STATEMENT OF ADDITIONAL INFORMATION

BLACKROCK LIQUIDITY FUNDS

TEMPCASH
TEMPFUND
FEDERAL TRUST FUND
FEDFUND
T-FUND
TREASURY TRUST FUND
CALIFORNIA MONEY FUND
MUNICASH
MUNIFUND
NEW YORK MONEY FUND

100 Bellevue Parkway, Wilmington, Delaware 19809 • Phone No. (800) 441-7450

This Statement of Additional Information of TempCash, TempFund, Federal Trust Fund, FedFund, T-Fund, Treasury Trust Fund, California Money Fund, MuniCash, MuniFund and New York Money Fund (collectively, the "Funds"), each a series of BlackRock Liquidity Funds (the "Trust"), is not a prospectus and should be read in conjunction with each of the current prospectuses of the Funds dated February 28, 2019, as they may from time to time be supplemented or revised, for: (i) the Administration, Cash Management, Cash Reserve, Dollar, Institutional, Capital, Private Client, Select and Premier Shares of the Funds; (ii) the Cash Plus Shares of TempCash, FedFund, California Money Fund, MuniCash and New York Money Fund; and (iii) the Plus Shares of TempFund, T-Fund, California Money Fund, MuniFund and New York Money Fund. No investment in shares should be made without reading the appropriate prospectus. This Statement of Additional Information is incorporated by reference in its entirety into each prospectus. The audited financial statements of each of the Funds are incorporated into this Statement of Additional Information by reference to the Funds' Annual Report to Shareholders for the fiscal year ended October 31, 2018 (the "Annual Report"). Copies of the prospectuses and Annual Report for each of the Funds may be obtained, without charge, by writing to the Trust, 100 Bellevue Parkway, Wilmington, DE 19809 or calling BlackRock Liquidity Funds at (800) 441-7450.

References to the Investment Company Act of 1940, as amended (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 "Commission" or 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.

BLACKROCK ADVISORS, LLC — MANAGER

BLACKROCK INVESTMENTS, LLC — DISTRIBUTOR

The date of this Statement of Additional Information is February 28, 2019

Fund and Share Class	Ticker Symbol
TEMPCASH	
Administration Shares	BLAXX
Cash Management Shares	BLMXX
Cash Plus Shares	—
Cash Reserve Shares	BLRXX
Dollar Shares	TCDXX
Institutional Shares	TMCXX
Capital Shares	TPCXX
Private Client Shares	—
Select Shares	—
Premier Shares	—
TEMPFUND	
Administration Shares	BTMXX
Cash Management Shares	BRTXX
Cash Reserve Shares	BRRXX
Dollar Shares	TDOXX
Institutional Shares	TMPXX
Plus Shares	—
Capital Shares	TFCXX
Private Client Shares	BTVXX
Select Shares	BTBXX
Premier Shares	BFPXX
FEDERAL TRUST FUND	
Administration Shares	BFTXX
Cash Management Shares	BFMXX
Cash Reserve Shares	BFDXX
Dollar Shares	TSDXX
Institutional Shares	TFFXX
Capital Shares	BECXX
Private Client Shares	—
Select Shares	—
Premier Shares	—
FEDFUND	
Administration Shares	BLFXX
Cash Management Shares	BFFXX
Cash Plus Shares	—
Cash Reserve Shares	BFRXX
Dollar Shares	TDDXX
Institutional Shares	TFDXX
Capital Shares	BFCXX
Private Client Shares	BRPXX
Select Shares	BFBXX
Premier Shares	BUPXX

Fund and Share Class	Ticker Symbol
T-FUND	
Administration Shares	BTAXX
Cash Management Shares	BPTXX
Cash Reserve Shares	BTRXX
Dollar Shares	TFEXX
Institutional Shares	TSTXX
Plus Shares	—
Capital Shares	BCHXX
Private Client Shares	BPVXX
Select Shares	BSLXX
Premier Shares	BEMXX
TREASURY TRUST FUND	
Administration Shares	BITXX
Cash Management Shares	BTCXX
Cash Reserve Shares	BTFXX
Dollar Shares	TTDXX
Institutional Shares	TTTXX
Capital Shares	BUCXX
Private Client Shares	—
Select Shares	TSLXX
Premier Shares	—
CALIFORNIA MONEY FUND	
Administration Shares	BLCXX
Cash Management Shares	BCCXX
Cash Plus Shares	—
Cash Reserve Shares	BCFXX
Dollar Shares	MUDXX
Institutional Shares	MUCXX
Plus Shares	—
Capital Shares	BPMXX
Private Client Shares	BCAXX
Select Shares	BCBXX
Premier Shares	BLBXX
MUNICASH	
Administration Shares	BMAXX
Cash Management Shares	BRCXX
Cash Plus Shares	—
Cash Reserve Shares	BMRXX
Dollar Shares	MCDXX
Institutional Shares	MCSXX
Capital Shares	MCPXX
Private Client Shares	—
Select Shares	—
Premier Shares	—

Fund and Share Class	Ticker Symbol
MUNIFUND	
Administration Shares	BIAXX
Cash Management Shares	BCMXX
Cash Reserve Shares	BMFXX
Dollar Shares	MFDXX
Institutional Shares	MFTXX
Plus Shares	—
Capital Shares	BPCXX
Private Client Shares	BMPXX
Select Shares	BMBXX
Premier Shares	BLSXX
NEW YORK MONEY FUND	
Administration Shares	BLNXX
Cash Management Shares	BLYXX
Cash Plus Shares	—
Cash Reserve Shares	BNRXX
Dollar Shares	BPDXX
Institutional Shares	MUNXX
Plus Shares	—
Capital Shares	BNCXX
Private Client Shares	BYPXX
Select Shares	BIBXX
Premier Shares	BNBXX

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General Information

BlackRock Liquidity Funds (the "Trust") was organized as a Delaware statutory trust on October 21, 1998. It is the successor to the following five investment companies: (1) Temporary Investment Fund, Inc.; (2) Trust for Federal Securities; (3) Municipal Fund for Temporary Investment; (4) Municipal Fund for California Investors, Inc.; and (5) Municipal Fund for New York Investors, Inc. (collectively the "Predecessor Companies"). The Predecessor Companies were comprised of the Trust's ten existing portfolios: TempCash, TempFund, Federal Trust Fund, FedFund, T-Fund, Treasury Trust Fund, California Money Fund, MuniCash, MuniFund and New York Money Fund (each, a "Fund" and collectively, the "Funds").

Each of TempCash, TempFund, California Money Fund, MuniCash and New York Money Fund is a non-retail, non-government money market fund under Rule 2a-7 under the 1940 Act (each an "Institutional Fund"). Each of Federal Trust Fund, FedFund, T-Fund and Treasury Trust Fund is a government money market fund under Rule 2a-7 (each a "Government Fund"). MuniFund is a retail money market fund under Rule 2a-7 (the "Retail Fund").

The Funds commenced operations as follows: TempCash — February 1984; TempFund — October 1973; Federal Trust Fund — December 1990; FedFund — October 1975; T-Fund — March 1980; Treasury Trust Fund — May 1989; California Money Fund — February 1983; MuniCash — February 1984; MuniFund — February 1980; and New York Money Fund — March 1983.

On February 10, 1999, each of the Funds was reorganized into a separate series of the Trust. The Trust is an open-end management investment company. Currently, the Trust offers shares of each of the ten Funds. Each Fund has elected to be classified as "diversified" under the 1940 Act, with the exception of California Money Fund and New York Money Fund. California Money Fund and New York Money Fund must satisfy the diversification requirements set forth in Rule 2a-7 under the 1940 Act and will thereby be deemed to be diversified under the 1940 Act. Each of the Funds offers Administration Shares, Cash Management Shares, Cash Reserve Shares, Dollar Shares, Institutional Shares, Capital Shares, Premier Shares, Private Client Shares and Select Shares. TempCash, FedFund, California Money Fund, MuniCash and New York Money Fund also offer Cash Plus Shares. TempFund, T-Fund, California Money Fund, MuniFund and New York Money Fund also offer Plus Shares.

On January 29, 2001, the Trust changed its name from "Provident Institutional Funds" to "BlackRock Provident Institutional Funds." On January 28, 2004, the Trust changed its name from "BlackRock Provident Institutional Funds" to "BlackRock Liquidity Funds." On February 21, 2008, the Funds changed the names of certain share classes as follows: "Bear Stearns Shares" were renamed "Select Shares"; "Bear Stearns Private Client Shares" were renamed "Private Client Shares"; "Bear Stearns Premier Shares" were renamed "Premier Shares"; and "Bear Stearns Premier Choice Shares" were renamed "Premier Choice Shares." On March 10, 2017, "Premier Choice Shares" were renamed "Capital Shares."

Investment Strategies, Risks And Policies

Portfolio Transactions

Subject to the general control of the Trust's Board of Trustees ("Board" or "Trustees"), BlackRock Advisors, LLC ("BlackRock" or the "Manager"), the Funds' investment manager, is responsible for, makes decisions with respect to, and places orders for all purchases and sales of portfolio securities for the Funds. BlackRock purchases portfolio securities for the Funds either directly from the issuer or from dealers who specialize in money market instruments. Such purchases are usually without brokerage commissions. In making portfolio investments, BlackRock seeks to obtain the best net price and the most favorable execution of orders. To the extent that the execution and price offered by more than one dealer are comparable, BlackRock may, in its discretion, effect transactions in portfolio securities with dealers who provide the Funds with research advice or other services.

Investment decisions for each Fund are made independently from those of the other Funds or other investment company portfolios or accounts advised or managed by BlackRock or its affiliates. Such other portfolios may also invest in the same securities as the Funds. When purchases or sales of the same security are made at

substantially the same time and price on behalf of such other portfolios, transactions are allocated as to amount, in a manner which BlackRock believes to be equitable to each Fund and its customers who also are acquiring securities. In some instances, this investment procedure may affect the size of the position obtained for a Fund. To the extent permitted by law, BlackRock may aggregate the securities to be sold or purchased for a Fund with those to be sold or purchased for such other portfolios in order to obtain best execution.

The Funds will not execute portfolio transactions through or acquire portfolio securities issued by BlackRock, BlackRock Investments, LLC ("BRIL") or any of their respective affiliated persons (as such term is defined in the 1940 Act), except to the extent permitted by the SEC. In addition, with respect to such transactions, securities, deposits and agreements, the Funds will not give preference to banks, savings and loan associations and other financial institutions ("Service Organizations") with whom a Fund enters into agreements concerning the provision of support services to customers who beneficially own Administration Shares, Cash Management Shares, Cash Plus Shares, Cash Reserve Shares, Dollar Shares, Plus Shares, Premier Shares, Capital Shares, Private Client Shares and Select Shares.

Federal Trust Fund and Treasury Trust Fund may engage in short-term trading for liquidity purposes. Each Fund's annual portfolio turnover will be relatively high because of the short-term nature of securities that the Funds are permitted to hold under SEC rules. However, this turnover is not expected to have a material effect on a Fund's net income. Each Fund's portfolio turnover rate is expected to be zero for regulatory reporting purposes.

Investment Strategies and Policies

The following supplements information contained in the prospectuses concerning the Funds' investment strategies and/or policies. To the extent an investment policy is discussed in this Statement of Additional Information ("SAI") but not in the prospectuses, such policy is not a principal policy of the Funds. Except as indicated, the information below relates only to those Funds that are authorized to invest in the instruments or securities described below.

Banking Industry Obligations. For purposes of TempCash's and TempFund's investment policies, the assets of a bank or savings institution will be deemed to include the assets of its domestic and foreign branches. Obligations of foreign banks in which TempCash and TempFund may invest include Eurodollar Certificates of Deposit ("ECDs"), which are U.S. dollar-denominated certificates of deposit issued by offices of foreign and domestic banks located outside the United States; Eurodollar Time Deposits ("ETDs"), which are U.S. dollar-denominated deposits in a foreign branch of a U.S. bank or a foreign bank; and Yankee Certificates of Deposit ("Yankee CDs"), which are U.S. dollar-denominated certificates of deposit issued by a U.S. branch of a foreign bank and held in the United States.

Commercial Paper. TempCash and TempFund may purchase commercial paper that is rated at the time of purchase in the highest rating category by at least two unaffiliated nationally recognized statistical rating organizations ("NRSROs") that rate such security (or its issuer), such as S&P Global Ratings ("S&P") or Moody's Investors Service, Inc. ("Moody's"). Commercial paper purchasable by TempCash and TempFund includes "Section 4(a)(2) paper," a term that includes debt obligations issued in reliance on the "private placement" exemption from registration afforded by Section 4(a)(2) of the Securities Act of 1933, as amended (the "1933 Act"). Section 4(a)(2) paper is restricted as to disposition under the Federal securities laws, and is frequently sold (and resold) to institutional investors such as TempCash or TempFund through or with the assistance of dealers who make a market in Section 4(a)(2) paper, thereby providing liquidity. Certain transactions in Section 4(a)(2) paper may qualify for the registration exemption provided in Rule 144A under the 1933 Act (see "Restricted Securities" below).

Cyber Security Issues. With the increased use of technologies such as the Internet to conduct business, each Fund is susceptible to operational, information security and related risks. In general, cyber incidents can result from deliberate attacks or unintentional events. Cyber attacks include, but are not limited to, gaining unauthorized access to digital systems (e.g., through "hacking" or malicious software coding) for purposes of misappropriating assets or sensitive information, corrupting data, or causing operational disruption. Cyber

attacks may also be carried out in a manner that does not require gaining unauthorized access, such as causing denial-of-service attacks on websites (*i.e.*, efforts to make network services unavailable to intended users). Cyber security failures or breaches by a Fund's adviser, sub-adviser(s) and other service providers (including, but not limited to, Fund accountants, custodians, transfer agents and administrators), and the issuers of securities in which the Funds invest, have the ability to cause disruptions and impact business operations, potentially resulting in financial losses, interference with a Fund's ability to calculate its net asset value ("NAV"), impediments to trading, the inability of Fund shareholders to transact business, violations of applicable privacy and other laws, regulatory fines, penalties, reputational damage, reimbursement or other compensation costs, or additional compliance costs. In addition, substantial costs may be incurred in order to prevent any cyber incidents in the future. While the Funds have established business continuity plans in the event of, and risk management systems to prevent, such cyber attacks, there are inherent limitations in such plans and systems including the possibility that certain risks have not been identified. Furthermore, the Funds cannot control the cyber security plans and systems put in place by service providers to the Funds and issuers in which the Funds invest. The Funds and their shareholders could be negatively impacted as a result.

Domestic Issuers. The Trust considers any issuer organized under the laws of a United States jurisdiction to be a United States issuer, and for purposes of TempCash's and TempFund's investments, the Trust considers an issuer to be a United States domestic issuer even if it is organized outside of a United States jurisdiction if the underlying credit support for the issuer's security is provided by an entity organized under the laws of a United States jurisdiction.

Forward Commitments. The Funds may purchase or sell money market securities on a forward commitment basis at fixed purchase terms. The purchase or sale will be recorded on the date a Fund enters into the commitment, and the value of the security will thereafter be reflected in the calculation of the Fund's NAV. The value of the security on the delivery date may be more or less than its purchase price. A Fund will segregate assets consisting of cash or liquid money market securities having a market value at all times at least equal to the amount of the forward purchase commitment. Although a Fund generally will enter into forward commitments with the intention of acquiring securities for its portfolio, a Fund may dispose of a commitment prior to settlement if the Manager deems it appropriate to do so.

There can be no assurance that a security purchased or sold through a forward commitment will be delivered. The value of securities in these transactions on the delivery date may be more or less than a Fund's purchase price. The Fund may bear the risk of a decline in the value of the security in these transactions and may not benefit from appreciation in the value of the security during the commitment period.

Funding Agreements. TempCash and TempFund may invest in guaranteed investment contracts and similar funding agreements. In connection with these investments, a Fund makes cash contributions to a deposit fund of the insurance company's general account. The insurance company then credits to the Fund on a periodic basis guaranteed interest, which is based on an index. The funding agreements provide that this guaranteed interest will not be less than a certain minimum rate. The purchase price paid for a funding agreement becomes part of the general assets of the insurance company, and the contract is paid from the general assets of the insurance company. Each Fund will only purchase funding agreements from highly rated insurance companies which, at the time of purchase, have assets of $1 billion or more and meet quality and credit standards established by the Manager under guidelines approved by the Board. Generally, funding agreements are not assignable or transferable without the permission of the issuing insurance companies, and an active secondary market in some funding agreements does not currently exist.

Illiquid Investments. No Fund will acquire any illiquid security (i.e., securities that cannot be sold or disposed of in the ordinary course of business within seven days at approximately the value ascribed to them by the Fund) if, immediately following such purchase, more than 5% of the Fund's total assets are invested in illiquid securities. The Manager will monitor the liquidity of illiquid investments under the supervision of the Board.

Inflation Risk. Like all mutual funds, the Funds are subject to inflation risk. Inflation risk is the risk that the present value of assets or income from investments will be less in the future as inflation decreases the value of money. As inflation increases, the present value of a Fund's assets can decline as can the value of a Fund's distributions.

Interest Rate Risk. The value of fixed income securities in the Funds can be expected to vary inversely with changes in prevailing interest rates. Fixed income securities with longer maturities, which tend to produce higher yields, are subject to potentially greater capital appreciation and depreciation than securities with shorter maturities.

Interfund Lending Program. Pursuant to an exemptive order granted by the SEC (the "IFL Order"), an open-end BlackRock fund (referred to as a "BlackRock fund" in this subsection), including a Fund, to the extent permitted by its investment policies and restrictions and subject to meeting the conditions of the IFL Order, has the ability to lend money to, and borrow money from, other BlackRock funds pursuant to a master interfund lending agreement (the "Interfund Lending Program"). Under the Interfund Lending Program, BlackRock funds may lend or borrow money for temporary purposes directly to or from other BlackRock funds (an "Interfund Loan"). All Interfund Loans would consist only of uninvested cash reserves that the lending BlackRock fund otherwise would invest in short-term repurchase agreements or other short-term instruments. Pursuant to the Funds' investment policies, each Fund may participate in the Interfund Lending Program as a borrower, but not as a lender. Typically the Funds will not need to participate as borrowers because the Funds are money market funds and are required to comply with the liquidity provisions of Rule 2a-7 under the 1940 Act.

If a BlackRock fund has outstanding bank borrowings, any Interfund Loans to such BlackRock fund would: (a) be at an interest rate equal to or lower than that of any outstanding bank loan, (b) be secured at least on an equal priority basis with at least an equivalent percentage of collateral to loan value as any outstanding bank loan that requires collateral, (c) have a maturity no longer than any outstanding bank loan (and in any event not over seven days), and (d) provide that, if an event of default occurs under any agreement evidencing an outstanding bank loan to the BlackRock fund, that event of default will automatically (without need for action or notice by the lending BlackRock fund) constitute an immediate event of default under the interfund lending agreement, entitling the lending BlackRock fund to call the Interfund Loan immediately (and exercise all rights with respect to any collateral), and cause such call to be made if the lending bank exercises its right to call its loan under its agreement with the borrowing BlackRock fund.

A BlackRock fund may borrow on an unsecured basis through the Interfund Lending Program only if its outstanding borrowings from all sources immediately after the borrowing total 10% or less of its total assets, provided that if the BlackRock fund has a secured loan outstanding from any other lender, including but not limited to another BlackRock fund, the borrowing BlackRock fund's borrowing will be secured on at least an equal priority basis with at least an equivalent percentage of collateral to loan value as any outstanding loan that requires collateral. If a borrowing BlackRock fund's total outstanding borrowings immediately after an Interfund Loan under the Interfund Lending Program exceed 10% of its total assets, the BlackRock fund may borrow through the Interfund Lending Program on a secured basis only. A BlackRock fund may not borrow under the Interfund Lending Program or from any other source if its total outstanding borrowings immediately after the borrowing would be more than 33⅓% of its total assets or any lower threshold provided for by the BlackRock fund's investment restrictions.

No BlackRock fund may lend to another BlackRock fund through the Interfund Lending Program if the loan would cause the lending BlackRock fund's aggregate outstanding loans through the Interfund Lending Program to exceed 15% of its current net assets at the time of the loan. A BlackRock fund's Interfund Loans to any one BlackRock fund shall not exceed 5% of the lending BlackRock fund's net assets. The duration of Interfund Loans will be limited to the time required to receive payment for securities sold, but in no event more than seven days, and for purposes of this condition, loans effected within seven days of each other will be treated as separate loan transactions. Each Interfund Loan may be called on one business day's notice by a lending BlackRock fund and may be repaid on any day by a borrowing BlackRock fund.

The limitations described above and the other conditions of the IFL Order permitting interfund lending are designed to minimize the risks associated with interfund lending for both the lending BlackRock fund and the borrowing BlackRock fund. However, no borrowing or lending activity is without risk. When a BlackRock fund borrows money from another BlackRock fund under the Interfund Lending Program, there is a risk that

the Interfund Loan could be called on one day's notice, in which case the borrowing BlackRock fund may have to seek to borrow from a bank, which would likely involve higher rates, seek an Interfund Loan from another BlackRock fund, or liquidate portfolio securities if no lending sources are available to meet its liquidity needs. Interfund Loans are subject to the risk that the borrowing BlackRock fund could be unable to repay the loan when due, and a delay in repayment could result in a lost opportunity by the lending BlackRock fund or force the lending BlackRock fund to borrow or liquidate securities to meet its liquidity needs. No BlackRock fund may borrow more than the amount permitted by its investment restrictions.

Investment Company Securities. The Funds may invest in securities issued by other open-end or closed-end investment companies as permitted by the 1940 Act and their investment strategies. Investments in other investment companies may cause a Fund (and, indirectly, the Fund's shareholders) to bear proportionately the costs incurred in connection with the other investment companies' operations. These investments may include, as consistent with a Fund's investment objectives and policies, certain variable rate demand securities issued by closed-end funds, which invest primarily in portfolios of taxable or tax-exempt securities. It is anticipated that the payments made on the variable rate demand securities issued by closed-end municipal bond funds will be exempt from federal income tax and, with respect to any such securities issued by single state municipal bond funds, exempt from the applicable state's income tax. Except as otherwise permitted under the 1940 Act, each Fund currently intends to limit its investments in other investment companies so that, as determined immediately after a security purchase is made: (a) not more than 5% of the value of the Fund's total assets will be invested in the securities of any one investment company; (b) not more than 10% of the Fund's total assets will be invested in the aggregate in securities of investment companies as a group; and (c) not more than 3% of the outstanding voting securities of any one investment company will be owned by the Fund. A Fund, as discussed below in "Investment Limitations," also may invest all of its assets in an open-end investment company or series thereof with substantially the same investment objectives, restrictions and policies as the Fund. Each Fund, pursuant to the 1940 Act and subject to certain conditions, may invest without limitation in affiliated registered and affiliated unregistered money market funds. (Alternatively, each Fund may rely on an exemptive order received from the SEC permitting it to invest in affiliated registered money market funds and in an affiliated private investment company, provided however, that in all cases the Fund's aggregate investment of cash in shares of such investment companies shall not exceed 25% of the Fund's total assets at any time.) As with other investments, investments in other investment companies are subject to market and selection risk. In addition, if a Fund acquires shares in investment companies, shareholders would bear both their proportionate share of expenses in the Fund (including management and advisory fees) and, indirectly, the expenses of such investment companies (including management and advisory fees). Investments by a Fund in wholly owned investment entities created under the laws of certain countries will not be deemed an investment in other investment companies.

Loan Participations. TempCash and TempFund may purchase loan participations. Loan participations are interests in loans which are administered by the lending bank or agent for a syndicate of lending banks, and sold by the lending bank or syndicate member. TempCash and TempFund may purchase interests in loan participations for which the underlying loan is issued by borrowers in whose obligations the Funds are permitted to invest. Such loan participations may have a demand provision that permits the Fund to require repayment within seven days. However, participations may not have such a demand provision and may not be otherwise marketable. Because the intermediary bank does not guarantee a loan participation in any way, a loan participation is subject to the credit risk generally associated with the underlying corporate borrower. In the event of the bankruptcy or insolvency of the borrower, a loan participation may be subject to certain defenses that can be asserted by such borrower as a result of improper conduct by the intermediary bank. In addition, in the event the underlying corporate borrower defaults, a Fund may be subject to delays, expenses and risks that are greater than those that would have been involved if the Fund had purchased a direct obligation (such as commercial paper) of the borrower. Under the terms of a loan participation, the purchasing Fund may be regarded as a creditor of the intermediary bank so that the Fund may also be subject to the risk that the issuing bank may become insolvent.

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 over-the-counter ("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, 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 "Proxy Voting Policies and Procedures."

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 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 redeem at any time some or all of the shares of a Fund acquired for their own accounts. A large 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 investment flexibility, portfolio diversification and expense ratio. 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.

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 "Additional Purchase and Redemption Information — Net Asset Value" in 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 a "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 of BlackRock 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, the Fund, BRIL and BlackRock each have 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 the Fund's portfolio transactions. Each Code of Ethics is also available on 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.

