now estimated to total \$71.4 billion in FY 2018, an increase of \$1.6 billion from the Enacted Budget Financial Plan estimate, which largely reflects the acceleration of PIT payments described below.

- **Tax Receipts.** PIT receipts are higher than expected in the FY 2018 Enacted Budget Financial Plan due to an acceleration of personal income tax payments during calendar year 2017 as taxpayers responded to Federal tax law changes that, starting in tax year 2018, limit the allowable itemized deduction of State and local income taxes, as well as local real

property taxes, to a maximum of \$10,000 on Federal income tax returns. DOB has increased PIT estimates upward which reflects \$1.9 billion in higher than expected receipts attributable to accelerated payments, partly offset by lower than expected receipts from other tax receipts adjustments. Such tax receipts adjustments reflect lower business tax receipts that reflect lower corporate franchise tax payments and lower sales tax receipts estimates that reflect weaker than expected consumer spending, partly offset by increases to estimated estate tax receipts.

- **Extraordinary Monetary Settlement Payments.** The State received a \$350 million civil monetary penalty payment from BNP Paribas, S.A., New York Branch (“BNPP” or “BNP Paribas”) in June 2017 pursuant to a consent order between the New York State Department of Financial Services (DFS) and BNPP; a \$225 million civil monetary penalty payment from Habib Bank in September 2017 pursuant to a consent order between DFS and Habib Bank Limited, New York Branch (together “Habib Bank”); a \$135 million civil monetary penalty payment from Credit Suisse AG and Credit Suisse AG, New York Branch (together “Credit Suisse”), pursuant to a November 2017 consent order between DFS and Credit Suisse; and \$2 million from Cigna Health and Life Insurance Company (“Cigna”), for a civil monetary penalty pursuant to a November 2017 consent order between Cigna and DFS. In addition, the State received \$60 million from a civil monetary penalty pursuant to a January 2018 consent order between Western Union and DFS.
- **Other Non-Tax Revisions.** Certain miscellaneous receipts have been revised based on results to date and updated information. In addition, revisions to debt service reduce the amount of PIT receipts transferred to the General Fund.

**Disbursements Revisions.** General Fund disbursements, including transfers to other funds, are expected to total \$70.0 billion in FY 2018, a decrease of \$1.2 billion from the estimates in the Enacted Budget Financial Plan. Revisions to General Fund disbursements estimates are based on a review of operating results and updated information on programs and activities.

- **Local Assistance.** General Fund disbursements for local assistance are expected to total \$46.5 billion in FY 2018, a decrease of \$567 million from the FY 2018 Enacted Budget Financial Plan. Spending has been lowered to reflect revised spending patterns attributable to certain public assistance and education programs, as well as revised timelines for ongoing transformation and efforts to ensure the efficient use of State resources in the mental hygiene service delivery system.
- **Agency Operations.** General Fund disbursements for agency operations, including fringe benefits, are expected to total \$13.8 billion in FY 2018, a decrease of \$124 million from the FY 2018 Enacted Budget Financial Plan estimates. Spending has been lowered to reflect revised estimates of agency fringe benefit spending, and the reimbursement of such payments to the General Fund, based on recent billing and payment activity.
- **Transfers.** General Fund transfers to other funds are expected to total \$9.7 billion in FY 2018, a decrease of \$485 million from the FY 2018 Enacted Budget Financial Plan estimates. General Fund transfers to Capital Projects Funds are expected to be lower than previously anticipated, mainly due to higher than expected capital reimbursements from bond proceeds in FY 2018 and revised levels of spending. Partly offsetting these decreases in General Fund transfers to other funds is the expected payment of \$340 million of FY 2019 debt service expenses in FY 2018. The State also paid \$100 million to settle two eminent domain cases with CSX (CSX 1 and CSX 2), including interest and fees. The First Quarterly Update to the Financial Plan reflected an initial cost estimate of \$63 million (\$39 million State share and \$24 million Federal share), plus applicable interest charges and attorneys’ fees for CSX 1. The Updated Financial Plan reflects the additional \$37 million paid by the State to finalize the settlement of both CSX 1 and CSX 2, with \$75 million attributable to CSX 1 and \$25 million attributable to CSX 2. The total \$76 million State share of the \$100 million settlement for CSX 1 and CSX 2 has been paid from the DHBTF, with the transfer funded with a portion of the Extraordinary Monetary Settlements received since adoption of the FY 2018 Enacted Budget.

**FY 2018 Closing Balance.** DOB projects that the State will end FY 2018 with a General Fund cash balance of \$9.2 billion, an increase of \$1.4 billion from FY 2017. The estimated balance of Extraordinary Monetary Settlements at the close of FY 2018 is \$4.7 billion, a decrease of \$586 million from FY 2017. (See “Uses of Extraordinary Monetary Settlements” herein.)

The estimated General Fund cash balance, excluding Extraordinary Monetary Settlements, is \$4.4 billion at the close of FY 2018, or \$2.0 billion higher than FY 2017. The annual change in the balance reflects a \$1.9 billion increase to the undesignated fund balance which will be carried into FY 2019 to offset PIT estimated payment reductions due to FY 2018 accelerations referred to above.

**FY 2019 Financial Plan.** The General Fund will be affected by two fund reclassifications beginning in FY 2019. The changes have no net impact on General Fund operations, but change the reporting of receipts and disbursements in total and among spending categories.

- **Mental Hygiene Fund Reclassification.** Spending from two State Special Revenue Fund accounts, the Mental Hygiene Program Fund and Patient Income Account, is reclassified to the General Fund to improve reporting transparency by eliminating large transfers between funds. The reclassification moves local assistance and operations spending, as well as the supporting revenue, into the General Fund, and eliminates transfers from the General Fund to the two Mental Hygiene State Special Revenue Fund accounts. In addition, roughly \$1.4 billion of fringe benefit spending associated with Mental Hygiene agencies will move from the respective agencies to the central GSC budget. Approximately \$60 million in indirect costs will no longer be reported in statewide spending.
- **DOT/DMV Operating Cost Reclassification.** Certain Department of Transportation (DOT) and Department of Motor Vehicles (DMV) operating costs related to snow and ice removal, bus, truck and rail inspection, and DMV regulatory activities are reclassified from the DHBTF to the General Fund. In the General Fund, the increased operating spending is offset by an identical reduction in the transfer to the DHBTF. The reclassification will better align operating and capital functions with dedicated revenue sources.

The State expects to end FY 2019 with a General Fund cash balance of \$5.1 billion, a decrease of \$4 billion from FY 2018 estimates. DOB intends to make transfers of Extraordinary Monetary Settlements on an as-needed basis over a multi-year period as spending occurs from appropriations funded with the settlements.

**Receipts (Excluding Monetary Settlements).** General Fund receipts, including transfers from other funds, are projected to total \$70.2 billion in FY 2019, a decrease of \$445 million (0.6 percent) from FY 2018 estimates. The acceleration of personal income tax payments for calendar year 2018 results in a year-to-year decrease of \$3.8 billion. Excluding the accelerated payments, total receipts increase \$3.4 billion or 4.9 percent.

General Fund PIT receipts, including transfers after payment of debt service on State PIT Revenue Bonds are expected to total \$45.1 billion, an annual decline of \$1.5 billion. The decline is the result of the shift of an estimated \$1.9 billion of receipts from FY 2019 into FY 2018 due to Federal tax reform. Underlying PIT growth is consistent with forecasted economic growth.

General Fund consumption/use tax receipts, including transfers after payment of debt service on LGAC and Sales Tax Revenue Bonds, are estimated to total \$13.8 billion, an annual increase of \$511 million (3.9 percent), which reflects projected growth in disposable income and taxable consumption, as well as the Executive Budget proposals.

General Fund business tax receipts are estimated at \$5.9 billion, an increase of \$761 million (14.9 percent). This growth is due to projected increases in corporate profits and Executive Budget proposals.

Other tax receipts to the General Fund are expected to total \$2.1 billion, a decrease of \$213 million (9.3 percent), reflecting a return to an average number of estate tax payments exceeding \$25 million.

Non-tax receipts are estimated at \$3.4 billion, an increase of \$42 million.

General Fund receipts are affected by the deposit of dedicated taxes in other funds for debt service and other purposes, the transfer of balances between funds of the State, and other factors.

**Disbursements (Excluding Monetary Settlements).** General Fund disbursements, including transfers to other funds, are expected to total \$72.5 billion in FY 2019, an annual increase of \$3.2 billion (4.6 percent).

Local assistance grants are expected to total \$48.2 billion in FY 2019, an annual increase of \$1.7 billion (3.7 percent). The largest increases include \$682 million for School Aid (on a State fiscal year basis), \$479 million for Medicaid, \$194 million for the MTA Subway Action Plan (described below) and \$228 million for Higher Education. The latter reflects continued support for student financial aid programs including the Excelsior Free Tuition Program, fringe benefit costs, and the timing of certain payments.

General Fund disbursements for agency operations, including fringe benefits and fixed costs, are expected to total \$14.7 billion, an annual increase of \$820 million (5.9 percent). Personal and nonpersonal service costs increase \$399 million from the current year, reflecting increased personal service costs driven by settled and expected labor agreements. Costs associated with State employees and retiree health insurance are expected to increase by \$315 million (7.9 percent), mainly due to negotiated rate increases reflecting medical cost inflation and current enrollment levels. The State's net costs for

Workers' Compensation are expected to increase by \$150 million (46 percent), due to underlying growth in the average weekly wage for benefit calculations and medical costs (\$45 million), as well as a reduction in the use of offsetting revenue (\$105 million).

General Fund transfers to other funds are estimated to total \$9.6 billion, an increase of \$647 million. The increase is mainly due to transfers for capital projects (excluding transfers funded with Extraordinary Monetary Settlements) reflecting the timing of reimbursement from bond proceeds and planned disbursements from the DHBTF.

General Fund disbursements are affected by the level of financing sources available in other funds, transfers of balances between funds of the State, and other factors that may change from year to year.

**Closing Balance for FY 2019.** DOB projects that the State will end FY 2019 with a General Fund cash balance of \$5.1 billion, a decrease of \$4.0 billion from FY 2018. The General Fund cash balance, excluding Extraordinary Monetary Settlements, is estimated at \$2.5 billion, or \$1.9 billion lower than the estimated closing balance at the end of FY 2018. The change is almost entirely due to the use of the \$1.9 billion in cash from PIT tax receipts accelerated into FY 2018, as well as the projected spending of resources in the Community Projects Fund.

Balances in the State's principal "rainy day" reserves, the Tax Stabilization Reserve and the Rainy Day Reserve, are expected to remain unchanged at \$1.8 billion.

The Executive Budget Financial Plan maintains a reserve of \$500 million for debt management purposes in FY 2019. DOB will decide on the use of these funds based on market conditions, Updated Financial Plan needs, and other factors.

The balance from Extraordinary Monetary Settlements at the close of FY 2019 is expected to total \$2.6 billion, a decrease of \$2.1 billion from the estimated FY 2018 closing balance. The decrease reflects the planned use of Extraordinary Monetary Settlements to fund Capital Projects Funds from DIIF (\$1.4 billion); the MTA Subway Action Plan (\$194 million); and general operations (\$383 million). The State's principal reserves are expected to remain unchanged from FY 2018.

DOB expects that the State will have sufficient liquidity in FY 2019 to make all planned payments as they become due without having to temporarily borrow from the Short-Term Investment Pool (STIP). The State continues to reserve money on a quarterly basis for debt service payments that are financed with General Fund resources. Money to pay debt service on bonds secured by dedicated receipts, including PIT bonds and Sales Tax bonds, continues to be set aside as required by law and bond covenants.

**FY 2019 Detailed Gap-Closing Plan.** To the extent the State enacts budgets that adhere to the 2 percent spending benchmark, the level of savings required in each subsequent year to hold spending to 2 percent would be lower.

**Spending Changes.** The Executive Budget Financial Plan reduces General Fund spending in FY 2019 by \$2.7 billion, net of new initiatives and costs, compared to the FY 2019 baseline estimate. The reductions include reestimates to spending based on updated information, specific cost-containment proposals, and the prepayment of FY 2019 expenses from excess resources expected to be available in FY 2018.

### *Local Assistance*

Local assistance spending includes financial aid to local governments and nonprofit organizations, as well as entitlement payments to individuals. Reductions from the prior projections for local assistance spending are expected to generate \$1.3 billion in General Fund savings. Savings are expected from both targeted actions and continuation of prior-year cost containment.

School Aid and Medicaid are the State's largest local assistance programs, comprising over 45 percent of the State Operating Funds budget. The Executive Budget Financial plan provides for the following:

- **Education.** A lower-than-projected increase in the Personal Income Growth Index (PIGI) results in reduced School Aid spending growth based upon the School Aid formula. The actual School Year (SY) 2019 PIGI is 1.5 percent, compared to the previously estimated 3.9 percent, generating multi-year savings. The Executive Budget Financial Plan reflects a proposed total of \$26.4 billion in aid for the 2018-19 school year, increasing school aid by \$769 million, or 3 percent over the prior school year. This increase is double the amount of the 1.5 percent indexed formula.

In addition, updates to the School Aid database indicate a decline in SY 2018 aid compared with the FY 2018 Enacted Budget Financial Plan estimates. Similarly, grant-based awards for School Aid are spending more slowly than anticipated. Other education savings include the restructuring of aid to private colleges, as well as revisions to the methodology used to reimburse school districts for summer school special education tuition costs which will now involve using the same wealth-equalized aid ratio that is used to reimburse school districts for similar programs operated during the school year; and one-time audit recoveries for the preschool special education program expected in FY 2019.

The Executive Budget Financial Plan reflects the proposed additional funding for several new initiatives to eliminate barriers to receiving school meals. In addition, funding for the Non-public School Health and Safety Equipment Program is expected to be provided through the Capital Projects Funds.

- **Health Care.** Medicaid spending under the Global Cap<sup>4</sup> is expected to total \$18.9 billion in FY 2019, an increase of \$593 million, consistent with the statutory index of 3.2 percent. The Global Cap is expected to provide \$425 million in General Fund savings in FY 2019. Total Medicaid spending, including spending outside the Global Cap, is expected to increase to \$20.6 billion in FY 2019. The Financial Plan will continue to fund, outside the Global Cap, increases in the minimum wage for health care providers (\$703 million) in FY 2019. In addition, the State continues to provide capital funding to the State's health care delivery system. The FY 2019 Executive Budget Financial Plan includes \$425 million in new health care capital spending, funded with bonds (\$300 million) and Extraordinary Monetary Settlements (\$125 million). The Executive Budget Financial Plan includes an additional \$425 million for non-Department of Health (DOH) Medicaid expenses within the Global Cap. To achieve savings within the Global Cap to support these additional costs, DOH will continue to implement various MRT actions to improve the efficiency and effective delivery of the statewide Medicaid program. These reforms include modifications to the Medicaid long-term care program to ensure access to long-term care services and support a growing aging population; continued controls on Medicaid pharmaceutical costs; incentives supporting the transition to value-based payment arrangements; additional program integrity efficiencies; the authorization of retail practices; a continuation of transportation reforms through targeted investments; and expansion of certain Medicaid services, including covered tele-health and community paramedicine.

Medicaid costs attributable to the minimum wage increase are projected to be higher than initially estimated, mainly due to higher-than-expected enrollment growth in the long-term care sector for home and personal care services. The Updated Financial Plan reflects higher Medicaid spending of \$125 million in FY 2019 growing to \$300 million by FY 2022. The Executive Budget Financial Plan includes \$703 million to support the direct cost of FY 2019 minimum wage increases for health care workers who provide services reimbursed by Medicaid.

Other health care savings include initiatives to consolidate and reduce certain public health programs, providing increased flexibility to support ongoing public health programs or investments in new or emerging public health priorities; modifications to certain pharmacy benefit programs; reforms to increase reimbursements from third-party insurers and streamline the evaluation process for the Early Intervention program; and the elimination of cost of living adjustment payments. The Updated Financial Plan also includes savings from the one-time recoupment of \$35 million from New York City in FY 2019 for ineligible School Nurse expenses included in claims from calendar years 2015 through 2017.

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<sup>4</sup> The Medicaid Global Cap is a statutory limit on annual State-funded Medicaid expenditures, indexed to the Medical component of the Consumer Price Index (CPI). Total State-funded Medicaid expenditures also include certain program costs which are not subject to the indexed provisions of the Global Cap.

- **Mental Hygiene.** Spending revisions reflect updated assumptions and revised timelines for ongoing transformation efforts to ensure efficient use of State resources in the mental hygiene service delivery system.
- **Human Services.** Savings reflect, among other things, expiration of State reimbursements to New York City for the Close to Home initiative; a cap on State-share reimbursement to NYC for child welfare spending, and reestimates to the disbursement estimates for other programs. Funding has been increased for higher projected public assistance caseload costs and to return child care subsidy funding to a level of \$806 million.
- **STAR.** The Executive Budget proposes freezing the exemption benefit, rather than allowing it to increase by up to 2 percent, and mandating enrollment in the Income Verification Program.
- **MTA Subway Action Plan.** The Executive Budget Financial Plan includes \$254 million in operating aid to fully fund the State's half of the MTA Subway Action Plan to address system failures, breakdowns, delays and deteriorating customer service, and to position the system for future modernization. State operating aid will be provided to the MTA from \$194 million in Extraordinary Monetary Settlements and \$60 million from accelerated transfer of PMT revenue. The Updated Financial Plan also includes \$174 million in new capital funding for the MTA as part of the MTA Subway Action Plan.

- **All Other.** Savings are expected as a result of updated spending projections across program areas, including: elimination of the planned FY 2019 1.9 percent human services cost-of-living increase; updated enrollment data for the State University of New York (SUNY) Community Colleges that results in a reduction in projected Full-Time Equivalent (FTE) students; and continued utilization of JP Morgan Settlement and Mortgage Insurance Fund (MIF) resources to fund housing and homelessness programs.

Spending increases in the outyears mainly reflects expected matching funds that will be provided to local governments that achieve savings consistent with County-wide Shared Services Property Tax Savings Plans; and funding for the proposed DREAM Act that extends student financial assistance to undocumented immigrant students pursuing higher education in New York.

### *Agency Operations*

Operating costs for State agencies include salaries, wages, fringe benefits, and non-personal service costs (e.g., supplies and utilities). Reductions from current-services projections for agency operations contribute \$446 million to the General Fund gap-closing plan.

- **Executive Agencies.** The Executive Budget Financial Plan reflects agency spending held flat, on a State Operating Funds basis, with limited exceptions, such as DOH costs attributable to the New York State of Health (NYSOH) marketplace and the Essential Plan program. State agencies are expected to continue to use less costly forms of service delivery, improve administrative practices, and pursue statewide solutions, including the utilization of Lean initiatives to streamline operations and management. The Executive Budget Financial Plan also includes savings from the continued transition of individuals from mental hygiene institutions to appropriate community settings.

Spending increases in the later years of the Updated Financial Plan are driven mainly by revised spending assumptions across multiple agencies to account for inflationary cost increases, additional administrative payroll in FY 2021, and higher Medicaid administration expenses to support the NYSOH insurance exchange as available Federal funding is assumed to expire.

Pension estimates reflect the planned payment of the full FY 2019 Employees' Retirement System (ERS)/Police and Fire Retirement System (PFRS) pension bill in April 2018, rather than on a monthly basis as previously assumed. Health insurance savings reflect elimination of the taxpayer-subsidized Income-Related Monthly Adjustment Amount (IRMAA) reimbursement for high income New York State Health Insurance Program (NYSHIP) enrollees, and from maintaining reimbursement of the standard Medicare Part B premium at \$134 per month.

The Executive Budget also proposes reforming the interest charged on judgments against the State from as high as 9 percent to a fair-market interest rate. The current rate was established in 1982 when interest rates were at 12 percent to avoid unnecessary taxpayer costs. The recommended rate is in line with the interest rate applied to judgements in Federal courts, and would ensure that neither side in a lawsuit will be disadvantaged by an interest rate that is above or below what otherwise could be earned while cases are being adjudicated.

- **University Systems.** Savings reflect elimination of the SUNY hospital subsidy, which is reinvested to support capital infrastructure projects at SUNY's teaching hospitals.
- **Elected Officials/Judiciary.** The Executive Budget Financial Plan reflects the Judiciary's request to increase operating support, including retroactive payment of collective bargaining agreements and expected cost increases for legal representation in Family Court support resulting from Raise the Age legislation and the Attorney for the Child program. The Executive Budget Financial Plan reflects the Legislature's request to increase operating costs, including increases for personal service costs and equipment.

### *Debt Management/Capital Projects*

The Executive Budget Financial Plan reflects FY 2019 debt service savings from the planned payment of \$340 million of FY 2019 expenses in FY 2018, as well as expected refundings, continued use of competitive bond sales, and other debt management actions. The use of available bond proceeds to reimburse capital spending from prior years, results in a downward revision to transfers needed to fund capital projects.

### *Resource Changes*

- **Taxpayer Acceleration of PIT Payments into FY 2018.** The State received a surge in personal income tax payments during calendar year 2017 as taxpayers responded to Federal tax law changes that, starting in tax year 2018, limit the allowable deduction of State and local income taxes, as well as local real property taxes, to a maximum of \$10,000 on



Federal income tax returns. DOB estimates that approximately \$1.9 billion in accelerated tax receipts were due to this behavioral response. The increase in cash in FY 2018 that DOB attributes to the acceleration of PIT receipts will be carried forward and used to offset the anticipated corresponding loss of PIT receipts in FY 2019.

- **Tax Receipts Revisions.** The Executive Budget Financial Plan reflects revisions to tax receipts across most tax categories, including the proposed decoupling of the State's tax law from the Federal cap with respect to the deductibility of SALT; changes and eliminations to certain Federal deductions; the temporary Federal medical expense deduction increase; child tax credit changes; and the single filer standard deduction. Executive Budget revisions proposed in response to the Federal tax law changes include:

- **Employer Compensation Expense Tax (ECET) System.** Federal tax changes limited the deductibility of State and local taxes for individuals who itemize their deductions, but maintained it for businesses. Legislation is proposed as part of the Executive Budget that, if enacted, would permit employers to opt-in to a new ECET system, which is intended to mitigate an increase in the tax burden for employees affected by the SALT limit. When fully phased in, employers that opt in to the ECET system would be subject to a 5 percent tax on all annual payroll expenses in excess of \$40,000 per employee. The ECET system, as proposed, would take effect on January 1, 2019. For employers who opt in, the new tax would be phased in over three years (1.5 percent in calendar year 2019, 3 percent in calendar year 2020, and 5 percent in calendar year 2021). The deadline for the first annual election for employers to opt in to this alternative system would be on October 1, 2018 for the tax year 2019.

The ECET proposal is designed to be revenue neutral for the State. As ECET collections rise, PIT collections are expected to fall by a comparable amount. The Executive Budget Financial Plan does not include any estimates for ECET collections since employer opt-in rates will not be known until October 2018. DOB expects to provide estimates in future AIS Updates as opt-in rates and other information become known.

- **Charitable Gifts Trust Fund.** Legislation submitted with the Executive Budget proposes the creation of two new State-operated Charitable Gifts Trust Funds to accept donations for the purposes of funding health care and education in New York. Taxpayers who itemize deductions can claim charitable gifts as deductions on their Federal and State tax income tax returns. In addition to the itemized deductions, any taxpayer making a donation to either or both of the two new State-operated funds will be eligible to claim a State tax credit on their income tax returns equal to 85 percent of the donation amount for the tax year following the year in which the donation is made. In addition, the legislation would allow school districts and other local governments the option to create charitable funds and to provide a credit against local property tax bills equal to a percentage of the donation.

The Executive Budget Financial Plan does not include any estimates for charitable contributions under this program. Charitable giving is not expected to have a measurable financial impact on State PIT receipts in FY 2019. Donations made in tax year 2018 are not expected to be disbursed for charitable purposes until FY 2020, and the cost of the State tax credit will not be incurred until tax year 2019. However, changes in taxpayer behavior could affect the timing and amount of PIT receipts. DOB expects to include estimates on charitable giving in future updates, once activity on donations can be observed.

- **Decoupling From Federal Tax Code.** The State tax code is closely aligned with the Federal tax code. Legislation is proposed as part of the Executive Budget that is designed to decouple the State tax code from the Federal tax code, where necessary, to avoid more than \$1.5 billion in State tax increases that would otherwise result from the recently enacted changes in the Federal tax code. The decoupling provisions, which are projected to increase the budget gaps in FY 2020 and beyond, include:

**Federal Cap on SALT.** The Federal law changes capped the itemized deduction for SALT at a maximum of \$10,000. The Executive Budget Financial Plan reflects the inclusion of legislation to decouple from this cap so that New York taxpayers who itemize are not subject to a State tax increase from the flow through of this Federal cap to State income tax returns. Absent this proposal, PIT receipts would be projected to increase by \$441 million annually, beginning in FY 2020.

**Federal Changes and Eliminations to Certain Deductions.** The Executive Budget Financial Plan proposes to decouple from the Federal changes on other deductions. Absent this proposal, PIT receipts would be projected to increase by \$269 million annually, beginning in FY 2020.

**Temporary Federal Medical Expense Deduction Increase.** Federal changes lower the threshold by which to claim the itemized medical expense deduction for tax years 2017 and 2018, thereby lowering taxpayer liability. The Executive Budget Financial Plan reflects the proposal to decouple from this decrease from tax year 2018, which would have lowered receipts by \$25 million in FY 2020.

**New York Single Filer Standard Deduction.** The Federal repeal of personal exemptions eliminates the ability of New York single-filer taxpayers to claim the standard deduction for non-dependents on their State tax returns under current State tax law. The Executive Budget includes legislation to address this issue. Absent this legislation, New York taxpayers would be subject to a \$840 million annual State tax increase beginning in FY 2020.

- **Personal Income Tax Revenue Bonds (PIT Bonds).** The State finances a significant share of capital projects through the issuance of PIT Bonds. As of January 15, 2018, New York State had \$34.8 billion of PIT Bonds outstanding with a FY 2019 annual debt service cost of \$3.2 billion, all of which is secured by financing agreement payments made from the Revenue Bond Tax Fund (RBTF), comprising 25 percent of State PIT receipts, net of refunds. In FY 2019, the amount of PIT receipts dedicated to the repayment of PIT Bonds is estimated at \$12.3 billion. In the event that the ECET and Charitable Gifts Trust Fund proposals described above become law, the Executive Budget proposes legislation that would accompany their authorization to strengthen the debt service coverage on PIT Bonds by (i) increasing the percentage of PIT receipts dedicated to the payment of PIT Bonds from 25 percent to 50 percent, and (ii) dedicating 50 percent of ECET receipts to the payment of PIT Bonds. In addition, in the event that (a) the State Legislature fails to appropriate amounts required to make all debt service payments on PIT Bonds or (b) having been appropriated and set aside pursuant to a certificate of the Director of the Budget, financing agreement payments have not been made when due on the PIT Bonds, the Executive Budget proposes to increase the required set-aside for the PIT Bonds program such that PIT and ECET receipts continue to be deposited to the RBTF until amounts on deposit in the RBTF equal the greater of (i) 40 percent of annual PIT and ECET receipts or (ii) \$12 billion. The equal set-asides from the ECET and PIT are intended to assure that the flow of taxes dedicated to PIT Bonds will remain constant, regardless of the number of employers who choose to opt in to the ECET system. The ECET and PIT are expected to offset one another, with increased collections in the ECET offset by a similar decrease in PIT receipts. The increase in the PIT set-aside is also expected to be sufficient to offset any reduction in PIT receipts that may occur from charitable giving to the new Charitable Gifts Trust Fund proposed with the Executive Budget. The proposed set-aside for PIT and ECET may be modified depending on the final form of tax reform legislation expected to be approved with the FY 2019 Enacted Budget.
- **Unincorporated Business Tax (UBT).** In addition to the ECET and Charitable Gifts Trust Fund proposals in the Executive Budget, the Executive is studying options for the creation of a UBT intended to preserve deductibility for individuals on certain components of nonwage income. A UBT would apply a deductible business tax on pass-through businesses, or some subset of pass-through businesses, and offer a corresponding tax credit to the owners of the business on their personal income taxes. DOB expects that any reduction in PIT receipts that may result from the creation of a UBT would be offset in full by an increase in UBT receipts. All or a portion of UBT receipts may be pledged to the payment of PIT Bonds. By the end of FY 2018, the Executive may propose legislation to create a UBT.
- **Use of Extraordinary Monetary Settlements.** The Executive Budget proposes the following uses for new settlements: \$194 million for the State's share of the MTA Subway Action Plan; \$125 million in "hard-dollar" capital for health care providers; and \$383 million for operating purposes.
- **Other Resource Changes.** These include updated estimates of various miscellaneous receipts and transfers from other funds, including FEMA reimbursements expected in FY 2019. In addition, the Executive Budget proposes a new \$120 safety inspection fee for privately operated for-hire/for-profit passenger carriers, and a modern rate structure for right-of-way fees that will require fees for the placement of fiber optic cables and wireless towers on State-owned highways.

#### *Revenue Actions*

- **Health Insurance Conversions (or comparable transactions).** The Updated Financial Plan includes \$500 million annually over four years from conversions, acquisitions, or related transactions in which not-for-profit health insurers convert to corporations organized for pecuniary profit. DOB believes that such activity is likely in the current health insurance market.
- **Impose a Healthcare Insurance Windfall Profit Fee.** The Federal tax plan gives health care companies a 40 percent cut on their taxes while also transferring health care costs to the State. The Executive Budget imposes a 14 percent surcharge on health insurer gains to recapture \$140 million of those corporate tax savings and reinvest it in vital health care services for New Yorkers.
- **Establish an Opioid Epidemic Surcharge.** New York State, like much of the country, is battling an opioid epidemic. The Executive Budget imposes a new surcharge of 2 cents per milligram of active opioid ingredient on prescription drugs, directing all proceeds to the Opioid Prevention, Treatment and Recovery Fund. This new fund will support ongoing prevention, treatment, and recovery services.
- **Discontinue the Energy Services Sales Tax Exemption.** The Executive Budget eliminates the sales tax exemption on

non-residential transmission and distribution of gas or electricity when purchased from an Energy Service Company (ESCO). Enacted in the early 2000's to incentivize consumer choice, this exemption is no longer necessary now that ESCOs are established entities (New York City eliminated this tax exemption in 2009).

- **Defer Business-Related Tax-Credit Claims.** Taxpayers must defer using most business credits for tax years 2018 through 2020, where such credits exceed \$2 million. They can begin to use deferred nonrefundable credits starting in 2021, and may use 50 percent of their refundable credits in 2021, 75 percent of the remaining credit in 2022, and the balance in 2023.
- **Internet Fairness Conformity Tax.** Online providers such as Amazon and eBay supply a marketplace for third-party sellers to sell their products to consumers. Currently, such outside sellers are required to collect sales tax from New York residents if the seller is located in New York. Many marketplace providers agree to collect the tax for the third-party seller in this instance. The Executive Budget requires a marketplace provider to collect the tax when it facilitates the sale to State residents, whether the seller is located within, or outside, New York.
- **Improve Cigar Tax Enforcement.** The Executive Budget changes the definition of “wholesale price” to the invoiced price for which a manufacturer or distributor sells tobacco products to a New York State registered tobacco distributor. The current definition of “wholesale price” is the result of litigation and has resulted in revenue losses as it relies on the industry to determine the tax on its own products through a pricing survey.
- **Other Actions.** The Executive Budget includes other tax credits/extensions, enforcement initiatives and tax code reforms. These include a two-year extension of the Hire a Vet Tax Credit to 2020; an increase in the vending machine sales tax exemption for food and drink purchases priced at \$1.50 or less, to \$2.00 or less; and a health tax of 10 cents per fluid milliliter on vapor products at the distributor level, equalizing the tax treatment of tobacco products and the equivalent products used in e-cigarettes.

### Other Financial Plan Matters

Transportation Funding. The State collects the PMT on behalf of, and disburses the entire amount to, the MTA. The Executive Budget proposes amending the enabling statute to no longer require the PMT to be appropriated annually by the State Legislature. PMT revenue that may be pledged to MTA bondholders under any new credit structure would have reduced risk of non-appropriation. In addition, PMT receipts will be received by the MTA without delays or uncertainty related to the appropriation process. In FY 2019, this is expected to provide a one-time benefit to the MTA of \$60 million. Consistent with this proposed law change, the Updated Financial Plan will no longer include PMT receipts and related local assistance disbursements, beginning in FY 2019. PMT receipts are estimated at approximately \$1.5 billion in FY 2019.

The Executive Budget also proposes appropriating certain transportation operating costs from the General Fund instead of the DHBTF. These operating expenses are currently funded by a transfer from the General Fund to the DHBTF. The change, which will increase disbursements in State Operating Funds by nearly \$390 million in FY 2019, applies to operating costs related to snow and ice removal; bus, truck and rail inspection; and DMV regulatory activities. The increased operating spending in the General fund is expected to be offset by an identical reduction in the transfer to the DHBTF.

### Managing Risks

The Executive Budget includes several measures to respond to potential risks, including the following:

- Legislation is proposed that would allow for across-the-board reductions to certain local assistance disbursements if the annual estimate for tax receipts in FY 2019 is revised downward by \$500 million or more during the fiscal year. The legislation provides for a uniform reduction of up to 3 percent to local assistance appropriations and related cash disbursements in the General Fund and State Special Revenue Funds. Programs that are exempt from the across-the-board reductions include School Aid, Medicaid, and public assistance.
- Legislation proposed with the Executive Budget would continue authorization for a process by which the State would manage potential significant reductions in Federal aid during FY 2019. Specifically, the legislation allows the Budget Director to prepare a plan for consideration by the Legislature in the event that Federal policymakers (i) reduce Federal financial participation in Medicaid funding to New York State or its subdivisions by \$850 million or more; or (ii) reduce Federal financial participation or other Federal aid funding to New York State that affects the State Operating Funds financial plan by \$850 million or more, exclusive of any cuts to Medicaid. Each limit is triggered separately. The plan prepared by the Budget Director must equally and proportionally reduce appropriations and cash disbursements in the General Fund and State Special Revenue Funds. Upon receipt of the plan, the Legislature has 90 days to prepare its own

corrective action plan, which may be adopted by concurrent resolution passed by both the Senate and the Assembly, or the plan submitted by the Budget Director takes effect automatically.

- The FY 2019 Executive Budget also creates a new Health Care Reform Act ( HCRA) fund account to ensure the continued availability and expansion of funding for quality health services to New York State residents and to mitigate risks associated with the loss of Federal health care funds. This account is expected to initially consist of any available funds from insurer conversions.

### Annual Spending Growth

DOB estimates that spending in State Operating Funds will grow at 1.9 percent from FY 2018 to FY 2019, consistent with the 2 percent spending growth benchmark.

### Local Assistance

- Medicaid and School Aid are the State's largest local aid programs, comprising approximately 45 percent of State Operating Funds spending. In SY 2019, School Aid is expected to total \$26.4 billion, an increase of \$769 million (3 percent), including a \$338 million increase in Foundation Aid. Medicaid spending subject to the Global Cap will grow at the indexed rate of 3.2 percent to \$18.9 billion. In total, Medicaid funded from State resources will increase to \$19.5 billion, including the Essential Plan (EP)<sup>5</sup>, the takeover of local Medicaid costs, and other spending outside the Global Cap.

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<sup>5</sup> The EP is an insurance program authorized under the ACA for individuals who are not eligible for Medicaid and who meet certain income threshold standards. Approximately 90 percent of program expenses are subsidized with Federal funds. The EP is not a Medicaid program; however, the State Funds support is managed within total DOH Medicaid Global Cap resources.

- In FY 2018, the bonds secured by annual payments under the Master Settlement Agreement (MSA) with tobacco manufacturers were retired, with no remaining debt service requirements to be paid on these bonds. Thus, DOB expects payments under the MSA of approximately \$103 million in FY 2018 and approximately \$329 million in FY 2019, with additional payments under the MSA to be available in the years beyond FY 2019. The FY 2018 Enacted Budget authorized and directed these payments be used to help defray costs of the State's takeover of Medicaid costs for counties and New York City. The State takeover, in which local Medicaid costs are capped permanently at 2015 calendar year levels, is expected to cost the State \$917 million in FY 2019 and \$1.1 billion in FY 2020. Consistent with State law, DOB expects MSA payments will be directly deposited to the Medicaid Management Information System (MMIS) Escrow Fund. The deposit mechanism has no impact on overall Medicaid spending funded with State resources, but does decrease reported State-supported Medicaid spending accounted for in State Operating Funds.
- In transportation, the Executive Budget proposes amending the statute to no longer require the PMT to be appropriated annually by the State Legislature. Consistent with this proposed law change, the Executive Budget Financial Plan does not reflect PMT receipts and related local assistance disbursements, beginning in FY 2019. PMT receipts and disbursements are estimated at approximately \$1.5 billion and \$1.4 billion, respectively, in FY 2019. The Executive Budget also proposes appropriating certain transportation operating costs from the General Fund instead of the DHBTF. These operating expenses are currently funded by a transfer from the General Fund to the DHBTF. This change will increase disbursements in State Operating Funds by nearly \$390 million in FY 2019.
- Local assistance spending reported in the Updated Financial Plan is affected by the accounting treatment of State payments to the Sales Tax Asset Receivable Corporation (STARC). Pursuant to legislation enacted in FY 2017, New York City is remitting savings to the State from a 2014 refunding of STARC bonds, which are supported solely by the annual payment of State aid. The FY 2017 legislation specified that the money refunded from STARC could be received by the State as a miscellaneous receipt, or directed by the State to a State public authority to offset debt service costs on State-supported bonds. In the FY 2018 Enacted Budget, the Legislature provided that money recouped from the STARC refunding can be treated as an offset to State spending by adding specific language to the STARC appropriation. The Executive Budget Financial Plan reflects the offset to spending in the calculation of State Operating Funds spending in both FY 2018 and FY 2019. In FY 2017, the State accounted for the money as a miscellaneous receipt.
- STAR spending is affected by the conversion of STAR benefits to State PIT credits, in addition to program reestimates. The conversion of STAR benefits to PIT credits has no impact on the value of the STAR benefits received by taxpayers, but does decrease reported disbursements for STAR on a State Operating Funds basis of reporting and decreases the level of reported PIT receipts by an identical amount.

- Higher Education spending growth is mainly due to the second phase of the Excelsior Free Tuition Program, State support for the DREAM Act, increased funding for other scholarships, fringe benefit cost increases, and the timing of certain payments.

#### *State Operations/Fringe Benefits*

- Spending for Executive agency operations is expected to increase slightly in FY 2019, excluding the reclassification of certain DOT and DMV operating costs related to snow and ice removal; bus, truck and rail inspection; and DMV regulatory activities from the DHBTF to the General Fund.
- Operations spending for the university systems and elected officials is expected to increase by 3.5 percent and 2.5 percent, respectively.
- Spending growth for fringe benefits is mainly due to rising employee health care and prescription drug costs.

#### *Debt Service*

- Spending from Debt Service Funds is expected to increase by 0.3 percent from 2018, which includes the impact of the payment of certain FY 2019 debt service costs in FY 2018.

#### **Cash Flow**

State Finance Law authorizes the General Fund to borrow money temporarily from available funds held in STIP. Money may be borrowed for up to four months, or until the end of the fiscal year, whichever period is shorter. The State last used this authorization in April 2011 when the General Fund needed to borrow funds from STIP for a period of five days. The amount of resources that can be borrowed by the General Fund is limited to available balances in STIP, as determined by the State Comptroller. Available balances include money in the State's governmental funds and a relatively small amount of other money belonging to the State. Several accounts in Debt Service Funds and Capital Projects Funds that are part of All Governmental Funds are excluded from the balances deemed available in STIP. These excluded funds consist of bond proceeds and money obligated for debt service payments.

DOB expects that the State will have sufficient liquidity in FY 2019 to make all planned payments as they become due, without having to temporarily borrow from STIP. The State continues to reserve money on a quarterly basis for debt service payments financed with General Fund resources. Money to pay debt service on bonds secured by dedicated receipts, including both PIT and Sales Tax bonds, continues to be set aside as required by law and bond covenants.

#### **Extraordinary Monetary Settlements**

From the beginning of FY 2015 through FY 2018, DOB estimates that the State will have received a total of \$10.7 billion in Extraordinary Monetary Settlements for violations of State laws by major financial and other institutions.

Since the FY 2018 Enacted Budget Financial Plan was issued, the State has received five settlement payments. Pursuant to a May 24, 2017 consent order between the DFS and BNP Paribas, BNP Paribas made a \$350 million civil monetary penalty payment. The order pertains to BNP Paribas engaging in improper, unsafe and unsound conduct, in violation of State laws and regulations, that included collusive conduct, improper exchange of information, manipulation of the price at which daily benchmark rates were set, and misleading customers.

Habib Bank paid a \$225 million civil monetary penalty pursuant to a September 7, 2017 consent order between Habib Bank and DFS. This consent order pertains to Habib Bank's failure to comply with laws and regulations designed to combat money laundering, terrorist financing, and other illicit financial transactions.

Pursuant to a November 13, 2017 consent order between the DFS and Credit Suisse, a \$135 million civil monetary penalty payment was received. The order pertains to Credit Suisse's failure to comply with laws and regulations designed to combat improper, unsafe, and unsound conduct in the foreign exchange trading business.

Cigna paid a \$2 million civil monetary penalty pursuant to a November 14, 2017 consent order between Cigna and DFS. This consent order pertains to Cigna's violation of laws and regulations by selling stop-loss and fully-insured health insurance policies out-of-state to New York-based small groups with employees in the State.

In addition, the State received a \$60 million civil monetary penalty pursuant to a January 4, 2018 consent order between Western Union and the DFS.

## Uses of Extraordinary Monetary Settlements

A total of \$10 billion in Extraordinary Monetary Settlements has been allocated in prior budgets and plans. The Executive Budget Financial Plan includes a plan to allocate the remaining \$702 million.

A total of \$7.8 billion has been, or is expected to be, used to finance various spending from capital appropriations, including operating activities associated with the maintenance, protection, preservation, and operation of capital assets. Another \$2.9 billion has been, or is expected to be, used for other purposes, including resolution of Office for People with Developmental Disabilities (OPWDD) Federal disallowances in FY 2016, retroactive labor costs, General Fund operations, onetime litigation payments to CSX, and costs of the Department of Law's Litigation Services Bureau.

The Updated Financial Plan reflects use of previously unallocated Extraordinary Monetary Settlements to support:

- **General Fund Operations (\$383 million).** Consistent with prior years, the Updated Financial Plan reflects the use of funds not appropriated for other purposes.
- **MTA Subsidy (\$194 million).** Additional support will be provided to the MTA for operations in FY 2019.
- **Health Care Capital Grants (\$125 million).** An additional \$425 million will be provided to the Health Care Facility Transformation Program, of which \$125 million will be funded from Extraordinary Monetary Settlements.

**Special Considerations.** The Updated Financial Plan is subject to complex economic, social, financial, political, and environmental risks and uncertainties, many of which are outside the ability of the State to control. DOB believes that the projections of receipts and disbursements in the Updated Financial Plan are based on reasonable assumptions, but there can be no assurance that actual results will not differ materially and adversely from these projections. For instance, actual receipts collections have fallen substantially below the levels forecasted in certain fiscal years. In addition, projections in future years are based on the assumption that annual growth in State Operating Funds spending will be limited to 2 percent, and that all savings that result from the 2 percent spending growth benchmark will be made available to the General Fund.

DOB routinely executes cash management actions to manage the State's large and complex budget. These actions are intended for a variety of purposes that include improving the State's cash flow, managing resources within and across State fiscal years, assisting in the adherence to spending targets, and better positioning the State to address future risks and unanticipated costs, such as economic downturns, unexpected revenue deterioration, and unplanned expenditures. As such, the State regularly makes certain payments above those initially planned, to maintain budget flexibility. All payments made above the planned amount are reflected in the year they occur, and adhere to the limit of the State's 2 percent annual spending growth benchmark.

The Updated Financial Plan is based on numerous assumptions, including the condition of the State and national economies, and the concomitant collection of economically sensitive tax receipts in the amounts projected. Other uncertainties and risks concerning the economic conditions and receipts forecasts include the impacts of: national and international events; ongoing financial risks in the Euro-zone; changes in consumer confidence, oil supplies and oil prices; major terrorist events, hostilities or war; climate change and extreme weather events; Federal statutory and regulatory changes concerning financial sector activities, Federal tax law and other programmatic purposes; changes concerning financial sector bonus payouts, as well as any future legislation governing the structure of compensation; shifts in monetary policy affecting interest rates and the financial markets; financial and real estate market developments which may adversely affect bonus income and capital gains realizations; the effect of household debt on consumer spending and State tax collections; and the outcomes of litigation and other claims affecting the State.

The Updated Financial Plan is subject to various uncertainties and contingencies relating to: wage and benefit increases for State employees that exceed projected annual costs; changes in the size of the State's workforce; the realization of the projected rate of return for pension fund assets and current assumptions with respect to wages for State employees affecting the State's required pension fund contributions; the willingness and ability of the Federal government to provide the aid expected in the Updated Financial Plan; the ability of the State to implement cost reduction initiatives, including reductions in State agency operations, and the success with which the State controls expenditures; and the ability of the State and its public authorities to market securities successfully in the public credit markets.

The projections and assumptions contained in the Updated Financial Plan are subject to revisions which may result in substantial change. No assurance can be given that these estimates and projections, which depend in part upon actions the State expects to be taken but which are not within the State's control, will be realized.

**Budget Risks and Uncertainties.** There can be no assurance that the State’s financial position will not change materially and adversely from current projections. If this were to occur, the State would be required to take gap closing actions. Such actions may include, but are not limited to: reductions in State agency operations; delays or reductions in payments to local governments or other recipients of State aid; delays in or suspension of capital maintenance and construction; extraordinary financing of operating expenses; use of non-recurring resources; or other measures. In some cases, the ability of the State to implement such actions requires the approval of the Legislature and cannot be implemented solely by action of the Governor.

The Updated Financial Plan projections for the outyears generally assume that School Aid and Medicaid disbursements will be limited to the annual growth in New York State personal income, and the ten-year average growth of the medical component of the Consumer Price Index (CPI), respectively. However, since FY 2014, the State has annually authorized School Aid spending to increase above the personal income growth index. In SY 2019, the Executive Budget Financial Plan reflects a projected 3.0 percent School Aid increase, compared to the 1.5 percent growth in the personal income growth index. In SY 2020, School Aid is projected to increase by 3.6 percent, based on currently projected personal income growth.

State law grants the Commissioner of Health (the “Commissioner”) certain powers and authority to maintain Medicaid spending levels assumed in the Updated Financial Plan. Over the past six years, DOH State Funds Medicaid spending levels have remained at or below indexed levels without requiring the Commissioner to exercise this authority. However, Medicaid program spending is sensitive to several factors including fluctuations in economic conditions, which may increase caseload, and changes in Federal aid, which could affect State health care spending. The Commissioner’s powers are intended to limit the rate of annual growth in DOH State Funds Medicaid spending to the levels estimated for the current fiscal year, through actions which may include reducing rates to providers. These actions may be dependent upon timely Federal approvals and other elements of the program that govern implementation. It should further be noted that the Medicaid Cap, which is indexed to historical CPI Medical trends, applies to State Operating Funds and, therefore, General Fund spending remains sensitive to revenue performance in the State’s HCRA fund. The HCRA fund finances approximately one-quarter of the DOH State-share costs of Medicaid.

The Updated Financial Plan forecast contains specific transaction risks and other uncertainties including, but not limited to: receipt of certain payments from public authorities; receipt of certain revenue sharing payments under the Tribal-State compact, including payments from the Seneca Nation<sup>6</sup>; receipt of miscellaneous revenues at the levels expected in the Updated Financial Plan, and achievement of cost-saving measures including, but not limited to, transfer of available fund balances to the General Fund at levels currently projected. Such risks and uncertainties, if they were to materialize, could adversely impact the Updated Financial Plan in current and/or future years.

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<sup>6</sup> The Seneca Nation has withheld payments to the State that were expected in June, September and December 2017. The State and Seneca Nation are currently in the arbitration process. The Updated Financial Plan assumes successful resolution by March 2018.

The Updated Financial Plan also reflects actions that affect the spending reported in the State Operating Funds basis of reporting, including (i) the realignment of certain operating costs to the capital budget to provide consistency in reporting across all agencies and a more accurate accounting of the overall capital budget; (ii) the payment of certain operating costs using available resources in accounts outside of the State Operating Funds basis of reporting; and (iii) the restructuring of the STAR program such that the spending for certain benefits is instead provided in the form of a tax credit for consistency with the reporting of other State tax credits. If these and other transactions are not implemented as planned, annual spending growth in State Operating Funds would increase above current estimates.

In developing the Updated Financial Plan, DOB attempts to mitigate the financial risks from receipts volatility, litigation, and unexpected costs, with an emphasis on the General Fund. It does this by, among other things, exercising caution when calculating total General Fund disbursements, and managing the accumulation of financial resources that can be used to offset new costs (including, but not limited to, fund balances not needed in a particular year, acceleration of tax refunds above the level budgeted in a given year, and prepayment of expenses). There can be no assurance that such resources will be sufficient to address risks that may materialize in any given fiscal year.

## Federal Issues

The State receives a substantial amount of Federal aid for health care, education, transportation, and other governmental purposes, as well as Federal funding to respond to, and recover from, severe weather events and other disasters. Many of the policies that drive this Federal aid may be subject to change under the Trump Administration and the current Congress.

Current Federal aid projections, and the assumptions on which they rely, are subject to revision in future financial updates as a result of changes in Federal policy.

The Federal government may enact budgetary changes or take other actions that adversely affect State finances. State legislation proposed with the FY 2019 Executive Budget continues authorization for a process by which the State would manage significant reductions in Federal aid during FY 2019 and FY 2020 should they arise. Specifically, the legislation allows the Budget Director to prepare a plan for consideration by the Legislature in the event that the Federal government (i) reduces Federal financial participation in Medicaid funding to New York State or its subdivisions by \$850 million or more; or (ii) reduces Federal financial participation or other Federal aid funding to New York State that affects the State Operating Funds financial plan by \$850 million or more, exclusive of any cuts to Medicaid. Each limit is triggered separately. The plan prepared by the Budget Director must equally and proportionally reduce appropriations and cash disbursements in the General Fund and State Special Revenue Funds. Upon receipt of the plan, the Legislature has 90 days to prepare its own corrective action plan, which may be adopted by concurrent resolution passed by both houses, or the plan submitted by the Budget Director takes effect automatically.

In addition, the Updated Financial Plan may also be adversely affected by other Federal government actions, including audits, disallowances, and changes to Federal participation rates or other Medicaid rules. For instance, the Updated Financial Plan includes reimbursement to the Federal government of \$100 million annually through FY 2027 pursuant to a March 2015 agreement between the State and the Centers for Medicare and Medicaid Services (CMS). The agreement resolved a pending disallowance for FY 2011 and all related payment disputes for State-operated services prior to April 1, 2013, including home and community-based waiver services. Pursuant to the agreement, the State must adjust the Federal/State share of future Medicaid costs to reimburse the Federal government. The State used \$850 million in Extraordinary Monetary Settlement payments, previously set aside for financial risks, to finance the initial repayment amount in FY 2016.

#### *Responding to the New Federal Tax Law*

On December 22, 2017, President Trump signed into law the TCJA, making major changes to the Federal Internal Revenue Code, most of which are effective in the 2018 tax year. The new Federal tax law makes extensive changes to Federal personal income taxes, corporate income taxes, and estate taxes, and the deductibility of various taxes and interest costs.

The State's income tax system interacts with the Federal system in numerous ways. The Federal changes will have significant flow-through effects on state tax burdens and revenues. Given the far-reaching nature of the Federal law, the New York State Department of Taxation and Finance has undertaken extensive analysis in consideration of how best to respond and has outlined options for State tax reform in response to the Federal legislation. The Executive Budget includes proposed changes to the State tax code to address Federal changes.

In addition, the new Federal tax law eliminates the tax-exempt advance refunding of municipal bonds, thereby limiting the ability of the State and debt-issuing public authorities to realize savings in favorable market conditions. Since FY 2015, advance refunding has saved New York State approximately \$1.1 billion.

#### *Current Federal Aid*

President Trump has proposed significant cuts to mandatory and discretionary domestic programs in Federal Fiscal Years (FFYs) 2018 and 2019 which are under consideration by Congress. If the proposed cuts are adopted, it could reduce Federal aid to New York by billions of dollars.

Currently, the Federal government is operating under a continuing resolution for FFY 2018 that keeps the Federal government operating through March 23, 2018.

The Budget Control Act (BCA) of 2011, which temporarily raised the debt limit, established discretionary spending caps on the Federal government through FFY 2021, and under certain conditions institutes automatic spending cuts for certain Federal funds on which the State relies. Discretionary Federal funding to the State could be reduced if these caps are not adjusted, suspended or eliminated. On February 9, 2018, the Federal government enacted legislation increasing the spending caps for FFYs 2018 and 2019, lessening the potential for significant spending cuts in discretionary domestic programs through FFY 2019.

#### *Medicaid Disproportionate Share Hospital (DSH) Payments*



Provisions within the Medicaid statute allow for a capped amount of payments to hospitals that treat a disproportionate number of Medicaid recipients. Changes made initially in the Patient Protection and ACA to reduce the aggregate amount of Federal reimbursements for DSH payments came into effect with the start of FFY 2018, beginning October 1, 2017, but have since been delayed to FFY 2020 (beginning October 1, 2019) by Federal legislation enacted on February 9, 2018. This legislation also accelerates full implementation of the DSH cuts to begin in FFY 2021, in contrast to the previous multi-year phase-in.

DOB estimates that when the changes do take effect, New York will see the largest reduction among all states, costing the State billions of dollars in lost Federal DSH payments when fully phased in. DOB continues to monitor Federal Medicaid DSH payment policies.

#### *Federal Health Care Policy*

In 2017, the Federal government attempted to end the Basic Health Program (EP in New York State), the ACA's Medicaid expansion, and to shift a larger share of growth in Medicaid costs to states by imposing per capita caps on Medicaid spending in lieu of Medicaid's current open-ended entitlement. If these bills had been enacted into law, these policies would have had a substantial adverse impact on the Financial Plan. Additionally, President Trump has taken unilateral Executive action to withhold Cost Sharing Reduction (CSR) payments, threatening low-cost health insurance coverage for income-eligible recipients when purchasing Qualified Health Plan or Essential Plan coverage through the New York State of Health, New York's official health plan marketplace. The Executive Budget Financial Plan assumes the continuation of these programs, but also establishes a statutory reserve to address the potential loss of Federal funding and authorizes program modifications, if necessary, to preserve vital services in the event of Federal reductions. While Federal funding for Consolidated Local Street & Highway Improvement Program (CHIP) has been reauthorized through FFY 2027, it remains possible that other Federal changes could affect the State's health care policies. DOB continues to monitor Federal health care policy.

#### *Excise Tax on High-Cost Employer-Sponsored Health Coverage ("Cadillac Tax")*

The Excise Tax on High-Cost Employer Sponsored Health Coverage is a 40 percent excise tax assessed on the portion of the premium for an employer-sponsored health insurance plan that exceeds a certain annual limit. The provision was initially included in the ACA to offset mandatory spending increases, but has since been altered by intervening laws that delay the implementation of the tax until 2022.

Regulations from the Internal Revenue Service have yet to be published and, at this point, it is unclear if or how the tax will be changed as a result of ongoing health care and tax reform discussions. DOB has no current estimate as to the potential impact to the Updated Financial Plan from this Federal excise tax.

#### *Medicaid Redesign Team (MRT) Medicaid Waiver*

The Federal CMS and the State have an agreement authorizing up to \$8 billion in new Federal funding over several years to transform New York's health care system and ensure access to quality care for all Medicaid beneficiaries. This funding, provided through an amendment to the State's Partnership Plan 1115 Medicaid waiver, is divided among the Interim Access Assurance Fund (IAAF), the Delivery System Reform Incentive Payment (DSRIP) Program, Health Homes, and various other Medicaid redesign initiatives.

Since January 1, 2014, in accordance with provisions of the ACA, the State has been eligible for enhanced FMAP funding associated with childless adults. The DOH continues to work with the CMS and to refine eligibility data systems to draw the appropriate amount of enhanced FMAP funding. This reconciliation may result in a modification of payments to the State and local governments.

#### *Federal Debt Limit*

On February 9, 2018, the Federal government enacted legislation suspending the Federal debt limit through March 1, 2019, forestalling the possibility of a default by the Federal government until at least that time. A Federal government default on payments, particularly for a prolonged period, could have a materially adverse effect on the national and the State economies, financial markets, and intergovernmental aid payments. The specific effects on the Updated Financial Plan of a future Federal government default are unknown and impossible to predict. However, data from past economic downturns suggest that the State's revenue loss could be substantial if the economy goes into a recession due to a Federal default.

A payment default by the United States may adversely affect the municipal bond market. Municipal issuers, as well as the State, could face higher borrowing costs and impaired market access. This would jeopardize planned capital investments in transportation infrastructure, higher education facilities, hazardous waste remediation, environmental projects, and economic development projects. Additionally, the market for and market value of outstanding municipal obligations, including municipal obligations of the State, could be adversely affected.

**State Government Employment.** As of March 31, 2017, the State had approximately 181,400 full time equivalent annual salaried employees funded from all funds including some part-time and temporary employees, independently-elected agencies and university systems, but excluding seasonal, legislative and judicial employees. The workforce is now substantially smaller than it was in 1990, when it peaked at approximately 230,000 positions. The State workforce is projected to total 181,416 positions at the end of FY 2018. The State workforce subject to direct Executive control is expected to total 118,481 full time equivalent positions at the end of FY 2018.

**Current Labor Negotiations.** The State has multi-year labor agreements in place with several unions, while negotiations are underway with other unions. The Civil Service Employees Association (CSEA) and DC-37 (Rent Regulation Unit) employees have a five-year labor contract that provides annual salary increases of 2 percent for FYs 2017 through 2021 and additional compensation changes, offset by benefit design changes within NYSHIP and reductions in overtime costs.

Employees represented by the Public Employees Federation (PEF) and the Graduate Student Employees Union (GSEU), as well as Management/Confidential employees, have a three-year collective bargaining agreement providing 2 percent annual salary increases in FYs 2017 through 2019.

Members of the Police Benevolent Association of the New York State Troopers (NYSTPBA) and the New York State Police Investigators Association (NYSPIA) have a multi-year collective bargaining agreement that provides a 2 percent general salary increase for each of FY 2015 and FY 2016, and a 1.5 percent general salary increase for each of FY 2017 and FY 2018. Negotiations on the next contract with NYSTPBA commenced in January and are anticipated with NYSPIA later in 2018.

The State is in negotiations with all other employee unions whose contracts concluded in FY 2016, including United University Professions (UUP), Council 82 and the New York State Correctional Officers and Police Benevolent Association (NYSCOPBA) following the March 2017 membership rejection of a tentative agreement on a five-year labor contract through FY 2021<sup>7</sup>. Negotiations also continue with the Police Benevolent Association of New York State (PBANYS), whose contract expired at the end of FY 2015.

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<sup>7</sup> The five-year agreement with NYSCOPBA that was not ratified would have provided for annual 2 percent general salary increases through FY 2021, and differentials typically received within the law enforcement community (e.g., Hazardous Duty Pay), the costs of which were offset by benefit design changes within NYSHIP and reductions in overtime costs.

The Judiciary has reached agreement with all 12 unions represented within its workforce. The contract periods vary from FY 2018 to FY 2020 for CSEA, FY 2012 to FY 2019 for Court Officers Benevolent Association of Nassau County (COBANC), FY 2012 to FY 2021 for the NYS Supreme Court Officers Association, the NYS Court Officers Association and the Court Clerks Association, and FY 2017 to FY 2019 for seven other unions. The Updated Financial Plan reflects no changes to the Judiciary cash estimates in the current year.

On June 27, 2016, CUNY Board of Trustees approved collective bargaining agreements between CUNY and unions representing almost all of the University's faculty and staff. For CUNY senior colleges, these agreements are estimated to cost approximately \$250 million for retroactive payments and \$150 million in ongoing annual costs. At the request of CUNY, the State advanced its planned payment of approximately \$250 million State support for CUNY senior colleges from October 2016 to June 2017, to make resources available for retroactive payments in the academic year ending June 2017.

**Pension Contributions.** The State makes annual contributions to the New York State and Local Retirement System (NYSLRS) for employees in ERS and PFRS. This section discusses contributions from the State, including the Judiciary, to the NYSLRS, which account for the majority of the State's pension costs<sup>8</sup>. All projections are based on projected market returns and numerous actuarial assumptions which, if unrealized, could change these projections materially.

During FY 2016, the NYSLRS updated its actuarial assumptions based on the results of the 2015 five-year experience study. In September 2015, the System announced that employer contribution rates would decrease for FY 2017 and the assumed rate of return would be lowered from 7.5 percent to 7 percent. The salary scale assumptions were also changed – for ERS the scale was reduced from 4.9 percent to 3.8 percent and for PFRS the scale was reduced from 6.0 percent to 4.5 percent.

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<sup>8</sup> The State's aggregate pension costs also include costs for State employees in the Teachers' Retirement System (TRS) for both SUNY and the State Education Department (SED), the Optional Retirement Program (ORP) for both SUNY and SED, and the New York State Voluntary Defined Contribution Plan (VDC).

### *FY 2019 Projections*

The preliminary FY 2019 ERS/PFRS pension liability of \$2.3 billion is impacted by the FY 2017 investment return of 11.5 percent, which was above the State Comptroller's assumed rate of return (7 percent). The estimate also reflects the impact of past investment performance and growth in the number of lower cost Tier 6 members. As a result, the average contribution rate for ERS will decrease from 15.3 percent of payroll to 14.9, while the average contribution rate for PFRS will decrease from 24.4 percent of payroll to 23.5 percent.<sup>9</sup>

The pension liability also reflects changes to military service credit provisions found in Section 1000 of the Retirement and Social Security Law (RSSL) enacted during the 2016 legislative session (Chapter 41 of the Laws of 2016). All veterans who are members of NYSLRS may, upon application, receive extra service credit for up to three years of military duty if such veterans (i) were honorably discharged, (ii) have achieved five years of credited service in a public retirement system, and (iii) agree to pay the employee share of such additional pension credit. Costs to the State for employees in ERS will be incurred at the time each member purchases credit, as documented by the Office of the State Comptroller at the end of each calendar year, while costs for employees in PFRS will be distributed across PFRS employers and billed on a two-year lag (e.g. FY 2017 costs will first be billed in FY 2019). Additionally, Section 25 of the RSSL requires the State to pay the ERS employer contributions associated with this credit on behalf of local governments. The State is also permitted to amortize the cost of past service credits newly incurred in a given fiscal year; however, the State does not anticipate choosing this option as there would be an interest rate of 7 percent applied to this amortization. The ERS cost to the State (including the costs covered for local ERS) was \$52 million in FY 2018 based on actual credit purchased through December 31, 2017. DOB currently estimates ERS costs of \$55 million in FY 2019; and \$39 million in FY 2020. Additionally, the State expects ongoing costs of \$7 million beginning in FY 2021 as new cohorts of veterans become eligible to purchase the credit.

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<sup>9</sup> Average contribution rates include the Group Life Insurance Program (GLIP), and thus differ from the system average normal rates reported in the pension amortization section.

### *Outyear Projections*

Pension estimates for FY 2020 and beyond, as projected by DOB, reflect growth in normal costs primarily based on the expectation that collective bargaining will result in continued salary increases and that investment returns will be below the actuarially assumed 7 percent rate of return in the near-to-mid-term.

**Pension Amortization.** Under legislation enacted in August 2010, the State and local governments may amortize (defer paying) a portion of their annual pension costs. Amortization temporarily reduces the pension costs that must be paid by public employers in a given fiscal year, but results in higher costs overall when repaid with interest.

The State and local governments are required to begin repayment on each new amortization in the fiscal year immediately following the year in which the amortization was initiated. The full amount of each amortization must be repaid within ten years at a fixed interest rate determined by OSC. Legislation included in the FY 2017 Enacted Budget authorized the State to prepay a portion of remaining principal associated with an amortization, and then pay a lower re-calculated interest installment in any subsequent year for which the principal has been prepaid. This option does not allow the State to delay the original ten-year repayment schedule, nor does it allow for the interest rate initially applied to the amortization amount to be modified.