BlackRock will not purchase securities or other property from, or sell securities or other property to, a Fund, except that the Fund may in accordance with rules or guidance adopted under the 1940 Act engage in transactions with accounts that are affiliated with the 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 the Fund to purchase and another client of BlackRock to sell, or the 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 the Funds wish 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, in certain emerging or international markets, or are subject to corporate or regulatory ownership restrictions, or invest in certain futures and 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 or certain transactions undertaken, 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. When ownership in certain securities nears an applicable threshold, BlackRock may limit purchases in such securities to the issuer's weighting in the applicable benchmark used by BlackRock to manage the 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 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 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.

BlackRock may not serve as an Authorized Participant in the creation and redemption of BlackRock-advised ETFs.

BlackRock may enter into contractual arrangements with third-party service providers to the 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'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 BlackRock Advisors, LLC) 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.

Accounting Services

Effective June 12, 2017, JPM serves as the accounting services provider for the Funds. Among other services, JPM maintains records of purchases and sales of securities, receipts and disbursements of cash and other debits and credits; keeps accounting journals and ledgers; records capital share transactions; calculates expense caps, waivers and recoupments (if any); computes each Fund's net income and capital gains and dividends payable; calculates and reports NAV; works with independent pricing sources; reconciles securities and cash positions with each Fund's custodian; prepares certain financial statements, notices and reports; and prepares certain tax reports. In connection with its accounting services, JPM also provides certain administrative services. Prior to June 12, 2017, BNY Mellon served as the accounting services provider (together with JPM, the "Accounting Services Providers").

The table below shows the amounts paid by BlackRock to the Accounting Services Providers for accounting services on behalf of each Fund for the past three fiscal years:

	Amount Paid to the Accounting Services Providers for Services Provided to				
For the Fiscal Year Ended October 31,	**TempCash**	**TempFund**	**Federal Trust Fund**	**FedFund**	**T-Fund**
2018	$80,280	$215,149	$80,478	$1,329,561	$1,002,413
2017	$23,750	$174,946	$43,945	$693,023	$454,070
2016	$16,650	$259,552	$19,989	$124,236	$148,508
For the Fiscal Year Ended October 31,	**Treasury Trust Fund**	**California Money Fund**	**MuniCash**	**MuniFund**	**New York Money Fund**
2018	$437,147	$44,418	$95,920	$45,193	$43,965
2017	$215,076	$18,616	$45,479	$20,192	$18,179
2016	$89,033	$7,108	$18,619	$18,750	$6,538

Distributor

BRIL serves as the distributor of each Fund's shares. BRIL, an indirect wholly-owned subsidiary of BlackRock, Inc., is a Delaware limited liability corporation and has its principal offices at 40 East 52nd Street,

New York, New York 10022. BlackRock is an affiliate of BRIL. Each Fund's shares are sold on a continuous basis by the distributor as agent, although it is not obliged to sell any particular amount of shares. The distributor pays the cost of printing and distributing prospectuses to persons who are not shareholders of the Funds (excluding preparation and printing expenses necessary for the continued registration of the Fund shares). The distributor prepares or reviews, provides advice with respect to, and files with the federal and state agencies or other organizations as required by federal, state or other applicable laws and regulations, all sales literature (advertisements, brochures and shareholder communications) for each of the Funds and any class or subclass thereof.

Custodian

JPM, which has its principal offices at 383 Madison Avenue, New York, New York 10179, and The Bank of New York Mellon, which has its principal offices at 240 Greenwich, New York, New York 10286, each serve as a custodian for each Fund. Among other responsibilities, JPM maintains a custody account or accounts in the name of the Funds, receives and delivers all assets for each Fund upon purchase and upon sale or maturity, and collects and receives all income and other payments and distributions on account of the assets of the Funds. Additionally, The Bank of New York Mellon maintains a custody account or accounts in the name of the Funds for the limited purpose of holding certain cash assets of the Funds.

Transfer Agent

BNY Mellon Investment Servicing (US) Inc., which has its principal offices at 301 Bellevue Parkway, Wilmington, DE 19809, serves as the transfer agent and dividend disbursing agent for each Fund.

Service Organizations

The Funds may enter into agreements with institutional investors (previously defined as "Service Organizations") requiring them to provide certain services to their customers who beneficially own shares of the Funds. The Trust's agreements with Service Organizations are governed by plans (comprised of a "Shareholder Services Plan" for each of the Administration, Cash Management, Cash Plus, Cash Reserve, Dollar and Capital Shares; the "Cash Plus Shares Distribution Plan" for the Cash Plus Shares; the "Distribution and Services Plan" for the Plus Shares; and a "Shareholders Services Plan" and "Distribution Plan" for each of the Premier, Private Client and Select Shares), which have been adopted by the Board pursuant to applicable rules and regulations of the SEC (collectively, the "Plans"). Pursuant to the Plans, the Board reviews, at least quarterly, a written report of the amounts expended under the Trust's agreements with Service Organizations and the purposes for which the expenditures were made. In addition, the Trust's arrangements with Service Organizations must be approved annually by a majority of the Trust's Trustees, including a majority of the Trustees who are not "interested persons" of the Trust as defined in the 1940 Act and who have no direct or indirect financial interest in such arrangements.

Pursuant to the Dollar Shareholder Services Plan, each of the Funds may enter into agreements with Service Organizations requiring them to provide services to their customers who beneficially own Dollar Shares in consideration of 0.25% (on an annualized basis) of the average daily NAV of the Dollar Shares held by the Service Organizations for the benefit of their customers. Such services provided by a Service Organization may include: (i) answering shareholder inquiries regarding account status and history, the manner in which purchases, exchanges and redemption of shares may be effected and certain other matters pertaining to the shareholders' investments; (ii) assisting shareholders in designating and changing dividend options, account designations and addresses; (iii) aggregating and processing purchase and redemption requests from shareholders and placing net purchase and redemption orders with the distributor; (iv) providing shareholders with a service that invests the assets of their accounts in shares pursuant to specific or pre-authorized instructions; (v) processing dividend payments from the particular Fund on behalf of shareholders; (vi) providing information periodically to shareholders showing their positions in Dollar Shares; (vii) arranging for bank wires; (viii) responding to shareholder inquiries relating to a particular Fund or the

services performed by the Service Organization; (ix) providing sub-accounting with respect to a Fund's shares beneficially owned by shareholders or the information necessary for sub-accounting; (x) if required by law, forwarding shareholder communications from the particular Fund (such as proxies, shareholder reports, annual and semi-annual financial statements and dividend, distribution and tax notices) to shareholders; and (xi) other similar services to the extent permitted under applicable statutes, rules or regulations.

Pursuant to the Administration Shareholder Services Plan, each of the Funds may also enter into agreements with Service Organizations requiring them to provide certain services to their shareholders who beneficially own Administration Shares, in consideration of 0.10% (on an annualized basis) of the average daily NAV of the shares held by the Service Organization for the benefit of their shareholders. Services provided by the Service Organizations may include: (i) answering shareholder inquiries regarding account status and history, the manner in which purchases, exchanges and redemption of shares may be effected and certain other matters pertaining to the shareholders' investments; and (ii) assisting shareholders in designating and changing dividend options, account designations and addresses.

Pursuant to the Capital Shareholder Services Plan, each of the Funds may also enter into agreements with Service Organizations requiring them to provide certain services to their shareholders who beneficially own Capital Shares, in consideration of 0.05% (on an annualized basis) of the average daily NAV of the shares held by the Service Organization for the benefit of its shareholders. Services provided by the Service Organizations may include answering shareholder inquiries regarding the manner in which purchases, exchanges and redemption of shares may be effected.

Pursuant to the Cash Reserve Shareholder Services Plan, each of the Funds may also enter into agreements with Service Organizations requiring them to provide certain services to their shareholders who beneficially own Cash Reserve Shares, in consideration of a total of 0.40% (on an annualized basis) of the average NAV of the Cash Reserve Shares held by the Service Organization for the benefit of their shareholders. An initial 0.10% (on an annualized basis) of the average daily NAV of such Shares will be paid to Service Organizations for providing administrative services which may include the services provided for Administration Shares as described above. Another 0.25% (on an annualized basis) of the average daily NAV of such Shares will be paid to Service Organizations for providing support services which may include the services provided for Dollar Shares as described in sub-sections (iii) through (xi) above. Another 0.05% (on an annualized basis) of the average daily NAV of such Shares will be paid to Service Organizations for providing sweep and/or allocation services ("Sweep/Allocation Services") which may include: (i) providing the necessary computer hardware and software which links the Service Organization's demand deposit account ("DDA") and/or employee benefits system to an account management system; (ii) providing software that aggregates the shareholder's orders and establishes an order to purchase or redeem shares of a Fund based on established target levels for the shareholder's accounts; (iii) providing periodic statements showing a shareholder's account balance and, to the extent practicable, integrating such information with other shareholder transactions otherwise effected through or with the Service Organization; and (iv) furnishing (either separately or on an integrated basis with other reports sent to a shareholder by a Service Organization) monthly and year-end statements and confirmations of purchases, exchanges and redemptions.

Pursuant to the Cash Management Shareholder Services Plan, each of the Funds may also enter into agreements with Service Organizations requiring them to provide support services to their shareholders who beneficially own Cash Management Shares, in consideration of a total of 0.50% (on an annualized basis) of the average NAV of the Cash Management Shares held by the Service Organization for the benefit of their shareholders. An initial 0.10% (on an annualized basis) of the average daily NAV of such Shares will be paid to Service Organizations for providing administrative services which may include the services provided for Administration Shares as described above. Another 0.25% (on an annual basis) of the average daily NAV of such Shares will be paid to Service Organizations for providing services which may include the services provided for Dollar Shares as described in sub-sections (iii) through (xi) above. Another 0.05% (on an annualized basis) of the average daily NAV of such Shares will be paid to Service Organizations for providing Sweep/Allocation Services provided for Cash Reserve Shares as described above. Another 0.10% (on an annualized basis) of the average daily NAV of such Shares will be paid to Service Organizations for providing

the sweep marketing services which may include (i): marketing and activities, including direct mail promotions, that promote the Sweep/Allocation Services, (ii) expenditures for other similar marketing support such as for telephone facilities and in-house telemarketing, (iii) distribution of literature promoting Sweep/ Allocation Services, (iv) travel, equipment, printing, delivery and mailing costs and overhead and other office expenses attributable to the marketing of the Sweep/Allocation Services.

Pursuant to the Distribution and Services Plan (12b-1 Plan) for the Plus Shares, TempFund, T-Fund, California Money Fund, MuniFund and New York Money Fund may enter into agreements with Service Organizations requiring them to provide certain sales and support services to their shareholders who beneficially own Plus Shares in consideration of 0.25% (or 0.40% in the case of California Money Fund and New York Money Fund) (on an annualized basis) of the average daily NAV of the Plus Shares held by the Service Organization for the benefit of shareholders. Sales and support services provided by the Service Organizations may include: (a) reasonable assistance in connection with the distribution of Plus Shares to shareholders as requested from time to time by the distributor, which assistance may include forwarding sales literature and advertising provided by the distributor for shareholders; and (b) the following support services to shareholders who may from time to time acquire and beneficially own Plus Shares: (i) establishing and maintaining accounts and records relating to shareholders that invest in Plus Shares; (ii) processing dividend and distribution payments from a particular Fund on behalf of shareholders; (iii) providing information periodically to shareholders showing their positions in Plus Shares; (iv) arranging for bank wires; (v) responding to shareholder inquiries relating to the services performed by the Service Organization; (vi) responding to routine inquiries from shareholders concerning their investments in Plus Shares; (vii) providing subaccounting with respect to Plus Shares beneficially owned by shareholders or the information to the Trust necessary for subaccounting; (viii) if required by law, forwarding shareholder communications from a particular Fund (such as proxies, shareholder reports, annual and semi-annual financial statements and dividend, distribution and tax notices) to shareholders; (ix) assisting in processing purchase, exchange and redemption requests from shareholders and in placing such orders with service contractors; (x) assisting shareholders in changing dividend options, account designations and addresses; (xi) providing shareholders with a service that invests the assets of their accounts in Plus Shares pursuant to specific or pre-authorized instructions; and (xii) providing such other similar services as the distributor may reasonably request to the extent the Service Organization is permitted to do so under applicable statutes, rules and regulations.

Pursuant to the Cash Plus Shareholder Services Plan, TempCash, FedFund, California Money Fund, MuniCash and New York Money Fund may enter into agreements with a financial institution requiring it to provide services to its customers who beneficially own Cash Plus Shares in consideration of a total of 0.50% (on an annualized basis) of the average daily NAV of the Cash Plus Shares held by a financial institution for the benefit of its customers. An initial 0.10% (on an annualized basis) of the average daily NAV of Cash Plus Shares will be paid to a financial institution for providing services which may include the services provided for Administration Shares as described above. Another 0.25% (on an annualized basis) of the average daily NAV of Cash Plus Shares will be paid to a financial institution for providing support services which may include the services provided for Dollar Shares as described in sub-sections (iii) through (xi) above. Another 0.05% (on an annualized basis) of the average daily NAV of Cash Plus Shares will be paid to a financial institution for providing Sweep/Allocation Services provided for Cash Reserve Shares as described above. Another 0.10% (on an annualized basis) of the average daily NAV of such Shares will be paid to a financial institution for providing services which may include: (i) marketing and activities, including direct mail promotions that promote the Sweep/Allocation Services, (ii) expenditures for other similar marketing support such as for telephone facilities and in-house telemarketing, (iii) distribution of literature promoting Sweep/Allocation Services, (iv) travel, equipment, printing, delivery and mailing costs and other office expenses attributable to the marketing of the Sweep/Allocation Services.

Pursuant to the Cash Plus Shares Distribution Plan (12b-1 Plan), TempCash, FedFund, California Money Fund, MuniCash and New York Money Fund may enter into an agreement with a financial institution requiring it to provide certain sales and distribution services to its shareholders who beneficially own Cash Plus Shares in consideration of 0.35% (on an annualized basis) of the average daily NAV of the Cash Plus Shares held by a financial institution for the benefit of shareholders. Sales and support services provided by a

financial institution may include, among other things, reasonable assistance in connection with the distribution of Cash Plus Shares to shareholders as requested from time to time by the distributor, which assistance may include forwarding sales literature and advertising provided by the distributor for shareholders.

Pursuant to the Select Shares, Private Client Shares and Premier Shares Distribution (12b-1) Plans, each Fund will be subject to a distribution fee payable pursuant to their Distribution Plans and related Agreements which will not exceed 0.35%, 0.35% and 0.10%, respectively, of the average daily NAV of such shares held by Service Organizations for the benefit of their customers. Sales and distribution services provided by Service Organizations under the applicable Distribution Plan and related Agreement may include reasonable assistance in connection with the distribution of such shares to shareholders as requested from time to time by the distributor, which assistance may include forwarding sales literature and advertising provided by the distributor for Customers.

Select Shares, Private Client Shares and Premier Shares will also be subject to a fee payable pursuant to their respective Shareholder Service Plan and related Agreement which will not exceed 0.50% (on an annualized basis) of the average daily NAV of a particular Fund's Select Shares, Private Client Shares or Premier Shares held by Service Organizations for the benefit of their customers. An initial 0.10% (on an annualized basis) of the average daily NAV of such Shares will be paid to Service Organizations for providing administrative services which may include the services provided for Administration Shares as described above. Another 0.25% (on an annualized basis) of the average daily NAV of such Shares will be paid to Service Organizations for providing services which may include the services provided for Dollar Shares as described in sections (iii) through (xi) above. Another 0.05% (on an annualized basis) of the average daily NAV of such Shares will be paid to Service Organizations for providing Sweep/Allocation Services provided for Cash Reserve Shares as described above. Another 0.10% (on an annualized basis) of the average daily NAV of such Shares will be paid to Service Organizations for providing services which may include: (i) marketing activities, including direct mail promotions, that promote the Sweep/Allocation Services, (ii) expenditures for other similar marketing support such as for telephone facilities and in-house telemarketing, (iii) distribution of literature promoting Sweep/Allocation Services, (iv) travel, equipment, printing, delivery and mailing costs and other office expenses attributable to the marketing of the Sweep/Allocation Services.

With respect to the Select Shares, Premier Shares and Private Client Shares, through February 29, 2020, BRIL has contractually agreed to waive all or a portion of the fees to which it is entitled under the Distribution Plan and Service Organizations have contractually agreed to waive all or a portion of the fees to which they are entitled under the Distribution Plan and the Shareholder Services Plan and related Agreement so that after such waivers, the maximum net annual fund ordinary operating expense ratios do not exceed (i) 1.00% of the average daily net assets of each Fund for Select Shares; (ii) 0.68% of the average daily net assets of each Fund for Private Client Shares; and (iii) 0.68% of the average daily net assets of each Fund for Premier Shares.

The Board has approved the Trust's arrangements with Service Organizations based on information provided to the Board that there is a reasonable likelihood that the arrangements will benefit the class of shares of the Fund charged with such fees and its shareholders. Any material amendment to the Trust's arrangements with Service Organizations must be made in a manner approved by a majority of the Board (including a majority of the disinterested Trustees), and any amendment to increase materially the costs under the Distribution Plan (12b-1 Plan) of the Cash Plus Shares, Plus Shares, Select Shares, Private Client Shares or Premier Shares must be approved by the holders of a majority as defined in the 1940 Act of the applicable outstanding shares. (It should be noted that while the annual service fee with respect to Plus Shares is currently set at 0.25%, the Plan adopted by the Board with respect to California Money Fund and New York Money Fund permits the Board to increase this fee to 0.40% without shareholder approval.) So long as the Trust's arrangements with Service Organizations are in effect, the selection and nomination of the members of the Board who are not "interested persons" (as defined in the 1940 Act) of the Trust will be committed to the discretion of such Independent Trustees.

The Manager, BRIL, and/or their affiliates may pay additional compensation, from time to time, out of their assets and not as an additional charge to the Funds, to selected Service Organizations and other persons in connection with providing services to shareholders of the Trust. See "Miscellaneous — Other Information" below.

The following chart provides information with respect to the fees paid to, and waived by, Service Organizations during the fiscal year ended October 31, 2018. A portion of the fees collected by Service Organizations were paid to affiliates for providing shareholder servicing activities to the Funds' share classes.

Fund/Share Class*	Total Shareholder Servicing Fees	Total Distribution (12b-1) Fees	Shareholder Servicing Fees Waived	Distribution (12b-1) Fees Waived
TempCash/Dollar	$ 21,036	—	—	—
TempFund/Administration	$ 72,375	—	—	—
TempFund/Cash Management	$3,256,977	—	—	—
TempFund/Cash Reserve	$ 23,473	—	—	—
TempFund/Dollar	$ 243,203	—	—	—
TempFund/Select	$ 3	$ 2	—	—
TempFund/Private Client	$ 11,206	$ 7,844	—	$ 7,844
Federal Trust Fund/Administration	$ 55,073	—	—	—
Federal Trust Fund/Cash Management	$ 71,882	—	—	—
Federal Trust Fund/Cash Reserve	$ 1,587	—	—	—
Federal Trust Fund/Dollar	$ 306,202	—	—	—
FedFund/Administration	$2,589,170	—	—	—
FedFund/Cash Management	$ 750,120	—	—	—
FedFund/Cash Reserve	$4,667,642	—	—	—
FedFund/Dollar	$4,854,493	—	—	—
FedFund/Capital	$1,722,353	—	$344,637	—
FedFund/Select	$1,092,755	$765,026	—	$43,706
FedFund/Private Client	$ 5,611	$ 3,928	—	$ 3,772
T-Fund/Administration	$ 771,975	—	—	—
T-Fund/Cash Management	$3,046,518	—	—	—
T-Fund/Cash Reserve	$ 373,878	—	—	—
T-Fund/Dollar	$6,449,269	—	—	—
T-Fund/Capital	$2,775,580	—	$555,284	—
T-Fund/Select	$ 225,726	$157,990	—	$ 9,030
Treasury Trust Fund/Administration	$ 555,252	—	—	—
Treasury Trust Fund/Cash Management	$ 98,533	—	—	—
Treasury Trust Fund/Cash Reserve	$ 12,437	—	—	—
Treasury Trust Fund/Dollar	$1,295,853	—	—	—
Treasury Trust Fund/Select	$ 178,813	$125,094	—	$ 7,153
California Money Fund/Select	$ 8,125	$ 5,688	—	$ 1,189
California Money Fund/Private Client	$ 2,331	$ 1,632	$ 93	$ 1,632
MuniCash/Dollar	$ 4,143	—	—	—
MuniFund/Administration	$ 16,653	—	—	—
MuniFund/Cash Management	$ 156	—	—	—
MuniFund/Dollar	$ 11,485	—	—	—
MuniFund/Select	$ 14,061	$ 9,841	—	$ 1,486
MuniFund/Private Client	$ 1,655	$ 1,158	$ 66	$ 1,158
New York Money Fund/Select	$ 1,136	$ 795	—	$ 130
New York Money Fund/Private Client	$ 1,362	$ 954	$ 54	$ 954

* Share classes that had no shares outstanding throughout the fiscal year ended October 31, 2018 or that otherwise paid no fees to Service Organizations have been excluded from the chart.

Expenses

A Fund's expenses include taxes, interest, fees and salaries of the Trust's Trustees and officers who are not trustees, officers (except the Chief Compliance Officer) or employees of the Trust's service contractors, SEC fees, state securities registration fees, costs of preparing and printing prospectuses for regulatory purposes and for distribution to shareholders, advisory and administration fees, charges of the custodian and of the transfer and dividend disbursing agent, Service Organization fees, costs of the Funds' computer access program, certain insurance premiums, outside auditing and legal expenses, costs of shareholder reports and shareholder meetings and any extraordinary expenses. A Fund also pays for brokerage fees and commissions (if any) in connection with the purchase and sale of portfolio securities.

Additional Information Concerning Taxes

Each Fund qualified during its last taxable year and intends to continue to qualify as a regulated investment company under Subchapter M of Subtitle A, Chapter 1, of the Internal Revenue Code of 1986, as amended ("Code"), and to distribute all, or substantially all, of its income each year, so that the Fund itself generally will be relieved of federal income and excise taxes. To qualify for treatment as a regulated investment company, it must generally meet three annual tests.

First, each Fund must derive with respect to each taxable year at least 90% of its gross income from dividends, interest, certain payments with respect to securities loans, gains from the sale or other disposition of stock or securities or foreign currencies, other income derived with respect to its business of investing in such stock, securities, or currencies, and net income derived from an interest in a qualified publicly traded partnership.

Second, generally, at the close of each quarter of its taxable year, at least 50% of the value of each Fund's assets must consist of cash and cash items, U.S. government securities, securities of other regulated investment companies and securities of other issuers (as to each of which the Fund has not invested more than 5% of the value of its total assets in securities of such issuer and does not hold more than 10% of the outstanding voting securities of such issuer), and no more than 25% of the value of each Fund's total assets may be invested in the securities of (1) any one issuer (other than U.S. government securities and securities of other regulated investment companies), (2) two or more issuers that the Fund controls and which are engaged in the same or similar trades or businesses, or (3) one or more qualified publicly traded partnerships.

Third, each Fund must distribute an amount equal to at least the sum of 90% of its investment company taxable income (net investment income and the excess of net short-term capital gain over net long-term capital loss) and 90% of its net tax-exempt income, if any, for the year.

Each Fund intends to comply with these requirements. If a Fund were to fail to make sufficient distributions, it could be liable for corporate income tax and for excise tax in respect of the shortfall or, if the shortfall is large enough, the Fund could be disqualified as a regulated investment company. If for any taxable year a Fund were to fail to qualify as a regulated investment company notwithstanding the availability of certain relief provisions, all its taxable income would be subject to tax at regular corporate rates without any deduction for distributions to shareholders. In that event, taxable shareholders would recognize dividend income on distributions to the extent of the Fund's current and accumulated earnings and profits and corporate shareholders could be eligible for the dividends-received deduction.

A 4% non-deductible excise tax is imposed on a regulated investment company that fails to distribute with respect to each calendar year at least 98% of its ordinary taxable income for the calendar year and at least 98.2% of its capital gain net income (excess of net long-term capital gains over net short-term capital losses) for the one year period ending October 31 of such calendar year and 100% of any such amounts that were not distributed in the prior year. While each Fund intends to distribute its income and capital gains in the manner necessary to avoid imposition of the 4% excise tax, there can be no assurance that a sufficient amount of the Fund's taxable income and capital gains will be distributed to avoid entirely the imposition of the tax. In such event, a Fund will be liable for the tax only on the amount by which it does not meet the foregoing distribution requirements.

The Funds may invest in debt securities that are issued at a discount or provide for deferred interest. Even though a Fund receives no actual interest payments on these securities, it will be deemed to receive income equal, generally, to a portion of the excess of the face value of the securities over their issue price ("original issue discount") each year that the securities are held. Since the income earned by a Fund in a taxable year from such investments may not be represented by cash income, the Fund may have to dispose of securities that it might otherwise have continued to hold, or may have to borrow, to generate cash to satisfy its distribution requirements.

Interest and gain received by a Fund in connection with an investment in foreign securities may be subject to withholding and other taxes imposed by foreign countries. Tax treaties between certain countries and the United States may reduce or eliminate such taxes. Imposition of such taxes will reduce the return of the affected Fund.

Although each Fund expects to qualify as a "regulated investment company" and to be relieved of all or substantially all federal income taxes, depending upon the extent of its activities in states and localities in which its offices are maintained, in which agents or independent contractors are located, in which it is otherwise deemed to be conducting business or from which it is deriving income or otherwise has established a taxable nexus, a Fund may be subject to the tax laws of such states or localities.

Dividends paid by a Fund from its ordinary income or from an excess of net short-term capital gain over net long-term capital loss (together referred to hereafter as "ordinary income dividends") are taxable to shareholders as ordinary income. Distributions made from an excess of net long-term capital gain over net short-term capital loss ("capital gain dividends") are taxable to shareholders as long-term capital gain, regardless of the length of time the shareholder has owned Fund shares. Distributions paid by a Fund that are reported as exempt-interest dividends will not be subject to regular federal income tax. Exempt-interest dividends are included, however, in determining the portion of a shareholder's social security benefits and railroad retirement benefits that are subject to federal income taxes. Funds that invest in tax-exempt securities may at times buy such securities at a discount to their original issue price or, for securities issued with original issue discount, their revised issue price. For federal income tax purposes and for purposes of New York State, New York City, California personal income taxes and certain other state and local personal income taxes, all or a portion of such discount may be treated as "market discount," which is taxable as ordinary income (without regard to the exempt nature of the security) either when the security is disposed of at a gain or, if the particular Fund so elects, over the remaining term of the security. Market discount income is characterized as ordinary taxable income when distributed as a dividend to shareholders. Certain dividend income and long term capital gain are eligible for taxation at a reduced rate that applies to non-corporate shareholders. Under these rules, the portion of ordinary income dividends constituting "qualified dividend income" when paid by a registered investment company to a non-corporate shareholder may be taxable to such shareholder at long-term capital gain rates provided the shareholder has held the shares on which the dividend was paid for at least 61 days during the 121-day period that begins on the date that is 60 days before the date on which the shares become ex-dividend with respect to such dividend (or, in the case of certain accumulated dividends with respect to preferred stocks, the shareholder has held the shares on which the dividend was paid for at least 91 days during the 181-day period that begins on the date that is 90 days before the date on which the shares become ex-dividend with respect to such dividend). However, to the extent a Fund's distributions are derived from income on debt securities and short-term capital gains, such distributions will not constitute "qualified dividend income." Thus, ordinary income dividends paid by the Funds generally will not be eligible for taxation at the reduced rate.

In general, any loss upon the sale or exchange of Fund shares held for six months or less will be disallowed to the extent of any exempt interest dividends received with respect to the shares; to the extent not disallowed, such loss will be treated as long-term capital loss to the extent of any capital gain dividends received with respect to the shares. Such loss will be allowed, however, in the case of shares in a Fund that declares exempt interest dividends daily in an amount equal to at least 90% of its net tax-exempt interest and distributes such dividends at least monthly. Distributions in excess of a Fund's earnings and profits will first reduce the shareholder's adjusted tax basis in the shareholder's shares and any amount in excess of such basis will constitute capital gains to such

shareholder (assuming the shares are held as a capital asset). Long-term capital gains (that is, gains from a sale or exchange of capital assets held for more than one year) are generally taxed at preferential rates to non-corporate taxpayers. Each Fund will furnish its shareholders with a written statement reporting the amounts of its dividends paid during the year that qualify as capital gain dividends or exempt-interest dividends, as applicable, as well as the portion of an exempt-interest dividend that constitutes an item of tax preference, as discussed below.

Ordinary income and capital gain dividends are taxable to shareholders even if they are reinvested in additional shares of a Fund. Distributions by a Fund, whether from ordinary income or capital gains, generally will not be eligible for the dividends received deduction allowed to corporations under the Code. If a Fund pays a dividend in January that was declared in the previous October, November or December to shareholders of record on a specified date in one of such months, then such dividend will be treated for tax purposes as being paid by the Fund and received by its shareholders on December 31 of the year in which such dividend was declared.

Because each Institutional Fund offers and redeems its shares using a floating NAV, a redeeming shareholder may realize gains and losses because of differences between the NAV at which shares are acquired and the NAV at which shares are redeemed. Ordinarily, any gains and losses realized would have to be accounted for separately. In addition, because of the so-called "wash sale" rules, any loss realized by a shareholder on a redemption of Institutional Fund shares would ordinarily be disallowed to the extent such shareholder acquired new shares of the same Institutional Fund within 30 days before or after such a redemption.

The Treasury Department and IRS have determined not to apply the wash sale rules to the redemption of investment company shares if the investment company is regulated as, and holds itself out as, a money market fund under Rule 2a-7 of the 1940 Act and has a floating rate NAV at the time of redemption. In addition, a shareholder in a money market fund may elect to adopt a simplified, aggregate accounting method under which gains and losses can be netted based on the shareholder's taxable year rather than reported separately. Shareholders are urged to consult their tax advisors before deciding to adopt such accounting method.

If the Board imposes a liquidity fee on share redemptions of an Institutional Fund or the Retail Fund because of a drop in such Institutional Fund's or Retail Fund's weekly liquid assets below certain levels, the amount that would ordinarily be payable to a redeeming shareholder of such Institutional Fund or Retail Fund will be reduced, consequently reducing the amount of gain, or increasing the amount of loss, that would otherwise be reportable for income tax purposes. The liquidity fee cannot be separately claimed as a deduction.

Any such liquidity fee will constitute an asset of the imposing Institutional Fund or Retail Fund and will serve to benefit non-redeeming shareholders. However, the Institutional Funds and Retail Fund do not intend to distribute such fees to non-redeeming shareholders. Such fees may, however, raise an Institutional Fund's NAV, increasing the taxable income or reducing the deductible losses of shareholders that redeem their shares at a later time when such fees are not being charged. If an Institutional Fund or the Retail Fund receives liquidity fees, it will consider the appropriate tax treatment of such fees to the Institutional Fund or Retail Fund at such time.

If the value of assets held by a Government Fund or the Retail Fund declines, the Board may authorize a reduction in the number of outstanding shares of the Government Fund or Retail Fund in order to preserve a NAV of $1.00 per share. The basis of any shares eliminated in this manner from a shareholder's account would be added to the basis of the shareholder's remaining shares of the Government Fund or Retail Fund; a shareholder disposing of shares at that time might recognize a capital loss. Dividends, including dividends reinvested in additional shares of the Government Fund or Retail Fund, will nonetheless be fully taxable, even if the number of shares in shareholders' accounts has been reduced.

Except with respect to an Institutional Fund with a floating rate NAV relying on IRS guidelines described above, a loss realized by a shareholder on a sale or exchange of shares of a Fund will be disallowed if other shares of the Fund are acquired (whether through the automatic reinvestment of dividends or otherwise)

within a 61-day period beginning 30 days before and ending 30 days after the date on which the shares are sold or exchanged. In such a case, the basis of the shares acquired will be adjusted to reflect the disallowed loss.

Under certain provisions of the Code, some shareholders may be subject to a 24% withholding tax on ordinary income dividends, capital gain dividends and redemption amounts ("backup withholding"). Backup withholding could be required on distributions paid by California Money Fund, MuniCash, MuniFund and New York Money Fund if such Fund does not reasonably estimate that at least 95% of its distributions during the taxable year are comprised of exempt-interest dividends. Generally, shareholders subject to backup withholding will be non-corporate shareholders that do not have certified taxpayer identification numbers on file with a Fund or that, to a Fund's knowledge, have furnished incorrect numbers. When establishing an account, an investor must certify under penalty of perjury that such number is correct and that the investor is not otherwise subject to backup withholding. Backup withholding is not an additional tax. Any amount withheld generally may be allowed as a refund or a credit against a shareholder's federal income tax liability provided that the required information is timely provided to the IRS.

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 in any single taxable year (or a greater amount in a combination of taxable years), the shareholder must file a disclosure statement on Form 8886 with the IRS. Direct shareholders of portfolio securities are in many cases exempted from this reporting requirement, but under current guidance, shareholders of a registered investment company are not exempted. 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 advisers to determine the applicability of these regulations in light of their individual circumstances.

A 3.8% Medicare tax is imposed on the net investment income (which includes, but is not limited to, interest, dividends and net gain from investments) of U.S. individuals with income exceeding $200,000, or $250,000 if married filing jointly, and of trusts and estates. Net investment income does not include exempt-interest dividends received from a Fund.

Ordinary income dividends paid to shareholders who are nonresident aliens or foreign entities (other than pass-through entities to the extent owned by U.S. persons) will be subject to a 30% U.S. withholding tax under existing provisions of the Code applicable to foreign individuals and entities unless a reduced rate of withholding is provided under applicable treaty law. Nonresident shareholders are urged to consult their own tax advisers concerning applicability of the United States withholding tax. Capital gain dividends paid to shareholders that are nonresident aliens or foreign entities, if and to the extent properly reported as capital gains dividends, generally will not be subject to 30% withholding tax, unless certain exceptions apply. Dividends derived by a registered investment company from short-term capital gains and qualified net interest income (including income from original issue discount and market discount) and paid to stockholders who are nonresident aliens and foreign entities, if and to the extent properly reported as "interest-related dividends" or "short-term capital gain dividends," generally will not be subject to U.S. withholding tax under a temporary exemption. Where possible, each Fund intends to report distributions in this manner. However, depending on its circumstances, a Fund may report all, some or none of its potentially eligible dividends as interest-related dividends or as short-term capital gain dividends, 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 must comply with applicable certification requirements relating to its non-U.S. status (including, in general, furnishing an IRS Form W-8BEN (in the case of individuals), W-8BEN-E (in the case of entities) or substitute form). In the case of shares held through an intermediary, the intermediary may withhold even if the Fund reports the payment as an interest-related dividend or short-term capital gain dividend. Non-U.S. shareholders should contact their intermediaries with respect to the application of these rules to their accounts. It is not possible to predict what portion, if any, of a Fund's distributions will be reported as consisting of qualified short-term gain or qualified net interest income exempt from withholding in the hands of nonresident and foreign shareholders.

Separately, a 30% withholding tax is currently imposed on U.S.-source dividends, interest and other income items paid to (i) certain foreign financial institutions and investment funds, and (ii) certain other foreign entities. To avoid withholding, foreign financial institutions and investment funds will generally either need to (a) collect and report to the IRS detailed information identifying their U.S. accounts and U.S. account holders, comply with due diligence procedures for identifying U.S. accounts and withhold tax on certain payments made to noncomplying foreign entities and account holders or (b) if an intergovernmental agreement is entered into and implementing legislation is adopted, comply with the agreement and legislation. Other foreign entities will generally either need to provide detailed information identifying each substantial U.S. owner or certify there are no such owners.

Ordinary income and capital gain dividends paid by the Funds may also be subject to state and local taxes. However, certain states and localities are exempt from taxation on dividends paid by registered investment companies that are derived from interest on United States Treasury obligations. State and local law varies as to whether dividend income attributable to United States Treasury obligations is exempt from income tax.

The following is applicable to California Money Fund, MuniCash, MuniFund and New York Money Fund only:

For a Fund to pay tax-exempt dividends for any taxable year, at least 50% of the aggregate value of the Fund's assets at the close of each quarter of the Fund's taxable year must consist of securities whose interest is excluded from gross income under Section 103(a) of the Code. In purchasing exempt securities, the Funds intend to rely on opinions of bond counsel or counsel to the issuers for each issue as to the excludability of interest on such obligations from gross income for federal income tax purposes and taxable income for state and local tax purposes. The Funds will not undertake independent investigations concerning the tax-exempt status of such obligations, nor do they guarantee or represent that bond counsels' opinions are correct. Bond counsels' opinions will generally be based in part upon covenants by the issuers and related parties regarding continuing compliance with federal tax requirements. Tax laws not only limit the purposes for which tax-exempt bonds may be issued and the supply of such bonds, but also contain numerous and complex requirements that must be satisfied on a continuing basis in order for bonds to be and remain tax-exempt. If the issuer of a bond or a user of a bond-financed facility fails to comply with such requirements at any time, interest on the bond could become taxable, retroactive to the date the obligation was issued. In that event, a portion of a Fund's distributions attributable to interest the Fund received on such bond for the current year and for prior years could be characterized or recharacterized as taxable income. If a Fund satisfies the applicable requirements, dividends paid by the Fund which are attributable to tax exempt interest on exempt securities and reported by the Fund as exempt-interest dividends in a written statement furnished to its shareholders may be treated by shareholders as items of interest excludable from their gross income under Section 103(a) of the Code. The percentage of total dividends paid by a Fund with respect to any taxable year which qualifies as exempt-interest dividends for federal income tax purposes will be the same for all shareholders receiving dividends from the Fund with respect to such year.

Shares of the Funds may not be an appropriate investment for entities that are "substantial users" of facilities financed by "private activity bonds" or "related persons" thereof. "Substantial user" is defined under U.S. Treasury Regulations to include a non-exempt person who regularly uses a part of such facilities in his or her trade or business and (i) whose gross revenues derived with respect to the facilities financed by the issuance of bonds are more than 5% of the total revenues derived by all users of such facilities, (ii) who occupies more than 5% of the usable area of such facilities or (iii) for whom such facilities or a part thereof were specifically constructed, reconstructed or acquired. "Related persons" include certain related natural persons, affiliated corporations, a partnership and its partners and an S corporation and its shareholders.

Future legislation, regulations, rulings or court decisions may cause interest on municipal obligations to be subject, directly or indirectly, to federal income taxation or may cause interest on municipal obligations that are presently exempt from state and local taxation to be subject to state or local income taxation, or the value of such municipal obligations to be subject to state or local intangible personal property tax, or may otherwise prevent a Fund from realizing the full current benefit of the tax-exempt status of such securities. Any such change could also affect the market price of such securities, and thus the value of an investment in a Fund.

* * *

The foregoing is only a summary of some of the tax considerations generally affecting the Funds and their shareholders that are not described in the prospectuses. Investors are urged to consult their tax advisors with specific reference to their own tax situation.

DIVIDENDS

General

Each Fund declares dividends daily and distributes substantially all of its net investment income to shareholders monthly. Shares begin accruing dividends on the day the purchase order for the shares is effected and continue to accrue dividends through the day before such shares are redeemed. Unless they are reinvested, dividends are paid monthly by wire transfer.

Each Fund's net investment income for dividend purposes consists of (i) interest accrued and original issue discount earned on that Fund's assets, (ii) plus the amortization of market discount and minus the amortization of market premium on such assets and (iii) less accrued expenses directly attributable to that Fund and the general expenses (*e.g.*, legal, accounting and Trustees' fees) of the Trust prorated to such Fund on the basis of its relative net assets. Any realized short-term capital gains may also be distributed as dividends to Fund shareholders. In addition, a Fund's Administration Shares, Capital Shares, Cash Management Shares, Cash Plus Shares, Cash Reserve Shares, Dollar Shares, Plus Shares, Premier Shares, Private Client Shares and/or Select Shares bear exclusively the expense of fees paid to Service Organizations. (See "Management of the Funds — Service Organizations.")

As stated, the Trust uses its best efforts to maintain the NAV per share of each Government Fund and the Retail Fund at $1.00. As a result of a significant expense or realized or unrealized loss incurred by any Government Fund or the Retail Fund, it is possible that a Government Fund's or the Retail Fund's NAV per share may fall below $1.00.

ADDITIONAL DESCRIPTION CONCERNING SHARES

The Trust was organized as a Delaware statutory trust on October 21, 1998. The Trust's Declaration of Trust authorizes the Board to issue an unlimited number of full and fractional shares of beneficial interest in the Trust and to classify or reclassify any unissued shares into one or more series of shares. Pursuant to such authority, the Board has authorized the issuance of ten series of shares designated as TempCash, TempFund, Federal Trust Fund, FedFund, T-Fund, Treasury Trust Fund, California Money Fund, MuniCash, MuniFund and New York Money Fund. The Board has full power and authority, in its sole discretion, and without obtaining shareholder approval, to divide or combine the shares or any class or series thereof into a greater or lesser number, to classify or reclassify any issued shares or any class or series thereof into one or more classes or series of shares, and to take such other action with respect to the Trust's shares as the Board may deem desirable. The Agreement and Declaration of Trust authorizes the Trustees without shareholder approval to cause the Trust to merge or to consolidate with any corporation, association, trust or other organization in order to change the form of organization and/or domicile of the Trust or to sell or exchange all or substantially all of the assets of the Trust, or any series or class thereof, in dissolution of the Trust, or any series or class thereof. The Agreement and Declaration of Trust permits the termination of the Trust or of any series or class of the Trust by the Trustees without shareholder approval. The Declaration of Trust further authorizes the Trustees to classify or reclassify any series of shares into one or more classes.

The Trust does not presently intend to hold annual meetings of shareholders except as required by the 1940 Act or other applicable law. Upon the written request of shareholders of a Fund owning at least 25% of the Fund's shares, the Trust will call for a meeting of shareholders of such Fund to consider the removal of one or more Trustees and certain other matters. To the extent required by law, the Trust will assist in shareholder communication in such matters.

Holders of shares in a Fund of the Trust will vote in the aggregate and not by class or sub-class on all matters, except as described above, and except that each Fund's Administration, Capital, Cash Management, Cash

Plus, Cash Reserve, Dollar, Plus, Premier, Private Client and Select Shares, as described in "Service Organizations" above, shall be entitled to vote on matters submitted to a vote of shareholders pertaining to that Fund's arrangements with its Service Organizations. Further, shareholders of each of the Funds will vote in the aggregate and not by Fund except as otherwise required by law or when the Board determines that the matter to be voted upon affects only the interests of the shareholders of a particular Fund. Rule 18f-2 under the 1940 Act provides that any matter required to be submitted by the provisions of such Act or applicable state law, or otherwise, to the holders of the outstanding securities of an investment company such as the Trust shall not be deemed to have been effectively acted upon unless approved by the holders of a majority of the outstanding shares of each portfolio affected by the matter. Rule 18f-2 further provides that a portfolio shall be deemed to be affected by a matter unless it is clear that the interests of each portfolio in the matter are identical or that the matter does not affect any interest of the portfolio. Under the Rule, the approval of an investment advisory agreement or any change in a fundamental investment policy would be effectively acted upon with respect to a portfolio only if approved by the holders of a majority of the outstanding voting securities of such portfolio. However, the Rule also provides that the ratification of the selection of independent accountants, the approval of principal underwriting contracts, and the election of Trustees are not subject to the separate voting requirements and may be effectively acted upon by shareholders of the investment company voting without regard to portfolio.

Notwithstanding any provision of Delaware law requiring a greater vote of shares of the Trust's shares of beneficial interest (or of any class voting as a class) in connection with any Trust action, unless otherwise provided by law (for example by Rule 18f-2 discussed above) or by the Trust's Charter, the Trust may take or authorize such action upon the favorable vote of the holders of more than 50% of all of the outstanding shares of beneficial interest voting without regard to class (or portfolio).

COUNSEL

Sidley Austin LLP, 787 Seventh Avenue, New York, New York 10019, serves as counsel to the Trust.

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Deloitte & Touche LLP, with offices at 200 Berkeley Street, Boston, Massachusetts 02116, serves as the Funds' independent registered public accounting firm.

FINANCIAL STATEMENTS

The audited financial statements and notes thereto in the Trust's Annual Report to Shareholders for the fiscal year ended October 31, 2018 (the "2018 Annual Report") are incorporated in this SAI by reference. No other parts of the 2018 Annual Report are incorporated by reference herein. The financial statements included in the 2018 Annual Report have been audited by Deloitte & Touche LLP. The report of Deloitte & Touche LLP is incorporated herein by reference. Such financial statements have been incorporated herein in reliance upon such report given upon Deloitte & Touche LLP's authority as experts in accounting and auditing. Additional copies of the 2018 Annual Report may be obtained at no charge by telephoning the Trust at the telephone number appearing on the front page of this SAI.

MISCELLANEOUS

Proxy Voting Policies and Procedures

The Board has delegated the voting of proxies for the Funds' securities to BlackRock pursuant to BlackRock's proxy voting guidelines and procedures (the "BlackRock Proxy Voting Guidelines"). Under the BlackRock Proxy Voting Guidelines, BlackRock will vote proxies related to Fund securities in the best interests of the Fund and its stockholders. From time to time, a vote may present a conflict between the interests of the Fund's stockholders, on the one hand, and those of BlackRock, or any affiliated person of the Fund or BlackRock, on the other. BlackRock maintains policies and procedures that are designed to prevent undue influence on

BlackRock's proxy voting activity that might stem from any relationship between the issuer of a proxy (or any dissident shareholder) and BlackRock, BlackRock's affiliates, a Fund or a Fund's affiliates. Most conflicts are managed through a structural separation of BlackRock's Corporate Governance Group from BlackRock's employees with sales and client responsibilities. In addition, BlackRock maintains procedures to ensure that all engagements with corporate issuers or dissident shareholders are managed consistently and without regard to BlackRock's relationship with the issuer of the proxy or dissident shareholder. In certain instances, BlackRock 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. Copies of both the Funds' Proxy Voting Policy and the BlackRock Proxy Voting Guidelines are attached as Appendix D.

Information on how each Fund voted proxies relating to portfolio securities during the most recent 12-month period ended June 30 is available without charge, (i) at www.blackrock.com and (ii) on the Commission's website at http://www.sec.gov.

Additional Payments by BlackRock

From time to time, BlackRock, BRIL and/or their affiliates (referred to in this section collectively as "BlackRock") may compensate Service Organizations for the sale and distribution of shares of a Fund, for services to a Fund and its shareholders and/or for data provision or technology support. A Service Organization may perform these obligations itself or may arrange for a third party to perform them. These payments, which are not made pursuant to a Plan or otherwise paid by a Fund, are referred to as "Additional Payments" herein.

Additional Payments are made from BlackRock's own assets (which may come directly or indirectly from fees paid by a Fund to BlackRock for various services, such as investment advisory services). These payments are not an additional charge to a Fund or its shareholders and do not change the price paid by shareholders for the purchase of a Fund's shares or the amount a Fund receives as proceeds from such purchases. Additional Payments made to Service Organizations are in addition to any distribution or shareholder servicing fees paid under any Plan of any Fund, any sales charges, commissions or other concessions described in the prospectuses or this SAI, and any administrative, networking, recordkeeping, sub-transfer agency or sub-accounting fees payable by a Fund. Pursuant to applicable FINRA regulations, the details of certain of these payments, including the Service Organizations receiving such payments in connection with the sale and distribution of Fund shares, are required to be disclosed. While FINRA regulations limit the sales charges that shareholders may bear, there are no limits with regard to the amounts that BlackRock may pay out of its own assets.

Additional Payments may be made as a fixed dollar amount, may be based on the number of customer accounts maintained by a Service Organization, may be based on a percentage of the value of shares sold to, or held by, customers of the Service Organization involved, or may be calculated on another basis.

BlackRock negotiates Additional Payments with each Service Organization on an individual basis. Additional Payments may be different for different Service Organizations, and some Service Organizations may be paid pursuant to more than one of the calculations described above. Not all Service Organizations receive Additional Payments. Sales-based payments primarily create incentives to make new sales of shares of the Fund, and asset-based payments primarily create incentives to retain previously sold shares of the Fund. The level of payments made to these Service Organizations in any year will vary and may be limited to specific Funds or share classes. In certain cases, these payments may be subject to certain minimum payment levels.

The aggregate amount of Additional Payments made by BlackRock may be substantial and may be significant to certain Service Organizations. The categories of Additional Payments listed below are not mutually exclusive. The same Service Organization, or one or more of its affiliates, may receive payments under more than one category of Additional Payments.

A. Distribution and Marketing Support

Additional Payments may be made by BlackRock for distribution and marketing support activities. These payments may take the form of, among other things, "due diligence" payments for a Service Organization's examination of a Fund; payments for providing extra employee training and information relating to a Fund; fees for access (in some cases on a preferential basis) to the Service Organization's registered representatives, salespersons or other personnel, including at sales meetings and conferences; "shelf space" payments for placing the Fund on the Service Organization's platform(s); "listing" fees for the placing of the Fund on a dealer's list (which may be a preferred or recommended list) of mutual funds available for purchase by its customers or in certain sales programs from time to time; fees for providing assistance in promoting the sale of the Fund's shares (which may include promotions in communications with the Service Organization's customers, registered representatives, salespersons and/or other personnel); payments for the sale of shares and/or the maintenance of share balances; transaction fees (also referred to as "ticket charges"); and payments for infrastructure support. These payments normally will not exceed the sum of (a) 0.25% of such year's Fund sales by that Service Organization, and (b) 0.21% of the assets attributable to that Service Organization invested in a Fund.