The portion of an employer's annual pension costs that may be amortized is determined by comparing the employer's amortization-eligible contributions as a percentage of employee salaries (i.e., the normal rate) to a system-wide amortization threshold (i.e., the graded rate). Graded rates are determined for ERS and PFRS according to a formula enacted in the 2010 legislation and generally move toward their system's average normal rate by up to one percentage point per year. When an

employer's normal rate is greater than the system-wide graded rate, the employer can elect to amortize the difference. However, when the normal rate of an employer that previously amortized is less than the system-wide graded rate, the employer is required to pay the graded rate. Additional contributions are first used to pay off existing amortizations and are then deposited into a reserve account to offset future increases in contribution rates. In 2017, State law changed the graded rate computation to provide an employer specific graded rate based on the employer's own tier and plan demographics.

The State has not amortized its pension costs (including the Office of Court Administration (OCA)) since FY 2016. The amortization threshold is projected to equal the normal rate in upcoming fiscal years.

**Other Post-Employment Benefits (OPEB).** State employees become eligible for post-employment benefits (e.g., health insurance) if they reach retirement while working for the State and are enrolled in NYSHIP, or are enrolled in the NYSHIP opt-out program, at the time they reach retirement and have at least ten years of eligible service for NYSHIP benefits. The cost of providing post-retirement health insurance is shared between the State and the retired employee. Contributions are established by law and may be amended by the Legislature. The State pays its share of costs on a pay as you go (PAYGO) basis as required by law.

In accordance with the Governmental Accounting Standards Board (GASB) Statement 45, the State must perform an actuarial valuation every two years for purposes of calculating OPEB liabilities. As disclosed in Note 13 of the State's Basic Financial Statements for FY 2017, the State's Annual Required Contribution (ARC) represents the annual level of funding that, if set aside on an ongoing basis, is projected to cover normal costs each year and to amortize any unfunded liabilities of the plan over a period not to exceed 30 years. Amounts required but not actually set aside to pay for these benefits are accumulated, with interest, as part of the net OPEB obligation, after adjusting for amounts previously required.

As reported in the State's Basic Financial Statements for FY 2017, the unfunded actuarial accrued liability for FY 2017 is \$87.3 billion (\$72.8 billion for the State and \$14.4 billion for SUNY), an increase of \$9.4 billion from FY 2016 (attributable entirely to the State). The unfunded actuarial accrued liability for FY 2017 used an actuarial valuation of OPEB liabilities as of April 1, 2016 for the State and April 1, 2014 for SUNY. These valuations were determined using the Frozen Entry Age actuarial cost method, and are amortized over an open period of 30 years using the level percentage of projected payroll amortization method. A significant portion of the annual growth in the State's unfunded actuarial accrued liability has been driven by the reduction of the discount rate from 3.155 to 2.637 percent, calculated as the average STIP rate for the past 20 years at the time of valuation. The decline in the discount rate increases the present value of projected benefit obligation.

The actuarially determined annual OPEB cost for FY 2017 totaled \$4.2 billion (\$3.2 billion for the State and \$923 million for SUNY), a decline of \$7 million from FY 2016 (\$4 million for the State and \$3 million for SUNY). The actuarially-determined cost is calculated using the Frozen Entry Age actuarial cost method, allocating costs on a level basis over earnings. The actuarially determined cost was \$2.4 billion (\$1.795 billion for the State and \$639 million for SUNY) greater than the PAYGO required cash payments for retiree costs made by the State in FY 2017. This difference between the State's PAYGO costs, and the actuarially determined ARC under GASB Statement 45, reduced the State's net position at the end of FY 2017 by \$2.4 billion.

GASB has no authority to require the additional costs to be funded on the State's budgetary (cash) basis, and no additional funding is assumed for this purpose in the Updated Financial Plan. The State continues to fund these costs, along with all other employee health care expenses, on a PAYGO basis.

There is no provision in the Updated Financial Plan to fund the ARC for OPEB. If the State began making a contribution, the additional cost above the PAYGO amounts would be lowered. However, it is not expected that the State will alter its current PAYGO funding practice.

The FY 2018 Enacted Budget included legislation creating a Retiree Health Benefit Trust Fund (the "Trust Fund") that authorizes the State to reserve money for the payment of health benefits of retired employees and their dependents. Under the legislation, the State may deposit into the Trust Fund, in any given fiscal year, up to 0.5 percent of total then-current unfunded actuarial accrued OPEB liability (currently \$72.8 billion for the State and \$14.4 billion for SUNY). The Updated Financial Plan does not include any deposits to the Trust Fund.

The provisions of GASB Statement 75 (Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions), which amends GASB Statement 45 and GASB Statement 57, are expected to be incorporated into the State's FY 2019 financial statements. The FY 2019 statements are expected to be issued in July 2019. The GASB Statement alters the

actuarial methods used to calculate OPEB liabilities, standardizes asset smoothing and discount rates, and requires the unfunded net OPEB obligation to be reported by the State in its Statement of Net Position. Reporting the unfunded OPEB liability on the Statement of Net Position, rather than as a note disclosure, is expected to significantly increase the State's total long-term liabilities and show the State in a negative net position.

GASB Statement 75 is not expected to alter the Updated Financial Plan cash PAYGO projections for health insurance costs, as the DOB methodology for forecasting these costs over a multi-year period already incorporates factors and considerations consistent with the new actuarial methods and calculations required by the GASB Statement.

**Litigation.** Litigation against the State may include potential challenges to the constitutionality of various actions. The State may also be affected by adverse decisions that are the result of various lawsuits. Such adverse decisions may not meet the materiality threshold to warrant individual description but, in the aggregate, could still adversely affect the Updated Financial Plan.

**Climate Change Adaptation.** Climate change poses long-term threats to physical and biological systems. Potential hazards and risks related to climate change for the State include, among other things, rising sea levels, more severe coastal flooding and erosion hazards, and more intense storms. Storms in recent years, including Superstorm Sandy, Hurricane Irene, and Tropical Storm Lee, have demonstrated vulnerabilities in the State's infrastructure (including mass transit systems, power transmission and distribution systems, and other critical lifelines) to extreme weather events including coastal flooding caused by storm surges. Climate change risks, if they materialize, can adversely impact the Updated Financial Plan in current or future years. Significant long-term planning and investment by the Federal government, State, municipalities, and public utilities are expected to be needed for adapting existing infrastructure to climate change risks.

Participants in financial markets are acknowledging climate change risks. In June 2017, an industry-led Task Force on Climate-related Financial Disclosure convened by the Financial Stability Board (an international body which monitors the global financial system) published recommendations stating that climate risk affects most market sectors and that climate-related risk should be publicly disclosed to investors in annual financial filings.<sup>10</sup> In November 2017, Moody's Investors Service (Moody's) issued guidance to state and local governments that climate change is forecast to heighten exposure to economic losses, placing potential pressure on credit ratings. The Moody's report identified rising sea levels and the effect on coastal infrastructure as the primary climate risk for the northeastern US region, including the State. These risks are heightened by population concentration in coastal counties.

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<sup>10</sup> For further context to the June 2017 disclosure recommendations, the Financial Stability Board was asked by an international coalition of G20 Finance Ministers and Central Bank Governors to address concerns that undisclosed climate risk could destabilize global financial markets.

The State continues to recover from the damage sustained during three powerful storms that crippled entire regions. In August 2011, Hurricane Irene disrupted power and caused extensive flooding to various State counties. In September 2011, Tropical Storm Lee caused flooding in additional State counties and, in some cases, exacerbated the damage caused by Hurricane Irene two weeks earlier. On October 29, 2012, Superstorm Sandy struck the East Coast, causing widespread infrastructure damage and economic losses to the greater New York region. The frequency and intensity of these storms present economic and financial risks to the State. Reimbursement claims for costs of the immediate response, recovery, and future mitigation efforts continue, largely supported by Federal funds. In January 2013, the Federal government approved approximately \$60 billion in Federal disaster aid for general recovery, rebuilding, and mitigation activity nationwide. It is anticipated that the State, MTA, and State localities may receive approximately one-half of this amount for response, recovery, and mitigation costs. To date, a total of \$17 billion has been committed to repairing impacted homes and businesses, restoring community services, and mitigating future storm risks across the State. There can be no assurance that all anticipated Federal disaster aid described above will be provided to the State and its affected entities over the coming years.

**Cybersecurity.** New York State government, like many other large public and private entities, relies on a large and complex technology environment to conduct its operations. As a recipient and provider of personal, private, or sensitive information, the State and its public corporations and municipalities face multiple cyber threats including, but not limited to, hacking, viruses, malware and other attacks on computer and other sensitive digital networks and systems. Entities or individuals may attempt to gain unauthorized access to the State's digital systems for the purpose of misappropriating assets or information or causing operational disruption and damage. To mitigate the risk of business operations impact and/or damage from cyber incidents or cyber-attacks, the State invests in multiple forms of cybersecurity and operational controls. The State's Enterprise Information Security Office (EISO) within the State's Office of Information Technology Services maintains a cyber

command center hotline and related procedures for cyber incident reporting and response, distributes real-time advisories and alerts, provides managed security services, and implements statewide information security training and exercises for State and local government. While controls are routinely reviewed and tested, no assurances can be given that such security and operational control measures will be completely successful to guard against cyber threats and attacks. The results of any such attack could impact business operations and/or damage State digital networks and systems and the costs of remedying any such damage could be substantial.

The State has also adopted regulations designed to protect the financial services industry from cyberattacks. Banks, insurance companies and other covered entities regulated by DFS are, unless eligible for limited exemptions, required to (i) maintain a cyber security program, create written cybersecurity policies and perform risk assessments, (ii) designate a Chief Information Security Officer with responsibility to oversee the cybersecurity program, (iii) annually certify compliance with the cybersecurity regulations and (iv) report to DFS cybersecurity events that have a reasonable likelihood of materially harming any material part of the entity's normal operations or of which notice is required to any government body, self-regulatory agency, or supervisory body.

**Financial Condition of New York State Localities.** The State's localities rely in part on State aid to balance their budgets and meet their cash requirements. As such, unanticipated financial need among localities can adversely affect the State's Updated Financial Plan. Certain localities outside New York City, including cities and counties, have experienced financial problems and have requested and received additional State assistance during the last several State fiscal years. In 2013, the Financial Restructuring Board for Local Governments was created to provide assistance to distressed local governments. The Restructuring Board performs comprehensive reviews and provides grants and loans as a condition of implementing recommended efficiency initiatives.

**Bond Market.** Successful implementation of the Updated Financial Plan is dependent on the State's ability to market bonds successfully. The State finances much of its capital spending in the first instance from the General Fund or the STIP, which it then reimburses with proceeds from the sale of bonds. If the State cannot sell bonds at the levels (or on the timetable) expected in the capital plan, the State's overall cash position and capital funding plan may be adversely affected. The success of projected public sales will be subject to prevailing market conditions, among other things. Future developments in the financial markets, including possible changes in Federal tax law relating to the taxation of interest on municipal bonds, as well as future developments concerning the State and public discussion of such developments generally, may affect the market for outstanding State-supported and State-related debt. The TCJA adversely impacts the State and its public authorities by removing certain refunding opportunities for Federal tax exempt financing, including advance refundings for debt service savings when interest rates are favorable.

**Debt Reform Act Limit.** The Debt Reform Act of 2000 ("Debt Reform Act") restricts the issuance of State supported debt to capital purposes only, and for a maximum term of 30 years. The Debt Reform Act limits the amount of new State-supported debt to 4 percent of State personal income, and new State supported debt service costs to 5 percent of All Funds receipts. The restrictions apply to all new State-supported debt issued since April 1, 2000. DOB, as administrator of the Act, determined that the State was in compliance with the statutory caps in the most recent calculation period (FY 2017).

Current projections anticipate that debt outstanding and debt service will continue to remain below the limits imposed by the Debt Reform Act. Based on the most recent personal income and debt outstanding forecasts, the availability under the debt outstanding cap is expected to decline from \$3.9 billion in FY 2018 to about \$61 million in FY 2021. This includes the estimated impact of the bond-financed portion of increased capital commitment levels. In addition, the projected availability under the debt cap is dependent on expected growth for State personal income. Debt outstanding and debt service caps continue to include the existing SUNY Dormitory Facilities lease revenue bonds, which are backed by a general obligation pledge of SUNY. Bonds issued under the new SUNY Dormitory Facilities Revenue credit (which are not backed by a general obligation pledge of SUNY) are not included in the State's calculation of debt caps. Capital spending priorities and debt financing practices may be adjusted from time to time to preserve available debt capacity and stay within the statutory limits, as events warrant.

Changes in the State's available debt capacity reflect the impact of several factors. These include a reduction to the personal income forecast due almost entirely to income revisions by the Bureau of Economic Analysis (BEA). In recent quarters, BEA has made sizeable revisions to prior-year income levels, which in turn changes the base on which DOB calculates income going forward. The substantial reduction to personal income makes it necessary to make capital spending reductions in order to stay within the debt cap in future years. The spending reductions are expected to be managed within anticipated

underspending on capital projects throughout the plan period. Additional reductions to capital spending are assumed from the FY 2019 Statewide Efficiency Plan, which assumes a reduction on bond-financed capital spending starting in FY 2020. Debt capacity amounts continue to assume that SUNY Dormitory Facilities lease revenue bonds will be refunded into the new SUNY Dormitory Facilities Revenue Bond credit when the bonds become currently callable.

**Secured Hospital Program.** Under the Secured Hospital Program, the State entered into service contracts to enable certain financially distressed not-for-profit hospitals to have tax-exempt debt issued on their behalf to pay for upgrading their primary health care facilities. Revenues pledged to pay debt service on the bonds include hospital payments made under loan agreements between the Dormitory Authority of the State of New York (DASNY) and the hospitals and certain reserve funds held by the applicable trustees for the bonds. In the event of revenue shortfalls to pay debt service on the Secured Hospital bonds, the service contracts obligate the State to pay debt service, subject to annual appropriations by the Legislature, on bonds issued by DASNY through the Secured Hospital Program. As of December 31, 2017, there were approximately \$220 million of bonds outstanding for this program.

Three of the four remaining hospitals in the State's Secured Hospital Program are in poor financial condition. In relation to the Secured Hospital Program, the State's contingent contractual obligation was invoked to pay debt service for the first time in FY 2014. Since then the State has paid \$85 million for debt service costs. DASNY also estimates the State will pay debt service costs of approximately \$26 million in FY 2019, \$28 million annually in FY 2020 and FY 2021, \$22 million in FY 2022, and \$17 million in FY 2023. These amounts are based on the actual experience to date of the participants in the program, and would cover the debt service costs for one hospital whose debt service obligation was discharged in bankruptcy but is paying rent which offsets a portion of the debt service, a second hospital which closed in 2010, and a third hospital that is currently delinquent in its payments. The State has estimated additional exposure of up to \$9 million annually, if all hospitals in the Program failed to meet the terms of their agreements with DASNY and if available reserve funds were depleted.

**Supranational Entities Risk.** Certain of the Funds may invest in obligations issued or guaranteed by supranational entities (e.g., the World Bank, European Investment Bank, Inter-American Development Bank, and Asia Development Bank), which are often chartered to promote economic development. The government members, or "stockholders," usually make initial capital contributions to the supranational entity and, in many cases, are committed to make additional capital contributions if such entity is unable to repay its borrowings. There is no guarantee that one or more stockholders of the supranational entity will continue to make any necessary additional capital contributions. If such contributions are not made, the entity may be unable to pay interest or repay principal on its debt securities, certain of the Funds may have limited legal recourse in the event of default, and certain of the Funds may lose money on such investments.

**Tax Risks Associated with Municipal Securities.** As with any investment, you should consider how your investment in shares of each Municipal Bond Fund will be taxed. The tax information in the relevant Prospectus and this SAI is provided as general information. You should consult your own tax professional about the tax consequences of an investment in shares of each Municipal Bond Fund.

Unless your investment in shares is made through a tax-exempt entity or tax-deferred retirement account, such as an individual retirement account, you need to be aware of the possible tax consequences when each Municipal Bond Fund makes distributions or you sell Municipal Bond Fund shares.

In response to the national economic downturn in recent years, governmental cost burdens may be reallocated among federal, state and local governments. Also, as a result of the downturn, many state and local governments are experiencing significant reductions in revenues and are consequently experiencing difficulties meeting ongoing expenses. Certain of these state or local governments may have difficulty paying principal or interest on their outstanding debt and may experience ratings downgrades of their debt.

**U.S. Economic Trading Partners Risk.** The U.S. is a significant, and in some cases the most significant, trading partner of, or foreign investor in, the country or countries in which a Fund invests. As a result, economic conditions of such countries may be particularly affected by changes in the U.S. economy. The U.S. economy has recently experienced very difficult conditions and increased volatility, as well as significant adverse trends. While government intervention and recent legislation has been enacted to improve the U.S. economy, the recovery has been fragile and modest. A decrease in U.S. imports, new trade and financial regulations, changes in the U.S. dollar exchange rate or an economic slowdown in the U.S. may have a material adverse effect on a country's economic conditions and, as a result, securities to which a Fund has exposure.

The U.S. has developed increasingly strained relations with a number of foreign countries, including traditional allies, such as certain European countries, and historical adversaries, such as North Korea, Iran, China and Russia. If these relations were to worsen, it could adversely affect U.S. issuers as well as non-U.S. issuers that rely on the U.S. for trade. The U.S. has also experienced increased internal unrest and discord. If this trend were to continue, it may have an adverse impact on the U.S. economy and many of the issuers in which a Fund invests.

**U.S. Treasury Obligations Risk.** Certain of the Funds invest in various types of U.S. Treasury securities. U.S. Treasury obligations may differ from other securities in their interest rates, maturities, times of issuance and other characteristics. Similar to other issuers, changes to the financial condition or credit rating of the U.S. government may cause the value of U.S. Treasury obligations to decline. U.S. Treasury obligations typically offer lower interest rates than other obligations. Neither the U.S. government nor any of its agencies or instrumentalities guarantees the market value of the securities it issues.

The total public debt of the U.S. as a percent of GDP has grown rapidly since the beginning of the recent financial downturn. Although high debt levels do not necessarily indicate or cause economic problems, they may create systemic risks if sound debt management practices are not implemented. A high national debt level may increase market pressures to meet government funding needs, which may drive debt cost higher and cause a country to sell additional debt, thereby increasing refinancing risk. A high national debt also raises concerns that a government will not be able to make principal or interest payments when they are due. In the worst case, unsustainable debt levels can cause a decline in the value of the dollar (which may lead to inflation), and can prevent the U.S. government from implementing effective counter-cyclical fiscal policy in economic downturns.

On August 5, 2011, S&P Global Ratings downgraded U.S. Treasury securities from an AAA rating to AA+. A further downgrade of the ratings of U.S. government debt obligations, which are often used as a benchmark for other borrowing arrangements, could result in higher interest rates for individual and corporate borrowers, cause disruptions in the international bond markets and generally have a substantial negative effect on the U.S. economy. A downgrade of U.S. Treasury securities from another ratings agency or a further downgrade beyond AA+ rating by S&P Global Ratings may cause the value of a Fund's U.S. Treasury obligations to decline.

**Valuation Risk.** In certain circumstances, a Fund's securities may be valued using techniques other than market quotations. The value established for a security may be different from what would be produced through the use of another methodology or if the value had been priced using market quotations. Securities that are valued using methods other than market quotations, including "fair valued" securities, may be subject to greater fluctuation in their value from one day to the next than would be the case if market quotations were used. In addition, there is no assurance that a Fund could sell a security for the value established for it at any time, and it is possible that a Fund could incur a loss if a security is sold for less than its established value.

**Risk of Investing in Asia.** Investments in securities of issuers in certain Asian countries involve risks not typically associated with investments in securities of issuers in other regions. Such heightened risks include, among others, expropriation and/or nationalization of assets, confiscatory taxation, piracy of intellectual property, data and other security breaches (especially of data stored electronically), political instability, including authoritarian and/or military involvement in governmental decision-making, armed conflict and social instability as a result of religious, ethnic and/or socio-economic unrest. Certain Asian economies have experienced rapid rates of economic growth and industrialization in recent years, and there is no assurance that these rates of economic growth and industrialization will be maintained.

Certain Asian countries have democracies with relatively short histories, which may increase the risk of political instability. These countries have faced political and military unrest, and further unrest could present a risk to their local economies and securities markets. Indonesia and the Philippines have each experienced violence and terrorism, which has negatively impacted their economies. North Korea and South Korea each have substantial military capabilities, and historical tensions between the two countries present the risk of war; in the recent past, these tensions have escalated. Any outbreak of hostilities between the two countries could have a severe adverse effect on the South Korean economy and securities market. Political, religious, and border disputes persist in India. India has recently experienced and may continue to experience civil unrest and hostilities with certain of its neighboring countries. Increased political and social unrest in these geographic areas could adversely affect the performance of investments in this region.

Certain governments in this region administer prices on several basic goods, including fuel and electricity, within their respective countries. Certain governments may exercise substantial influence over many aspects of the private sector in their respective countries and may own or control many companies. Future government actions could have a significant effect on



the economic conditions in this region, which in turn could have a negative impact on private sector companies. There is also the possibility of diplomatic developments adversely affecting investments in the region.

Corruption and the perceived lack of a rule of law in dealings with international companies in certain Asian countries may discourage foreign investment and could negatively impact the long-term growth of certain economies in this region. In addition, certain countries in the region are experiencing high unemployment and corruption, and have fragile banking sectors.

Some economies in this region are dependent on a range of commodities, including oil, natural gas and coal. Accordingly, they are strongly affected by international commodity prices and particularly vulnerable to any weakening in global demand for these products. The market for securities in this region may also be directly influenced by the flow of international capital, and by the economic and market conditions of neighboring countries. Adverse economic conditions or developments in neighboring countries may increase investors' perception of the risk of investing in the region as a whole, which may adversely impact the market value of the securities issued by companies in the region.

**Risk of Investing in Australasia.** The economies of Australasia, which include Australia and New Zealand, are dependent on exports from the agricultural and mining sectors. This makes Australasian economies susceptible to fluctuations in the commodity markets. Australasian economies are also increasingly dependent on their growing service industries. Australia and New Zealand are located in a part of the world that has historically been prone to natural disasters, such as drought and flooding. Any such event in the future could have a significant adverse impact on the economies of Australia and New Zealand and affect the value of securities held by a relevant Fund. The economies of Australia and New Zealand are dependent on trading with certain key trading partners, including Asia, Europe and the U.S. The Australia–U.S. Free Trade Agreement has significantly expanded the trading relationship between the U.S. and Australia. Economic events in the U.S., Asia, or in other key trading countries can have a significant economic effect on the Australian economy. The economies of Australia and New Zealand are heavily dependent on the mining sector. Passage of new regulations limiting foreign ownership of companies in the mining sector or imposition of new taxes on profits of mining companies may dissuade foreign investment, and as a result, have a negative impact on companies to which a Fund has exposure.

**Risk of Investing in Central and South America.** The economies of certain Central and South American countries have experienced high interest rates, economic volatility, inflation, currency devaluations, government defaults, high unemployment rates and political instability which can adversely affect issuers in these countries. In addition, commodities (such as oil, gas and minerals) represent a significant percentage of the region's exports and many economies in this region are particularly sensitive to fluctuations in commodity prices. Adverse economic events in one country may have a significant adverse effect on other countries of this region.

The governments of certain countries in Central and South America may exercise substantial influence over many aspects of the private sector and may own or control many companies. Future government actions could have a significant effect on the economic conditions in such countries, which could have a negative impact on the securities in which the Fund invests. Diplomatic developments may also adversely affect investments in certain countries in Central and South America. Some countries in Central and South America may be affected by public corruption and crime, including organized crime.

Certain countries in Central and South America may be heavily dependent upon international trade and, consequently, have been and may continue to be negatively affected by trade barriers, exchange controls, managed adjustments in relative currency values and other protectionist measures imposed or negotiated by the countries with which they trade. These countries also have been and may continue to be adversely affected by economic conditions in the countries with which they trade. In addition, certain issuers located in countries in Central and South America in which the Fund invests may have dealings with countries subject to sanctions and/or embargoes imposed by the U.S. government and the United Nations and/or countries identified by the U.S. government as state sponsors of terrorism. An issuer may sustain damage to its reputation if it is identified as an issuer that has dealings with such countries. The Fund may be adversely affected if it invests in such issuers.

**Risk of Investing in Developed Countries.** Many countries with developed markets have recently experienced significant economic pressures. These countries generally tend to rely on the services sectors (e.g., the financial services sector) as the primary source of economic growth and may be susceptible to the risks of individual service sectors. For example, companies in the financial services sector are subject to governmental regulation and, recently, government intervention, which may adversely affect the scope of their activities, the prices they can charge and amount of capital they must maintain. Recent dislocations in the financial sector and perceived or actual governmental influence over certain financial companies may lead

to credit rating downgrades and, as a result, impact, among other things, revenue growth for such companies. If financial companies experience a prolonged decline in revenue growth, certain developed countries that rely heavily on financial companies as an economic driver may experience a correlative slowdown. Recently, new concerns have emerged with respect to the economic health of certain developed countries. These concerns primarily stem from heavy indebtedness of many developed countries and their perceived inability to continue to service high debt loads without simultaneously implementing stringent austerity measures. Such concerns have led to tremendous downward pressure on the economies of these countries. As a result, it is possible that interest rates on debt of certain developed countries may rise to levels that make it difficult for such countries to service such debt. Spending on health care and retirement pensions in most developed countries has risen dramatically over the last few years. Medical innovation, extended life expectancy and higher public expectations are likely to continue the increase in health care and pension costs. Any increase in health care and pension costs will likely have a negative impact on the economic growth of many developed countries. Certain developed countries rely on imports of certain key items, such as crude oil, natural gas, and other commodities. As a result, an increase in demand for, or price fluctuations of, certain commodities may negatively affect developed country economies. Developed market countries generally are dependent on the economies of certain key trading partners. Changes in any one economy may cause an adverse impact on several developed countries. In addition, heavy regulation of, among others, labor and product markets may have an adverse effect on certain issuers. Such regulations may negatively affect economic growth or cause prolonged periods of recession. Such risks, among others, may adversely affect the value of a Fund's investments.

**Risk of Investing in Emerging Markets.** Certain of the Funds may invest in securities of issuers domiciled in emerging market countries. Investments in emerging market countries may be subject to greater risks than investments in developed countries. These risks include: (i) less social, political, and economic stability; (ii) greater illiquidity and price volatility due to smaller or limited local capital markets for such securities, or low or non-existent trading volumes; (iii) custodians, clearinghouses, foreign exchanges and broker-dealers may be subject to less scrutiny and regulation by local authorities; (iv) local governments may decide to seize or confiscate securities held by foreign investors and/or local governments may decide to suspend or limit an issuer's ability to make dividend or interest payments; (v) local governments may limit or entirely restrict repatriation of invested capital, profits, and dividends; (vi) capital gains may be subject to local taxation, including on a retroactive basis; (vii) issuers facing restrictions on dollar or euro payments imposed by local governments may attempt to make dividend or interest payments to foreign investors in the local currency; (viii) investors may experience difficulty in enforcing legal claims related to the securities and/or local judges may favor the interests of the issuer over those of foreign investors; (ix) bankruptcy judgments may only be permitted to be paid in the local currency; (x) limited public information regarding the issuer may result in greater difficulty in determining market valuations of the securities; and (xi) lack of financial reporting on a regular basis, substandard disclosure and differences in accounting standards may make it difficult to ascertain the financial health of an issuer.

Emerging market securities markets are typically marked by a high concentration of market capitalization and trading volume in a small number of issuers representing a limited number of industries, as well as a high concentration of ownership of such securities by a limited number of investors. In addition, brokerage and other costs associated with transactions in emerging market securities can be higher, sometimes significantly, than similar costs incurred in securities markets in developed countries. Although some emerging markets have become more established and tend to issue securities of higher credit quality, the markets for securities in other emerging market countries are in the earliest stages of their development, and these countries issue securities across the credit spectrum. Even the markets for relatively widely traded securities in emerging market countries may not be able to absorb, without price disruptions, a significant increase in trading volume or trades of a size customarily undertaken by institutional investors in the securities markets of developed countries. The limited size of many of these securities markets can cause prices to be erratic for reasons apart from factors that affect the soundness and competitiveness of the securities issuers. For example, prices may be unduly influenced by traders who control large positions in these markets. Additionally, market making and arbitrage activities are generally less extensive in such markets, which may contribute to increased volatility and reduced liquidity of such markets. The limited liquidity of emerging market country securities may also affect a Fund's ability to accurately value its portfolio securities or to acquire or dispose of securities at the price and time it wishes to do so or in order to meet redemption requests.

Many emerging market countries suffer from uncertainty and corruption in their legal frameworks. Legislation may be difficult to interpret and laws may be too new to provide any precedential value. Laws regarding foreign investment and private property may be weak or non-existent. Sudden changes in governments may result in policies which are less favorable to investors such as policies designed to expropriate or nationalize "sovereign" assets. Certain emerging market countries in the past have expropriated large amounts of private property, in many cases with little or no compensation, and there can be no assurance that such expropriation will not occur in the future.

Investment in the securities markets of certain emerging market countries is restricted or controlled to varying degrees. These restrictions may limit a Fund's investment in certain emerging market countries and may increase the expenses of the Fund. Certain emerging market countries require governmental approval prior to investments by foreign persons or limit investment by foreign persons to only a specified percentage of an issuer's outstanding securities or a specific class of securities which may have less advantageous terms (including price) than securities of the company available for purchase by nationals.

Many emerging market countries lack the social, political, and economic stability characteristic of the U.S. Political instability among emerging market countries can be common and may be caused by an uneven distribution of wealth, social unrest, labor strikes, civil wars, and religious oppression. Economic instability in emerging market countries may take the form of: (i) high interest rates; (ii) high levels of inflation, including hyperinflation; (iii) high levels of unemployment or underemployment; (iv) changes in government economic and tax policies, including confiscatory taxation; and (v) imposition of trade barriers.

A Fund's income and, in some cases, capital gains from foreign securities will be subject to applicable taxation in certain of the emerging market countries in which it invests, and treaties between the U.S. and such countries may not be available in some cases to reduce the otherwise applicable tax rates.

Emerging markets also have different clearance and settlement procedures, and in certain of these emerging markets there have been times when settlements have been unable to keep pace with the volume of securities transactions, making it difficult to conduct such transactions.

In the past, certain governments in emerging market countries have become overly reliant on the international capital markets and other forms of foreign credit to finance large public spending programs, which in the past have caused huge budget deficits. Often, interest payments have become too overwhelming for a government to meet, representing a large percentage of total GDP. These foreign obligations have become the subject of political debate and served as fuel for political parties of the opposition, which pressure the government not to make payments to foreign creditors, but instead to use these funds for, among other things, social programs. Either due to an inability to pay or submission to political pressure, foreign governments have been forced to seek a restructuring of their loan and/or bond obligations, have declared a temporary suspension of interest payments or have defaulted. These events have adversely affected the values of securities issued by foreign governments and corporations domiciled in those countries and have negatively affected not only their cost of borrowing, but their ability to borrow in the future as well.

**Risk of Investing in Europe.** Investing in European countries may expose a Fund to the economic and political risks associated with Europe in general and the specific European countries in which it invests. The economies and markets of European countries are often closely connected and interdependent, and events in one European country can have an adverse impact on other European countries. A Fund makes investments in securities of issuers that are domiciled in, or have significant operations in, member states of the EMU of the EU, which requires member states to comply with restrictions on inflation rates, deficits, interest rates, debt levels and fiscal and monetary controls, each of which may significantly affect every country in Europe. Changes in imports or exports, changes in governmental or EU regulations on trade, changes in the exchange rate of the euro (the common currency of certain EU countries), the default or threat of default by an EU member state on its sovereign debt, and/or an economic recession in an EU member state may have a significant adverse effect on the economies of EU member states and their trading partners. Although certain European countries do not use the euro, many of these countries are obliged to meet the criteria for joining the euro zone. Consequently, these countries must comply with many of the restrictions noted above. The European financial markets have experienced volatility and adverse trends in recent years due to concerns about economic downturns, rising government debt levels and the possible default of government debt in several European countries, including, but not limited to, Cyprus, France, Greece, Ireland, Italy, Portugal, Spain and Ukraine. In order to prevent further economic deterioration, certain countries, without prior warning, can institute "capital controls." Countries may use these controls to restrict volatile movements of capital entering and exiting their country. Such controls may negatively affect a Fund's investments. A default or debt restructuring by any European country would adversely impact holders of that country's debt and sellers of credit default swaps linked to that country's creditworthiness, which may be located in countries other than those listed above. In addition, the credit ratings of certain European countries were recently downgraded. These downgrades may result in further deterioration of investor confidence. These events have adversely affected the value and exchange rate of the euro and may continue to significantly affect the economies of every country in Europe, including countries that do not use the euro and non-EU member states. Responses to the financial problems by European governments, central banks and others, including austerity measures and reforms,

may not produce the desired results, may result in social unrest and may limit future growth and economic recovery or have other unintended consequences. Further defaults or restructurings by governments and other entities of their debt could have additional adverse effects on economies, financial markets and asset valuations around the world. In addition, one or more countries may abandon the euro and/or withdraw from the EU. The impact of these actions, especially if they occur in a disorderly fashion, is not clear but could be significant and far-reaching and could adversely impact the value of a Fund's investments in the region. In a referendum held on June 23, 2016, the United Kingdom (the "U.K.") resolved to leave the EU. The referendum may introduce significant uncertainties and instability in the financial markets as the U.K. negotiates its exit from the EU. Although the precise timeframe for the U.K.'s withdrawal is uncertain, on March 29, 2017, the U.K. initiated the withdrawal process by sending a formal notice of the country's intention to withdraw from the EU. An agreement has been reached between the U.K. and the EU to continue negotiations on the U.K.'s exit from the EU. The outcome of negotiations remain uncertain. Secessionist movements, such as the Catalan movement in Spain or Scotland, as well as governmental or other responses to such movements, may also create instability and uncertainty in the region. The occurrence of terrorist incidents throughout Europe also could impact financial markets. The impact of these events is not clear but could be significant and far-reaching and could adversely affect the value and liquidity of a Fund's investments.

**Risk of Investing in the Middle East.** Many Middle Eastern countries have little or no democratic tradition, and the political and legal systems in such countries may have an adverse impact on a Fund. Many economies in the Middle East are highly reliant on income from the sale of oil or trade with countries involved in the sale of oil, and their economies are therefore vulnerable to changes in the market for oil and foreign currency values. As global demand for oil fluctuates, many Middle Eastern economies may be significantly impacted.

In addition, many Middle Eastern governments have exercised and continue to exercise substantial influence over many aspects of the private sector. In certain cases, a Middle Eastern country's government may own or control many companies, including some of the largest companies in the country. Accordingly, governmental actions in the future could have a significant effect on economic conditions in Middle Eastern countries. This could affect private sector companies and a Fund, as well as the value of securities in a Fund's portfolio.

Certain Middle Eastern markets are in the earliest stages of development. As a result, there may be a high concentration of market capitalization and trading volume in a small number of issuers representing a limited number of industries, as well as a high concentration of investors and financial intermediaries. Brokers in Middle Eastern countries typically are fewer in number and less capitalized than brokers in the U.S.

The legal systems in certain Middle Eastern countries also may have an adverse impact on a Fund. For example, the potential liability of a shareholder in a U.S. corporation with respect to acts of the corporation generally is limited to the amount of the shareholder's investment. However, the notion of limited liability is less clear in certain Middle Eastern countries. A Fund therefore may be liable in certain Middle Eastern countries for the acts of a corporation in which it invests for an amount greater than its actual investment in that corporation. Similarly, the rights of investors in Middle Eastern issuers may be more limited than those of shareholders of a U.S. corporation. It may be difficult or impossible to obtain or enforce a legal judgment in a Middle Eastern country. Some Middle Eastern countries prohibit or impose substantial restrictions on investments in their capital markets, particularly their equity markets, by foreign entities such as a Fund. For example, certain countries may require governmental approval prior to investment by foreign persons or limit the amount of investment by foreign persons in a particular issuer. Certain Middle Eastern countries may also limit investment by foreign persons to only a specific class of securities of an issuer that may have less advantageous terms (including price) than securities of the issuer available for purchase by nationals of the relevant Middle Eastern country.

The manner in which foreign investors may invest in companies in certain Middle Eastern countries, as well as limitations on those investments, may have an adverse impact on the operations of a Fund. For example, in certain of these countries, a Fund may be required to invest initially through a local broker or other entity and then have the shares that were purchased re-registered in the name of a Fund. Re-registration in some instances may not be possible on a timely basis. This may result in a delay during which a Fund may be denied certain of its rights as an investor, including rights as to dividends or to be made aware of certain corporate actions. There also may be instances where a Fund places a purchase order but is subsequently informed, at the time of re-registration, that the permissible allocation of the investment to foreign investors has already been filled and, consequently, a Fund may not be able to invest in the relevant company.

Substantial limitations may exist in certain Middle Eastern countries with respect to a Fund's ability to repatriate investment income or capital gains. A Fund could be adversely affected by delays in, or a refusal to grant, any required governmental approval for repatriation of capital, as well as by the application to a Fund of any restrictions on investment.

Certain Middle Eastern countries may be heavily dependent upon international trade and, consequently, have been and may continue to be negatively affected by trade barriers, exchange controls, managed adjustments in relative currency values and other protectionist measures imposed or negotiated by the countries with which they trade. These countries also have been and may continue to be adversely impacted by economic conditions in the countries with which they trade. In addition, certain issuers located in Middle Eastern countries in which a Fund invests may operate in, or have dealings with, countries subject to sanctions and/or embargoes imposed by the U.S. government and the United Nations, and/or countries identified by the U.S. government as state sponsors of terrorism. As a result, an issuer may sustain damage to its reputation if it is identified as an issuer which operates in, or has dealings with, such countries. A Fund, as an investor in such issuers, will be indirectly subject to those risks.

Certain Middle Eastern countries have strained relations with other Middle Eastern countries due to territorial disputes, historical animosities, defense concerns or other reasons, which may adversely affect the economies of these Middle Eastern countries. Certain Middle Eastern countries experience significant unemployment, as well as widespread underemployment. There has also been a recent increase in recruitment efforts and an aggressive push for territorial control by terrorist groups in the region, which has led to an outbreak of warfare and hostilities. Warfare in Syria has spread to surrounding areas, including many portions of Iraq and Turkey. Such hostilities may continue into the future or may escalate at any time due to ethnic, racial, political, religious or ideological tensions between groups in the region or foreign intervention or lack of intervention, among other factors.

**Risk of Investing in North America.** A decrease in imports or exports, changes in trade regulations or an economic recession in any North American country can have a significant economic effect on the entire North American region and on some or all of the North American countries in which a Fund invests.

The U.S. is Canada's and Mexico's largest trading and investment partner. The Canadian and Mexican economies are significantly affected by developments in the U.S. economy. Since the implementation of the North American Free Trade Agreement ("NAFTA") in 1994 among Canada, the U.S. and Mexico, total merchandise trade among the three countries has increased. However, political developments in the U.S., including possible termination of NAFTA, may have implications for the trade arrangements among the U.S., Mexico and Canada, which could negatively affect the value of securities held by a Fund. Policy and legislative changes in one country may have a significant effect on North American markets generally, as well as on the value of certain securities held by a Fund.

**Risk of Investing in the Automotive Sub-Industry.** The automotive sub-industry can be highly cyclical, and companies in the automotive sub-industry may suffer periodic losses. The automotive sub-industry is also highly competitive and there may be, at times, excess capacity in the global and domestic automotive sub-industry. Over the last several decades, the U.S. automotive sub-industry has experienced periodic downturns; certain automotive companies required stimulus from the U.S. government, while others formed strategic industry alliances in order to weather the substantially difficult market conditions. In general, the automotive sub-industry is susceptible to labor disputes, product defect litigation, patent expiration, increased pension liabilities, rise in material or component prices and changing consumer tastes.

**Risk of Investing in the Basic Materials Industry.** Issuers in the basic materials industry could be adversely affected by commodity price volatility, exchange rates, import controls and increased competition. Companies in the basic materials industry may be subject to swift fluctuations in supply and demand. Fluctuations may be caused by events relating to political and economic developments, the environmental impact of basic materials operations, and the success of exploration projects. Production of industrial materials often exceeds demand as a result of over-building or economic downturns, leading to poor investment returns. Issuers in the basic materials industry are at risk for environmental damage and product liability claims and may be adversely affected by depletion of resources, delays in technical progress, labor relations, tax and government regulations related to changes to, among other things, energy and environmental policies.

**Risk of Investing in the Capital Goods Industry.** Companies in the capital goods industry may be affected by fluctuations in the business cycle and by other factors affecting manufacturing demands. Companies in the capital goods industry depend heavily on corporate spending. Companies in the capital goods industry may perform well during times of economic expansion, and as economic conditions worsen, the demand for capital goods may decrease due to weakening demand, worsening business cash flows, tighter credit controls and deteriorating profitability. During times of economic volatility,

corporate spending may fall and adversely affect the capital goods industry. This industry may also be affected by changes in interest rates, corporate tax rates and other government policies. Many capital goods are sold internationally and such companies are subject to market conditions in other countries and regions.

**Risk of Investing in the Consumer Cyclical Industry.** A Fund may invest in consumer cyclical companies, which rely heavily on business cycles and economic conditions. Consumer cyclical companies include automotive manufacturers, retail companies, and housing-related companies. The consumer cyclical industry can be significantly affected by several factors, including, without limitation, the performance of domestic and international economies, exchange rates, changing consumer tastes and trends, marketing campaigns, cyclical revenue generation, consumer confidence, commodity price volatility, labor relations, interest rates, import and export controls, intense competition, technological developments and government regulation.

**Risk of Investing in the Consumer Goods Industry.** Companies in the consumer goods industry include companies involved in the design, production or distribution of goods for consumers, including food, household, home, personal and office products, clothing and textiles. The success of the consumer goods industry is tied closely to the performance of the domestic and international economy, interest rates, exchange rates, competition, consumer confidence and consumer disposable income. The consumer goods industry may be affected by trends, marketing campaigns and other factors affecting consumer demand. Governmental regulation affecting the use of various food additives may affect the profitability of certain companies in the consumer goods industry. Moreover, international events may affect food and beverage companies that derive a substantial portion of their net income from foreign countries. In addition, tobacco companies may be adversely affected by new laws, regulations and litigation. Many consumer goods may be marketed globally, and consumer goods companies may be affected by the demand and market conditions in other countries and regions. Companies in the consumer goods industry may be subject to severe competition, which may also have an adverse impact on their profitability. Changes in demographics and consumer preferences may affect the success of consumer products.

**Risk of Investing in the Consumer Services Industry.** The success of consumer product manufacturers and retailers (including food and drug retailers, general retailers, media, and travel and leisure) is tied closely to the performance of the domestic and international economy, interest rates, exchange rates, competition and consumer confidence. The consumer services industry depends heavily on disposable household income and consumer spending. Companies in the consumer services industry may be subject to severe competition, which may also have an adverse impact on their profitability. Changes in demographics and consumer preferences may affect the success of consumer service providers.

**Risk of Investing in the Consumer Staples Sector.** Companies in the consumer staples sector may be adversely affected by changes in the global economy, consumer spending, competition, demographics and consumer preferences, and production spending. Companies in the consumer staples sector may also be affected by changes in global economic, environmental and political events, economic conditions, the depletion of resources, and government regulation. For instance, government regulations may affect the permissibility of using various food additives and production methods of companies that make food products, which could affect company profitability. In addition, tobacco companies may be adversely affected by the adoption of proposed legislation and/or by litigation. Companies in the consumer staples sector also may be subject to risks pertaining to the supply of, demand for and prices of raw materials. The prices of raw materials fluctuate in response to a number of factors, including, without limitation, changes in government agricultural support programs, exchange rates, import and export controls, changes in international agricultural and trading policies, and seasonal and weather conditions. Companies in the consumer staples sector may be subject to severe competition, which may also have an adverse impact on their profitability.

**Risk of Investing in the Energy Sector.** Companies in the energy sector are strongly affected by the levels and volatility of global energy prices, energy supply and demand, government regulations and policies, energy production and conservation efforts, technological change, development of alternative energy sources, and other factors that they cannot control. These companies may also lack resources and have limited business lines. Energy companies may have relatively high levels of debt and may be more likely to restructure their businesses if there are downturns in certain energy markets or in the global economy. If an energy company in a Fund's portfolio becomes distressed, a Fund could lose all or a substantial portion of its investment.

The energy sector is cyclical and is highly dependent on commodity prices; prices and supplies of energy may fluctuate significantly over short and long periods of time due to, among other things, national and international political changes, Organization of Petroleum Exporting Countries ("OPEC") policies, changes in relationships among OPEC members and

between OPEC and oil-importing nations, the regulatory environment, taxation policies, and the economy of the key energy-consuming countries. Commodity prices have recently been subject to increased volatility and declines, which may negatively affect companies in which a Fund invests.

Companies in the energy sector may be adversely affected by terrorism, natural disasters or other catastrophes. Companies in the energy sector are at risk of civil liability from accidents resulting in injury, loss of life or property, pollution or other environmental damage claims. Disruptions in the oil industry or shifts in fuel consumption may significantly impact companies in this sector. Significant oil and gas deposits are located in emerging markets countries where corruption and security may raise significant risks, in addition to the other risks of investing in emerging markets. Additionally, the Middle East, where many companies in the energy sector may operate, has historically and recently experienced widespread social unrest.

Companies in the energy sector may also be adversely affected by changes in exchange rates, interest rates, economic conditions, tax treatment, government regulation and intervention, negative perception, efforts at energy conservation and world events in the regions in which the companies operate (e.g., expropriation, nationalization, confiscation of assets and property or the imposition of restrictions on foreign investments and repatriation of capital, military coups, social unrest, violence or labor unrest). Because a significant portion of revenues of companies in this sector is derived from a relatively small number of customers that are largely composed of governmental entities and utilities, governmental budget constraints may have a significant impact on the stock prices of companies in this sector. The energy sector is highly regulated. Entities operating in the energy sector are subject to significant regulation of nearly every aspect of their operations by federal, state and local governmental agencies. Such regulation can change rapidly or over time in both scope and intensity. Stricter laws, regulations or enforcement policies could be enacted in the future which would likely increase compliance costs and may materially adversely affect the financial performance of companies in the energy sector.

**Risk of Investing in the Financials Sector.** Companies in the financials sector include regional and money center banks, securities brokerage firms, asset management companies, savings banks and thrift institutions, specialty finance companies (e.g., credit card, mortgage providers), insurance and insurance brokerage firms, consumer finance firms, financial conglomerates and foreign banking and financial companies.

Most financial companies are subject to extensive governmental regulation, which limits their activities and may affect their ability to earn a profit from a given line of business. Government regulation may change frequently and may have significant adverse consequences for companies in the financials sector, including effects not intended by the regulation. Direct governmental intervention in the operations of financial companies and financial markets may materially and adversely affect the companies in which a Fund invests, including legislation in many countries that may increase government regulation, repatriation and other intervention. The impact of governmental intervention and legislative changes on any individual financial company or on the financials sector as a whole cannot be predicted. The valuation of financial companies has been and continues to be subject to unprecedented volatility and may be influenced by unpredictable factors, including interest rate risk and sovereign debt default. Certain financial businesses are subject to intense competitive pressures, including market share and price competition. Financial companies in foreign countries are subject to market specific and general regulatory and interest rate concerns. In particular, government regulation in certain foreign countries may include taxes and controls on interest rates, credit availability, minimum capital requirements, bans on short sales, limits on prices and restrictions on currency transfers. In addition, companies in the financials sector may be the targets of hacking and potential theft of proprietary or customer information or disruptions in service, which could have a material adverse effect on their businesses.

The profitability of banks, savings and loan associations and financial companies is largely dependent on the availability and cost of capital funds and can fluctuate significantly when interest rates change; for instance, when interest rates go up, the value of securities issued by many types of companies in the financials sector generally goes down. In other words, financial companies may be adversely affected in certain market cycles, including, without limitation, during periods of rising interest rates, which may restrict the availability and increase the cost of capital, and during periods of declining economic conditions, which may cause, among other things, credit losses due to financial difficulties of borrowers.

In addition, general economic conditions are important to the operations of these companies, and financial difficulties of borrowers may have an adverse effect on the profitability of financial companies. Financial companies can be highly dependent upon access to capital markets, and any impediments to such access, such as adverse overall economic conditions or a negative perception in the capital markets of a financial company's financial condition or prospects, could

adversely affect its business. Deterioration of credit markets can have an adverse impact on a broad range of financial markets, causing certain financial companies to incur large losses. In these conditions, companies in the financials sector may experience significant declines in the valuation of their assets, take actions to raise capital and even cease operations. Some financial companies may also be required to accept or borrow significant amounts of capital from government sources and may face future government-imposed restrictions on their businesses or increased government intervention. In addition, there is no guarantee that governments will provide any such relief in the future. These actions may cause the securities of many companies in the financials sector to decline in value.

**Risk of Investing in the Healthcare Sector.** Companies in the healthcare sector are often issuers whose profitability may be affected by extensive government regulation, restrictions on government reimbursement for medical expenses, rising or falling 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. Many healthcare companies are heavily dependent on patent protection and the actual or perceived safety and efficiency of their products.

Patents have a limited duration, and, upon expiration, other companies may market substantially similar “generic” products that are typically sold at a lower price than the patented product, which can cause the original developer of the product to lose market share and/or reduce the price charged for the product, resulting in lower profits for the original developer. As a result, the expiration of patents may adversely affect the profitability of these companies.

In addition, because the products and services of many companies in the healthcare sector affect the health and well-being of many individuals, these companies are especially susceptible 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, which can result in increased development costs, delayed cost recovery and loss of competitive advantage to the extent that rival companies have developed competing products or procedures, adversely affecting the company’s revenues and profitability. In other words, delays in the regulatory approval process may diminish the opportunity for a company to profit from a new product or to bring a new product to market, which could have a material adverse effect on a company’s business. Healthcare companies may also be strongly affected by scientific biotechnology or technological developments, and their products may quickly become obsolete. Also, many healthcare companies offer products and services that are subject to governmental regulation and may be adversely affected by changes in governmental policies or laws. Changes in governmental policies or laws may span a wide range of topics, including cost control, national health insurance, incentives for compensation in the provision of healthcare services, tax incentives and penalties related to healthcare insurance premiums, and promotion of prepaid healthcare plans. In addition, a number of legislative proposals concerning healthcare have been considered by the U.S. Congress in recent years. It is unclear what proposals will ultimately be enacted, if any, and what effect they may have on companies in the healthcare sector.

Additionally, the expansion of facilities by healthcare-related providers may be subject to “determinations of need” by certain government authorities. This process not only generally increases the time and costs involved in these expansions, but also makes expansion plans uncertain, limiting the revenue and profitability growth potential of healthcare-related facilities operators and negatively affecting the prices of their securities. Moreover, in recent years, both local and national governmental budgets have come under pressure to reduce spending and control healthcare costs, which could both adversely affect regulatory processes and public funding available for healthcare products, services and facilities.

**Risk of Investing in the Industrials Sector.** The value of securities issued by companies in the industrials sector may be adversely affected by supply of and demand for both their specific products or services and for industrials sector products in general. The products of manufacturing companies may face obsolescence due to rapid technological developments and frequent new product introduction. Government regulations, world events and economic conditions may affect the performance of companies in the industrials sector. The industrials sector may also be adversely affected by changes or trends in commodity prices, which may be influenced by unpredictable factors. For example, commodity price declines and unit volume reductions resulting from an over-supply of materials used in the industrials sector can adversely affect the sector. Furthermore, companies in the industrials sector may be subject to liability for environmental damage, product liability claims, depletion of resources, and mandated expenditures for safety and pollution control.



**Risk of Investing in the Insurance Industry.** The insurance industry is subject to extensive government regulation in some countries and can be significantly affected by changes in interest rates, general economic conditions, price and marketing competition, the imposition of premium rate caps or other changes in government regulation or tax law. Different segments of the insurance industry can be significantly affected by changes in mortality and morbidity rates, environmental clean-up costs and catastrophic events such as earthquakes, hurricanes and terrorist acts.

**Risk of Investing in the Media Sub-Industry.** Companies in the media sub-industry may encounter distressed cash flows due to the need to commit substantial capital to meet increasing competition, particularly in formulating new products and services using new technology. Media companies are subject to risks that include cyclicalities of revenues and earnings, a potential decrease in the discretionary income of targeted individuals, changing consumer tastes and interests, competition in the industry and the potential for increased state and federal regulation. Advertising spending is an important source of revenue for media companies. During economic downturns, advertising spending typically decreases and, as a result, media companies tend to generate less revenue.

**Risk of Investing in Municipal Securities in the Utilities Sector.** Certain municipal securities are issued by public bodies, including state and municipal utility authorities, to, among other things, finance the operation or expansion of utility entities. Various future economic and other conditions may adversely affect utility entities, including inflation, increases in financing requirements, increases in raw material costs and other operating costs, changes in demand for services and the effects of environmental and other governmental regulations. Municipal securities that are issued to finance a particular utility project often depend on revenues from that project to make principal and interest payments. Adverse conditions and developments affecting a particular utility project can result in lower revenues to the issuer of the municipal securities. Certain utilities are subject to specific risks. Gas utilities are subject to risks of supply conditions and increased competition from other providers of utility services. In addition, gas utilities are affected by gas prices, which may be magnified to the extent that a gas utility enters into long-term contracts for the purchase or sale of gas at a fixed price, since such prices may change significantly and to the disadvantage of the gas utility.

**Risk of Investing in the Oil and Gas Industry.** Companies in the oil and gas industry are strongly affected by the levels and volatility of global energy prices, oil and gas supply and demand, government regulations and policies, oil and gas production and conservation efforts and technological change. The oil and gas industry is cyclical and from time to time may experience a shortage of drilling rigs, equipment, supplies or qualified personnel, or due to significant demand, such services may not be available on commercially reasonable terms. Prices and supplies of oil and gas may fluctuate significantly over short and long periods of time due to national and international political changes, OPEC policies, changes in relationships among OPEC members and between OPEC and oil-importing nations, the regulatory environment, taxation policies, and the economies of key energy-consuming countries. Disruptions in the oil sub-industry or shifts in energy consumption may significantly impact companies in this industry. For instance, significant oil and gas deposits are located in emerging market countries where corruption and security may raise significant risks, in addition to the other risks of investing in emerging markets. In addition, the Middle East, where many companies in the oil and gas industry may operate, has recently experienced widespread social unrest. Oil and gas companies operate in a highly competitive industry, with intense price competition. A significant portion of their revenues may depend on a relatively small number of customers, including governmental entities and utilities.

**Risk of Investing in the Pharmaceuticals Industry.** Companies in the pharmaceuticals industry are subject to competitive forces that may make it difficult to raise prices and, in fact, may result in price discounting. The profitability of some companies in the pharmaceuticals industry may be dependent on a relatively limited number of products. In addition, their products can become obsolete due to industry innovation, changes in technologies or other market developments. Many new products in the pharmaceuticals industry are subject to government approvals, regulation and reimbursement rates. The process of obtaining government approvals may be long and costly. Many companies in the pharmaceuticals industry are heavily dependent on patents and intellectual property rights. The loss or impairment of these rights may adversely affect the profitability of these companies. Companies in the pharmaceutical industry may be subject to extensive litigation based on product liability and similar claims.

**Risk of Investing in the Real Estate Industry.** Companies in the real estate industry include companies that invest in real estate, such as real estate investment trusts (“REITs”), real estate holding companies or real estate development companies (collectively, “Real Estate Companies”). Investing in Real Estate Companies exposes investors to the risks of owning real estate directly, as well as to risks that relate specifically to the way in which Real Estate Companies are organized and

operated. The real estate industry is highly sensitive to general and local economic conditions and developments, and characterized by intense competition and periodic overbuilding. Investing in Real Estate Companies involves various risks. Some risks that are specific to Real Estate Companies are discussed in greater detail below.

*Interest Rate Risk.* Rising interest rates could result in higher costs of capital for Real Estate Companies, which could negatively impact a Real Estate Company's ability to meet its payment obligations. Declining interest rates could result in increased prepayment on loans and require redeployment of capital in less desirable investments.

*Leverage Risk.* Real Estate Companies may use leverage (and some may be highly leveraged), which increases investment risk and could adversely affect a Real Estate Company's operations and market value in periods of rising interest rates. Real Estate Companies are also exposed to the risks normally associated with debt financing. Financial covenants related to a Real Estate Company's leverage may affect the ability of the Real Estate Company to operate effectively. In addition, real property may be subject to the quality of credit extended and defaults by borrowers and tenants. If the properties do not generate sufficient income to meet operating expenses, including, where applicable, debt service, ground lease payments, tenant improvements, third-party leasing commissions and other capital expenditures, the income and ability of a Real Estate Company to make payments of any interest and principal on its debt securities will be adversely affected.

*Loan Foreclosure Risk.* Real Estate Companies may foreclose on loans that the Real Estate Company originated or acquired. Foreclosure may generate negative publicity for the underlying property that affects its market value. In addition to length and expense, foreclosure proceedings may not fully uphold the validity of all of the terms of the applicable loan. Claims and defenses asserted by borrowers or other lenders may interfere with the enforcement of rights by a Real Estate Company. Parallel proceedings, such as bankruptcy, may also delay resolution and limit the amount of recovery on a foreclosed loan by a Real Estate Company even where the property underlying the loan is liquidated.

*Property Risk.* Real Estate Companies may be subject to risks relating to functional obsolescence or reduced desirability of properties; extended vacancies due to economic conditions and tenant bankruptcies; catastrophic events such as earthquakes, hurricanes and terrorist acts; and casualty or condemnation losses. Real estate income and values also may be greatly affected by demographic trends, such as population shifts or changing tastes and values, or increasing vacancies or declining rents resulting from legal, cultural, technological, global or local economic developments.

*Distressed Investment Risk.* Real Estate Companies may invest in distressed, defaulted or out-of-favor bank loans. Identification and implementation by a Real Estate Company of loan modification and restructure programs involves a high degree of uncertainty. Even successful implementation may still require adverse compromises and may not prevent bankruptcy. Real Estate Companies may also invest in other debt instruments that may become non-performing, including the securities of companies with higher credit and market risk due to financial or operational difficulties. Higher risk securities may be less liquid and more volatile than the securities of companies not in distress.

*Underlying Investment Risk.* Real Estate Companies make investments in a variety of debt and equity instruments with varying risk profiles. For instance, Real Estate Companies may invest in debt instruments secured by commercial property that have higher risks of delinquency and foreclosure than loans on single family homes due to a variety of factors associated with commercial property, including the tie between income available to service debt and productive use of the property. Real Estate Companies may also invest in debt instruments and preferred equity that are junior in an issuer's capital structure and that involve privately negotiated structures. Subordinated debt investments, such as B-Notes and mezzanine loans, involve a greater credit risk of default due to the need to service more senior debt of the issuer. Similarly, preferred equity investments involve a greater risk of loss than conventional debt financing due to their non-collateralized nature and subordinated ranking. Investments in commercial mortgage-backed securities may also be junior in priority in the event of bankruptcy or similar proceedings. Investments in senior loans may be effectively subordinated if the senior loan is pledged as collateral. The ability of a holder of junior claims to proceed against a defaulting issuer is circumscribed by the terms of the particular contractual arrangement, which vary considerably from transaction to transaction.

*Management Risk.* Real Estate Companies are dependent upon management skills and may have limited financial resources. Real Estate Companies are generally not diversified and may be subject to heavy cash flow dependency, default by borrowers and voluntary liquidation. In addition, transactions between Real Estate Companies and their affiliates may be subject to conflicts of interest, which may adversely affect a Real Estate Company's shareholders. A Real Estate Company may also have joint venture investments in certain of its properties, and, consequently, its ability to control decisions relating to such properties may be limited.

**Liquidity Risk.** Investing in Real Estate Companies may involve risks similar to those associated with investing in small-capitalization companies. Real Estate Company securities, like the securities of small-capitalization companies, may be more volatile than, and perform differently from, shares of large-capitalization companies. There may be less trading in Real Estate Company shares, which means that buy and sell transactions in those shares could have a magnified impact on share price, resulting in abrupt or erratic price fluctuations. In addition, real estate is relatively illiquid, and, therefore, a Real Estate Company may have a limited ability to vary or liquidate properties in response to changes in economic or other conditions.

**Concentration Risk.** Real Estate Companies may own a limited number of properties and concentrate their investments in a particular geographic region or property type. Economic downturns affecting a particular region, industry or property type may lead to a high volume of defaults within a short period.

**U.S. Tax Risk.** Certain U.S. Real Estate Companies are subject to special U.S. federal tax requirements. A REIT that fails to comply with such tax requirements may be subject to U.S. federal income taxation, which may affect the value of the REIT and the characterization of the REIT's distributions. The U.S. federal tax requirement that a REIT distribute substantially all of its net income to its shareholders may result in a REIT having insufficient capital for future expenditures. A REIT that successfully maintains its qualification may still become subject to U.S. federal, state and local taxes, including excise, penalty, franchise, payroll, mortgage recording, and transfer taxes, both directly and indirectly through its subsidiaries.

**Regulatory Risk.** Real estate income and values may be adversely affected by such factors as applicable domestic and foreign laws (including tax laws). Government actions, such as tax increases, zoning law changes or environmental regulations, also may have a major impact on real estate income and values. In addition, quarterly compliance with regulations limiting the proportion of asset types held by a U.S. REIT may force certain Real Estate Companies to liquidate or restructure otherwise attractive investments. Some countries may not recognize REITs or comparable structures as a viable form of real estate funds.

**Risk of Investing in the Retail Industry.** The retail industry may be affected by changes in domestic and international economies, consumer confidence, disposable household income and spending, and consumer tastes and preferences. Companies in the retail industry face intense competition, which may have an adverse effect on their profitability. The success of companies in the retail industry may be strongly affected by social trends, marketing campaigns and public perceptions. Companies in the retail industry may be dependent on outside financing, which may be difficult to obtain. Many of these companies are dependent on third party suppliers and distribution systems. Retail companies may be unable to protect their intellectual property rights or may be liable for infringing the intellectual property rights of others.

**Risk of Investing in the Technology Sector.** Technology companies are characterized by periodic new product introductions, innovations and evolving industry standards, and, as a result, face intense competition, both domestically and internationally, which may have an adverse effect on profit margins. Companies in the technology sector are often smaller and less experienced companies and may be subject to greater risks than larger companies; these risks may be heightened for technology companies in foreign markets. Technology companies may have limited product lines, markets, financial resources or personnel. The products of technology companies may face product obsolescence due to rapid technological developments and frequent new product introduction, changes in consumer and business purchasing patterns, unpredictable changes in growth rates and competition for the services of qualified personnel. In addition, a rising interest rate environment tends to negatively affect companies in the technology sector because, in such an environment, those companies with high market valuations may appear less attractive to investors, which may cause sharp decreases in the companies' market prices. Companies in the technology sector are heavily dependent on patent and intellectual property rights. The loss or impairment of these rights may adversely affect the profitability of these companies. The technology sector may also be adversely affected by changes or trends in commodity prices, which may be influenced or characterized by unpredictable factors. Finally, while all companies may be susceptible to network security breaches, certain companies in the technology sector may be particular targets of hacking and potential theft of proprietary or consumer information or disruptions in service, which could have a material adverse effect on their businesses.

**Risk of Investing in the Telecommunications Sector.** The telecommunications sector of a country's economy is often subject to extensive government regulation. The costs of complying with governmental regulations, delays or failure to receive required regulatory approvals, or the enactment of new regulatory requirements may negatively affect the business of telecommunications companies. Government actions around the world, specifically in the area of pre-marketing clearance of products and prices, can be arbitrary and unpredictable. Companies in the telecommunications sector may experience distressed cash flows due to the need to commit substantial capital to meet increasing competition, particularly in

developing new products and services using new technology. Technological innovations may make the products and services of certain telecommunications companies obsolete. Finally, while all companies may be susceptible to network security breaches, certain companies in the telecommunications sector may be particular targets of hacking and potential theft of proprietary or consumer information or disruptions in service, which could have a material adverse effect on their businesses.