B. Shareholder Services

Many Fund shares are owned or held by Service Organizations for the benefit of their customers. In these situations, a Fund may not maintain accounts in the name of the customers, and Service Organizations may perform some of the functions for these customers' accounts that the transfer agent would have performed if the accounts had been in the customers' names on the Fund's books. Such services include sub-accounting services, shareholder servicing and transaction processing services and are sometimes referred to as "recordkeeping," "sub-transfer agency," "sub-accounting," "networking" and/or "administrative" services. Additional Payments may exceed amounts that would be earned on these assets by the transfer agent for the performance of these or similar services. These Additional Payments made by BlackRock are in addition to any transfer agent, shareholder servicing and transaction processing fees paid by a Fund, as applicable.

C. Data Provision and Technology Support

BlackRock may make Additional Payments to Service Organizations for the provision of certain analytical or other data services relating to the Funds, such as statistical information regarding sales of the Funds, or technology support. Such Additional Payments are generally made as a fixed dollar amount, and not based on assets or sales.

D. Service Organizations Receiving Additional Payments

As of the date of this SAI, the Service Organizations listed below, and, in some cases, certain of the Service Organization's affiliates, may be receiving one or more types of Additional Payments. This list may change over time, and BlackRock may pay Service Organizations or their affiliates additional types of Additional Payments in the future. Please contact your Service Organization to determine whether it or its affiliate currently may be receiving such payments and to obtain further information regarding any such payments.

AccuTech Systems Corporation
ADP Broker-Dealer, Inc.
Advisor Group, Inc.
Alight Solutions LLC
Allianz Life Financial Services, LLC
Allianz Life Insurance Company of New York
Allianz Life Insurance Company of North America
American Enterprise Investment Services, Inc.
American Fidelity Assurance Company
American Fidelity Securities, Inc.
American General Life Insurance Company
American United Life Insurance Company
Annuity Investors Life Insurance Company
Ascensus Broker Dealer Services, Inc.
Ascensus, Inc.
AXA Advisors, LLC

AXA Equitable Life Insurance Company
Bank of America, N.A.
Bank of New York Mellon, The
Barclays Capital Inc.
BB&T Retirement & Institutional Services
Benefit Plans Administrative Services, Inc.
Benefit Trust Company
BlackRock Advisors, LLC
BMO Capital Markets Corp.
BNP Paribas Investment Partners UK Limited
BNY Mellon, N.A.
BOKF, N.A.
Broadridge Business Process Outsourcing, LLC
Brown Brothers Harriman & Co.
Capital One, N.A.
Cetera Advisor Networks LLC
Cetera Advisors LLC
Cetera Financial Group
Cetera Financial Specialists LLC
Cetera Investment Services LLC
Charles Schwab & Co., Inc.
Charles Schwab Bank
Chicago Mercantile Exchange Inc.
Citco Securities, LLC
CitiBank, National Association
Citigroup Global Markets, Inc.
Citizens Business Bank
CME Shareholder Servicing LLC
CMFG Life Insurance Company
Comerica Bank
Commonwealth Financial Network
Computershare Trust Company
Conduent HR Services, LLC
Credit Suisse Securities (USA) LLC
CSC Trust Company of Delaware
Delaware Life Insurance Company
Delaware Life Insurance Company of New York
Deutsche Bank AG
Deutsche Bank Trust Company Americas
Digital Retirement Solutions, Inc.
Edward D. Jones & Co., L.P.
Empire Fidelity Investments Life Insurance Company
E*trade Savings Bank
Federal Deposit Insurance Corporation
Fidelity Brokerage Services LLC
Fidelity Investments Institutional Operations Company, Inc.
Fidelity Investments Life Insurance Company
Fifth Third Securities, Inc.
First Allied Securities, Inc.
First Command Financial Planning, Inc.
First Hawaiian Bank
First Mercantile Trust Company
First MetLife Investors Insurance Company
First Republic Bank
First Security Benefit Life Insurance and Annuity Company of New York
First Symetra National Life Insurance Company of New York
FIS Brokerage & Securities Services LLC
Forethought Life Insurance Company
FSC Securities Corporation
Genworth Life and Annuity Insurance Company
Genworth Life Insurance Company of New York
Girard Securities, Inc.
Global Atlantic Distributors, LLC
Goldman Sachs & Co.
Great-West Financial Retirement Plan Services, LLC
Great-West Life & Annuity Insurance Company
Great-West Life & Annuity Insurance Company of New York
Guardian Insurance & Annuity Company, Inc., The
GWFS Equities, Inc.
Hartford Funds Management Company
Hartford Life Insurance Company
Hartford Securities Distribution Company, Inc.
Hazeltree Fund Services, Inc.
Hightower Securities, Inc.
Hilltop Securities Inc.
HSBC Bank USA, N.A.
Huntington Investment Company, The
Institutional Cash Distributors, LLC
Integrity Life Insurance Company
J.P. Morgan Securities LLC
Jefferies LLC
Jefferson National Life Insurance Company
Jefferson National Life Insurance Company of New York
John Hancock Life Insurance Company (U.S.A.)
John Hancock Life Insurance Company of New York
John Hancock Trust Company
JPMorgan Chase Bank, N.A.
Kestra Investment Services, LLC
Ladenburg Thalmann Advisor Network LLC
Lincoln Financial Advisors Corporation
Lincoln Financial Distributors, Inc.
Lincoln Financial Securities Corporation
Lincoln Life & Annuity Company of New York
Lincoln National Life Insurance Company
Lincoln Retirement Services LLC
LPL Financial LLC

M&T Securities Inc.
Manufacturers and Traders Trust Company
Massachusetts Mutual Life Insurance Company
Members Life Insurance Company
Mercer HR Services, LLC
Merrill Lynch, Pierce, Fenner & Smith Incorporated
Metavante Corporation
MetLife Insurance Company USA
Metropolitan Life Insurance Company
Mid Atlantic Capital Corporation
Midland Life Insurance Company
Minnesota Life Insurance Company
Mizuho Securities USA Inc.
MML Distributors, LLC
MML Investors Services, LLC
Morgan Stanley & Co. LLC
Morgan Stanley Distribution, Inc.
Morgan Stanley Smith Barney LLC
MUFG Union Bank, National Association
National Financial Services LLC
National Integrity Life Insurance Company
National Life Insurance Company
Nationwide Financial Services, Inc.
Nationwide Fund Distributors LLC
Nationwide Retirement Solutions
NCB Federal Savings Bank
New England Pension Plan Systems, LLC
New York Life Insurance and Annuity Corporation
Newport Retirement Services, Inc.
NEX Treasury Limited
Northbrook Bank & Trust Company
Northern Trust Company, The
Northwestern Mutual Investment Services, LLC
NYLife Distributors LLC
Oppenheimer & Co., Inc.
Orion Advisor Services, LLC
Pacific Life & Annuity Company
Pacific Life Insurance Company
Pacific Select Distributors, LLC
Park Avenue Securities LLC
Pershing LLC
PFPC Inc.
PFS Investments Inc.
Piper Jaffray & Co.
PNC Bank, National Association
PNC Capital Markets LLC
PNC Investments LLC
Primerica Shareholder Services, Inc.
Principal Life Insurance Company
Pruco Life Insurance Company
Pruco Life Insurance Company of New Jersey
Prudential Annuities Distributors, Inc.
Prudential Insurance Company of America
Raymond James & Associates, Inc.
Raymond James Financial Services, Inc.
RBC Capital Markets, LLC
Regions Bank
Reliance Trust Company
Reliastar Life Insurance Company
Reliastar Life Insurance Company of New York
RiverSource Distributors, Inc.
RiverSource Life Insurance Co. of New York
RiverSource Life Insurance Company
Royal Alliance Associates, Inc.
SagePoint Financial, Inc.
Sammons Retirement Solutions, Inc.
Santander Bank, N.A.
Saturna Trust Company
Security Benefit Life Insurance Company
Security Financial Resources, Inc.
Security Life of Denver Insurance Company
SEI Private Trust Company
SG Americas Securities, LLC
Silicon Valley Bank
Standard Insurance Company
State Farm Life and Accident Assurance Company
State Farm Life Insurance Company
State Farm VP Management Corp.
State Street Global Markets, LLC
Stifel, Nicolaus & Company, Incorporated
Summit Brokerage Services, Inc.
SunTrust Bank
SVB Asset Management
Symetra Life Insurance Company
Syntal Capital Partners, LLC
T. Rowe Price Retirement Plan Services, Inc.
Talcott Resolution Life and Annuity Insurance Company
Talcott Resolution Life Insurance Company
TD Ameritrade Clearing, Inc.
TD Ameritrade Trust Company
TD Ameritrade, Inc.
Teachers Insurance and Annuity Association of America
Transamerica Advisors Life Insurance Company
Transamerica Financial Life Insurance Company
Treasury Brokerage
U.S. Bancorp Investments, Inc.
U.S. Bank, National Association
UBATCO & Co.
UBS Financial Services, Inc.
UBS Securities LLC
UMB Bank, National Association
United States Life Insurance Company in the City of

New York, The
VALIC Retirement Services Company
Vanguard Group, Inc., The
Vanguard Marketing Corporation
Voya Financial Advisors, Inc.
Voya Financial Partners, LLC
Voya Insurance and Annuity Company
Voya Institutional Plan Services, LLC
Voya Investments Distributor, LLC
Voya Retirement Insurance and Annuity Company
Wells Fargo Advisors, LLC
Wells Fargo Advisors Financial Network, LLC
Wells Fargo Bank, N.A.
Wells Fargo Clearing Services, LLC
Wells Fargo Investments, LLC
Wells Fargo Securities, LLC
Wilmington Trust, National Association
Woodbury Financial Services, Inc.
ZB, National Association

E. Sponsorship and Other Incentive Payments and Services

In addition to the Additional Payments described above, BlackRock may contribute to various other incentive arrangements to promote the sale of shares, including hosting proprietary and financially sponsoring Service Organizations' training and educational seminars, conferences, meetings or events. BlackRock may also pay for the travel,

Separately, BlackRock has developed proprietary tools, calculators and related interactive or digital content that is made available through the www.BlackRock.com website at no additional cost to Service Organizations. BlackRock configures these tools and calculators and localizes the content for Service Organizations as part of its customary digital marketing support and promotion of the Funds or other BlackRock funds, iShares ETFs and other exchange-traded products.

F. Conflicts

Additional Payments made by BlackRock to a Service Organization or its affiliates or other incentive arrangements may be an important factor in the Service Organization's willingness to support the sale of a Fund and/or particular share class through its distribution system or to perform services with respect to such Fund. Additional Payments and other incentive arrangements may also be important factors in the Service Organization's willingness to recommend the BlackRock Fund complex in general.

BlackRock may be motivated to pay Additional Payments and other incentive compensation to promote the sale of Fund shares to customers of Service Organizations and the retention of those investments by such customers. To the extent Service Organizations sell more shares of a Fund or retain shares of a Fund in their customers' accounts, BlackRock benefits from the incremental management and other fees paid by the Fund with respect to those assets.

Service Organizations may have financial incentives for recommending a particular Fund, share class or fund complex over another. Service Organizations may charge their customers additional fees in connection with the purchase or redemption of Fund shares or for account-related services which are in addition to the sales and other charges described in the Fund's prospectuses and this SAI. Such charges may vary among Service Organizations but in all cases will be retained by the Service Organization and will not be remitted to a Fund or BlackRock.

Shareholders should consider whether such incentives exist when evaluating any recommendations from a Service Organization to purchase or sell shares of a Fund and when considering which share class is most appropriate. **You should consult with your Service Organization, and review carefully any disclosure by the Service Organization, as to compensation received by it or its affiliates and for more information about the payments described above.**

Shareholder Vote

As used in this SAI, a "majority of the outstanding shares" of a Fund or of a particular portfolio means, with respect to the approval of an investment advisory agreement, a distribution plan or a change in a fundamental investment policy, the lesser of (1) 67% of that Fund's shares (irrespective of class or subclass) or of the portfolio represented at a meeting at which the holders of more than 50% of the outstanding shares of that Fund or portfolio are present in person or by proxy, or (2) more than 50% of the outstanding shares of a Fund (irrespective of class or subclass) or of the portfolio.

Securities Holdings of Brokers

As of October 31, 2018, the value of a Fund's aggregate holdings, if any, of the securities of each of its regular brokers or dealers (as defined in Rule 10b-1 under the 1940 Act) or their parents is set forth below:

TempCash Regular Broker Dealer	Security	Value ($000)
KBC Group N.V.	D	164,992
Skandinaviska Enskilda Banken AB	D	138,011
ABN AMRO Securities LLC	D	100,000
Barclays Capital, Inc.	D	99,994
Swedbank AB	D	48,014

TempFund Regular Broker Dealer	Security	Value ($000)
Skandinaviska Enskilda Banken AB	D	568,083
KBC Group N.V.	D	549,977
Barclays Capital, Inc.	D	387,977
ABN AMRO Securities LLC	D	300,000
Swedbank AB	D	130,037

Certain Record Holders

To the knowledge of the Trust, the following entities owned of record or beneficially 5% or more of a class of a Fund's shares as of February 9, 2019:

Name	Address	Percent
TempCash		
Institutional Shares		
BPIF NSCC Omnibus Account	760 Moore Road King of Prussia, PA 19406	86.51%
Administration Shares		
Pershing LLC	1 Pershing Plaza Jersey City, NJ 07399-0001	100%
Dollar Shares		
Provident Advisers	Rooney Enterprises Inc. 3400 South Water Street Pittsburgh, PA 15203	75.23%
Provident Advisers	Chicago Title Insurance Co. Escrow Agent For HMC Prop 1994 Two Gateway Center 603 Stanwix Street, Suite 1900 Pittsburgh, PA 15222	12.36%
Provident Advisers	Chicago Title Insurance Co. Escrow Agent/Herman Lipsitz Two Gateway Center 603 Stanwix Street, 19th Floor Pittsburgh, PA 15222	12.36%
TempFund		
Institutional Shares		
Merrill Lynch Pierce Fenner & Smith	200 North College Street, 3rd Floor Charlotte, NC 28255	11.36%
Strategic Cash Portfolio II	400 Bellevue Parkway Wilmington, DE 19809	7.17%
Morgan Stanley Smith Barney LLC	1300 Thames Street, 6th Floor Baltimore, MD 21231-3495	6.47%

Name	Address	Percent
Administration Shares		
Citizens National Bank Trust Department	P.O. Box 911 Meridian, MS 39302	36.86%
Wilmington Trust	1100 Wehrle Drive Williamsville, NY 14221	29.19%
Merrill Lynch Pierce Fenner & Smith	200 North College Street, 3rd Floor Charlotte, NC 28255	17.00%
Delaware Trust Company	251 Little Falls Drive Wilmington, DE 19808	9.61%
Cash Management Shares		
Delaware Trust Company	251 Little Falls Drive Wilmington, DE 19808	57.99%
Merrill Lynch Pierce Fenner & Smith	4800 E Deerlake Drive Jacksonville, FL 32246-6484	42.00%
Cash Reserve Shares		
Citizens National Bank Trust Department	P.O. Box 911 Meridian, MS 39302	65.34%
Wells Fargo Clearing Services	2801 Market Street Saint Louis, MO 63103	6.25%
Merrill Lynch Pierce Fenner & Smith	4800 E Deerlake Drive Jacksonville, FL 32246-6484	5.18%
Dollar Shares		
Delaware Trust Company	251 Little Falls Drive Wilmington, DE 19808	34.53%
Merrill Lynch Pierce Fenner & Smith	200 North College Street, 3rd Floor Charlotte, NC 28255	27.46%
Merrill Lynch Pierce Fenner & Smith	4800 E Deerlake Drive Jacksonville, FL 32246-6484	15.95%
Citizens National Bank Trust Department	P.O. Box 911 Meridian, MS 39302	10.73%
Provident Advisers	32 Meadow View Court Leonia, NJ 07605	5.30%
Private Client Shares		
JP Morgan Securities LLC	4 Chase Metrotech Center, 7th Floor Brooklyn, NY 11245	21.51%
JP Morgan Securities LLC	4 Chase Metrotech Center, 7th Floor Brooklyn, NY 11245	8.17%
JP Morgan Securities LLC	4 Chase Metrotech Center, 7th Floor Brooklyn, NY 11245	6.97%
JP Morgan Securities LLC	4 Chase Metrotech Center, 7th Floor Brooklyn, NY 11245	5.05%
Select Shares		
Pershing LLC	1 Pershing Plaza Jersey City, NJ 07399-0001	100%
FedFund		
Institutional Shares		
Bank of New York Hare & Co.	111 Sanders Creek Parkway East Syracuse, NY 13057	15.27%
Merrill Lynch Pierce Fenner & Smith	4800 E Deerlake Drive Jacksonville, FL 32246-6484	11.75%
Merrill Lynch Pierce Fenner & Smith	200 North College Street, 3rd Floor Charlotte, NC 28255	5.72%
Administration Shares		
Wilmington Trust	1100 Wehrle Drive Williamsville, NY 14221	87.04%
Pershing LLC	1 Pershing Plaza Jersey City, NJ 07399-0001	11.23%
Cash Management Shares		
Delaware Trust Company	251 Little Falls Drive Wilmington, DE 19808	89.37%
Laba & Co. FBO Bank of America	135 S LaSalle Street Chicago, IL 60603	5.42%

Name	Address	Percent
Cash Reserve Shares		
Merrill Lynch Pierce Fenner & Smith	4800 E Deerlake Drive Jacksonville, FL 32246-6484	73.18%
Nabank & Co.	6242 E 41st Street BTC 2W Tulsa, OK 74135	26.27%
Dollar Shares		
Wilmington Trust	1100 Wehrle Drive Williamsville, NY 14221	30.69%
PNC Bank	1900 East 9th St B7 YB13 07 6 Cleveland, OH 44114	22.24%
Union Bank Trust Nominee FBO Cash Management Sweeps	P.O. Box 85484 San Diego, CA 92186	20.99%
HSBC Bank USA NA	452 Fifth Avenue New York, NY 10018	8.54%
Pershing LLC	1 Pershing Plaza Jersey City, NJ 07399-0001	7.75%
Private Client Shares		
JP Morgan Securities LLC	4 Chase Metrotech Center, 7th Floor Brooklyn, NY 11245	100%
Select Shares		
Pershing LLC	1 Pershing Plaza Jersey City, NJ 07399-0001	99.99%
Capital Shares		
Silicon Valley Bank	3003 Tasman Drive Santa Clara, CA 95054	99.99%
Federal Trust Fund		
Institutional Shares		
Bank of America Model Bank	901 Main Street, 66th Floor Dallas, TX 75202-0000	39.33%
BPIF NSCC Omnibus Account	760 Moore Road King of Prussia, PA 19406	18.51%
State Street Bank FBO Cash Sweep Clients	1776 Heritage Drive Quincy, MA 02170	15.40%
Merrill Lynch Pierce Fenner & Smith	200 North College Street, 3rd Floor Charlotte, NC 28255	9.49%
Bank of America Global Finance	901 Main Street, 66th Floor Dallas, TX 75202-3738	8.21%
Administration Shares		
Merrill Lynch Pierce Fenner & Smith	200 North College Street, 3rd Floor Charlotte, NC 28255	86.92%
Voya Institutional Trust Co.	1 Orange Way Windsor, CT 06066	13.07%
Cash Management Shares		
BPIF NSCC Omnibus Account	760 Moore Road King of Prussia, PA 19406	99.99%
Cash Reserve Shares		
Randall S Saunders and Moya Saunders Jt. Ten.	401 Brushy Ridge Road New Canaan, CT 06840	96.40%
Dollar Shares		
BPIF NSCC Omnibus Account	760 Moore Road King of Prussia, PA 19406	51.40%
Merrill Lynch Pierce Fenner & Smith	200 North College Street, 3rd Floor Charlotte, NC 28255	43.45%
T-Fund		
Institutional Shares		
Bank of New York Hare & Co. 2	111 Sanders Creek Parkway East Syracuse, NY 13057	13.84%
Current Asset Fund Ltd.	P.O. Box 309 George Town, Grand Cayman Islands	9.78%
State Street Bank FBO Cash Sweep Clients	1776 Heritage Drive Quincy, MA 02170	8.06%
JP Morgan Chase Bank N.A.	10410 Highland Manor Drive, 3rd Floor Tampa, FL 33610	5.91%
Bank of New York Hare & Co. 2B	111 Sanders Creek Parkway East Syracuse, NY 13057	5.79%

Name	Address	Percent
Administration Shares		
Wilmington Trust	1100 Wehrle Drive Williamsville, NY 14221	60.49%
Pershing LLC	1 Pershing Plaza Jersey City, NJ 07399-0001	39.46%
Cash Management Shares		
Assetmark Trust Company FBO Assetmark Inc. & Mutual Clients	3200 N Central Avenue 7th Floor Phoenix, AZ 85012	26.56%
Delaware Trust Company	251 Little Falls Drive Wilmington, DE 19808	16.08%
BPIF NSCC Omnibus Account	760 Moore Road King of Prussia, PA 19406	16.06%
Jefferies LLC FBO MSC Partners LP	101 Hudson Street, 11th Floor Jersey City, NJ 07302	6.34%
Cash Reserve Shares		
Bank of New York Hare & Co. 2	111 Sanders Creek Parkway East Syracuse, NY 13057	87.88%
First Republic Bank	111 Pine Street San Francisco, CA 94111-0000	11.73%
Dollar Shares		
Citibank NA FBO	480 Washington Blvd. 30th Floor Jersey City, NJ 07310	16.14%
PNC Bank	1900 East 9th St B7 YB13 07 6 Cleveland, OH 44114	15.86%
Citibank NA FBO	480 Washington Blvd. 30th Floor Jersey City, NJ 07310	14.97%
Union Bank Trust Nominee FBO Cash Management Sweep	P.O. Box 85484 San Diego, CA 92186	14.20%
Wilmington Trust	1100 Wehrle Drive Williamsville, NY 14221	10.02%
Select Shares		
Pershing LLC	1 Pershing Plaza Jersey City, NJ 07399-0001	99.99%
Capital Shares		
Silicon Valley Bank	3003 Tasman Drive Santa Clara, CA 95054	99.82%
Treasury Trust Fund		
Institutional Shares		
Bank of New York Hare & Co. 2B	111 Sanders Creek Parkway East Syracuse, NY 13057	24.44%
Bank of America	1201 Main Street, 9th Floor Dallas, TX 75202	16.34%
Merrill Lynch Pierce Fenner & Smith	4800 E Deerlake Drive Jacksonville, FL 32246-6484	13.95%
Wells Fargo Bank NA	550 South 4th Street Minneapolis, MN 55415	8.81%
Administration Shares		
Wilmington Trust	1100 Wehrle Drive Williamsville, NY 14221	55.06%
SEI Private Trust Company	One Freedom Valley Drive Oaks, PA 19456	9.41%
Pershing LLC	1 Pershing Plaza Jersey City, NJ 07399-0001	7.13%
Cash Management Shares		
Laba & Co. FBO Bank of America	135 S. LaSalle Street Chicago, IL 60603	100%
Cash Reserve Shares		
Merrill Lynch Pierce Fenner & Smith	4800 E Deerlake Drive Jacksonville, FL 32246-6484	99.45%

Name	Address	Percent
Dollar Shares		
PNC Bank	1900 East 9th Street B7 YB13 07 6 Cleveland, OH 44114	46.82%
Wilmington Trust	1100 Wehrle Drive Williamsville, NY 14221	12.94%
Knotfloat & Co. State Street Bank FBO Sweep	1200 Crown Colony Drive Quincy, MA 02169	12.09%
Union Bank Trust Nominee FBO Cash Management Sweep	P.O. Box 85484 San Diego, CA 92186	9.70%
Bank of New York Hare & Co. 2	111 Sanders Creek Parkway East Syracuse, NY 13057	6.21%
Pershing LLC	1 Pershing Plaza Jersey City, NJ 07399-0001	5.91%
Select Shares		
Pershing LLC	1 Pershing Plaza Jersey City, NJ 07399-0001	99.99%
California Money Fund		
Institutional Shares		
State Street FBO Cash Sweep BlackRock Clients	1776 Heritage Dr. Quincy, MA 02170	94.10%
MuniCash		
Institutional Shares		
BPIF NSCC Omnibus Account	760 Moore Road King of Prussia, PA 19406	62.93%
State Street FBO Cash Sweep BlackRock Clients	1776 Heritage Dr. Quincy, MA 02170	19.96%
Administration Shares		
Pershing LLC	1 Pershing Plaza Jersey City, NJ 07399-0001	100%
Dollar Shares		
Citizens National Bank Trust Department	P.O. Box 911 Meridian, MS 39302	87.17%
BPIF NSCC Omnibus Account	760 Moore Road King of Prussia, PA 19406	6.81%
Provident Advisers	P.O. Box 215 Zelienople, PA 16063	6.01%
MuniFund		
Institutional Shares		
Broadway National Bank	P.O. Box 17001 San Antonio, TX 78286	33.69%
Lobatco – Texas Bank & Trust	1800 NW Loop 281 Longview, TX 75604	16.48%
JPMCC-Chase Processing 28521	4 Chase Metrotech Center, 7th Floor Brooklyn, NY 11245	13.13%
Morgan Stanley Smith Barney LLC	1300 Thames Street, 6th Floor Baltimore, MD 21231-3495	12.78%
William L Mack	2115 Linwood Ave, Suite 110 Fort Lee, NJ 07024	5.78%
Maril and Co. FBO	4900 W Brown Deer Road Brown Deer, WI 53223	5.77%
Administration Shares		
JP Morgan Securities LLC	4 Chase Metrotech Center, 7th Floor Brooklyn, NY 11245	98.51%
Dollar Shares		
Lobatco – Texas Bank & Trust	1800 NW Loop 281 Longview, TX 75604	100%
Private Client Shares		
JP Morgan Securities LLC	4 Chase Metrotech Center, 7th Floor Brooklyn, NY 11245	100%

Name	Address	Percent
Select Shares		
Pershing LLC	1 Pershing Plaza Jersey City, NJ 07399-0001	99.99%
New York Money Fund		
Institutional Shares		
State Street FBO Cash Sweep BlackRock Clients	1776 Heritage Dr. Quincy, MA 02170	79.53%
BPIF NSCC Omnibus Account	760 Moore Road King of Prussia, PA 19406	10.68%
SEI Private Trust Company	One Freedom Valley Drive Oaks, PA 19456	9.33%

APPENDIX A

DESCRIPTION OF BOND RATINGS

A Description of Moody's Investors Service, Inc.'s ("Moody's") Global Rating Scales

Ratings assigned on Moody's global long-term and short-term rating scales are forward-looking opinions of the relative credit risks of financial obligations issued by non-financial corporates, financial institutions, structured finance vehicles, project finance vehicles, and public sector entities. Long-term ratings are assigned to issuers or obligations with an original maturity of one year or more and reflect both on the likelihood of a default on contractually promised payments and the expected financial loss suffered in the event of default. Short-term ratings are assigned to obligations with an original maturity of thirteen months or less and reflect both on the likelihood of a default on contractually promised payments and the expected financial loss suffered in the event of default.