**Risk of Investing in the Transportation Infrastructure Industry.** Municipal securities include, among others, bonds payable from fuel taxes and tolls for municipal toll roads, as well as general airport bonds. Issuers in the transportation infrastructure industry can be significantly affected by economic changes, fuel prices, labor relations, technology developments, exchange rates, industry competition, insurance costs and deteriorating public infrastructure, such as bridges, roads, rails, ports and airports. Municipal securities that are issued to finance a particular transportation project often depend on revenues from that project to make principal and interest payments. Adverse conditions and developments affecting a particular project can result in lower revenues to the issuer of the municipal securities. Other risk factors that may affect the transportation infrastructure industry include the risk of increases in fuel and other operating costs and the effects of regulatory changes or other government decisions.

**Risk of Investing in the Utilities Sector.** The utilities sector may be adversely affected by changing commodity prices, government regulation stipulating rates charged by utilities, increased tariffs, changes in tax laws, interest rate fluctuations and changes in the cost of providing specific utility services. The utilities industry is also subject to potential terrorist attacks, natural disasters and severe weather conditions, as well as regulatory and operational burdens associated with the operation and maintenance of nuclear facilities. Government regulators monitor and control utility revenues and costs, and therefore may limit utility profits. In certain countries, regulatory authorities may also restrict a company's access to new markets, thereby diminishing the company's long-term prospects.

There are substantial differences among the regulatory practices and policies of various jurisdictions, and any regulatory agency may make major shifts in policy from time to time. There is no assurance that regulatory authorities will, in the future, grant rate increases. Additionally, existing and possible future regulatory legislation may make it even more difficult for utilities to obtain adequate relief. Certain of the issuers of securities held in a Fund's portfolio may own or operate nuclear generating facilities. Governmental authorities may from time to time review existing policies and impose additional requirements governing the licensing, construction and operation of nuclear power plants. Prolonged changes in climate conditions can also have a significant impact on both the revenues of an electric and gas utility as well as the expenses of a utility, particularly a hydro-based electric utility.

The rates that traditional regulated utility companies may charge their customers generally are subject to review and limitation by governmental regulatory commissions. Rate changes may occur only after a prolonged approval period or may not occur at all, which could adversely affect utility companies when costs are rising. The value of regulated utility debt securities (and, to a lesser extent, equity securities) tends to have an inverse relationship to the movement of interest rates. Certain utility companies have experienced full or partial deregulation in recent years. These utility companies are frequently more similar to industrial companies in that they are subject to greater competition and have been permitted by regulators to diversify outside of their original geographic regions and their traditional lines of business. As a result, some companies may be forced to defend their core business and may be less profitable. Deregulation may also permit a utility company to expand outside of its traditional lines of business and engage in riskier ventures.

## Proxy Voting Policy

For all Funds other than the iShares ESG 1-5 Year USD Corporate Bond ETF and iShares ESG USD Corporate Bond ETF (these two Funds together, the "Sustainable Funds"), the Board has delegated the voting of proxies for each Fund's securities to BFA pursuant to the Funds' Proxy Voting Policy (the "iShares ETFs Proxy Voting Policy"), and BlackRock has adopted policies and procedures (the "BlackRock Proxy Voting Policies") governing proxy voting by accounts managed by BlackRock, including the Funds. For the Sustainable Funds, the Board has delegated the voting of proxies for each Sustainable Fund's securities to BFA pursuant to the Sustainable Funds' Proxy Voting Policy (the "iShares Sustainable ETFs Proxy Voting Policy"), and BlackRock has adopted the BlackRock Proxy Voting Policies and supplemental guidelines applicable to environmental and social issues investing (the "Supplemental BlackRock Sustainable Proxy Voting Guidelines") governing proxy voting by the iShares sustainable ETFs managed by BlackRock, including the Sustainable Funds.

Under the BlackRock Proxy Voting Policies, BFA will vote proxies related to Fund securities in the best interests of a Fund and its shareholders. From time to time, a vote may present a conflict between the interests of a Fund's shareholders, on the one hand, and those of BFA, or any affiliated person of a Fund or BFA, on the other. BFA maintains policies and procedures that are designed to prevent undue influence on BFA's proxy voting activity that might stem from any relationship between the issuer of a proxy (or any dissident shareholder) and BFA, BFA's affiliates, a Fund or a Fund's affiliates. Most conflicts are managed through a structural separation of BFA's Corporate Governance Group from BFA's employees with sales and client responsibilities. In addition, BFA maintains procedures to ensure that all engagements with corporate issuers or dissident shareholders are managed consistently and without regard to BFA's relationship with the issuer of the proxy or the dissident shareholder. In certain instances, BFA may determine to engage an independent fiduciary to vote proxies as a further safeguard to avoid potential conflicts of interest or as otherwise required by applicable law.

Under the Supplemental BlackRock Sustainable Proxy Voting Guidelines, the Sustainable Funds maintain proxy voting guidelines consistent with the belief that well-managed companies will deal effectively with the material environmental and social (E&S) factors relevant to their businesses. BFA expects companies to identify and report on the material, business-specific E&S risks and opportunities and to explain how these are managed. BFA may vote against the election of directors where BFA has concerns that a company might not be dealing with E&S issues appropriately. For E&S shareholder proposals, BFA may vote differently for different funds based on BFA's assessment of the materiality of the underlying issues in conjunction with an assessment that investors in the Sustainable Funds may expect more urgent action be taken by the company.

Copies of the iShares ETFs Proxy Voting Policy, the iShares Sustainable ETFs Proxy Voting Policy, the BlackRock Proxy Voting Policies and the Supplemental BlackRock Sustainable Proxy Voting Guidelines are attached as Appendixes A1, A2, A3 and A4, respectively.

Information with respect to how proxies relating to the Funds' portfolio securities were voted during the 12-month period ended June 30 is available: (i) without charge, upon request, by calling 1-800-iShares (1-800-474-2737) or through the Funds' website at [www.iShares.com](http://www.iShares.com); and (ii) on the SEC's website at [www.sec.gov](http://www.sec.gov).

## Portfolio Holdings Information

The Board has adopted a policy regarding the disclosure of the Funds' portfolio holdings information that requires that such information be disclosed in a manner that: (i) is consistent with applicable legal requirements and in the best interests of each Fund's respective shareholders; (ii) does not put the interests of BFA, the Distributor or any affiliated person of BFA or the Distributor, above those of Fund shareholders; (iii) does not advantage any current or prospective Fund shareholders over any other current or prospective Fund shareholders, except to the extent that certain Entities (as described below) may receive portfolio holdings information not available to other current or prospective Fund shareholders in connection with the dissemination of information necessary for transactions in Creation Units, as discussed below, and certain information may be provided to personnel of BFA and its affiliates who manage funds that invest a significant percentage of their assets in shares of the Fund for the purpose of facilitating risk management and hedging activities; and (iv) does not provide selective access to portfolio holdings information except pursuant to the procedures outlined below and to the extent appropriate confidentiality arrangements limiting the use of such information are in effect. The "Entities" referred to in sub-section (iii) above are generally limited to National Securities Clearing Corporation ("NSCC") members, subscribers to various fee-based subscription services, large institutional investors (known as "Authorized Participants") that have been authorized by the Distributor to purchase and redeem large blocks of shares pursuant to legal requirements and market makers and other institutional market participants and entities that provide information or transactional services.

Each business day, each Fund's portfolio holdings information is provided to the Distributor or other agent for dissemination through the facilities of the NSCC and/or other fee-based subscription services to NSCC members and/or subscribers to those other fee-based subscription services, including market makers and Authorized Participants, and to entities that publish and/or analyze such information in connection with the process of purchasing or redeeming Creation Units or trading shares of the Funds in the secondary market or evaluating such potential transactions. This information typically reflects each Fund's anticipated holdings on the following business day.

Daily access to information concerning the Funds' portfolio holdings is permitted: (i) to certain personnel of those service providers that are involved in portfolio management and providing administrative, operational, risk management, or other

support to portfolio management; and (ii) to other personnel of the Funds' investment adviser, the Distributor and their affiliates, and the administrator, custodian and fund accountant who deal directly with, or assist in, functions related to investment management, distribution, administration, custody, securities lending and fund accounting, as may be necessary to conduct business in the ordinary course in a manner consistent with federal securities laws and regulations thereunder. In addition, each Fund discloses its fixed-income and/or equity portfolio holdings daily at [www.iShares.com](http://www.iShares.com). More information about this disclosure is available at [www.iShares.com](http://www.iShares.com).

Portfolio holdings information made available in connection with the creation/redemption process may be provided to other entities that provide services to the Funds in the ordinary course of business after it has been disseminated to the NSCC. From time to time, information concerning portfolio holdings other than portfolio holdings information made available in connection with the creation/redemption process, as discussed above, may be provided to other entities that provide services to the Funds, including rating or ranking organizations, in the ordinary course of business, no earlier than one business day following the date of the information.

Each Fund discloses its complete portfolio holdings schedule in public filings with the SEC within 70 days of the end of the second and fourth fiscal quarters and within 60 days of the end of the first and third fiscal quarters and will provide such information to shareholders as required by federal securities laws and regulations thereunder. A Fund may, however, voluntarily disclose all or part of its portfolio holdings other than in connection with the creation/redemption process, as discussed above, in advance of required filings with the SEC, provided that such information is made generally available to all shareholders and other interested parties in a manner that is consistent with the above policy for disclosure of portfolio holdings information. Such information may be made available through a publicly available website or other means that make the information available to all likely interested parties contemporaneously.

The Trust's Chief Compliance Officer or his delegate may authorize disclosure of portfolio holdings information pursuant to the above policy and procedures, subject to restrictions on selective disclosure imposed by applicable law.

The Board reviews the policy and procedures for disclosure of portfolio holdings information at least annually.

## Construction and Maintenance of the Underlying Indexes

Descriptions of the Underlying Indexes are provided below.

With respect to certain underlying indexes of the iShares funds, BFA or its affiliates have held discussions with the index provider regarding their business interest in licensing an index to track a particular market segment and conveyed investment concepts and strategies that could be considered for the index. The index provider designed and constituted the index using concepts conveyed by BFA or its affiliates. For certain of these indices, the relevant fund may be the first or sole user of the underlying index. In its sole discretion, the index provider determines the composition of the securities and other instruments in such underlying index, the rebalance protocols of the underlying index, the weightings of the securities and other instruments in the underlying index, and any updates to the methodology. From time to time, BFA or its affiliates may also provide input relating to possible methodology changes of such underlying index pursuant to the index provider's consultation process or pursuant to other communications with the index provider.

### The Bloomberg Barclays Indexes

The Bloomberg Barclays Indexes are maintained by Bloomberg Barclays Capital Inc/ Bloomberg Index Services Limited or its affiliates ("Bloomberg" or the "Index Provider"), which is not affiliated with BFA. BFA will have no role in maintaining the Underlying Indexes.

To use the Bloomberg Barclays MSCI US Corporate 1-5 Year ESG Focus Index and Bloomberg Barclays MSCI US Corporate ESG Focus Index, BFA or its affiliates have entered into a license agreement with MSCI ESG Research LLC ("MSCI ESG Research"), which pursuant to its agreement with Bloomberg Index Services Limited, a subsidiary of the Index Provider, may license each Underlying Index.

#### **Bloomberg Barclays MSCI US Corporate 1-5 Year ESG Focus Index**

**Number of Components: approximately 520**

**Index Description.** The Bloomberg Barclays MSCI US Corporate 1-5 Year ESG Focus Index is designed to maximize exposure to positive environmental, social and governance (“ESG”) characteristics while exhibiting risk and return characteristics similar to those of the Bloomberg Barclays US Corporate 1-5 Years Index (the Parent Index). The Underlying Index is constructed by selecting constituents from the Parent Index through an optimization process using ESG rating inputs from MSCI ESG Research in an effort to maximize exposure to ESG factors for a target tracking error constraint of 10 basis points relative to the Parent Index. The Fund’s Index Provider begins with the Parent Index, excludes securities of companies involved in the business of tobacco and controversial weapons companies, as well as securities of companies involved in very severe business controversies (as determined by MSCI ESG Research). MSCI ESG Research identifies key ESG controversies, including, among other things, issues involving: (i) the environment (e.g., biodiversity and land use, toxic emissions and waste, energy and climate change, water stress, non-hazardous operational waste, and supply chain management); (ii) human rights and communities (e.g., impact on local communities, human rights concerns, and civil liberties); (iii) labor rights and supply chains (e.g., child labor, collective bargaining and union, health and safety, discrimination and workforce diversity, and labor management relations); (iv) customers (e.g., anti-competitive practices, customer relations, privacy and data security, product safety and quality, and marketing and advertising); and (v) governance (e.g., bribery and fraud, governance structures, and controversial investments). MSCI ESG Research then rates each company’s exposure to these ESG issues and evaluates the extent to which the company has created strategies and programs to manage ESG risks and opportunities. Companies are scored by MSCI ESG Research based on both their risk exposure and risk management, and then ranked in comparison to their industry peers. Using MSCI ESG Research’s ESG ratings, the Index Provider then follows a quantitative process in an effort to determine optimal weights for securities to maximize exposure to securities of companies with higher ESG ratings, subject to maintaining risk and return characteristics similar to those of the Parent Index.

**Index Methodology.** The Underlying Index consists of U.S. dollar-denominated, investment-grade corporate bonds having remaining maturities between one and five years and issued by companies that have positive ESG characteristics (as determined by MSCI ESG Research ratings). In addition, the securities included in the Underlying Index must be fixed-rate, taxable corporate securities. Excluded from the Underlying Index include, but are not limited to, structured notes, private placements and floating rate securities. The Underlying Index is market capitalization weighted and the securities in the Underlying Index are updated on the last business day of each month.

**Bloomberg Barclays MSCI US Corporate ESG Focus Index****Number of Components: approximately 2,169**

**Index Description.** The Bloomberg Barclays MSCI US Corporate ESG Focus Index the Underlying Index, is designed to maximize exposure to positive ESG characteristics while exhibiting risk and return characteristics similar to those of the Bloomberg Barclays US Corporate Index (the Parent Index). The Underlying Index is constructed by selecting constituents from the Parent Index through an optimization process using ESG rating inputs from MSCI ESG Research in an effort to maximize exposure to ESG factors for a target tracking error constraint of 10 basis points relative to the Parent Index. The Fund’s Index Provider begins with the Parent Index, excludes securities of companies involved in the business of tobacco and controversial weapons companies, as well as securities of companies involved in very severe business controversies (as determined by MSCI ESG Research). MSCI ESG Research identifies key ESG controversies, including, among other things, issues involving: (i) the environment (e.g., biodiversity and land use, toxic emissions and waste, energy and climate change, water stress, non-hazardous operational waste, and supply chain management); (ii) human rights and communities (e.g., impact on local communities, human rights concerns, and civil liberties); (iii) labor rights and supply chains (e.g., child labor, collective bargaining and union, health and safety, discrimination and workforce diversity, and labor management relations); (iv) customers (e.g., anti-competitive practices, customer relations, privacy and data security, product safety and quality, and marketing and advertising); and (v) governance (e.g., bribery and fraud, governance structures, and controversial investments). MSCI ESG Research then rates each company’s exposure to these ESG issues and evaluates the extent to which the company has created strategies and programs to manage ESG risks and opportunities. Companies are scored by MSCI ESG Research based on both their risk exposure and risk management, and then ranked in comparison to their industry peers. Using MSCI ESG Research’s ESG ratings, the Index Provider then follows a quantitative process in an effort to determine optimal weights for securities to maximize exposure to securities of companies with higher ESG ratings, subject to maintaining risk and return characteristics similar to those of the Parent Index.

**Index Methodology.** The Underlying Index consists of U.S. dollar-denominated, investment-grade corporate bonds issued by companies that have positive ESG characteristics (as determined by MSCI ESG Research ratings) and have remaining maturities of greater than or equal to one year. In addition, the securities included in the Underlying Index must be fixed-rate, taxable corporate securities. Excluded from the Underlying Index include, but are not limited to, structured notes, private placements and floating rate securities. The Underlying Index is market capitalization weighted and the securities in the Underlying Index are updated on the last business day of each month.

### **Bloomberg Barclays U.S. Agency Bond Index**

**Number of Components: approximately 285**

**Index Description.** The Bloomberg Barclays U.S. Agency Bond Index measures the performance of the agency sector of the U.S. government bond market and is comprised of investment-grade U.S. dollar-denominated publicly-issued government agency bonds or debentures. The Underlying Index includes callable and non-callable securities issued by U.S. government agencies, quasi-federal corporations (as described under *Index Methodology* below), and corporate or foreign debt guaranteed by the U.S. government. In addition, the securities in the Underlying Index must be fixed-rate and non-convertible and have \$300 million or more of outstanding face value. As of February 28, 2018, approximately 84.2% of the composite market value of the bonds represented in the Underlying Index was in the form of U.S. agency debentures. The largest issues within the Underlying Index were Fannie Mae, Freddie Mac and FHLB, with a composite market value weight in the Underlying Index of approximately 30.71%, 24.25%, and 29.21%, respectively.

**Index Methodology.** The Underlying Index measures the performance of both callable and non-callable U.S. dollar-denominated government agency debentures, including securities of the following categories:

- *U.S. government guaranteed securities:* corporate and non-U.S. issuances that carry direct guarantees from the U.S. government;
- *U.S. government owned, not guaranteed, securities:* issuances of quasi-federal corporations (*i.e.*, entities that are partially or wholly-owned by the U.S. government); such issuances generally carry no explicit guarantee of repayment from the U.S. government; and
- *U.S. government sponsored securities:* issuances of U.S. government sponsored entities (including Fannie Mae and Freddie Mac), which are not 100% government owned, but carry out government policies and benefit from implied involvement of central governments, such as by benefiting from certain government subsidies, credit provisions, or other government support; such issuances generally have no guarantees from the U.S. government.

The Underlying Index is market value weighted and the securities in the Underlying Index are updated on the last business day of each month.

The Underlying Index represents the U.S. Agency portion of the Bloomberg Barclays U.S. Aggregate Bond Index, whose eligible universe is defined by total market issuance, meeting the selection criteria mentioned above.

**Index Maintenance.** The Underlying Index constituents are reset on the last business day of each month and remain static throughout the month. The universe of Underlying Index constituents adjust for securities that become ineligible for inclusion in an Underlying Index during the month (*e.g.*, because of downgrades or called bonds) or for issues that are newly eligible (*e.g.*, up-grades or newly issued bonds) on the last business day of each month. The Bloomberg Barclays Indexes are valued using end of day bid side prices, as marked by Bloomberg. Intra-month cash flows contribute to monthly returns, but they are not reinvested during the month and do not earn a reinvestment return. Total returns are calculated based on the sum of price changes, gain/loss on repayments of principal, and coupon received or accrued, expressed as a percentage of beginning market value. The Bloomberg Barclays Indexes are calculated once a day and are available from major data vendors.

### **Bloomberg Barclays U.S. Aggregate Bond Index**

**Number of Components: approximately 9,826**

**Index Description.** The Bloomberg Barclays U.S. Aggregate Bond Index represents the securities of the total U.S. investment-grade bond market.

**Index Methodology.** The Underlying Index provides a measure of the performance of the U.S. investment-grade bond market, which includes investment-grade (must be Baa3/BBB- or higher using the middle rating of Moody's, S&P Global



Ratings, and Fitch) U.S. Treasury bonds, government-related bonds, investment-grade corporate bonds, MBS, CMBS and ABS that are publicly offered for sale in the U.S. The securities in the Underlying Index must have \$300 million or more of outstanding face value and must have at least one year remaining to maturity, with the exception of amortizing securities such as ABS and MBS, which have lower minimum thresholds as defined by the index provider. In addition, the securities must be denominated in U.S. dollars and must be fixed-rate, non-convertible, and taxable. Certain types of securities, such as SLGs, are excluded from the Underlying Index. Also excluded from the Underlying Index are structured notes with embedded swaps or other special features, private placements, floating rate securities and Eurobonds. The Underlying Index is market capitalization weighted and the securities in the Underlying Index are updated on the last business day of each month. As of February 28, 2018, approximately 28.22% of the bonds represented in the Underlying Index were U.S. fixed-rate agency MBS. U.S. fixed-rate agency MBS are securities issued by entities such as Ginnie Mae, Freddie Mac and Fannie Mae that are backed by pools of mortgages. Most transactions in fixed-rate MBS occur through standardized contracts for future delivery in which the exact mortgage pools to be delivered are not specified until a few days prior to settlement TBA transactions. The Fund may enter into such contracts on a regular basis. The Fund, pending settlement of such contracts, will invest its assets in high-quality, liquid short-term instruments, including shares of BlackRock Cash Funds. The Fund will assume its pro rata share of the fees and expenses of any money market fund that it may invest in, in addition to the Fund's own fees and expenses. The Fund may also acquire interests in mortgage pools through means other than such standardized contracts for future delivery.

### **Bloomberg Barclays U.S. Government/Credit Bond Index**

**Number of Components: approximately 6,884**

**Index Description.** The Bloomberg Barclays U.S. Government/Credit Bond Index measures the performance of U.S. dollar-denominated U.S. Treasury bonds, government-related bonds (*i.e.*, U.S. and foreign agencies, sovereign, supranational and local authority debt), and investment-grade U.S. corporate bonds that have a remaining maturity of greater than or equal to one year.

**Index Methodology.** The Underlying Index consists of U.S. government, government-related and investment-grade U.S. credit securities that have greater than or equal to one year remaining to maturity and have more than \$250 million or more of outstanding face value. In addition, the securities must be denominated in U.S. dollars and must be fixed-rate and non-convertible. Excluded from the Underlying Index are certain special issues, such as TINs, SLGs, and coupon issues that have been stripped from assets that are already included in the Underlying Index. Also excluded from the Underlying Index are structured notes with embedded swaps or other special features, private placements, floating rate securities and Eurobonds. The Underlying Index is market capitalization weighted and the securities in the Underlying Index are updated on the last business day of each month.

### **Bloomberg Barclays U.S. Intermediate Government/Credit Bond Index**

**Number of Components: approximately 4,773**

**Index Description.** The Bloomberg Barclays U.S. Intermediate Government/Credit Bond Index measures the performance of U.S. dollar-denominated U.S. Treasury bonds, government-related bonds (*i.e.*, U.S. and foreign agencies, sovereign, supranational and local authority debt), and investment-grade U.S. corporate bonds that have a remaining maturity of greater than one year and less than or equal to ten years.

**Index Methodology.** The Underlying Index consists of U.S. government, government-related and investment-grade U.S. credit securities that have greater than one year and less than or equal to ten years remaining to maturity and have more than \$300 million or more of outstanding face value. In addition, the securities must be denominated in U.S. dollars and must be fixed-rate and non-convertible. Excluded from the Underlying Index are certain special issues, such as TINs, SLGs, and coupon issues that have been stripped from assets that are already included in the Underlying Index. Also excluded from the Underlying Index are structured notes with embedded swaps or other special features, private placements, floating rate securities and Eurobonds. The Underlying Index is market capitalization weighted and the securities in the Underlying Index are updated on the last business day of each month.

### **Bloomberg Barclays U.S. MBS Index**

**Number of Components: approximately 307**

**Index Description.** The Bloomberg Barclays U.S. MBS Index measures the performance of investment-grade MBS issued or guaranteed by U.S. government agencies. As of February 28, 2018, there were 307 issues in the Underlying Index.

**Index Methodology.** The Underlying Index includes fixed-rate MBS issued by Ginnie Mae, Freddie Mac, and Fannie Mae that have 30-, 20-, 15-year maturities. All securities in the Underlying Index must have a remaining weighted average maturity of at least one year. In addition, the securities in the Underlying Index must be denominated in U.S. dollars and must be non-convertible. The Underlying Index is market capitalization weighted, and the securities in the Underlying Index are updated on the last business day of each month. As of February 28, 2018, approximately 100% of the bonds represented in the Underlying Index were U.S. agency MBS. Most transactions in MBS occur through standardized contracts for future delivery in which the exact mortgage pools to be delivered are not specified until a few days prior to settlement TBA transactions. The Fund may enter into such contracts for fixed-rate pass-through securities on a regular basis. The Fund, pending settlement of such contracts, will invest its assets in liquid, short-term instruments, including shares of BlackRock Cash Funds. The Fund will assume its pro rata share of the fees and expenses of any money market fund that it may invest in, in addition to the Fund's own fees and expenses. The Fund may also acquire interests in mortgage pools through means other than such standardized contracts for future delivery.

### **Bloomberg Barclays U.S. Universal 5-10 Year Index**

**Number of Components: approximately 5,994**

**Index Description.** The Bloomberg Barclays U.S. Universal 5-10 Year Index measures the performance of U.S. dollar-denominated taxable bonds that are rated either investment-grade or high yield with remaining effective maturities between five and ten years.

**Index Methodology.** The Underlying Index includes U.S. Treasury bonds, government-related bonds (*i.e.*, U.S. and non-U.S. agencies, sovereign, quasi-sovereign, supranational and local authority debt), investment-grade and high yield U.S. corporate bonds, MBS, CMBS, ABS, Eurodollar bonds (*i.e.*, U.S. dollar-denominated bonds issued by foreign issuers outside the U.S.), bonds registered with the SEC or exempt from registration at the time of issuance, or offered pursuant to Rule 144A under the 1933 Act with or without registration rights ("Rule 144A Bonds") and emerging market bonds. The securities in the Underlying Index must be denominated in U.S. dollars and non-convertible. Excluded from the Underlying Index are tax-exempt municipal securities, coupon issues that have been stripped from bonds, structured notes, private placements (excluding Rule 144A Bonds) and inflation-linked bonds. A significant portion of the Underlying Index is comprised of MBS that include 20-year and 30-year mortgages. These MBS are included in the Underlying Index because their effective duration has historically been more consistent with the duration of non-callable 5-10 year bonds due to prepayments.

### **Bloomberg Barclays U.S. Universal 10+ Year Index**

**Number of Components: approximately 2,672**

**Index Description.** The Bloomberg Barclays U.S. Universal 10+ Year Index measures the performance of U.S. dollar-denominated bonds that are rated either investment grade or high-yield with remaining maturities greater than ten years.

**Index Methodology.** The Underlying Index includes U.S. Treasury bonds, government-related bonds (*i.e.*, U.S. and non-U.S. agencies, sovereign, quasi-sovereign, supranational and local authority debt), investment-grade and high yield U.S. corporate bonds, Eurodollar bonds (*i.e.*, U.S. dollar-denominated bonds issued by foreign issuers outside the U.S.), bonds registered with the SEC or exempt from registration at the time of issuance, or offered pursuant to Rule 144A under the 1933 Act with or without registration rights ("Rule 144A Bonds") and emerging market bonds. The Underlying Index is a subset of the Bloomberg Barclays U.S. Universal Index. The securities in the Underlying Index must have at least 10 years remaining to maturity, or at least 10 years remaining to the first call date in the case of callable perpetual securities. In addition, the securities in the Underlying Index must be denominated in U.S. dollars and be non-convertible. Excluded from the Underlying Index are tax-exempt municipal securities, coupon issues that have been stripped from bonds, structured notes and private placements (excluding Rule 144A Bonds). The Underlying Index is market-capitalization weighted and is rebalanced on the last day of the month.

The investment-grade securities in the Underlying Index have \$300 million or more par amount outstanding and the high yield securities have \$150 million or more par amount outstanding. The U.S. dollar-denominated emerging market bonds in the Underlying Index have \$500 million or more at the security level and corporate issuers have \$1 billion or more in outstanding debt. The SEC Rule 144A issues in the Underlying Index have \$250 million or more par amount outstanding.

# The ICE<sup>®</sup> BofAML<sup>®</sup> Bond Indexes

## ICE BofAML 1-5 Year US Corporate Index

**Number of Components: approximately 3,095**

**Index Description.** The ICE BofAML 1-5 Year US Corporate Index measures the performance of investment-grade corporate bonds that are U.S. dollar-denominated and have a remaining maturity of greater than or equal to one year and less than five years.

**Index Methodology.** The Underlying Index consists of investment-grade U.S. corporate bonds that have a remaining maturity of greater than or equal to one year and less than five years and have more than \$250 million or more of outstanding face value. In addition, the securities must be denominated in U.S. dollars and must be fixed-rate. Original issue zero coupon bonds, 144a securities (with and without registration rights), and pay-in-kind securities are included in the index. Callable perpetual securities are included provided they are at least one year from the first call date. Fixed-to-floating rate securities are included provided they are callable within the fixed rate period and are at least one year from the last call prior to the date the bond transitions from a fixed to a floating rate security. Excluded from the Underlying Index are equity-linked securities, securities in legal default, hybrid securitized corporate bonds, Eurodollar bonds (U.S. dollar-denominated securities not issued in the U.S. domestic market), taxable and tax-exempt U.S. municipal securities and dividends-received-deduction-eligible securities. The Underlying Index is market capitalization weighted and the securities in the Underlying Index are updated on the last business day of each month.

## ICE BofAML 5-10 Year US Corporate Index

**Number of Components: approximately 2,297**

**Index Description.** The ICE BofAML 5-10 Year US Corporate Index measures the performance of investment-grade corporate bonds that are U.S. dollar-denominated and have a remaining maturity of greater than or equal to five years and less than ten years.

**Index Methodology.** The Underlying Index consists of investment-grade U.S. corporate securities that have a remaining maturity of greater than or equal to five years and less than ten years and have more than \$250 million or more of outstanding face value. In addition, the securities must be denominated in U.S. dollars and must be fixed-rate. Original issue zero coupon bonds, 144a securities (with and without registration rights), and pay-in-kind securities are included in the index. Callable perpetual securities are included provided they are at least one year from the first call date. Fixed-to-floating rate securities are included provided they are callable within the fixed rate period and are at least one year from the last call prior to the date the bond transitions from a fixed to a floating rate security. Excluded from the Underlying Index are equity-linked securities, securities in legal default, hybrid securitized corporates, Eurodollar bonds (U.S. dollar-denominated securities not issued in the U.S. domestic market), taxable and tax-exempt U.S. municipal securities and dividends-received-deduction-eligible securities. The Underlying Index is market capitalization weighted and the securities in the Underlying Index are updated on the last business day of each month.

## ICE BofAML 10+ Year US Corporate Index

**Number of Components: approximately 2,384**

**Index Description.** The ICE BofAML 10+ Year US Corporate Index measures the performance of investment-grade corporate bonds that are U.S. dollar-denominated and have a remaining maturity of greater than or equal to ten years.

**Index Methodology.** The Underlying Index consists of investment-grade U.S. corporate bonds that have a remaining maturity of greater than or equal to ten years and have more than \$250 million or more of outstanding face value. In addition, the securities must be denominated in U.S. dollars and must be fixed-rate. Original issue zero coupon bonds, 144a securities (with and without registration rights), and pay-in-kind securities are included in the index. Callable perpetual securities are included provided they are at least one year from the first call date. Fixed-to-floating rate securities are included provided they are callable within the fixed rate period and are at least one year from the last call prior to the date the bond transitions from a fixed to a floating rate security. Excluded from the Underlying Index are equity-linked securities, securities in legal default, hybrid securitized corporates, Eurodollar bonds (U.S. dollar-denominated securities not issued in the U.S. domestic market), taxable and tax-exempt U.S. municipal securities and dividends-received-deduction-eligible securities. The Underlying Index is market capitalization weighted and the securities in the Underlying Index are updated on the last business day of each month.

**ICE BofAML US Corporate Index****Number of Components: approximately 7,774**

**Index Description.** The ICE BofAML US Corporate Index measures the performance of investment-grade corporate bonds that are U.S. dollar-denominated and have a remaining maturity of greater than or equal to one year.

**Index Methodology.** The Underlying Index consists of investment-grade U.S. corporate bonds that have a remaining maturity of greater than or equal to one year and have more than \$250 million or more of outstanding face value. In addition, the securities must be denominated in U.S. dollars and must be fixed-rate. Original issue zero coupon bonds, 144a securities (with and without registration rights), and pay-in-kind securities are included in the index. Callable perpetual securities are included provided they are at least one year from the first call date. Fixed-to-floating rate securities are included provided they are callable within the fixed rate period and are at least one year from the last call prior to the date the bond transitions from a fixed to a floating rate security. Excluded from the Underlying Index are equity-linked securities, securities in legal default, hybrid securitized corporate bonds, Eurodollar bonds (U.S. dollar-denominated securities not issued in the U.S. domestic market), taxable and tax-exempt U.S. municipal securities and dividends-received-deduction-eligible securities. The Underlying Index is market capitalization weighted and the securities in the Underlying Index are updated on the last business day of each month.

**The ICE U.S. Treasury Bond Index Series™****ICE U.S. Treasury 1-3 Year Bond Index****Number of Components: approximately 96**

**Index Description.** The ICE U.S. Treasury 1-3 Year Bond Index measures the performance of public obligations of the U.S. Treasury that have a remaining maturity of greater than one year and less than or equal to three years.

**Index Methodology.** The Underlying Index consists of publicly-issued U.S. Treasury securities that have a remaining maturity of greater than one year and less than or equal to three years and have \$300 million or more of outstanding face value, excluding amounts held by the Fed. In addition, the securities in the Underlying Index must be fixed-rate and denominated in U.S. dollars. Excluded from the Underlying Index are inflation-linked securities, Treasury bills, cash management bills, any government agency debt issued with or without a government guarantee and zero-coupon issues that have been stripped from coupon-paying bonds. The Underlying Index is weighted by market capitalization, and the securities in the Underlying Index are updated on the last business day of each month.

**ICE U.S. Treasury 3-7 Year Bond Index****Number of Components: approximately 96**

**Index Description.** The ICE U.S. Treasury 3-7 Year Bond Index measures the performance of public obligations of the U.S. Treasury that have a remaining maturity of greater than three years and less than or equal to seven years.

**Index Methodology.** The Underlying Index consists of publicly-issued U.S. Treasury securities that have a remaining maturity of greater than three years and less than or equal to seven years and have \$300 million or more of outstanding face value, excluding amounts held by the Fed. In addition, the securities in the Underlying Index must be fixed-rate and denominated in U.S. dollars. Excluded from the Underlying Index are inflation-linked securities, Treasury bills, cash management bills, any government agency debt issued with or without a government guarantee and zero-coupon issues that have been stripped from coupon-paying bonds. The Underlying Index is weighted by market capitalization, and the securities in the Underlying Index are updated on the last business day of each month.

**ICE U.S. Treasury 7-10 Year Bond Index****Number of Components: approximately 21**

**Index Description.** The ICE U.S. Treasury 7-10 Year Bond Index measures the performance of public obligations of the U.S. Treasury that have a remaining maturity of greater than seven years and less than or equal to ten years.

**Index Methodology.** The Underlying Index consists of publicly-issued U.S. Treasury securities that have a remaining maturity of greater than seven years and less than or equal to ten years and have \$300 million or more of outstanding face value, excluding amounts held by the Fed. In addition, the securities in the Underlying Index must be fixed-rate and denominated in

U.S. dollars. Excluded from the Underlying Index are inflation-linked securities, Treasury bills, cash management bills, any government agency debt issued with or without a government guarantee and zero-coupon issues that have been stripped from coupon-paying bonds. The Underlying Index is weighted by market capitalization, and the securities in the Underlying Index are updated on the last business day of each month.

#### **ICE U.S. Treasury 10-20 Year Bond Index**

**Number of Components: approximately 10**

**Index Description.** The ICE U.S. Treasury 10-20 Year Bond Index measures the performance of public obligations of the U.S. Treasury that have a remaining maturity of greater than ten years and less than or equal to twenty years.

**Index Methodology.** The Underlying Index consists of publicly-issued U.S. Treasury securities that have a remaining maturity of greater than ten years and less than or equal to twenty years and have \$300 million or more of outstanding face value, excluding amounts held by the Fed. In addition, the securities in the Underlying Index must be fixed-rate and denominated in U.S. dollars. Excluded from the Underlying Index are inflation-linked securities, cash management bills, any government agency debt issued with or without a government guarantee and zero-coupon issues that have been stripped from coupon-paying bonds. The Underlying Index is weighted by market capitalization, and the securities in the Underlying Index are updated on the last business day of each month.

#### **ICE U.S. Treasury 20+ Year Bond Index**

**Number of Components: approximately 39**

**Index Description.** The ICE U.S. Treasury 20+ Year Bond Index measures the performance of public obligations of the U.S. Treasury that have a remaining maturity greater than twenty years.

**Index Methodology.** The Underlying Index consists of publicly-issued U.S. Treasury securities that have a remaining maturity greater than twenty years and have \$300 million or more of outstanding face value, excluding amounts held by the Fed. In addition, the securities in the Underlying Index must be fixed-rate and denominated in U.S. dollars. Excluded from the Underlying Index are inflation-linked securities, Treasury bills, cash management bills, any government agency debt issued with or without a government guarantee and zero-coupon issues that have been stripped from coupon-paying bonds. The Underlying Index is weighted by market capitalization, and the securities in the Underlying Index are updated on the last business day of each month.

#### **ICE U.S. Treasury Short Bond Index**

**Number of Components: approximately 78**

**Index Description.** The ICE U.S. Treasury Short Bond Index measures the performance of public obligations of the U.S. Treasury that have a remaining maturity of equal to or greater than one month and less than one year.

**Index Methodology.** The Underlying Index consists of publicly-issued U.S. Treasury securities that have a remaining maturity of equal to or greater than one month and less than one year and have \$300 million or more of outstanding face value, excluding amounts held by the Fed. In addition, the securities in the Underlying Index must be fixed-rate and denominated in U.S. dollars. Excluded from the Underlying Index are inflation-linked securities, cash management bills, any government agency debt issued with or without a government guarantee and zero-coupon issues that have been stripped from coupon-paying bonds. The Underlying Index is weighted by market capitalization, and the securities in the Underlying Index are updated on the last business day of each month.

## **The Markit iBoxx Indexes**

#### **Markit iBoxx<sup>®</sup> USD Liquid High Yield Index**

**Number of Components: approximately 983**

**Index Description.** The Markit iBoxx<sup>®</sup> USD Liquid High Yield Index measures the performance of the liquid high yield corporate bond market. As of February 28, 2018, the Underlying Index is a rules-based index consisting of approximately 983 liquid high yield, U.S. dollar-denominated corporate bonds that seeks to maximize liquidity while maintaining representation of the broader corporate bond market.

**Index Methodology.** The Underlying Index is a subset of a broader high yield universe of sub-investment-grade bonds. Bonds in the Underlying Index are selected from the universe of eligible bonds in the Markit iBoxx USD Corporate Bond Index using defined rules. The bonds eligible for inclusion in the Underlying Index include U.S. dollar-denominated corporate bonds that: (i) are issued by companies domiciled in the countries classified as developed markets by the index provider; (ii) have an average rating of sub-investment grade (ratings from Fitch, Moody's or S&P Global Ratings are considered; if more than one agency provides a rating, the average rating is attached to the bond); (iii) are from issuers with at least \$1 billion of outstanding face value (iv) are bond issues with at least \$400 million of outstanding face value; (v) have an original maturity date of less than 15 years; (vi) have at least one year remaining to maturity; and (vii) have at least one year and 6 months to maturity for new index insertions.

**Component Selection Criteria.** Eligible bonds are chosen by applying the eligibility rules listed above. The Underlying Index is a modified market value weighted index with a cap on each issuer at 3%. There is no maximum number of bond issues per issuer eligible, but to avoid an over-concentration in any single-issuer, the methodology caps single-issuer exposure to no more than 3% of the index weight, calculated on the last business day of each month. The Underlying Index is updated monthly on the last business day of each month.

### Markit iBoxx<sup>®</sup> USD Liquid Investment Grade Index

**Number of Components: approximately 1,823**

**Index Description.** The Markit iBoxx<sup>®</sup> USD Liquid Investment Grade Index measures the performance as of February 28, 2018, of approximately 1,823 highly liquid investment-grade corporate bonds. The Underlying Index is a rules-based index consisting of highly liquid, investment-grade, U.S. dollar-denominated corporate bonds that seeks to maximize liquidity while maintaining representation of the broader corporate bond market.

**Index Methodology.** The Underlying Index is a subset of the Markit iBoxx USD Corporate Bond Index, which as of February 28, 2018 is an index of 5,510 investment-grade bonds. Bonds in the Underlying Index are selected from the universe of eligible bonds in the Markit iBoxx USD Corporate Bond Index using defined rules. Currently, the bonds eligible for inclusion in the Underlying Index consist of U.S. dollar-denominated corporate bonds that: (i) are issued by companies domiciled in the countries classified as developed markets by the index provider; (ii) have an average rating of investment grade (ratings from Fitch, Moody's, or S&P Global Ratings are considered; if more than one agency provides a rating, the average rating is attached to the bond); (iii) are from issuers with at least \$2 billion outstanding face value; (iv) have at least \$750 million of outstanding face value; (v) have at least three years to maturity; and (vi) have at least three years and 6 months to maturity for new index insertions.

**Component Selection Criteria.** Eligible bonds are chosen by applying the eligibility rules listed above. The Underlying Index is a modified market value weighted index with a cap on each issuer at 3%. The number of bonds in the Underlying Index may change and there is no constraint on the number of index constituents. There is no maximum number of bond issues per issuer eligible, but to avoid an over-concentration in any single-issuer, the methodology caps single-issuer exposure to no more than 3% of the index weight, calculated on the last business day of each month. The Underlying Index is updated monthly on the last business day of each month.

The composition of the Underlying Index is held constant for any given calendar month to ensure continuity during the month and to avoid jumps unrelated to the price movements of the bonds. The inclusion and exclusion criteria above are applied at month-end, after the close of business. Bonds that were in the Underlying Index, but that no longer satisfy all the criteria at month-end, will be removed from the Underlying Index. If a bond becomes eligible in the middle of the month, it will still need to satisfy the criteria at the end of the month, and can be included only upon rebalancing at month-end. When a bond is called, it remains in the Underlying Index at its call price until the end of the month, after which it is removed. Changes in issue size that take place during the month are taken into consideration only at the next rebalancing date.

Markit<sup>®</sup> and iBoxx<sup>®</sup> are registered trademarks of Markit Group Limited and Markit Indices Limited, respectively. The methodologies of the iBoxx<sup>®</sup> indexes are owned by Markit Indices Limited and may be covered by one or more patents or pending patent applications.

## The S&P Indexes

**Issue Changes.** General oversight responsibility for the S&P Indexes, including overall policy guidelines and methodology, is handled by an S&P Dow Jones Indices LLC ("SPDJI") Index Committee. Maintenance of component investments, including

additions and deletions to these investments, is the responsibility of separate regional index committees composed of S&P index staff specialized in the various regional equity markets and, in some cases with the assistance of local stock exchanges. Public announcements of index changes as the result of committee decisions will generally be made two business days in advance of the anticipated effective date whenever possible, although for exceptional corporate events announcements may be made earlier.

**Index Maintenance.** Maintaining the S&P Indexes includes monitoring and completing the adjustments for company additions and deletions, share changes, stock splits, stock dividends, and stock price adjustments due to restructuring and spin-offs.

**Index Availability.** Most S&P Fixed-Income Indexes are calculated at the end of the business day. All S&P Indexes are available from major data vendors.

### **S&P California AMT-Free Municipal Bond Index™**

**Number of Components: approximately 3,265**

**Index Description.** The S&P California AMT-Free Municipal Bond Index™ is a broad, comprehensive, market-value weighted index designed to measure the performance of the investment-grade California sector of the U.S. municipal bond market. As of January 7, 2019, the Underlying Index consisted of 3,265 bonds, with a total market value of \$174.7 billion.

**Index Methodology.** To be included in the Underlying Index, bonds must meet all of the following criteria: (i) the bond issuer is from a California State or local government or agency whose interest payments are exempt from U.S. federal and California State income taxes and the federal AMT as determined by the index provider in accordance with its methodology; (ii) the bond must be denominated in U.S. dollars; (iii) the bond must have a rating of at least BBB- by S&P Global Ratings, Baa3 by Moody's, or BBB- by Fitch. A bond must be rated by at least one of these three rating agencies in order to qualify for the Underlying Index, and the lowest rating will be used in determining if a bond is investment-grade; (iv) each bond in the Underlying Index must be a constituent of an offering where the original offering amount was at least \$100 million, and must have a minimum par amount of \$15 million. To remain in the Underlying Index, bonds must maintain a minimum par amount greater than or equal to \$15 million as of the next rebalancing date and must maintain a minimum Par Amount greater than or equal to \$15 million as of four days prior to last business day of each month ("Rebalancing Reference Date"); and (v) as of the last business day of each month ("Rebalancing Date"), the bond must have a minimum term to maturity and/or pre-refunded or call date greater than or equal to one calendar month. "Business Day" is defined as any day that U.S. municipal bonds are traded, as determined by the Securities Industry and Financial Markets Association ("SIFMA") and/or the New York Stock Exchange ("NYSE"). Bonds that are completely called or tendered during the course of the month and bonds that are scheduled to be completely called or redeemed, during the course of the month following the Rebalancing Date, will be removed on the Rebalancing Date. At each monthly rebalancing, no one issuer can represent more than 25% of the weight of the Underlying Index; and individual issuers that represent at least 5% of the weight of the Underlying Index cannot account for more than 50% of the weight of the Underlying Index in aggregate. The following types of bonds are specifically excluded from the Underlying Index: commercial paper, derivative securities (inverse floaters, forwards, and swaps), housing bonds, non-rated bonds, notes, taxable municipals, tobacco bonds, and variable rate debt and certain conduit financed municipal securities.

**Component Selection Criteria.** Eligible bonds are approved by the SPDJI Index Committee who oversees the management of the Underlying Index and are added to the Underlying Index on the next Rebalancing Date, subject to the schedule of the monthly rebalancing procedures.

**Index Maintenance.** The Underlying Index is a market-value weighted index. S&P's pricing division, Securities Evaluations, reports the price of each bond in the index each day. The prices used in the index calculation will add the accrued interest for each bond to the price reported by S&P. The total return is calculated by aggregating the interest return, reflecting the return due to paid and accrued interest, and principal return, reflecting the capital gains or losses due to changes in S&P's end-of-day price and principal repayments and the reinvestment return, reflecting the reinvestment of related cash flows. The Underlying Index is generally reviewed and rebalanced on a monthly basis. The SPDJI Index Committee, nevertheless, reserves the right to make adjustments to the Underlying Index at any time that it believes appropriate. Additions, deletions and other changes to the Underlying Index arising from the monthly rebalancing are published three business days prior to the last business day of the month (the "Announcement Date"). Publicly available information, up to and including the close on the fourth Business Day preceding the Rebalancing Date, is considered in the rebalancing. Underlying Index changes

published in the announcement will not normally be subject to revision and will become effective after the close. Any index bond that is downgraded below investment grade between rebalancing dates is removed at the next rebalancing date.

### **S&P National AMT-Free Municipal Bond Index™**

**Number of Components: approximately 11,852**

**Index Description.** The S&P National AMT-Free Municipal Bond Index™ is a broad, comprehensive, market-value weighted index designed to measure the performance of the investment-grade U.S. municipal bond market. As of February 28, 2018, the Underlying Index consisted of 11,852 bonds, with a total market value of \$729.75 billion.

**Index Methodology.** In order for a bond to be classified as eligible for inclusion in the Underlying Index, a bond must meet all of the following criteria: (i) the bond issuer is a state or local government or agency such that interest on each bond is exempt from U.S. federal income taxes and the federal AMT as determined by the index provider in accordance with its methodology; (ii) the bond must be denominated in U.S. dollars; and (iii) the bond must have a rating of at least BBB- by S&P Global Ratings, Baa3 by Moody's, or BBB- by Fitch. A bond must be rated by at least one of these three rating agencies in order to qualify for the index, and the lowest rating will be used in determining if a bond is investment-grade; (iv) each bond in the Underlying Index must be a constituent of an offering where the original offering amount was at least \$100 million, and must have a minimum par amount of \$25 million. To remain in the Underlying Index, bonds must maintain a minimum par amount greater than or equal to \$25 million as of the next rebalancing date and must maintain a minimum Par Amount greater than or equal to \$25 million as of four days prior to last Business Day of each month ("Rebalancing Reference Date"); and (v) as of the last Business Day of each month ("Rebalancing Date"), the bond must have a minimum term to maturity and/or pre-refunded or call date greater than or equal to one calendar month. "Business Day" is defined as any day that U.S. municipal bonds are traded, as determined by the SIFMA and/or the NYSE. Bonds that are completely called or tendered during the course of the month and bonds that are scheduled to be completely called or redeemed, during the course of the month following the Rebalancing Date, will be removed on the Rebalancing Date. At each monthly rebalancing, no one issuer can represent more than 25% of the weight of the Underlying Index; and individual issuers that represent at least 5% of the weight of the Underlying Index cannot account for more than 50% of the weight of the Underlying Index in aggregate. The following types of bonds are specifically excluded from the Underlying Index: commercial paper, derivative securities (inverse floaters, forwards, and swaps), housing bonds, non-rated bonds, notes, taxable municipals, tobacco bonds, and variable rate debt and certain conduit financed municipal securities.

**Component Selection Criteria.** Eligible bonds are approved by the SPDJI Index Committee who oversees the management of the Underlying index and are added to the Underlying Index on the next Rebalancing Date, subject to the schedule of the monthly rebalancing procedures.

**Index Maintenance.** The Underlying Index is a market-value weighted index. S&P's pricing division, Securities Evaluations, reports the price of each bond in the index each day. The prices used in the index calculation will add the accrued interest for each bond to the price reported by S&P. The total return is calculated by aggregating the interest return, reflecting the return due to paid and accrued interest, and principal return, reflecting the capital gains or losses due to changes in S&P's end-of-day price and principal repayments and the reinvestment return, reflecting the reinvestment of related cash flows. The Underlying Index is generally reviewed and rebalanced on a monthly basis. The SPDJI Index Committee, nevertheless, reserves the right to make adjustments to the Underlying Index at any time that it believes appropriate. Additions, deletions and other changes to the Underlying Index arising from the monthly rebalancing are published three Business Days prior to the last business day of the month (the "Announcement Date"). Publicly available information, up to and including the close on the fourth Business Day preceding the Rebalancing Date, is considered in the rebalancing. Underlying Index changes published in the announcement will not normally be subject to revision and will become effective after the close. Any index bond that is downgraded below investment grade between rebalancing dates is removed at the next rebalancing date.

### **S&P New York AMT-Free Municipal Bond Index™**

**Number of Components: approximately 6,426**

**Index Description.** The S&P New York AMT-Free Municipal Bond Index™ is a broad, comprehensive, market-value weighted index designed to measure the performance of the investment-grade New York sector of the U.S. municipal bond market. As of January 7, 2019, the Underlying Index consisted of 6,426 bonds, with a total market value of \$214.2 billion.

**Index Methodology.** To be included in the Underlying Index, bonds must meet all of the following criteria: (i) the bond issuer is from New York State or a local government or agency whose interest payments are exempt from U.S. federal and New York



state income taxes and the federal AMT, as determined by the index provider in accordance with its methodology; (ii) the bond must be denominated in U.S. dollars; (iii) the bond must have a rating of at least BBB- by S&P Global Ratings, Baa3 by Moody's, or BBB- by Fitch. A bond must be rated by at least one of these three rating agencies in order to qualify for the index, and the lowest rating will be used in determining if a bond is investment-grade; (iv) each bond in the Underlying Index must be a constituent of an offering where the original offering amount was at least \$20 million, and must have a minimum par amount of \$5 million. To remain in the Underlying Index, bonds must maintain a minimum par amount greater than or equal to \$5 million as of the next rebalancing date and must maintain a minimum Par Amount greater than or equal to \$5 million as of four days prior to last Business Day of each month ("Rebalancing Reference Date"); and (v) as of the last Business Day of each month ("Rebalancing Date"), the bond must have a minimum term to maturity and/or pre-refunded or call date greater than or equal to one calendar month. "Business Day" is defined as any day that U.S. municipal bonds are traded, as determined by the SIFMA and/or the NYSE. Bonds that are completely called or tendered during the course of the month and bonds that are scheduled to be completely called or redeemed, during the course of the month following the Rebalancing Date, will be removed on the Rebalancing Date. At each monthly rebalancing, no one issuer can represent more than 25% of the weight of the Underlying Index; and individual issuers that represent at least 5% of the weight of the Underlying Index cannot account for more than 50% of the weight of the Underlying Index in aggregate. The following types of bonds are specifically excluded from the Underlying Index: commercial paper, derivative securities (inverse floaters, forwards, and swaps), housing bonds, non-rated bonds, notes, taxable municipals, tobacco bonds, and variable rate debt and certain conduit financed municipal securities.

**Component Selection Criteria.** Eligible bonds are approved by the SPDJI Index Committee who oversees the management of the Underlying Index and are added to the Underlying Index on the next Rebalancing Date, subject to the schedule of the monthly rebalancing procedures.

**Index Maintenance.** The Underlying Index is a market-value weighted index. S&P's pricing division, Securities Evaluations, reports the price of each bond in the index each day. The prices used in the index calculation will add the accrued interest for each bond to the price reported by S&P. The total return is calculated by aggregating the interest return, reflecting the return due to paid and accrued interest, and principal return, reflecting the capital gains or losses due to changes in S&P's end-of-day price and principal repayments and the reinvestment return, reflecting the reinvestment of related cash flows. The Underlying Index is generally reviewed and rebalanced on a monthly basis. The SPDJI Index Committee, nevertheless, reserves the right to make adjustments to the Underlying Index at any time that it believes appropriate. Additions, deletions and other changes to the Underlying Index arising from the monthly rebalancing are published three Business Days prior to the last business day of the month (the "Announcement Date"). Publicly available information, up to and including the close on the fourth Business Day preceding the Rebalancing Date, is considered in the rebalancing. Underlying Index changes published in the announcement will not normally be subject to revision and will become effective after the close. Any index bond that is downgraded below investment grade between rebalancing dates is removed at the next rebalancing date.

### **S&P Short Term National AMT-Free Municipal Bond Index™**

**Number of Components: approximately 3,412**

**Index Description.** The S&P Short Term National AMT-Free Municipal Bond Index™ is a broad, comprehensive, market-value weighted index designed to measure the performance of the short-term investment-grade U.S. municipal bond market. As of February 28, 2018, the Underlying Index consisted of 3,412 issues, with a total market value of \$197.07 billion. The Underlying Index is a subset of the S&P National AMT-Free Municipal Bond Index™ and represented approximately 27.00% of the weight of the S&P National AMT-Free Municipal Bond Index™ as of February 28, 2018.

**Index Methodology.** In order for a bond to be classified as eligible for inclusion in the Underlying Index, a bond must meet all of the following criteria: (i) the bond issuer is a state or local government or agency such that interest on the bond is exempt from U.S. federal income taxes and the federal AMT, as determined by the index provider in accordance with its methodology; (ii) the bond must be denominated in U.S. dollars; (iii) the bond must have a rating of at least BBB- by S&P Global Ratings, Baa3 by Moody's, or BBB- by Fitch. A bond must be rated by at least one of these three rating agencies in order to qualify for the Underlying Index, and the lowest rating will be used in determining if a bond is investment-grade; (iv) each bond in the index must be a constituent of an offering where the original offering amount was at least \$100 million, and must have a minimum par amount of \$25 million. To remain in the Underlying Index, a bond must maintain a minimum par amount greater than or equal to \$25 million as of four days prior to last Business Day of each month ("Rebalancing Reference Date"); and (v) as of the last Business Day of each month ("Rebalancing Date"), the bond must have a remaining term to maturity and/or pre-refunded or call date that is less than or equal to five years and greater than or equal to one

calendar month. “Business Day” is defined as any day that U.S. municipal bonds are traded, as determined by SIFMA and/or NYSE. Bonds that are completely called or tendered during the course of the month and bonds that are scheduled to be completely called or redeemed, during the course of the month following the Rebalancing Date, will be removed on the Rebalancing Date. At each monthly rebalancing, no one issuer can represent more than 25% of the weight of the Underlying Index; and individual issuers that represent at least 5% of the weight of the Underlying Index cannot account for more than 50% of the weight of the Underlying Index in aggregate. The following types of bonds are specifically excluded from the Underlying Index: commercial paper, derivative securities (inverse floaters, forwards, and swaps), housing bonds, non-rated bonds, notes, taxable municipals, tobacco bonds, and variable rate debt and certain conduit financed municipal securities.

**Index Maintenance.** The Underlying Index is a market-value weighted index. S&P’s pricing division, Securities Evaluations, reports the price of each bond in the index each day. The prices used in the index calculation will add the accrued interest for each bond to the price reported by S&P. The total return is calculated by aggregating the interest return, reflecting the return due to paid and accrued interest, and principal return, reflecting the capital gains or losses due to changes in S&P’s end-of-day price and principal repayments and the reinvestment return, reflecting the reinvestment of related cash flows. The Underlying Index is generally reviewed and rebalanced on a monthly basis. The SPDJI Index Committee, nevertheless, reserves the right to make adjustments to the Underlying Index at any time that it believes appropriate. Additions, deletions and other changes to the Underlying Index arising from the monthly rebalancing are published three Business Days prior to the last business day of the month (the “Announcement Date”). Publicly available information, up to and including the close on the fourth Business Day preceding the Rebalancing Date, is considered in the rebalancing. Underlying Index changes published in the announcement will not normally be subject to revision and will become effective after the close. Any index bond that is downgraded below investment grade between rebalancing dates is removed at the next rebalancing date.

**Changes in Circumstances Affecting Index Use.** If, in the future, a Fund’s Underlying Index is discontinued by its index provider or the Trustees determine that it would not be beneficial to shareholders for the Fund to continue operations using its Underlying Index, the Trustees may change the Underlying Index as described in the *Investment Limitations* section of this SAI or cause a Fund to effect a merger or reorganization with another Fund. To the extent permitted by law, such change or merger or reorganization may be effected without a vote of shareholders.

## Investment Restrictions

Each Fund has adopted its investment objective as a non-fundamental investment policy. Therefore, each Fund may change its investment objective and its Underlying Index without shareholder approval. The Board has adopted as fundamental policies the following numbered investment restrictions, which cannot be changed without the approval of the holders of a majority of the applicable Fund’s outstanding voting securities. A vote of a majority of the outstanding voting securities of a Fund is defined in the 1940 Act as the lesser of (i) 67% or more of the voting securities present at a shareholder meeting, if the holders of more than 50% of the outstanding voting securities of the Fund are present or represented by proxy, or (ii) more than 50% of outstanding voting securities of the Fund.

**The iShares 1-3 Year Treasury Bond ETF, iShares 7-10 Year Treasury Bond ETF, iShares 20+ Year Treasury Bond ETF, iShares Core U.S. Aggregate Bond ETF and iShares iBoxx \$ Investment Grade Corporate Bond ETF will not:**

1. Concentrate its investments (*i.e.*, invest 25% or more of its total assets in the securities of a particular industry or group of industries), except that a Fund will concentrate to approximately the same extent that its Underlying Index concentrates in the securities of such particular industry or group of industries. For purposes of this limitation, securities of the U.S. government (including its agencies and instrumentalities), repurchase agreements collateralized by U.S. government securities, and securities of state or municipal governments and their political subdivisions are not considered to be issued by members of any industry.
2. Borrow money, except that (i) each Fund may borrow from banks for temporary or emergency (not leveraging) purposes, including the meeting of redemption requests which might otherwise require the untimely disposition of securities; and (ii) each Fund may, to the extent consistent with its investment policies, enter into repurchase agreements, reverse repurchase agreements, forward roll transactions and similar investment strategies and techniques. To the extent that it engages in transactions described in (i) and (ii), each Fund will be limited so that no more than 33 1/3% of the value of its total assets (including the amount borrowed) is derived from such transactions. Any borrowings which come to exceed this amount will be reduced in accordance with applicable law.

3. Issue any senior security, except as permitted under the 1940 Act, as interpreted, modified or otherwise permitted by regulatory authority having jurisdiction, from time to time.
4. Make loans, except as permitted under the 1940 Act, as interpreted, modified or otherwise permitted by regulatory authority having jurisdiction, from time to time.
5. Purchase or sell real estate, real estate mortgages, commodities or commodity contracts, but this restriction shall not prevent each Fund from trading in futures contracts and options on futures contracts (including options on currencies to the extent consistent with each Fund's investment objective and policies). (Notwithstanding the foregoing, the iShares Core U.S. Aggregate Bond ETF may purchase or sell MBS, commercial MBS and real estate mortgages.)
6. Engage in the business of underwriting securities issued by other persons, except to the extent that each Fund may technically be deemed to be an underwriter under the 1933 Act, in disposing of portfolio securities.

**The iShares 3-7 Year Treasury Bond ETF, iShares 10-20 Year Treasury Bond ETF, iShares Agency Bond ETF, iShares Broad USD Investment Grade Corporate Bond ETF, iShares California Muni Bond ETF, iShares Core 10+ Year USD Bond ETF, iShares Government/Credit Bond ETF, iShares iBoxx \$ High Yield Corporate Bond ETF, iShares Intermediate Government/Credit Bond ETF, iShares Intermediate-Term Corporate Bond ETF, iShares Long-Term Corporate Bond ETF, iShares MBS ETF, iShares National Muni Bond ETF, iShares New York Muni Bond ETF, iShares Short-Term Corporate Bond ETF, iShares Short-Term National Muni Bond ETF and iShares Short Treasury Bond ETF will not:**

1. Concentrate its investments (*i.e.*, invest 25% or more of its total assets in the securities of a particular industry or group of industries), except that a Fund will concentrate to approximately the same extent that its Underlying Index concentrates in the securities of such particular industry or group of industries. For purposes of this limitation, securities of the U.S. government (including its agencies and instrumentalities), repurchase agreements collateralized by U.S. government securities, and securities of state or municipal governments and their political subdivisions are not considered to be issued by members of any industry.
2. Borrow money, except that (i) each Fund may borrow from banks for temporary or emergency (not leveraging) purposes, including the meeting of redemption requests which might otherwise require the untimely disposition of securities, and (ii) each Fund may, to the extent consistent with its investment policies, enter into repurchase agreements, reverse repurchase agreements, forward roll transactions and similar investment strategies and techniques. To the extent that it engages in transactions described in (i) and (ii), each Fund will be limited so that no more than 33 1/3% of the value of its total assets (including the amount borrowed) is derived from such transactions. Any borrowings which come to exceed this amount will be reduced in accordance with applicable law.
3. Issue any senior security, except as permitted under the 1940 Act, as amended, and as interpreted, modified or otherwise permitted by regulatory authority having jurisdiction, from time to time.
4. Make loans, except as permitted under the 1940 Act, as interpreted, modified or otherwise permitted by regulatory authority having jurisdiction, from time to time.
5. Purchase or sell real estate unless acquired as a result of ownership of securities or other instruments (but this restriction shall not prevent each Fund from investing in securities of companies engaged in the real estate business or securities or other instruments backed by real estate or mortgages), or commodities or commodity contracts (but this restriction shall not prevent each Fund from trading in futures contracts and options on futures contracts, including options on currencies to the extent consistent with each Fund's investment objective and policies).
6. Engage in the business of underwriting securities issued by other persons, except to the extent that each Fund may technically be deemed to be an underwriter under the 1933 Act, in disposing of portfolio securities.

**The iShares Core 5-10 Year USD Bond ETF, iShares ESG 1-5 Year USD Corporate Bond ETF and iShares ESG USD Corporate Bond ETF may not:**

1. Concentrate its investments in a particular industry, as that term is used in the 1940 Act, except that a Fund will concentrate to approximately the same extent that its Underlying Index concentrates in the securities of a particular industry or group of industries.
2. Borrow money, except as permitted under the 1940 Act.
3. Issue senior securities to the extent such issuance would violate the 1940 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 REITs, 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 1940 Act.
7. Make loans to the extent prohibited by the 1940 Act.

***Notations Regarding each of the iShares Core 5-10 Year USD Bond ETF's, iShares ESG 1-5 Year USD Corporate Bond ETF's and iShares ESG USD Corporate Bond ETF's Fundamental Investment Restrictions***

The following notations are not considered to be part of each 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 SEC 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 each 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 each 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 each 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.) To limit the risks attendant to borrowing, the Investment Company Act requires each 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 each 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 SEC staff guidance and interpretations, when each 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 SEC). The policy in (2) above will be interpreted to permit each 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 each 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 each 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 each Fund's underwriting commitments, when added to the value of the Fund's investments in issuers where each 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 1933 Act.

Although it is not believed that the application of the 1933 Act provisions described above would cause each 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 1933 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 each Fund from making loans (including lending its securities); however, SEC 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.

Under its non-fundamental investment restrictions, which may be changed by the Board without shareholder approval, iShares Core 5-10 Year USD Bond ETF, iShares ESG 1-5 Year USD Corporate Bond ETF and iShares ESG USD Corporate Bond ETF may not make short sales of securities or maintain a short position, except to the extent permitted by the iShares Core 5-10 Year USD Bond ETF's, iShares ESG 1-5 Year USD Corporate Bond ETF's and iShares ESG USD Corporate Bond ETF's Prospectus and SAI, as amended from time to time, and applicable law.

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

In addition to the investment restrictions adopted as fundamental policies, set forth above, each Fund (except the iShares Core 5-10 Year USD Bond ETF, iShares ESG 1-5 Year USD Corporate Bond ETF and iShares ESG USD Corporate Bond ETF) has adopted a non-fundamental policy not to invest in the securities of a company for the purpose of exercising management or control, or purchase or otherwise acquire any illiquid security, except as permitted under the 1940 Act, which currently permits up to 15% of each Fund's net assets to be invested in illiquid securities (calculated at the time of investment). Except with regard to the fundamental policy relating to senior securities set forth in (3) above for all Funds, if any percentage restriction described above is complied with at the time of an investment, a later increase or decrease in percentage resulting from a change in values of assets will not constitute a violation of such restriction.

BFA monitors the liquidity of restricted securities in each Fund's portfolio. In reaching liquidity decisions, BFA considers the following factors:

- The frequency of trades and quotes for the security;
- The number of dealers wishing to purchase or sell the security and the number of other potential purchasers;
- Dealer undertakings to make a market in the security; and
- The nature of the security and the nature of the marketplace in which it trades (e.g., the time needed to dispose of the security, the method of soliciting offers and the mechanics of transfer).

Under normal circumstances (i) each of the iShares National Muni Bond ETF and the iShares Short-Term National Muni Bond ETF will invest at least 80% of the value of its net assets, plus the amount of any borrowings for investment purposes, in investments the income of which is free from federal income tax, including AMT; (ii) the iShares California Muni Bond ETF will invest at least 80% of the value of its net assets, plus the amount of any borrowings for investment purposes, in investments the income of which is free from federal income tax, including AMT, and California income tax; and (iii) the iShares New York Muni Bond ETF will invest at least 80% of the value of its net assets, plus the amount of any borrowings for investment purposes, in investments the income of which is free from federal income tax, including AMT, and New York income tax. These policies are fundamental policies of the Municipal Bond Funds and may not be changed without a vote of a majority of each Fund's outstanding voting securities, as defined in the 1940 Act. Each Fund (except the Municipal Bond Funds) has adopted a non-fundamental investment policy to invest, under normal circumstances, at least 80% of the value of its net assets, plus the amount of any borrowings for investment purposes, in securities in the Fund's Underlying Index and (except the iShares ESG 1-5 Year USD Corporate Bond ETF and iShares ESG USD Corporate Bond ETF) in TBA transactions with respect to the percentage of the Underlying Index (if any) that consists of mortgage-pass through securities. Each of the

iShares Core 10+ Year USD Bond ETF and iShares Core U.S. Aggregate Bond ETF have adopted an additional non-fundamental policy under which the iShares Core 10+ Year USD Bond ETF and iShares Core U.S. Aggregate Bond ETF, under normal circumstances, will invest, at least 80% of its net assets, plus the amount of any borrowings for investment purposes, in securities of U.S. issuers. Each Fund also has adopted a policy to provide its shareholders with at least 60 days' prior written notice of any change in such policy. If, subsequent to an investment, an 80% requirement is no longer met, a Fund's future investments will be made in a manner that will bring the Fund into compliance with this policy.

Each Fund has adopted a non-fundamental limitation such that, under normal market conditions, any borrowings by the Fund will not exceed 10% of the Fund's net assets.

Each Fund may not purchase securities of other investment companies, except to the extent permitted by the 1940 Act. As a matter of policy, however, a 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 1940 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).

## Continuous Offering

The method by which Creation Units are created and traded may raise certain issues under applicable securities laws. Because new Creation Units are issued and sold by the Funds on an ongoing basis, at any point a "distribution," as such term is used in the 1933 Act, may occur. Broker-dealers and other persons are cautioned that some activities on their part may, depending on the circumstances, result in their being deemed participants in a distribution in a manner that could render them statutory underwriters and subject them to the prospectus delivery requirement and liability provisions of the 1933 Act.

For example, a broker-dealer firm or its client may be deemed a statutory underwriter if it takes Creation Units after placing an order with the Distributor, breaks them down into constituent shares and sells such shares directly to customers or if it chooses to couple the creation of new shares with an active selling effort involving solicitation of secondary market demand for shares. A determination of whether one is an underwriter for purposes of the 1933 Act must take into account all of the facts and circumstances pertaining to the activities of the broker-dealer or its client in the particular case and the examples mentioned above should not be considered a complete description of all the activities that could lead to a categorization as an underwriter.

Broker-dealer firms should also note that dealers who are not "underwriters" but are effecting transactions in shares, whether or not participating in the distribution of shares, generally are required to deliver a prospectus. This is because the prospectus delivery exemption in Section 4(a)(3) of the 1933 Act is not available in respect of such transactions as a result of Section 24(d) of the 1940 Act. Firms that incur a prospectus delivery obligation with respect to shares of the Funds are reminded that, pursuant to Rule 153 under the 1933 Act, a prospectus delivery obligation under Section 5(b)(2) of the 1933 Act owed to an exchange member in connection with a sale on the Listing Exchange generally is satisfied by the fact that the prospectus is available at the Listing Exchange upon request. The prospectus delivery mechanism provided in Rule 153 is available only with respect to transactions on an exchange.

## Management

**Trustees and Officers.** The Board has responsibility for the overall management and operations of the Funds, including general supervision of the duties performed by BFA and other service providers. Each Trustee serves until he or she resigns, is removed, dies, retires or becomes incapacitated. Each officer shall hold office until his or her successor is elected and qualifies or until his or her death, resignation or removal. Trustees who are not "interested persons" (as defined in the 1940 Act) of the Trust are referred to as independent trustees ("Independent Trustees").

The registered investment companies advised by BFA or its affiliates (the "BlackRock-advised Funds") are organized into one complex of open-end equity, multi-asset, index and money market funds (the "BlackRock Multi-Asset Complex"), one complex of closed-end funds and open-end non-index fixed-income funds (the "BlackRock Fixed-Income Complex") and one complex of ETFs ("Exchange-Traded Fund Complex") (each, a "BlackRock Fund Complex"). Each Fund is included in the BlackRock Fund Complex referred to as the Exchange-Traded Fund Complex. Each Trustee also serves as a Director of iShares, Inc. and a Trustee of iShares U.S. ETF Trust and, as a result, oversees all of the funds within the Exchange-Traded

Fund Complex, which consists of 358 funds as of June 29, 2018. With the exception of Robert S. Kapito, Mark K. Wiedman, Charles Park, Martin Small and Benjamin Archibald, the address of each Trustee and officer is c/o BlackRock, Inc., 400 Howard Street, San Francisco, CA 94105. The address of Mr. Kapito, Mr. Wiedman, Mr. Park, Mr. Small and Mr. Archibald is c/o BlackRock, Inc., Park Avenue Plaza, 55 East 52<sup>nd</sup> Street, New York, NY 10055. The Board has designated Cecilia H. Herbert as its Independent Board Chair. Additional information about the Funds' Trustees and officers may be found in this SAI, which is available without charge, upon request, by calling toll-free 1-800-iShares (1-800-474-2737).

### Interested Trustees

Name (Age)	Position	Principal Occupation(s) During the Past 5 Years	Other Directorships Held by Trustee
Robert S. Kapito <sup>1</sup> (61)	Trustee (since 2009).	President, BlackRock, Inc. (since 2006); Vice Chairman of BlackRock, Inc. and Head of BlackRock's Portfolio Management Group (since its formation in 1998) and BlackRock, Inc.'s predecessor entities (since 1988); Trustee, University of Pennsylvania (since 2009); President of Board of Directors, Hope & Heroes Children's Cancer Fund (since 2002).	Director of BlackRock, Inc. (since 2006); Director of iShares, Inc. (since 2009); Trustee of iShares U.S. ETF Trust (since 2011).
Mark K. Wiedman <sup>2</sup> (47)	Trustee (since 2013).	Senior Managing Director, BlackRock, Inc. (since 2014); Managing Director, BlackRock, Inc. (2007-2014); Head of International and of Corporate Strategy for BlackRock (since 2019); Global Head of BlackRock's ETF and Index Investments Business (2016-2019); Global Head of iShares (2011-2016); Head of Corporate Strategy, BlackRock, Inc. (2009-2011).	Director of iShares, Inc. (since 2013); Trustee of iShares U.S. ETF Trust (since 2013); Director of PennyMac Financial Services, Inc. (since 2008).

<sup>1</sup> Robert S. Kapito is deemed to be an "interested person" (as defined in the 1940 Act) of the Trust due to his affiliations with BlackRock, Inc. and its affiliates.

<sup>2</sup> Mark K. Wiedman is deemed to be an "interested person" (as defined in the 1940 Act) of the Trust due to his affiliations with BlackRock, Inc. and its affiliates.

## Independent Trustees

Name (Age)	Position	Principal Occupation(s) During the Past 5 Years	Other Directorships Held by Trustee
Cecilia H. Herbert (69)	Trustee (since 2005); Independent Board Chair (since 2016).	Chair of the Finance Committee (since 2019) and Trustee and Member of the Finance, Technology and Quality Committees of Stanford Health Care (since 2016); Member of the Audit Committee (since 2018) and Trustee and Member of the Investment Committee, WNET, a New York public media company (since 2011); Chair (1994-2005) and Member (since 1992) of the Investment Committee, Archdiocese of San Francisco; Trustee of Forward Funds (14 portfolios) (2009-2018); Trustee of Salient MF Trust (4 portfolios) (2015-2018); Director (1998-2013) and President (2007- 2011) of the Board of Directors, Catholic Charities CYO; Trustee (2002-2011) and Chair of the Finance and Investment Committee (2006- 2010) of the Thacher School.	Director of iShares, Inc. (since 2005); Trustee of iShares U.S. ETF Trust (since 2011); Independent Board Chair of iShares, Inc. and iShares U.S. ETF Trust (since 2016); Trustee of Thrivent Church Loan and Income Fund (since 2019).
Jane D. Carlin (62)	Trustee (since 2015); Risk Committee Chair (since 2016).	Consultant (since 2012); Member of the Audit Committee (2012-2018), Chair of the Nominating and Governance Committee (2017-2018) and Director of PHH Corporation (mortgage solutions) (2012-2018); Managing Director and Global Head of Financial Holding Company Governance & Assurance and the Global Head of Operational Risk Management of Morgan Stanley (2006-2012).	Director of iShares, Inc. (since 2015); Trustee of iShares U.S. ETF Trust (since 2015); Member of the Audit Committee (since 2016) and Director of The Hanover Insurance Group, Inc. (since 2016).
Richard L. Fagnani (63)	Trustee (since 2017); Audit Committee Chair (since 2019).	Partner, KPMG LLP (2002-2016).	Director of iShares, Inc. (since 2017); Trustee of iShares U.S. ETF Trust (since 2017).
John E. Kerrigan (62)	Trustee (since 2005); Nominating and Governance and Equity Plus Committee Chairs (since 2019).	Chief Investment Officer, Santa Clara University (since 2002).	Director of iShares, Inc. (since 2005); Trustee of iShares U.S. ETF Trust (since 2011).



Name (Age)	Position	Principal Occupation(s) During the Past 5 Years	Other Directorships Held by Trustee
Drew E. Lawton (59)	Trustee (since 2017); 15(c) Committee Chair (since 2017).	Senior Managing Director of New York Life Insurance Company (2010- 2015).	Director of iShares, Inc. (since 2017); Trustee of iShares U.S. ETF Trust (since 2017).
John E. Martinez (57)	Trustee (since 2003); Securities Lending Committee Chair (since 2019).	Director of Real Estate Equity Exchange, Inc. (since 2005); Director of Cloudera Foundation (since 2017); and Director of Reading Partners (2012-2016).	Director of iShares, Inc. (since 2003); Trustee of iShares U.S. ETF Trust (since 2011).
Madhav V. Rajan (53)	Trustee (since 2011); Fixed Income Plus Committee Chair (since 2019).	Dean, and George Pratt Shultz Professor of Accounting, University of Chicago Booth School of Business (since 2017); Robert K. Jaedicke Professor of Accounting, Stanford University Graduate School of Business (2001-2017); Professor of Law (by courtesy), Stanford Law School (2005-2017); Senior Associate Dean for Academic Affairs and Head of MBA Program, Stanford University Graduate School of Business (2010- 2016).	Director of iShares, Inc. (since 2011); Trustee of iShares U.S. ETF Trust (since 2011).

#### Officers

Name (Age)	Position	Principal Occupation(s) During the Past 5 Years
Martin Small (42)	President (since 2016).	Managing Director, BlackRock, Inc. (since 2010); Head of U.S. iShares (since 2015); Co-Head of the U.S. Financial Markets Advisory Group, BlackRock, Inc. (2008-2014).
Jack Gee (58)	Treasurer and Chief Financial Officer (since 2008).	Managing Director, BlackRock, Inc. (since 2009); Senior Director of Fund Administration of Intermediary Investor Business, BGI (2009).
Charles Park (50)	Chief Compliance Officer (since 2006).	Chief Compliance Officer of BlackRock Advisors, LLC and the BlackRock-advised Funds in the Equity-Bond Complex, the Equity- Liquidity Complex and the Closed- End Complex (since 2014); Chief Compliance Officer of BFA (since 2006).
Benjamin Archibald (43)	Secretary (since 2015).	Managing Director, BlackRock, Inc. (since 2014); Director, BlackRock, Inc. (2010-2013); Secretary of the BlackRock-advised mutual funds (since 2012).

Name (Age)	Position	Principal Occupation(s) During the Past 5 Years
Steve Messinger (56)	Executive Vice President (since 2016).	Managing Director, BlackRock, Inc. (2007-2014 and since 2016); Managing Director, Beacon Consulting Group (2014-2016).
Scott Radell (49)	Executive Vice President (since 2012).	Managing Director, BlackRock, Inc. (since 2009); Head of Portfolio Solutions, BlackRock, Inc. (since 2009).
Alan Mason (57)	Executive Vice President (since 2016).	Managing Director, BlackRock, Inc. (since 2009).

The Board has concluded that, based on each Trustee's experience, qualifications, attributes or skills on an individual basis and in combination with those of the other Trustees, each Trustee should serve as a Trustee of the Board. Among the attributes common to all Trustees are their ability to review critically, evaluate, question and discuss information provided to them, to interact effectively with the Funds' investment adviser, other service providers, counsel and the independent registered public accounting firm, and to exercise effective business judgment in the performance of their duties as Trustees. A Trustee's ability to perform his or her duties effectively may have been attained through the Trustee's educational background or professional training; business, consulting, public service or academic positions; experience from service as a Board member of the Funds and the other funds in the Trust (and any predecessor funds), other investment funds, public companies, or non-profit entities or other organizations; and/or other life experiences. Also, set forth below is a brief discussion of the specific experience, qualifications, attributes or skills of each Trustee that led the Board to conclude that he or she should serve (or continue to serve) as a Trustee.

Robert S. Kapito has been a Trustee of the Trust since 2009. Mr. Kapito has also served as a Director of iShares, Inc. since 2009, a Trustee of iShares U.S. ETF Trust since 2011 and a Director of BlackRock, Inc. since 2006. Mr. Kapito served as a Director of iShares MSCI Russia Capped ETF, Inc. from 2010 to 2015. In addition, he has over 20 years of experience as part of BlackRock, Inc. and BlackRock's predecessor entities. Mr. Kapito serves as President of BlackRock, Inc., and is a member of the Global Executive Committee and Chairman of the Global Operating Committee. He is responsible for day-to-day oversight of BlackRock's key operating units, including Investment Strategies, Client Businesses, Technology & Operations, and Risk & Quantitative Analysis. Prior to assuming his current responsibilities in 2007, Mr. Kapito served as Vice Chairman of BlackRock, Inc. and Head of BlackRock's Portfolio Management Group. In that role, he was responsible for overseeing all portfolio management within BlackRock, including the Fixed Income, Equity, Liquidity, and Alternative Investment Groups. Mr. Kapito serves as a member of the Board of Trustees of the University of Pennsylvania and the Harvard Business School Board of Dean's Advisors. He has also been President of the Board of Directors for the Hope & Heroes Children's Cancer Fund since 2002. Mr. Kapito earned a BS degree in economics from the Wharton School of the University of Pennsylvania in 1979, and an MBA degree from Harvard Business School in 1983.

Mark K. Wiedman has been a Trustee of the Trust since 2013. Mr. Wiedman has also served as a Director of iShares, Inc. and a Trustee of iShares U.S. ETF Trust since 2013. Mr. Wiedman served as a Director of iShares MSCI Russia Capped ETF, Inc. from 2013 to 2015. Mr. Wiedman is the Head of International and of Corporate Strategy for BlackRock and Senior Managing Director of BlackRock, Inc. In addition, he is a member of BlackRock's Global Executive Committee. Prior to assuming his current responsibilities in 2019, Mr. Wiedman was the Global Head of iShares and Index Investments. Mr. Wiedman was previously the head of Corporate Strategy for BlackRock. Mr. Wiedman joined BlackRock in 2004 to help start the advisory business, which evolved into the Financial Markets Advisory Group in BlackRock Solutions. This group advises financial institutions and governments on managing their capital markets exposures and businesses. Prior to BlackRock, he served as senior advisor and chief of staff for the Under Secretary for Domestic Finance at the U.S. Department of the Treasury and also was a management consultant at McKinsey & Co., advising financial institutions in the U.S., Europe, and Japan. He has taught as an adjunct associate professor of law at Fordham University in New York and Renmin University in Beijing. Mr. Wiedman serves on the board of PennyMac Financial Services, Inc., a publicly-traded U.S. mortgage banking and investment management firm started in 2008, with BlackRock, Inc. as a sponsor. Mr. Wiedman earned an AB degree, Phi Beta Kappa, *magna cum laude*, in social studies from Harvard College in 1992 and a JD degree from Yale Law School in 1996.

Cecilia H. Herbert has been a Trustee of the Trust since 2005 and Chair of the Trust's Board since 2016. Ms. Herbert has also served as a Director of iShares, Inc. since 2005, a Trustee of iShares U.S. ETF Trust since 2011, and Chair of each Board since 2016. Ms. Herbert served as a Director of iShares MSCI Russia Capped ETF, Inc. from 2010 to 2015. In addition, Ms. Herbert served as Trustee of the Forward Funds from 2009 to 2018 and Trustee of Salient Funds from 2015 to 2018. She has served since 1992 on the Investment Council of the Archdiocese of San Francisco and was Chair from 1994 to 2005. She has served as a member of the Finance, Technology and Quality Committees and Trustee of Stanford Health Care since 2016 and became Chair of the Finance Committee of Stanford Health Care in 2019. She has served as an Audit Committee member (since 2018) and a Trustee of WNET, New York's public media station, since 2011. She became a member of the Governing Council of the Independent Directors Forum in 2018 and joined the board of Thrivent Church Loan and Income Fund in 2019. She was President of the Board of Catholic Charities CYO, the largest social services agency in the San Francisco Bay Area, from 2007 to 2011 and a member of that board from 1992 to 2013. She previously served as Trustee of the Pacific Select Funds from 2004 to 2005 and Trustee of the Montgomery Funds from 1992 to 2003. She worked from 1973 to 1990 at J.P. Morgan/Morgan Guaranty Trust doing international corporate finance and corporate lending, retiring as Managing Director and Head of the West Coast Office. Ms. Herbert has been on numerous non-profit boards, chairing investment and finance committees. She holds a double major in economics and communications from Stanford University and an MBA from Harvard Business School.

Jane D. Carlin has been a Trustee of the Trust since 2015 and Chair of the Risk Committee since 2016. Ms. Carlin has also served as a Director of iShares, Inc. and a Trustee of iShares U.S. ETF Trust since 2015, and Chair of the Risk Committee of each Board since 2016. Ms. Carlin has served as a consultant since 2012 and formerly served as Managing Director and Global Head of Financial Holding Company Governance & Assurance and the Global Head of Operational Risk Management of Morgan Stanley from 2006 to 2012. In addition, Ms. Carlin served as Managing Director and Global Head of the Bank Operational Risk Oversight Department of Credit Suisse Group from 2003 to 2006. Prior to that, Ms. Carlin served as Managing Director and Deputy General Counsel of Morgan Stanley. Ms. Carlin has over 30 years of experience in the financial sector and has served in a number of legal, regulatory, and risk management positions. Ms. Carlin has served as a member of the Audit Committee and as a Director of The Hanover Insurance Group, Inc., each since 2016. Ms. Carlin served as a member of the Audit Committee from 2012 to 2018, chair of the Nominating and Governance Committee from 2017 to 2018 and as an Independent Director on the Board of PHH Corporation from 2012 to 2018. She previously served as a Director on the Boards of Astoria Financial Corporation and Astoria Bank. Ms. Carlin was appointed by the United States Treasury to the Financial Services Sector Coordinating Council for Critical Infrastructure Protection and Homeland Security, where she served as Chairperson from 2010 to 2012 and Vice Chair and Chair of the Cyber Security Committee from 2009 to 2010. Ms. Carlin has a BA degree in political science from State University of New York at Stony Brook and a JD degree from Benjamin N. Cardozo School of Law.

Richard L. Fagnani has been a Trustee of the Trust since 2017 and Chair of the Audit Committee of the Trust since 2019. Mr. Fagnani has also served as a Director of iShares, Inc. and a Trustee of iShares U.S. ETF Trust since 2017, and Chair of the Audit Committee of each Board since 2019. Mr. Fagnani served as an Advisory Board Member of the Trust, iShares U.S. ETF Trust and iShares, Inc. from April 2017 to June 2017. Mr. Fagnani served as a Senior Audit Partner at KPMG LLP from 2002 to 2016, most recently as the U.S. asset management audit practice leader responsible for setting strategic direction and execution of the operating plan for the asset management audit practice. In addition, from 1977 to 2002, Mr. Fagnani served as an Audit Partner at Andersen LLP, where he developed and managed the asset management audit practice. Mr. Fagnani served as a Trustee on the Board of the Walnut Street Theater in Philadelphia from 2009 to 2014 and as a member of the School of Business Advisory Board at LaSalle University from 2006 to 2014. Mr. Fagnani has a BS degree in Accounting from LaSalle University.

John E. Kerrigan has been a Trustee of the Trust since 2005 and Chair of the Equity Plus and Nominating and Governance Committees of the Trust since 2019. Mr. Kerrigan has also served as a Director of iShares, Inc. since 2005, a Trustee of iShares U.S. ETF Trust since 2011, and Chair of the Equity Plus and Nominating and Governance Committees of each Board since 2019. Mr. Kerrigan served as a Director of iShares MSCI Russia Capped ETF, Inc. from 2010 to 2015. Mr. Kerrigan has served as Chief Investment Officer of Santa Clara University since 2002. Mr. Kerrigan was formerly a Managing Director at Merrill Lynch & Co., including the following responsibilities: Managing Director, Institutional Client Division, Western United States. Mr. Kerrigan has been a Director, since 1999, of The BASIC Fund (Bay Area Scholarships for Inner City Children). Mr. Kerrigan has a BA degree from Boston College and is a Chartered Financial Analyst Charterholder.

Drew E. Lawton has been a Trustee of the Trust since 2017 and Chair of the 15(c) Committee of the Trust since 2017. Mr. Lawton has also served as a Director of iShares, Inc., a Trustee of iShares U.S. ETF Trust, and Chair of the 15(c) Committee of

each Board since 2017. Mr. Lawton also served as an Advisory Board Member of the Trust, iShares, Inc. and iShares U.S. ETF Trust from 2016 to 2017. Mr. Lawton served as Director of Principal Funds, Inc., Principal Variable Contracts Funds, Inc. and Principal Exchange-Traded Funds from March 2016 to October 2016. Mr. Lawton served in various capacities at New York Life Insurance Company from 2010 to 2015, most recently as a Senior Managing Director and Chief Executive Officer of New York Life Investment Management. From 2008 to 2010, Mr. Lawton was the President of Fridson Investment Advisors, LLC. Mr. Lawton previously held multiple roles at Fidelity Investments from 1997 to 2008. Mr. Lawton has a BA degree in Administrative Science from Yale University and an MBA from University of North Texas.

John E. Martinez has been a Trustee of the Trust since 2003 and Chair of the Securities Lending Committee of the Trust since 2019. Mr. Martinez has also served as a Director of iShares, Inc. since 2003, a Trustee of iShares U.S. ETF Trust since 2011, and Chair of the Securities Lending Committee of each Board since 2019. Mr. Martinez served as a Director of iShares MSCI Russia Capped ETF, Inc. from 2010 to 2015. Mr. Martinez is a Director of Real Estate Equity Exchange, Inc., providing governance oversight and consulting services to this privately held firm that develops products and strategies for homeowners in managing the equity in their homes. Mr. Martinez currently serves as a Board member for the Cloudera Foundation, whose mission is to apply Cloudera's data science expertise and discipline to solve global social problems. Mr. Martinez previously served as Director of Barclays Global Investors ("BGI") UK Holdings, where he provided governance oversight representing BGI's shareholders (Barclays PLC, BGI management shareholders) through oversight of BGI's worldwide activities. Mr. Martinez also previously served as Co-Chief Executive Officer of the Global Index and Markets Group of BGI, Chairman of Barclays Global Investor Services and Chief Executive Officer of the Capital Markets Group of BGI. From 2003 to 2012, he was a Director and Executive Committee Member for Larkin Street Youth Services, providing governance oversight and strategy development to an agency that provides emergency and transitional housing, healthcare, education, job and life skills training to homeless youth. He now serves on the Larkin Street Honorary Board. From 2012 to 2016, Mr. Martinez served as a Director for Reading Partners, an organization committed to making all children literate through one-on-one tutoring of students in grades K-4 who are not yet reading at grade level. Mr. Martinez has an AB degree in economics from The University of California, Berkeley and holds an MBA degree in finance and statistics from The University of Chicago Booth School of Business.

Madhav V. Rajan has been a Trustee of the Trust since 2011 and Chair of the Fixed Income Plus Committee of the Trust since 2019. Mr. Rajan has also served as a Director of iShares, Inc. and a Trustee of iShares U.S. ETF Trust since 2011, and Chair of the Fixed Income Plus Committee of each Board since 2019. Mr. Rajan served as a Director of iShares MSCI Russia Capped ETF, Inc. from 2011 to 2015. Mr. Rajan is the Dean and George Pratt Shultz Professor of Accounting at the University of Chicago Booth School of Business. From 2001 to 2017, Mr. Rajan was the Robert K. Jaedicke Professor of Accounting at the Stanford University Graduate School of Business. In April 2017, he received the school's Robert T. Davis Award for Lifetime Achievement and Service. He has taught accounting for over 25 years to undergraduate, MBA and law students, as well as to senior executives. From 2010 to 2016, Mr. Rajan served as the Senior Associate Dean for Academic Affairs and head of the MBA Program at the Stanford University Graduate School of Business. Mr. Rajan served as editor of "The Accounting Review" from 2002 to 2008 and is co-author of "Cost Accounting: A Managerial Emphasis," a leading cost accounting textbook. From 2013 to 2018, Mr. Rajan served on the Board of Directors of Cavium Inc., a semiconductor company. Mr. Rajan holds MS and PhD degrees in Accounting from Carnegie Mellon University.

#### Board – Leadership Structure and Oversight Responsibilities

Overall responsibility for oversight of the Funds rests with the Board. The Board has engaged BFA to manage the Funds on a day-to-day basis. The Board is responsible for overseeing BFA and other service providers in the operations of the Funds in accordance with the provisions of the 1940 Act, applicable provisions of state and other laws and the Trust's charter. The Board is currently composed of nine members, seven of whom are Independent Trustees. The Board currently conducts regular in person meetings four times a year. In addition, the Board frequently holds special in person or telephonic meetings or informal conference calls to discuss specific matters that may arise or require action between regular meetings. The Independent Trustees meet regularly outside the presence of management, in executive session or with other service providers to the Trust.

The Board has appointed an Independent Trustee to serve in the role of Board Chair. The Board Chair's role is to preside at all meetings of the Board and to act as a liaison with service providers, officers, attorneys, and other Trustees generally between meetings. The Board Chair may also perform such other functions as may be delegated by the Board from time to time. The Board has established seven standing Committees: a Nominating and Governance Committee, an Audit Committee, a 15(c) Committee, a Securities Lending Committee, a Risk Committee, an Equity Plus Committee and a Fixed Income Plus

Committee to assist the Board in the oversight and direction of the business and affairs of the Funds, and from time to time the Board may establish ad hoc committees or informal working groups to review and address the policies and practices of the Funds with respect to certain specified matters. The Chair of each standing Committee is an Independent Trustee. The role of the Chair of each Committee is to preside at all meetings of the Committee and to act as a liaison with service providers, officers, attorneys and other Trustees between meetings. Each standing Committee meets regularly to conduct the oversight functions delegated to the Committee by the Board and reports its finding to the Board. The Board and each standing Committee conduct annual assessments of their oversight function and structure. The Board has determined that the Board's leadership structure is appropriate because it allows the Board to exercise independent judgment over management and it allocates areas of responsibility among committees of Independent Trustees and the full Board to enhance effective oversight.

Day-to-day risk management with respect to the Funds is the responsibility of BFA or other service providers (depending on the nature of the risk), subject to the supervision of BFA. Each Fund is subject to a number of risks, including investment, compliance, operational, reputational, counterparty and valuation risks, among others. While there are a number of risk management functions performed by BFA and other service providers, as applicable, it is not possible to identify and eliminate all of the risks applicable to the Funds. The Trustees have an oversight role in this area, satisfying themselves that risk management processes and controls are in place and operating effectively. Risk oversight forms part of the Board's general oversight of each Fund and is addressed as part of various Board and committee activities. In some cases, risk management issues are specifically addressed in presentations and discussions. For example, BFA has an independent dedicated Risk and Quantitative Analysis Group ("RQA") that assists BFA in managing fiduciary and corporate risks, including investment, operational, counterparty credit and enterprise risk. Representatives of RQA meet with the Board to discuss their analysis and methodologies, as well as specific risk topics such as operational and counterparty risks relating to the Funds. The Board, directly or through a committee, also reviews reports from, among others, management and the independent registered public accounting firm for the Trust, as appropriate, regarding risks faced by each Fund and management's risk functions. The Board has appointed a Chief Compliance Officer who oversees the implementation and testing of the Trust's compliance program, including assessments by independent third parties, and reports to the Board regarding compliance matters for the Trust and its principal service providers. In testing and maintaining the compliance program, the Chief Compliance Officer (and his or her delegates) assesses key compliance risks affecting each Fund, and addresses them in periodic reports to the Board. In addition, the Audit Committee meets with both the Funds' independent registered public accounting firm and BFA's internal audit group to review risk controls in place that support each Fund as well as test results. Board oversight of risk is also performed as needed between meetings through communications between BFA and the Board. The Independent Trustees have engaged independent legal counsel to assist them in performing their oversight responsibilities. From time to time, the Board may modify the manner in which it conducts risk oversight. The Board's oversight role does not make it a guarantor of the Funds' investment performance or other activities.

**Committees of the Board of Trustees.** The members of the Audit Committee are Richard L. Fagnani (Chair), John E. Kerrigan and Madhav V. Rajan, each of whom is an Independent Trustee. The purposes of the Audit Committee are to assist the Board (i) in its oversight of the Trust's accounting and financial reporting principles and policies and related controls and procedures maintained by or on behalf of the Trust; (ii) in its oversight of the Trust's financial statements and the independent audit thereof; (iii) in selecting, evaluating and, where deemed appropriate, replacing the independent accountants (or nominating the independent accountants to be proposed for shareholder approval in any proxy statement); (iv) in evaluating the independence of the independent accountants; (v) in complying with legal and regulatory requirements that relate to the Trust's accounting and financial reporting, internal controls, compliance controls and independent audits; and (vi) to assume such other responsibilities as may be delegated by the Board. The Audit Committee met five times during the fiscal year ended February 28, 2018.

The members of the Nominating and Governance Committee are John E. Kerrigan (Chair), Madhav V. Rajan and Drew E. Lawton, each of whom is an Independent Trustee. The Nominating and Governance Committee nominates individuals for Independent Trustee membership on the Board and recommends appointments to the Advisory Board. The Nominating and Governance Committee functions include, but are not limited to, the following: (i) reviewing the qualifications of any person properly identified or nominated to serve as an Independent Trustee; (ii) recommending to the Board and current Independent Trustees the nominee(s) for appointment as an Independent Trustee by the Board and current Independent Trustees and/or for election as Independent Trustees by shareholders to fill any vacancy for a position of Independent Trustee(s) on the Board; (iii) recommending to the Board and current Independent Trustees the size and composition of the Board and Board committees and whether they comply with applicable laws and regulations; (iv) recommending a current Independent Trustee to the Board and current Independent Trustees to serve as Board Chair; (v) periodic review of the

Board's retirement policy; and (vi) recommending an appropriate level of compensation for the Independent Trustees for their services as Trustees, members or chairpersons of committees of the Board, Board Chair and any other positions as the Nominating and Governance Committee considers appropriate. The Nominating and Governance Committee does not consider Board nominations recommended by shareholders (acting solely in their capacity as a shareholder and not in any other capacity). The Nominating and Governance Committee met three times during the fiscal year ended February 28, 2018.

Each Independent Trustee serves on the 15(c) Committee. The Chair of the 15(c) Committee is Drew E. Lawton. The principal responsibilities of the 15(c) Committee are to support, oversee and organize on behalf of the Board the process for the annual review and renewal of the Trust's advisory and sub-advisory agreements. These responsibilities include: (i) meeting with BlackRock, Inc. in advance of the Board meeting at which the Trust's advisory and sub-advisory agreements are to be considered to discuss generally the process for providing requested information to the Board and the format in which information will be provided; and (ii) considering and discussing with BlackRock, Inc. such other matters and information as may be necessary and appropriate for the Board to evaluate the investment advisory and sub-advisory agreements of the Trust. The 15(c) Committee met two times during the fiscal year ended February 28, 2018.

The members of the Securities Lending Committee are John E. Martinez (Chair), Jane D. Carlin and Drew E. Lawton, each of whom is an Independent Trustee. The principal responsibilities of the Securities Lending Committee are to support, oversee and organize on behalf of the Board the process for oversight of the Trust's securities lending activities. These responsibilities include: (i) requesting that certain information be provided to the Committee for its review and consideration prior to such information being provided to the Board; (ii) considering and discussing with BlackRock, Inc. such other matters and information as may be necessary and appropriate for the Board to oversee the Trust's securities lending activities and make required findings and approvals; and (iii) providing a recommendation to the Board regarding the annual approval of the Trust's Securities Lending Guidelines and the required findings with respect to, and annual approval of, the Trust's agreement with the securities lending agent. The Securities Lending Committee met three times during the fiscal year ended February 28, 2018.

The members of the Equity Plus Committee are John E. Kerrigan (Chair), John E. Martinez and Drew E. Lawton, each of whom is an Independent Trustee. The principal responsibilities of the Equity Plus Committee are to support, oversee and organize on behalf of the Board the process for oversight of Trust performance and related matters for equity funds. These responsibilities include: (i) reviewing quarterly reports regarding Trust performance, secondary market trading and changes in net assets to identify any matters that should be brought to the attention of the Board; and (ii) considering any performance or investment related matters as may be delegated to the Committee by the Board from time to time and providing a report or recommendation to the Board as appropriate. The Equity Plus Committee met four times during the fiscal year ended February 28, 2018.

The members of the Fixed Income Plus Committee are Madhav V. Rajan (Chair), Jane D. Carlin and Richard L. Fagnani, each of whom is an Independent Trustee. The principal responsibilities of the Fixed Income Plus Committee are to support, oversee and organize on behalf of the Board the process for oversight of Trust performance and related matters for fixed-income or multi-asset funds. These responsibilities include: (i) reviewing quarterly reports regarding Trust performance, secondary market trading and changes in net assets to identify any matters that should be brought to the attention of the Board; and (ii) considering any performance or investment related matters as may be delegated to the Committee by the Board from time to time and providing a report or recommendation to the Board as appropriate. The Fixed Income Plus Committee met four times during the fiscal year ended February 28, 2018.

The members of the Risk Committee are Jane D. Carlin (Chair), Richard L. Fagnani and John E. Martinez, each of whom is an Independent Trustee. The principal responsibility of the Risk Committee is to consider and organize on behalf of the Board risk related matters of the Funds so the Board may most effectively structure itself to oversee them. The Risk Committee commenced on January 1, 2016. The Risk Committee met four times during the fiscal year ended February 28, 2018.

As the Chair of the Board, Cecilia H. Herbert may serve as an ex-officio member of each Committee.

The following table sets forth, as of December 31, 2017, the dollar range of equity securities beneficially owned by each Trustee in the Funds and in other registered investment companies overseen by the Trustee within the same family of investment companies as the Trust. If a fund is not listed below, the Trustee did not own any securities in that fund as of the date indicated above:

Name	Fund	Dollar Range of Equity Securities in Named Fund	Aggregate Dollar Range of Equity Securities in all Registered Investment Companies Overseen by Trustee in Family of Investment Companies
Robert S. Kapito	None	None	None
Mark K. Wiedman	iShares Core Aggressive Allocation ETF	Over \$100,000	Over \$100,000
	iShares Core MSCI EAFE ETF	Over \$100,000	
	iShares Core MSCI Emerging Markets ETF	Over \$100,000	
	iShares Core S&P Total U.S. Stock Market ETF	Over \$100,000	
	iShares National Muni Bond ETF	Over \$100,000	
	iShares New York Muni Bond ETF	Over \$100,000	
	iShares Short Maturity Municipal Bond ETF	Over \$100,000	
	iShares Short-Term National Muni Bond ETF	Over \$100,000	
Cecilia H. Herbert	iShares California Muni Bond ETF	Over \$100,000	Over \$100,000
	iShares China Large-Cap ETF	\$50,001-\$100,000	
	iShares Core Dividend Growth ETF	\$50,001-\$100,000	
	iShares Core High Dividend ETF	\$1-\$10,000	
	iShares Core MSCI Emerging Markets ETF	\$10,001-\$50,000	
	iShares Core MSCI Total International Stock ETF	\$10,001-\$50,000	
	iShares Core S&P 500 ETF	Over \$100,000	
	iShares Core S&P Small-Cap ETF	\$1-\$10,000	
	iShares Core S&P Total U.S. Stock Market ETF	\$50,001-\$100,000	
	iShares Core S&P U.S. Growth ETF	\$50,001-\$100,000	
	iShares Core S&P U.S. Value ETF	\$50,001-\$100,000	
	iShares iBoxx \$ High Yield Corporate Bond ETF	\$10,001-\$50,000	
	iShares International Select Dividend ETF	\$1-\$10,000	
	iShares MSCI EAFE ETF	\$1-\$10,000	
	iShares MSCI Japan ETF	\$10,001-\$50,000	
	iShares National Muni Bond ETF	\$10,001-\$50,000	
	iShares Preferred and Income Securities ETF	\$10,001-\$50,000	
Jane D. Carlin	iShares Core MSCI EAFE ETF	Over \$100,000	Over \$100,000
	iShares Core MSCI Emerging Markets ETF	\$10,001-\$50,000	
	iShares Core S&P Mid-Cap ETF	\$10,001-\$50,000	
	iShares Core S&P Small-Cap ETF	\$50,001-\$100,000	
	iShares Core U.S. Aggregate Bond ETF	Over \$100,000	
	iShares Europe ETF	\$10,001-\$50,000	
	iShares Global Tech ETF	\$50,001-\$100,000	
	iShares MSCI ACWI ETF	Over \$100,000	

Name	Fund	Dollar Range of Equity Securities in Named Fund	Aggregate Dollar Range of Equity Securities in all Registered Investment Companies Overseen by Trustee in Family of Investment Companies
	iShares MSCI ACWI ex U.S. ETF	\$50,001-\$100,000	
	iShares MSCI EAFE Small-Cap ETF	\$10,001-\$50,000	
	iShares MSCI Emerging Markets Small-Cap ETF	\$10,001-\$50,000	
Richard L. Fagnani	iShares Core MSCI EAFE ETF	Over \$100,000	Over \$100,000
	iShares Core MSCI Emerging Markets ETF	\$10,001-\$50,000	
	iShares Core S&P 500 ETF	\$10,001-\$50,000	
	iShares Global Financials ETF	\$10,001-\$50,000	
	iShares iBonds Dec 2022 Term Corporate ETF	\$1-\$10,000	
	iShares MSCI Emerging Markets ETF	\$50,001-\$100,000	
	iShares MSCI Japan ETF	\$10,001-\$50,000	
	iShares Russell 1000 Growth ETF	Over \$100,000	
	iShares Russell 1000 Value ETF	Over \$100,000	
	iShares Russell 2000 ETF	Over \$100,000	
	iShares Russell 2000 Growth ETF	\$10,001-\$50,000	
	iShares Russell 2000 Value ETF	\$10,001-\$50,000	
	iShares Russell Mid-Cap Growth ETF	\$10,001-\$50,000	
	iShares Russell Mid-Cap Value ETF	\$10,001-\$50,000	
John E. Kerrigan	iShares MSCI ACWI ex U.S. ETF	Over \$100,000	Over \$100,000
	iShares Short-Term National Muni Bond ETF	Over \$100,000	
Drew E. Lawton	iShares 0-5 Year High Yield Corporate Bond ETF	Over \$100,000	Over \$100,000
	iShares Core MSCI Total International Stock ETF	Over \$100,000	
	iShares Core S&P Total U.S. Stock Market ETF	Over \$100,000	
	iShares Exponential Technologies ETF	Over \$100,000	
	iShares MSCI Frontier 100 ETF	\$50,001-\$100,000	
	iShares Nasdaq Biotechnology ETF	\$10,001-\$50,000	
John E. Martinez	iShares Core 5-10 Year USD Bond ETF	Over \$100,000	Over \$100,000
	iShares Core MSCI EAFE ETF	Over \$100,000	
	iShares Core MSCI Total International Stock ETF	\$1-\$10,000	
	iShares Core S&P 500 ETF	Over \$100,000	
	iShares Core S&P Small-Cap ETF	Over \$100,000	
	iShares Core S&P Total U.S. Stock Market ETF	Over \$100,000	
	iShares Global Consumer Staples ETF	Over \$100,000	
	iShares MSCI All Country Asia ex Japan ETF	Over \$100,000	



Name	Fund	Dollar Range of Equity Securities in Named Fund	Aggregate Dollar Range of Equity Securities in all Registered Investment Companies Overseen by Trustee in Family of Investment Companies
	iShares MSCI EAFE ETF	Over \$100,000	
	iShares National Muni Bond ETF	Over \$100,000	
	iShares Russell 1000 ETF	Over \$100,000	
	iShares Russell 1000 Value ETF	Over \$100,000	
	iShares Russell 2000 ETF	Over \$100,000	
	iShares Short Maturity Bond ETF	\$1-\$10,000	
Madhav V. Rajan	iShares Broad USD High Yield Corporate Bond ETF	Over \$100,000	Over \$100,000
	iShares Core Dividend Growth ETF	Over \$100,000	
	iShares Core High Dividend ETF	Over \$100,000	
	iShares Core S&P 500 ETF	Over \$100,000	
	iShares iBoxx \$ High Yield Corporate Bond ETF	Over \$100,000	
	iShares iBoxx \$ Investment Grade Corporate Bond ETF	Over \$100,000	
	iShares Preferred and Income Securities ETF	Over \$100,000	
	iShares Russell 2000 ETF	Over \$100,000	
	iShares Select Dividend ETF	Over \$100,000	

As of December 31, 2017, none of the Independent Trustees or their immediate family members owned beneficially or of record any securities of BFA (the Funds' investment adviser), the Distributor or any person controlling, controlled by or under common control with BFA or the Distributor.

**Remuneration of Trustees and Advisory Board Members.** Effective January 1, 2019, each current Independent Trustee is paid an annual retainer of \$375,000 for his or her services as a Board member to the BlackRock-advised Funds in the Exchange-Traded Fund Complex, together with out-of-pocket expenses in accordance with the Board's policy on travel and other business expenses relating to attendance at meetings. The annual retainer for services as an Advisory Board Member is the same as the annual retainer for services as a Board member. The Independent Chair of the Board is paid an additional annual retainer of \$80,000. The Chair of each of the Equity Plus Committee, Fixed Income Plus Committee, Securities Lending Committee, Risk Committee, Nominating and Governance Committee and 15(c) Committee is paid an additional annual retainer of \$25,000. The Chair of the Audit Committee is paid an additional annual retainer of \$40,000. Each Independent Trustee that served as a director of subsidiaries of the Exchange-Traded Fund Complex is paid an additional annual retainer of \$10,000 (plus an additional \$1,765 paid annually to compensate for taxes due in the Republic of Mauritius in connection with such Trustee's service on the boards of certain Mauritius-based subsidiaries).

The tables below set forth the compensation earned by each Independent Trustee and Interested Trustee for services to each Fund for the fiscal year ended February 28, 2018 and the aggregate compensation paid to them for services to the Exchange-Traded Fund Complex for the calendar year ended December 31, 2017.

Name	iShares 1-3 Year Treasury Bond ETF	iShares 3-7 Year Treasury Bond ETF	iShares 7-10 Year Treasury Bond ETF	iShares 10-20 Year Treasury Bond ETF
<i>Independent Trustees:</i>				
Jane D. Carlin	\$2,954	\$1,851	\$2,190	\$133
Richard L. Fagnani <sup>1</sup>	2,655	1,664	1,969	119

Name	iShares 1-3 Year Treasury Bond ETF	iShares 3-7 Year Treasury Bond ETF	iShares 7-10 Year Treasury Bond ETF	iShares 10-20 Year Treasury Bond ETF
Cecilia H. Herbert	3,207	2,010	2,378	144
Charles A. Hurty <sup>2</sup>	3,080	1,930	2,284	139
John E. Kerrigan	2,954	1,851	2,190	133
Drew E. Lawton <sup>3</sup>	2,883	1,807	2,138	130
John E. Martinez	2,954	1,851	2,190	133
Madhav V. Rajan	3,024	1,895	2,242	136

*Interested Trustees:*

Robert S. Kapito	\$ 0	\$ 0	\$ 0	\$ 0
Mark K. Wiedman	0	0	0	0

Name	iShares 20+ Year Treasury Bond ETF	iShares Agency Bond ETF	iShares Broad USD Investment Grade Corporate Bond ETF	iShares California Muni Bond ETF
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*Independent Trustees:*

Jane D. Carlin	\$1,759	\$116	\$386	\$232
Richard L. Fagnani <sup>1</sup>	1,581	104	347	208
Cecilia H. Herbert	1,910	126	419	252
Charles A. Hurty <sup>2</sup>	1,834	121	403	242
John E. Kerrigan	1,759	116	386	232
Drew E. Lawton <sup>3</sup>	1,717	113	377	226
John E. Martinez	1,759	116	386	232
Madhav V. Rajan	1,801	119	396	237

*Interested Trustees:*

Robert S. Kapito	\$ 0	\$ 0	\$ 0	\$ 0
Mark K. Wiedman	0	0	0	0

Name	iShares Core 5-10 Year USD Bond ETF	iShares Core 10+ Year USD Bond ETF	iShares Core U.S. Aggregate Bond ETF	iShares ESG 1-5 Year USD Corporate Bond ETF <sup>4</sup>
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*Independent Trustees:*

Jane D. Carlin	\$10	\$71	\$14,308	\$6
Richard L. Fagnani <sup>1</sup>	9	64	12,860	6
Cecilia H. Herbert	11	77	15,534	7
Charles A. Hurty <sup>2</sup>	11	74	14,921	7
John E. Kerrigan	10	71	14,308	6
Drew E. Lawton <sup>3</sup>	10	70	13,967	6
John E. Martinez	10	71	14,308	6
Madhav V. Rajan	10	73	14,649	7

*Interested Trustees:*

Robert S. Kapito	\$ 0	\$ 0	\$ 0	\$0
Mark K. Wiedman	0	0	0	0

Name	iShares ESG USD Corporate Bond ETF <sup>4</sup>	iShares Government/Credit Bond ETF	iShares iBoxx \$ High Yield Corporate Bond ETF	iShares iBoxx \$ Investment Grade Corporate Bond ETF
<i>Independent Trustees:</i>				
Jane D. Carlin	\$3	\$38	\$3,904	\$8,476
Richard L. Fagnani <sup>1</sup>	3	34	3,509	7,619
Cecilia H. Herbert	3	41	4,239	9,203
Charles A. Hurty <sup>2</sup>	3	39	4,072	8,840
John E. Kerrigan	3	38	3,904	8,476
Drew E. Lawton <sup>3</sup>	3	37	3,811	8,275
John E. Martinez	3	38	3,904	8,476
Madhav V. Rajan	3	39	3,997	8,678

*Interested Trustees:*

Robert S. Kapito	\$0	\$ 0	\$ 0	\$ 0
Mark K. Wiedman	0	0	0	0

Name	iShares Intermediate Government/Credit Bond ETF	iShares Intermediate-Term Corporate Bond ETF	iShares Long-Term Corporate Bond ETF	iShares MBS ETF
<i>Independent Trustees:</i>				
Jane D. Carlin	\$498	\$1,881	\$178	\$3,091
Richard L. Fagnani <sup>1</sup>	448	1,690	160	2,778
Cecilia H. Herbert	541	2,042	194	3,356
Charles A. Hurty <sup>2</sup>	519	1,961	186	3,224
John E. Kerrigan	498	1,881	178	3,091
Drew E. Lawton <sup>3</sup>	486	1,836	174	3,018
John E. Martinez	498	1,881	178	3,091
Madhav V. Rajan	510	1,926	183	3,165

*Interested Trustees:*

Robert S. Kapito	\$ 0	\$ 0	\$ 0	\$ 0
Mark K. Wiedman	0	0	0	0

Name	iShares National Muni Bond ETF	iShares New York Muni Bond ETF	iShares Short-Term Corporate Bond ETF	iShares Short-Term National Muni Bond ETF
<i>Independent Trustees:</i>				
Jane D. Carlin	\$2,377	\$77	\$2,858	\$402
Richard L. Fagnani <sup>1</sup>	2,137	69	2,569	362
Cecilia H. Herbert	2,581	84	3,104	437
Charles A. Hurty <sup>2</sup>	2,479	81	2,981	420
John E. Kerrigan	2,377	77	2,858	402
Drew E. Lawton <sup>3</sup>	2,321	75	2,790	393
John E. Martinez	2,377	77	2,858	402
Madhav V. Rajan	2,434	79	2,927	412

*Interested Trustees:*

Name	iShares National Muni Bond ETF	iShares New York Muni Bond ETF	iShares Short-Term Corporate Bond ETF	iShares Short-Term National Muni Bond ETF
Robert S. Kapito	\$0	\$0	\$0	\$0
Mark K. Wiedman	0	0	0	0

Name	iShares Short Treasury Bond ETF
<i>Independent Trustees:</i>	
Jane D. Carlin	\$2,489
Richard L. Fagnani <sup>1</sup>	2,237
Cecilia H. Herbert	2,703
Charles A. Hurty <sup>2</sup>	2,596
John E. Kerrigan	2,489
Drew E. Lawton <sup>3</sup>	2,430
John E. Martinez	2,489
Madhav V. Rajan	2,548

*Interested Trustees:*

Robert S. Kapito	\$ 0
Mark K. Wiedman	0

Name	Pension or Retirement Benefits Accrued As Part of Trust Expenses <sup>5</sup>	Estimated Annual Benefits Upon Retirement <sup>5</sup>	Total Compensation From the Funds and Fund Complex <sup>6</sup>
<i>Independent Trustees:</i>			
Jane D. Carlin	Not Applicable	Not Applicable	\$ 361,764
Richard L. Fagnani <sup>1</sup>	Not Applicable	Not Applicable	256,250
Cecilia H. Herbert	Not Applicable	Not Applicable	375,000
Charles A. Hurty <sup>2</sup>	Not Applicable	Not Applicable	376,764
John E. Kerrigan	Not Applicable	Not Applicable	350,000
Drew E. Lawton <sup>3</sup>	Not Applicable	Not Applicable	337,500
John E. Martinez	Not Applicable	Not Applicable	350,000
Madhav V. Rajan	Not Applicable	Not Applicable	362,500

*Interested Trustees:*

Robert S. Kapito	Not Applicable	Not Applicable	\$ 0
Mark K. Wiedman	Not Applicable	Not Applicable	0

<sup>1</sup> Compensation from each Fund and Total Compensation from the Funds and the Fund Complex, as applicable, is shown for Richard L. Fagnani for his services as an Advisory Board Member for the period from April 1, 2017 (date of his appointment to the Advisory Board of the Trust, iShares, Inc. and iShares U.S. ETF Trust) to June 18, 2017, and for his services as an Independent Trustee for the period from June 19, 2017 (date of his election to the Board of the Trust, iShares, Inc. and iShares U.S. ETF Trust) to February 28, 2018.

<sup>2</sup> Served as an Independent Trustee through December 31, 2018.

<sup>3</sup> Compensation from each Fund and Total Compensation from the Funds and the Fund Complex, as applicable, is shown for Drew E. Lawton for his services as an Advisory Board Member for the period from March 1, 2017 to June 18, 2017, and for his services as an Independent Trustee for the period from June 19, 2017 (date of his election to the Board of the Trust, iShares, Inc. and iShares U.S. ETF Trust) to February 28, 2018.

<sup>4</sup> Compensation reported is from the Fund's inception to February 28, 2018.

<sup>5</sup> No Trustee or officer is entitled to any pension or retirement benefits from the Trust.

<sup>6</sup> Also includes compensation for service on the Board of Trustees or the Advisory Board of iShares U.S. ETF Trust and the Board of Directors or the Advisory Board of iShares, Inc.

### Control Persons and Principal Holders of Securities.

The Trustees and officers of the Trust collectively owned less than 1% of each Fund's outstanding shares as of May 31, 2018.

Although the Trust does not have information concerning the beneficial ownership of shares held in the names of Depository Trust Company ("DTC") participants (as defined below), as of May 31, 2018, the name and percentage ownership of each DTC participant that owned of record 5% or more of the outstanding shares of a Fund were as follows:

Fund	Name	Percentage of Ownership	
iShares 1-3 Year Treasury Bond ETF	Merrill Lynch, Pierce, Fenner & Smith Incorporated - TS Sub 101 Hudson Street 9th Floor Jersey City, NJ 07302-3997	13.37%	
	TD Ameritrade Clearing, Inc. 1005 N. Ameritrade Place Bellevue, NE 68005	8.14%	
	National Financial Services LLC 200 Liberty Street 5 <sup>th</sup> Floor New York, NY 10281	7.64%	
	Charles Schwab & Co., Inc. 111 Pavonia Avenue Jersey City, NJ 07310	7.08%	
	JPMorgan Chase Bank, National Association 14201 Dallas Pkwy 12 <sup>th</sup> Floor Dallas, TX 75240	6.41%	
	Ameriprise Enterprise Investment Services, Inc. 901 3 <sup>rd</sup> Avenue South Minneapolis, MN 55474	6.32%	
	Morgan Stanley Smith Barney LLC 1300 Thames Street 6 <sup>th</sup> Floor Baltimore, MD 21231	5.13%	
	iShares 3-7 Year Treasury Bond ETF	Merrill Lynch, Pierce, Fenner & Smith Incorporated - TS Sub 101 Hudson Street 9th Floor Jersey City, NJ 07302-3997	32.38%
		TD Ameritrade Clearing, Inc. 1005 N. Ameritrade Place Bellevue, NE 68005	7.75%
		Ameriprise Enterprise Investment Services, Inc. 901 3 <sup>rd</sup> Avenue South Minneapolis, MN 55474	5.82%

Fund	Name	Percentage of Ownership
iShares 7-10 Year Treasury Bond ETF	National Financial Services LLC 200 Liberty Street 5 <sup>th</sup> Floor New York, NY 10281	5.81%
	Ameriprise Enterprise Investment Services, Inc. 901 3 <sup>rd</sup> Avenue South Minneapolis, MN 55474	17.45%
	Charles Schwab & Co., Inc. 111 Pavonia Avenue Jersey City, NJ 07310	13.45%
iShares 10-20 Year Treasury Bond ETF	National Financial Services LLC 200 Liberty Street 5 <sup>th</sup> Floor New York, NY 10281	10.38%
	Charles Schwab & Co., Inc. 111 Pavonia Avenue Jersey City, NJ 07310	10.33%
	JPMorgan Chase Bank, National Association 14201 Dallas Pkwy 12 <sup>th</sup> Floor Dallas, TX 75240	10.08%
	Morgan Stanley Smith Barney LLC 1300 Thames Street 6 <sup>th</sup> Floor Baltimore, MD 21231	7.97%
	Bank of America, National Association GWIM TRUST OPERATIONS 414 N. Akard Street 5 <sup>th</sup> Floor Dallas, TX 75201	7.09%
	VANGUARD Marketing Corporation 100 Vanguard Boulevard Malvern, PA 19355	5.57%
	Merrill Lynch, Pierce, Fenner & Smith Incorporated - TS Sub 101 Hudson Street 9th Floor Jersey City, NJ 07302-3997	5.53%
iShares 20+ Year Treasury Bond ETF	National Financial Services LLC 200 Liberty Street 5 <sup>th</sup> Floor New York, NY 10281	13.50%
	Charles Schwab & Co., Inc. 111 Pavonia Avenue Jersey City, NJ 07310	8.63%

Fund	Name	Percentage of Ownership
	The Bank of New York Mellon 401 Salina Street 2 <sup>nd</sup> Floor Syracuse, NY 13202	7.55%
	JPMorgan Chase Bank, National Association 14201 Dallas Pkwy 12 <sup>th</sup> Floor Dallas, TX 75240	7.48%
	Pershing LLC One Pershing Plaza Jersey City, NJ 07399	5.67%
	TD Ameritrade Clearing, Inc. 1005 N. Ameritrade Place Bellevue, NE 68005	5.61%
	Ameriprise Enterprise Investment Services, Inc. 901 3 <sup>rd</sup> Avenue South Minneapolis, MN 55474	5.06%
iShares Agency Bond ETF	Charles Schwab & Co., Inc. 111 Pavonia Avenue Jersey City, NJ 07310	22.37%
	National Financial Services LLC 200 Liberty Street 5 <sup>th</sup> Floor New York, NY 10281	12.52%
	First Clearing, LLC 901 East Byrd Street Richmond, VA 23219	9.72%
	Reliance Trust Company, FIS TrustDesk MKE 11277 West Park Place, Suite 300 Milwaukee, WI 53224	8.55%
	Raymond, James & Associates, Inc. 880 Carillon Parkway P.O. Box 12749 St. Petersburg, FL 33733	6.59%
	TD Ameritrade Clearing, Inc. 1005 N. Ameritrade Place Bellevue, NE 68005	5.95%
iShares Broad USD Investment Grade Corporate Bond ETF	UBS Financial Services Inc. 1000 Harbor Blvd. 8 <sup>th</sup> Floor Weehawken, NJ 07087	42.09%
	National Financial Services LLC 200 Liberty Street 5 <sup>th</sup> Floor New York, NY 10281	7.71%
iShares California Muni Bond ETF	Charles Schwab & Co., Inc. 111 Pavonia Avenue Jersey City, NJ 07310	30.12%

Fund	Name	Percentage of Ownership
	National Financial Services LLC 200 Liberty Street 5 <sup>th</sup> Floor New York, NY 10281	18.71%
	Merrill Lynch, Pierce, Fenner & Smith Incorporated - TS Sub 101 Hudson Street 9th Floor Jersey City, NJ 07302-3997	8.20%
	TD Ameritrade Clearing, Inc. 1005 N. Ameritrade Place Bellevue, NE 68005	7.91%
	Morgan Stanley Smith Barney LLC 1300 Thames Street 6 <sup>th</sup> Floor Baltimore, MD 21231	5.96%
iShares Core 5-10 Year USD Bond ETF	Charles Schwab & Co., Inc. 111 Pavonia Avenue Jersey City, NJ 07310	38.94%
	National Financial Services LLC 200 Liberty Street 5 <sup>th</sup> Floor New York, NY 10281	14.41%
	D.A. Davidson & Co. 9 3 <sup>rd</sup> Street North Great Falls, MT 59403	11.63%
	J.P. Morgan Clearing Corp One Metrotech Center North Brooklyn, NY 11201	7.29%
	Merrill Lynch, Pierce, Fenner & Smith Incorporated - TS Sub 101 Hudson Street 9th Floor Jersey City, NJ 07302-3997	6.21%
iShares Core 10+ Year USD Bond ETF	National Financial Services LLC 200 Liberty Street 5 <sup>th</sup> Floor New York, NY 10281	35.24%
	Charles Schwab & Co., Inc. 111 Pavonia Avenue Jersey City, NJ 07310	12.87%
	TD Ameritrade Clearing, Inc. 1005 N. Ameritrade Place Bellevue, NE 68005	12.66%
	The Bank of New York Mellon 401 Salina Street 2 <sup>nd</sup> Floor Syracuse, NY 13202	7.17%



Fund	Name	Percentage of Ownership
iShares Core U.S. Aggregate Bond ETF	Edward D. Jones & Co. 12555 Manchester Road Saint Louis, MO 63131	12.95%
	State Street Bank and Trust Company 1776 Heritage Drive North Quincy, MA 02171	12.24%
	National Financial Services LLC 200 Liberty Street 5 <sup>th</sup> Floor New York, NY 10281	8.85%
	TD Ameritrade Clearing, Inc. 1005 N. Ameritrade Place Bellevue, NE 68005	8.74%
	First Clearing, LLC 901 East Byrd Street Richmond, VA 23219	7.22%
	Charles Schwab & Co., Inc. 111 Pavonia Avenue Jersey City, NJ 07310	5.65%
iShares ESG 1-5 Year USD Corporate Bond ETF	Morgan Stanley Smith Barney LLC 1300 Thames Street 6 <sup>th</sup> Floor Baltimore, MD 21231	53.69%
	TD Ameritrade Clearing, Inc. 1005 N. Ameritrade Place Bellevue, NE 68005	13.71%
	Charles Schwab & Co., Inc. 111 Pavonia Avenue Jersey City, NJ 07310	11.82%
iShares ESG USD Corporate Bond ETF	Merrill Lynch, Pierce, Fenner & Smith Incorporated - TS Sub 101 Hudson Street 9th Floor Jersey City, NJ 07302-3997	26.75%
	TD Ameritrade Clearing, Inc. 1005 N. Ameritrade Place Bellevue, NE 68005	24.17%
	Charles Schwab & Co., Inc. 111 Pavonia Avenue Jersey City, NJ 07310	14.93%
	National Financial Services LLC 200 Liberty Street 5 <sup>th</sup> Floor New York, NY 10281	10.87%
	LPL Financial Corporation 9785 Towne Centre Drive San Diego, CA 92121-1968	8.52%

Fund	Name	Percentage of Ownership
	Interactive Brokers Retail Equity Clearing 8 Greenwich Office Park Greenwich, CT 06831	7.80%
iShares Government/Credit Bond ETF	U.S. Bank N.A. 1555 North Rivercenter Dr. Suite 302 Milwaukee, WI 53212	16.86%
	National Financial Services LLC 200 Liberty Street 5 <sup>th</sup> Floor New York, NY 10281	13.23%
	Charles Schwab & Co., Inc. 111 Pavonia Avenue Jersey City, NJ 07310	11.38%
	Merrill Lynch, Pierce, Fenner & Smith Incorporated - TS Sub 101 Hudson Street 9th Floor Jersey City, NJ 07302-3997	11.04%
	J.P. Morgan Clearing Corp One Metrotech Center North Brooklyn, NY 11201	6.80%
	Citibank, N.A. 3800 CitiBank Center Tampa Building A/Floor 2 Tampa, FL 33610	6.47%
iShares iBoxx \$ High Yield Corporate Bond ETF	National Financial Services LLC 200 Liberty Street 5 <sup>th</sup> Floor New York, NY 10281	13.17%
	Merrill Lynch, Pierce, Fenner & Smith Incorporated - TS Sub 101 Hudson Street 9th Floor Jersey City, NJ 07302-3997	7.24%
	First Clearing, LLC 901 East Byrd Street Richmond, VA 23219	6.72%
	Charles Schwab & Co., Inc. 111 Pavonia Avenue Jersey City, NJ 07310	5.48%
	Pershing LLC One Pershing Plaza Jersey City, NJ 07399	5.46%

Fund	Name	Percentage of Ownership	
iShares iBoxx \$ Investment Grade Corporate Bond ETF	Merrill Lynch, Pierce, Fenner & Smith Incorporated - TS Sub 101 Hudson Street 9th Floor Jersey City, NJ 07302-3997	15.64%	
	The Bank of New York Mellon 401 Salina Street 2 <sup>nd</sup> Floor Syracuse, NY 13202	10.38%	
	National Financial Services LLC 200 Liberty Street 5 <sup>th</sup> Floor New York, NY 10281	8.73%	
	State Street Bank and Trust Company 1776 Heritage Drive North Quincy, MA 02171	6.46%	
	TD Ameritrade Clearing, Inc. 1005 N. Ameritrade Place Bellevue, NE 68005	5.99%	
	Charles Schwab & Co., Inc. 111 Pavonia Avenue Jersey City, NJ 07310	5.56%	
	UBS Financial Services Inc. 1000 Harbor Blvd. 8 <sup>th</sup> Floor Weehawken, NJ 07087	5.10%	
	iShares Intermediate Government/Credit Bond ETF	National Financial Services LLC 200 Liberty Street 5 <sup>th</sup> Floor New York, NY 10281	13.89%
		Charles Schwab & Co., Inc. 111 Pavonia Avenue Jersey City, NJ 07310	10.13%
		The Bank of New York Mellon 401 Salina Street 2 <sup>nd</sup> Floor Syracuse, NY 13202	8.05%
Merrill Lynch, Pierce, Fenner & Smith Incorporated - TS Sub 101 Hudson Street 9th Floor Jersey City, NJ 07302-3997		7.71%	
U.S. Bank N.A. 1555 North Rivercenter Dr. Suite 302 Milwaukee, WI 53212		7.33%	
KeyBank National Association 127 Public Square Cleveland, OH 44114		5.81%	

Fund	Name	Percentage of Ownership	
iShares Intermediate-Term Corporate Bond ETF	National Financial Services LLC 200 Liberty Street 5 <sup>th</sup> Floor New York, NY 10281	15.05%	
	Charles Schwab & Co., Inc. 111 Pavonia Avenue Jersey City, NJ 07310	7.89%	
	Pershing LLC One Pershing Plaza Jersey City, NJ 07399	7.50%	
	First Clearing, LLC 901 East Byrd Street Richmond, VA 23219	6.65%	
	TD Ameritrade Clearing, Inc. 1005 N. Ameritrade Place Bellevue, NE 68005	5.26%	
	JPMorgan Chase Bank, National Association 14201 Dallas Pkwy 12 <sup>th</sup> Floor Dallas, TX 75240	5.16%	
	iShares Long-Term Corporate Bond ETF	The Bank of New York Mellon 401 Salina Street 2 <sup>nd</sup> Floor Syracuse, NY 13202	16.75%
		National Financial Services LLC 200 Liberty Street 5 <sup>th</sup> Floor New York, NY 10281	15.08%
		Morgan Stanley Smith Barney LLC 1300 Thames Street 6 <sup>th</sup> Floor Baltimore, MD 21231	11.86%
		BlackRock Institutional Trust Company, N.A. 400 Howard Street San Francisco, CA 94105	6.47%
Pershing LLC One Pershing Plaza Jersey City, NJ 07399		5.09%	
iShares MBS ETF		Merrill Lynch, Pierce, Fenner & Smith Incorporated - TS Sub 101 Hudson Street 9th Floor Jersey City, NJ 07302-3997	45.48%
		National Financial Services LLC 200 Liberty Street 5 <sup>th</sup> Floor New York, NY 10281	6.11%

Fund	Name	Percentage of Ownership
	Charles Schwab & Co., Inc. 111 Pavonia Avenue Jersey City, NJ 07310	5.55%
	First Clearing, LLC 901 East Byrd Street Richmond, VA 23219	5.02%
iShares National Muni Bond ETF	National Financial Services LLC 200 Liberty Street 5 <sup>th</sup> Floor New York, NY 10281	14.54%
	Charles Schwab & Co., Inc. 111 Pavonia Avenue Jersey City, NJ 07310	10.67%
	Apex Clearing Corporation One Dallas Center 350 M. St. Paul Suite 1300 Dallas, TX 75201	7.83%
	UBS Financial Services Inc. 1000 Harbor Blvd. 8 <sup>th</sup> Floor Weehawken, NJ 07087	7.51%
	Merrill Lynch, Pierce, Fenner & Smith Incorporated - TS Sub 101 Hudson Street 9 <sup>th</sup> Floor Jersey City, NJ 07302-3997	6.31%
	TD Ameritrade Clearing, Inc. 1005 N. Ameritrade Place Bellevue, NE 68005	5.04%
iShares New York Muni Bond ETF	National Financial Services LLC 200 Liberty Street 5 <sup>th</sup> Floor New York, NY 10281	21.13%
	Charles Schwab & Co., Inc. 111 Pavonia Avenue Jersey City, NJ 07310	14.99%
	Merrill Lynch, Pierce, Fenner & Smith Incorporated - TS Sub 101 Hudson Street 9 <sup>th</sup> Floor Jersey City, NJ 07302-3997	11.23%
	Pershing LLC One Pershing Plaza Jersey City, NJ 07399	8.07%
	UBS Financial Services Inc. 1000 Harbor Blvd. 8 <sup>th</sup> Floor Weehawken, NJ 07087	5.92%

Fund	Name	Percentage of Ownership
iShares Short-Term Corporate Bond ETF	Morgan Stanley Smith Barney LLC 1300 Thames Street 6 <sup>th</sup> Floor Baltimore, MD 21231	5.69%
	National Financial Services LLC 200 Liberty Street 5 <sup>th</sup> Floor New York, NY 10281	12.45%
	Charles Schwab & Co., Inc. 111 Pavonia Avenue Jersey City, NJ 07310	10.37%
	U.S. Bank N.A. 1555 North Rivercenter Dr. Suite 302 Milwaukee, WI 53212	7.92%
	The Bank of New York Mellon 401 Salina Street 2 <sup>nd</sup> Floor Syracuse, NY 13202	6.21%
iShares Short-Term National Muni Bond ETF	Northern Trust Company (The) 801 South Canal Street Chicago, IL 60612	5.68%
	National Financial Services LLC 200 Liberty Street 5 <sup>th</sup> Floor New York, NY 10281	14.02%
	Charles Schwab & Co., Inc. 111 Pavonia Avenue Jersey City, NJ 07310	13.53%
	Morgan Stanley Smith Barney LLC 1300 Thames Street 6 <sup>th</sup> Floor Baltimore, MD 21231	9.07%
	UBS Financial Services Inc. 1000 Harbor Blvd. 8 <sup>th</sup> Floor Weehawken, NJ 07087	8.28%
iShares Short-Term National Muni Bond ETF	Merrill Lynch, Pierce, Fenner & Smith Incorporated - TS Sub 101 Hudson Street 9 <sup>th</sup> Floor Jersey City, NJ 07302-3997	7.28%
	Bank of America, National Association GWIM TRUST OPERATIONS 414 N. Akard Street 5 <sup>th</sup> Floor Dallas, TX 75201	6.52%

Fund	Name	Percentage of Ownership
	SEI Private Trust Company/C/O GWP 1 Freedom Valley Drive Oaks, PA 19456	5.78%
	Ameriprise Enterprise Investment Services, Inc. 901 3 <sup>rd</sup> Avenue South Minneapolis, MN 55474	5.24%
iShares Short Treasury Bond ETF	Deutsche Bank Securities Inc./Cedear 1251 Avenue of the Americas New York, NY 10020	60.82%
	The Bank of New York Mellon 401 Salina Street 2 <sup>nd</sup> Floor Syracuse, NY 13202	10.61%

**Potential Conflicts of Interest.** The PNC Financial Services Group, Inc. (“PNC”), through a subsidiary, has a significant economic interest in BlackRock, Inc., the parent of BFA, the Funds’ investment adviser. Certain activities of BFA, BlackRock, Inc. and the other subsidiaries of BlackRock, Inc. (collectively referred to in this section as “BlackRock”) and PNC and its subsidiaries (collectively referred to in this section as the “Entities”), and their respective directors, officers and employees, with respect to the Funds and/or other accounts managed by BlackRock or Entities, may give rise to actual or perceived conflicts of interest such as those described below.