Description of Moody's Long-Term Obligation Ratings

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 to 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.

Hybrid Indicator (hyb)

The hybrid indicator (hyb) is appended to all ratings of hybrid securities issued by banks, insurers, finance companies, and securities firms. By their terms, hybrid securities allow for the omission of scheduled dividends, interest, or principal payments, which can potentially result in impairment if such an omission occurs. Hybrid securities may also be subject to contractually allowable write-downs of principal that could result in impairment. Together with the hybrid indicator, the long-term obligation rating assigned to a hybrid security is an expression of the relative credit risk associated with that security.

Description of Short-Term Obligation Ratings

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.

Description of Moody's US Municipal Short-Term Obligation Ratings

The Municipal Investment Grade ("MIG") scale is used to rate US municipal bond anticipation notes of up to three years maturity. Municipal notes rated on the MIG scale may be secured by either pledged revenues or proceeds of a take-out financing received prior to note maturity. MIG ratings expire at the maturity of the obligation, and the issuer's long-term rating is only one consideration in assigning the MIG rating. MIG ratings are divided into three levels — MIG 1 through MIG 3 — while speculative grade short-term obligations are designated SG.

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.

Description of Moody's Demand Obligation Ratings

In the case of variable rate demand obligations ("VRDOs"), a two-component rating is assigned: a long or short-term debt rating and a demand obligation rating. The first element represents Moody's evaluation of risk associated

with scheduled principal and interest payments. The second element represents Moody's evaluation of risk associated with the ability to receive purchase price upon demand ("demand feature"). The second element uses a rating from a variation of the MIG scale called the Variable Municipal Investment Grade ("VMIG") scale.

VMIG 1	This designation denotes superior credit quality. Excellent protection is afforded by the superior short-term credit strength of the liquidity provider and structural and legal protections that ensure the timely payment of purchase price upon demand.
VMIG 2	This designation denotes strong credit quality. Good protection is afforded by the strong short-term credit strength of the liquidity provider and structural and legal protections that ensure the timely payment of purchase price upon demand.
VMIG 3	This designation denotes acceptable credit quality. Adequate protection is afforded by the satisfactory short-term credit strength of the liquidity provider and structural and legal protections that ensure the timely payment of purchase price upon demand.
SG	This designation denotes speculative-grade credit quality. Demand features rated in this category may be supported by a liquidity provider that does not have an investment grade short-term rating or may lack the structural and/or legal protections necessary to ensure the timely payment of purchase price upon demand.

Description of S&P Global Ratings ("S&P"), a Division of S&P Global Inc., Issue Credit Ratings

A S&P issue credit rating is a forward-looking opinion about the creditworthiness of an obligor with respect to a specific financial obligation, a specific class of financial obligations, or a specific financial program (including ratings on medium-term note programs and commercial paper programs). It takes into consideration the creditworthiness of guarantors, insurers, or other forms of credit enhancement on the obligation and takes into account the currency in which the obligation is denominated. The opinion reflects S&P's view of the obligor's capacity and willingness to meet its financial commitments as they come due, and may assess terms, such as collateral security and subordination, which could affect ultimate payment in the event of default.

Issue credit ratings can be either long-term or short-term. Short-term ratings are generally assigned to those obligations considered short-term in the relevant market. In the U.S., for example, that means obligations with an original maturity of no more than 365 days — including commercial paper. Short-term ratings are also used to indicate the creditworthiness of an obligor with respect to put features on long-term obligations. Medium-term notes are assigned long-term ratings.

Issue credit ratings are based, in varying degrees, on S&P's analysis of the following considerations:

- Likelihood of payment — capacity and willingness of the obligor to meet its financial commitment on an obligation in accordance with the terms of the obligation;
- Nature of and provisions of the obligation, and the promise we impute;
- Protection afforded by, and relative position of, the obligation in the event of bankruptcy, reorganization, or other arrangement under the laws of bankruptcy and other laws affecting creditors' rights.

Long-Term Issue Credit Ratings*

AAA	An obligation rated ‘AAA’ has the highest rating assigned by S&P. 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 on the obligation 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 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 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	This indicates that no rating has been requested, or that there is insufficient information on which to base a rating, or that S&P does not rate a particular obligation as a matter of policy.

*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 Issue Credit Ratings

A-1	A short-term obligation rated 'A-1' is rated in the highest category by S&P. 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 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.

Description of S&P's Municipal Short-Term Note Ratings

A S&P U.S. municipal note rating reflects S&P's 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. In determining which type of rating, if any, to assign, S&P's analysis will review the following considerations:

- Amortization schedule — the larger the final maturity relative to other maturities, the more likely it will be treated as a note; and
- Source of payment — the more dependent the issue is on the market for its refinancing, the more likely it will be treated as a note.

S&P's municipal short-term note rating symbols are as follows:

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.

Description of Fitch Ratings' ("Fitch's") Credit Ratings Scales

Fitch's credit ratings provide an opinion on the relative ability of an entity to meet financial commitments, such as interest, preferred dividends, repayment of principal, insurance claims or counterparty obligations. Credit ratings are used by investors as indications of the likelihood of receiving the money owed to them in accordance with the terms on which they invested.

Fitch's credit ratings do not directly address any risk other than credit risk. In particular, ratings do not deal with the risk of a market value loss on a rated security due to changes in interest rates, liquidity and other market considerations. However, in terms of payment obligation on the rated liability, market risk may be considered to the extent that it influences the *ability* of an issuer to pay upon a commitment. Ratings nonetheless do not reflect market risk to the extent that they influence the size or other conditionality of the *obligation* to pay upon a commitment (for example, in the case of index-linked bonds).

In the default components of ratings assigned to individual obligations or instruments, the agency typically rates to the likelihood of non-payment or default in accordance with the terms of that instrument's documentation. In limited cases, Fitch may include additional considerations (*i.e.*, rate to a higher or lower standard than that implied in the obligation's documentation). In such cases, the agency will make clear the assumptions underlying the agency's opinion in the accompanying rating commentary.

The terms "investment grade" and "speculative grade" have established themselves over time as shorthand to describe the categories 'AAA' to 'BBB' (investment grade) and 'BB' to 'D' (speculative grade). The terms "investment grade" and "speculative grade" are market conventions, and do not imply any recommendation or endorsement of a specific security for investment purposes. "Investment grade" categories indicate relatively low to moderate credit risk, while ratings in the "speculative" categories either signal a higher level of credit risk or that a default has already occurred.

A designation of Not Rated or NR is used to denote securities not rated by Fitch where Fitch has rated some, but not all, securities comprising an issuance capital structure.

Description of Fitch's Long-Term Corporate Finance Obligations Rating Scales

Fitch long-term obligations rating scales are as follows:

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.

Notes: 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.

Description of Fitch's Short-Term Ratings

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.

Fitch short-term ratings are as follows:

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.

APPENDIX B

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 trade, 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 December 2018, the State's unemployment rate was preliminarily estimated to be 4.2 percent, approximately 0.3 percent higher than the national average of 3.9 percent but 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 personal income tax increase and a sales tax increase (collectively known as "Proposition 30"). In November 2016, voters approved an extension of the Proposition 30 personal income tax increase until the December 31, 2030 but the sales tax increase expired on December 31, 2016. See "The State Budget — Proposition 30 and Proposition 55" below. Despite significant budgetary improvements during the last several years, there remain a number of budget risks that threaten the financial condition of the State's Treasury General Fund (the "General Fund"). These risks include the threat of recession, potentially unfavorable changes to federal policies, the uncertain impact of changes in federal tax law and trade policy, and significant unfunded liabilities of the State's two main retirement systems. See "State and Local Pension and Post-Retirement Liabilities" 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 Governor is required to sign the budget by the start of the fiscal year on July 1.

The State's General Fund budget has achieved structural balance for the last several fiscal years, while also building up historic levels of reserves. The 2019-20 Governor's Budget projects a Special Fund for Economic Uncertainties ("SFEU") balance of approximately $3.9 billion as of June 30, 2019 and an SFEU balance of approximately $2.3 billion as of June 30, 2020 if proposed budget solutions are adopted. See "Status of State General Fund; 2019-20 Governor's Budget" below. The 2019-20 Governor's Budget funds the Budget Stabilization Account (the "BSA"), a fund established to build a stronger "rainy day" reserve, to 100 percent of its constitutional target ($15.3 billion) assuming a $1.8 billion mandatory deposit. The BSA deposit reflects the Governor's interpretation of a constitutional amendment approved in November of 2014 intended to strengthen the BSA ("Proposition 2") that prior optional deposits into the BSA did not count toward the 10 percent threshold level required by Proposition 2. See "The State Budget" and "Status of State General Fund; 2019-20 Governor's Budget" below.

Many local governments in the State 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 July 2018 estimate of the State's population is 39.8 million, which represents just 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 September 2018, the Department of Finance reported that total personal income increased approximately 4.0 percent in 2016 and estimated that it increased approximately 4.6 percent in 2017. As of January 2019, the State projected personal income to grow by 5.5 percent in 2018 and 5.0 percent in 2019.

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. As of February 2019, the State Department of Finance projected taxable sales to grow by 5.7 percent in 2018, 5.7 percent in 2019 and 2.9 percent in 2020. Annual taxable sale transactions for the State for 2017 and 2018 are not yet finalized by the California State Board of Equalization but the Department of Finance estimated $717 billion in taxable sales for 2018.

The statewide median home price for existing single-family homes fell to a low of approximately $300,000 in calendar year 2011. In July 2018, the statewide median home price was $591,460, 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 still remains slightly lower than the pre-recession peak median price of $594,530. Nevertheless, 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 almost 113,439 in 2017 (approximately $34.8 billion valuation), reflecting an annual growth rate of approximately 14 percent in valuation, 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 $28.1 billion in 2017, reflecting an average annual growth rate of approximately 14 percent in valuation and surpassing the pre-recession high of $22.5 billion from 2007.

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 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 XIIIA of the California Constitution ("Article XIIIA"), enacted by the voters in 1978 and commonly known as "Proposition 13." Briefly, Article XIIIA 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 XIIIA, 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 XIIIA 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 XIIIA, 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 XIIIC ("Article XIIIC") and Article XIIID ("Article XIIID") to the State Constitution, which contain a number of provisions affecting the ability of local governments to levy and collect both existing and future taxes, assessments, fees and charges.

Article XIIIC 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 XIIIC 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 XIIID contains several provisions making it generally more difficult for local governments to levy and maintain "assessments" for municipal services and programs. Article XIIID also contains several provisions affecting "fees" and "charges," defined for purposes of Article XIIID 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 XIIID 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 XIIID), 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 XIIIC 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 Governments. 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 XIIIA and Article XIIIC 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 XIIIB of the California Constitution ("Article XIIIB"), enacted by the voters in 1979 and significantly amended by Propositions 98 and 111 in 1988 and 1990, respectively. Article XIIIB 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 XIIIB 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 2019-20 Governor's Budget projected the State would be approximately $4.3 billion, $4.9 billion and $7.5 billion under its limit in fiscal years 2017-18, 2018-19 and 2019-20, 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. New general obligation bonds, lease revenue bonds and other General Fund-supported debt are authorized by the voters and/or the State Legislature. As of January 1, 2019, the State had approximately $82.0 billion of outstanding general obligation bonds and lease revenue bonds payable principally from the State's General Fund or from lease payments paid from the operating budget of the respective lessees, which operating budgets are primarily, but not exclusively, derived from the General Fund. This outstanding debt consists of approximately $73.1 billion of general obligation bonds and approximately $8.9 billion of lease-revenue bonds. Moreover, as of January 1, 2019, the State had approximately $37.1 billion of authorized and unissued General Fund-supported general obligation bonds and $6.4 billion of authorized but unissued lease revenue bonds.

As of February 2019, debt service on General Fund-supported general obligation bonds and lease-revenue debt is estimated to equal approximately 5.9 percent of General Fund revenues in fiscal year 2018-19 and 5.7 percent of General Fund revenues in fiscal year 2019-20. These amounts fluctuate 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 from the Department of Finance in February 2019, approximately $5.4 billion of such obligations will be issued in fiscal year 2019-20 (consisting of approximately $4.2 billion of new money general obligation bonds and approximately $1.2 billion 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 issues 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. However, the State has not issued revenue anticipation notes since fiscal year 2014-15 and is not expected to issue revenue anticipation notes in fiscal year 2018-19 or 2019-20.

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.

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 January 1, 2019, the various State revenue bond financing programs had approximately $35.0 billion in outstanding bonds and the various State financing authorities had approximately $31.9 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 $19.7 billion of outstanding revenue bonds secured by certain revenues of the University of California, as of January 1, 2019. Other State agencies and authorities with significant bond programs include the State Department of Water Resources which had approximately $5.7 billion of outstanding revenue bonds secured by power and water users, and the California Housing Finance Agency had approximately $1.3 billion of outstanding revenue bonds secured by mortgage loans made for single family and multi-family housing units, as of January 1, 2019.

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 2019-20 Governor's Budget, these sources are expected to contribute approximately 68.8 percent, 18.8 percent and 9.0 percent, respectively, of total General Fund revenues and transfers in fiscal year 2019-20. The State's personal income tax structure is highly progressive with rates ranging from 1 percent to 12.3 percent. In the State's general obligation bond disclosure in February 2019, the State noted that the top 1 percent of taxpayers paid approximately 45.8 percent of the total personal income tax in tax year 2016. 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. For example, over the last 10 years, capital gains tax receipts accounted for a high of 10.7 percent of General Fund revenues and transfers in fiscal year 2017-18 and a low of 3.4 percent in fiscal year 2009-10.

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 $87.0 billion in fiscal year 2009-10 to an estimated $136.3 billion in fiscal year 2018-19 according to the 2019-20 Governor's Budget, reflecting an average annual growth rate of approximately 4.6 percent. 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 2019-20 Governor's Budget projected an SFEU balance of approximately $3.9 billion as of June 30, 2019 and an SFEU balance of approximately $2.3 billion as of June 30, 2020 if proposed budget solutions are adopted. See "2019-20 Governor's Budget — General Fund Budget Summary" below. The 2019-20 Governor's Budget funds the BSA to 100% of its constitutional target through the $1.8 billion mandatory deposit. Overall, the State's combined discretionary and mandatory budget reserves are proposed to grow to almost $15.3 billion which is about 12% of estimated State General Fund revenues. The 2019-20 Governor's Budget also proposes to pay down 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.

Since 2011 every State budget has been enacted in a timely manner in accordance with the process whereby the Governor's proposed budget is revised and finalized according to the schedule outlined below (the "Budget Act"). See "The State Budget — Overview" and "Status of State General Fund; 2019-20 Governor's Budget" 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. For fiscal year 2018-19, the Proposition 98 Guarantee is $77.9 billion, of which $57.8 billion is payable from the General Fund. For fiscal year 2019-20, the Proposition 98 Guarantee is $80.7 billion, of which $58.7 billion is payable from the General Fund. The 2019-20 Governor's Budget Proposition 98 Guarantee level for fiscal year 2019-20 is an increase of $2.8 billion over the fiscal year 2018-19 level. The 2019-20 Governor's Budget provides that just over 40 percent of General Fund revenues in fiscal years 2018-19 and 2019-20 will be directed to K-14 programs covered by the Proposition 98 Guarantee. 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.

Pension. 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 2018-19 General Fund contributions to CalPERS and CalSTRS are estimated (as of September 2018) to be approximately $3.6 billion and $3.1 billion, respectively. The combined contributions (including contributions for California State University ("CSU")) represent approximately 4.8 percent of all General Fund expenditures for fiscal year 2018-19. In addition to the combined contributions, the State will also be making a one-time $3.0 billion supplemental payment to CalPERS in fiscal year 2019-20. The 2019-20 Governor's Budget estimates that this $3.0 billion supplemental contribution will

result in savings of $7.2 billion over the next three decades, assuming actuarial and investment assumptions are realized. The 2019-20 Governor's Budget also dedicates all of the Proposition 2 debt payments, $1.8 billion, toward paying down unfunded retiree health and pension liabilities.

The recent economic recession called into question the reliability of assumed rates of return used to determine actuarial unfunded pension liabilities. For actuarial valuations prior to June 30, 2011, CalPERS and CalSTRS had used an assumed 7.75 percent rate of return to calculate their respective unfunded liabilities. The investment earnings assumptions were lowered to 7.50 percent for both funds 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 governments 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% and for 2019-20 to 7.0%. In February 2017, the CalSTRS Board lowered its investment return assumption to 7.25% for the June 30, 2016 actuarial valuation and 7.0% for the June 30, 2017 actuarial valuation. These assumption changes will result in additional increases of unfunded liabilities for the systems. In February 2018, CalPERS adopted revisions to its actuarial authorization policy which will be applied to amortizations of gains, losses and actuarial surplus experienced after June 30, 2019 and will affect contributions starting in fiscal year 2010-21.

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 earned an 8.6 percent return on investments for the twelve months ended June 30, 2018, compared with an 11.2 percent return on investments for the twelve months ended June 30, 2017, and 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 9.0 percent return on investments for the twelve months ended June 30, 2018 in its comprehensive annual financial report for fiscal year 2017-18, compared to a 13.4 percent return on investments for the twelve months ended June 30, 2017, and 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, 2018, CalPERS estimated 3-year, 5-year and 10-year time weighted average returns of 6.7, 8.1 and 5.6 percent, respectively, and CalSTRS reported 3-year, 5-year and 10-year time weighted average returns of 7.8, 9.2 and 6.3 percent, respectively.

The CalPERS Board reported an unfunded accrued liability allocable to State employees (excluding judges and elected officials), as of June 30, 2017, of $58.7 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, 2017 at $107.3 billion on an AVA basis, and $103.5 billion on an MVA basis, reflecting the investment return assumptions adopted by CalSTRS in 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.

OPEB. 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 August 2018) were estimated to be approximately $2.1 billion of total General Fund expenditures for fiscal year 2017-18 and approximately $2.4 billion of total General Fund expenditures for fiscal year 2018-19 (or approximately 1.7 percent of General Fund expenditures in each fiscal year).

The State's most recent OPEB actuarial accrued liability report estimated an approximately $91.5 billion unfunded actuarial accrued liability 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. Statutory language passed as part of the 2015-16 Budget Act, which proposed prefunding the entire unfunded liability by fiscal year 2044-45, contained 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 September 2018, the State had approximately $880 million set aside in the prefunding trust fund. By the end of fiscal year 2018-19, the State projected the trust fund balance will approach $1.6 billion in assets.

General. 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 were a significant 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 one-time supplemental payment to be made to CalPERs in fiscal year 2018-19.

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 a 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 annual budget is proposed by the Governor by January 10 of each year for the next fiscal year (the "Governor's Budget"). 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 update the Governor's Budget projections and budgetary proposals by May 14 of each year (the "May Revision"). 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 Legislature has approved and the Governor 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. 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 2019-20 Governor's Budget to be approximately $13.8 billion as of June 30, 2019 and approximately $15.3 billion as of June 30, 2020 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 "— Additional Revisions to Balanced Budget Amendment (Proposition 2)" 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 extended 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 $7.1 billion in fiscal year 2017-18 and the State projects that revenue from the personal income tax increase in Proposition 30/55 will be $8.0 billion for fiscal year 2018-19, $8.2 billion in fiscal year 2019-20, $8.4 billion in fiscal year 2020-21 and $8.4 billion in 2021-22. The 2019-20 Governor's Budget assumed the continuation of existing federal fiscal policies and accounts for changes in federal tax law adopted in December 2017.

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 of 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, Congress has attempted multiple times to repeal the Affordable Care Act and consequently drop health care coverage for millions of Californians. The 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 2019-20 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, if the ACA is not repealed, until fiscal year 2020-21, when the State will pay 10 percent of the total costs. The State's

estimated share of the costs of the optional expansion was approximately $15 billion ($1.5 billion from the General Fund) for fiscal year 2017-18. By fiscal year 2020-21, the General Fund share for the optional expansion is projected to be $2.6 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; 2019-20 Governor's Budget

On January 10, 2019, the Governor proposed a budget for fiscal year 2019-20. The 2019-20 Governor's Proposed Budget (the "2019-20 Governor's Budget") projects a healthy one-time surplus for the State while also warning of uncertain times because of federal policies, rising costs and the global political and economic climate. The 2019-20 Governor's Budget projects that at the end of the 2018-19 fiscal year the State will have total available general fund reserves of $18.3 billion, including $3.9 billion in the traditional general fund reserve, $13.5 billion in BSA and $900 million in the Safety Net Reserve Fund. The 2019-20 Governor's Budget also projects total general fund revenues and transfers of $142.6 billion for fiscal year 2019-20 and authorizes expenditures of $144.2 billion, and projects that the State will end the 2019-20 fiscal year with total available general fund reserves of $18.5 billion. including $2.3 billion in the traditional general fund reserve, $15.3 billion in the BSA and $900 million in the Safety Net Reserve Fund. The 2019-20 Governor's Budget proposes to make a deposit of $1.8 billion to the BSA (also known as the State's "rainy day fund"). A recent opinion by the California Office of Legislative Counsel concluded that supplemental payments to the BSA made in prior fiscal years do not count towards calculating its constitutional maximum of 10% which means that the BSA will be funded in excess of its constitutional maximum and could reach a funding level of $19.4 billion in fiscal year 2022-23. However, the 2019-20 Governor's Budget estimated that a one-year recession in 2019-20 that is larger than the 2001 recession but milder than the 2007 recession could result in a nearly $70 billion revenue loss and a $40 billion budget deficit over three years.

A summary of the condition of the State's General Fund, including revised results from fiscal year 2018-19 and 2019-20 Governor's Budget numbers for fiscal years 2018-19 and 2019-20 are set forth below.

General Fund Condition
(Dollars in Millions)

		2018-19 Governor's Budget			
	2018-19[1]	Revised 2018-19[2]	Percent Change	Proposed 2019-20[2]	Percent Change
Prior-year General Fund balance	$5,351	$12,377		$5,241	
Revenues and transfers	133,518	136,945	2.5%	142,618	4.0%
Expenditures	(137,662)	(144,082)	4.4%	144,192	0.1%
Ending General Fund Balance	$4,402	$5,241		$3,667	
Encumbrances	(1,165)	(1,385)		(1,385)	
SFEU balance	$3,273	$3,856		$2,283	
BSA balance	$13,767	$13,535		$15,302	
Total Reserves	$17,030	$17,391		$17,585	

(1) From 2018-19 Governor's Budget
(2) From 2019-20 Governor's Budget.