BlackRock is one of the world’s largest asset management firms. PNC is a diversified financial services organization spanning the retail, business and corporate markets. BlackRock, PNC and their respective subsidiaries and each of their respective directors, officers and employees, including, in the case of BlackRock, the business units or entities and personnel who may be involved in the investment activities and business operations of a Fund, are engaged worldwide in businesses, including managing equities, fixed-income securities, cash and alternative investments, and banking and other financial services, and have interests other than that of managing the Funds. These are considerations of which investors in a Fund should be aware, and which may cause conflicts of interest that could disadvantage a Fund and its shareholders. These businesses and interests include potential multiple advisory, transactional, financial and other relationships with, or interests in, companies and interests in securities or other instruments that may be purchased or sold by a Fund.

BlackRock and the Entities have proprietary interests in, and may manage or advise with respect to, accounts or funds (including separate accounts and other funds and collective investment vehicles) that have investment objectives similar to those of a Fund and/or that engage in transactions in the same types of securities, currencies and instruments as the Fund. BlackRock and Entities are also major participants in the global currency, equities, swap and fixed income markets, in each case, for the accounts of clients and, in some cases, on a proprietary basis. As such, BlackRock and Entities are or may be actively engaged in transactions in the same securities, currencies, and instruments in which a Fund invests. Such activities could affect the prices and availability of the securities, currencies, and instruments in which a Fund invests, which could have an adverse impact on a Fund’s performance. Such transactions, particularly in respect of most proprietary accounts or client accounts, will be executed independently of a Fund’s transactions and thus at prices or rates that may be more or less favorable than those obtained by the Fund.

When BlackRock seeks to purchase or sell the same assets for managed accounts, including a Fund, the assets actually purchased or sold may be allocated among the accounts on a basis determined in its good faith discretion to be equitable. In some cases, this system may adversely affect the size or price of the assets purchased or sold for a Fund. In addition, transactions in investments by one or more other accounts managed by BlackRock or Entities may have the effect of diluting or otherwise disadvantaging the values, prices or investment strategies of a Fund, particularly, but not limited to, with respect to small-capitalization, emerging market or less liquid strategies. This may occur with respect to BlackRock-advised accounts when investment decisions regarding a Fund are based on research or other information that is also used to support decisions for other accounts. When BlackRock implements a portfolio decision or strategy on behalf of another account ahead of, or contemporaneously with, similar decisions or strategies for a Fund, market impact, liquidity constraints, or other factors could result in the Fund receiving less favorable trading results and the costs of implementing such decisions or

strategies could be increased or the Fund could otherwise be disadvantaged. BlackRock may, in certain cases, elect to implement internal policies and procedures designed to limit such consequences, which may cause a Fund to be unable to engage in certain activities, including purchasing or disposing of securities, when it might otherwise be desirable for it to do so.

Conflicts may also arise because portfolio decisions regarding a Fund may benefit other accounts managed by BlackRock. For example, the sale of a long position or establishment of a short position by a Fund may impair the price of the same security sold short by (and therefore benefit) BlackRock or its other accounts or funds, and the purchase of a security or covering of a short position in a security by a Fund may increase the price of the same security held by (and therefore benefit) BlackRock or its other accounts or funds. In addition, to the extent permitted by applicable law, certain Funds may invest their assets in other funds advised by BlackRock, including funds that are managed by one or more of the same portfolio managers, which could result in conflicts of interest relating to asset allocation, timing of Fund purchases and redemptions, and increased remuneration and profitability for BlackRock, and/or its personnel, including portfolio managers.

In certain circumstances, BlackRock, on behalf of the Funds, may seek to buy from or sell securities to another fund or account advised by BlackRock. BlackRock may (but is not required to) effect purchases and sales between BlackRock clients ("cross trades"), including the Funds, if BlackRock believes such transactions are appropriate based on each party's investment objectives and guidelines, subject to applicable law and regulation. There may be potential conflicts of interest or regulatory issues relating to these transactions which could limit BlackRock's decision to engage in these transactions for the Funds. BlackRock may have a potentially conflicting division of loyalties and responsibilities to the parties in such transactions. On any occasion when a Fund participates in a cross trade, BlackRock will comply with procedures adopted under applicable rules and SEC guidance.

BlackRock and the Entities and their respective clients may pursue or enforce rights with respect to an issuer in which a Fund has invested, and those activities may have an adverse effect on the Fund. As a result, prices, availability, liquidity and terms of the Fund's investments may be negatively impacted by the activities of BlackRock or the Entities or their respective clients, and transactions for the Fund may be impaired or effected at prices or terms that may be less favorable than would otherwise have been the case.

The results of a Fund's investment activities may differ significantly from the results achieved by BlackRock for its proprietary accounts or other accounts (including investment companies or collective investment vehicles) which it manages or advises. It is possible that one or more accounts managed or advised by BlackRock and such other accounts will achieve investment results that are substantially more or less favorable than the results achieved by a Fund. Moreover, it is possible that a Fund will sustain losses during periods in which one or more proprietary or other accounts managed or advised by BlackRock achieve significant profits. The opposite result is also possible.

From time to time, a Fund may be restricted from purchasing or selling securities, or from engaging in other investment activities because of regulatory, legal or contractual requirements applicable to BlackRock or one or more Entities or other accounts managed or advised by BlackRock or an Entity for clients worldwide, and/or the internal policies of BlackRock and the Entities designed to comply with such requirements. As a result, there may be periods, for example, when BlackRock will not initiate or recommend certain types of transactions in certain securities or instruments with respect to which BlackRock and/or one or more Entities are performing services or when position limits have been reached. For example, the investment activities of BlackRock or one or more Entities for their proprietary accounts and accounts under their management may limit the investment opportunities for a Fund in certain emerging and other markets in which limitations are imposed upon the amount of investment, in the aggregate or in individual issuers, by affiliated foreign investors.

In connection with its management of a Fund, BlackRock may have access to certain fundamental analysis and proprietary technical models developed by BlackRock. BlackRock will not be under any obligation, however, to effect transactions on behalf of a Fund in accordance with such analysis and models. In addition, BlackRock will not have any obligation to make available any information regarding their proprietary activities or strategies, or the activities or strategies used for other accounts managed by them, for the benefit of the management of a Fund and it is not anticipated that BlackRock will have access to such information for the purpose of managing the Fund. The proprietary activities or portfolio strategies of BlackRock, or the activities or strategies used for accounts managed by BlackRock or other client accounts could conflict with the transactions and strategies employed by BlackRock in managing a Fund.

The Funds may be included in investment models developed by BlackRock for use by clients and financial advisors. To the extent clients invest in these investment models and increase the assets under management of the Funds, the investment



management fee amounts paid by the Funds to BlackRock may also increase. The price, availability and liquidity of a Fund may be impacted by purchases and redemptions of the Fund by model-driven investment portfolios.

In addition, certain principals and certain employees of a Fund's investment adviser are also principals or employees of other business units or entities within BlackRock. As a result, these principals and employees may have obligations to such other business units or entities or their clients and such obligations to other business units or entities or their clients may be a consideration of which investors in a Fund should be aware.

BlackRock may enter into transactions and invest in securities, instruments and currencies on behalf of a Fund in which clients of BlackRock or an Entity, or, to the extent permitted by the SEC and applicable law, BlackRock or an Entity, serves as the counterparty, principal or issuer. In such cases, such party's interests in the transaction will be adverse to the interests of the Fund, and such party may have no incentive to assure that the Fund obtains the best possible prices or terms in connection with the transactions. In addition, the purchase, holding and sale of such investments by a Fund may enhance the profitability of BlackRock or an Entity.

BlackRock or one or more Entities may also create, write or issue derivatives for their clients, the underlying securities, currencies or instruments in which a Fund may invest or which may be based on the performance of the Fund. BlackRock has entered into an arrangement with Markit Indices Limited, the index provider for underlying fixed-income indexes used by certain iShares funds, related to derivative fixed-income products that are based on such iShares funds. BlackRock will receive certain payments for licensing intellectual property belonging to BlackRock and for facilitating the provision of data in connection with such derivative products, which may include payments based on the trading volumes of, or revenues generated by, the derivative products. Other funds and accounts managed by BlackRock may from time to time transact in such derivative products, which could contribute to the viability of such derivative products by making them more appealing to funds and accounts managed by third parties, and in turn lead to increased payments to BlackRock. Trading activity in such derivative products could also potentially lead to increased purchase activity with respect to these iShares funds and increased assets under management for BlackRock.

A Fund may, subject to applicable law, purchase investments that are the subject of an underwriting or other distribution by BlackRock or one or more Entities and may also enter into transactions with other clients of BlackRock or an Entity where such other clients have interests adverse to those of the Fund.

At times, these activities may cause business units or entities within BlackRock or an Entity to give advice to clients that may cause these clients to take actions adverse to the interests of a Fund. To the extent such transactions are permitted, a Fund will deal with BlackRock and/or Entities on an arm's-length basis.

To the extent authorized by applicable law, BlackRock or one or more Entities may act as broker, dealer, agent, lender or adviser or in other commercial capacities for a Fund. It is anticipated that the commissions, mark-ups, mark-downs, financial advisory fees, underwriting and placement fees, sales fees, financing and commitment fees, brokerage fees, other fees, compensation or profits, rates, terms and conditions charged by BlackRock or an Entity will be in its view commercially reasonable, although BlackRock and each Entity, including its sales personnel, will have an interest in obtaining fees and other amounts that are favorable to BlackRock or the Entity and such sales personnel, which may have an adverse effect on the Funds. Index based funds also may use an index provider that is affiliated with another service provider of the Fund or BlackRock that acts as a broker, dealer, agent, lender or in other commercial capacities for a Fund or BlackRock.

Subject to applicable law, BlackRock and the Entities (and their personnel and other distributors) will be entitled to retain fees and other amounts that they receive in connection with their service to the Funds as broker, dealer, agent, lender, adviser or in other commercial capacities. No accounting to the Funds or their shareholders will be required, and no fees or other compensation payable by the Funds or their shareholders will be reduced by reason of receipt by BlackRock or an Entity of any such fees or other amounts.

When BlackRock or an Entity acts as broker, dealer, agent, adviser or in other commercial capacities in relation to the Funds, BlackRock or the Entity may take commercial steps in its own interests, which may have an adverse effect on the Funds. A Fund will be required to establish business relationships with its counterparties based on the Fund's own credit standing. BlackRock will not have any obligation to allow its credit to be used in connection with a Fund's establishment of its business relationships, nor is it expected that the Fund's counterparties will rely on the credit of BlackRock in evaluating the Fund's creditworthiness.

BTC, an affiliate of BFA pursuant to SEC exemptive relief, acts as securities lending agent to, and receives a share of securities lending revenues from, the Funds. BlackRock will also receive compensation for managing the reinvestment of the cash collateral from securities lending. There are potential conflicts of interests in managing a securities lending program, including but not limited to: (i) BlackRock as securities lending agent may have an incentive to increase or decrease the amount of securities on loan or to lend particular securities in order to generate additional risk-adjusted revenue for BlackRock and its affiliates; and (ii) BlackRock as securities lending agent may have an incentive to allocate loans to clients that would provide more revenue to BlackRock. As described further below, BlackRock seeks to mitigate this conflict by providing its securities lending clients with equal lending opportunities over time in order to approximate pro-rata allocation.

As part of its securities lending program, BlackRock indemnifies certain clients and/or funds against a shortfall in collateral in the event of borrower default. BlackRock's RQA calculates, on a regular basis, BlackRock's potential dollar exposure to the risk of collateral shortfall upon counterparty default ("shortfall risk") under the securities lending program for both indemnified and non-indemnified clients. On a periodic basis, RQA also determines the maximum amount of potential indemnified shortfall risk arising from securities lending activities ("indemnification exposure limit") and the maximum amount of counterparty-specific credit exposure ("credit limits") BlackRock is willing to assume as well as the program's operational complexity. RQA oversees the risk model that calculates projected shortfall values using loan-level factors such as loan and collateral type and market value as well as specific borrower counterparty credit characteristics. When necessary, RQA may further adjust other securities lending program attributes by restricting eligible collateral or reducing counterparty credit limits. As a result, the management of the indemnification exposure limit may affect the amount of securities lending activity BlackRock may conduct at any given point in time and impact indemnified and non-indemnified clients by reducing the volume of lending opportunities for certain loans (including by asset type, collateral type and/or revenue profile).

BlackRock uses a predetermined systematic process in order to approximate pro-rata allocation over time. In order to allocate a loan to a portfolio: (i) BlackRock as a whole must have sufficient lending capacity pursuant to the various program limits (i.e., indemnification exposure limit and counterparty credit limits); (ii) the lending portfolio must hold the asset at the time a loan opportunity arrives; and (iii) the lending portfolio must also have enough inventory, either on its own or when aggregated with other portfolios into one single market delivery, to satisfy the loan request. In doing so, BlackRock seeks to provide equal lending opportunities for all portfolios, independent of whether BlackRock indemnifies the portfolio. Equal opportunities for lending portfolios does not guarantee equal outcomes. Specifically, short and long-term outcomes for individual clients may vary due to asset mix, asset/liability spreads on different securities, and the overall limits imposed by the firm.

Purchases and sales of securities and other assets for a Fund may be bunched or aggregated with orders for other BlackRock client accounts, including with accounts that pay different transaction costs solely due to the fact that they have different research payment arrangements. BlackRock, however, is not required to bunch or aggregate orders if portfolio management decisions for different accounts are made separately, or if they determine that bunching or aggregating is not practicable or required, or in cases involving client direction.

Prevailing trading activity frequently may make impossible the receipt of the same price or execution on the entire volume of securities purchased or sold. When this occurs, the various prices may be averaged, and the Funds will be charged or credited with the average price. Thus, the effect of the aggregation may operate on some occasions to the disadvantage of the Funds. In addition, under certain circumstances, the Funds will not be charged the same commission or commission equivalent rates in connection with a bunched or aggregated order.

Subject to applicable law, BlackRock may select brokers (including, without limitation, certain Entities) that furnish BlackRock, the Funds, other BlackRock client accounts or personnel, directly or through correspondent relationships, with research or other appropriate services which provide, in BlackRock's view, appropriate assistance to BlackRock in the investment decision-making process (including with respect to futures, fixed-price offerings and OTC transactions). Such research or other services may include, to the extent permitted by law, research reports on companies, industries and securities; economic and financial data; financial publications; proxy analysis; trade industry seminars; computer data bases; research-oriented software and other services and products. Research or other services obtained in this manner may be used in servicing any or all of the Funds and other BlackRock client accounts, including in connection with BlackRock client accounts other than those that pay commissions to the broker relating to the research or other service arrangements. Such products and services may disproportionately benefit other BlackRock client accounts relative to the Funds based on the amount of brokerage commissions paid by the Funds and such other BlackRock client accounts. For example, research or other services that are paid for through one client's commissions may not be used in managing that client's account. In

addition, other BlackRock client accounts may receive the benefit, including disproportionate benefits, of economies of scale or price discounts in connection with products and services that may be provided to the Funds and to such other BlackRock client accounts. To the extent that BlackRock uses soft dollars, it will not have to pay for those products and services itself.

BlackRock does not currently enter into arrangements to use the Funds' assets for, or participate in, soft dollars, although BlackRock may receive research that is bundled with the trade execution, clearing, and/or settlement services provided by a particular broker-dealer. To the extent that BlackRock receives research on this basis, many of the same conflicts related to traditional soft dollars may exist. For example, the research effectively will be paid by client commissions that also will be used to pay for the execution, clearing, and settlement services provided by the broker-dealer and will not be paid by BlackRock. BlackRock, unless prohibited by applicable law, may endeavor to execute trades through brokers who, pursuant to such arrangements, provide research or other services in order to ensure the continued receipt of research or other services BlackRock believes are useful in its investment decision-making process. BlackRock may from time to time choose not to engage in the above described arrangements to varying degrees. BlackRock, unless prohibited by applicable law, may also enter into commission sharing arrangements under which BlackRock may execute transactions through a broker-dealer, including, where permitted, an Entity, and request that the broker-dealer allocate a portion of the commissions or commission credits to another firm that provides research to BlackRock. To the extent that BlackRock engages in commission sharing arrangements, many of the same conflicts related to traditional soft dollars may exist.

BlackRock may utilize certain electronic crossing networks ("ECNs") (including, without limitation, ECNs in which BlackRock or an Entity has an investment or other interest, to the extent permitted by applicable law) in executing client securities transactions for certain types of securities. These ECNs may charge fees for their services, including access fees and transaction fees. The transaction fees, which are similar to commissions or markups/markdowns, will generally be charged to clients and, like commissions and markups/markdowns, would generally be included in the cost of the securities purchased. Access fees may be paid by BlackRock even though incurred in connection with executing transactions on behalf of clients, including the Funds. In certain circumstances, ECNs may offer volume discounts that will reduce the access fees typically paid by BlackRock. BlackRock will only utilize ECNs consistent with its obligation to seek to obtain best execution in client transactions.

BlackRock has adopted policies and procedures designed to prevent conflicts of interest from influencing proxy voting decisions that it makes on behalf of advisory clients, including the Funds, and to help ensure that such decisions are made in accordance with BlackRock's fiduciary obligations to its clients. Nevertheless, notwithstanding such proxy voting policies and procedures, actual proxy voting decisions of BlackRock may have the effect of favoring the interests of other clients or businesses of other divisions or units of BlackRock and/or an Entity, provided that BlackRock believes such voting decisions to be in accordance with its fiduciary obligations. For a more detailed discussion of these policies and procedures, see the *Proxy Voting Policy* section of this SAI.

It is also possible that, from time to time, BlackRock or an Entity may, subject to compliance with applicable law, purchase and hold shares of a Fund. Increasing a Fund's assets may enhance liquidity, investment flexibility and diversification and may contribute to economies of scale that tend to reduce the Fund's expense ratio. BlackRock and the Entities reserve the right, subject to compliance with applicable law, to sell into the market or redeem in Creation Units through an Authorized Participant at any time some or all of the shares of a Fund acquired for their own accounts. A large sale or redemption of shares of a Fund by BlackRock or an Entity could significantly reduce the asset size of the Fund, which might have an adverse effect on the Fund's liquidity, investment flexibility, portfolio diversification, expense ratio or ability to comply with the listing requirements for the Fund. BlackRock seeks to consider the effect of redemptions on a Fund and other shareholders in deciding whether to redeem its shares but is not obligated to do so and may elect not to do so.

It is possible that a Fund may invest in securities of, or engage in transactions with, companies with which an Entity has developed or is trying to develop investment banking relationships as well as securities of entities in which BlackRock or an Entity has significant debt or equity investments or other interests or in which an Entity makes a market. A Fund may also invest in issuances (such as structured notes) by entities for which BlackRock provides and is compensated for cash management services relating to the proceeds from the sale of such issuances. A Fund also may invest in securities of, or engage in transactions with, companies to which an Entity provides or may in the future provide research coverage. Such investments or transactions could cause conflicts between the interests of a Fund and the interests of BlackRock, other clients of BlackRock or an Entity. In making investment decisions for a Fund, BlackRock is not permitted to obtain or use material non-public information acquired by any unit of BlackRock in the course of these activities. In addition, from time to time, the activities of BlackRock or an Entity may limit a Fund's flexibility in purchases and sales of securities. When an Entity

is engaged in an underwriting or other distribution of securities of an entity, BlackRock may be prohibited from purchasing or recommending the purchase of certain securities of that entity for a Fund. As indicated below, BlackRock or an Entity may engage in transactions with companies in which BlackRock-advised funds or other clients of BlackRock or of an Entity have an investment.

BlackRock and Chubb Limited (“Chubb”), a public company whose securities are held by BlackRock-advised funds and other accounts, partially funded the creation of a re-insurance company (“Re Co”) pursuant to which each has approximately a 9.9% ownership interest and each has representation on the board of directors. Certain employees and executives of BlackRock have a less than ½ of 1% ownership interest in Re Co. BlackRock manages the investment portfolio of Re Co, which is held in a wholly-owned subsidiary. Re Co participates as a reinsurer with reinsurance contracts underwritten by subsidiaries of Chubb. An independent director of certain BlackRock-advised funds also serves as an independent director of Chubb and has no interest or involvement in the Re Co transaction.

BlackRock and the Entities, their personnel and other financial service providers may have interests in promoting sales of the Funds. With respect to BlackRock and the Entities and their personnel, the remuneration and profitability relating to services to and sales of the Funds or other products may be greater than remuneration and profitability relating to services to and sales of certain funds or other products that might be provided or offered. BlackRock and the Entities and their sales personnel may directly or indirectly receive a portion of the fees and commissions charged to the Funds or their shareholders. BlackRock and its advisory or other personnel may also benefit from increased amounts of assets under management. Fees and commissions may also be higher than for other products or services, and the remuneration and profitability to BlackRock or the Entities and such personnel resulting from transactions on behalf of or management of the Funds may be greater than the remuneration and profitability resulting from other funds or products.

Third parties, including service providers to BlackRock or a Fund, may sponsor events (including, but not limited to, marketing and promotional activities and presentations, educational training programs and conferences) for registered representatives, other professionals and individual investors. There is a potential conflict of interest as such sponsorships may defray the costs of such activities to BlackRock, and may provide an incentive to BlackRock to retain such third parties to provide services to a Fund.

BlackRock may provide valuation assistance to certain clients with respect to certain securities or other investments and the valuation recommendations made for such clients’ accounts may differ from the valuations for the same securities or investments assigned by a Fund’s pricing vendors, especially if such valuations are based on broker-dealer quotes or other data sources unavailable to the Fund’s pricing vendors. While BlackRock will generally communicate its valuation information or determinations to a Fund’s pricing vendors and/or fund accountants, there may be instances where the Fund’s pricing vendors or fund accountants assign a different valuation to a security or other investment than the valuation for such security or investment determined or recommended by BlackRock.

As disclosed in more detail in the *Determination of Net Asset Value* section of each Fund’s Prospectus and this SAI, when market quotations are not readily available or are believed by BlackRock to be unreliable, a Fund’s investments are valued at fair value by BlackRock in accordance with procedures adopted by the Board. When determining “fair value price,” BlackRock seeks to determine the price that a Fund might reasonably expect to receive from the current sale of that asset or liability in an arm’s-length transaction. The price generally may not be determined based on what a Fund might reasonably expect to receive for selling an asset or liability at a later time or if it holds the asset or liability to maturity. While fair value determinations will be based upon all available factors that BlackRock deems relevant at the time of the determination, and may be based on analytical values determined by BlackRock using proprietary or third-party valuation models, fair value represents only a good faith approximation of the value of an asset or liability. The fair value of one or more assets or liabilities may not, in retrospect, be the price at which those assets or liabilities could have been sold during the period in which the particular fair values were used in determining a Fund’s net asset value. As a result, a Fund’s sale or redemption of its shares at net asset value, at a time when a holding or holdings are valued by BlackRock (pursuant to Board-adopted procedures) at fair value, may have the effect of diluting or increasing the economic interest of existing shareholders and may affect the amount of revenue received by BlackRock with respect to services for which it receives an asset-based fee.

To the extent permitted by applicable law, a Fund may invest all or some of its short-term cash investments in any money market fund or similarly-managed private fund advised or managed by BlackRock. In connection with any such investments, a Fund, to the extent permitted by the 1940 Act, may pay its share of expenses of a money market fund or other similarly-managed private fund in which it invests, which may result in a Fund bearing some additional expenses.

BlackRock and its directors, officers and employees, may buy and sell securities or other investments for their own accounts and may have conflicts of interest with respect to investments made on behalf of a Fund. As a result of differing trading and investment strategies or constraints, positions may be taken by directors, officers and employees that are the same, different from or made at different times than positions taken for the Fund. To lessen the possibility that a Fund will be adversely affected by this personal trading, each Fund, BFA and BlackRock have each adopted a code of ethics in compliance with Section 17(j) of the 1940 Act that restricts securities trading in the personal accounts of investment professionals and others who normally come into possession of information regarding a Fund's portfolio transactions. Each code of ethics is available by contacting BlackRock or by accessing the EDGAR Database on the SEC's Internet site at <http://www.sec.gov>, and copies may be obtained, after paying a duplicating fee, by e-mail at [publicinfo@sec.gov](mailto:publicinfo@sec.gov).

BlackRock will not purchase securities or other property from, or sell securities or other property to, a Fund, except that a Fund may in accordance with rules or guidance adopted under the 1940 Act engage in transactions with accounts that are affiliated with a Fund as a result of common officers, directors, or investment advisers or pursuant to exemptive orders granted to the Funds and/or BlackRock by the SEC. These transactions would be effected in circumstances in which BlackRock determined that it would be appropriate for a Fund to purchase and another client of BlackRock to sell, or a Fund to sell and another client of BlackRock to purchase, the same security or instrument on the same day. From time to time, the activities of a Fund may be restricted because of regulatory requirements applicable to BlackRock and/or BlackRock's internal policies designed to comply with, limit the applicability of, or otherwise relate to such requirements. A client not advised by BlackRock would not be subject to some of those considerations. There may be periods when BlackRock may not initiate or recommend certain types of transactions, or may otherwise restrict or limit their advice in certain securities or instruments issued by or related to companies for which BlackRock or an Entity is performing investment banking, market making, advisory or other services or has proprietary positions. For example, when BlackRock is engaged to provide advisory or risk management services for a company, BlackRock may be prohibited from or limited in purchasing or selling securities of that company on behalf of a Fund, particularly where such services result in BlackRock obtaining material non-public information about the company (e.g., in connection with participation in a creditors' committee). Similar situations could arise if personnel of BlackRock serve as directors of companies the securities of which a Fund wishes to purchase or sell. However, if permitted by applicable law, and where consistent with BlackRock's policies and procedures (including the necessary implementation of appropriate information barriers), the Funds may purchase securities or instruments that are issued by such companies, are the subject of an underwriting, distribution or advisory assignment by an Entity, or are the subject of an advisory or risk management assignment by BlackRock, or where personnel of BlackRock are directors or officers of the issuer.

The investment activities of BlackRock for their proprietary accounts and for client accounts may also limit the investment strategies and rights of the Funds. For example, in certain circumstances where the Funds invest in securities issued by companies that operate in certain regulated industries or in certain emerging or international markets, or are subject to corporate or regulatory ownership restrictions, or invest in certain futures or other derivative transactions, there may be limits on the aggregate amount invested by BlackRock for their proprietary accounts and for client accounts (including the Funds) that may not be exceeded without the grant of a license or other regulatory or corporate consent or, if exceeded, may cause BlackRock, the Funds or other client accounts to suffer disadvantages or business restrictions.

If certain aggregate ownership thresholds are reached either through the actions of BlackRock or a Fund or as a result of third-party transactions, the ability of BlackRock, on behalf of clients (including the Funds), to purchase or dispose of investments, or exercise rights or undertake business transactions, may be restricted by regulation or otherwise impaired. As a result, BlackRock, on behalf of its clients (including the Funds), may limit purchases, sell existing investments, or otherwise restrict, forgo or limit the exercise of rights (including transferring, outsourcing or limiting voting rights or forgoing the right to receive dividends) when BlackRock, in its sole discretion, deems it appropriate in light of potential regulatory or other restrictions on ownership or other consequences resulting from reaching investment thresholds.

In those circumstances where ownership thresholds or limitations must be observed, BlackRock seeks to allocate limited investment opportunities equitably among clients (including the Funds), taking into consideration benchmark weight and investment strategy. BlackRock has adopted certain controls designed to prevent the occurrence of a breach of any applicable ownership threshold or limits, including, for example, when ownership in certain securities nears an applicable threshold, BlackRock may remove such securities from the list of Deposit Securities to be delivered to the Fund in connection with purchases of Creation Units of such Fund and may limit purchases in such securities to the issuer's weighting in the applicable benchmark used by BlackRock to manage such Fund. If client (including Fund) holdings of an issuer exceed an applicable threshold and BlackRock is unable to obtain relief to enable the continued holding of such investments, it may be

necessary to sell down these positions to meet the applicable limitations. In these cases, benchmark overweight positions will be sold prior to benchmark positions being reduced to meet applicable limitations.

In addition to the foregoing, other ownership thresholds may trigger reporting requirements to governmental and regulatory authorities, and such reports may entail the disclosure of the identity of a client or BlackRock's intended strategy with respect to such security or asset.

BlackRock may not serve as an Authorized Participant in the creation and redemption of iShares ETFs.

BlackRock may maintain securities indices. To the extent permitted by applicable laws, the Funds may seek to license and use such indices as part of their investment strategy. Index based funds that seek to track the performance of securities indices also may use the name of the index or index provider in the fund name. Index providers, including BlackRock (to the extent permitted by applicable law), may be paid licensing fees for use of their index or index name. BlackRock may benefit from the Funds using BlackRock indices by creating increasing acceptance in the marketplace for such indices. BlackRock is not obligated to license its indices to any Fund and the Funds are under no obligation to use BlackRock indices. Any Fund that enters into a license for a BlackRock index cannot be assured that the terms of any index licensing agreement with BlackRock will be as favorable as those terms offered to other licensees.

The custody arrangement described in "Investment Advisory, Administrative and Distribution Services" may lead to potential conflicts of interest with BlackRock where BlackRock has agreed to waive fees and/or reimburse ordinary operating expenses in order to cap expenses of the Funds (or where BlackRock charges a unitary management fee). This is because the custody arrangements with certain Funds' custodian may have the effect of reducing custody fees when the Funds leave cash balances uninvested. This could be viewed as having the potential to provide BlackRock an incentive to keep high positive cash balances for Funds in order to offset fund custody fees that BlackRock might otherwise reimburse or pay. However, BlackRock's portfolio managers do not intentionally keep uninvested balances high, but rather make investment decisions that they anticipate will be beneficial to fund performance. For funds without a unitary management fee, when a fund's actual operating expense ratio exceeds a stated cap, a reduction in custody fees reduces the amount of waivers and/or reimbursements BlackRock would be required to make to the fund.

BlackRock may enter into contractual arrangements with third-party service providers to a Fund (e.g., custodians, administrators and index providers) pursuant to which BlackRock receives fee discounts or concessions in recognition of BlackRock's overall relationship with such service providers. To the extent that BlackRock is responsible for paying these service providers out of its management fee, the benefits of any such fee discounts or concessions may accrue, in whole or in part, to BlackRock.

BlackRock owns or has an ownership interest in certain trading, portfolio management, operations and/or information systems used by Fund service providers. These systems are, or will be, used by a Fund service provider in connection with the provision of services to accounts managed by BlackRock and funds managed and sponsored by BlackRock, including the Funds, that engage the service provider (typically the custodian). A Fund's service provider remunerates BlackRock for the use of the systems. A Fund service provider's payments to BlackRock for the use of these systems may enhance the profitability of BlackRock.

BlackRock has entered into an arrangement with Intercontinental Exchange, Inc. ("ICE") to be one of ICE's development partners in connection with ICE's intention to launch a new open-architecture, centralized industry platform to facilitate creation and redemption orders for ETFs (the "ICE Platform"). As a development partner, BlackRock has licensed certain of its intellectual property to ICE. Once the ICE Platform is launched, BlackRock intends to use the ICE Platform to facilitate creations and redemptions in the Funds and certain other services provided by the ICE Platform. BlackRock may have an incentive to promote the broad adoption of the ICE Platform by the ETF marketplace because BlackRock will earn a fee, based on the total revenues earned by the ICE Platform, for licensing BlackRock's intellectual property to ICE and for BlackRock's role as development partner. ICE Data Services, the underlying index provider for certain of the Funds, is a wholly owned subsidiary of ICE.

BlackRock's receipt of fees from a service provider in connection with the use of systems provided by BlackRock may create an incentive for BlackRock to recommend that a Fund enter into or renew an arrangement with the service provider.

A Fund from time to time may purchase in the secondary market (i) certain mortgage pass-through securities packaged and master serviced by PNC Mortgage Securities Corp. ("PNC Mortgage") or Midland Loan Services, Inc. ("Midland"), or (ii)

mortgage-related securities containing loans or mortgages originated by PNC Bank, National Association (“PNC Bank”) or its affiliates. It is possible that under some circumstances, PNC Mortgage, Midland or other affiliates could have interests that are in conflict with the holders of these mortgage-backed securities, and such holders could have rights against PNC Mortgage, Midland or their affiliates. For example, if PNC Mortgage, Midland or their affiliates engaged in negligence or willful misconduct in carrying out its duties as a master servicer, then any holder of the mortgage-backed security could seek recourse against PNC Mortgage, Midland or their affiliates, as applicable. Also, as a master servicer, PNC Mortgage, Midland or their affiliates may make certain representations and warranties regarding the quality of the mortgages and properties underlying a mortgage-backed security. If one or more of those representations or warranties is false, then the holders of the mortgage backed securities could trigger an obligation of PNC Mortgage, Midland or their affiliates, as applicable, to repurchase the mortgages from the issuing trust. Finally, PNC Mortgage, Midland or their affiliates may own securities that are subordinate to the senior mortgage-backed securities owned by a Fund.

Present and future activities of BlackRock (including BFA) and the Entities and their respective directors, officers and employees, in addition to those described in this section, may give rise to additional conflicts of interest.

**Legal Proceedings.** On June 16, 2016, investors (the “Plaintiffs”) in certain iShares funds (iShares Core S&P Small-Cap ETF, iShares Russell 1000 Growth ETF, iShares Core S&P 500 ETF, iShares Russell Mid-Cap Growth ETF, iShares Russell Mid-Cap ETF, iShares Russell Mid-Cap Value ETF, iShares Select Dividend ETF, iShares Morningstar Mid-Cap ETF, iShares Morningstar Large-Cap ETF, iShares Preferred and Income Securities ETF and iShares U.S. Aerospace & Defense ETF) filed a putative class action lawsuit against the Trust, BlackRock, Inc. and certain of its advisory affiliates, and certain directors/trustees and officers of the Trust (collectively, “Defendants”) in California State Court. The lawsuit alleges the Defendants violated federal securities laws by failing to adequately disclose in the prospectuses issued by the funds noted above the risks of using stop-loss orders in the event of a “flash crash,” such as the one that occurred on May 6, 2010. On September 18, 2017, the court issued a Statement of Decision holding that the Plaintiffs lack standing to assert their claims. On October 11, 2017, the court entered final judgment dismissing all of Plaintiffs’ claims with prejudice. Plaintiffs have appealed the court’s decision.

## Investment Advisory, Administrative and Distribution Services

**Investment Adviser.** BFA serves as investment adviser to each Fund pursuant to an investment advisory agreement between the Trust, on behalf of each Fund, and BFA. BFA is a California corporation indirectly owned by BlackRock, Inc. and is registered as an investment adviser under the Investment Advisers Act of 1940, as amended. Under the investment advisory agreement, BFA, subject to the supervision of the Board and in conformity with the stated investment policies of each Fund, manages and administers the Trust and the investment of each Fund’s assets. BFA is responsible for placing purchase and sale orders and providing continuous supervision of the investment portfolio of each Fund.

Pursuant to the investment advisory agreement, BFA may, from time to time, in its sole discretion and to the extent permitted by applicable law, appoint one or more sub-advisers, including, without limitation, affiliates of BFA, to perform investment advisory or other services with respect to a Fund. In addition, BFA may delegate certain of its investment advisory functions under the investment advisory agreement to one or more of its affiliates to the extent permitted by applicable law. BFA may terminate any or all sub-advisers or such delegation arrangements in its sole discretion upon appropriate notice at any time to the extent permitted by applicable law.

BFA is responsible, under the investment advisory agreement, for substantially all expenses of the Funds, including the cost of transfer agency, custody, fund administration, legal, audit and other services. BFA is not responsible for, and the Funds will bear, the management fees, interest expenses, taxes, expenses incurred with respect to the acquisition and disposition of portfolio securities and the execution of portfolio transactions, including brokerage commissions, distribution fees or expenses, litigation expenses and any extraordinary expenses (as determined by a majority of the Independent Trustees).

For its investment advisory services to each Fund, BFA received a management fee at the annual rates (as a percentage of such Fund’s average net assets) set forth below for the fiscal years noted.

For its investment advisory services to the iShares iBoxx \$ High Yield Corporate Bond ETF, BFA is paid a management fee from the iShares iBoxx \$ High Yield Corporate Bond ETF corresponding to the iShares iBoxx \$ High Yield Corporate Bond ETF’s allocable portion of an aggregate management fee based on the aggregate average daily net assets of the following

iShares funds: iShares iBoxx \$ High Yield Corporate Bond ETF and iShares J.P. Morgan USD Emerging Markets Bond ETF. The aggregate management fee for the iShares funds listed above is calculated as follows:

Average Daily Net Assets	Rate of Management Fee for the iShares iBoxx \$ High Yield Corporate Bond ETF
First \$19 billion	0.5000%
Greater than \$19 billion – Up to \$33 billion	0.4750%
Greater than \$33 billion – Up to \$47 billion	0.4513%
Greater than \$47 billion	0.4287%

Effective June 26, 2018, for its investment advisory services to the iShares iBoxx \$ Investment Grade Corporate Bond ETF, iShares Intermediate-Term Corporate Bond ETF, iShares Long-Term Corporate Bond ETF, iShares MBS ETF and iShares Short-Term Corporate Bond ETF, BFA is paid a management fee from each Fund calculated based on the aggregate average daily net assets of the following iShares funds: iShares Cohen & Steers REIT ETF, iShares iBoxx \$ Investment Grade Corporate Bond ETF, iShares Intermediate-Term Corporate Bond ETF, iShares Long-Term Corporate Bond ETF, iShares MBS ETF, iShares Nasdaq Biotechnology ETF, iShares Russell 1000 Growth ETF, iShares Russell 1000 Value ETF, iShares Russell Mid-Cap ETF, iShares Russell Mid-Cap Growth ETF, iShares Russell Mid-Cap Value ETF, iShares S&P Mid-Cap 400 Growth ETF, iShares Short-Term Corporate Bond ETF and iShares TIPS Bond ETF. The management fee for the iShares iBoxx \$ Investment Grade Corporate Bond ETF equals the ratio of the Fund's net assets over the aggregate net assets of the above iShares funds multiplied by the amount calculated as follows: 0.1500% per annum of the aggregate net assets less than or equal to \$121 billion, plus 0.1425% per annum of the aggregate net assets over \$121 billion, up to and including \$181 billion, plus 0.1354% per annum of the aggregate net assets over \$181 billion, up to and including \$231 billion, plus 0.1287% per annum of the aggregate net assets over \$231 billion, up to and including \$281 billion, plus 0.1222% per annum of the aggregate net assets in excess of \$281 billion. The management fee for each of the iShares Intermediate-Term Corporate Bond ETF, iShares Long-Term Corporate Bond ETF and iShares Short-Term Corporate Bond ETF equals the ratio of the Fund's net assets over the aggregate net assets of the above iShares funds multiplied by the amount calculated as follows: 0.0600% per annum of the aggregate net assets less than or equal to \$121 billion, plus 0.0570% per annum of the aggregate net assets over \$121 billion, up to and including \$181 billion, plus 0.0542% per annum of the aggregate net assets over \$181 billion, up to and including \$231 billion, plus 0.0515% per annum of the aggregate net assets over \$231 billion, up to and including \$281 billion, plus 0.0489% per annum of the aggregate net assets in excess of \$281 billion. The management fee for the iShares MBS ETF equals the ratio of the Fund's net assets over the aggregate net assets of the above iShares funds multiplied by the amount calculated as follows: 0.0900% per annum of the aggregate net assets less than or equal to \$121 billion, plus 0.0855% per annum of the aggregate net assets over \$121 billion, up to and including \$181 billion, plus 0.0813% per annum of the aggregate net assets over \$181 billion, up to and including \$231 billion, plus 0.0772% per annum of the aggregate net assets over \$231 billion, up to and including \$281 billion, plus 0.0734% per annum of the aggregate net assets in excess of \$281 billion.

Fund	Management Fee	Fund Inception Date	Management Fees Paid Net of Waivers for Fiscal Year Ended February 28, 2018	Management Fees Paid Net of Waivers for Fiscal Year Ended February 28, 2017	Management Fees Paid Net of Waivers for Fiscal Year Ended February 29, 2016
iShares 1-3 Year Treasury Bond ETF	0.15%	07/22/02	\$ 16,736,176	\$ 16,084,915	\$16,168,690
iShares 3-7 Year Treasury Bond ETF	0.15%	01/05/07	10,744,495	9,133,780	7,853,966
iShares 7-10 Year Treasury Bond ETF	0.15%	07/22/02	11,448,979	13,315,601	11,632,469
iShares 10-20 Year Treasury Bond ETF	0.15%	01/05/07	781,278	1,114,777	719,478
iShares 20+ Year Treasury Bond ETF	0.15%	07/22/02	10,818,563	11,221,276	9,215,978
iShares Agency Bond ETF	0.20%	11/05/08	985,484	1,234,640	992,630
iShares Broad USD Investment Grade Corporate Bond ETF <sup>1,2</sup>	0.15%	01/05/07	2,204,563	1,434,888	1,354,971
iShares California Muni Bond ETF	0.25%	10/04/07	1,979,040	1,575,777	1,051,642
iShares Core 5-10 Year USD Bond ETF <sup>3,4</sup>	0.06%	11/01/16	14,495	5,154	N/A
iShares Core 10+ Year USD Bond ETF <sup>5</sup>	0.06%	12/08/09	217,231	191,823	184,314
iShares Core U.S. Aggregate Bond ETF <sup>6,7</sup>	0.05%	09/22/03	19,364,071	22,760,529	18,563,743



Fund	Management Fee	Fund Inception Date	Management Fees Paid Net of Waivers for Fiscal Year Ended February 28, 2018	Management Fees Paid Net of Waivers for Fiscal Year Ended February 28, 2017	Management Fees Paid Net of Waivers for Fiscal Year Ended February 29, 2016
iShares ESG 1-5 Year USD Corporate Bond ETF	0.12%	07/11/17	10,138	N/A	N/A
iShares ESG USD Corporate Bond ETF	0.18%	07/11/17	11,509	N/A	N/A
iShares Government/Credit Bond ETF	0.20%	01/05/07	331,808	523,557	445,635
iShares iBoxx \$ High Yield Corporate Bond ETF	0.49%	04/04/07	89,108,367	82,652,331	72,764,253
iShares iBoxx \$ Investment Grade Corporate Bond ETF	0.15%	07/22/02	52,238,868	43,549,933	33,482,363
iShares Intermediate Government/Credit Bond ETF	0.20%	01/05/07	4,247,869	4,239,475	3,696,429
iShares Intermediate-Term Corporate Bond ETF <sup>8,9</sup>	0.20%	01/05/07	14,121,384	12,998,614	12,210,331
iShares Long-Term Corporate Bond ETF <sup>10,11</sup>	0.20%	12/08/09	1,613,351	1,907,401	1,577,656
iShares MBS ETF <sup>12</sup>	0.09%	03/13/07	13,616,684	21,730,380	17,926,955
iShares National Muni Bond ETF <sup>13,14</sup>	0.25%	09/07/07	21,709,229	18,351,725	13,242,422
iShares New York Muni Bond ETF	0.25%	10/04/07	678,895	592,687	464,195
iShares Short-Term Corporate Bond ETF <sup>15,16</sup>	0.20%	01/05/07	22,535,689	21,895,941	21,481,395
iShares Short-Term National Muni Bond ETF <sup>17,18</sup>	0.25%	11/05/08	3,731,121	2,848,712	2,308,900
iShares Short Treasury Bond ETF <sup>19</sup>	0.15%	01/05/07	9,171,704	5,623,790	4,743,686

<sup>1</sup> For the iShares Broad USD Investment Grade Corporate Bond ETF, BFA contractually agreed to waive a portion of its management fee such that the Fund's total annual fund operating expenses after fee waiver will not exceed 0.06% effective June 1, 2018 through May 30, 2023. The contractual waiver was discontinued beginning on June 26, 2018.

<sup>2</sup> Effective June 26, 2018, the management fee for the iShares Broad USD Investment Grade Corporate Bond ETF is 0.06%. Prior to June 26, 2018, the management fee for the iShares Broad USD Investment Grade Corporate Bond ETF was 0.15%.

<sup>3</sup> For the iShares Core 5-10 Year USD Bond ETF, BFA has contractually agreed to waive a portion of its management fees in an amount equal to the acquired fund fees and expenses, if any, attributable to investments by the Fund in other registered investment companies advised by BFA, or its affiliates, through February 28, 2021. The contractual waiver may be terminated prior to February 28, 2021 only upon written agreement of the Trust and BFA. For the fiscal years ended February 28, 2018 and February 28, 2017, BFA waived \$7,341 and \$1,227 of management fees, respectively.

<sup>4</sup> Effective August 4, 2017, the management fee for the iShares Core 5-10 Year USD Bond ETF is 0.06%. Prior to August 4, 2017, the management fee for the iShares Core 5-10 Year USD Bond ETF was 0.08%.

<sup>5</sup> Effective August 4, 2017, the management fee for the iShares Core 10+ Year USD Bond ETF is 0.06%. From October 5, 2016, to August 3, 2017, the management fee for the iShares Core 10+ Year USD Bond ETF was 0.08%. Prior to October 5, 2016, the management fee for the iShares Core 10+ Year USD Bond ETF was 0.12%.

<sup>6</sup> For the iShares Core U.S. Aggregate Bond ETF, BFA has contractually agreed to waive a portion of its management fees in an amount equal to acquired fund fees and expenses, if any, attributable to investments by the Fund in other registered investment companies advised by BFA, or its affiliates, through June 30, 2026. The contractual waiver may be terminated prior to June 30, 2026 only upon written agreement of the Trust and BFA. For the fiscal years ended February 28, 2018, February 29, 2017 and February 28, 2016, BFA waived \$5,058,901, \$3,726,880 and \$3,037,868 of management fees, respectively.

<sup>7</sup> Effective October 5, 2016, the management fee for the iShares Core U.S. Aggregate Bond ETF is 0.05%. Prior to October 5, 2016, the management fee for the iShares Core U.S. Aggregate Bond ETF was 0.08%.

<sup>8</sup> For the iShares Intermediate-Term Corporate Bond ETF, BFA contractually agreed to waive a portion of its management fee such that the Fund's total annual fund operating expenses after fee waiver will not exceed 0.06% effective June 1, 2018 through May 30, 2023. The contractual waiver was discontinued beginning on June 26, 2018.

<sup>9</sup> Effective June 26, 2018, the management fee for the iShares Intermediate-Term Corporate Bond ETF is 0.06%. Prior to June 26, 2018, the management fee for the iShares Intermediate-Term Corporate Bond ETF was 0.20%.

<sup>10</sup> For the iShares Long-Term Corporate Bond ETF, BFA contractually agreed to waive a portion of its management fee such that the Fund's total annual fund operating expenses after fee waiver will not exceed 0.06% effective June 1, 2018 through May 30, 2023. The contractual waiver was discontinued beginning on June 26, 2018.

<sup>11</sup> Effective June 26, 2018, the management fee for the iShares Long-Term Corporate Bond ETF is 0.06%. Prior to June 26, 2018, the management fee for the iShares Long-Term Corporate Bond ETF was 0.20%.

<sup>12</sup> Effective July 13, 2017, for the iShares MBS ETF, BFA has contractually agreed to waive a portion of its management fee such that the Fund's total

annual fund operating expenses after fee waiver will not exceed 0.09% through February 28, 2023. The contractual waiver may be terminated prior to February 28, 2023 only upon written agreement of the Trust and BFA. For the fiscal year ended February 28, 2018, BFA waived \$1,939,234 of management fees.

- <sup>13</sup> For the iShares National Muni Bond ETF, BFA has contractually agreed to waive a portion of its management fees in an amount equal to acquired fund fees and expenses, if any, attributable to investments by the Fund in other series of iShares Trust and iShares, Inc. through June 30, 2026. The contractual waiver may be terminated prior to June 30, 2026 only upon written agreement of the Trust and BFA. BFA contractually agreed to waive its management fee by an additional amount such that the Fund's total annual fund operating expenses after fee waiver will not exceed 0.07% effective June 1, 2018 through May 30, 2023. The contractual waiver was discontinued beginning on June 26, 2018. For the fiscal years ended February 28, 2018, February 29, 2017 and February 28, 2016, BFA waived \$0, \$0 and \$0 of management fees, respectively.
- <sup>14</sup> Effective June 26, 2018, the management fee for the iShares National Muni Bond ETF is 0.07%. Prior to June 26, 2018, the management fee for the iShares National Muni Bond ETF was 0.25%.
- <sup>15</sup> For the iShares Short-Term Corporate Bond ETF, BFA contractually agreed to waive a portion of its management fee such that the Fund's total annual fund operating expenses after fee waiver will not exceed 0.06% effective June 1, 2018 through May 30, 2023. The contractual waiver was discontinued beginning on June 26, 2018.
- <sup>16</sup> Effective June 26, 2018, the management fee for the iShares Short-Term Corporate Bond ETF is 0.06%. Prior to June 26, 2018, the management fee for the iShares Short-Term Corporate Bond ETF was 0.20%.
- <sup>17</sup> For the iShares Short-Term National Muni Bond ETF, BFA contractually agreed to waive a portion of its management fee such that the Fund's total annual fund operating expenses after fee waiver will not exceed 0.07% effective June 1, 2018 through May 30, 2023. The contractual waiver was discontinued beginning on June 26, 2018.
- <sup>18</sup> Effective June 26, 2018, the management fee for the iShares Short-Term National Muni Bond ETF is 0.07%. Prior to June 26, 2018, the management fee for the iShares Short-Term National Muni Bond ETF was 0.25%.
- <sup>19</sup> For the iShares Short Treasury Bond ETF, BFA has voluntarily agreed to waive a portion of its management fees to the extent necessary to prevent the Fund from experiencing a negative 30-day SEC yield. This voluntary waiver may be reduced or discontinued at any time without notice. For the fiscal years ended February 28, 2018, February 29, 2017, and February 28, 2016, BFA waived \$0, \$0 and \$686,992 of its management fees, respectively.

The investment advisory agreement with respect to each Fund continues in effect for two years from its effective date, and thereafter is subject to annual approval by (i) the Board, or (ii) the vote of a majority of the outstanding voting securities (as defined in the 1940 Act) of the applicable Fund, provided that in either event such continuance also is approved by a majority of the Board members who are not interested persons (as defined in the 1940 Act) of the applicable Fund, by a vote cast in person at a meeting called for the purpose of voting on such approval.

The investment advisory agreement with respect to each Fund is terminable without penalty, on 60 days' notice, by the Board or by a vote of the holders of a majority of the applicable Fund's outstanding voting securities (as defined in the 1940 Act). The investment advisory agreement is also terminable upon 60 days' notice by BFA and will terminate automatically in the event of its assignment (as defined in the 1940 Act).

**Portfolio Managers.** As of February 28, 2018, the individuals named as Portfolio Managers in each Fund's Prospectus were also primarily responsible for the day-to-day management of other iShares funds and certain other types of portfolios and/or accounts as follows:

#### James Mauro

<u>Types of Accounts</u>	<u>Number</u>	<u>Total Assets</u>
Registered Investment Companies	59	\$74,363,000,000
Other Pooled Investment Vehicles	9	27,502,000,000
Other Accounts	8	6,043,000,000

#### Scott Radell

<u>Types of Accounts</u>	<u>Number</u>	<u>Total Assets</u>
Registered Investment Companies	73	\$83,621,000,000
Other Pooled Investment Vehicles	10	25,242,000,000
Other Accounts	11	6,153,000,000

Each of the portfolios or accounts for which the Portfolio Managers are primarily responsible for the day-to-day management seeks to track the rate of return, risk profile and other characteristics of independent third-party indexes by either replicating the same combination of securities and other financial instruments that compose those indexes or through a representative sampling of the securities and other financial instruments that compose those indexes based on objective criteria and data. Pursuant to BFA policy, investment opportunities are allocated equitably among the Funds and other portfolios and accounts.

For example, under certain circumstances, an investment opportunity may be restricted due to limited supply in the market, legal constraints or other factors, in which event the investment opportunity will be allocated equitably among those portfolios and accounts, including the Funds, seeking such investment opportunity. As a consequence, from time to time the Funds may receive a smaller allocation of an investment opportunity than they would have if the Portfolio Managers and BFA and its affiliates did not manage other portfolios or accounts.

Like the Funds, the other portfolios or accounts for which the Portfolio Managers are primarily responsible for the day-to-day portfolio management generally pay an asset-based fee to BFA or its affiliates, as applicable, for its advisory services. One or more of those other portfolios or accounts, however, may pay BFA or its affiliates a performance-based fee in lieu of, or in addition to, an asset-based fee for its advisory services. A portfolio or account with a performance-based fee would pay BFA or its affiliates a portion of that portfolio's or account's gains, or would pay BFA or its affiliates more for its services than would otherwise be the case if BFA or its affiliates meets or exceeds specified performance targets. Performance-based fee arrangements could present an incentive for BFA or its affiliates to devote greater resources, and allocate more investment opportunities, to the portfolios or accounts that have those fee arrangements, relative to other portfolios or accounts, in order to earn larger fees. Although BFA and its affiliates have an obligation to allocate resources and opportunities equitably among portfolios and accounts and intends to do so, shareholders of the Funds should be aware that, as with any group of portfolios and accounts managed by an investment adviser and/or its affiliates pursuant to varying fee arrangements, including performance-based fee arrangements, there is the potential for a conflict-of-interest, which may result in the Portfolio Managers' favoring those portfolios or accounts with performance-based fee arrangements.

The tables below show, for each Portfolio Manager, the number of portfolios or accounts of the types set forth in the above tables and the aggregate of total assets in those portfolios or accounts with respect to which the investment management fees are based on the performance of those portfolios or accounts as of February 28, 2018:

#### James Mauro

<u>Types of Accounts</u>	<u>Number of Other Accounts with Performance Fees Managed by Portfolio Manager</u>	<u>Aggregate of Total Assets</u>
Registered Investment Companies	0	N/A
Other Pooled Investment Vehicles	0	N/A
Other Accounts	0	N/A

#### Scott Radell

<u>Types of Accounts</u>	<u>Number of Other Accounts with Performance Fees Managed by Portfolio Manager</u>	<u>Aggregate of Total Assets</u>
Registered Investment Companies	0	N/A
Other Pooled Investment Vehicles	0	N/A
Other Accounts	0	N/A

The discussion below describes the Portfolio Managers' compensation as of February 28, 2018.

#### Portfolio Manager Compensation Overview

BlackRock, Inc.'s financial arrangements with its portfolio managers, its competitive compensation and its career path emphasis at all levels reflect the value senior management places on key resources. Compensation may include a variety of components and may vary from year to year based on a number of factors. The principal components of compensation include a base salary, a performance-based discretionary bonus, participation in various benefits programs and one or more of the incentive compensation programs established by BlackRock, Inc.

**Base compensation.** Generally, portfolio managers receive base compensation based on their position with the firm.

**Discretionary Incentive Compensation.** Discretionary incentive compensation is a function of several components: the performance of BlackRock, Inc., the performance of the portfolio manager's group within BlackRock, Inc. and the individual's performance and contribution to the overall performance of these portfolios and BlackRock, Inc.

**Distribution of Discretionary Incentive Compensation.** Discretionary incentive compensation is distributed to portfolio managers in a combination of cash and BlackRock, Inc. restricted stock units which vest ratably over a number of years. The BlackRock, Inc. restricted stock units, if properly vested, will be settled in BlackRock, Inc. common stock. Typically, the cash bonus, when combined with base salary, represents more than 60% of total compensation for the portfolio managers. Paying a portion of annual bonuses in stock puts compensation earned by a portfolio manager for a given year “at risk” based on BlackRock, Inc.’s ability to sustain and improve its performance over future periods.