LAO Overview of 2019-20 Governor's Budget. In its report on the 2019-20 Governor's Budget, the LAO observed that the budget situation continues to be positive and the LAO estimates the Governor had $20.6 billion in discretionary resources to allocate among spending and reserves in creating the 2019-20 Governor's Budget. The LAO believes that the 2019-20 Governor's Budget makes prudent choices in allocating these resources and that, although the Governor proposes using a smaller share of resources for reserves than recent budgets, he uses almost half of the available resources to pay down some of the State's outstanding liabilities and focuses his spending commitments on one-time purposes. The LAO notes that the 2019-20 Governor's Budget proposes spending roughly $3 billion on an ongoing basis, which is significantly higher than other recent budget proposals but in line with the LAO's economic growth scenario in its November Fiscal Outlook which estimated that $3 billion was roughly the level of ongoing spending that the budget could support. However, the LAO observes that this was just one scenario and recent experience indicates revenues could be somewhat lower than either the LAO or the Governor estimated.

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, health care costs, the impact of federal tax legislation and other federal policies, increased debt service payments and potential adverse decisions in litigation.

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 February 12, 2019, 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"):

Moody's	S&P	Fitch
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 governments 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**.

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**) 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**) 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**).

Complete text of the State Controller's monthly Summary Analysis may be accessed at the State Controller's website (**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.

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 August 2018 that, during fiscal year 2018-19, it expected to transfer approximately $7.4 billion in sales tax revenues and $700 million in vehicle license fee revenue to local governments under the realignment plan. However, General Fund savings have been over $2.0 billion annually from the realigned programs beginning in fiscal year 2011- 12. The State estimates savings of $2.9 billion in fiscal year 2017-18, and $3 billion in fiscal year 2018-19 from 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.

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.

Climate Change. The future fiscal impact of climate change on the State is difficult to predict but it could be significant. 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.

Cybersecurity Risks — The State, 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 is subject to 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 purposes of misappropriating assets or information or causing operational disruption and damage. In 2017 the State established a statewide security operations center to protect against malicious activity targeting critical technology infrastructure Local governments in the State have experienced similar threats and taken similar measures, however, no assurances can be given that the efforts to manage cyber threats and attacks will be successful or that any such attack will not materially impact the operations or finances of the State or its local governments.

APPENDIX C

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” 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 December 18, 2018 with respect to the City and December 4, 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 2018 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” or the “Act”) and the New York City Charter (the “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 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. The City is required to submit its financial plans to the New York State Financial Control Board (the “Control Board”).

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 2018 fiscal year, the City's General Fund had a total surplus of $4.581 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 2018 fiscal year is the thirty-eighth 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 14, 2018, the City submitted to the Control Board the financial plan for the 2019 through 2022 fiscal years (the "June Financial Plan"), which was consistent with the City's capital and expense budgets as adopted for the 2019 fiscal year. On November 8, 2018, the City submitted to the Control Board a modification to the June Financial Plan (as so modified, the "Financial Plan").

The Financial Plan projects revenues and expenses for the 2019 fiscal years balanced in accordance with GAAP, except for the application of GASB 49, and projects gaps of approximately $3.18 billion, $3.54 billion and $3.36 billion in fiscal years 2020 through 2022, respectively. The June Financial Plan had projected revenues and expenses for the 2019 fiscal year balanced in accordance with GAAP, except for the application of GASB 49, and had projected gaps of approximately $3.26 billion, $2.89 billion and $2.29 billion in fiscal years 2020 through 2022, respectively.

The Financial Plan reflects, since the June Financial Plan, an increase in projected net revenues of $471 million in fiscal year 2019 and decreases in projected net revenues of $4 million and $1 million in fiscal years 2020 and 2022, respectively. Changes in projected revenues include: (i) an increase in personal income tax revenues of $244 million in fiscal year 2019; (ii) a net increase in corporation taxes revenues of $32 million in fiscal year 2019; (iii) a decrease in unincorporated business tax revenues of $46 million in fiscal year 2019; (iv) an increase in sales tax revenues of $24 million in fiscal year 2019; (v) an increase in real estate transaction taxes of $66 million in fiscal year 2019; and (vi) a net increase in other tax revenues of $57 million in fiscal year 2019. Changes in projected revenues also include a net increase in other revenues of $94 million in fiscal year 2019 and net decreases in other revenues of $4 million and $1 million in fiscal years 2020 and 2022, respectively.

The Financial Plan also reflects, since the June Financial Plan, a decrease in projected net expenditures of $49 million in fiscal year 2019 and increases in projected net expenditures of $435 million, $646 million and $1.08 billion in fiscal years 2020 through 2022, respectively. Changes in projected expenditures include: (i) increases in agency expenses of $52 million, $45 million, $45 million and $58 million in fiscal years 2019 through 2022, respectively; (ii) increases in the labor reserve of $227 million, $704 million, $967 million and $1.44 billion in fiscal years 2019 through 2022, respectively; (iii) decreases in pension contributions of $50 million, $92 million and $151 million in fiscal years 2020 through 2022, respectively, primarily as a result of strong investment earnings in fiscal year 2018; and (iv) decreases in net expenditures of $328 million, $264 million, $274 million and $276 million in fiscal years 2019 through 2022, respectively, as a result of the Citywide Savings Program.

The Financial Plan reflects, since the June Financial Plan, provision for $520 million for the prepayment in fiscal year 2019 of fiscal year 2020 expenses and an expenditure reduction of $520 million in fiscal year 2020.

The Financial Plan also reflects recent contract settlements with District Council 37 of AFSCME ("DC 37") and the United Federation of Teachers ("UFT") (which, together, represent approximately 61% of the City's workforce) and the application of the pattern increases established in those settlements to the entire workforce over a 43-month contract period. The pattern framework provides for a 2% wage increase on the first month of the contract, a 2.25% wage increase on the 13th month, and a 3% wage increase on the 26th month. The pattern also provides funding equivalent to 0.25% of wages to be used to fund benefit items. The DC 37 Settlement covers the period from September 26, 2017 through May 25, 2021. The UFT Settlement covers the

period from February 14, 2019 through September 13, 2022. Such settlements also include health insurance savings as part of a new Municipal Labor Committee ("MLC") agreement, in addition to those previously agreed upon, which are contractually enforceable through arbitration.

The Financial Plan reflects the projected direct impact to City tax revenues of the 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. However, the Financial Plan does not reflect the indirect impact of the TCJA, including the effect of State legislation which, among other things, increases the opportunities for charitable contributions, and provides an option to employers to shift to an employer compensation tax and reduce State personal income taxes. the effect of which is uncertain at this time.

The Financial Plan does not currently include funding beyond fiscal year 2019 for the Fair Fares program, which provides reduced fares to low income subway and bus riders beginning in January 2019. However, it is expected that, prior to its expiration, funding sources will be identified for the continuation of the program and that unspent funds from fiscal year 2019 will be carried forward to fiscal year 2020 for the implementation 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 June Financial Plan and the 2019-2022 Capital Commitment Plan (as defined herein) reflected the addition of a total of $1 billion of capital funds in fiscal years 2019 through 2022 to address lead-based paint and other health and safety concerns in New York City Housing Authority ("NYCHA") properties. On November 14, 2018, a federal court rejected a proposed Consent Decree that included the City's commitment to provide the capital funding described above. As a result of such rejection, litigation by the U.S. Attorney against NYCHA with respect to lead-based paint and other hazards remains unresolved. The Financial Plan and 2019-2022 Capital Commitment Plan continue to reflect the City capital funding described above. NYCHA has announced that it may be out of compliance with federal requirements beyond regulations concerning lead-based paint and other health and safety concerns. NYCHA has also estimated the total cost of its outstanding repairs at approximately $32 billion.

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

The Mayor and Governor recently announced that Amazon will establish one of its two new corporate headquarters in Long Island City, Queens. Amazon is expected to eventually occupy up to 8 million square feet of office space. In addition to incentives provided by the State, Amazon will be eligible for pre-existing, as-of-right incentive programs authorized by law with respect to the City. The agreement with Amazon is projected to have no material impact on the Financial Plan.

Local legislation has been introduced in the City Council that would establish a City-operated charity to which taxpayers could contribute in exchange for a credit against property taxes, with the intent of permitting those taxpayers to deduct those contributions from federal income tax. Money received by the charity would be used for City operations. The State recently passed legislation permitting municipalities to create charitable funds allowing a local property tax credit of 95% of the contribution. The Internal Revenue Service has issued proposed rules that would make such credits ineligible for federal tax deductions in most cases.

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, 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 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 2017, the City added 729,900 private sector jobs (growth of 23%). All such changes are based on average annual employment levels through and including the years referenced.

As of October 2018, total employment in the City was 4,549,400 compared to 4,481,500 in October 2017, an increase of 1.5% based on data provided by the New York State Department of Labor, which is not seasonally adjusted.

Assumptions. 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 $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 $581 million, $577 million, $606 million and $631 million in fiscal years 2019 through 2022, respectively.

The delinquency rate was 1.4% in fiscal year 2014, 1.6% in fiscal year 2015, 1.4% in fiscal year 2016,1.3% in fiscal year 2017 and 1.2% in fiscal year 2018,. The Financial Plan projects delinquency rates of 1.3% 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, revenue declines in fiscal year 2019 reflecting a return to more typical levels after the

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, and growth in fiscal years 2020 through 2022 reflecting steady economic growth; (ii) with respect to the general corporation tax, moderate growth in fiscal year 2019 supported by healthy levels of corporate profits and Wall Street profitability, 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 income tax, growth slows in fiscal year 2019 following the strong growth seen the prior year (the result of the repatriation of non-qualified deferred compensation and taxpayer behavior in response to the TCJA), moderate growth for fiscal years 2020 through fiscal year 2022 reflecting steady economic growth; (iv) with respect to the sales tax, moderate growth in fiscal year 2019 reflecting employment gains, wage growth and tourist consumption 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 real property transfer tax, growth in 2019 reflecting strength in large commercial transactions, decline in 2020 as the volume of large commercial transactions drops from the high levels seen in the prior years; growth returns in fiscal year 2021 through 2022 reflecting steady economic growth; (vi) with respect to mortgage recording tax, decline in 2019 through 2020 as the commercial loan refinancing activity wanes in 2019 and volume of large commercial transactions drops from the high levels seen in the prior years in 2020; growth returns in fiscal years from 2021 through 2022 reflecting steady economic growth; and (vii) with respect to the commercial rent tax, growth in 2019 reflecting employment gains and a slower growth in 2020 reflecting recently enacted tax program that increased the base rent subject to tax providing relief for tax payers; growth rebounds from 2021 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 279,949 as of June 30, 2019 to an estimated level of 280,833 by June 30, 2022.

Other Fringe Benefits includes $2.465 billion, $2.604 billion, $2.718 billion and $2.856 billion in fiscal years 2019 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 Financial Plan reflects recent contract settlements with DC 37 and the UFT (which, together, represent approximately 61% of the City's workforce) and the application of the pattern increases established in those settlements to the entire workforce over a 43-month contract period. The pattern framework provides for a 2% wage increase on the first month of the contract, a 2.25% wage increase on the 13th month, and a 3% wage increase on the 26th month. The pattern also provides funding equivalent to 0.25% of wages to be used to fund benefit items. The DC 37 Settlement covers the period from September 26, 2017 through May 25, 2021. The UFT Settlement covers the period from February 14, 2019 through September 13, 2022. Such settlements also include health insurance savings as part of a new Municipal Labor Committee ("MLC") agreement (the "MLC Agreement"), in addition to those previously agreed upon. Negotiations with unsettled unions are ongoing. The PBA has filed for arbitration with the City over new contract terms.

The amounts in the Financial Plan reflect the offsets from health insurance savings of $200 million in fiscal year 2019, $300 million in fiscal year 2020, and $600 million in fiscal year 2021 and thereafter. These savings are pursuant to the MLC Agreement. The City has the right to enforce the agreement through a binding arbitration process. If total health insurance savings in fiscal year 2021 are greater than $600 million, the first $68 million of such additional savings will be used by the City to make a $100 per member per year increase to welfare funds effective July 1, 2021. If a savings amount over $600 million but less than $668 million is achieved, the $100 per member per year increase will be prorated. Any savings thereafter are to be divided equally between the City and the unions. These savings are in addition to the $3.4 billion of health insurance savings the City achieved in fiscal years 2015 through 2018, $1.3 billion of which are recurring, which were negotiated pursuant to a previous MLC agreement.

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 2019 fiscal year. Thereafter, to account for inflation, administrative OTPS expenditures are projected to rise by 2.5% annually in fiscal years 2020 through 2022. Energy costs for each of the 2019 through 2022 fiscal years are assumed to vary annually, with total energy expenditures projected at $906 million in fiscal year 2019 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 $713 million in fiscal year 2019 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 2019 fiscal year.

The City-funded portion of medical assistance payments is expected to be $5.8 billion in each of fiscal years 2020 through 2022. Such payments include the City's capped share of local Medicaid expenditures as well as Supplemental Medicaid payments to NYCHH.

New York City Health and Hospitals ("NYCHH"). NYCHH, which provides essential services to over 1.1 million New Yorkers annually, faces near- and long-term financial challenges resulting from, among other things, changes in hospital reimbursement under the Affordable Care Act 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 November 2018, NYCHH released an accrual-based financial plan, which projected City-funded expenditures of $718 million, $919 million, $920 million and $920 million in fiscal years 2019 through 2022, respectively, in addition to the forgiveness of debt service and the City's contribution to supplemental Medicaid payments which is consistent with the City's Financial Plan. NYCHH's financial plan projected, before implementation of a gap closing program, total receipts of $6.5 billion, $6.5 billion, $6.2 billion and $6.2 billion and total disbursements of $7.7 billion, $7.8 billion, $7.8 billion, and $8.0 billion in fiscal years 2019 through 2022, respectively, resulting in projected operating gaps of $1.2 billion, $1.3 billion, $1.6 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 $625 million, $879 million, $1.0 billion and $1.0 billion and expense-reducing initiatives total $430 million, $530 million, $585 million and $585 million in fiscal years 2019 through 2022, respectively.

NYCHH relies on significant projected revenue from Medicaid, Medicare and other third-party payor programs. Future changes to such programs could have adverse impacts on NYCHH's financial condition.

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 2018 through 2022 fiscal years was prepared in July 2018. The NYCT fiscal year coincides with the calendar year. The NYCT financial plan projects City assistance to the NYCT operating budget of $623.4 million in 2018, decreasing to $394.3 million in 2022; 2018 assistance includes $254.0 million in City funding for the Subway Action Plan, the MTA's emergency plan to address subway delays, which will be funded through a separate revenue stream starting in 2019. In addition, the NYCT financial plan projects real estate transfer tax revenue dedicated for NYCT use of $647.5 million in 2018, increasing to $651.9 million in 2022.

The NYCT financial plan includes a reforecast of baseline revenue reflecting ridership trends, recognition of a full commitment in funding for the Subway Action Plan, initial funding for the Bus Plan, the MTA's plan to overhaul and improve bus service across the five boroughs, and operating budget impacts from the Canarsie Tunnel reconstruction. After reflecting such revenues and changes, the NYCT accrual-based financial plan projects $10.7 billion in revenues and $14.1 billion in expenses for 2018, leaving a budget gap of $3.4 billion. After accounting for accrual adjustments and cash carried over from 2017, NYCT projects accrual-based operating budget gaps of $140.7 million in 2018, $518.0 million in 2019, $1.2 billion in 2020, $2.1 billion in 2021, and $3.3 billion in 2022.

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 $728.0 million in 2018, increasing to $958.1 million in 2022.

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 further 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. On November 15, 2018, the MTA released its 2019 Financial Plan, which was subject to MTA Board approval in December 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, 2018, the City expended $730.4 million for judgments and claims. The Financial Plan includes provisions for judgments and claims of $697.0 million, $711.9 million, $727.1 million and $742.3 million for the 2019 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, 2018 amounted to approximately $6.7 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, 2018 include an estimate that the City's liability in the certiorari proceedings, as of June 30, 2018, could amount to approximately $1,208 million. Provision has been made in the Financial Plan for estimated refunds of $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 July 25, 2018, the City Comptroller released a report entitled "Comments on New York City's Fiscal Year 2019 Adopted Budget." In the report, the City Comptroller projects net additional resources of $151 million in fiscal year 2019 and net risks of $920 million, $949 million and $1.13 billion in fiscal years 2020 through 2022, respectively, which, when added to the results projected in the June Financial Plan, would result in a surplus of approximately $151 million in fiscal year 2019 and gaps of approximately $4.18 billion, $3.84 billion and $3.42 billion in fiscal years 2020 through 2022, respectively.

The differences from the June Financial Plan projections result in part from the City Comptroller's net expenditure projections, which are higher than the June Financial Plan projections by $473 million, $1.15 billion, $1.48 billion and $2.04 billion in fiscal years 2019 through 2022, respectively, as a result of: (i) additional overtime expenditures of $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 2019 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; (vi) increased expenditures to support NYCHH of $165 million in each of fiscal years 2020 through 2022; and (vii) increased costs as a result of collective bargaining settlements and future pattern settlements of $227 million, $704 million, $929 million and $1.34 billion in fiscal years 2019 through 2022, respectively. 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 $50 million in each of fiscal years 2019 through 2022; and (iii) lower estimates for pension contributions of $54 million, $108 million and $162 million in fiscal years 2020 through 2022, respectively, resulting from fiscal year 2018 pension investment earnings above the actuarial interest rate assumption.

The differences from the June Financial Plan projections also result from the City Comptroller's net revenue projections, which are higher than the June Financial Plan projections by $624 million, $228 million, $532 million and $909 million in fiscal years 2019 through 2022, respectively. The report identifies certain risks and offsets to projected revenues: (i) property tax revenues are projected to be higher by $76 million, $303 million, $785 million and $883 million in fiscal years 2019 through 2022, respectively; (ii) personal income tax revenues are projected to be higher by $182 million in fiscal year 2019; (iii) business tax revenues are projected to be higher by $169 million, $20 million, $44 million and $53 million in fiscal years 2019 through 2022, respectively; (iv) sales tax revenues are projected to be higher by $91 million, $179 million, $149 million and $85 million in fiscal years 2019 through 2022, respectively; (v) revenues from audit collections are projected to be higher by $100 million in fiscal year 2019 and $200 million in each of fiscal years 2020 through 2022; (vi) Environmental Control Board fine revenues are projected to be higher by $20 million in each of fiscal years 2019 through 2022; (vii) Department of Buildings penalty revenues are projected to be higher by $4 million in each of fiscal years 2019 through 2022; and (viii) motor vehicle fine revenues are projected to 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 are projected to be lower by $117 million, $190 million and $260 million in fiscal years 2020 through 2022, respectively; and (ii) real estate-related tax revenues are projected to be lower by $23 million, $384 million, $483 million and $79 million in fiscal years 2019 through 2022, respectively.

On July 25, 2018, the OSDC released a report on the June Financial Plan. The report states that the June Financial Plan projects a surplus of nearly $4.6 billion in fiscal year 2018, which resulted mostly from a reallocation of unneeded reserves and higher tax revenues. The report notes that the City's economy is strong and the fiscal year 2019 budget is balanced under current conditions, but the June Financial Plan projects budget gaps in fiscal years 2020, 2021 and 2022 which are larger than those projected in June 2017. The report states that there are budget risks that could make closing the budget gaps more difficult. NYCHA has

$32 billion in capital needs in its five-year capital program, but less than $8 billion in available capital resources, and the City may be called upon to increase financial support of NYCHA. The City may also be called upon to provide additional financial support to the MTA's 2020-2024 five-year capital program which is expected to be released next year. If the economic terms of the tentative agreement reached with DC 37 were applied to the entire work force as the City assumes, the fiscal year 2020 budget gap would increase by more than $700 million. Rising trade tensions could trigger an economic setback, and growing federal deficits will likely increase pressure on Congress to cut federal programs, which would adversely affect the City and the State. The report states that the City has increased its reserves and notes that the City should continue that practice given the budget risks.

The OSDC report quantifies certain risks and offsets to the June Financial Plan. The report identifies net offsets of $40 million in fiscal year 2019 and net risks of $760 million, $918 million and $1.27 billion in fiscal years 2020 through 2022, respectively. When combined with the results projected in the Financial Plan, the report estimates a budget surplus of $40 million in fiscal year 2019 and budget gaps of $4.02 billion, $3.81 billion and $3.56 billion in fiscal years 2020 through 2022, respectively. The risks to the Financial Plan identified in the report include: (i) increased homeless shelter operation expenditures of $47 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 2019 through 2022; (iii) increased uniformed services overtime costs of $125 million in each of fiscal years 2019 through 2022; (iv) increased costs as a result of collective bargaining settlements and future pattern settlements of $227 million, $704 million, $929 million and $1.34 billion in fiscal years 2019 through 2022, respectively; and (v) increased expenditures to fund the Fair Fares program of $212 million in each of fiscal years 2020 through 2022. The report also identifies: (i) increased tax revenues of $400 million in fiscal year 2019 and $250 million in each of fiscal years 2020 through 2022; (ii) 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 $52 million, $61 million, $71 million and $72 million in fiscal years 2019 through 2022, respectively; (iii) anticipated debt service savings from low interest rates on variable rate bonds of $50 million in fiscal year 2019 and $22 million in each of fiscal years 2020 through 2022; and (iv) lower estimates for pension contributions of $58 million, $115 million and $173 million in fiscal years 2020 through 2022, respectively, resulting from fiscal year 2018 pension investment earnings above the actuarial interest rate assumption.

On July 20, 2018, the staff of the Control Board issued a report reviewing the June Financial Plan. The report states that the City generated a surplus of almost $4.6 billion in fiscal year 2018, in part because of a surge in personal income tax collections at the end of fiscal year 2018. The report states that the June Financial Plan projects budget gaps in fiscal years 2020, 2021 and 2022, and given the size of the outyear gaps, the City will need to continue developing agency savings programs throughout the June Financial Plan period to continue producing large surpluses to close the outyear gaps without service reductions or tax increases. The report notes that there are concerns that could create increased pressure on the outyears of the June Financial Plan period. The City has experienced volatility in the growth rate of City funds over the last several years, and it is unknown how long the current economic recovery will continue and what, if any, impacts there will be from federal actions and the possibility of trade wars. Federal actions could put pressure on the City to increase subsidies to NYCHH. The MTA has developed a plan for subway improvements, and while the plan is preliminary and unofficial, there have been no agreements on whether it will proceed or how it will be funded. Determination of how to meet NYCHA's capital needs may impact the City's budget. In addition, outyear gaps will be higher due to collective bargaining negotiations that are underway.

The report identifies net risks to the June Financial Plan of $58 million, $757 million, $975 million and $1.39 billion in fiscal years 2019 through 2022, respectively, resulting in estimated gaps of $58 million, $4.02 billion, $3.86 billion and $3.67 billion in fiscal years 2019 through 2022, respectively. Such net risks and offsets result from: (i) increased personal income tax revenues of $250 million in each of fiscal years 2019 through 2022; (ii) increased miscellaneous revenues of $100 million in each of fiscal years 2019 through 2022; (iii) increased costs as a result of collective bargaining settlements and future pattern settlements of $227 million, $704 million, $929 million and $1.34 billion in fiscal years 2019 through 2022, respectively; (iv) increased expenditures to fund the Fair Fares program of $212 million in each of fiscal years 2020 through 2022; (v) increased uniformed services overtime costs of $130 million, $152 million, $155 million and $155 million in fiscal years 2019 through 2022, respectively; and (vi) decreased speed camera revenues of $51 million, $39 million, $29 million and $28 million in fiscal years 2019 through 2022, respectively.

Outstanding General Obligation Indebtedness. As of September 30, 2018, approximately $37 billion of City general obligation bonds were outstanding.

As of September 30, 2018, $2.72 billion aggregate principal amount of Hudson Yards Infrastructure Corporation ("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 2019 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 $19.1 billion. The 2019-2022 Capital Commitment Plan reflects total anticipated City-funded water and sewer commitments of $12.1 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 and $142 million of Building Aid Revenue Bonds in fiscal years 2019, 2021 and 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.

New York State

New York is the fourth most populous state in the nation, after California, Texas, and Florida, 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 hub for 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.

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 proportionally less 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, hence this is a far more important sector for the

State than for the nation as a whole. Although this sector accounts for less than 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. Combined, these industries 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. Farming is an important part of the State's rural economy, 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.

Annual Information Statement. The Annual Information Statement, dated July 2, 2018 (the "AIS"), reflects the State's Enacted Budget Financial Plan (the "Enacted Budget Financial Plan") for Fiscal Year (FY) 2019[1] and sets forth the State's official Financial Plan projections for Fiscal Year 2019 through Fiscal Year 2022. The State updates the Annual Information Statement quarterly and released its first quarterly update on September 24, 2018 and its second quarterly update on December 4, 2018 (the "AIS Update") which reflects the Second Quarterly Update to the Financial Plan for FY 2019 (the "Updated Financial Plan") and updates to the State's official Financial Plan projections for FY 2019 through FY 2022.

Overview of the Updated Financial Plan. DOB reports that the Updated Financial Plan for FY 2019 is expected to remain in balance on a cash basis in the General Fund. Estimates for General Fund disbursements have been reduced in each year of the Updated Financial Plan, based on a review of operating results to date and other information. Annual spending growth in State Operating Funds is estimated at 2 percent, consistent with the Enacted Budget Financial Plan.

The General Fund budget gap for FY 2020 is now estimated at $3.1 billion, a decrease of nearly $1 billion compared to the Enacted Budget Financial Plan. If spending growth in State Operating Funds were to be held to 2 percent in FY 2020, DOB estimates the General Fund budget gap would be $402 million

State Operating Funds disbursements are estimated at $100.1 billion in FY 2019, an increase of 2 percent over FY 2018 results. The estimate reflects downward revisions in certain categories of disbursements, which are expected to be offset by an FY 2019 planned payment of $145 million for debt service due in FY 2020. To maintain annual spending growth at 2 percent, DOB actively manages disbursements with the goal of adhering as closely as possible to the 2 percent spending benchmark.

Since the Enacted Budget Financial Plan as reported in the AIS, the Updated Financial Plan reflects an additional $335 million received in Extraordinary Monetary Settlement payments from firms that have engaged in conduct that violates New York State laws and regulations. These Extraordinary Monetary Settlement payments will be held in reserve, consistent with treatment of other settlements. Extraordinary Monetary Settlements held in reserve in the General Fund are expected to total $3.95 billion at the close of FY 2019, of which $411 million has not been designated for specific purposes. In addition, the General Fund is expected to maintain $1.8 billion in rainy day reserves, $500 million for debt management, and smaller balances in other reserves.

On July 31, 2018, the State received a $1 billion payment from Fidelis Care, a nonprofit insurer associated with the Catholic Diocese of New York. The payment was made in connection with the sale of substantially all its assets to Centene Corporation, a for-profit health insurer based in St. Louis, Missouri, allowing that entity to enter New York's health insurance marketplace. Consistent with previous transactions of similar nature in New York, the transaction was subject to regulatory approval by the Department of Health, the Department of Financial Services (DFS) and the Office of the Attorney General. The timing of the transaction and receipt of the initial payment is consistent with the estimates included in the Enacted Budget Financial Plan.

On August 23, 2018, the Internal Revenue Service (IRS) issued proposed regulations — IRS REG-112176-18 = that seek to provide new rules governing the availability of Federal income tax deductions for charitable contributions when a taxpayer receives or expects to receive a state or local tax credit for such contributions. In the case of state tax credits received by a taxpayer making a charitable contribution, the proposed regulations would require the taxpayer to reduce the Federal income tax deduction by the amount of the state tax credit received for such charitable contribution; provided, however, this rule would not apply if the

[1] The State fiscal year is identified by the calendar year in which it ends. For example, fiscal year 2019 ("FY 2019") is the fiscal year that began on April 1, 2018 and ends on March 31, 2019.

value of the state tax credit to be received does not exceed 15 percent of the charitable contribution. If finalized, the effective date of these proposed regulations would be August 27, 2018. The Treasury Department and the IRS have collected comments from the general public on these proposed regulations and held a public hearing on November 5, 2018. Based on its review of the proposed regulations, DOB anticipates that if the proposed regulations are adopted in their current form, then contributions to the State Charitable Gifts Trust Fund may decline. The proposed regulations, by their terms, do not impact the Federal tax reduction that DOB expects would result for certain taxpayers employed by entities that may enroll in the Employer Compensation Expense Program (ECEP).

On September 4, 2018, the United University Professions (UUP) ratified a six-year collective bargaining agreement for academic years 2017 through 2022. The agreement provides for a 2 percent general salary increase in each year of the contract, and additional compensation changes, which are partly offset by benefit design changes within the New York State Health Insurance Program (NYSHIP). The multi-year costs of the agreement (approximately $225 million in FY 2019) are reflected in the Updated Financial Plan.

In September 2018, the U.S. Bureau of Economic Analysis (BEA) released the State personal income data used to calculate the final School Aid Growth Cap for the 2019-20 school year pursuant to State Education Law Section 3602. The resulting Personal Income Growth Index (PIGI), equal to the annual growth rate in New York State personal income from FY 2017 to FY 2018, is 6.1 percent. However, the Updated Financial Plan assumes School Aid growth of only 3.6 percent. Consistent with DOB's practice since enactment of the PIGI as the statutory growth cap for School Aid, the PIGI impact will be reflected in the FY 2020 Executive Budget Financial Plan as part of a comprehensive recommendation for School Aid.

On October 10, 2018, the Police Benevolent Association of the New York State Troopers (NYSTPBA) ratified a five-year collective bargaining agreement for FY 2019 through FY 2023. The agreement provides for a 2 percent general salary increase in each year of the contract and additional compensation changes, which are partly offset by benefit design changes within NYSHIP, similar to UUP and the Civil Service Employees Association (CSEA). Costs are expected to be funded within agency operating budgets, consistent with the treatment of other negotiated salary increases.

The Governor is expected to submit his FY 2020 Executive Budget to the Legislature no later than February 1, 2019. DOB expects the current Administration will continue to propose, and the Legislature will continue to enact, balanced budgets in future years that limit annual growth in State Operating Funds to no greater than 2 percent. The spending benchmark is calculated using the cash basis of accounting, as described herein, and is based on the current composition of the State Operating Funds perspective as reported by DOB. The General Fund operating projections[2] 4 for FY 2020, FY 2021, and FY 2022 are calculated based on this assumption. DOB expects that specific proposals to limit annual spending growth in State Operating Funds to 2 percent will be included in future budget proposals.

At a press conference held on February 4, 2019, the Governor, State Comptroller and the Budget Director announced that state personal income tax receipts in December 2018 and January 2019 were $2.3 billion below projections.

General Fund Operating Results Through September 2018

The State ended September 2018 with a General Fund cash balance of $6.5 billion, $533 million above the Enacted Budget Financial Plan estimate. The higher balance is mainly attributable to lower spending for agency operations and capital projects, and receipt of unplanned Extraordinary Monetary Settlements.

Receipts, including transfers from other funds, totaled $35.9 billion through September 2018. Tax receipts were generally consistent with Enacted Budget Financial Plan estimates. Non-tax receipts were $262 million above planned levels, due mainly to Extraordinary Monetary Settlements.

Disbursements, including transfers to other funds, totaled $38.9 billion through September 2018, $350 million lower than the initial projections presented in the Enacted Budget Financial Plan. Lower spending for local assistance reflects payments for education, higher education, and social services programs. Many of these payments are expected to occur by the end of the third quarter of FY 2019. However, some of the spending reduction has been recognized in the downward revisions to certain

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[2] The Updated Financial Plan displays General Fund budget gaps both before and after savings that would be estimated to occur if annual growth in State Operating Funds spending is held to 2 percent in FY 2020 and each year thereafter.

categories of disbursements in the Updated Financial Plan. In addition, certain General Fund transfers to other funds were not needed in the first half of FY 2019, as spending for capital projects and other purposes occurred more slowly than expected. These transfers are expected to be made later in FY 2019.

Multi-Year Financial Plan Revisions

Receipts Revisions. General Fund receipts, including transfers from other funds, are projected to total $72.8 billion in FY 2019, an increase of $135 million from the Enacted Budget Financial Plan. Projected General Fund tax receipts remain unchanged. However, transfers of tax receipts after payment of debt service have been revised to reflect the planned payment in FY 2019 of $145 million in debt service due in FY 2020[3]. In addition, miscellaneous receipts and transfers from other State funds have been revised to reflect the receipt of unplanned Extraordinary Monetary Settlement payments, updated information and accounting reclassifications, as well as certain transactions that may not be completed by year-end.

Disbursements Revisions. General Fund disbursements, including transfers to other funds, are expected to total $75.8 billion in FY 2019, a decrease of $817 million from the Enacted Budget Financial Plan projections. Revisions to General Fund disbursements are based on a review of operating results to date and updated information on programs and activities.

Local Assistance. Projected General Fund disbursements for local assistance have been revised downward in each year of the Updated Financial Plan. General Fund disbursements for local assistance are expected to total $51 billion in FY 2019, a $50 million decrease from the Enacted Budget Financial Plan.

Agency Operations. General Fund disbursements for agency operations, including employee fringe benefits, are expected to total $19.2 billion in FY 2019, a decrease of $56 million from the Enacted Budget Financial Plan projections.

Transfers to Other Funds. General Fund transfers to other funds are expected to total $5.5 billion in FY 2019, a decrease of $711 million from the Enacted Budget Financial Plan.

State Operating Funds Summary of Annual Spending Change

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

A significant amount of spending that occurs in State Operating Funds is supported with resources generated in exchange for services provided by State entities. Examples include SUNY operations that are funded with tuition, patient and fee revenue, and regulatory activities by the Workers' Compensation Board (WCB) and Department of Financial Services (DFS) that are funded with industry assessments. In addition, other spending is supported with revenues that are used exclusively, or nearly exclusively, for dedicated purposes, such as the various taxes collected and disbursed to the MTA and other transit systems from the Metropolitan Mass Transportation Fund and public transportation funds. These "own-source" revenues contribute more than $400 million in spending growth from FY 2018 to FY 2019. These activities have no direct bearing on the State's ability to maintain a balanced budget in the General Fund.

Spending growth in recent years reflects the State's effort to address long-standing public policy issues. For example, in FY 2015, the State absorbed the full cost of growth in Medicaid on behalf of local governments. Secondly, in FY 2017, the State enacted a law that provides for increases in the minimum wage. Relative to FY 2018, the FY 2019 State Operating Funds spending includes a nearly $800 million State share for the direct cost of the minimum wage increase to health care providers.

Local Assistance

Medicaid and School Aid are the State's largest local aid programs, comprising approximately 45 percent of State Operating Funds spending. In School Year (SY) 2019, School Aid is expected to total $26.6 billion, an increase of $914 million (3.6 percent),

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[3] Prepayments will be funded with resources that DOB expects to be available after operations. The level of prepayments may change, depending on FY 2019 operating results. Debt service revisions typically affect both transfers from and to the General Fund. Thus, the reduction in tax receipts transferred to the General Fund is offset in part by a downward revision to General Fund transfers to support spending from the Debt Service Fund.

including a $618 million increase in Foundation Aid.[4] Medicaid spending subject to the Medicaid Spending Cap (or "Global Cap") will grow at the indexed rate of 3.2 percent to $18.9 billion. In total, Medicaid spending that is funded from State resources will increase to $20.4 billion, which includes the takeover of local Medicaid growth costs ($182 million growth), the cost of minimum wage increases ($448 million growth), and other spending outside the Global Cap.

In FY 2018, bonds secured by annual payments from tobacco manufactures under the Master Settlement Agreement (MSA) were retired, with no remaining debt service requirements to be paid on these bonds. Thus, DOB expects payments under the MSA of approximately $435 million to be available in FY 2019 (including $103 million from FY 2018) and additional payments to be available in subsequent years. Legislation included in the FY 2018 Enacted Budget 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 to be deposited directly 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 reduce reported State supported Medicaid spending accounted for in FY 2019 State Operating Funds by $435 million.

The FY 2019 Enacted Budget includes legislation dedicating $836 million to the MTA's NYC Subway Action Plan, which will provide $508 million for operating purposes and $328 million for capital purposes. The State and the City will each fund 50 percent of the MTA's NYC Subway Action Plan ($418 million). The State will provide $194 million from Extraordinary Monetary Settlements and $60 million in accelerated PMT pass-through resources, which constitute the State's operating obligation consistent with the MTA's NYC Subway Action Plan to address system failures, breakdowns, delays and deteriorating customer service.

The PMT will no longer be appropriated annually by the State Legislature. Previously, the State collected the PMT on behalf of, and disbursed the entire amount to, the MTA. The FY 2019 Enacted Budget amended the enabling statute to no longer require the PMT to be appropriated annually by the State Legislature but instead paid directly to MTA from a sole custody fund. This allows the MTA to collect PMT receipts without delays or uncertainty related to the appropriation process. Consistent with this statutory change, the Updated Financial Plan does not include PMT receipts and related local assistance disbursements. In FY 2019, the PMT receipts and disbursements that have been excluded are estimated at approximately $1.5 billion and $1.4 billion, respectively

STAR spending in FY 2018 and FY 2019 is affected by the conversion of STAR benefits to State PIT credits. The conversion of STAR benefits to PIT credits has no impact on the value of the STAR benefits received by taxpayers. It does, however, decrease the level of reported PIT receipts and reported disbursements for STAR on a State Operating Funds basis by an identical amount (estimated at $775 million in FY 2018 and $937 million in FY 2019.)

Higher Education spending growth is due mainly to the second phase of the Excelsior Free Tuition Program, the timing of certain payments during academic year 2018, and increased funding for other scholarships, which provide financial aid to approximately 400,000 students.

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. The Legislature authorized, via specific language in the STARC appropriation, that the STARC refunding money recouped from NYC be treated as an offset to State spending. The Updated Financial Plan reflects the offset to spending in the calculation of FY 2019 State Operating Funds spending. In prior years, the reimbursement money was reflected as a miscellaneous receipt.

State Operations/Fringe Benefits

Spending for Executive agency operations is expected to increase by 2.3 percent in FY 2019, excluding the reclassification of certain DOT and DMV operating costs to the General Fund. Beginning in FY 2019, the FY 2019 Enacted Budget appropriates certain transportation operating costs from the General Fund instead of the DHBTF. These operating expenses were previously

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[4] Total education aid, including reimbursement for charter school supplemental tuition and facilities aid, is projected at $26.7 billion in SY 2019, an increase of nearly $1 billion (3.9 percent) from SY 2018.

funded by a transfer from the General Fund to the DHBTF. The change, which will increase disbursements in State Operating Funds by nearly $280 million in FY 2019, applies to operating costs related to snow and ice removal; bus, truck and rail inspection; and DMV regulatory activities.

Operations spending for the University Systems and elected officials, which include the Attorney General, Comptroller, Legislature and Judiciary, are expected to increase by 1.8 percent and 2.4 percent, respectively.

Spending growth for fringe benefits is due mainly to rising employee health care and prescription drug costs. The State continues to repay the State Retirement System for amounts amortized from FY 2011 through FY 2016. The payments were amortized to mitigate the extraordinary increase in annual contributions following investment losses. In FY 2019, the amount of amortization repayment totals $432 million.

Debt Service

The decline in Debt Service Funds spending is mainly to the payment of $594 million in planned FY 2019 debt service costs during FY 2018, which is partly offset by the planned prepayment of $145 million of FY 2020 debt service costs during FY 2019.

Impact of Federal Tax Law Changes

On December 22, 2017, President Trump signed into law the Tax Cuts and Jobs Act of 2017 (TCJA) (H.R. 1, P.L. 115-97), 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.

The State's income tax system interacts with the Federal system in numerous ways. The changes to the Federal tax code will have significant flow-through effects on state tax burdens and state tax receipts. From the standpoint of individual New York State taxpayers, one of the most onerous provisions in the TCJA is a new $10,000 limit on the deductibility of State and Local Tax (SALT) payments, effective for tax year 2018. The TCJA's SALT deduction limit represents a large increase in the State's effective tax rate relative to historical experience, and may adversely affect New York's economic competitiveness.

DOB and the Department of Taxation and Finance (DTF) estimate that the SALT deduction limit raises Federal tax liability for New York taxpayers by $14.3 billion for tax year 2018, relative to what taxpayers would have paid absent the limitation. Over the course of the eight years the SALT deduction limit is scheduled to be in effect, the State estimates that resident taxpayers who itemize at the Federal level for each year through 2025 will collectively pay an additional $121 billion in Federal taxes relative to what they would have paid absent the SALT deduction limit.

Moreover, the TCJA contains numerous provisions that may adversely affect residential real estate prices in New York State and elsewhere, of which the SALT deduction limit is the most significant. A loss of wealth associated with a decline in home prices could have a statistically significant impact on household spending in the State through the wealth effect, whereby consumers perceive the rise and fall of the value of an asset, such as a home, as a corresponding increase or decline in income, causing them to alter their spending practices. Reductions in household spending by New York residents, if they were to occur, would be expected to result in lower sales for the State's businesses, which, in turn, would cause further reductions in economic activity and employment. Lastly, falling home prices could result in homeowners delaying the sale of their homes. The combined impact of lower home prices and fewer sales transactions could result in lower real estate transfer tax collections.

In sum, the Federal tax law changes may intensify migration pressures and erode the value of home prices, thereby posing risks to the State's tax base.

State Response to Federal Tax Law Changes

The FY 2019 Enacted Budget includes State tax reforms intended to mitigate issues arising from the Federal law, including decoupling many State tax provisions from the Federal changes, the creation of an optional payroll tax program, and the establishment of a new State charitable giving vehicle, all of which are described below. The State is evaluating other tax law changes in response to the TCJA, including the feasibility of an unincorporated business tax.

On July 17, 2018, the State, joined by Connecticut, Maryland, and New Jersey, filed a lawsuit intended to protect New York taxpayers from the new Federal limit on the SALT deduction. The lawsuit argues that the new SALT limit was enacted to target New York and similarly situated states, that it interferes with state's rights to make their own fiscal decisions, and that it will disproportionately harm taxpayers in these states.

Decoupling From Federal Tax Code

The State tax code is closely aligned in many respects with the Federal tax code. The FY 2019 Enacted Budget includes legislation that decouples the State tax code from the Federal tax code, where appropriate, to minimize roughly $1 billion in State tax increases that would otherwise have been the result of the Federal tax changes. Those decoupled Federal changes, which would have affected the General Fund budget gaps projected in FY 2020 and beyond, include:

- Federal Limit on SALT Deduction. The TCJA capped the itemized deductions for SALT at $10,000. The State tax code is updated to decouple from this limit, preventing a State tax increase from the linkage of this Federal limit to State income tax returns.
- Federal Changes and Eliminations to Certain Deductions. The State decoupled from new Federal limits on other deductions.
- Temporary Federal Medical Expense Deduction Increase. Federal changes impose a two-year increase in the itemized medical expense deduction, thereby lowering taxpayer liability. The State has not changed its tax code.
- Child Tax Credit. Federal law changes the value of, and eligibility for, the child tax credit. The Empire State Child Tax Credit program will remain unchanged.
- New York Single Filer Standard Deduction. The Federal repeal of personal exemptions would have eliminated the ability of New York single-filer taxpayers to claim the standard deduction on their State tax returns. The FY 2019 Enacted Budget includes legislation to address this issue. Absent this legislation, New York State taxpayers would have been subject to an annual State tax increase of $840 million, beginning in FY 2020.

Employer Compensation Expense Program (ECEP)

Under legislation approved with the FY 2019 Enacted Budget, employers may opt in to a new ECEP, which is intended to mitigate the tax burden for employees affected by the SALT deduction limit. While the TCJA limits deductibility for individuals, it does not cap deductibility for ordinary and necessary business expenses paid or incurred by employers in carrying on a trade or business.

Employers that elect to participate in the ECEP program would be subject to a 5 percent State tax on all annual payroll expenses in excess of $40,000 per employee, phased in over three years beginning on January 1, 2019 as follows: 1.5 percent in tax year 2019, 3 percent in 2020, and 5 percent in 2021. Employers must elect to participate in the ECEP for the upcoming tax year by December 1 of the preceding calendar year, with the first annual election due by December 1, 2018 for the tax year beginning on January 1, 2019.

The ECEP is intended to be revenue neutral, with any decrease in New York State PIT receipts expected to be offset by a comparable increase in ECEP revenue. Remittance of ECEP revenue to the State is expected to occur on the same schedule as PIT withholdings, with remittances starting in the fourth quarter of FY 2019. A new State PIT credit will be available to employees whose wages are subject to the tax; any decrease in New York State PIT receipts is expected to be offset by a comparable increase in ECEP revenue because the formula used to calculate the State PIT credit corresponds in value to the ECEP.

DOB expects to include information on actual ECEP participation by the third quarterly update to the Enacted Budget Financial Plan, as information on employer elections becomes available.

State Charitable Gifts Trust Fund

The FY 2019 Enacted Budget authorizes the creation of a new State Charitable Gifts Trust Fund, which will accept gifts, starting in tax year 2018, for the purposes of improving health care and education in New York State. Taxpayers who itemize deductions may claim these charitable gifts as deductions on their Federal and State income tax returns. Any taxpayer making a donation may also claim a State tax credit equal to 85 percent of the donation amount for the tax year after the donation is made. State PIT receipts will be reduced by the State tax deduction and 85 percent tax credit.[5] Amounts on deposit in the Charitable Gifts Trust

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[5] The FY 2019 Enacted Budget also provides that the SUNY Research Foundation, the CUNY Research Foundation, and Health Research, Inc. may accept up to $10 million each in charitable gifts on an annual basis. State PIT receipts will also be reduced by the State tax deduction and an 85 percent credit for those donations that will be available beginning in tax year 2019.

Fund at the close of calendar year 2018 are expected to be appropriated for authorized purposes in the FY 2020 Budget. To date, the State has received $93 million in charitable gifts that have been deposited to the Charitable Gifts Trust Fund for healthcare and education ($57 million and $35 million, respectively).

Impact of Tax Law Changes on PIT Revenue Bonds

To offset the potential reduction in the level of New York State PIT receipts resulting from activity of the ECEP and the State Charitable Gifts Trust Fund, the FY 2019 Enacted Budget amends the State Finance Law provisions creating the Revenue Bond Tax Fund to increase the percentage of New York State PIT receipts required to be deposited upon receipt in the Revenue Bond Tax Fund from 25 percent to 50 percent. In addition, the legislation that created the ECEP requires that 50 percent of ECEP receipts received by the State be deposited to the Revenue Bond Tax Fund. These changes became effective April 1, 2018.

The amendments also increase the amount of all New York State PIT receipts collected from payroll withholding and ECEP receipts that must be deposited in the Revenue Bond Tax Fund in the event that (a) the State Legislature fails to appropriate amounts required to make all debt service payments on State PIT Revenue Bonds or (b) having been appropriated and set aside pursuant to a certificate of the Director of the Budget, debt service payments and other cash requirements under the Financing Agreement have not been made when due on the State PIT Revenue Bonds. Under prior law, New York State PIT receipts from payroll withholding were to be deposited to the Revenue Bond Tax Fund until amounts on deposit in the Revenue Bond Tax Fund equaled the greater of 25 percent of annual New York State PIT receipts or $6 billion. Under the new law, New York State PIT receipts and ECEP receipts will be deposited to the Revenue Bond Tax Fund until amounts on deposit in the Revenue Bond Tax Fund equal the greater of 40 percent of the aggregate of annual New York State PIT receipts and ECEP receipts or $12 billion.

Donations to the Charitable Gifts Trust Fund could reduce State PIT receipts by nearly one dollar for every dollar donated. Accordingly, the amount of donations to the State Charitable Gifts Trust Fund is the principal direct risk to the amount of New York State PIT receipts deposited to the Revenue Bond Tax Fund under the tax law changes enacted by the State as part of the FY 2019 Enacted Budget. To address this risk, the State increased the amount of PIT receipts deposited into the Revenue Bond Tax Fund from 25 percent to 50 percent.

DOB and DTF have prepared a calculation of the maximum amount of charitable donations to the State Charitable Gifts Trust Fund that could occur annually under varying assumptions. The calculation of this ceiling is intended as a stress test on State PIT receipts that may flow to the Revenue Bond Tax Fund under different levels of assumed taxpayer participation. It should not, under any circumstances, be viewed either as an estimate or projection of likely donations. The factors that may influence donation activity are complex and include, but are not limited to, possible statements, actions, or interpretive guidance by the IRS or other governmental actors relating to the deductibility of such donations; the liquidity position, risk tolerance, and knowledge of individual taxpayers; advice or guidance of tax advisors or other professionals; changes in general economic conditions; adoption of similar trusts in other states; and tax reciprocity agreements among states.

The ceiling on the amount of potential donations is calculated to be in the range of $28 billion annually, on average (2018 through 2022).[6] The calculation of the ceiling assumes that every resident taxpayer who has an incentive to donate will do so, and such donations will be equal to the total value of each resident taxpayer's SALT payments less the value of the $10,000 Federal SALT deduction limit, up to the value of the taxpayer's total State tax liability. The calculation is dependent on several assumptions concerning the number of itemized filers. It relies on the most recent personal income tax population study file (2016), as trended forward, as well as the impact of the TCJA and State law changes on the number and distribution of itemized and standardized filers. The calculation also assumes that (i) no further changes in Federal tax law occur, and (ii) DOB projections of the level of State taxpayer liability for the forecast period as set forth in the Enacted Budget Financial Plan are materially accurate.

In general, assumptions made regarding taxpayer behavior were intended to maximize the calculated impact of charitable giving on PIT receipts in each year. After these adjustments and with inclusion of ECEP revenues, receipts to the Revenue Bond Tax Fund are projected to remain above the level of receipts that would have been expected under statutes effective prior to April 2018, even assuming a maximum taxpayer participation scenario.