*Long-Term Incentive Plan Awards* — From time to time, long-term incentive equity awards are granted to certain key employees to aid in retention, align their interests with long-term shareholder interests and motivate performance. Equity awards are generally granted in the form of BlackRock, Inc. restricted stock units that, once vested, settle in BlackRock, Inc. common stock.

**Other Compensation Benefits.** In addition to base compensation and discretionary incentive compensation, portfolio managers may be eligible to receive or participate in one or more of the following:

*Incentive Savings Plans* — BlackRock, Inc. has created a variety of incentive savings plans in which BlackRock, Inc. employees are eligible to participate, including a 401(k) plan, the BlackRock Retirement Savings Plan (“RSP”), and the BlackRock Employee Stock Purchase Plan (“ESPP”). The employer contribution components of the RSP include a company match equal to 50% of the first 8% of eligible pay contributed to the plan capped at \$5,000 per year, and a company retirement contribution equal to 3-5% of eligible compensation up to the U.S. Internal Revenue Service (the “IRS”) limit (\$275,000 for 2018). The RSP offers a range of investment options, including registered investment companies and collective investment funds managed by the firm. BlackRock, Inc. contributions follow the investment direction set by participants for their own contributions or, absent participant investment direction, are invested into an index target date fund that corresponds to, or is closest to, the year in which the participant attains age 65. The ESPP allows for investment in BlackRock, Inc. common stock at a 5% discount on the fair market value of the stock on the purchase date. Annual participation in the ESPP is limited to the purchase of 1,000 shares of common stock or a dollar value of \$25,000 based on its fair market value on the Purchase Date. James Mauro and Scott Radell are each eligible to participate in these plans.

As of February 28, 2018, the Portfolio Managers beneficially owned shares of the Funds in the amounts reflected in the following tables:

#### James Mauro

Fund	Dollar Range						
	None	\$1 to \$10k	\$10,001 to \$50k	\$50,001 to \$100k	\$100,001 to \$500k	\$500,001 to \$1m	over \$1m
iShares 1-3 Year Treasury Bond ETF	X						
iShares 3-7 Year Treasury Bond ETF	X						
iShares 7-10 Year Treasury Bond ETF	X						
iShares 10-20 Year Treasury Bond ETF	X						
iShares 20+ Year Treasury Bond ETF	X						
iShares Agency Bond ETF	X						
iShares Broad USD Investment Grade Corporate Bond ETF	X						
iShares California Muni Bond ETF	X						
iShares Core 5-10 Year USD Bond ETF	X						
iShares Core 10+ Year USD Bond ETF	X						
iShares Core U.S. Aggregate Bond ETF	X						
iShares Government/Credit Bond ETF	X						
iShares iBoxx \$ High Yield Corporate Bond ETF	X						
iShares iBoxx \$ Investment Grade Corporate Bond ETF	X						
iShares Intermediate Government/Credit Bond ETF	X						

**James Mauro**

Fund	Dollar Range						
	None	\$1 to \$10k	\$10,001 to \$50k	\$50,001 to \$100k	\$100,001 to \$500k	\$500,001 to \$1m	over \$1m
iShares Intermediate-Term Corporate Bond ETF	X						
iShares Long-Term Corporate Bond ETF	X						
iShares MBS ETF	X						
iShares National Muni Bond ETF	X						
iShares New York Muni Bond ETF	X						
iShares Short-Term Corporate Bond ETF	X						
iShares Short-Term National Muni Bond ETF	X						
iShares Short Treasury Bond ETF	X						

**Scott Radell**

Fund	Dollar Range						
	None	\$1 to \$10k	\$10,001 to \$50k	\$50,001 to \$100k	\$100,001 to \$500k	\$500,001 to \$1m	over \$1m
iShares 1-3 Year Treasury Bond ETF	X						
iShares 3-7 Year Treasury Bond ETF	X						
iShares 7-10 Year Treasury Bond ETF	X						
iShares 10-20 Year Treasury Bond ETF	X						
iShares 20+ Year Treasury Bond ETF	X						
iShares Agency Bond ETF	X						
iShares Broad USD Investment Grade Corporate Bond ETF	X						
iShares California Muni Bond ETF	X						
iShares Core 5-10 Year USD Bond ETF	X						
iShares Core 10+ Year USD Bond ETF	X						
iShares Core U.S. Aggregate Bond ETF	X						
iShares Government/Credit Bond ETF	X						
iShares iBoxx \$ High Yield Corporate Bond ETF						X	
iShares iBoxx \$ Investment Grade Corporate Bond ETF	X						
iShares Intermediate Government/Credit Bond ETF	X						
iShares Intermediate-Term Corporate Bond ETF	X						
iShares Long-Term Corporate Bond ETF	X						
iShares MBS ETF	X						
iShares National Muni Bond ETF	X						
iShares New York Muni Bond ETF	X						
iShares Short-Term Corporate Bond ETF	X						
iShares Short-Term National Muni Bond ETF	X						
iShares Short Treasury Bond ETF	X						

**Codes of Ethics.** The Trust, BFA and the Distributor have adopted codes of ethics pursuant to Rule 17j-1 under the 1940 Act. The codes of ethics permit personnel subject to the codes of ethics to invest in securities, subject to certain limitations, including securities that may be purchased or held by the Funds. The codes of ethics are on public file with, and are available from, the SEC.

**Anti-Money Laundering Requirements.** The Funds are subject to the USA PATRIOT Act (the “Patriot Act”). The Patriot Act is intended to prevent the use of the U.S. financial system in furtherance of money laundering, terrorism or other illicit activities. Pursuant to requirements under the Patriot Act, a Fund may request information from Authorized Participants to enable it to form a reasonable belief that it knows the true identity of its Authorized Participants. This information will be used to verify the identity of Authorized Participants or, in some cases, the status of financial professionals; it will be used only for compliance with the requirements of the Patriot Act.

The Funds reserve the right to reject purchase orders from persons who have not submitted information sufficient to allow a Fund to verify their identity. Each Fund also reserves the right to redeem any amounts in a Fund from persons whose identity it is unable to verify on a timely basis. It is the Funds’ policy to cooperate fully with appropriate regulators in any investigations conducted with respect to potential money laundering, terrorism or other illicit activities.

**Administrator, Custodian and Transfer Agent.** State Street Bank and Trust Company (“State Street”) serves as administrator, custodian and transfer agent for the Funds under the Master Services Agreement and related Service Schedule (the “Service Module”). State Street’s principal address is 1 Lincoln Street, Boston, MA 02111. Pursuant to the Service Module for Fund Administration and Accounting Services with the Trust, State Street provides necessary administrative, legal, tax and accounting and financial reporting services for the maintenance and operations of the Trust and each Fund. In addition, State Street makes available the office space, equipment, personnel and facilities required to provide such services. Pursuant to the Service Module for Custodial Services with the Trust, State Street maintains, in separate accounts, cash, securities and other assets of the Trust and each Fund, keeps all necessary accounts and records and provides other services. State Street is required, upon the order of the Trust, to deliver securities held by State Street and to make payments for securities purchased by the Trust for each Fund. State Street is authorized to appoint certain foreign custodians or foreign custody managers for Fund investments outside the U.S. Pursuant to the Service Module for Transfer Agency Services with the Trust, State Street acts as a transfer agent for each Fund’s authorized and issued shares of beneficial interest, and as dividend disbursing agent of the Trust. As compensation for these services, State Street receives certain out-of-pocket costs, transaction fees and asset-based fees which are accrued daily and paid monthly by BFA from its management fee.

The following table sets forth the administration, custodian and transfer agency expenses of each Fund paid by BFA to State Street for the fiscal years noted:

<u>Fund</u>	<u>Fund Inception Date</u>	<u>Administration, Custodian &amp; Transfer Agency Expenses Paid During Fiscal Year Ended February 28, 2018</u>	<u>Administration, Custodian &amp; Transfer Agency Expenses Paid During Fiscal Year Ended February 28, 2017</u>	<u>Administration, Custodian &amp; Transfer Agency Expenses Paid During Fiscal Year Ended February 29, 2016</u>
iShares 1-3 Year Treasury Bond ETF	07/22/02	\$199,591	\$221,061	\$238,643
iShares 3-7 Year Treasury Bond ETF	01/05/07	128,707	126,054	115,884
iShares 7-10 Year Treasury Bond ETF	07/22/02	137,311	183,334	171,480
iShares 10-20 Year Treasury Bond ETF	01/05/07	10,782	16,145	11,547
iShares 20+ Year Treasury Bond ETF	07/22/02	130,689	156,484	136,399
iShares Agency Bond ETF	11/05/08	11,021	13,700	12,228
iShares Broad USD Investment Grade Corporate Bond ETF	01/05/07	41,358	30,171	30,459
iShares California Muni Bond ETF	10/04/07	17,011	16,428	12,188
iShares Core 5-10 Year USD Bond ETF	11/01/16	34,867	11,716	N/A
iShares Core 10+ Year USD Bond ETF	12/08/09	13,335	10,857	12,467
iShares Core U.S. Aggregate Bond ETF	09/22/03	947,296	866,091	647,578
iShares ESG 1-5 Year USD Corporate Bond ETF	07/11/17	1,770	N/A	N/A
iShares ESG USD Corporate Bond ETF	07/11/17	2,662	N/A	N/A
iShares Government/Credit Bond ETF	01/05/07	12,144	15,706	16,249
iShares iBoxx \$ High Yield Corporate Bond ETF	04/04/07	271,515	319,536	319,084
iShares iBoxx \$ Investment Grade Corporate Bond ETF	07/22/02	608,274	597,026	495,462

<u>Fund</u>	<u>Fund Inception Date</u>	<u>Administration, Custodian &amp; Transfer Agency Expenses Paid During Fiscal Year Ended February 28, 2018</u>	<u>Administration, Custodian &amp; Transfer Agency Expenses Paid During Fiscal Year Ended February 28, 2017</u>	<u>Administration, Custodian &amp; Transfer Agency Expenses Paid During Fiscal Year Ended February 29, 2016</u>
iShares Intermediate Government/Credit Bond ETF	01/05/07	46,651	49,933	46,582
iShares Intermediate-Term Corporate Bond ETF	01/05/07	140,488	141,805	144,060
iShares Long-Term Corporate Bond ETF	12/08/09	23,484	24,901	25,147
iShares MBS ETF	03/13/07	272,393	259,828	224,722
iShares National Muni Bond ETF	09/07/07	163,635	156,915	126,945
iShares New York Muni Bond ETF	10/04/07	7,461	7,233	6,449
iShares Short-Term Corporate Bond ETF	01/05/07	200,400	225,487	239,588
iShares Short-Term National Muni Bond ETF	11/05/08	28,881	26,086	25,500
iShares Short Treasury Bond ETF	01/05/07	102,477	81,594	80,609

**Distributor.** The Distributor's principal address is 1 University Square Drive, Princeton, NJ 08540. Shares are continuously offered for sale by the Funds through the Distributor or its agent only in Creation Units, as described in the applicable Prospectus and below in the *Creation and Redemption of Creation Units* section of this SAI. Fund shares in amounts less than Creation Units are generally not distributed by the Distributor or its agent. The Distributor or its agent will arrange for the delivery of the applicable Prospectus and, upon request, this SAI to persons purchasing Creation Units and will maintain records of both orders placed with it or its agents and confirmations of acceptance furnished by it or its agents. The Distributor is a broker-dealer registered under the Securities Exchange Act of 1934, as amended (the "1934 Act"), and a member of the Financial Industry Regulatory Authority, Inc. ("FINRA"). The Distributor is also licensed as a broker-dealer in all 50 U.S. states, as well as in Puerto Rico, the U.S. Virgin Islands and the District of Columbia.

The Distribution Agreement for each Fund provides that it may be terminated at any time, without the payment of any penalty, on at least 60 days' prior written notice to the other party following (i) the vote of a majority of the Independent Trustees, or (ii) the vote of a majority of the outstanding voting securities (as defined in the 1940 Act) of the relevant Fund. The Distribution Agreement will terminate automatically in the event of its assignment (as defined in the 1940 Act).

The Distributor may also enter into agreements with securities dealers ("Soliciting Dealers") who will solicit purchases of Creation Units of Fund shares. Such Soliciting Dealers may also be Authorized Participants (as described below), DTC participants and/or investor services organizations.

BFA or its affiliates may, from time to time and from its own resources, pay, defray or absorb costs relating to distribution, including payments out of its own resources to the Distributor, or to otherwise promote the sale of shares.

**Securities Lending.** To the extent that a Fund engages in securities lending, each Fund conducts its securities lending pursuant to SEC exemptive relief, and BTC acts as securities lending agent for the Funds, subject to the overall supervision of BFA, pursuant to a written agreement (the "Securities Lending Agency Agreement").

Each Fund retains a portion of the securities lending income and remits the remaining portion to BTC as compensation for its services as securities lending agent. Securities lending income is generally equal to the total of income earned from the reinvestment of cash collateral (and excludes collateral investment fees as defined below), and any fees or other payments to and from borrowers of securities. As securities lending agent, BTC bears all operational costs directly related to securities lending. Each Fund is responsible for fees in connection with the investment of cash collateral received for securities on loan in a money market fund managed by BFA (the "collateral investment fees"); however, BTC has agreed to reduce the amount of securities lending income it receives in order to effectively limit the collateral investment fees the Fund bears to an annual rate of 0.04%. Such money market fund shares will not be subject to a sales load, redemption fee, distribution fee or service fee.

Pursuant to the Securities Lending Agency Agreement:

Through December 31, 2018, (i) fixed-income funds, such as the Funds, retained 80% of securities lending income (which excludes collateral investment fees) and (ii) this amount could never be less than 70% of the sum of securities lending income plus collateral investment fees. Effective January 1, 2019, (i) fixed-income funds, such as the Funds, retain 82% of securities lending income (which excludes collateral investment fees) and (ii) this amount can never be less than 70% of the sum of securities lending income plus collateral investment fees.

Under the securities lending program, the Funds are categorized into one of several specific asset classes. The determination of a Fund's asset class category (fixed-income, domestic equity, international equity or fund-of-funds), each of which may be subject to a different fee arrangement, is based on a methodology agreed to by the Trust and BTC.

In addition, commencing the business day following the date that the aggregate securities lending income (which includes, for this purpose, collateral investment fees) earned across the Exchange-Traded Fund Complex (as defined under "Management — Trustees and Officers") in a calendar year exceeds a specified threshold, each applicable fixed income fund, pursuant to the securities lending agreement, will receive for the remainder of that calendar year securities lending income as follows:

(i) 85% of securities lending income (which excludes collateral investment fees) and (ii) this amount can never be less than 70% of the sum of securities lending income plus collateral investment fees.

The services provided to the Funds by BTC in the most recent fiscal year ended February 28, 2018 primarily included the following:

- (1) selecting borrowers from an approved list of borrowers and executing a securities lending agreement as agent on behalf of the Funds with each such borrower;
- (2) negotiating the terms of securities loans, including the amount of fees;
- (3) directing the delivery of loaned securities;
- (4) monitoring the daily value of the loaned securities and directing the payment of additional collateral or the return of excess collateral, as necessary;
- (5) investing cash collateral received in connection with any loaned securities;
- (6) monitoring distributions on loaned securities (for example, interest and dividend activity);
- (7) in the event of default by a borrower with respect to any securities loan, using the collateral or the proceeds of the liquidation of collateral to purchase replacement securities of the same issue, type, class and series as that of the loaned securities; and
- (8) terminating securities loans and arranging for the return of loaned securities to the Funds at loan termination.

The following tables show the dollar amounts of income and fees/compensation related to the securities lending activities of each Fund during its most recent fiscal year ended February 28, 2018.

Fund	iShares 1-3 Year Treasury Bond ETF	iShares 3-7 Year Treasury Bond ETF	iShares 7-10 Year Treasury Bond ETF	iShares 10-20 Year Treasury Bond ETF
<b>Gross income from securities lending activities</b>	<b>\$62,517</b>	<b>\$2,288</b>	<b>N/A</b>	<b>N/A</b>
<i>Fees and/or compensation for securities lending activities and related services</i>				



Fund	iShares 1-3 Year Treasury Bond ETF	iShares 3-7 Year Treasury Bond ETF	iShares 7-10 Year Treasury Bond ETF	iShares 10-20 Year Treasury Bond ETF
Securities lending income paid to BTC for services as securities lending agent	1,968	151	N/A	N/A
Cash collateral management expenses not included in securities lending income paid to BTC	3,312	68	N/A	N/A
Administrative fees not included in securities lending income paid to BTC	0	0	N/A	N/A
Indemnification fees not included in securities lending income paid to BTC	0	0	N/A	N/A
Rebates (paid to borrowers)	44,919	1,241	N/A	N/A
Other fees not included in securities lending income paid to BTC	0	0	N/A	N/A
<b>Aggregate fees/compensation for securities lending activities</b>	<b>50,199</b>	<b>1,460</b>	<b>N/A</b>	<b>N/A</b>
<b>Net income from securities lending activities</b>	<b>12,318</b>	<b>828</b>	<b>N/A</b>	<b>N/A</b>
Fund	iShares 20+ Year Treasury Bond ETF	iShares Agency Bond ETF	iShares Broad USD Investment Grade Corporate Bond ETF	iShares California Muni Bond ETF
<b>Gross income from securities lending activities</b>	<b>\$643</b>	<b>\$1,087</b>	<b>\$2,492,411</b>	<b>N/A</b>
<i>Fees and/or compensation for securities lending activities and related services</i>				
Securities lending income paid to BTC for services as securities lending agent	1	28	127,519	N/A
Cash collateral management expenses not included in securities lending income paid to BTC	34	58	70,063	N/A

Fund	iShares 20+ Year Treasury Bond ETF	iShares Agency Bond ETF	iShares Broad USD Investment Grade Corporate Bond ETF	iShares California Muni Bond ETF
Administrative fees not included in securities lending income paid to BTC	0	0	0	N/A
Indemnification fees not included in securities lending income paid to BTC	0	0	0	N/A
Rebates (paid to borrowers)	524	802	1,736,334	N/A
Other fees not included in securities lending income paid to BTC	0	0	0	N/A
<b>Aggregate fees/compensation for securities lending activities</b>	<b>559</b>	<b>888</b>	<b>1,933,916</b>	<b>N/A</b>
<b>Net income from securities lending activities</b>	<b>84</b>	<b>199</b>	<b>558,495</b>	<b>N/A</b>
Fund	iShares Core 5-10 Year USD Bond ETF	iShares Core 10+ Year USD Bond ETF	iShares Core U.S. Aggregate Bond ETF	iShares ESG 1-5 Year USD Corporate Bond ETF
<b>Gross income from securities lending activities</b>	<b>\$24,214</b>	<b>\$13,307</b>	<b>\$3,652,127</b>	<b>\$1,988</b>
<i>Fees and/or compensation for securities lending activities and related services</i>				
Securities lending income paid to BTC for services as securities lending agent	1,441	1,393	351,221	83
Cash collateral management expenses not included in securities lending income paid to BTC	747	434	112,588	48
Administrative fees not included in securities lending income paid to BTC	0	0	0	0
Indemnification fees not included in securities lending income paid to BTC	0	0	0	0

Fund	iShares Core 5-10 Year USD Bond ETF	iShares Core 10+ Year USD Bond ETF	iShares Core U.S. Aggregate Bond ETF	iShares ESG 1-5 Year USD Corporate Bond ETF
Rebates (paid to borrowers)	16,064	5,457	1,607,534	1,489
Other fees not included in securities lending income paid to BTC	0	0	0	0
<b>Aggregate fees/compensation for securities lending activities</b>	<b>18,252</b>	<b>7,284</b>	<b>2,071,343</b>	<b>1,620</b>
<b>Net income from securities lending activities</b>	<b>5,962</b>	<b>6,023</b>	<b>1,580,784</b>	<b>368</b>

Fund	iShares ESG USD Corporate Bond ETF	iShares Government/Credit Bond ETF	iShares iBoxx \$ High Yield Corporate Bond ETF	iShares iBoxx \$ Investment Grade Corporate Bond ETF
<b>Gross income from securities lending activities</b>	<b>\$2,485</b>	<b>\$14,500</b>	<b>\$67,579,943</b>	<b>\$44,786,033</b>
<i>Fees and/or compensation for securities lending activities and related services</i>				
Securities lending income paid to BTC for services as securities lending agent	82	1,503	5,968,503	2,023,281
Cash collateral management expenses not included in securities lending income paid to BTC	64	463	1,715,332	1,255,727
Administrative fees not included in securities lending income paid to BTC	0	0	0	0
Indemnification fees not included in securities lending income paid to BTC	0	0	0	0
Rebates (paid to borrowers)	1,946	5,843	33,639,962	32,574,023
Other fees not included in securities lending income paid to BTC	0	0	0	0

Fund	iShares ESG USD Corporate Bond ETF	iShares Government/Credit Bond ETF	iShares iBoxx \$ High Yield Corporate Bond ETF	iShares iBoxx \$ Investment Grade Corporate Bond ETF
Aggregate fees/compensation for securities lending activities	2,092	7,809	41,323,797	35,853,031
Net income from securities lending activities	393	6,691	26,256,146	8,933,002
Fund	iShares Intermediate-Term Corporate Bond ETF	iShares Intermediate Government/Credit Bond ETF	iShares Long-Term Corporate Bond ETF	iShares MBS ETF
Gross income from securities lending activities	\$11,791,919	\$210,554	\$1,026,738	N/A
<i>Fees and/or compensation for securities lending activities and related services</i>				
Securities lending income paid to BTC for services as securities lending agent	643,717	21,856	47,364	N/A
Cash collateral management expenses not included in securities lending income paid to BTC	333,185	6,474	29,030	N/A
Administrative fees not included in securities lending income paid to BTC	0	0	0	N/A
Indemnification fees not included in securities lending income paid to BTC	0	0	0	N/A
Rebates (paid to borrowers)	7,988,565	84,388	743,550	N/A
Other fees not included in securities lending income paid to BTC	0	0	0	N/A
Aggregate fees/compensation for securities lending activities	8,965,467	112,718	819,944	N/A
Net income from securities lending activities	2,826,452	97,836	206,794	N/A

Fund	iShares National Muni Bond ETF	iShares New York Muni Bond ETF	iShares Short-Term Corporate Bond ETF	iShares Short-Term National Muni Bond ETF
<b>Gross income from securities lending activities</b>	N/A	N/A	<b>\$8,383,179</b>	N/A
<i>Fees and/or compensation for securities lending activities and related services</i>				
Securities lending income paid to BTC for services as securities lending agent	N/A	N/A	471,486	N/A
Cash collateral management expenses not included in securities lending income paid to BTC	N/A	N/A	239,569	N/A
Administrative fees not included in securities lending income paid to BTC	N/A	N/A	0	N/A
Indemnification fees not included in securities lending income paid to BTC	N/A	N/A	0	N/A
Rebates (paid to borrowers)	N/A	N/A	5,620,437	N/A
Other fees not included in securities lending income paid to BTC	N/A	N/A	0	N/A
<b>Aggregate fees/compensation for securities lending activities</b>	<b>N/A</b>	<b>N/A</b>	<b>6,331,492</b>	<b>N/A</b>
<b>Net income from securities lending activities</b>	<b>N/A</b>	<b>N/A</b>	<b>2,051,687</b>	<b>N/A</b>

Fund	iShares Short Treasury Bond ETF
<b>Gross income from securities lending activities</b>	<b>\$219,123</b>
<i>Fees and/or compensation for securities lending activities and related services</i>	

Fund	iShares Short Treasury Bond ETF
Securities lending income paid to BTC for services as securities lending agent	8,423
Cash collateral management expenses not included in securities lending income paid to BTC	11,221
Administrative fees not included in securities lending income paid to BTC	0
Indemnification fees not included in securities lending income paid to BTC	0
Rebates (paid to borrowers)	153,231
Other fees not included in securities lending income paid to BTC	0
<b>Aggregate fees/compensation for securities lending activities</b>	<b>172,875</b>
<b>Net income from securities lending activities</b>	<b>46,248</b>

**Payments by BFA and its Affiliates.** BFA and/or its affiliates (“BFA Entities”) may pay certain broker-dealers, registered investment advisers, banks and other financial intermediaries (“Intermediaries”) for certain activities related to the Funds, other iShares funds or exchange-traded products in general. BFA Entities make these payments from their own assets and not from the assets of the Funds. Although a portion of BFA Entities’ revenue comes directly or indirectly in part from fees paid by the Funds, other iShares funds or exchange-traded products, these payments do not increase the price paid by investors for the purchase of shares of, or the cost of owning, the Funds, other iShares funds or exchange-traded products. BFA Entities make payments for Intermediaries’ participation in activities that are designed to make registered representatives, other professionals and individual investors more knowledgeable about exchange-traded products, including the Funds and other iShares funds, or for other activities, such as participation in marketing activities and presentations, educational training programs, conferences, the development of technology platforms and reporting systems (“Education Costs”). BFA Entities also make payments to Intermediaries for certain printing, publishing and mailing costs or materials relating to the Funds, other iShares funds or exchange-traded products (“Publishing Costs”). In addition, BFA Entities make payments to Intermediaries that make shares of the Funds, other iShares funds or exchange-traded products available to their clients, develop new products that feature iShares or otherwise promote the Funds, other iShares funds and exchange-traded products. BFA Entities may also reimburse expenses or make payments from their own assets to Intermediaries or other persons in consideration of services or other activities that the BFA Entities believe may benefit the iShares business or facilitate investment in the Funds, other iShares funds or exchange-traded products. Payments of the type described above are sometimes referred to as revenue-sharing payments.

Payments to an Intermediary may be significant to the Intermediary, and amounts that Intermediaries pay to your salesperson or other investment professional may also be significant for your salesperson or other investment professional. Because an Intermediary may make decisions about which investment options it will recommend or make available to its clients or what services to provide for various products based on payments it receives or is eligible to receive, such payments may create conflicts of interest between the Intermediary and its clients and these financial incentives may cause the Intermediary to recommend the Funds, other iShares funds or exchange-traded products over other investments. The same conflicts of interest and financial incentives exist with respect to your salesperson or other investment professional if he or she receives similar payments from his or her Intermediary firm.

In addition to the payments described above, BFA Entities have developed proprietary tools, calculators and related interactive or digital content that is made available through the [www.BlackRock.com](http://www.BlackRock.com) website at no additional cost to Intermediaries. BlackRock may configure these tools and calculators and localizes the content for Intermediaries as part of its customary digital marketing support and promotion of the Funds, other iShares funds, exchange-traded products and BlackRock mutual funds.

As of March 1, 2013, BFA Entities have contractual arrangements to make payments (in addition to payments for Education Costs or Publishing Costs) to one Intermediary, Fidelity Brokerage Services LLC (“FBS”). Effective June 4, 2016, this relationship was expanded to include National Financial Services, LLC (“NFS”), an affiliate of FBS. Pursuant to this special, long-term and significant arrangement (the “Marketing Program”), FBS, NFS and certain of their affiliates (collectively “Fidelity”) have agreed, among other things, to actively promote iShares funds to customers, investment professionals and other intermediaries and in advertising campaigns as the preferred exchange-traded product, to offer certain iShares funds in certain Fidelity platforms and investment programs, in some cases at a waived or reduced commission rate or ticket charge, and to provide marketing data to BFA Entities. BFA Entities have agreed to facilitate the Marketing Program by, among other things, making certain payments to FBS and NFS for marketing and implementing certain brokerage and investment programs. Upon termination of the arrangement, the BFA Entities will make additional payments to FBS and/or NFS based upon a number of criteria, including the overall success of the Marketing Program and the level of services provided by FBS and NFS during the wind-down period.

In addition, BFA Entities may enter into other contractual arrangements with Intermediaries and certain other third parties that the BFA Entities believe may benefit the iShares business or facilitate investment in iShares funds. Such agreements may include payments by BFA Entities to such Intermediaries and third parties for data collection and provision, technology support, platform enhancement, or co-marketing and cross-promotional efforts. Payments made pursuant to such arrangements may vary in any year and may be different for different Intermediaries and third parties. In certain cases, the payments described in the preceding sentence may be subject to certain minimum payment levels. Such payments will not be asset- or revenue-based. As of the date of this SAI, the Intermediaries and other third parties receiving such contractual payments include: Charles Schwab & Co., Inc., Commonwealth Equity Services, Inc., Dorsey Wright and Associates, LLC, E\*Trade Securities LLC, FDx Advisors, Inc., Ladenburg Thalmann Advisor Network LLC, LPL Financial LLC, Merrill Lynch, Pierce, Fenner & Smith Incorporated, Morgan Stanley Smith Barney LLC, Orion Advisors Services, LLC, Pershing LLC, Raymond James Financial Services, Inc., TD Ameritrade, Inc. and UBS Financial Services Inc. Any additions, modifications, or deletions to Intermediaries and other third parties listed above that have occurred since the date of this SAI are not included in the list.

Further, BFA Entities make Education Costs and Publishing Costs payments to other Intermediaries that are not listed above. BFA Entities may determine to make such payments based on any number of metrics. For example, BFA Entities may make payments at year-end or other intervals in a fixed amount, an amount based upon an Intermediary’s services at defined levels or an amount based on the Intermediary’s net sales of one or more iShares funds in a year or other period, any of which arrangements may include an agreed-upon minimum or maximum payment, or any combination of the foregoing. As of the date of this SAI, BFA anticipates that the payments paid by BFA Entities in connection with the Funds, iShares funds and exchange-traded products in general will be immaterial to BFA Entities in the aggregate for the next year. **Please contact your salesperson or other investment professional for more information regarding any such payments or financial incentives his or her Intermediary firm may receive. Any payments made, or financial incentives offered, by the BFA Entities to an Intermediary may create the incentive for the Intermediary to encourage customers to buy shares of the Funds, other iShares funds or other exchange-traded products.**

The Funds may participate in certain market maker incentive programs of a national securities exchange in which an affiliate of the Funds would pay a fee to the exchange used for the purpose of incentivizing one or more market makers in the

securities of a Fund to enhance the liquidity and quality of the secondary market of securities of a Fund. The fee would then be credited by the exchange to one or more market makers that meet or exceed liquidity and market quality standards with respect to the securities of a Fund. Each market maker incentive program is subject to approval from the SEC. Any such fee payments made to an exchange will be made by an affiliate of a Fund solely for the benefit of a Fund and will not be paid from any Fund assets. Other funds managed by BFA may also participate in such programs.

## Determination of Net Asset Value

**Valuation of Shares.** The NAV for each Fund is generally calculated as of the close of business on the NYSE (normally 4:00 p.m., Eastern time) on each business day the NYSE is open. Valuation of securities held by a Fund is as follows:

**Equity Investments.** Equity securities traded on a recognized securities exchange (e.g., NYSE), on separate trading boards of a securities exchange or through a market system that provides contemporaneous transaction pricing information (each, an “Exchange”) are valued using information obtained via independent pricing services, generally at the closing price on the Exchange on which the security is primarily traded, or if an Exchange closing price is not available, the last traded price on that Exchange prior to the time as of which a Fund’s assets or liabilities are valued. However, under certain circumstances, other means of determining current market value may be used. If an equity security is traded on more than one Exchange, the current market value of the security where it is primarily traded generally will be used. In the event that there are no sales involving an equity security held by a Fund on a day on which a Fund values such security, the prior day’s price will be used, unless, in accordance with valuation procedures approved by the Board (the “Valuation Procedures”), BlackRock determines in good faith that such prior day’s price no longer reflects the fair value of the security, in which case such asset would be treated as a Fair Value Asset (as defined below).

**Fixed-Income Investments.** Fixed-income securities for which market quotations are readily available are generally valued using such securities’ current market value. A Fund values fixed-income portfolio securities using the last available bid prices or current market quotations provided by dealers or prices (including evaluated prices) supplied by a Fund’s approved independent third-party pricing services, each in accordance with the Valuation Procedures. The pricing services may use matrix pricing or valuation models that utilize certain inputs and assumptions to derive values, including transaction data (e.g., recent representative bids and offers), credit quality information, perceived market movements, news, and other relevant information and by other methods, which may include consideration of: yields or prices of securities of comparable quality, coupon, maturity and type; indications as to values from dealers; general market conditions; and/or other factors and assumptions. Pricing services generally value fixed-income securities assuming orderly transactions of an institutional round lot size, but a Fund may hold or transact in such securities in smaller, odd lot sizes. Odd lots may trade at lower prices than institutional round lots. The amortized cost method of valuation may be used with respect to debt obligations with sixty days or less remaining to maturity unless BlackRock determines in good faith that such method does not represent fair value. Loan participation notes are generally valued at the mean of the last available bid prices from one or more brokers or dealers as obtained from independent third-party pricing services. Certain fixed-income investments, including asset-backed and mortgage-related securities, may be valued based on valuation models that consider the estimated cash flows of each tranche of the entity, establish a benchmark yield and develop an estimated tranche-specific spread to the benchmark yield based on the unique attributes of the tranche.

**Options, Futures, Swaps and Other Derivatives.** Exchange-traded equity options for which market quotations are readily available are valued at the mean of the last bid and ask prices as quoted on the Exchange or the board of trade on which such options are traded. In the event that there is no mean price available for an exchange traded equity option held by a Fund on a day on which a Fund values such option, the last bid (long positions) or ask (short positions) price, if available, will be used as the value of such option. If no such bid or ask price is available on a day on which a Fund values such option, the prior day’s price will be used, unless BlackRock determines in good faith that such prior day’s price no longer reflects the fair value of the option, in which case such option will be treated as a Fair Value Asset (as defined below). OTC derivatives are valued using the last available bid prices or current market quotations provided by dealers or prices (including evaluated prices) supplied by a Fund’s approved independent third-party pricing services, each in accordance with the Valuation Procedures. OTC derivatives may be valued using a mathematical model which may incorporate a number of market data factors. Financial futures contracts and options thereon, which are traded on exchanges, are valued at their settle price as of the close of such exchanges. Swap agreements and other derivatives are generally valued daily based upon quotations from market makers or by a pricing service in accordance with the Valuation Procedures.



**Underlying Funds.** Shares of underlying ETFs will be valued at their most recent closing price on an Exchange. Shares of underlying money market funds will be valued at their NAV.

**General Valuation Information.** The price a Fund could receive upon the sale of any particular portfolio investment may differ from a Fund's valuation of the investment, particularly for securities that trade in thin or volatile markets or that are valued using a fair valuation methodology or a price provided by an independent pricing service. As a result, the price received upon the sale of an investment may be less than the value ascribed by a Fund, and a Fund could realize a greater than expected loss or lesser than expected gain upon the sale of the investment. A Fund's ability to value its investment may also be impacted by technological issues and/or errors by pricing services or other third-party service providers.

All cash, receivables and current payables are carried on a Fund's books at their face value.

Prices obtained from independent third-party pricing services, broker-dealers or market makers to value a Fund's securities and other assets and liabilities are based on information available at the time a Fund values its assets and liabilities. In the event that a pricing service quotation is revised or updated subsequent to the day on which a Fund valued such security or other asset or liability, the revised pricing service quotation generally will be applied prospectively. Such determination will be made considering pertinent facts and circumstances surrounding the revision.

In the event that application of the methods of valuation discussed above result in a price for a security which is deemed not to be representative of the fair market value of such security, the security will be valued by, under the direction of or in accordance with a method approved by the Board as reflecting fair value. All other assets and liabilities (including securities for which market quotations are not readily available) held by a Fund (including restricted securities) are valued at fair value as determined in good faith by the Board or by BlackRock (its delegate) pursuant to the Valuation Procedures. Any assets and liabilities that are denominated in a foreign currency are converted into U.S. dollars using prevailing market rates on the date of valuation as quoted by one or more data service providers.

Certain of the securities acquired by a Fund may be traded on foreign exchanges or OTC markets on days on which a Fund's NAV is not calculated. In such cases, the NAV of a Fund's shares may be significantly affected on days when Authorized Participants can neither purchase nor redeem shares of a Fund.

Generally, trading in non-U.S. securities, U.S. government securities, money market instruments and certain fixed-income securities is substantially completed each day at various times prior to the close of business on the NYSE. The values of such securities used in computing the NAV of a Fund are determined as of such times.

Use of fair value prices and certain current market valuations could result in a difference between the prices used to calculate a Fund's NAV and the prices used in the Underlying Index, which, in turn, could result in a difference between a Fund's performance and the performance of the Underlying Index.

**Fair Value.** When market quotations are not readily available or are believed in good faith by BlackRock to be unreliable, a Fund's investments are valued at fair value ("Fair Value Assets"). Fair Value Assets are valued by BlackRock in accordance with the Valuation Procedures. BlackRock may reasonably conclude that a market quotation is not readily available or is unreliable if, among other things, a security or other asset or liability does not have a price source due to its complete lack of trading, if BlackRock believes in good faith that a market quotation from a broker-dealer or other source is unreliable (e.g., where it varies significantly from a recent trade, or no longer reflects the fair value of the security or other asset or liability subsequent to the most recent market quotation), or where the security or other asset or liability is only thinly traded or due to the occurrence of a significant event subsequent to the most recent market quotation. For this purpose, a "significant event" is deemed to occur if BlackRock determines, in its reasonable business judgment, that an event has occurred after the close of trading for an asset or liability but prior to or at the time of pricing a Fund's assets or liabilities, and that the event is likely to cause a material change to the closing market price of the assets or liabilities held by a Fund. Non-U.S. securities whose values are affected by volatility that occurs in the markets or in related or highly correlated assets (e.g., American Depositary Receipts, Global Depositary Receipts or ETFs that invest in components of the Underlying Index) on a trading day after the close of non-U.S. securities markets may be fair valued. On any day the NYSE is open and a foreign market or the primary exchange on which a foreign asset or liability is traded is closed, such asset or liability will be valued using the prior day's price, provided that BlackRock is not aware of any significant event or other information that would cause such price to no longer reflect the fair value of the asset or liability, in which case such asset or liability would be treated as a Fair Value Asset.

BlackRock, with input from the BlackRock Investment Strategy Group, will submit its recommendations regarding the valuation and/or valuation methodologies for Fair Value Assets to BlackRock's Valuation Committee. The BlackRock Valuation Committee may accept, modify or reject any recommendations. In addition, a Fund's accounting agent periodically endeavors to confirm the prices it receives from all third-party pricing services, index providers and broker-dealers, and, with the assistance of BlackRock, to regularly evaluate the values assigned to the securities and other assets and liabilities of a Fund. The pricing of all Fair Value Assets is subsequently reported to and, where appropriate, ratified by the Board.

When determining the price for a Fair Value Asset, the BlackRock Valuation Committee (or BlackRock's Pricing Group) will seek to determine the price that a Fund might reasonably expect to receive upon the current sale of that asset or liability in an arm's-length transaction on the date on which the assets or liabilities are being valued, and does not seek to determine the price that a Fund might expect to receive for selling the asset, or the cost of extinguishing a liability, at a later time or if it holds the asset or liability to maturity. Fair value determinations will be based upon all available factors that the BlackRock Valuation Committee (or BlackRock's Pricing Group) deems relevant at the time of the determination, and may be based on analytical values determined by BlackRock using proprietary or third-party valuation models.

Fair value represents a good faith approximation of the value of an asset or liability. When determining the fair value of an asset, one or more of a variety of fair valuation methodologies may be used (depending on certain factors, including the asset type). For example, the asset may be priced on the basis of the original cost of the investment or, alternatively, using proprietary or third-party models (including models that rely upon direct portfolio management pricing inputs and which reflect the significance attributed to the various factors and assumptions being considered). Prices of actual, executed or historical transactions in the relevant asset and/or liability (or related or comparable assets and/or liabilities) or, where appropriate, an appraisal by a third-party experienced in the valuation of similar assets and/or liabilities, may also be used as a basis for establishing the fair value of an asset or liability. The fair value of one or more assets or liabilities may not, in retrospect, be the price at which those assets or liabilities could have been sold during the period in which the particular fair values were used in determining a Fund's NAV. As a result, a Fund's sale or redemption of its shares at NAV, at a time when a holding or holdings are valued at fair value, may have the effect of diluting or increasing the economic interest of existing shareholders.

Each Fund's annual audited financial statements, which are prepared in accordance with US GAAP, follow the requirements for valuation set forth in Financial Accounting Standards Board Accounting Standards Codification Topic 820, "Fair Value Measurements and Disclosures" ("ASC 820"), which defines and establishes a framework for measuring fair value under US GAAP and expands financial statement disclosure requirements relating to fair value measurements. Generally, ASC 820 and other accounting rules applicable to funds and various assets in which they invest are evolving. Such changes may adversely affect a Fund. For example, the evolution of rules governing the determination of the fair market value of assets or liabilities to the extent such rules become more stringent would tend to increase the cost and/or reduce the availability of third-party determinations of fair market value. This may in turn increase the costs associated with selling assets or affect their liquidity due to a Fund's inability to obtain a third-party determination of fair market value.

## Brokerage Transactions

Subject to policies established by the Board, BFA is primarily responsible for the execution of a Fund's portfolio transactions and the allocation of brokerage. BFA does not execute transactions through any particular broker or dealer, but seeks to obtain the best net results for the Funds, taking into account such factors as price (including the applicable brokerage commission or dealer spread), size of order, difficulty of execution, operational facilities of the firm and the firm's risk and skill in positioning blocks of securities. While BFA generally seeks reasonable trade execution costs, a Fund does not necessarily pay the lowest spread or commission available, and payment of the lowest commission or spread is not necessarily consistent with obtaining the best price and execution in particular transactions. Subject to applicable legal requirements, BFA may select a broker based partly upon brokerage or research services provided to BFA and its clients, including a Fund. In return for such services, BFA may cause a Fund to pay a higher commission than other brokers would charge if BFA determines in good faith that the commission is reasonable in relation to the services provided.

In selecting brokers or dealers to execute portfolio transactions, BFA seeks to obtain the best price and most favorable execution for a Fund and may take into account a variety of factors including: (i) the size, nature and character of the security or instrument being traded and the markets in which it is purchased or sold; (ii) the desired timing of the transaction; (iii) BFA's knowledge of the expected commission rates and spreads currently available; (iv) the activity existing and expected in

the market for the particular security or instrument, including any anticipated execution difficulties; (v) the full range of brokerage services provided; (vi) the broker's or dealer's capital; (vii) the quality of research and research services provided; (viii) the reasonableness of the commission, dealer spread or its equivalent for the specific transaction; and (ix) BFA's knowledge of any actual or apparent operational problems of a broker or dealer. Brokers may also be selected because of their ability to handle special or difficult executions, such as may be involved in large block trades, less liquid securities, or other circumstances.

Section 28(e) of the 1934 Act ("Section 28(e)") permits a U.S. investment adviser, under certain circumstances, to cause an account to pay a broker or dealer a commission for effecting a transaction in securities that exceeds the amount another broker or dealer would have charged for effecting the same transaction in recognition of the value of brokerage and research services provided by that broker or dealer. This includes commissions paid on riskless principal transactions in securities under certain conditions.

From time to time, a Fund may purchase new issues of securities in a fixed price offering. In these situations, the broker may be a member of the selling group that will, in addition to selling securities, provide BFA with research services. FINRA has adopted rules expressly permitting these types of arrangements under certain circumstances. Generally, the broker will provide research "credits" in these situations at a rate that is higher than that available for typical secondary market transactions. These arrangements may not fall within the safe harbor of Section 28(e).

OTC issues, including most fixed-income securities such as corporate debt and U.S. Government securities, are normally traded on a "net" basis without a stated commission, through dealers acting for their own account and not as brokers. The Funds will primarily engage in transactions with these dealers or deal directly with the issuer unless a better price or execution could be obtained by using a broker. Prices paid to a dealer with respect to both foreign and domestic securities will generally include a "spread," which is the difference between the prices at which the dealer is willing to purchase and sell the specific security at the time, and includes the dealer's normal profit.

Under the 1940 Act, persons affiliated with a Fund and persons who are affiliated with such affiliated persons are prohibited from dealing with the Fund as principal in the purchase and sale of securities unless a permissive order allowing such transactions is obtained from the SEC. Since transactions in the OTC market usually involve transactions with the dealers acting as principal for their own accounts, the Funds will not deal with affiliated persons and affiliated persons of such affiliated persons, including PNC and its affiliates, in connection with such transactions. The Funds will not purchase securities during the existence of any underwriting or selling group relating to such securities of which BFA, PNC, BRIL or any affiliated person (as defined in the 1940 Act) thereof is a member except pursuant to procedures adopted by the Board in accordance with Rule 10f-3 under the 1940 Act.

Purchases of money market instruments by the Funds are made from dealers, underwriters and issuers. The Funds do not currently expect to incur any brokerage commission expense on such transactions because money market instruments are generally traded on a "net" basis with dealers acting as principal for their own accounts without a stated commission. The price of the security, however, usually includes a profit to the dealer.

BFA may, from time to time, effect trades on behalf of and for the account of the Funds with brokers or dealers that are affiliated with BFA, in conformity with Rule 17e-1 under the 1940 Act and SEC rules and regulations. Under these provisions, any commissions paid to affiliated brokers or dealers must be reasonable and fair compared to the commissions charged by other brokers or dealers in comparable transactions.

Securities purchased in underwritten offerings include a fixed amount of compensation to the underwriter, generally referred to as the underwriter's concession or discount. When securities are purchased or sold directly from or to an issuer, no commissions or discounts are paid.

Investment decisions for the Funds and for other investment accounts managed by BFA and the other Affiliates are made independently of each other in light of differing conditions. A variety of factors will be considered in making investment allocations. These factors include: (i) investment objectives or strategies for particular accounts, including sector, industry, country or region and capitalization weightings; (ii) tax considerations of an account; (iii) risk or investment concentration parameters for an account; (iv) supply or demand for a security at a given price level; (v) size of available investment; (vi) cash availability and liquidity requirements for accounts; (vii) regulatory restrictions; (viii) minimum investment size of an account; (ix) relative size of account; and (x) such other factors as may be approved by BlackRock's general counsel. Moreover, investments may not be allocated to one client account over another based on any of the following considerations:

(i) to favor one client account at the expense of another; (ii) to generate higher fees paid by one client account over another or to produce greater performance compensation to BlackRock; (iii) to develop or enhance a relationship with a client or prospective client; (iv) to compensate a client for past services or benefits rendered to BlackRock or to induce future services or benefits to be rendered to BlackRock; or (v) to manage or equalize investment performance among different client accounts. BFA and the other Affiliates may deal, trade and invest for their own respective accounts in the types of securities in which the Funds may invest.

Initial public offerings (“IPOs”) of securities may be over-subscribed and subsequently trade at a premium in the secondary market. When BFA is given an opportunity to invest in such an initial offering or “new” or “hot” issue, the supply of securities available for client accounts is often less than the amount of securities the accounts would otherwise take. In order to allocate these investments fairly and equitably among client accounts over time, each portfolio manager or a member of his or her respective investment team will indicate to BFA’s trading desk their level of interest in a particular offering with respect to eligible clients’ accounts for which that team is responsible. IPOs of U.S. equity securities will be identified as eligible for particular client accounts that are managed by portfolio teams who have indicated interest in the offering based on market capitalization of the issuer of the security and the investment mandate of the client account and in the case of international equity securities, the country where the offering is taking place and the investment mandate of the client account. Generally, shares received during the IPO will be allocated among participating client accounts within each investment mandate on a *pro rata* basis. This *pro rata* allocation may result in a Fund receiving less of a particular security than if pro-rating had not occurred. All allocations of securities will be subject, where relevant, to share minimums established for accounts and compliance constraints. In situations where supply is too limited to be allocated among all accounts for which the investment is eligible, portfolio managers may rotate such investment opportunities among one or more accounts so long as the rotation system provides for fair access for all client accounts over time. Other allocation methodologies that are considered by BFA to be fair and equitable to clients may be used as well.

Because different accounts may have differing investment objectives and policies, BFA may buy and sell the same securities at the same time for different clients based on the particular investment objective, guidelines and strategies of those accounts. For example, BFA may decide that it may be entirely appropriate for a growth fund to sell a security at the same time a value fund is buying that security. To the extent that transactions on behalf of more than one client of BFA or the other Affiliates during the same period may increase the demand for securities being purchased or the supply of securities being sold, there may be an adverse effect on price. For example, sales of a security by BlackRock on behalf of one or more of its clients may decrease the market price of such security, adversely impacting other BlackRock clients that still hold the security. If purchases or sales of securities arise for consideration at or about the same time that would involve the Funds or other clients or funds for which BFA or another Affiliate act as investment manager, transactions in such securities will be made, insofar as feasible, for the respective funds and clients in a manner deemed equitable to all.

In certain instances, BFA may find it efficient for purposes of seeking to obtain best execution, to aggregate or “bunch” certain contemporaneous purchases or sale orders of its advisory accounts and advisory accounts of affiliates. In general, all contemporaneous trades for client accounts under management by the same portfolio manager or investment team will be bunched in a single order if the trader believes the bunched trade would provide each client with an opportunity to achieve a more favorable execution at a potentially lower execution cost. The costs associated with a bunched order will be shared *pro rata* among the clients in the bunched order. Generally, if an order for a particular portfolio manager or management team is filled at several different prices through multiple trades, all accounts participating in the order will receive the average price (except in the case of certain international markets where average pricing is not permitted). While in some cases this practice could have a detrimental effect upon the price or value of the security as far as the Funds are concerned, in other cases it could be beneficial to the Funds. Transactions effected by BFA or the other Affiliates on behalf of more than one of its clients during the same period may increase the demand for securities being purchased or the supply of securities being sold, causing an adverse effect on price. The trader will give the bunched order to the broker-dealer that the trader has identified as being able to provide the best execution of the order. Orders for purchase or sale of securities will be placed within a reasonable amount of time of the order receipt and bunched orders will be kept bunched only long enough to execute the order.

With the exception of the iBoxx \$ High Yield Corporate Bond ETF, which incurred brokerage commissions of \$1,467 for the fiscal year ended February 29, 2016, there were no brokerage commissions paid on behalf of each Fund for the fiscal years ended February 28, 2018, February 28, 2017 and February 29, 2016.

The following table sets forth the names of the Funds' "regular" broker-dealers, as defined under Rule 10b-1 of the 1940 Act, which derive more than 15% of their gross revenues from securities-related activities and in which the Funds invest, together with the market value of each investment as of the fiscal year ended February 28, 2018:

<u>Fund</u>	<u>Issuer</u>	<u>Market Value of Investment</u>
iShares Broad USD Investment Grade Corporate Bond ETF	JPMorgan Chase & Co.	\$ 26,220,470
	Bank of America Corp.	23,545,106
	Goldman Sachs Group Inc. (The)	23,029,912
	Citigroup Inc.	20,268,420
	Morgan Stanley	20,051,938
	Barclays PLC	6,093,547
	Credit Suisse AG	1,895,353
	Nomura Holdings Inc.	381,794
iShares Core 5-10 Year USD Bond ETF	JPMorgan Chase & Co.	\$ 187,998
	Bank of America Corp.	141,632
	Morgan Stanley	119,771
	Citigroup Inc.	115,745
	Goldman Sachs Group Inc. (The)	107,792
iShares Core 10+ Year USD Bond ETF	JPMorgan Chase & Co.	\$ 1,662,816
	Goldman Sachs Group Inc. (The)	1,521,092
	Citigroup Inc.	1,377,659
	Bank of America Corp.	1,129,331
	Morgan Stanley	977,068
iShares Core U.S. Aggregate Bond ETF	Barclays PLC	305,276
	JPMorgan Chase & Co.	\$290,082,315
	Goldman Sachs Group Inc. (The)	252,843,186
	Bank of America Corp.	252,726,318
	Morgan Stanley	222,524,960
iShares ESG 1-5 Year USD Corporate Bond ETF	Citigroup Inc.	214,076,364
	Barclays PLC	64,321,590
	Credit Suisse AG	28,915,864
	Nomura Holdings Inc.	6,751,836
	Goldman Sachs Group Inc. (The)	\$ 367,363
iShares ESG USD Corporate Bond ETF	Morgan Stanley	208,130
	Citigroup Inc.	48,848
	Goldman Sachs Group Inc. (The)	\$ 135,983
	Morgan Stanley	94,963
iShares Government/Credit Bond ETF	Bank of America Corp.	86,453
	JPMorgan Chase & Co.	85,356
	Citigroup Inc.	71,557
	Bank of America Corp.	\$ 1,170,576
iShares Government/Credit Bond ETF	Goldman Sachs Group Inc. (The)	926,809
	JPMorgan Chase & Co.	909,030

<u>Fund</u>	<u>Issuer</u>	<u>Market Value of Investment</u>
	Citigroup Inc.	782,291
	Morgan Stanley	555,008
	Barclays PLC	192,628
	Nomura Holdings Inc.	165,983
	Credit Suisse AG	52,056
iShares iBoxx \$ Investment Grade Corporate Bond ETF	JPMorgan Chase & Co.	\$1,000,343,126
	Bank of America Corp.	971,354,542
	Goldman Sachs Group Inc. (The)	939,158,554
	Citigroup Inc.	794,377,844
	Morgan Stanley	776,374,133
	Barclays PLC	211,241,386
	Credit Suisse AG	63,652,193
iShares Intermediate Government/Credit Bond ETF	JPMorgan Chase & Co.	\$ 15,948,115
	Bank of America Corp.	15,121,540
	Goldman Sachs Group Inc. (The)	12,448,942
	Citigroup Inc.	12,378,201
	Morgan Stanley	12,237,367
	Barclays PLC	3,332,516
	Credit Suisse AG	1,859,666
	Nomura Holdings Inc.	348,029
iShares Intermediate-Term Corporate Bond ETF	Bank of America Corp.	\$ 139,048,667
	JPMorgan Chase & Co.	138,956,095
	Goldman Sachs Group Inc. (The)	129,237,582
	Morgan Stanley	115,168,039
	Citigroup Inc.	105,753,271
	Barclays PLC	32,152,381
	Credit Suisse AG	23,133,915
	Nomura Holdings Inc.	1,704,249
iShares Long-Term Corporate Bond ETF	Goldman Sachs Group Inc. (The)	\$ 9,653,023
	JPMorgan Chase & Co.	8,913,628
	Bank of America Corp.	6,474,652
	Citigroup Inc.	6,316,123
	Morgan Stanley	4,256,860
	Barclays PLC	2,007,274
iShares Short-Term Corporate Bond ETF	JPMorgan Chase & Co.	\$ 234,382,961
	Goldman Sachs Group Inc. (The)	180,631,134
	Morgan Stanley	170,724,038
	Bank of America Corp.	170,530,363
	Citigroup Inc.	99,126,571
	Credit Suisse AG	63,240,235
	Barclays PLC	42,529,651
	Nomura Holdings Inc.	6,111,555

The Funds' purchase and sale orders for securities may be combined with those of other investment companies, clients or accounts that BlackRock manages or advises. If purchases or sales of portfolio securities of the Funds and one or more other accounts managed or advised by BlackRock are considered at or about the same time, transactions in such securities are allocated among the Funds and the other accounts in a manner deemed equitable to all by BlackRock. In some cases, this procedure could have a detrimental effect on the price or volume of the security as far as the Funds are concerned. However, in other cases, it is possible that the ability to participate in volume transactions and to negotiate lower transaction costs will be beneficial to the Funds. BlackRock may deal, trade and invest for its own account in the types of securities in which the Funds may invest. BlackRock may, from time to time, effect trades on behalf of and for the account of the Funds with brokers or dealers that are affiliated with BFA, in conformity with the 1940 Act and SEC rules and regulations. Under these provisions, any commissions paid to affiliated brokers or dealers must be reasonable and fair compared to the commissions charged by other brokers or dealers in comparable transactions. The Funds will not deal with affiliates in principal transactions unless permitted by applicable SEC rules or regulations, or by SEC exemptive order.

Portfolio turnover may vary from year to year, as well as within a year. Certain Funds may use TBA transactions, which are expected to cause a higher portfolio turnover rate because TBA positions are rolled every month. High turnover rates may result in comparatively greater brokerage expenses. While each Fund's portfolio turnover rates are generally expected to be low, the portfolio turnover rate for that portion of the iShares Core U.S. Aggregate Bond ETF's and iShares MBS ETF's assets invested through TBA transactions, if any, is expected to be substantially higher because TBA positions are rolled every month. Higher turnover rates would likely result in comparatively greater transaction costs.

The table below sets forth the portfolio turnover rates of each Fund for the fiscal years noted:

Fund	Fiscal Year Ended February 28, 2018	Fiscal Year Ended February 28, 2017
iShares 1-3 Year Treasury Bond ETF	85%	66%
iShares 3-7 Year Treasury Bond ETF	66%	45%
iShares 7-10 Year Treasury Bond ETF	46%	77%
iShares 10-20 Year Treasury Bond ETF	27%	15%
iShares 20+ Year Treasury Bond ETF	25%	24%
iShares Agency Bond ETF	78%	71%
iShares Broad USD Investment Grade Corporate Bond ETF	11%	12%
iShares California Muni Bond ETF	32%	25%
iShares Core 5-10 Year USD Bond ETF	504%	108%
iShares Core 10+ Year USD Bond ETF	11%	8%
iShares Core U.S. Aggregate Bond ETF <sup>1</sup>	252%	242%
iShares ESG 1-5 Year USD Corporate Bond ETF	30%	N/A
iShares ESG USD Corporate Bond ETF	17%	N/A
iShares Government/Credit Bond ETF	17%	14%
iShares iBoxx \$ High Yield Corporate Bond ETF	17%	13%
iShares iBoxx \$ Investment Grade Corporate Bond ETF	10%	11%
iShares Intermediate Government/Credit Bond ETF	19%	20%
iShares Intermediate-Term Corporate Bond ETF	21%	16%
iShares Long-Term Corporate Bond ETF	12%	10%
iShares MBS ETF <sup>1</sup>	745%	748%
iShares National Muni Bond ETF	10%	8%
iShares New York Muni Bond ETF	31%	21%
iShares Short-Term Corporate Bond ETF	46%	35%
iShares Short-Term National Muni Bond ETF	21%	19%
iShares Short Treasury Bond ETF	47%	78%

<sup>1</sup> Portfolio turnover rate includes TBA transactions, as described above.

# Additional Information Concerning the Trust

**Shares.** The Trust currently consists of more than 280 separate investment series or portfolios called funds. The Trust issues shares of beneficial interests in the funds with no par value. The Board may designate additional iShares funds.

Each share issued by a fund has a *pro rata* interest in the assets of that fund. Shares have no preemptive, exchange, subscription or conversion rights and are freely transferable. Each share is entitled to participate equally in dividends and distributions declared by the Board with respect to the relevant fund, and in the net distributable assets of such fund on liquidation.

Each share has one vote with respect to matters upon which the shareholder is entitled to vote. In any matter submitted to shareholders for a vote, each fund shall hold a separate vote, provided that shareholders of all affected funds will vote together when: (i) required by the 1940 Act, or (ii) the Trustees determine that the matter affects the interests of more than one fund.

Under Delaware law, the Trust is not required to hold an annual meeting of shareholders unless required to do so under the 1940 Act. The policy of the Trust is not to hold an annual meeting of shareholders unless required to do so under the 1940 Act. All shares (regardless of the fund) have noncumulative voting rights in the election of members of the Board. Under Delaware law, Trustees of the Trust may be removed by vote of the shareholders.

Following the creation of the initial Creation Unit(s) of shares of a fund and immediately prior to the commencement of trading in such fund's shares, a holder of shares may be a "control person" of the fund, as defined in Rule 0-1 under the 1940 Act. A fund cannot predict the length of time for which one or more shareholders may remain a control person of the fund.

Shareholders may make inquiries by writing to iShares Trust, c/o BlackRock Investments, LLC, 1 University Square Drive, Princeton, NJ 08540.

Absent an applicable exemption or other relief from the SEC or its staff, beneficial owners of more than 5% of the shares of a fund may be subject to the reporting provisions of Section 13 of the 1934 Act and the SEC's rules promulgated thereunder. In addition, absent an applicable exemption or other relief from the SEC or its staff, officers and trustees of a fund and beneficial owners of 10% of the shares of a fund ("Insiders") may be subject to the insider reporting, short-swing profit and short sale provisions of Section 16 of the 1934 Act and the SEC's rules promulgated thereunder. Beneficial owners and Insiders should consult with their own legal counsel concerning their obligations under Sections 13 and 16 of the 1934 Act and existing guidance provided by the SEC staff.

In accordance with the Trust's current Agreement and Declaration of Trust (the "Declaration of Trust"), the Board may, without shareholder approval (unless such shareholder approval is required by the Declaration of Trust or applicable law, including the 1940 Act), authorize certain funds to merge, reorganize, consolidate, sell all or substantially all of their assets, or take other similar actions with, to or into another fund. The Trust or a Fund may be terminated by a majority vote of the Board, subject to the affirmative vote of a majority of the shareholders of the Trust or such Fund entitled to vote on termination; however, in certain circumstances described in the Declaration of Trust, only a majority vote of the Board is required. Although the shares are not automatically redeemable upon the occurrence of any specific event, the Declaration of Trust provides that the Board will have the unrestricted power to alter the number of shares in a Creation Unit. Therefore, in the event of a termination of the Trust or a Fund, the Board, in its sole discretion, could determine to permit the shares to be redeemable in aggregations smaller than Creation Units or to be individually redeemable. In such circumstance, the Trust or a Fund may make redemptions in-kind, for cash or for a combination of cash or securities. Further, in the event of a termination of the Trust or a Fund, the Trust or a Fund might elect to pay cash redemptions to all shareholders, with an in-kind election for shareholders owning in excess of a certain stated minimum amount.

**DTC as Securities Depository for Shares of the Funds.** Shares of each Fund are represented by securities registered in the name of DTC or its nominee and deposited with, or on behalf of, DTC.

DTC was created in 1973 to enable electronic movement of securities between its participants ("DTC Participants"), and NSCC was established in 1976 to provide a single settlement system for securities clearing and to serve as central counterparty for securities trades among DTC Participants. In 1999, DTC and NSCC were consolidated within The Depository Trust & Clearing Corporation ("DTCC") and became wholly-owned subsidiaries of DTCC. The common stock of DTCC is



owned by the DTC Participants, but NYSE and FINRA, through subsidiaries, hold preferred shares in DTCC that provide them with the right to elect one member each to the DTCC board of directors. Access to the DTC system is available to entities, such as banks, brokers, dealers and trust companies, that clear through or maintain a custodial relationship with a DTC Participant, either directly or indirectly (“Indirect Participants”).

Beneficial ownership of shares is limited to DTC Participants, Indirect Participants and persons holding interests through DTC Participants and Indirect Participants. Ownership of beneficial interests in shares (owners of such beneficial interests are referred to herein as “Beneficial Owners”) is shown on, and the transfer of ownership is effected only through, records maintained by DTC (with respect to DTC Participants) and on the records of DTC Participants (with respect to Indirect Participants and Beneficial Owners that are not DTC Participants). Beneficial Owners will receive from or through the DTC Participant a written confirmation relating to their purchase of shares. The laws of some jurisdictions may require that certain purchasers of securities take physical delivery of such securities in definitive form. Such laws may impair the ability of certain investors to acquire beneficial interests in shares of the Fund.

Conveyance of all notices, statements and other communications to Beneficial Owners is effected as follows. Pursuant to the Depositary Agreement between the Trust and DTC, DTC is required to make available to the Trust upon request and for a fee to be charged to the Trust a listing of the shares of each Fund held by each DTC Participant. The Trust shall inquire of each such DTC Participant as to the number of Beneficial Owners holding shares, directly or indirectly, through such DTC Participant. The Trust shall provide each such DTC Participant with copies of such notice, statement or other communication, in such form, number and at such place as such DTC Participant may reasonably request, in order that such notice, statement or communication may be transmitted by such DTC Participant, directly or indirectly, to such Beneficial Owners. In addition, the Trust shall pay to each such DTC Participant a fair and reasonable amount as reimbursement for the expenses attendant to such transmittal, all subject to applicable statutory and regulatory requirements.

Share distributions shall be made to DTC or its nominee, Cede & Co., as the registered holder of all shares of the Trust. DTC or its nominee, upon receipt of any such distributions, shall credit immediately DTC Participants’ accounts with payments in amounts proportionate to their respective beneficial interests in shares of each Fund as shown on the records of DTC or its nominee. Payments by DTC Participants to Indirect Participants and Beneficial Owners of shares held through such DTC Participants will be governed by standing instructions and customary practices, as is now the case with securities held for the accounts of customers in bearer form or registered in a “street name,” and will be the responsibility of such DTC Participants.

The Trust has no responsibility or liability for any aspect of the records relating to or notices to Beneficial Owners, or payments made on account of beneficial ownership interests in such shares, or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests, or for any other aspect of the relationship between DTC and the DTC Participants or the relationship between such DTC Participants and the Indirect Participants and Beneficial Owners owning through such DTC Participants. DTC may decide to discontinue providing its service with respect to shares of the Trust at any time by giving reasonable notice to the Trust and discharging its responsibilities with respect thereto under applicable law. Under such circumstances, the Trust shall take action to find a replacement for DTC to perform its functions at a comparable cost.

**Distribution of Shares.** In connection with each Fund’s launch, each Fund was seeded through the sale of one or more Creation Units by each Fund to one or more initial investors. Initial investors participating in the seeding may be Authorized Participants, a lead market maker or other third party investor or an affiliate of each Fund or each Fund’s adviser. Each such initial investor may sell some or all of the shares underlying the Creation Unit(s) held by them pursuant to the registration statement for each Fund (each, a “Selling Shareholder”), which shares have been registered to permit the resale from time to time after purchase. Each Fund will not receive any of the proceeds from the resale by the Selling Shareholders of these shares.

Selling Shareholders may sell shares owned by them directly or through broker-dealers, in accordance with applicable law, on any national securities exchange on which the shares may be listed or quoted at the time of sale, through trading systems, in the OTC market or in transactions other than on these exchanges or systems at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale, or at negotiated prices. These sales may be effected through brokerage transactions, privately negotiated trades, block sales, entry into options or other derivatives transactions or through any other means authorized by applicable law. Selling Shareholders may redeem the shares held in Creation Unit size by them through an Authorized Participant.

Any Selling Shareholder and any broker-dealer or agents participating in the distribution of shares may be deemed to be “underwriters” within the meaning of Section 2(a)(11) of the 1933 Act, in connection with such sales.

Any Selling Shareholder and any other person participating in such distribution will be subject to applicable provisions of the 1934 Act and the rules and regulations thereunder.

## Creation and Redemption of Creation Units

**General.** The Trust issues and sells shares of each Fund only in Creation Units on a continuous basis through the Distributor or its agent, without a sales load, at a price based on each Fund’s NAV next determined after receipt, on any Business Day (as defined below), of an order received by the Distributor or its agent in proper form. On days when the applicable Listing Exchange or the bond markets close earlier than normal, a Fund may require orders to be placed earlier in the day. The following table sets forth the number of shares of a Fund that constitute a Creation Unit for such Fund and the approximate value of such Creation Unit as of March 31, 2018 (except as noted):

Fund	Shares Per Creation Unit	Approximate Value Per Creation Unit (U.S.\$)
iShares 1-3 Year Treasury Bond ETF	100,000	\$ 8,352,000
iShares 3-7 Year Treasury Bond ETF	100,000	12,061,000
iShares 7-10 Year Treasury Bond ETF	100,000	10,322,000
iShares 10-20 Year Treasury Bond ETF	100,000	13,228,000
iShares 20+ Year Treasury Bond ETF	100,000	12,215,000
iShares Agency Bond ETF	50,000	5,596,000
iShares Broad USD Investment Grade Corporate Bond ETF <sup>1</sup>	50,000	2,683,216
iShares California Muni Bond ETF	50,000	2,909,000
iShares Core 5-10 Year USD Bond ETF	100,000	4,824,000
iShares Core 10+ Year USD Bond ETF	50,000	3,092,500
iShares Core U.S. Aggregate Bond ETF	100,000	10,715,000
iShares ESG 1-5 Year USD Corporate Bond ETF	50,000	1,228,500
iShares ESG USD Corporate Bond ETF	50,000	1,227,500
iShares Government/Credit Bond ETF	50,000	5,579,000
iShares iBoxx \$ High Yield Corporate Bond ETF	100,000	8,529,000
iShares iBoxx \$ Investment Grade Corporate Bond ETF	100,000	11,714,000
iShares Intermediate Government/Credit Bond ETF	50,000	5,413,500
iShares Intermediate-Term Corporate Bond ETF <sup>1</sup>	50,000	2,660,201
iShares Long-Term Corporate Bond ETF	100,000	6,027,000
iShares MBS ETF	100,000	10,466,000
iShares National Muni Bond ETF	100,000	10,869,000
iShares New York Muni Bond ETF	50,000	2,732,500
iShares Short-Term Corporate Bond ETF <sup>1</sup>	50,000	2,590,286
iShares Short-Term National Muni Bond ETF	50,000	5,235,000
iShares Short Treasury Bond ETF	100,000	11,032,000

<sup>1</sup> The Approximate Value Per Creation Unit for the iShares Broad USD Investment Grade Corporate Bond ETF, iShares Intermediate-Term Corporate Bond ETF and iShares Short-Term Corporate Bond ETF is as of August 8, 2018.

In its discretion, the Trust reserves the right to increase or decrease the number of a Fund’s shares that constitute a Creation Unit. The Board reserves the right to declare a split or a consolidation in the number of shares outstanding of any Fund, and to make a corresponding change in the number of shares constituting a Creation Unit, in the event that the per share price in the secondary market rises (or declines) to an amount that falls outside the range deemed desirable by the Board.

A “Business Day” with respect to each Fund is any day on which the Listing Exchange on which the Fund is listed for trading is open for business. As of the date of this SAI, each Listing Exchange observes the following holidays, as observed: New

Year's Day, Martin Luther King, Jr. Day, Presidents' Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

**Fund Deposit.** The consideration for purchase of Creation Units of a Fund, generally consists of an in-kind deposit of a designated portfolio of securities (including any portion of such securities for which cash may be substituted) (Deposit Securities) and the Cash Component computed as described below. Together, the Deposit Securities and the Cash Component constitute the "Fund Deposit," which, when combined with a Fund's portfolio securities, is designed to generate performance that has a collective investment profile similar to that of the Underlying Index. The Fund Deposit represents the minimum initial and subsequent investment amount for a Creation Unit of any Fund.

The "Cash Component" is an amount equal to the difference between the NAV of the shares (per Creation Unit) and the "Deposit Amount," which is an amount equal to the market value of the Deposit Securities, and serves to compensate for any differences between the NAV per Creation Unit and the Deposit Amount. Payment of any stamp duty or other similar fees and expenses payable upon transfer of beneficial ownership of the Deposit Securities are the sole responsibility of the Authorized Participant purchasing a Creation Unit.

The iShares Core U.S. Aggregate Bond ETF and iShares MBS ETF (the "Partial Cash Funds") generally offer Creation Units partially for cash, but may, in certain circumstances, offer Creation Units solely for cash or solely in-kind. Please see the *Cash Purchase Method* section below and the following discussion summarizing the Deposit Security method for further information on purchasing Creation Units of the Funds.

To facilitate efficient management of the Funds and to enable each Fund to track its respective Underlying Index, for iShares Agency Bond ETF, iShares Broad USD Investment Grade Corporate Bond ETF, iShares California Muni Bond ETF, iShares Core 5-10 Year USD Bond ETF, iShares Core 10+ Year USD Bond ETF, iShares Core U.S. Aggregate Bond ETF, iShares Government/Credit Bond ETF, iShares iBoxx \$ High Yield Corporate Bond ETF, iShares iBoxx \$ Investment Grade Corporate Bond ETF, iShares Intermediate Government/Credit Bond ETF, iShares Intermediate-Term Corporate Bond ETF, iShares Long-Term Corporate Bond ETF, iShares MBS ETF, iShares National Muni Bond ETF, iShares New York Muni Bond ETF, iShares Short-Term Corporate Bond ETF and iShares Short-Term National Muni Bond ETF, the Deposit Securities required for purchase of a Creation Unit may not be identical to the Fund Securities (as defined below under "Redemption of Creation Units") the Fund will deliver upon redemption of Fund shares. The Deposit Securities and Fund Securities, as applicable, in connection with a purchase or redemption of a Creation Unit of a Fund, will correspond *pro rata*, to the extent practicable, to the securities held by such Fund. Consistent with the exemptive orders granted to the Funds by the SEC, creation baskets will correspond generally to the price and yield performance of each Fund's Underlying Index.

BFA makes available through the NSCC on each Business Day prior to the opening of business on the Listing Exchange, the list of names and the required number or par value of each Deposit Security and the amount of the Cash Component to be included in the current Fund Deposit (based on information as of the end of the previous Business Day for each Fund). Such Fund Deposit is applicable, subject to any adjustments as described below, to purchases of Creation Units of shares of a given Fund until such time as the next-announced Fund Deposit is made available.

The identity and number or par value of the Deposit Securities change pursuant to changes in the composition of a Fund's portfolio and as rebalancing adjustments and corporate action events are reflected from time to time by BFA with a view to the investment objective of the Fund. The composition of the Deposit Securities may also change in response to adjustments to the weighting or composition of the component securities constituting the relevant Underlying Index.

The Trust may require the substitution of an amount of cash (*i.e.*, a "cash in lieu" amount) to replace any Deposit Security of the Partial Cash Funds that is a TBA transaction or an interest in a mortgage pass-through security. The amount of cash contributed will be equivalent to the price of the TBA transaction or mortgage pass-through security interest listed as a Deposit Security. A transaction fee may be charged on the cash amount contributed in lieu of the TBA transaction or mortgage pass-through security.

The Funds reserve the right to permit or require the substitution of a "cash in lieu" amount to be added to the Cash Component to replace any Deposit Security that may not be available in sufficient quantity for delivery or that may not be eligible for transfer through DTC or the clearing process (as discussed below) or that the Authorized Participant is not able to trade due to a trading restriction. The Funds also reserve the right to permit or require a "cash in lieu" amount in certain circumstances, including circumstances in which the delivery of the Deposit Security by the Authorized Participant would be restricted under applicable securities or other local laws or in certain other situations.

**Cash Purchase Method.** Although the Trust does not generally permit partial or full cash purchases of Creation Units of its funds, when partial or full cash purchases of Creation Units are available or specified for a Fund (Creation Units of the Partial Cash Funds are generally offered partially for cash), they will be effected in essentially the same manner as in-kind purchases thereof. In the case of a partial or full cash purchase, the Authorized Participant must pay the cash equivalent of the Deposit Securities it would otherwise be required to provide through an in-kind purchase, plus the same Cash Component required to be paid by an in-kind purchaser.

**Procedures for Creation of Creation Units.** To be eligible to place orders with the Distributor and to create a Creation Unit of the Funds, an entity must be: (i) a “Participating Party,” *i.e.*, a broker-dealer or other participant in the clearing process through the Continuous Net Settlement System of the NSCC (the “Clearing Process”), a clearing agency that is registered with the SEC, or (ii) a DTC Participant, and must have executed an agreement with the Distributor, with respect to creations and redemptions of Creation Units (“Authorized Participant Agreement”) (discussed below). A Participating Party or DTC Participant who has executed an Authorized Participant Agreement is referred to as an “Authorized Participant.” All shares of the Funds, however created, will be entered on the records of DTC in the name of Cede & Co. for the account of a DTC Participant.

**Role of the Authorized Participant.** Creation Units may be purchased only by or through a DTC Participant that has entered into an Authorized Participant Agreement with the Distributor. Such Authorized Participant will agree, pursuant to the terms of such Authorized Participant Agreement and on behalf of itself or any investor on whose behalf it will act, to certain conditions, including that such Authorized Participant will make available in advance of each purchase of shares an amount of cash sufficient to pay the Cash Component, once the net asset value of a Creation Unit is next determined after receipt of the purchase order in proper form, together with the transaction fees described below. An Authorized Participant, acting on behalf of an investor, may require the investor to enter into an agreement with such Authorized Participant with respect to certain matters, including payment of the Cash Component. Investors who are not Authorized Participants must make appropriate arrangements with an Authorized Participant. Investors should be aware that their particular broker may not be a DTC Participant or may not have executed an Authorized Participant Agreement and that orders to purchase Creation Units may have to be placed by the investor’s broker through an Authorized Participant. As a result, purchase orders placed through an Authorized Participant may result in additional charges to such investor. The Trust does not expect to enter into an Authorized Participant Agreement with more than a small number of DTC Participants. A list of current Authorized Participants may be obtained from the Distributor. The Distributor has adopted guidelines regarding Authorized Participants’ transactions in Creation Units that are made available to all Authorized Participants. These guidelines set forth the processes and standards for Authorized Participants to transact with the Distributor and its agents in connection with creation and redemption transactions. In addition, the Distributor may be appointed as the proxy of the Authorized Participant and may be granted a power of attorney under its Authorized Participant Agreement.

**Placement of Creation Orders.** Fund Deposits must be delivered through the Federal Reserve System (for cash and U.S. government securities), through DTC (for corporate and municipal securities) or through a central depository account, such as with Euroclear or DTC, maintained by State Street or a sub-custodian (a “Central Depository Account”). Any portion of a Fund Deposit that may not be delivered through the Fed or DTC must be delivered through a Central Depository Account. The Fund Deposit transfers made through DTC must be ordered by the DTC Participant in a timely fashion so as to ensure the delivery of the requisite number of Deposit Securities through DTC to the account of the Funds generally before 3:00 p.m., Eastern time on the Settlement Date. Fund Deposit transfers made through the Fed must be deposited by the participant institution in a timely fashion so as to ensure the delivery of the requisite number or amount of Deposit Securities or cash through the Fed to the account of the Fund generally before 3:00 p.m., Eastern time on the Settlement Date. Fund Deposit transfers made through a Central Depository Account must be completed pursuant to the requirements established by the custodian or sub-custodian for such Central Depository Account generally before 2:00 p.m., Eastern time on the Settlement Date. The “Settlement Date” for all funds is generally the second business day after the Transmittal Date. All questions as to the number of Deposit Securities to be delivered, and the validity, form and eligibility (including time of receipt) for the deposit of any tendered securities, will be determined by the Trust, whose determination shall be final and binding. The amount of cash equal to the Cash Component must be transferred directly to State Street through the Federal Reserve Bank wire transfer system in a timely manner so as to be received by State Street generally before 3:00 p.m., Eastern time on the Settlement Date. If the Cash Component and the Deposit Securities are not received by 3:00 p.m., Eastern time on the Settlement Date, the creation order may be canceled. Upon written notice to the Distributor, such canceled order may be resubmitted the following Business Day using a Fund Deposit as newly constituted to reflect the then current NAV of the

Funds. The delivery of Creation Units so created generally will occur no later than the second Business Day following the day on which the purchase order is deemed received by the Distributor, provided that the relevant Fund Deposit has been received by the Funds prior to such time.

**Purchase Orders.** To initiate an order for a Creation Unit, an Authorized Participant must submit to the Distributor or its agent an irrevocable order to purchase shares of a Fund, in proper form, generally before 4:00 p.m., Eastern time on any Business Day to receive that day's NAV. The Distributor or its agent will notify BFA and the custodian of such order. The custodian will then provide such information to any appropriate sub-custodian. Procedures and requirements governing the delivery of the Fund Deposit are set forth in the procedures handbook for Authorized Participants and may change from time to time. Investors, other than Authorized Participants, are responsible for making arrangements for a creation request to be made through an Authorized Participant. The Distributor or its agent will provide a list of current Authorized Participants upon request. Those placing orders to purchase Creation Units through an Authorized Participant should allow sufficient time to permit proper submission of the purchase order to the Distributor or its agent by the Cutoff Time (as defined below) on such Business Day.

The Authorized Participant must also make available on or before the contractual settlement date, by means satisfactory to the Funds, immediately available or same day funds estimated by the Funds to be sufficient to pay the Cash Component next determined after acceptance of the purchase order, together with the applicable purchase transaction fees. Those placing orders should ascertain the applicable deadline for cash transfers by contacting the operations department of the broker or depository institution effectuating the transfer of the Cash Component. This deadline is likely to be significantly earlier than the Cutoff Time of the Funds. Investors should be aware that an Authorized Participant may require orders for purchases of shares placed with it to be in the particular form required by the individual Authorized Participant.

The Authorized Participant is responsible for any and all expenses and costs incurred by a Fund, including any applicable cash amounts, in connection with any purchase order.

**Timing of Submission of Purchase Orders.** An Authorized Participant must submit an irrevocable order to purchase shares of a Fund generally before 4:00 p.m., Eastern time on any Business Day in order to receive that day's NAV. Creation Orders must be transmitted by an Authorized Participant in the form required by the Funds to the Distributor or its agent pursuant to procedures set forth in the Authorized Participant Agreement. Economic or market disruptions or changes, or telephone or other communication failure, may impede the ability to reach the Distributor or its agent or an Authorized Participant. Each Fund's deadline specified above for the submission of purchase orders is referred to as that Fund's "Cutoff Time." The Distributor or its agent, in their discretion, may permit the submission of such orders and requests by or through an Authorized Participant at any time (including on days on which the Listing Exchange is not open for business) via communication through the facilities of the Distributor's or its agent's proprietary website maintained for this purpose. Purchase orders and redemption requests, if accepted by the Trust, will be processed based on the NAV next determined after such acceptance in accordance with a Fund's Cutoff Times as provided in the Authorized Participant Agreement and disclosed in this SAI.

**Acceptance of Orders for Creation Units.** Subject to the conditions that (i) an irrevocable purchase order has been submitted by the Authorized Participant (either on its own or another investor's behalf) and (ii) arrangements satisfactory to the Funds are in place for payment of the Cash Component and any other cash amounts which may be due, the Funds will accept the order, subject to each Fund's right (and the right of the Distributor and BFA) to reject any order until acceptance, as set forth below.

Once a Fund has accepted an order, upon the next determination of the net asset value of the shares, the Fund will confirm the issuance of a Creation Unit, against receipt of payment, at such net asset value. The Distributor or its agent will then transmit a confirmation of acceptance to the Authorized Participant that placed the order.

Each Fund reserves the absolute right to reject or revoke a creation order transmitted to it by the Distributor or its agent if (i) the order is not in proper form; (ii) the investor(s), upon obtaining the shares ordered, would own 80% or more of the currently outstanding shares of the Fund; (iii) the Deposit Securities delivered do not conform to the identity and number of shares specified, as described above; (iv) acceptance of the Deposit Securities would have certain adverse tax consequences to the Fund; (v) acceptance of the Fund Deposit would, in the opinion of counsel, be unlawful; (vi) acceptance of the Fund Deposit would, in the discretion of the Fund or BFA, have an adverse effect on the Fund or the rights of beneficial owners; or (vii) circumstances outside the control of the Fund, the Distributor or its agent and BFA make it impracticable to process purchase orders. The Distributor or its agent shall notify a prospective purchaser of a Creation Unit and/or the Authorized

Participant acting on behalf of such purchaser of its rejection of such order. The Funds, State Street, the sub-custodian and the Distributor or its agent are under no duty, however, to give notification of any defects or irregularities in the delivery of Fund Deposits nor shall any of them incur any liability for failure to give such notification.

**Issuance of a Creation Unit.** Except as provided herein, a Creation Unit will not be issued until the transfer of good title to the applicable Fund of the Deposit Securities and the payment of the Cash Component have been completed. When the sub-custodian has confirmed to the custodian that the securities included in the Fund Deposit (or the cash value thereof) have been delivered to the account of the relevant sub-custodian or sub-custodians, the Distributor or its agent and BFA shall be notified of such delivery and the applicable Fund will issue and cause the delivery of the Creation Unit. Creation Units are generally issued on a “T+2 basis” (i.e., two Business Days after trade date). Each Fund reserves the right to settle Creation Unit transactions on a basis other than T+2, including a shorter settlement period, if necessary or appropriate under the circumstances and compliant with applicable law.

To the extent contemplated by an Authorized Participant Agreement with the Distributor, each Fund will issue Creation Units to such Authorized Participant, notwithstanding the fact that the corresponding Fund Deposits have not been received in part or in whole, in reliance on the undertaking of the Authorized Participant to deliver the missing Deposit Securities as soon as possible, which undertaking shall be secured by such Authorized Participant’s delivery and maintenance of collateral having a value at least equal to 105% and up to 115%, which percentage BFA may change at any time, in its sole discretion, of the value of the missing Deposit Securities in accordance with the Funds’ then-effective procedures. The Trust may use such cash deposit at any time to buy Deposit Securities for the Funds. The only collateral that is acceptable to the Funds is cash in U.S. dollars. Such cash collateral must be delivered no later than the time specified by a Fund or its custodian on the contractual settlement date. The cash collateral posted by the Authorized Participant may be invested at the risk of the Authorized Participant, and income, if any, on invested cash collateral will be paid to that Authorized Participant. Information concerning the Funds’ current procedures for collateralization of missing Deposit Securities is available from the Distributor or its agent. The Authorized Participant Agreement will permit the Funds to buy the missing Deposit Securities at any time and will subject the Authorized Participant to liability for any shortfall between the cost to the Funds of purchasing such securities and the cash collateral including, without limitation, liability for related brokerage, borrowings and other charges.

In certain cases, Authorized Participants may create and redeem Creation Units on the same trade date and in these instances, the Funds reserve the right to settle these transactions on a net basis or require a representation from the Authorized Participants that the creation and redemption transactions are for separate beneficial owners. All questions as to the number of shares of each security in the Deposit Securities and the validity, form, eligibility and acceptance for deposit of any securities to be delivered shall be determined by each Fund and the Fund’s determination shall be final and binding.

**Costs Associated with Creation Transactions.** A standard creation transaction fee is imposed to offset the transfer and other transaction costs associated with the issuance of Creation Units. The standard creation transaction fee is charged to the Authorized Participant on the day such Authorized Participant creates a Creation Unit, and is the same regardless of the number of Creation Units purchased by the Authorized Participant on the applicable Business Day. If a purchase consists solely or partially of cash, the Authorized Participant may also be required to cover (up to the maximum amount shown below) certain brokerage, tax, foreign exchange, execution, price movement and other costs and expenses related to the execution of trades resulting from such transaction (which may, in certain instances, be based on a good faith estimate of transaction costs). Authorized Participants will also bear the costs of transferring the Deposit Securities to the Funds. Certain fees/costs associated with creation transactions may be waived in certain circumstances. Investors who use the services of a broker or other financial intermediary to acquire Fund shares may be charged a fee for such services.

The following table sets forth each Fund’s standard creation transaction fees and maximum additional charge (as described above):

Fund	Standard Creation Transaction Fee	Maximum Additional Charge*
iShares 1-3 Year Treasury Bond ETF	N/A	3.0%
iShares 3-7 Year Treasury Bond ETF	\$ 500	3.0%
iShares 7-10 Year Treasury Bond ETF	N/A	3.0%
iShares 10-20 Year Treasury Bond ETF	\$ 500	3.0%
iShares 20+ Year Treasury Bond ETF	N/A	3.0%

Fund	Standard Creation Transaction Fee	Maximum Additional Charge*
iShares Agency Bond ETF	\$100	3.0%
iShares Broad USD Investment Grade Corporate Bond ETF	\$500	3.0%
iShares California Muni Bond ETF	\$250	3.0%
iShares Core 5-10 Year USD Bond ETF	\$275	3.0%
iShares Core 10+ Year USD Bond ETF	\$300	3.0%
iShares Core U.S. Aggregate Bond ETF	\$500	3.0%
iShares ESG 1-5 Year USD Corporate Bond ETF	\$150	3.0%
iShares ESG USD Corporate Bond ETF	\$150	3.0%
iShares Government/Credit Bond ETF	\$500	3.0%
iShares iBoxx \$ High Yield Corporate Bond ETF	\$500	3.0%
iShares iBoxx \$ Investment Grade Corporate Bond ETF	\$500	3.0%
iShares Intermediate Government/Credit Bond ETF	\$500	3.0%
iShares Intermediate-Term Corporate Bond ETF	\$500	3.0%
iShares Long-Term Corporate Bond ETF	\$300	3.0%
iShares MBS ETF	\$300	3.0%
iShares National Muni Bond ETF	\$400	3.0%
iShares New York Muni Bond ETF	\$250	3.0%
iShares Short-Term Corporate Bond ETF	\$500	3.0%
iShares Short-Term National Muni Bond ETF	\$100	3.0%
iShares Short Treasury Bond ETF	\$250	3.0%

\* As a percentage of the net asset value per Creation Unit.

**Redemption of Creation Units.** Shares of a Fund may be redeemed by Authorized Participants only in Creation Units at their NAV next determined after receipt of a redemption request in proper form by the Distributor or its agent and only on a Business Day. The Funds will not redeem shares in amounts less than Creation Units. There can be no assurance, however, that there will be sufficient liquidity in the secondary market at any time to permit assembly of a Creation Unit. Investors should expect to incur brokerage and other costs in connection with assembling a sufficient number of shares to constitute a Creation Unit that could be redeemed by an Authorized Participant. Beneficial owners also may sell shares in the secondary market.

The Partial Cash Funds generally redeem Creation Units partially for cash. However, the Funds reserve the right to distribute securities and other portfolio instruments in-kind as payment for Creation Units being redeemed. Please see the *Cash Redemption Method* section below and the following discussion summarizing the in-kind method for further information on redeeming Creation Units of the Funds.

With respect to each Fund, BFA makes available through the NSCC, prior to the opening of business on the Listing Exchange on each Business Day, the designated portfolio of securities (including any portion of such securities for which cash may be substituted) that will be applicable (subject to possible amendment or correction) to redemption requests received in proper form (as defined below) on that day (“Fund Securities”), and an amount of cash (the “Cash Amount,” as described below). Such Fund Securities and the corresponding Cash Amount (each subject to possible amendment or correction) are applicable, in order to effect redemptions of Creation Units of a Fund until such time as the next announced composition of the Fund Securities and Cash Amount is made available. Fund Securities received on redemption may not be identical to Deposit Securities that are applicable to creations of Creation Units. Procedures and requirements governing redemption transactions are set forth in the handbook for Authorized Participants and may change from time to time.

Unless cash redemptions are available or specified for a Fund, the redemption proceeds for a Creation Unit generally consist of Fund Securities, plus the Cash Amount, which is an amount equal to the difference between the net asset value of the shares being redeemed, as next determined after the receipt of a redemption request in proper form, and the value of Fund Securities, less a redemption transaction fee (as described below).

The Trust may, in its sole discretion, substitute a “cash in lieu” amount to replace any Fund Security. The Trust also reserves the right to permit or require a “cash in lieu” amount in certain circumstances, including circumstances in which: (i) the delivery of a Fund Security to the Authorized Participant would be restricted under applicable securities or other local laws; or

(ii) the delivery of a Fund Security to the Authorized Participant would result in the disposition of the Fund Security by the Authorized Participant due to restrictions under applicable securities or other local laws, or in certain other situations. The amount of cash paid out in such cases will be equivalent to the value of the substituted security listed as a Fund Security. Notwithstanding the foregoing, the Trust may, in its sole discretion, substitute a “cash in lieu” amount to replace any Fund Security of the Partial Cash Funds that is a TBA transaction or mortgage pass-through security. In such cases, a transaction fee may be charged on the cash amount paid in lieu of the TBA transaction or mortgage pass through security. In the event that the Fund Securities have a value greater than the NAV of the shares, a compensating cash payment equal to the difference is required to be made by or through an Authorized Participant by the redeeming shareholder. Each Fund generally redeems Creation Units for Fund Securities (except for the Partial Cash Funds, which generally redeem Creation Units partially for cash), but each Fund reserves the right to utilize a cash option for redemption of Creation Units. Each Fund may, in its sole discretion, provide such redeeming Authorized Participant a portfolio of securities that differs from the exact composition of the Fund Securities, but does not differ in NAV.

**Cash Redemption Method.** Although the Trust does not generally permit full cash redemptions of Creation Units of its funds, when partial or full cash redemptions of Creation Units are available or specified (e.g., Creation Units of the Partial Cash Funds are generally redeemed partially for cash), they will be effected in essentially the same manner as in-kind redemptions thereof. In the case of partial or full cash redemption, the Authorized Participant receives the cash equivalent of the Fund Securities and other instruments it would otherwise receive through an in-kind redemption, plus the same Cash Amount to be paid to an in-kind redeemer.

**Costs Associated with Redemption Transactions.** A standard redemption transaction fee is imposed to offset transfer and other transaction costs that may be incurred by the relevant Fund. The standard redemption transaction fee is charged to the Authorized Participant on the day such Authorized Participant redeems a Creation Unit, and is the same regardless of the number of Creation Units redeemed by an Authorized Participant on the applicable Business Day. If a redemption consists solely or partially of cash, the Authorized Participant may also be required to cover (up to the maximum amount shown below) certain brokerage, tax, foreign exchange, execution, price movement and other costs and expenses related to the execution of trades resulting from such transaction (which may, in certain instances, be based on a good faith estimate of transaction costs). Authorized Participants will also bear the costs of transferring the Fund Securities from a Fund to their account on their order. Certain fees/costs associated with redemption transactions may be waived in certain circumstances. Investors who use the services of a broker or other financial intermediary to dispose of Fund shares may be charged a fee for such services.

The following table sets forth each Fund’s standard redemption transaction fees and maximum additional charge (as described above):

Fund	Standard Redemption Transaction Fee	Maximum Additional Charge*
iShares 1-3 Year Treasury Bond ETF	N/A	2.0%
iShares 3-7 Year Treasury Bond ETF	\$ 500	2.0%
iShares 7-10 Year Treasury Bond ETF	N/A	2.0%
iShares 10-20 Year Treasury Bond ETF	\$ 500	2.0%
iShares 20+ Year Treasury Bond ETF	N/A	2.0%
iShares Agency Bond ETF	\$ 100	2.0%
iShares Broad USD Investment Grade Corporate Bond ETF	\$ 500	2.0%
iShares California Muni Bond ETF	\$ 250	2.0%
iShares Core 5-10 Year USD Bond ETF	\$ 275	2.0%
iShares Core 10+ Year USD Bond ETF	\$ 300	2.0%
iShares Core U.S. Aggregate Bond ETF	\$ 500	2.0%
iShares ESG 1-5 Year USD Corporate Bond ETF	\$ 150	2.0%
iShares ESG USD Corporate Bond ETF	\$ 150	2.0%
iShares Government/Credit Bond ETF	\$ 500	2.0%
iShares iBoxx \$ High Yield Corporate Bond ETF	\$ 500	2.0%
iShares iBoxx \$ Investment Grade Corporate Bond ETF	\$ 500	2.0%
iShares Intermediate Government/Credit Bond ETF	\$ 500	2.0%
iShares Intermediate-Term Corporate Bond ETF	\$ 500	2.0%



Fund	Standard Redemption Transaction Fee	Maximum Additional Charge*
iShares Long-Term Corporate Bond ETF	\$300	2.0%
iShares MBS ETF	\$300	2.0%
iShares National Muni Bond ETF	\$400	2.0%
iShares New York Muni Bond ETF	\$250	2.0%
iShares Short-Term Corporate Bond ETF	\$500	2.0%
iShares Short-Term National Muni Bond ETF	\$100	2.0%
iShares Short Treasury Bond ETF	\$250	2.0%

\* As a percentage of the net asset value per Creation Unit, inclusive of the standard redemption transaction fee.

**Placement of Redemption Orders.** Redemption requests for Creation Units of the Funds must be submitted to the Distributor or its agent by or through an Authorized Participant. An Authorized Participant must submit an irrevocable request to redeem shares of a Fund generally before 4:00 p.m., Eastern time on any Business Day in order to receive that day's NAV. On days when the Listing Exchange closes earlier than normal, a Fund may require orders to redeem Creation Units to be placed earlier that day. Investors, other than Authorized Participants, are responsible for making arrangements for a redemption request to be made through an Authorized Participant. The Distributor or its agent will provide a list of current Authorized Participants upon request.

The Authorized Participant must transmit the request for redemption in the form required by the Funds to the Distributor or its agent in accordance with procedures set forth in the Authorized Participant Agreement. Investors should be aware that their particular broker may not have executed an Authorized Participant Agreement and that, therefore, requests to redeem Creation Units may have to be placed by the investor's broker through an Authorized Participant who has executed an Authorized Participant Agreement. At any time, only a limited number of broker-dealers will have an Authorized Participant Agreement in effect. Investors making a redemption request should be aware that such request must be in the form specified by such Authorized Participant. Investors making a request to redeem Creation Units should allow sufficient time to permit proper submission of the request by an Authorized Participant and transfer of the shares to the Funds' transfer agent; such investors should allow for the additional time that may be required to effect redemptions through their banks, brokers or other financial intermediaries if such intermediaries are not Authorized Participants.

A redemption request is considered to be in "proper form" if: (i) an Authorized Participant has transferred or caused to be transferred to the Funds' transfer agent the Creation Unit redeemed through the book-entry system of DTC so as to be effective by the Listing Exchange closing time on any Business Day on which the redemption request is submitted; (ii) a request in form satisfactory to the applicable Fund is received by the Distributor or its agent from the Authorized Participant on behalf of itself or another redeeming investor within the time periods specified above; and (iii) all other procedures set forth in the Authorized Participant Agreement are properly followed.

Upon receiving a redemption request, the Distributor or its agent shall notify the applicable Fund and the Fund's transfer agent of such redemption request. The tender of an investor's shares for redemption and the distribution of the securities and/or cash included in the redemption payment made in respect of Creation Units redeemed will be made through DTC and the relevant Authorized Participant to the Beneficial Owner thereof as recorded on the book-entry system of DTC or the DTC Participant through which such investor holds, as the case may be, or by such other means specified by the Authorized Participant submitting the redemption request.

A redeeming Authorized Participant, whether on its own account or acting on behalf of a Beneficial Owner, must maintain appropriate security arrangements with a qualified broker-dealer, bank or other custody providers in each jurisdiction in which any of the portfolio securities are customarily traded, to which account such portfolio securities will be delivered.

Deliveries of redemption proceeds by each Fund are generally made within two Business Days (*i.e.*, "T+2"). Each Fund reserves the right to settle redemption transactions on a basis other than T+2 but by T+7, if necessary or appropriate under the circumstances and compliant with applicable law. Delayed settlement may occur due to a number of different reasons, including, without limitation, settlement cycles for the underlying securities, unscheduled market closings, an effort to link distribution to dividend record dates and ex-dates and newly announced holidays. For example, the redemption settlement process may be extended beyond T+2 because of the occurrence of a holiday in a non-U.S. market or in the U.S. bond market that is not a holiday observed in the U.S. equity market.

To the extent contemplated by an Authorized Participant's agreement with the Distributor or its agent, in the event an Authorized Participant has submitted a redemption request in proper form but is unable to transfer all or part of the Creation Unit to be redeemed to a Fund, at or prior to 10:00 a.m., Eastern time on the Listing Exchange business day after the date of submission of such redemption request, the Distributor or its agent will accept the redemption request in reliance on the undertaking by the Authorized Participant to deliver the missing shares as soon as possible. Such undertaking shall be secured by the Authorized Participant's delivery and maintenance of collateral consisting of cash, in U.S. dollars in immediately available funds, having a value at least equal to 105% and up to 115%, which percentage BFA may change at any time, in its sole discretion, of the value of the missing shares. Such cash collateral must be delivered no later than the time specified by each Fund or its custodian on the day after the date of submission of such redemption request and shall be held by State Street and marked-to-market daily. The fees of State Street and any sub-custodians in respect of the delivery, maintenance and redelivery of the cash collateral shall be payable by the Authorized Participant. The cash collateral posted by the Authorized Participant may be invested at the risk of the Authorized Participant, and income, if any, on invested cash collateral will be paid to that Authorized Participant. The Authorized Participant Agreement permits the Funds to acquire shares of the Funds at any time and subjects the Authorized Participant to liability for any shortfall between the aggregate of the cost to the Funds of purchasing such shares, plus the value of the Cash Amount, and the value of the cash collateral together with liability for related brokerage and other charges.

Because the portfolio securities of a Fund may trade on exchange(s) on days that the Listing Exchange is closed or are otherwise not Business Days for such Fund, shareholders may not be able to redeem their shares of such Fund, or purchase or sell shares of such Fund on the Listing Exchange on days when the NAV of such a Fund could be significantly affected by events in the relevant non-U.S. markets.

The right of redemption may be suspended or the date of payment postponed with respect to any Fund: (i) for any period during which the Listing Exchange is closed (other than customary weekend and holiday closings); (ii) for any period during which trading on the Listing Exchange is suspended or restricted; (iii) for any period during which an emergency exists as a result of which disposal of the shares of the Fund's portfolio securities or determination of its net asset value is not reasonably practicable; or (iv) in such other circumstance as is permitted by the SEC.

**Taxation on Creations and Redemptions of Creation Units.** An Authorized Participant generally will recognize either gain or loss upon the exchange of Deposit Securities for Creation Units. This gain or loss is calculated by taking the market value of the Creation Units purchased over the Authorized Participant's aggregate basis in the Deposit Securities exchanged therefor. However, the IRS may apply the wash sales rules to determine that any loss realized upon the exchange of Deposit Securities for Creation Units is not currently deductible. Authorized Participants should consult their own tax advisors.

Current U.S. federal income tax laws dictate that capital gain or loss realized from the redemption of Creation Units will generally create long-term capital gain or loss if the Authorized Participant holds the Creation Units for more than one year, or short-term capital gain or loss if the Creation Units were held for one year or less, if the Creation Units are held as capital assets.

## Taxes

The following is a summary of certain material U.S. federal income tax considerations regarding the purchase, ownership and disposition of shares of a Fund. This summary does not address all of the potential U.S. federal income tax consequences that may be applicable to a Fund or to all categories of investors, some of which may be subject to special tax rules. Current and prospective shareholders are urged to consult their own tax advisors with respect to the specific federal, state, local and non-U.S. tax consequences of investing in a Fund. The summary is based on the laws and judicial and administrative interpretations thereof in effect on the date of this SAI, all of which are subject to change, possibly with retroactive effect.

Tax reform legislation commonly known as the Tax Cuts and Jobs Act (the "Tax Act") was enacted on December 22, 2017. The Tax Act makes significant changes to the U.S. federal income tax rules for individuals and corporations, generally effective for taxable years beginning after December 31, 2017. Most of the changes applicable to individuals are temporary and, without further legislation, will not apply after 2025. The application of certain provisions of the Tax Act is uncertain, and the changes in the act may have indirect effects on a Fund, its investments and its shareholders that cannot be predicted. In addition, legislative, regulatory or administrative changes could be enacted or promulgated at any time, either prospectively or with retroactive effect. Prospective investors should consult their tax advisors regarding the implications of the Tax Act on their investment in a Fund.

**Regulated Investment Company Qualifications.** Each Fund intends to continue to qualify for and to elect treatment as a separate RIC under Subchapter M of the Internal Revenue Code. To qualify for treatment as a RIC, each Fund must annually distribute at least 90% of its investment company taxable income (which includes dividends, interest and net short-term capital gains) and meet several other requirements. Among such other requirements are the following: (i) at least 90% of each Fund's annual gross income must be derived from dividends, interest, payments with respect to securities loans, gains from the sale or other disposition of stock or securities or non-U.S. currencies, other income (including, but not limited to, gains from options, futures or forward contracts) derived with respect to its business of investing in such stock, securities or currencies, and net income derived from interests in qualified publicly-traded partnerships (*i.e.*, partnerships that are traded on an established securities market or tradable on a secondary market, other than a partnership that derives at least 90% of its income from interest, dividends, capital gains and other traditionally permitted RIC income); and (ii) at the close of each quarter of each Fund's taxable year, (a) at least 50% of the market value of each Fund's total assets must be represented by cash and cash items, U.S. government securities, securities of other RICs and other securities, with such other securities limited for purposes of this calculation in respect of any one issuer to an amount not greater than 5% of the value of the Fund's assets and not greater than 10% of the outstanding voting securities of such issuer, and (b) not more than 25% of the value of the Fund's total assets may be invested in the securities of any one issuer, of two or more issuers of which 20% or more of the voting stock is held by the Fund and that are engaged in the same or similar trades or businesses or related trades or businesses (other than the securities of other RICs) or the securities of one or more qualified publicly-traded partnerships.

A Fund may be able to cure a failure to derive at least 90% of its income from the sources specified above or a failure to diversify its holdings in the manner described above by paying a tax and/or by disposing of certain assets. If, in any taxable year, a Fund fails one of these tests and does not timely cure the failure, that Fund will be taxed in the same manner as an ordinary corporation and distributions to its shareholders will not be deductible by that Fund in computing its taxable income.

Although in general the passive loss rules of the Internal Revenue Code do not apply to RICs, such rules do apply to a RIC with respect to items attributable to an interest in a qualified publicly-traded partnership. A Fund's investments in partnerships, including in qualified publicly-traded partnerships, may result in the Fund being subject to state, local, or non-U.S. income, franchise or withholding tax liabilities.

**Taxation of RICs.** As a RIC, a Fund will not be subject to U.S. federal income tax on the portion of its taxable investment income and capital gains that it distributes to its shareholders, provided that it satisfies a minimum distribution requirement. To satisfy the minimum distribution requirement, a Fund must distribute to its shareholders at least the sum of (i) 90% of its "investment company taxable income" (*i.e.*, income other than its net realized long-term capital gain over its net realized short-term capital loss), plus or minus certain adjustments, and (ii) 90% of its net tax-exempt income for the taxable year. A Fund will be subject to income tax at regular corporate rates on any taxable income or gains that it does not distribute to its shareholders. If a Fund fails to qualify for any taxable year as a RIC or fails to meet the distribution requirement, all of its taxable income will be subject to tax at regular corporate income tax rates without any deduction for distributions to shareholders, and such distributions generally will be taxable to shareholders as ordinary dividends to the extent of the Fund's current and accumulated earnings and profits. In such event, distributions to individuals should be eligible to be treated as qualified dividend income and distributions to corporate shareholders generally should be eligible for the dividends-received deduction. Although each Fund intends to distribute substantially all of its net investment income and its capital gains for each taxable year, each Fund will be subject to U.S. federal income taxation to the extent any such income or gains are not distributed. Moreover, if a Fund fails to qualify as a RIC in any year, it must pay out its earnings and profits accumulated in that year in order to qualify again as a RIC. If a Fund fails to qualify as a RIC for a period greater than two taxable years, the Fund may be required to recognize any net built-in gains with respect to certain of its assets (*i.e.*, the excess of the aggregate gains, including items of income, over aggregate losses that would have been realized with respect to such assets if the Fund had been liquidated) if it qualifies as a RIC in a subsequent year.

**Net Capital Loss Carryforwards.** Net capital loss carryforwards may be applied against any net realized capital gains in each succeeding year, until they have been reduced to zero or until their respective expiration dates, whichever occurs first. Capital loss carryforwards from taxable years beginning after 2010 are not subject to expiration, and short-term and long-term capital loss carryforwards from such taxable years may only be applied against net realized short-term and long-term capital gains, respectively.

In the event that a Fund were to experience an ownership change as defined under the Internal Revenue Code, the loss carryforwards and other favorable tax attributes of a Fund, if any, may be subject to limitation.

The following Funds had tax basis net capital loss carryforwards as set forth in the table below as of February 28, 2018, the tax year-end for the Funds listed:

Fund	Non-Expiring <sup>1</sup>	Expiring 2019	Total
iShares 1-3 Year Treasury Bond ETF	\$ 66,703,899	—	\$ 66,703,899
iShares 3-7 Year Treasury Bond ETF	76,668,027	1,230	76,669,257
iShares 7-10 Year Treasury Bond ETF	142,786,542	—	142,786,542
iShares 10-20 Year Treasury Bond ETF	9,066,991	55,582	9,122,573
iShares 20+ Year Treasury Bond ETF	144,098,686	—	144,098,686
iShares Agency Bond ETF	597,936	—	597,936
iShares Broad USD Investment Grade Corporate Bond ETF	2,543,117	—	2,543,117
iShares California Muni Bond ETF	89,210	—	89,210
iShares Core 5-10 Year USD Bond ETF	318,002	—	318,002
iShares Core 10+ Year USD Bond ETF	912,302	—	912,302
iShares Core U.S. Aggregate Bond ETF	241,191,401	—	241,191,401
iShares ESG 1-5 Year USD Corporate Bond ETF	5,356	—	5,356
iShares ESG USD Corporate Bond ETF	1,275	—	1,275
iShares Government/Credit Bond ETF	1,012,717	—	1,012,717
iShares iBoxx \$ High Yield Corporate Bond ETF	790,277,051	—	790,277,051
iShares iBoxx \$ Investment Grade Corporate Bond ETF	86,788,495	—	86,788,495
iShares Intermediate Government/Credit Bond ETF	3,541,229	—	3,541,229
iShares Intermediate-Term Corporate Bond ETF	25,793,802	—	25,793,802
iShares Long-Term Corporate Bond ETF	11,026,354	—	11,026,354
iShares MBS ETF	184,348,293	—	184,348,293
iShares National Muni Bond ETF	30,316,830	—	30,316,830
iShares Short-Term Corporate Bond ETF	8,897,757	—	8,897,757
iShares Short-Term National Muni Bond ETF	962,576	—	962,576
iShares Short Treasury Bond ETF	695,145	—	695,145

<sup>1</sup> Must be utilized prior to losses subject to expiration.

**Excise Tax.** A Fund will be subject to a 4% excise tax on certain undistributed income if it does not distribute to its shareholders in each calendar year at least 98% of its ordinary income for the calendar year plus at least 98.2% of its capital gain net income for the 12 months ended October 31 of such year. For this purpose, however, any ordinary income or capital gain net income retained by a Fund that is subject to corporate income tax will be considered to have been distributed by year-end. In addition, the minimum amounts that must be distributed in any year to avoid the excise tax will be increased or decreased to reflect any underdistribution or overdistribution, as the case may be, from the previous year. Each Fund intends to declare and distribute dividends and distributions in the amounts and at the times necessary to avoid the application of this 4% excise tax.

**Taxation of U.S. Shareholders.** Dividends and other distributions by a Fund are generally treated under the Internal Revenue Code as received by the shareholders at the time the dividend or distribution is made. However, any dividend or capital gain distribution declared by a Fund in October, November or December of any calendar year and payable to shareholders of

record on a specified date in such a month shall be deemed to have been received by each shareholder on December 31 of such calendar year and to have been paid by the Fund not later than such December 31, provided such dividend is actually paid by the Fund during January of the following calendar year.

Each Fund intends to distribute annually to its shareholders substantially all of its net tax-exempt income, investment company taxable income and any net realized long-term capital gains in excess of net realized short-term capital losses (including any capital loss carryovers). However, if a Fund retains for investment an amount equal to all or a portion of its net long-term capital gains in excess of its net short-term capital losses (including any capital loss carryovers), it will be subject to a corporate tax (at a flat rate of 21%) on the amount retained. In that event, the Fund will report such retained amounts as undistributed capital gains in a notice to its shareholders who (a) will be required to include in income for U.S. federal income tax purposes, as long-term capital gains, their proportionate shares of the undistributed amount, (b) will be entitled to credit their proportionate shares of the tax paid by the Fund on the undistributed amount against their U.S. federal income tax liabilities, if any, and to claim refunds to the extent their credits exceed their liabilities, if any, and (c) will be entitled to increase their tax basis, for U.S. federal income tax purposes, in their shares by an amount equal to the excess of the amount in clause (a) over the amount in clause (b). Organizations or persons not subject to U.S. federal income tax on such capital gains will be entitled to a refund of their *pro rata* share of such taxes paid by the Fund upon filing appropriate returns or claims for refund with the IRS.

Distributions of net realized long-term capital gains, if any, that a Fund reports as capital gain dividends are taxable as long-term capital gains, whether paid in cash or in shares and regardless of how long a shareholder has held shares of the Fund. All other dividends of a Fund (including dividends from short-term capital gains) from its current and accumulated earnings and profits (“regular dividends”) are generally subject to tax as ordinary income. Long-term capital gains are eligible for taxation at a maximum rate of 20% for non-corporate shareholders, depending on whether their income exceeds certain threshold amounts.

If an individual receives a regular dividend qualifying for the long-term capital gain rates and such dividend constitutes an “extraordinary dividend,” and the individual subsequently recognizes a loss on the sale or exchange of stock in respect of which the extraordinary dividend was paid, then the loss will be long-term capital loss to the extent of such extraordinary dividend. An “extraordinary dividend” on common stock for this purpose is generally a dividend (i) in an amount greater than or equal to 10% of the taxpayer’s tax basis (or trading value) in a share of stock, aggregating dividends with ex-dividend dates within an 85-day period, or (ii) in an amount greater than 20% of the taxpayer’s tax basis (or trading value) in a share of stock, aggregating dividends with ex-dividend dates within a 365-day period.

Distributions in excess of a Fund’s current and accumulated earnings and profits will, as to each shareholder, be treated as a tax-free return of capital to the extent of a shareholder’s basis in shares of the Fund, and as a capital gain thereafter (if the shareholder holds shares of the Fund as capital assets). Distributions in excess of a Fund’s minimum distribution requirements, but not in excess of the Fund’s earnings and profits, will be taxable to shareholders and will not constitute nontaxable returns of capital. The Fund’s capital loss carryovers, if any, carried from taxable years beginning before 2011 do not reduce current earnings and profits, even if such carryforwards offset current year realized gains. Shareholders receiving dividends or distributions in the form of additional shares should be treated for U.S. federal income tax purposes as receiving a distribution in an amount equal to the amount of money that the shareholders receiving cash dividends or distributions will receive and should have a cost basis in the shares received equal to such amount. No deduction would be allowed to an investor for interest on indebtedness incurred or continued to purchase or carry shares of the Fund to the extent the interest deduction would relate to exempt-interest dividends received.

A 3.8% U.S. federal Medicare contribution tax is imposed on net investment income, including, but not limited to, interest, dividends, and net gain from investments, of U.S. individuals with income exceeding \$200,000 (or \$250,000 if married and filing jointly), and of estates and trusts.

Investors considering buying shares just prior to a dividend or capital gain distribution should be aware that, although the price of shares purchased at that time may reflect the amount of the forthcoming distribution, such dividend or distribution may nevertheless be taxable to them. If a Fund is the holder of record of any security on the record date for any dividends payable with respect to such security, such dividends will be included in the Fund’s gross income not as of the date received but as of the later of (i) the date such security became ex-dividend with respect to such dividends (*i.e.*, the date on which a buyer of the security would not be entitled to receive the declared, but unpaid, dividends); or (ii) the date the Fund acquired

such security. Accordingly, in order to satisfy its income distribution requirements, a Fund may be required to pay dividends based on anticipated earnings, and shareholders may receive dividends in an earlier year than would otherwise be the case.

In certain situations, a Fund may, for a taxable year, defer all or a portion of its net capital loss (or if there is no net capital loss, then any net long-term or short-term capital loss) realized after October and its late-year ordinary loss (defined as the sum of the excess of post-October foreign currency and passive foreign investment company (“PFIC”) losses over post-October foreign currency and PFIC gains, plus the excess of post-December ordinary losses over post-December ordinary income) until the next taxable year in computing its investment company taxable income and net capital gain, which will defer the recognition of such realized losses. Such deferrals and other rules regarding gains and losses realized after October (or December) may affect the tax character of shareholder distributions.

**Sales of Shares.** Upon the sale or exchange of shares of a Fund, a shareholder will realize a taxable gain or loss equal to the difference between the amount realized and the shareholder’s basis in shares of the Fund. A redemption of shares by a Fund will be treated as a sale for this purpose. Such gain or loss will be treated as capital gain or loss if the shares are capital assets in the shareholder’s hands and will be long-term capital gain or loss if the shares are held for more than one year and short-term capital gain or loss if the shares are held for one year or less. Any loss realized on a sale or exchange will be disallowed to the extent the shares disposed of are replaced, including replacement through the reinvesting of dividends or capital gains distributions, or by an option, or contract to acquire substantially identical shares, within a 61-day period beginning 30 days before and ending 30 days after the disposition of the shares. In such a case, the basis of the shares acquired will be increased to reflect the disallowed loss. Any loss realized by a shareholder on the sale of Fund shares held by the shareholder for six months or less will be treated for U.S. federal income tax purposes as a long-term capital loss to the extent of any distributions or deemed distributions of long-term capital gains received by the shareholder with respect to such share. The Medicare contribution tax described above will apply to the sale of Fund shares.

If a shareholder incurs a sales charge in acquiring shares of a Fund, disposes of those shares within 90 days and then, on or before January 31 of the following calendar year, acquires shares in a mutual fund for which the otherwise applicable sales charge is reduced by reason of a reinvestment right (e.g., an exchange privilege), the original sales charge will not be taken into account in computing gain/loss on the original shares to the extent the subsequent sales charge is reduced. Instead, the disregarded portion of the original sales charge will be added to the tax basis of the newly acquired shares. Furthermore, the same rule also applies to a disposition of the newly acquired shares made within 90 days of the second acquisition. This provision prevents a shareholder from immediately deducting the sales charge by shifting his or her investment within a family of mutual funds.

**Backup Withholding.** In certain cases, a Fund will be required to withhold at a 24% rate and remit to the U.S. Treasury such amounts withheld from any distributions paid to a shareholder who: (i) has failed to provide a correct taxpayer identification number; (ii) is subject to backup withholding by the IRS; (iii) has failed to certify to a Fund that such shareholder is not subject to backup withholding; or (iv) has not certified that such shareholder is a U.S. person (including a U.S. resident alien). Backup withholding is not an additional tax and any amount withheld may be credited against a shareholder’s U.S. federal income tax liability.

**Sections 351 and 362.** The Trust, on behalf of each Fund, has the right to reject an order for a purchase of shares of the Fund if the purchaser (or group of purchasers) would, upon obtaining the shares so ordered, own 80% or more of the outstanding shares of a given Fund and if, pursuant to Sections 351 and 362 of the Internal Revenue Code, that Fund would have a basis in the securities different from the market value of such securities on the date of deposit. If a Fund’s basis in such securities on the date of deposit was less than market value on such date, the Fund, upon disposition of the securities, would recognize more taxable gain or less taxable loss than if its basis in the securities had been equal to market value. It is not anticipated that the Trust will exercise the right of rejection except in a case where the Trust determines that accepting the order could result in material adverse tax consequences to a Fund or its shareholders. The Trust also has the right to require information necessary to determine beneficial share ownership for purposes of the 80% determination.

**Tax-Exempt Interest Income.** Dividends paid by the Municipal Bond Funds that are properly reported as exempt-interest dividends will not be subject to regular federal income tax. Each Municipal Bond Fund intends to invest its assets in a manner such that dividend distributions to its shareholders will generally be exempt from U.S. federal income taxation. Dividends paid by the Fund will be exempt from federal income tax (though not necessarily exempt from state and local taxation) to the

extent of the Fund's tax-exempt interest income as long as 50% or more of the value of the Fund's assets at the end of each quarter is invested in state, municipal and other bonds that are excluded from gross income for federal income tax purposes and as long as the Fund properly reports such dividends as exempt-interest dividends.

So long as, at the close of each quarter of the taxable year of the iShares California Muni Bond ETF (the "California Fund"), at least 50% of the value of the California Fund's total assets consists of obligations of the U.S. and of the State of California and its political subdivisions, the interest on which is exempt from California personal income tax and California corporate income tax ("CA-exempt Obligations"), exempt-interest dividends (i) paid by the California Fund in an amount not exceeding the interest received on such CA-exempt Obligations during the California Fund's taxable year, and (ii) reported by the California Fund as exempt-interest dividends (in a written notice mailed to the California Fund's shareholders) will be treated as an item of interest excludable from income for California personal income tax purposes and corporate income tax purposes. Exempt-interest dividends paid to a corporate shareholder subject to California corporate franchise tax, however, will be taxable as ordinary income for purposes of such tax. Distributions derived from interest on tax-exempt obligations issued by governmental authorities in states other than California or on other obligations or investments the interest on which is not exempt from California personal income tax or corporate income tax, and distributions to shareholders derived from short-term or long-term capital gains, will be taxed as ordinary income for California personal and corporate income tax purposes and California corporate franchise tax purposes. Interest on indebtedness incurred or continued by a shareholder of the California Fund to purchase or carry shares of the California Fund generally will not be deductible for California personal or corporate income tax purposes. It should be noted that California law deviates from the provisions of Subchapter M of Chapter 1 of Subtitle A of the Internal Revenue Code, relating to regulated investment companies in certain potentially material respects.

The foregoing is a general, abbreviated summary of certain of the provisions of California law presently in effect that govern the taxation of the shareholders of the California Fund. These provisions are subject to change by legislative or administrative action, and any such change may be retroactive. Shareholders are advised to consult with their own tax advisors for more detailed information concerning California tax matters.

Individual shareholders of the iShares New York Muni Bond ETF will not be required to include in their gross income for New York State and City purposes any portion of distributions received from the Fund that are directly attributable to (i) interest earned on tax-exempt obligations issued by New York State or any political subdivision thereof (including New York City) or (ii) interest earned on obligations of U.S. possessions or territories that is exempt from state taxation pursuant to federal law, provided that the Fund qualifies as a RIC and satisfies the requirement that at least 50% of its assets at the close of each quarter of its taxable year constitute such obligations. Distributions from the Fund that are attributable to sources other than those described in the preceding sentence (including interest on obligations of other states and their political subdivisions) will generally be taxable to individual shareholders as ordinary income.

Shareholders of the iShares New York Muni Bond ETF that are subject to New York State corporation franchise tax or New York City general corporation tax will be required to include exempt-interest dividends paid by the Fund in their "entire net income" for purposes of such taxes and will be required to include their shares of the Fund in their investment capital for purposes of such taxes. If a shareholder is subject to unincorporated business taxation by New York City, income and gains distributed by the Fund will be subject to such taxation except to the extent such distributions are directly attributable to interest earned on tax-exempt obligations issued by New York State or any political subdivision thereof (including New York City). However, shareholders of the Fund will not be subject to the unincorporated business tax imposed by New York City solely by reason of their ownership of shares in the Fund. Shares of the iShares New York Muni Bond ETF will not be subject to property taxes imposed by New York State or City.

Interest on indebtedness incurred by shareholders to purchase or carry shares of New York Municipal Income generally will not be deductible for New York State personal income tax purposes.

Interest income on the Fund that is distributed to its shareholders will generally not be taxable to the Fund for purposes of New York State corporation franchise tax or New York City general corporation tax.

The foregoing is a general, abbreviated summary of certain of the provisions of the tax laws of New York State and City presently in effect as they directly govern the taxation of shareholders of the Fund. These provisions are subject to change by legislative or administrative action, and any such change may be retroactive with respect to New York Municipal Income transactions. Shareholders are advised to consult with their own tax advisors for more detailed information concerning New York State and City matters.

**Taxation of Certain Derivatives.** A Fund's transactions in zero coupon securities, non-U.S. currencies, forward contracts, options and futures contracts (including options and futures contracts on non-U.S. currencies), to the extent permitted, will be subject to special provisions of the Internal Revenue Code (including provisions relating to "hedging transactions" and "straddles") that, among other consequences, may affect the character of gains and losses realized by the Fund (*i.e.*, may affect whether gains or losses are ordinary or capital), accelerate recognition of income to the Fund and defer Fund losses. These rules could therefore affect the character, amount and timing of distributions to shareholders. These provisions also (a) will require the Fund to mark-to-market certain types of the positions in its portfolio (*i.e.*, treat them as if they were closed out at the end of each year) and (b) may cause the Fund to recognize income without receiving cash with which to pay dividends or make distributions in amounts necessary to satisfy the distribution requirements for avoiding income and excise taxes. Each Fund will monitor its transactions, will make the appropriate tax elections and will make the appropriate entries in its books and records when it acquires any zero coupon security, non-U.S. currency, forward contract, option, futures contract or hedged investment in order to mitigate the effect of these rules and prevent disqualification of the Fund as a RIC.

A Fund's investments in so-called "section 1256 contracts," such as regulated futures contracts, most non-U.S. currency forward contracts traded in the interbank market and options on most security indexes, are subject to special tax rules. All section 1256 contracts held by the Fund at the end of its taxable year are required to be marked to their market value, and any unrealized gain or loss on those positions will be included in the Fund's income as if each position had been sold for its fair market value at the end of the taxable year. The resulting gain or loss will be combined with any gain or loss realized by the Fund from positions in section 1256 contracts closed during the taxable year. Provided such positions were held as capital assets and were not part of a "hedging transaction" nor part of a "straddle," 60% of the resulting net gain or loss will be treated as long-term capital gain or loss, and 40% of such net gain or loss will be treated as short-term capital gain or loss, regardless of the period of time the positions were actually held by the Fund.

As a result of entering into swap contracts, a Fund may make or receive periodic net payments. A Fund may also make or receive a payment when a swap is terminated prior to maturity through an assignment of the swap or other closing transaction. Periodic net payments will generally constitute ordinary income or deductions, while termination of a swap will generally result in capital gain or loss (which will be a long-term capital gain or loss if the Fund has been a party to the swap for more than one year). The cost of any payments made by the Fund on a swap transaction will be netted *pro rata* against both tax exempt and taxable gross income. With respect to certain types of swaps, a Fund may be required to currently recognize income or loss with respect to future payments on such swaps or may elect under certain circumstances to mark such swaps to market annually for tax purposes as ordinary income or loss. Periodic net payments that would otherwise constitute ordinary deductions but are allocable under the Internal Revenue Code to exempt-interest dividends will not be allowed as deductions but instead will reduce net tax-exempt income.

**Market Discount.** Any market discount recognized on a bond is taxable as ordinary income. A market discount bond is a bond acquired in the secondary market at a price below redemption value or adjusted issue price if issued with original issue discount ("OID"). To the extent a Fund does not include the market discount in income as it accrues, gain on the Fund's disposition of such an obligation will be treated as ordinary income rather than capital gain to the extent of the accrued market discount.

**Non-U.S. Investments.** Income (including, in some cases, capital gains) received by certain of the Funds from investments in non-U.S. securities may be subject to withholding and other taxes imposed by non-U.S. countries. Tax conventions between certain countries and the U.S. may reduce or eliminate such taxes in some cases. If more than 50% of a Fund's total assets at the close of its taxable year consists of securities of non-U.S. corporations, the Fund may elect for U.S. income tax purposes to treat non-U.S. income taxes paid by it as paid by its shareholders. A Fund may qualify for and make this election in some, but not necessarily all, of its taxable years. If a Fund were to make an election, shareholders of the Fund would be required to take into account an amount equal to their pro rata portions of such non-U.S. taxes in computing their taxable income and then treat an amount equal to those non-U.S. taxes as a U.S. federal income tax deduction or as a foreign tax credit against their U.S. federal income taxes. Shortly after any year for which it makes such an election, a Fund will report to its shareholders the amount per share of such non-U.S. income tax that must be included in each shareholder's gross income and the amount which will be available for the deduction or credit. No deduction for non-U.S. taxes may be claimed by a shareholder who does not itemize deductions. Certain limitations will be imposed on the extent to which the credit (but not the deduction) for non-U.S. taxes may be claimed.

Under Section 988 of the Internal Revenue Code, gains or losses attributable to fluctuations in exchange rates between the time a Fund accrues income or receivables or expenses or other liabilities denominated in a non-U.S. currency and the time a



Fund actually collects such income or pays such liabilities are generally treated as ordinary income or ordinary loss. In general, gains (and losses) realized on debt instruments will be treated as Section 988 gain (or loss) to the extent attributable to changes in exchange rates between the U.S. dollar and the currencies in which the instruments are denominated. Similarly, gain or losses on non-U.S. currency, non-U.S. currency forward contracts, certain non-U.S. currency options or futures contracts and the disposition of debt securities denominated in non-U.S. currency, to the extent attributable to fluctuations in exchange rates between the acquisition and disposition dates, are also treated as ordinary income or loss unless the Fund were to elect otherwise.

**Original Issue Discount.** OID on tax-exempt bonds is recognized over the term of the bond and is tax-exempt to the holder of the bond. Special U.S. federal income tax rules apply to inflation-indexed bonds. Generally, all stated interest on such bonds is taken into income by a Fund under its regular method of accounting for interest income. The amount of a positive inflation adjustment, which results in an increase in the inflation-adjusted principal amount of the bond, is treated as original issue discount. The OID is included in a Fund's gross income ratably during the period ending with the maturity of the bond, under the general OID inclusion rules. The amount of a Fund's OID in a taxable year with respect to a bond will increase a Fund's taxable income for such year without a corresponding receipt of cash, until the bond matures. As a result, a Fund may need to use other sources of cash to satisfy its distributions for such year. The amount of negative inflation adjustment, which results in a decrease in the inflation-adjusted principal amount of the bond, reduces the amount of interest (including stated, interest, OID, and market discount, if any) otherwise includible in a Fund's income with respect to the bond for the taxable year.

**Reporting.** If a shareholder recognizes a loss with respect to a Fund's shares of \$2 million or more for an individual shareholder or \$10 million or more for a corporate shareholder, the shareholder must file with the IRS a disclosure statement on IRS Form 8886. Direct shareholders of portfolio securities are in many cases exempted from this reporting requirement, but under current guidance, shareholders of a RIC are not exempted. The fact that a loss is reportable under these regulations does not affect the legal determination of whether the taxpayer's treatment of the loss is proper. Shareholders should consult their tax advisors to determine the applicability of these regulations in light of their individual circumstances.

**Taxation of Non-U.S. Shareholders.** Dividends paid by a Fund to non-U.S. shareholders are generally subject to withholding tax at a 30% rate or a reduced rate specified by an applicable income tax treaty to the extent derived from investment income and short-term capital gains. Dividends paid by a Fund from net tax-exempt income or long-term capital gains are generally not subject to such withholding tax. In order to obtain a reduced rate of withholding, a non-U.S. shareholder will be required to provide an IRS Form W-8BEN or IRS Form W-8BEN-E certifying its entitlement to benefits under a treaty. The withholding tax does not apply to regular dividends paid to a non-U.S. shareholder who provides an IRS Form W-8ECI, certifying that the dividends are effectively connected with the non-U.S. shareholder's conduct of a trade or business within the U.S. Instead, the effectively connected dividends will be subject to regular U.S. income tax as if the non-U.S. shareholder were a U.S. shareholder. A non-U.S. corporation receiving effectively connected dividends may also be subject to additional "branch profits tax" imposed at a rate of 30% (or lower treaty rate). A non-U.S. shareholder who fails to provide an IRS Form W-8BEN, IRS Form W-8BEN-E or other applicable form may be subject to backup withholding at the appropriate rate.

Properly-reported dividends are generally exempt from U.S. federal withholding tax where they (i) are paid in respect of a Fund's "qualified net interest income" (generally, a Fund's U.S. source interest income, other than certain contingent interest and interest from obligations of a corporation or partnership in which a Fund is at least a 10% shareholder or partner, reduced by expenses that are allocable to such income); or (ii) are paid in respect of a Fund's "qualified short-term capital gains" (generally, the excess of a Fund's net short-term capital gain over a Fund's long-term capital loss for such taxable year). However, depending on its circumstances, a Fund may report all, some or none of its potentially eligible dividends as such qualified net interest income or as qualified short-term capital gains and/or treat such dividends, in whole or in part, as ineligible for this exemption from withholding. In order to qualify for this exemption from withholding, a non-U.S. shareholder will need to comply with applicable certification requirements relating to its non-U.S. status (including, in general, furnishing an IRS Form W-8BEN, IRS Form W-8BEN-E or substitute Form). In the case of shares held through an intermediary, the intermediary may withhold even if a Fund reports the payment as qualified net interest income or qualified short-term capital gain. Non-U.S. shareholders should contact their intermediaries with respect to the application of these rules to their accounts.

Distributions that a Fund reports as "short-term capital gain dividends" or "long-term capital gain dividends" will not be treated as such to a recipient foreign shareholder if the distribution is attributable to gain received from the sale or exchange of U.S. real property or an interest in a U.S. real property holding corporation and a Fund's direct or indirect interests in U.S.

real property exceeded certain levels. Instead, if the foreign shareholder has not owned more than 5% of the outstanding shares of a Fund at any time during the one year period ending on the date of distribution, such distributions will be subject to 30% withholding by a Fund and will be treated as ordinary dividends to the foreign shareholder; if the foreign shareholder owned more than 5% of the outstanding shares of a Fund at any time during the one year period ending on the date of the distribution, such distribution will be treated as real property gain subject to 21% withholding tax and could subject the foreign shareholder to U.S. filing requirements. Additionally, if a Fund's direct or indirect interests in U.S. real property were to exceed certain levels, a foreign shareholder realizing gains upon redemption from a Fund could be subject to the 21% withholding tax and U.S. filing requirements unless more than 50% of a Fund's shares were owned by U.S. persons at such time or unless the foreign person had not held more than 5% of a Fund's outstanding shares throughout either such person's holding period for the redeemed shares or, if shorter, the previous five years.

Separately, a 30% withholding tax is currently imposed on U.S.-source dividends, interest and other income items, and will be imposed on proceeds from the sale, redemption or other disposition of property producing U.S.-source dividends and interest paid after December 31, 2018, to: (i) foreign financial institutions, including non-U.S. investment funds, unless they agree to collect and disclose to the IRS information regarding their direct and indirect U.S. account holders and (ii) certain other foreign entities, unless they certify certain information regarding their direct and indirect U.S. owners. To avoid withholding, foreign financial institutions will need to: (i) enter into agreements with the IRS that state that they will provide the IRS information including the names, addresses and taxpayer identification numbers of direct and indirect U.S. account holders; comply with due diligence procedures with respect to the identification of U.S. accounts; report to the IRS certain information with respect to U.S. accounts maintained; agree to withhold tax on certain payments made to non-compliant foreign financial institutions or to account holders who fail to provide the required information; and determine certain other information as to their account holders, or (ii) in the event that an applicable intergovernmental agreement and implementing legislation are adopted, provide local revenue authorities with similar account holder information. Other foreign entities will need to provide the name, address and taxpayer identification number of each substantial U.S. owner or provide certifications of no substantial U.S. ownership, unless certain exceptions apply.

Shares of a Fund held by a non-U.S. shareholder at death will be considered situated within the U.S. and subject to the U.S. estate tax.

The foregoing discussion is a summary of certain material U.S. federal income tax considerations only and is not intended as a substitute for careful tax planning. Purchasers of shares should consult their own tax advisors as to the tax consequences of investing in such shares, including consequences under state, local and non-U.S. tax laws. Finally, the foregoing discussion is based on applicable provisions of the Internal Revenue Code, regulations, judicial authority and administrative interpretations in effect on the date of this SAI. Changes in applicable authority could materially affect the conclusions discussed above, and such changes often occur.

## Financial Statements

Each Fund's audited Financial Statements, including the Financial Highlights, appearing in the applicable Annual Report to Shareholders and the report therein of PricewaterhouseCoopers LLP, an independent registered public accounting firm, are hereby incorporated by reference in this SAI. The applicable Annual Report to Shareholders, which contains the referenced audited financial statements, is available upon request and without charge.

## Miscellaneous Information

**Counsel.** Willkie Farr & Gallagher LLP, located at 787 Seventh Avenue, New York, NY 10019, is counsel to the Trust.

**Independent Registered Public Accounting Firm.** PricewaterhouseCoopers LLP, located at Three Embarcadero Center, San Francisco, CA 94111, serves as the Trust's independent registered public accounting firm, audits the Funds' financial statements, and may perform other services.

**Shareholder Communications to the Board.** The Board has established a process for shareholders to communicate with the Board. Shareholders may contact the Board by mail. Correspondence should be addressed to iShares Board of Trustees, c/o BlackRock Fund Advisors, iShares Fund Administration, 400 Howard Street, San Francisco, CA 94105. Shareholder communications to the Board should include the following information: (i) the name and address of the shareholder; (ii) the

number of shares owned by the shareholder; (iii) the Fund(s) of which the shareholder owns shares; and (iv) if these shares are owned indirectly through a broker, financial intermediary or other record owner, the name of the broker, financial intermediary or other record owner. All correspondence received as set forth above shall be reviewed by the Secretary of the Trust and reported to the Board.

**Regulation Under the Alternative Investment Fund Managers Directive.** The Alternative Investment Fund Managers Directive (“AIFMD”) imposes detailed and prescriptive obligations on fund managers established in the EU (“EU Operative Provisions”). These do not currently apply to managers established outside of the EU, such as BFA. Rather, non-EU managers are only required to comply with certain disclosure, reporting and transparency obligations of AIFMD (“AIFMD Disclosure Provisions”) if such managers market a fund to EU investors.

Where the AIFMD Disclosure Provisions relate to EU Operative Provisions that do not apply to BFA, no meaningful disclosure can be made. These EU Operative Provisions include prescriptive rules on: measuring and capping leverage in line with known European standards; the treatment of investors; the use of “depositories”; and coverage for professional liability risks.

AIFMD imposes certain conditions on the marketing of funds, such as the Funds, to EU investors. AIFMD requires that an ‘alternative investment fund manager’ (“AIFM”) be identified to meet such conditions where such marketing is sought. For these purposes BFA, as the legal entity responsible for performing the portfolio and risk management of the Funds, shall be the AIFM.

AIFMD requires disclosure on an ongoing basis of certain information relating to the use of special arrangements, leverage, rights of reuse of collateral, guarantees granted under leverage arrangements and the use of gates, side pockets and similar liquidity management tools. Given that the Funds do not use any special arrangements or allow for collateral reuse, it is not intended that such disclosures will need to be made by the Funds. Each Fund will, however, to the extent relevant and appropriate, disclose in its annual report information on the Fund’s leverage, risk profile and risk management systems employed by BFA. Each Fund will also disclose material changes, if any, to the liquidity management systems and procedures employed in respect of the Fund.

BFA has registered the following Funds for marketing to investors in Finland, Luxembourg, the Netherlands, Sweden, and the U.K.:

iShares 7-10 Year Treasury Bond ETF

iShares 20+ Year Treasury Bond ETF

iShares Core U.S. Aggregate Bond ETF

iShares iBoxx \$ Investment Grade Corporate Bond ETF

iShares iBoxx \$ High Yield Corporate Bond ETF

iShares Intermediate-Term Corporate Bond ETF

iShares Short-Term Corporate Bond ETF

**Investors’ Rights.** Each Fund relies on the services of BFA and its other service providers, including the Distributor, administrator, custodian and transfer agent. Further information about the duties and roles of these service providers is set out in this SAI. Investors who acquire shares of a Fund are not parties to the relevant agreement with these service providers and do not have express contractual rights against the Fund or its service providers, except certain institutional investors that are Authorized Participants may have certain express contractual rights with respect to the Distributor under the terms of the relevant Authorized Participant Agreement. Investors may have certain legal rights under federal or state law against a Fund or its service providers. In the event that an investor considers that it may have a claim against a Fund, or against any service provider in connection with its investment in a Fund, such investor should consult its own legal advisor.

By contract, Authorized Participants irrevocably submit to the non-exclusive jurisdiction of any New York State or U.S. federal court sitting in New York City over any suit, action or proceeding arising out of or relating to the Authorized Participant Agreement. Jurisdiction over other claims, whether by investors or Authorized Participants, will turn on the facts of the particular case and the law of the jurisdiction in which the proceeding is brought.

# Appendix A1 - iShares ETFs Proxy Voting Policy

## BlackRock U.S. Registered Funds

### Open-End Mutual Funds and iShares ETFs<sup>1</sup> Proxy Voting Policy

#### Procedures Governing Delegation of Proxy Voting to Fund Adviser

October 1, 2018

The Boards of Trustees/Directors (“Directors”) of open-end funds advised by BlackRock Fund Advisors or BlackRock Advisors, LLC (“BlackRock”) (the “Funds”), have the responsibility for the oversight of voting proxies relating to portfolio securities of the Funds, and have determined that it is in the best interests of the Funds and their shareholders to delegate that responsibility to BlackRock, subject to the principles outlined in this Policy, as part of BlackRock’s authority to manage, acquire and dispose of account assets, all as contemplated by the Funds’ respective investment management agreements.

BlackRock has adopted guidelines and procedures (together and as from time to time amended, the “BlackRock Proxy Voting Guidelines”) governing proxy voting by accounts managed by BlackRock.

BlackRock will cast votes on behalf of each of the Funds on specific proxy issues in respect of securities held by each such Fund (or may refrain from voting) in accordance with the BlackRock Proxy Voting Guidelines.

BlackRock will report on an annual basis to the Directors on (1) a summary of all proxy votes that BlackRock has made on behalf of the Funds in the preceding year together with a representation that all votes were in accordance with the BlackRock Proxy Voting Guidelines<sup>1</sup>, and (2) any changes to the BlackRock Proxy Voting Guidelines that have not previously been reported.

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<sup>1</sup> iShares ESG 1-5 Year USD Corporate Bond ETF, iShares ESG MSCI EAFE ETF, iShares ESG MSCI EM ETF, iShares ESG MSCI USA ETF, iShares ESG MSCI USA Small-Cap ETF, iShares ESG U.S. Aggregate Bond ETF, iShares ESG USD Corporate Bond ETF, iShares Global Green Bond ETF, iShares MSCI ACWI Low Carbon Target ETF, iShares MSCI Global Impact ETF, iShares MSCI KLD 400 Social ETF, iShares MSCI Peru ETF and iShares MSCI USA ESG Select ETF have separate Proxy Voting Policies.

# Appendix A2 – iShares Sustainable ETFs Proxy Voting Policy

BlackRock U.S. Registered Funds

iShares Sustainable ETFs Proxy Voting Policy

Procedures Governing Delegation of Proxy Voting to Fund Adviser

September 28, 2018

The Boards of Trustees/Directors (“Directors”) of Funds listed in Appendix A (the “iShares Sustainable ETFs”), advised by BlackRock Fund Advisors (“BlackRock”), have the responsibility for the oversight of voting proxies relating to portfolio securities of the iShares Sustainable ETFs, and have determined that it is in the best interests of the iShares Sustainable ETFs and their shareholders to delegate the responsibility to vote proxies to BlackRock, subject to the principles outlined in this Policy, as part of BlackRock’s authority to manage, acquire and dispose of account assets, all as contemplated by the iShares Sustainable ETFs’ respective investment management agreements.

BlackRock has adopted guidelines and procedures and supplemental guidelines applicable to environmental and social issues investing (together and as from time to time amended, the “BlackRock Sustainable Voting Guidelines”) governing proxy voting by the iShares Sustainable ETFs managed by BlackRock.

BlackRock will cast votes on behalf of each of the iShares Sustainable ETFs on specific proxy issues in respect of securities held by each such iShares Sustainable ETF (or may refrain from voting) in accordance with the BlackRock Sustainable Voting Guidelines.

BlackRock will report on an annual basis to the Directors on (1) a summary of all proxy votes that BlackRock has made on behalf of the iShares Sustainable ETFs in the preceding year together with a representation that all votes were in accordance with the BlackRock Sustainable Voting Guidelines, and (2) any changes to the BlackRock Sustainable Voting Guidelines that have not previously been reported.

## Appendix A

iShares ESG 1-5 Year USD Corporate Bond ETF

iShares ESG MSCI EAFE ETF

iShares ESG MSCI EM ETF

iShares ESG MSCI USA ETF

iShares ESG MSCI USA Small-Cap ETF

iShares ESG U.S. Aggregate Bond ETF

iShares ESG USD Corporate Bond ETF

iShares Global Green Bond ETF

iShares MSCI ACWI Low Carbon Target ETF

iShares MSCI Global Impact ETF

iShares MSCI KLD 400 Social ETF

iShares MSCI USA ESG Select ETF

# Appendix A3 – BlackRock Proxy Voting Policies

BlackRock Investment Stewardship

Global Corporate Governance Guidelines & Engagement Principles

January 2019

**Contents**

Introduction to BlackRock	A-6
Philosophy on corporate governance	A-6
Corporate governance, engagement and voting	A-6
- Boards and directors	A-7
- Auditors and audit-related issues	A-8
- Capital structure, mergers, asset sales and other special transactions	A-8
- Compensation and benefits	A-9
- Environmental and social issues	A-10
- General corporate governance matters and shareholder protections	A-10
BlackRock's oversight of its investment stewardship activities	A-10
- Oversight	A-10
- Vote execution	A-11
- Conflicts management policies and procedures	A-12
- Voting guidelines	A-13
- Reporting and vote transparency	A-13



## INTRODUCTION TO BLACKROCK

BlackRock helps investors build better financial futures. As a fiduciary to our clients, we provide the investment and technology solutions they need when planning for their most important goals. We manage assets on behalf of institutional and individual clients, across a full spectrum of investment strategies, asset classes and regions. Our client base includes pension plans, endowments, foundations, charities, official institutions, insurers and other financial institutions, as well as individuals around the world.

### PHILOSOPHY ON CORPORATE GOVERNANCE

BlackRock's Investment Stewardship activities are focused on protecting and enhancing the economic value of the companies in which we invest on behalf of clients. We do this through engagement with boards and management of investee companies and, for those clients who have given us authority, through voting at shareholder meetings.

We believe that there are certain fundamental rights attached to shareholding. Companies and their boards should be accountable to shareholders and structured with appropriate checks and balances to ensure that they operate in shareholders' best interests. Effective voting rights are central to the rights of ownership and there should be one vote for one share. Shareholders should have the right to elect, remove and nominate directors, approve the appointment of the auditor and to amend the corporate charter or by-laws. Shareholders should be able to vote on matters that are material to the protection of their investment including but not limited to changes to the purpose of the business, dilution levels and pre-emptive rights, and the distribution of income and capital structure. In order to make informed decisions, we believe that shareholders have the right to sufficient and timely information.

Our primary focus is on the performance of the board of directors. As the agent of shareholders, the board should set the company's strategic aims within a framework of prudent and effective controls, which enables risk to be assessed and managed. The board should provide direction and leadership to management and oversee management's performance. Our starting position is to be supportive of boards in their oversight efforts on shareholders' behalf and we would generally expect to support the items of business they put to a vote at shareholder meetings. Votes cast against or withheld from resolutions proposed by the board are a signal that we are concerned that the directors or management have either not acted in the best interests of shareholders or have not responded adequately to shareholder concerns. We assess voting matters on a case-by-case basis and in light of each company's unique circumstances taking into consideration regional best practices and long-term value creation.

These principles set out our approach to engaging with companies, provide guidance on our position on corporate governance and outline how our views might be reflected in our voting decisions. Corporate governance practices can vary internationally, so our expectations in relation to individual companies are based on the legal and regulatory framework of each local market. However, we believe there are overarching principles of corporate governance that apply globally and provide a framework for more detailed, market-specific assessments.

We believe BlackRock has a responsibility in relation to monitoring and providing feedback to companies, sometimes known as "stewardship." These ownership responsibilities include engaging with management or board members on corporate governance matters, voting proxies in the best long-term economic interests of shareholders and engaging with regulatory bodies to ensure a sound policy framework consistent with promoting long-term shareholder value creation. We also believe in the responsibility to our clients to have appropriate resources and oversight structures. Our approach is set out in the section below titled "BlackRock's oversight of its investment stewardship activities" and is further detailed in a team profile on our website.

### CORPORATE GOVERNANCE, ENGAGEMENT AND VOTING

We recognize that accepted standards of corporate governance differ between markets, but we believe there are sufficient common threads globally to identify an overarching set of principles. The objective of our investment stewardship activities is the protection and enhancement of the value of our clients' investments in public corporations. Thus, these principles focus on practices and structures that we consider to be supportive of long-term value creation. We discuss below the principles under six key themes. In our regional and market-specific voting guidelines we explain how these principles inform our voting decisions in relation to specific resolutions that may appear on the agenda of a shareholder meeting in the relevant market.

The six key themes are:

- Boards and directors
- Auditors and audit-related issues
- Capital structure, mergers, asset sales and other special transactions
- Compensation and benefits
- Environmental and social issues
- General corporate governance matters and shareholder protections

At a minimum, we expect companies to observe the accepted corporate governance standards in their domestic market or to explain why doing so is not in the interests of shareholders. Where company reporting and disclosure is inadequate or the approach taken is inconsistent with our view of what is in the best interests of shareholders, we will engage with the company and/or use our vote to encourage a change in practice. In making voting decisions, we perform independent research and analysis, such as reviewing relevant information published by the company and apply our voting guidelines to achieve the outcome we believe best protects our clients' long-term economic interests. We also work closely with our active portfolio managers, and may take into account internal and external research.

BlackRock views engagement as an important activity; engagement provides us with the opportunity to improve our understanding of investee companies and their governance structures to better inform our voting decisions. Engagement also allows us to share our philosophy and approach to investment and corporate governance with companies to enhance their understanding of our objectives. Our engagements often focus on providing our feedback on company disclosures, particularly where we believe they could be enhanced. There are a range of approaches we may take in engaging companies depending on the nature of the issue under consideration, the company and the market.

BlackRock takes an engagement-first approach, emphasizing direct dialogue with companies on governance issues that have a material impact on financial performance. We generally prefer to engage in the first instance where we have concerns and give management time to address or resolve the issue. As a long-term investor, we are patient and persistent in working with our portfolio companies to have an open dialogue and develop mutual understanding of governance matters, to promote the adoption of best practices and to assess the merits of a company's approach to its governance. We monitor the companies in which we invest and engage with them constructively and privately where we believe doing so helps protect shareholders' interests. We do not try to micro-manage companies, or tell management and boards what to do. We present our views as a long-term shareholder and listen to companies' responses. The materiality and immediacy of a given issue will generally determine the level of our engagement and whom we seek to engage at the company, which could be management representatives or board directors.

## **Boards and directors**

The performance of the board is critical to the economic success of the company and to the protection of shareholders' interests. Board members serve as agents of shareholders in overseeing the strategic direction and operation of the company. For this reason, BlackRock focuses on directors in many of our engagements and sees the election of directors as one of our most important responsibilities in the proxy voting context.

We expect the board of directors to promote and protect shareholder interests by:

- establishing an appropriate corporate governance structure
- supporting and overseeing management in setting long-term strategic goals, applicable measures of value-creation and milestones that will demonstrate progress, and steps taken if any obstacles are anticipated or incurred
- ensuring the integrity of financial statements
- making independent decisions regarding mergers, acquisitions and disposals
- establishing appropriate executive compensation structures
- addressing business issues, including environmental and social issues, when they have the potential to materially impact company reputation and performance

There should be clear definitions of the role of the board, the committees of the board and senior management such that the responsibilities of each are well understood and accepted. Companies should report publicly the approach taken to governance (including in relation to board structure) and why this approach is in the best interest of shareholders. We will

seek to engage with the appropriate directors where we have concerns about the performance of the board or the company, the broad strategy of the company, or the performance of individual board members.

BlackRock believes that directors should stand for re-election on a regular basis. We assess directors nominated for election or re-election in the context of the composition of the board as a whole. There should be detailed disclosure of the relevant credentials of the individual directors in order for shareholders to assess the caliber of an individual nominee. We expect there to be a sufficient number of independent directors on the board to ensure the protection of the interests of all shareholders. Common impediments to independence may include but are not limited to:

- current or former employment at the company or a subsidiary within the past several years
- being, or representing, a shareholder with a substantial shareholding in the company
- interlocking directorships
- having any other interest, business or other relationship which could, or could reasonably be perceived to, materially interfere with the director's ability to act in the best interests of the company

BlackRock believes that the operation of the board is enhanced when there is a clearly independent, senior non-executive director to chair it or, where the chairman is also the CEO (or is otherwise not independent), an independent lead director. The role of this director is to enhance the effectiveness of the independent members of the board through shaping the agenda, ensuring adequate information is provided to the board and encouraging independent participation in board deliberations. The lead independent board director should be available to shareholders in those situations where a director is best placed to explain and justify a company's approach.

To ensure that the board remains effective, regular reviews of board performance should be carried out and assessments made of gaps in skills or experience amongst the members. BlackRock believes it is beneficial for new directors to be brought onto the board periodically to refresh the group's thinking and to ensure both continuity and adequate succession planning. In identifying potential candidates, boards should take into consideration the multiple dimensions of diversity, including personal factors such as gender, ethnicity, and age; as well as professional characteristics, such as a director's industry, area of expertise, and geographic location. The board should review these dimensions of the current directors and how they might be augmented by incoming directors. We believe that directors are in the best position to assess the optimal size for the board, but we would be concerned if a board seemed too small to have an appropriate balance of directors or too large to be effective.

There are matters for which the board has responsibility that may involve a conflict of interest for executives or for affiliated directors. BlackRock believes that shareholders' interests are best served when the board forms committees of fully independent directors to deal with such matters. In many markets, these committees of the board specialize in audit, director nominations and compensation matters. An ad hoc committee might also be formed to decide on a special transaction, particularly one with a related party or to investigate a significant adverse event.

### **Auditors and audit-related issues**

BlackRock recognizes the critical importance of financial statements, which should provide a true and fair picture of a company's financial condition. We will hold the members of the audit committee or equivalent responsible for overseeing the management of the audit function. We take particular note of cases involving significant financial restatements or ad hoc notifications of material financial weakness.

The integrity of financial statements depends on the auditor being free of any impediments to being an effective check on management. To that end, we believe it is important that auditors are, and are seen to be, independent. Where the audit firm provides services to the company in addition to the audit, the fees earned should be disclosed and explained. Audit committees should have in place a procedure for assessing annually the independence of the auditor.

### **Capital structure, mergers, asset sales and other special transactions**

The capital structure of a company is critical to its owners, the shareholders, as it impacts the value of their investment and the priority of their interest in the company relative to that of other equity or debt investors. Pre-emptive rights are a key protection for shareholders against the dilution of their interests.

Effective voting rights are central to the rights of ownership and we believe strongly in one vote for one share as a guiding principle that supports good corporate governance. Shareholders, as the residual claimants, have the strongest interest in protecting company value, and voting power should match economic exposure.

We are concerned that the creation of a dual share class may result in an over-concentration of power in the hands of a few shareholders, thus disenfranchising other shareholders and amplifying the potential conflict of interest, which the one share, one vote principle is designed to mitigate. However, we recognize that in certain circumstances, companies may have a valid argument for dual-class listings, at least for a limited period of time. We believe that such companies should review these dual-class structures on a regular basis or as company circumstances change. Additionally, they should receive shareholder approval of their capital structure on a periodic basis via a management proposal in the company's proxy. The proposal should give unaffiliated shareholders the opportunity to affirm the current structure or establish mechanisms to end or phase out controlling structures at the appropriate time, while minimizing costs to shareholders.

In assessing mergers, asset sales or other special transactions, BlackRock's primary consideration is the long-term economic interests of shareholders. Boards proposing a transaction need to clearly explain the economic and strategic rationale behind it. We will review a proposed transaction to determine the degree to which it enhances long-term shareholder value. We would prefer that proposed transactions have the unanimous support of the board and have been negotiated at arm's length. We may seek reassurance from the board that executives' and/or board members' financial interests in a given transaction have not adversely affected their ability to place shareholders' interests before their own. Where the transaction involves related parties, we would expect the recommendation to support it to come from the independent directors and it is good practice to be approved by a separate vote of the non-conflicted shareholders.

BlackRock believes that shareholders have a right to dispose of company shares in the open market without unnecessary restriction. In our view, corporate mechanisms designed to limit shareholders' ability to sell their shares are contrary to basic property rights. Such mechanisms can serve to protect and entrench interests other than those of the shareholders. We believe that shareholders are broadly capable of making decisions in their own best interests. We expect any so-called 'shareholder rights plans' proposed by a board to be subject to shareholder approval upon introduction and periodically thereafter for continuation.

### **Compensation and benefits**

BlackRock expects a company's board of directors to put in place a compensation structure that incentivizes and rewards executives appropriately and is aligned with shareholder interests, particularly generating sustainable long-term shareholder returns. We would expect the compensation committee to take into account the specific circumstances of the company and the key individuals the board is trying to incentivize. We encourage companies to ensure that their compensation plans incorporate appropriate and challenging performance conditions consistent with corporate strategy and market practice. We use third party research, in addition to our own analysis, to evaluate existing and proposed compensation structures. We hold members of the compensation committee or equivalent board members accountable for poor compensation practices or structures.

BlackRock believes that there should be a clear link between variable pay and company performance that drives shareholder returns. We are not supportive of one-off or special bonuses unrelated to company or individual performance. We acknowledge that the use of peer group evaluation by compensation committees can help ensure competitive pay; however we are concerned when increases in total compensation at a company are justified solely on peer benchmarking rather than outperformance. We support incentive plans that foster the sustainable achievement of results relative to competitors. The vesting timeframes associated with incentive plans should facilitate a focus on long-term value creation. We believe consideration should be given to building claw back provisions into incentive plans such that executives would be required to forgo rewards when they are not justified by actual performance. Compensation committees should guard against contractual arrangements that would entitle executives to material compensation for early termination of their contract. Finally, pension contributions and other deferred compensation arrangements should be reasonable in light of market practice.

Non-executive directors should be compensated in a manner that is commensurate with the time and effort expended in fulfilling their professional responsibilities. Additionally, these compensation arrangements should not risk compromising their independence or aligning their interests too closely with those of the management, whom they are charged with overseeing.

## Environmental and social issues

It is within this context of our fiduciary duty to clients that we undertake our investment stewardship activities. Sound practices in relation to the material environmental and social (“E&S”) factors inherent in the business model can be a signal of operational excellence and management quality.

BlackRock expects companies to identify and report on the material, business-specific E&S risks and opportunities and to explain how these are managed. This explanation should make clear how the approach taken by the company best serves the interests of shareholders and protects and enhances the long-term economic value of the company. E&S factors are material if they are core to how the business operates. The key performance indicators in relation to E&S factors should also be disclosed and performance against them discussed, along with any peer group benchmarking and verification processes in place. This helps shareholders assess how well management is dealing with the material E&S factors relevant to the business. Any generally recognized best practices and reporting standards adopted by the company should also be discussed in this context.

We do not see it as our role to make social or political judgments on behalf of clients. Our consideration of these E&S factors is consistent with protecting the long-term economic interest of our clients’ assets. We expect investee companies to comply, at a minimum, with the laws and regulations of the jurisdictions in which they operate. They should explain how they manage situations where local laws or regulations that significantly impact the company’s operations are contradictory or ambiguous to global norms.

Given that E&S factors are often not issues on which a shareholder votes, we will engage directly with the board or management. Engagement on a particular E&S factor is based on our assessment that there are potential material economic ramifications for shareholders over the long-term.

We may vote against the election of directors where we have concerns that a company might not be dealing with material E&S factors appropriately. Sometimes we may reflect such concerns by supporting a shareholder proposal on the issue, where there seems to be either a significant potential threat or realized harm to shareholders’ interests caused by poor management of E&S factors. In deciding our course of action, we will assess whether the company has already taken sufficient steps to address the concern and whether there is a clear and material economic disadvantage to the company if the issue is not addressed.

## General corporate governance matters and shareholder protections

BlackRock believes that shareholders have a right to timely and detailed information on the financial performance and viability of the companies in which they invest. In addition, companies should also publish information on the governance structures in place and the rights of shareholders to influence these. The reporting and disclosure provided by companies help shareholders assess whether their economic interests have been protected and the quality of the board’s oversight of management. We believe shareholders should have the right to vote on key corporate governance matters, including changes to governance mechanisms, to submit proposals to the shareholders’ meeting and to call special meetings of shareholders.

## BLACKROCK’S OVERSIGHT OF ITS INVESTMENT STEWARDSHIP ACTIVITIES

### Oversight

We hold ourselves to a very high standard in our investment stewardship activities, including proxy voting. This function is executed by a team called BlackRock Investment Stewardship (“BIS”) which is comprised of BlackRock employees who do not have other responsibilities other than their roles in BIS. BIS is considered an investment function. The team does not have sales responsibilities.

BlackRock maintains three regional advisory committees (“Stewardship Advisory Committees”) for (a) the Americas; (b) Europe, the Middle East and Africa (“EMEA”); and (c) Asia-Pacific, generally consisting of senior BlackRock investment professionals and/or senior employees with practical boardroom experience. The regional Stewardship Advisory Committees review and advise on amendments to the proxy voting guidelines covering markets within each respective region (“Guidelines”).

In addition to the regional Stewardship Advisory Committees, the Investment Stewardship Global Oversight Committee (“Global Committee”) is a risk-focused committee, comprised of senior representatives from various BlackRock investment teams, BlackRock’s Deputy General Counsel, the Global Head of Investment Stewardship (“Global Head”), and other senior executives with relevant experience and team oversight.

The Global Head has primary oversight of the activities of BIS, including voting in accordance with the Guidelines, which require the application of professional judgment and consideration of each company’s unique circumstances. The Global Committee reviews and approves amendments to these Global Corporate Governance & Engagement Principles. The Global Committee also reviews and approves amendments to the regional Guidelines, as proposed by the regional Stewardship Advisory Committees.

In addition, the Global Committee receives and reviews periodic reports regarding the votes cast by BIS, as well as regular updates on material process issues, procedural changes and other risk oversight considerations. The Global Committee reviews these reports in an oversight capacity as informed by the BIS corporate governance engagement program and Guidelines.

BIS carries out engagement with companies, monitors and executes proxy votes, and conducts vote operations (including maintaining records of votes cast) in a manner consistent with the relevant Guidelines. BIS also conducts research on corporate governance issues and participates in industry discussions to keep abreast of important developments in the corporate governance field. BIS may utilize third parties for certain of the foregoing activities and performs oversight of those third parties. BIS may raise complicated or particularly controversial matters for internal discussion with the relevant investment teams and/or refer such matters to the appropriate regional Stewardship Advisory Committees for review, discussion and guidance prior to making a voting decision.

#### **Vote execution**

We carefully consider proxies submitted to funds and other fiduciary account(s) (“Fund” or “Funds”) for which we have voting authority. BlackRock votes (or refrains from voting) proxies for each Fund for which we have voting authority based on our evaluation of the best long-term economic interests of shareholders, in the exercise of our independent business judgment, and without regard to the relationship of the issuer of the proxy (or any shareholder proponent or dissident shareholder) to the Fund, the Fund’s affiliates (if any), BlackRock or BlackRock’s affiliates, or BlackRock employees (see “Conflicts management policies and procedures”, below).

When exercising voting rights, BlackRock will normally vote on specific proxy issues in accordance with the Guidelines for the relevant market. The Guidelines are reviewed regularly and are amended consistent with changes in the local market practice, as developments in corporate governance occur, or as otherwise deemed advisable by BlackRock’s Stewardship Advisory Committees. BIS may, in the exercise of their professional judgment, conclude that the Guidelines do not cover the specific matter upon which a proxy vote is required or that an exception to the Guidelines would be in the best long-term economic interests of BlackRock’s clients.

In the uncommon circumstance of there being a vote with respect to fixed income securities or the securities of privately held issuers, the decision generally will be made by a Fund’s portfolio managers and/or BIS based on their assessment of the particular transactions or other matters at issue.

In certain markets, proxy voting involves logistical issues which can affect BlackRock’s ability to vote such proxies, as well as the desirability of voting such proxies. These issues include but are not limited to: (i) untimely notice of shareholder meetings; (ii) restrictions on a foreigner’s ability to exercise votes; (iii) requirements to vote proxies in person; (iv) “share-blocking” (requirements that investors who exercise their voting rights surrender the right to dispose of their holdings for some specified period in proximity to the shareholder meeting); (v) potential difficulties in translating the proxy; (vi) regulatory constraints; and (vii) requirements to provide local agents with unrestricted powers of attorney to facilitate voting instructions. We are not supportive of impediments to the exercise of voting rights such as shareblocking or overly burdensome administrative requirements.

As a consequence, BlackRock votes proxies on a “best-efforts” basis. In addition, BIS may determine that it is generally in the best interests of BlackRock’s clients not to vote proxies if the costs (including but not limited to opportunity costs associated with shareblocking constraints) associated with exercising a vote are expected to outweigh the benefit the client would derive by voting on the proposal.

Portfolio managers have full discretion to vote the shares in the Funds they manage based on their analysis of the economic impact of a particular ballot item. Portfolio managers may from time to time reach differing views on how best to maximize economic value with respect to a particular investment. Therefore, portfolio managers may, and sometimes do, vote shares in the Funds under their management differently from one another. However, because BlackRock's clients are mostly long-term investors with long-term economic goals, ballots are frequently cast in a uniform manner.

### Conflicts management policies and procedures

BIS maintains the following policies and procedures that seek to prevent undue influence on BlackRock's proxy voting activity. Such influence might stem from any relationship between the investee company (or any shareholder proponent or dissident shareholder) and BlackRock, BlackRock's affiliates, a Fund or a Fund's affiliates, or BlackRock employees. The following are examples of sources of perceived or potential conflicts of interest:

- BlackRock clients who may be issuers of securities or proponents of shareholder resolutions
- BlackRock business partners or third parties who may be issuers of securities or proponents of shareholder resolutions
- BlackRock employees who may sit on the boards of public companies held in Funds managed by BlackRock
- Significant BlackRock, Inc. investors who may be issuers of securities held in Funds managed by BlackRock
- Securities of BlackRock, Inc. or BlackRock investment funds held in Funds managed by BlackRock
- BlackRock, Inc. board members who serve as senior executives of public companies held in Funds managed by BlackRock

BlackRock has taken certain steps to mitigate perceived or potential conflicts including, but not limited to, the following:

- Adopted the Guidelines which are designed to protect and enhance the economic value of the companies in which BlackRock invests on behalf of clients.
- Established a reporting structure that separates BIS from employees with sales, vendor management or business partnership roles. In addition, BlackRock seeks to ensure that all engagements with corporate issuers, dissident shareholders or shareholder proponents are managed consistently and without regard to BlackRock's relationship with such parties. Clients or business partners are not given special treatment or differentiated access to BIS. BIS prioritizes engagements based on factors including but not limited to our need for additional information to make a voting decision or our view on the likelihood that an engagement could lead to positive outcome(s) over time for the economic value of the company. Within the normal course of business, BIS may engage directly with BlackRock clients, business partners and/or third parties, and/or with employees with sales, vendor management or business partnership roles, in discussions regarding our approach to stewardship, general corporate governance matters, client reporting needs, and/or to otherwise ensure that proxy-related client service levels are met.
- Determined to engage, in certain instances, an independent fiduciary to vote proxies as a further safeguard to avoid potential conflicts of interest, to satisfy regulatory compliance requirements, or as may be otherwise required by applicable law. In such circumstances, the independent fiduciary provides BlackRock's proxy voting agent with instructions, in accordance with the Guidelines, as to how to vote such proxies, and BlackRock's proxy voting agent votes the proxy in accordance with the independent fiduciary's determination. BlackRock uses an independent fiduciary to vote proxies of (i) any company that is affiliated with BlackRock, Inc., (ii) any public company that includes BlackRock employees on its board of directors, (iii) The PNC Financial Services Group, Inc., (iv) any public company of which a BlackRock, Inc. board member serves as a senior executive, and (v) companies when legal or regulatory requirements compel BlackRock to use an independent fiduciary. In selecting an independent fiduciary, we assess several characteristics, including but not limited to: independence, an ability to analyze proxy issues and vote in the best economic interest of our clients, reputation for reliability and integrity, and operational capacity to accurately deliver the assigned votes in a timely manner. We may engage more than one independent fiduciary, in part in order to mitigate potential or perceived conflicts of interest at an independent fiduciary. The Global Committee appoints and reviews the performance of the independent fiduciar(ies), generally on an annual basis.

When so authorized, BlackRock acts as a securities lending agent on behalf of Funds. With regard to the relationship between securities lending and proxy voting, BlackRock's approach is driven by our clients' economic interests. The decision whether to recall securities on loan to vote is based on a formal analysis of the revenue producing value to clients of loans, against the assessed economic value of casting votes. Generally, we expect that the likely economic value to clients of casting votes would be less than the securities lending income, either because, in our assessment, the resolutions being voted on will not

have significant economic consequences or because the outcome would not be affected by BlackRock recalling loaned securities in order to vote. BlackRock also may, in our discretion, determine that the value of voting outweighs the cost of recalling shares, and thus recall shares to vote in that instance.

Periodically, BlackRock reviews our process for determining whether to recall securities on loan in order to vote and may modify it as necessary.

### **Voting guidelines**

The issue-specific Guidelines published for each region/country in which we vote are intended to summarize BlackRock's general philosophy and approach to issues that may commonly arise in the proxy voting context in each market where we invest. These Guidelines are not intended to be exhaustive. BIS applies the Guidelines on a case-by-case basis, in the context of the individual circumstances of each company and the specific issue under review. As such, these Guidelines do not indicate how BIS will vote in every instance. Rather, they share our view about corporate governance issues generally, and provide insight into how we typically approach issues that commonly arise on corporate ballots.

### **Reporting and vote transparency**

We inform clients about our engagement and voting policies and activities through direct communication and through disclosure on our website. Each year we publish an annual report, an annual engagement and voting statistics report, and our full voting record to our website. On a quarterly basis, we publish regional reports which provide an overview of our investment stewardship engagement and voting activities during the quarter, including market developments, speaking engagements, and engagement and voting statistics. Additionally, we make public our market-specific voting guidelines for the benefit of clients and companies with whom we engage.



# Appendix A4 – Supplemental BlackRock Sustainable Proxy Voting Guidelines

September 28, 2018

## Environmental and social issues

Our fiduciary duty to clients is to protect and enhance their economic interest in the companies in which we invest on their behalf. It is within this context that BlackRock Investment Stewardship (BIS) undertake our corporate governance activities. We believe that well-managed companies will deal effectively with the material environmental and social (“E&S”) factors relevant to their businesses.

BIS expects companies to identify and report on the material, business-specific E&S risks and opportunities and to explain how these are managed. This explanation should make clear how the approach taken by the company best serves the interests of shareholders and protects and enhances the long-term economic value of the company. The key performance indicators in relation to E&S matters should also be disclosed and performance against them discussed, along with any peer group benchmarking and verification processes in place. This helps shareholders assess how well management is dealing with the material E&S factors relevant to the business. Any global standards adopted should also be disclosed and discussed in this context.

We may vote against the election of directors where we have concerns that a company might not be dealing with E&S issues appropriately. Sometimes we may reflect such concerns by supporting a shareholder proposal on the issue, where there seems to be either a significant potential threat or realized harm to shareholders’ interests caused by poor management of material E&S matters. In deciding our course of action, we will assess the nature of our engagement with the company on the issue over time, including whether:

- The company has already taken sufficient steps to address the concern
- The company is in the process of actively implementing a response
- There is a clear and material economic disadvantage to the company in the near-term if the issue is not addressed in the manner requested by the shareholder proposal

BIS may vote against shareholder proposals that, in our assessment, are too prescriptive or narrowly focused, deal with issues we consider to be the purview of the board or management, or where the company is already reporting in the spirit of the shareholder proposals even if not in its exact format.

In certain instances, BIS may instruct E&S shareholder proposals differently for different funds. This “split vote” will be based on BIS’ assessment of the materiality of the underlying issues in conjunction with an assessment that clients invested in the ESG funds may expect more urgent action be taken by the company. In our view, it is reasonable to expect that clients invested in ESG funds may be less patient with regard to evolution in corporate policies on material E&S matters and therefore wish to send a stronger signal to the company by supporting a shareholder proposal.

## Environmental shareholder proposals:

### Climate risks and opportunities:

Within the framework laid out above, as well as our guidance on “How BlackRock Investment Stewardship engages on climate risk”, we believe that climate presents significant investment risks and opportunities to many companies. We believe that the Financial Stability Board’s Task Force on Climate- Related Financial Disclosures (“TCFD”) and the Sustainability Accounting Standards Board (“SASB”) sector-specific disclosure standards provide useful guidance to companies on identifying, managing, and reporting on climate-related risks and opportunities. We expect companies to help their investors understand how the company may be impacted by climate change and to convey their governance around this issue through their corporate disclosures. For companies in sectors that are significantly exposed to climate-related risk, we expect the whole board to have demonstrable fluency in how climate risk affects the business, and how management mitigates that risk. Shareholder proposals related to climate risk, include, but are not limited to: the need for greater reporting on GHG

emissions; how the company’s strategy would fare under a 2 degree scenario;<sup>1</sup> the transition to a lower carbon economy (including greater integration of renewable energy etc.); and the company’s management of methane or other GHG emissions.

In assessing these proposals, we take into consideration the factors laid out above, as well as the robustness of the company’s existing disclosures and our understanding of its management of the issues as revealed through our engagements with the company and board members over time.

### **Sustainability Disclosures**

As set forth above, BIS expects companies to identify and report on the material, business-specific E&S risks and opportunities and to explain how these are managed. This includes how the company is assessing risks to the natural environment as a result, directly, or indirectly, of its operations. This may include impacts to forests, species, water, air, as well as the impact of waste, and of product life-cycle management. We believe that SASB’s sector-specific disclosure standards provide useful guidance to companies on identifying, managing, and reporting on material sector-specific sustainability issues. Using SASB as a guide, where necessary, we will engage with companies to understand their oversight and management of material sustainability factors. Where there is a shareholder proposal related to a matter of environmental sustainability, we will assess the quality of the company’s existing disclosures, the information gleaned through engagement, and the fund’s timeframe for change in reaching a decision on how to vote.

### **Social and political shareholder proposals:**

#### **Data Privacy and cybersecurity:**

BIS views cybersecurity as a significant enterprise-wide risk that can impact all levels of a company’s operational activities. Managing this risk is essential to preserving corporate value over time. We assess cybersecurity risk as one component of a company’s broader risk management and oversight responsibility. In any engagement related to risk, we seek to understand a company’s governance and strategy around the issue; the board’s oversight of management and the company’s processes; and the company’s disclosures regarding its preparedness to manage a risk-related event if and when one occurs. Where a company receives a shareholder proposal related to cybersecurity and data privacy accountability, we will review the company’s existing disclosures and take into account our understanding of its management of the issues as revealed through our engagements with the company and board members over time.

#### **Human Capital Management:**

A company’s approach to human capital management – employee development, diversity and a commitment to equal employment opportunity, health and safety, labor relations, and supply chain labor standards, amongst other things – will vary across sectors but are a factor in business continuity and success. In light of evolving market trends like shortages of skilled labor, uneven wage growth, and technology that is transforming the labor market, many companies and investors consider having a high standard of human capital management a competitive advantage. In our engagement on these factors, we seek to ensure companies are adopting the sound business practices likely to create an engaged and stable workforce. As part of the engagement, we are interested to know if, and how, boards oversee and work with management to improve performance in these areas. Such engagement also provides a lens into the company’s culture, long-term operational risk management practices, and, more broadly, the quality of the board’s oversight.

BIS is aware that disclosure of information on HCM is still evolving and that the way HCM risks manifest themselves may vary by industry and market. We are members of the Investor Advisory Group of the Sustainability Accounting Standards Board (SASB), which provides industry-specific HCM metrics. We encourage companies to aim over time to go beyond commentaries and provide more transparency on their practices. Investors recognize that most companies are already in possession of HCM data on their workforce, but are cautious of disclosing this information. We believe that both qualitative and quantifiable indicators can help effectively distinguish companies that are managing this important driver of value in their business. Where a company receives a shareholder proposal related to reporting on Equal Employment Opportunity (EEO), board diversity or pay disparity, we will take into account the company’s current disclosures as well as any insight we receive through our engagements with the company and board members in reaching a decision on how to vote.

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<sup>1</sup> As envisioned by the United Nations Framework Convention on Climate Change (“UNFCCC”) Conference of the Parties to the Paris Climate Accord in 2015.

## Human Rights

BIS believes that companies with strong corporate governance practices are more likely to manage the material environmental and social risks facing the company. To that end, we expect management and the board to oversee the health and safety of its workers, their working conditions, adherence to applicable labor and anti-discrimination laws, work day length and minimum wage best practices. Companies should also understand and manage their impact on communities, including lower income and indigenous populations. We expect companies and board to be able to explain their oversight of human rights-related issues. We expect that companies have policies in place to review their practices and supply chains and to have processes to institute corrective action where necessary. We also expect companies to be in compliance with international standards such as the UN Global Compact, where applicable, and we will take into account any violations thereof in the context of our engagement and voting decisions.

### Opioids:

Companies involved in the manufacture and distribution of opioids have come under increasing scrutiny over their ability to manage the financial and reputational risks associated with their products. We believe financial and reputational consequences of litigation, adverse publicity, and regulatory actions and investigations have the potential to impact these companies' long-term financial performance. Through engagement with such companies, we assess the robustness of management's approach to setting strategy around drug pricing, drug access, marketing, supply chain management, and public education around controlled substances. We also evaluate board oversight of reputational and legal risks facing the company, as well as the process and frequency by which the board is informed about corporate policies and procedures related to oversight of opioid-related risks. Where a company receives a shareholder proposal related to reporting or overseeing opioid-related risk, or proposals related to reviewing drug pricing or distribution practices, our assessment will take into account factors discussed above, and any knowledge gained from our engagement with the company and board members, as well as the time frame needed for change.

### Product safety, supply chains and distribution channels:

Companies in certain industries, such as the food and pharmaceutical sectors, may need to mitigate financial risks associated with their products, supply chains and/or their distribution channels. Where appropriate, BIS expects companies to disclose how they are addressing these risks for themselves and for their distributors, for example, by their participation in industry groups and/or initiatives or through certification by reputable organizations. Where a company receives a shareholder proposal on topics such as: animal welfare, animal testing, removal of antibiotic or genetically modified organism use in the supply chain or use of non-recycling packaging, we will assess the materiality of the issue to the company's business, review the company's existing disclosure, and if appropriate, engage the company's board and management team to enhance our understanding of their processes and oversight.

### Corporate political activities:

When presented with shareholder proposals requesting increased disclosure on corporate political activities, we may consider the political activities of that company and its peers, the existing level of disclosure, and our view of the associated risks. We generally believe that it is the duty of boards and management to determine the appropriate level of disclosure of all types of corporate activity, and we are generally not supportive of proposals that are overly prescriptive in nature. We may determine to support a shareholder proposal requesting additional reporting of corporate political activities where there seems to be either a significant potential threat or actual harm to shareholders' interests and where we believe the company has not already provided shareholders with sufficient information to assess the company's management of the risk. Finally, we believe that it is not the role of shareholders to suggest or approve corporate political activities; therefore we generally do not support proposals requesting a shareholder vote on political activities or expenditures.

# Appendix B – Description of Fixed-Income Ratings

A rating is generally assigned to a fixed-income security at the time of issuance by a credit rating agency designated as a nationally recognized statistical rating organization (“NRSRO”) by the SEC. While NRSROs may from time to time revise such ratings, they undertake no obligation to do so, and the ratings given to securities at issuance do not necessarily represent ratings which would be given to these securities on a particular subsequent date.

NRSROs may rate specific investments (e.g., bonds), issuers (e.g., corporations, governments and financial institutions) and/or programs (e.g., commercial paper programs). However, certain types of investments generally are not rated by NRSROs, such as certain government/sovereign obligations, US agency securities, commercial paper, time deposits at financial institutions, and derivative instruments such as credit default swaps. For these types of investments, as well as US Treasury securities (some of which are not rated), where a NRSRO has not rated the specific investment but has rated the investment’s issuer, program, financial institution or underlying reference asset, BFA may consider the investment to have the same NRSRO rating as its issuer, program, financial institution or underlying reference asset, as appropriate. In the case of municipal securities, where one NRSRO provides multiple ratings for the same security (e.g., “underlying,” “insured” and/or “enhanced” ratings), BFA may consider the security to have the highest of the multiple ratings.

New issue securities (regardless of type) rarely are rated by a NRSRO at the time of their initial offering. Preliminary prospectuses or term sheets for new issue securities often include an expected rating for the security (as determined by the underwriter and/or issuer) or a NRSRO rating for the issuer of the security. If applicable, when deciding whether to purchase a new issue security that has not yet been rated by a NRSRO, BFA may attribute an expected rating to the security based on: (i) the expected rating of the security set forth in the preliminary prospectus or term sheet for the security; (ii) the NRSRO’s rating for the issuer of the security set forth in the preliminary prospectus or term sheet for the security; or (iii) with respect to asset-backed securities, the rating of a prior issuance.

Where the investment objective of a fund is to track the performance of an index that includes credit ratings eligibility criteria as part of its index methodology, a fund may purchase any security within the index, such security having been determined by the index provider as meeting its credit ratings eligibility criteria. The credit ratings practices of an index provider may differ from BlackRock’s practices, as described above. Further, a fund may invest, directly or indirectly, in securities that are not rated by a rating agency or securities with a credit rating that differs from the credit rating specified in its index methodology in various circumstances, including where a security is downgraded but not yet removed from an index, following the removal of a security from an index prior to its sale by the fund or as a result of a corporate action or restructuring affecting an issuer of a security held by a fund.

Fixed-income securities which are unrated expose the investor to risks with respect to capacity to pay interest or repay principal which are similar to the risks of lower-rated speculative bonds. Evaluation of these securities is dependent on the investment adviser’s judgment, analysis and experience in the evaluation of such securities.

Investors should note that the assignment of a rating to a security by an NRSRO may not reflect the effect of recent developments on the issuer’s ability to make interest and principal payments or on the likelihood of default.

Securities deemed to be high yield are rated below Baa3 by Moody’s and below BBB- by S&P Global Ratings and Fitch.

The descriptions below relate to general long-term and short-term obligations of an issuer.

## Moody’s Ratings

### Long-Term Obligations

**Aaa:** Obligations rated Aaa are judged to be of the highest quality, subject to the lowest level of credit risk.

**Aa:** Obligations rated Aa are judged to be of high quality and are subject to very low credit risk.

**A:** Obligations rated A are judged to be upper-medium grade and are subject to low credit risk.

**Baa:** Obligations rated Baa are judged to be medium-grade and subject to moderate credit risk and as such may possess certain speculative characteristics.

**Ba:** Obligations rated Ba are judged to be speculative and are subject to substantial credit risk.

**B:** Obligations rated B are considered speculative and are subject to high credit risk.

**Caa:** Obligations rated Caa are judged to be speculative, of poor standing and are subject to very high credit risk.

**Ca:** Obligations rated Ca are highly speculative and are likely in, or very near, default, with some prospect of recovery of principal and interest.

**C:** Obligations rated C are the lowest rated and are typically in default, with little prospect for recovery of principal or interest.

**Note:** Moody's appends numerical modifiers 1, 2 and 3 in each generic rating classification from Aa through Caa. The modifier 1 indicates that the obligation ranks in the higher end of its generic rating category; the modifier 2 indicates a mid-range ranking; and the modifier 3 indicates a ranking in the lower end of that generic rating category.

**Absence of Rating:** Where no rating has been assigned or where a rating has been withdrawn, it may be for reasons unrelated to the creditworthiness of the issue.

Should no rating be assigned, the reason may be one of the following:

1. An application was not received or accepted.
2. The issue or issuer belongs to a group of securities or entities that are not rated as a matter of policy.
3. There is a lack of essential data pertaining to the issue or issuer.
4. The issue was privately placed, in which case the rating is not published in Moody's publications.

Withdrawal may occur if new and material circumstances arise, the effects of which preclude satisfactory analysis; if there is no longer available reasonable up-to-date data to permit a judgment to be formed; if a bond is called for redemption; or for other reasons.

### Short-Term Obligations

Moody's short-term debt ratings are opinions of the ability of issuers to honor short-term financial obligations, generally with an original maturity not exceeding thirteen months.

Moody's employs the following designations to indicate the relative repayment ability of rated issuers:

**P-1:** Issuers (or supporting institutions) rated Prime-1 have a superior ability to repay short-term debt obligations.

**P-2:** Issuers (or supporting institutions) rated Prime-2 have a strong ability to repay short-term debt obligations.

**P-3:** Issuers (or supporting institutions) rated Prime-3 have an acceptable ability to repay short-term obligations.

**NP:** Issuers (or supporting institutions) rated Not Prime do not fall within any of the Prime rating categories.

### US Municipal Short-Term Debt Obligations

There are three rating categories for short-term municipal obligations that are considered investment grade and are designated as Municipal Investment Grade (MIG). In addition, those short-term obligations that are of speculative quality are designated SG, or speculative grade. MIG ratings expire at the maturity of the obligation.

**MIG 1:** This designation denotes superior credit quality. Excellent protection is afforded by established cash flows, highly reliable liquidity support, or demonstrated broad-based access to the market for refinancing.

**MIG 2:** This designation denotes strong credit quality. Margins of protection are ample, although not as large as in the preceding group.

**MIG 3:** This designation denotes acceptable credit quality. Liquidity and cash-flow protection may be narrow, and market access for refinancing is likely to be less well-established.

**SG:** This designation denotes speculative-grade credit quality. Debt instruments in this category may lack sufficient margins of protection.

## S&P Global Ratings

### Long-Term Obligations

**AAA:** An obligation rated AAA has the highest rating assigned by S&P Global Ratings. The obligor's capacity to meet its financial commitment on the obligation is extremely strong.

**AA:** An obligation rated AA differs from the highest-rated obligations only to a small degree. The obligor's capacity to meet its financial commitment is very strong.

**A:** An obligation rated A is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher-rated categories. However, the obligor's capacity to meet its financial commitment on the obligation is still strong.

**BBB:** An obligation rated BBB exhibits adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitment on the obligation.

**BB; B; CCC; CC; and C:** Obligations rated BB, B, CCC, CC, and C are regarded as having significant speculative characteristics. BB indicates the least degree of speculation and C the highest. While such obligations will likely have some quality and protective characteristics, these may be outweighed by large uncertainties or major exposures to adverse conditions.

**BB:** An obligation rated BB is less vulnerable to nonpayment than other speculative issues. However, it faces major ongoing uncertainties or exposure to adverse business, financial, or economic conditions which could lead to the obligor's inadequate capacity to meet its financial commitment on the obligation.

**B:** An obligation rated B is more vulnerable to nonpayment than obligations rated BB, but the obligor currently has the capacity to meet its financial commitment on the obligation. Adverse business, financial, or economic conditions will likely impair the obligor's capacity or willingness to meet its financial commitment on the obligation.

**CCC:** An obligation rated CCC is currently vulnerable to nonpayment, and is dependent upon favorable business, financial, and economic conditions for the obligor to meet its financial commitment on the obligation. In the event of adverse business, financial, or economic conditions, the obligor is not likely to have the capacity to meet its financial commitment on the obligation.

**CC:** An obligation rated CC is currently highly vulnerable to nonpayment. The CC rating is used when a default has not yet occurred, but S&P Global Ratings expects default to be a virtual certainty, regardless of the anticipated time to default.

**C:** An obligation rated C is currently highly vulnerable to nonpayment, and the obligation is expected to have lower relative seniority or lower ultimate recovery compared to obligations that are rated higher.

**D:** An obligation rated D is in default or in breach of an imputed promise. For non-hybrid capital instruments, the D rating category is used when payments on an obligation are not made on the date due, unless S&P Global Ratings believes that such payments will be made within five business days in the absence of a stated grace period or within the earlier of the stated grace period or 30 calendar days. The D rating also will be used upon the filing of a bankruptcy petition or the taking of similar action and where default on an obligation is a virtual certainty, for example due to automatic stay provisions. An obligation's rating is lowered to D if it is subject to a distressed exchange offer.

**NR:** NR indicates no rating has been requested, or that there is insufficient information on which to base a rating, or that S&P Global Ratings does not rate a particular obligation as a matter of policy.

**Note:** The ratings from AA to CCC may be modified by the addition of a plus (+) or minus (-) sign to show relative standing within the major rating categories.

### Short-Term Obligations

**A-1:** A short-term obligation rated A-1 is rated in the highest category by S&P Global Ratings. The obligor's capacity to meet its financial commitment on the obligation is strong. Within this category, certain obligations are designated with a plus sign (+). This indicates that the obligor's capacity to meet its financial commitment on these obligations is extremely strong.

**A-2:** A short-term obligation rated A-2 is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher rating categories. However, the obligor's capacity to meet its financial commitment on the obligation is satisfactory.

**A-3:** A short-term obligation rated A-3 exhibits adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitment on the obligation.

**B:** A short-term obligation rated B is regarded as vulnerable and has significant speculative characteristics. The obligor currently has the capacity to meet its financial commitments; however, it faces major ongoing uncertainties which could lead to the obligor's inadequate capacity to meet its financial commitments.

**C:** A short-term obligation rated C is currently vulnerable to nonpayment and is dependent upon favorable business, financial, and economic conditions for the obligor to meet its financial commitment on the obligation.

**D:** A short-term obligation rated D is in default or in breach of an imputed promise. For non-hybrid capital instruments, the D rating category is used when payments on an obligation are not made on the date due, unless S&P Global Ratings believes that such payments will be made within any stated grace period. However, any stated grace period longer than five business days will be treated as five business days. The D rating also will be used upon the filing of a bankruptcy petition or the taking of a similar action and where default on an obligation is a virtual certainty, for example due to automatic stay provisions. An obligation's rating is lowered to D if it is subject to a distressed exchange offer.

### **Municipal Short-Term Obligations**

An S&P U.S. municipal note rating reflects S&P Global Ratings opinion about the liquidity factors and market access risks unique to the notes. Notes due in three years or less will likely receive a note rating. Notes with an original maturity of more than three years will most likely receive a long-term debt rating.

**SP-1:** Strong capacity to pay principal and interest. An issue determined to possess a very strong capacity to pay debt service is given a plus (+) designation.

**SP-2:** Satisfactory capacity to pay principal and interest, with some vulnerability to adverse financial and economic changes over the term of the notes.

**SP-3:** Speculative capacity to pay principal and interest.

### **Fitch Ratings**

#### **Long-Term Obligations**

**AAA:** Highest credit quality. AAA ratings denote the lowest expectation of credit risk. They are assigned only in cases of exceptionally strong capacity for payment of financial commitments. This capacity is highly unlikely to be adversely affected by foreseeable events.

**AA:** Very high credit quality. AA ratings denote expectations of very low credit risk. They indicate very strong capacity for payment of financial commitments. This capacity is not significantly vulnerable to foreseeable events.

**A:** High credit quality. A ratings denote expectations of low credit risk. The capacity for payment of financial commitments is considered strong. This capacity may, nevertheless, be more vulnerable to adverse business or economic conditions than is the case for higher ratings.

**BBB:** Good credit quality. BBB ratings indicate that expectations of credit risk are currently low. The capacity for payment of financial commitments is considered adequate but adverse business or economic conditions are more likely to impair this capacity.

**BB:** Speculative. BB ratings indicate an elevated vulnerability to credit risk, particularly in the event of adverse changes in business or economic conditions over time; however, business or financial alternatives may be available to allow financial commitments to be met.

**B:** Highly speculative. B ratings indicate that material credit risk is present.

**CCC:** Substantial credit risk. CCC ratings indicate that substantial credit risk is present.

**CC:** Very high levels of credit risk. CC ratings indicate very high levels of credit risk.

**C:** Exceptionally high levels of credit risk. C indicates exceptionally high levels of credit risk.

Defaulted obligations typically are not assigned RD or D ratings, but are instead rated in the B to C rating categories, depending upon their recovery prospects and other relevant characteristics. This approach better aligns obligations that have comparable overall expected loss but varying vulnerability to default and loss.

*Note: The modifiers “+” or “-” may be appended to a rating to denote relative status within major rating categories. Such suffixes are not added to the AAA obligation rating category, or to corporate finance obligation ratings in the categories below CCC.*

*The subscript ‘emr’ is appended to a rating to denote embedded market risk which is beyond the scope of the rating. The designation is intended to make clear that the rating solely addresses the counterparty risk of the issuing bank. It is not meant to indicate any limitation in the analysis of the counterparty risk, which in all other respects follows published Fitch criteria for analyzing the issuing financial institution. Fitch does not rate these instruments where the principal is to any degree subject to market risk.*

#### **Short-Term Obligations (Corporate and Public Finance)**

A short-term issuer or obligation rating is based in all cases on the short-term vulnerability to default of the rated entity or security stream and relates to the capacity to meet financial obligations in accordance with the documentation governing the relevant obligation. Short-Term Ratings are assigned to obligations whose initial maturity is viewed as “short-term” based on market convention. Typically, this means up to 13 months for corporate, sovereign, and structured obligations, and up to 36 months for obligations in U.S. public finance markets.

**F1:** Highest short-term credit quality. Indicates the strongest intrinsic capacity for timely payment of financial commitments; may have an added “+” to denote any exceptionally strong credit feature.

**F2:** Good short-term credit quality. Good intrinsic capacity for timely payment of financial commitments.

**F3:** Fair short-term credit quality. The intrinsic capacity for timely payment of financial commitments is adequate.

**B:** Speculative short-term credit quality. Minimal capacity for timely payment of financial commitments, plus heightened vulnerability to near term adverse changes in financial and economic conditions.

**C:** High short-term default risk. Default is a real possibility.

**RD:** Restricted default. Indicates an entity that has defaulted on one or more of its financial commitments, although it continues to meet other financial obligations. Typically applicable to entity ratings only.

**D:** Default. Indicates a broad-based default event for an entity, or the default of a short-term obligation.

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