The DOB and DTF calculation of the projected ceiling on the amount of donations is necessarily based on many assumptions that may change materially over time. While DOB believes that these factors can be expected to constrain donation activity, there can

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[6] The calculation of maximum potential donations is based on current law, including the scheduled reversion of the top PIT rate from 8.82 percent to 6.85 percent starting in tax year 2020.

be no assurance that, under conditions of maximum participation, the amount of annual charitable gifts will not reduce the level of PIT receipts deposited into the Revenue Bond Tax Fund below the levels projected in the FY 2019 Executive Budget Financial Plan, as amended. If that were to occur, it is DOB's expectation that changes to the tax law would be recommended to further increase the percentage of PIT receipts deposited into the Revenue Bond Tax Fund.

Accordingly, although the calculation of a maximum amount of charitable donations to the State Charitable Gifts Trust Fund reflect DOB's and DTF's current best judgment and estimates, such amount may be higher.

IRS Guidance

On August 23, 2018, the IRS issued proposed regulations — IRS REG-112176-18 — that seek to provide new rules governing the availability of Federal income tax deductions for charitable contributions when a taxpayer receives or expects to receive a state or local tax credit for such charitable contributions. In the case of state tax credits received by a taxpayer making a charitable contribution, the proposed regulations would require the taxpayer to reduce the Federal income tax deduction by the amount of the state tax credit received for such charitable contribution; provided, however, this rule would not apply if the value of the state tax credit to be received does not exceed 15 percent of the charitable contribution. If finalized, the effective date of these proposed regulations would be August 27, 2018. The Treasury Department and the IRS have collected comments from the general public on these proposed regulations and held a public hearing on November 5, 2018. Based on its review of the proposed regulations, DOB anticipates that if the proposed regulations are adopted in their current form, then contributions to the State Charitable Gifts Trust Fund may decline. The proposed regulations, by their terms, do not impact the Federal tax reduction that DOB expects would result for certain taxpayers employed by entities that may enroll in the ECEP.

Implementation

The State developed the ECEP and Charitable Gifts Trust Fund based on a review of existing laws, regulations, and precedents. However, there can be no assurance that the IRS will allow taxes paid under the ECEP by an electing employer, or donations made by taxpayers to the Charitable Gifts Trust Fund, to be deductible for Federal tax purposes under current law and the TCJA. As noted above, the IRS has proposed regulations that would impair the ability of taxpayers to deduct donations to the Charitable Gifts Trust Fund from Federally taxable income while receiving State tax credits for such donations.

The FY 2019 Enacted Budget allows taxpayers to claim reimbursement from the State for interest on underpayments of Federal tax liability for the 2019, 2020 and 2021 tax years if the underpayments arise from reliance on amendments to State tax law enacted in 2018. To receive reimbursement, taxpayers are required to submit their reimbursement claims to DTF within 60 days of making an interest payment to the IRS.

There could be a material expense to the State if taxpayer participation in the ECEP and Charitable Gifts initiatives for the 2019, 2020 and 2021 tax years results in Federal determinations of underpayment of Federal income tax. Any cost to the Updated Financial Plan from State reimbursement of interest charges would occur in FY 2021 at the earliest, for determinations on 2019 tax payments due in April 2020, or thereafter

The Updated Financial Plan does not include any estimate of the magnitude of the possible interest expense to the State, which depends on several factors, including: rates of participation in the ECEP; the magnitude of donations to the State Charitable Gifts Trust Fund; the amount of determinations of underpayment attributable to reliance on other changes in State tax law made in 2018; the amount of time between the due date of the return and the date any Federal determination is issued; the interest rate applied; and the frequency at which taxpayers submit timely reimbursement claims to the State. Interest on unpaid Federal tax generally accrues from the due date of the return until the date of payment in full. Under current Federal law, the interest rate is determined quarterly and is the Federal short-term rate plus 3 percent, compounded daily.

Enacted Budget Financial Plan.

The General Fund is affected by two fund reclassifications approved in the FY 2019 Enacted Budget. 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 General State Charges (GSCs) budget.

- DOT/DMV Operating Cost Reclassification. Certain DOT and 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 is intended to align operating and capital functions with their revenue sources.

The reclassifications affect the comparability of FY 2018 results to FY 2019 estimates. In addition, General Fund receipts and disbursements continue to be affected by the receipt and use of Extraordinary Monetary Settlements. Unless otherwise noted, the discussions of receipts and disbursements that follow exclude (a) the receipts and use of Extraordinary Monetary Settlements and (b) the fund reclassifications for mental hygiene activity and the DHBTF that take effect in FY 2019.

Receipts.

General Fund receipts, including transfers from other funds, are projected to total $71.3 billion in FY 2019, an increase of $694 million (1.0 percent) from FY 2018 results. The annual change is impacted by the shift of an estimated $1.9 billion of receipts from FY 2019 into FY 2018 due to the TCJA and the payment of $500 million in additional PIT refunds in the last quarter of FY 2018. Excluding these shifts, the total receipts increase is $4.0 billion or 5.8 percent.

General Fund PIT receipts, including transfers after payment of debt service on State PIT Revenue Bonds, are expected to total $46.4 billion, an annual decrease of $580 million. Excluding the shifts described above, the underlying PIT growth of roughly 6.0 percent is consistent with forecasted economic growth and revisions based on April 2018 results.

General Fund consumption/use tax receipts, including transfers after payment of debt service on Local Government Assistance Corporation (LGAC) and Sales Tax Revenue Bonds, are estimated to total $13.4 billion, an annual increase of $207 million (1.6 percent). This reflects projected growth in disposable income and taxable consumption.

General Fund business tax receipts are estimated at $5.6 billion, an increase of $710 million (14.4 percent). This growth is due to projected increases in corporate profits and new for-profit insurance providers subject to a premium insurance tax.

Other tax receipts to the General Fund are expected to total $2.0 billion including transfers after payment of debt service on Clean Water/Clean Air (CW/CA) bonds, a decrease of $221 million (9.7 percent), reflecting a return to an average number of estate tax payments exceeding $25 million.

Non-tax receipts are estimated at $3.9 billion, an increase of $578 million. The growth is mainly due to the expected transfer of resources from the Health Care Transformation Fund.

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.

General Fund disbursements, including transfers to other funds, are expected to total $73.6 billion in FY 2019, an annual increase of $4.3 billion (6.2 percent) from FY 2018 results.

Local assistance grants are expected to total $49.3 billion in FY 2019, an annual increase of $3.2 billion (7.0 percent). The largest increases include $1.0 billion for School Aid (on a State fiscal year basis) and $971 million for Medicaid.

General Fund disbursements for agency operations, including fringe benefits and fixed costs, are expected to total $14.8 billion, an annual increase of $979 million (7.1 percent). Personal and nonpersonal service costs increase $685 million from FY 2018, reflecting increased personal service costs driven by labor agreements. Fringe benefit costs associated with State employees, including retiree health insurance costs, are expected to increase by $294 million (5.3 percent), mainly due to negotiated rate increases reflecting medical cost inflation and current enrollment levels. The State's costs for Workers' Compensation are expected to increase by $174 million, due to underlying growth in the average weekly wage benefit and medical costs ($69 million), as well as a reduction in other resources available to offset costs ($105 million).

General Fund transfers to other funds are estimated to total $9.6 billion, an increase of $104 million. The increase is mainly due to transfers for capital projects (excluding transfers funded with Extraordinary Monetary Settlements), reflecting the timing of General Fund capital reimbursements from bond proceeds.

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 $6.5 billion, a decrease of $3.0 billion from FY 2018. The General Fund closing balance, excluding Extraordinary Monetary Settlements, is estimated at $2.5 billion, or $1.9 billion lower than the closing balance at the end of FY 2018. The change is due almost entirely to the expected use of the $1.9 billion in cash received in FY 2018 attributed to taxpayer behavior, principally the acceleration of tax payments in response to the Federal limit on SALT deductibility, which became effective January 1, 2018.

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 Updated Financial Plan continues to maintain a reserve of $500 million for debt management purposes. DOB will decide on the use of these funds based on market conditions, financial plan needs, and other factors.

The balance from Extraordinary Monetary Settlements is expected to total $3.9 billion at the close of FY 2019, a decrease of $1.1 billion from FY 2018. The anticipated decrease reflects the use of Extraordinary Monetary Settlements to fund activities appropriated from other funds ($937 million); the MTA Subway Action Plan ($194 million); and general operations ($383 million), partly offset by the receipt of settlement payments to date in FY 2019 ($518 million less $75 million retained by the Department of Law in other funds).

Cash Flow.

State Finance Law authorizes the General Fund to borrow money temporarily from available funds held in the Short-Term Investment Pool (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 the available balances in STIP, as determined by the State Comptroller. Available balances include money in 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 PIT bonds 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 June 2018, DOB calculates that the State has received a total of $11.2 billion in Extraordinary Monetary Settlements for violations of State laws by major financial and other institutions.

Since the Enacted Budget Financial Plan, the State has received $335 million in monetary settlement payments from firms that have engaged in conduct that violates New York State laws and regulations. These settlement payments will be held in reserve, consistent with treatment of other settlements. Extraordinary Monetary Settlements held in the General Fund are expected to total $3.95 billion at the close of FY 2019, of which $411 million has not been designated for specific purposes.

In addition, Wells Fargo & Company ("Wells Fargo") has paid a $65 million penalty pursuant to an October 18, 2018 Settlement Agreement between Wells Fargo and the Office of the Attorney General. This Settlement Agreement pertains to Wells Fargo's representations to investors regarding its cross-selling business model and publicly reported cross-sell metrics. This Extraordinary Monetary Settlement has not been reflected in the Updated Financial Plan.

A total of $10.8 billion in Extraordinary Monetary Settlements has been allocated to date. The remaining balance of $411 million remains unallocated. A total of $7.8 billion of Extraordinary Monetary Settlement receipts 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 certain matters such as Office for People with Developmental Disabilities (OPWDD) Federal disallowances in FY 2016, retroactive labor costs, General Fund operations, one-time litigation payments to CSX Transportation, Inc. (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 its operations in FY 2019 as part of the State's commitment to fund 50 percent of the MTA's New York City Subway Action Plan.
- Health Care Capital Grants ($125 million). An additional $525 million will be provided to the Health Care Facility Transformation Program, of which $125 million will be funded from Extraordinary Monetary Settlements over a multi-year period.

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, certain projections contained in the Enacted Budget Financial Plan are based on the assumption that annual growth in State Operating Funds spending will be limited to 2 percent in FY 2020, FY 2021, and FY 2022, 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 spending growth benchmark.

The Updated Financial Plan is based on numerous assumptions, including the condition of the State and national economies and the concomitant receipt of economically sensitive tax receipts in the amounts projected. Other uncertainties and risks concerning the economic and receipts forecasts include the impacts of: national and international events; ongoing financial instability in the Euro-zone; changes in consumer confidence, oil and gas supplies and oil and gas prices; major terrorist events, hostilities or war; climate change and extreme weather events; cybersecurity threats; Federal statutory and regulatory changes concerning financial sector activities; Federal tax law; changes to Federal programs; 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; tech industry developments and employment; 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 projected 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 issue 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 additional 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 FYs 2020 to 2022 assume that School Aid and Medicaid disbursements will be limited to the annual growth in State personal income and the ten-year rolling 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 increases above the personal income growth index. In SY 2019, the Updated Financial Plan reflects a 3.6 percent School Aid increase, compared to 1.5 percent growth in the personal income growth index. the Updated Financial Plan reflects a School Aid increase of 3.6 percent. However, recently updated personal income growth data results in a 6.1 percent growth in the personal income growth index.

State law grants the Commissioner of Health 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 a number of 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 Global 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 State's share of Medicaid costs.

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[7]; 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 or future years.

The Updated Financial Plan also includes 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 to 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 a particular 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 given 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 a given fiscal year.

Federal Funding. 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 as a result of changes in Federal policy. Actions by the Federal government, including the TCJA, pose a heightened risk to State finances. Enactment of

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7 The Seneca Nation has withheld payments to the State that were expected in FY 2018 and FY 2019 (between April 1, 2017 and September 30, 2019)0. The State and Seneca Nation are currently in the arbitration process. The Updated Financial Plan assumes successful resolution by the end of FY 2019.

Federal tax law changes is currently projected to add $1.9 trillion to the Federal deficit over the next ten years, increasing the likelihood that Congress will seek material cuts in Federal aid programs or impose new barriers to the receipt of Federal aid by families and individuals.

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.

Given this uncertainty, the FY 2019 Enacted Budget included legislation to continue authorization for a process by which the State could manage any potentially significant reductions in Federal aid during FYs 2019 and 2020. Specifically, the legislation allows the Budget Director to prepare a plan for consideration by the Legislature if 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, and is not additive. 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 Assembly. Otherwise, the plan submitted by the Budget Director takes effect automatically

Current Federal Aid. President Trump has proposed significant cuts to mandatory and discretionary domestic programs in Federal Fiscal Years (FFYs) 2018 and 2019. The proposed cuts for FFY 2018 were largely rejected by the Consolidated Appropriations Act of 2018, which was enacted in March 2018. Portions of the FFY 2019 budget are still under consideration by Congress. If the proposed cuts are adopted, it could reduce Federal aid to New York by billions of dollars.

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 Affordable Care Act (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. The 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 if the changes do take effect as scheduled, 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 Enacted Budget Financial Plan.

Additionally, the Trump Administration withheld Cost Sharing Reduction (CSR) payments, threatening low-cost health insurance coverage for income-eligible recipients purchasing Qualified Health Plan (QHP) or EP coverage through New York State of Health (NYSOH), New York's official health plan marketplace. However, recent actions by the Trump Administration, in response to litigation brought by the State, will allow the State to recoup some of the withheld EP funding through changes to the reimbursement methodology. The Updated Financial Plan continues to reflect support for the EP program.

While Federal funding for the Children's Health Insurance 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 IRS have yet to be published. DOB has no current estimate as to the potential impact to the Enacted Budget Financial Plan from this Federal excise tax.

Medicaid Redesign Team ("MRT") Medicaid Waiver. The Federal Centers for Medicare & Medicaid Services (CMS) and the State have reached 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 Federal Medical Assistance Percentage (FMAP) funding associated with childless adults. The DOH continues to work with the CMS, and to refine the 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 Enacted Budget 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, 2018, the State had approximately 181,600 FTE 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 182,728 positions at the end of FY 2019. The State workforce subject to direct Executive control is expected to total 118,868 full time equivalent positions at the end of FY 2019.

Status of Current Labor Negotiations. The State has multi-year labor agreements in place with the majority of its unionized workforce. The Civil Service Employees Association (CSEA) and DC-37 (Rent Regulation) 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.

On September 4, 2018, the United University Professions (UUP) ratified a six-year collective bargaining agreement that includes academic years 2017 through 2022. The agreement provides for a 2 percent general salary increase in each year of the contract, and additional compensation changes, which are partly offset by benefit design changes within NYSHIP. The cost of the agreement (approximately $225 million in FY 2019) has been included in the Updated Financial Plan and is primarily funded by SUNY with the exception of the related fringe benefit costs, which are paid by the State.

On October 10, 2018, the Police Benevolent Association of the New York State Troopers (NYSTPBA) ratified a five-year collective bargaining agreement for FY 2019 through FY 2023. The agreement provides for a 2 percent annual general salary increase in each year of the contract and additional compensation changes, which are partly offset by changes to health insurance benefit design within NYSHIP, similar to UUP and CSEA. The cost of this agreement is expected to be offset by agency management plan savings, consistent with past practice.

Employees represented by the Public Employees Federation (PEF) and the Graduate Student Employees Union (GSEU) have a three-year collective bargaining agreement providing 2 percent annual salary increases in FYs 2017 through 2019. Salary increases provided to PEF and GSEU employees have also been extended to Management/Confidential (M/C) employees.

The State is in negotiations with all other employee unions whose contracts concluded in previous fiscal years, including the New York State Police Investigators Association (NYSPIA), Council 82 and the New York State Correctional Officers and Police Benevolent Association (NYSCOPBA) following the March 2017 membership rejection of a tentative collective bargaining agreement on a five-year labor contract through FY 2021.[8] Negotiations also continue with the Police Benevolent Association of New York State (PBANYS), whose contract expired at the end of FY 2015.

The Judiciary has reached agreements with all 12 unions represented within its workforce. The contract periods are as follows: 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.

State Retirement System. The System provides pension benefits to public employees of the State and its localities (except employees of New York City, and public school teachers and administrators, who are covered by separate plans). State employees made up about 33 percent of the membership as of March 31, 2018. There were 3,044 other public employers participating in the System, including all cities and counties (except New York City), most towns, villages and school districts (with respect to non- teaching employees), and many public authorities.

As of March 31, 2018, 652,030 persons were members of the System and 470,596 pensioners or beneficiaries were receiving pension benefits. Article 5, section 7 of the State Constitution considers membership in any State pension or retirement system to be "a contractual relationship, the benefits of which shall not be diminished or impaired."

The State Comptroller is the administrative head of New York State and Local Retirement System (NYSLRS) and the trustee and custodian of the Common Retirement Fund (CRF), a trust created pursuant to the Retirement and Social Security Law to hold the System's assets, and, as such, is responsible for investing the assets of the System.

The State makes annual contributions to the NYSLRS for employees in the New York State and Local Employees' Retirement System (ERS) and the New York State and Local Police and Fire Retirement System (PFRS). 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, NYSLRS announced that employer contribution rates would decrease beginning in 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. During FY 2019, salary scale assumptions were further changed via a one-time 10 percent increase for both ERS and PFRS, to be reflected in FY 2020 contribution rates.

In order to protect employers from potentially volatile contributions tied directly to the value of the System's assets held by the CRF, the System utilizes a multi-year smoothing procedure. One of the factors used by the System's Actuary to calculate employer contribution requirements is the assumed investment rate of return, which is currently 7.0 percent.[9] The current actuarial smoothing method recognizes unexpected annual gains and losses (returns above or below the assumed investment rate of return) over a 5-year period.

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[8] The five-year collective bargaining 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.

[9] During 2015, the Retirement System's Actuary conducted the statutorily required quinquennial actual experience study of economic and demographic assumptions. The assumed investment rate of return is an influential factor in calculating employer contribution rates. In addition, the Chief Investment Officer conducted an asset allocation study. The resulting asset allocation and long-term asset allocation policy informed the Actuary's recommendation regarding the revision of the investment rate of return (discount rate). In September 2015, the Comptroller announced the assumed rate of return for NYSLRS would be lowered from 7.5 percent to 7 percent. The 7 percent rate of return has been used to determine employer contribution rates in FYs 2017 through 2020.

The amount of future annual employer contribution rates will depend, in part, on the value of the assets held by the CRF as of each April 1, as well as on the present value of the anticipated benefits to be paid by the System as of each April 1. Contribution rates for FY 2020 were released in August 2018. The average ERS rate decreased by 0.3 percent from 14.9 percent of salary in FY 2019 to 14.6 percent of salary in FY 2020, while the average PFRS rate in FY 2020 will remain at 23.5 percent of payroll, the same rate as in FY 2019.

The System assets are held by the CRF for the exclusive benefit of members, pensioners and beneficiaries. Investments for the System are made by the State Comptroller as trustee of the CRF. The System reports that the net position restricted for pension benefits as of March 31, 2018 was $212.1 billion (including $5.2 billion in receivables, which consist of employer contributions, amortized amounts, member contributions, member loans, accrued interest and dividends, investment sales and other miscellaneous receivables), an increase of $14.5 billion or 7.3 percent from the FY 2017 level of $197.6 billion. The increase in net position restricted for pension benefits from FY 2017 to FY 2018 reflects, in large part, equity market performance.[10] The System's audited Financial Statement reports a time-weighted investment rate of return of 11.35 percent (gross rate of return before the deduction of certain fees) for FY 2018.

The System reports that the present value of anticipated benefits for current members, retirees, and beneficiaries increased to $251.4 billion (including $127.8 billion for retirees and beneficiaries) as of April 1, 2018, up from $240.7 billion as of April 1, 2017. The funding method used by the System anticipates that the plan net position, plus future actuarially determined contributions, will be sufficient to pay for the anticipated benefits of current members, retirees and beneficiaries. The valuation used by the Retirement Systems Actuary was based on audited net position restricted for pension benefits as of March 31, 2018. Actuarially determined contributions are calculated using actuarial assets and the present value of anticipated benefits. Actuarial assets differed from plan net position on April 1, 2018 in that the determination of actuarial assets utilized a smoothing method that recognized 20 percent of the unexpected gain for FY 2018, 40 percent of the unexpected gain for FY 2017, 60 percent of the unexpected loss for FY 2016, and 80 percent of the unexpected loss for FY 2015. The asset valuation method smooths gains and losses based on the market value of all investments. Actuarial assets increased from $198.1 billion on April 1, 2017 to $206.7 billion on April 1, 2018.

The ratio of the fiduciary net position to the total pension liability for ERS, as of March 31, 2018, calculated by the System's Actuary, was 98.2 percent. The ratio of the fiduciary net position to the total pension liability for PFRS, as of March 31, 2018, calculated by the System's Actuary, was 96.9 percent.[11]

FY 2019 Projections. The State's FY 2019 ERS/PFRS pension liability estimate of $2.2 billion is based on the most recent bill prepared by OSC as of October 2018. The estimate includes payment of $432 million towards the balance outstanding on prior-year deferrals (i.e., amortizations) and additional interest savings from paying the majority of the pension bill in April 2018. The State's FY 2019 ERS/PFRS pension estimate was revised downward based on actual FY 2018 salary base (used to calculate the FY 2019 bill), which was lower than previously projected.

FY 2020 Projections. The preliminary FY 2020 ERS/PFRS pension liability estimate of $2.3 billion is impacted by FY 2018 investment returns of 11.4 percent, which was above the 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 14.9 percent to 14.6 percent of payroll, while the average contribution rate for PFRS will remain stable at 23.5 percent of payroll.

Outyear Projections. Pension estimates for FY 2021 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.

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[10] On November 14, 2018, the State Comptroller released a statement indicating that the value of the System's invested assets posted a 3.47 percent time-weighted rate of return (gross rate of return before the deduction of certain fees) for the three-month period ended September 30, 2018. This report reflects unaudited data for assets invested for the System. The value of invested assets changes daily.

[11] The System previously disclosed a funded ratio in accordance with GASB Statements 25 and 27, which have been amended by GASB Statements 67 and 68. The GASB Statements 67 and 68 amendments had the effect, among other things, of no longer requiring the disclosure of a funded ratio. GASB now requires the disclosure of the ratio of the fiduciary net position to the total pension liability. This ratio is not called a funded ratio and is not directly comparable to the funded ratio disclosed in prior years.

Other Post-Employment Benefits. 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 the New York State Health Insurance Program ("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 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 2018, 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 2018, the unfunded actuarial accrued liability for FY 2018 is $90.5 billion ($72.8 billion for the State and $17.7 billion for SUNY), an increase of $3.3 billion from FY 2017 (attributable entirely to SUNY). The unfunded actuarial accrued liability for FY 2018 used an actuarial valuation of OPEB liabilities as of April 1, 2016. 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 is due to 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 the projected benefit obligation.

The actuarially determined annual OPEB cost for FY 2018 totaled $5.5 billion ($4.3 billion for the State and $1.2 billion for SUNY), an increase of $1.3 billion from FY 2017 ($1.0 billion for the State and $264 million for SUNY). The actuarially-determined cost is calculated using the Frozen Entry Age actuarial cost method, allocating costs on a level percentage of earnings basis. The actuarially determined cost was $3.6 billion ($2.7 billion for the State and $878 million for SUNY) greater than the PAYGO required cash payments for retiree costs made by the State in FY 2018. This difference between the State's PAYGO costs, and the actuarially-determined ARC under GASB Statement 45, reduced the State's net asset condition at the end of FY 2018 by $3.6 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, meaning the State pays these costs as they become due.

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. 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, is expected to be incorporated into the State's FY 2019 Basic Financial Statements. The FY 2019 Basic Financial Statements are expected to be issued in July 2019. The GASB Statements, as amended by GASB Statement 75, alter the actuarial methods used to calculate OPEB liabilities, standardizes asset smoothing and discount rates, and require 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 to the Basic Financial Statements, 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, 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 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 to adapt 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. In November 2017, Moody's Investors Service 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.

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 purposes 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 Chief Information Security Office (CISO) within the State's Office of Information Technology Services (ITS) maintains comprehensive policies and standards, programs, and services relating to the security of State government networks and geographic information systems, and annually assesses the implementation of security policies and standards to ensure compliance through the Nationwide Cyber Security Review. In addition, the CISO maintains the New York State Cyber Command Center team and hotline, which provides a security operations center, digital forensics capabilities, 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 at guarding 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, (ii) create written cybersecurity policies and perform risk assessments, (iii) designate a Chief Information Security

Officer with responsibility to oversee the cybersecurity program, (iv) annually certify compliance with the cybersecurity regulations and (v) report to DFS cybersecurity events that have a reasonable likelihood of materially harming any material part of the entity's normal operation(s) 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 financial projections. 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 on the 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. 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. 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 bonds to 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 2018).

Actual levels of debt outstanding and debt service costs continue to remain below the statutory caps. From April 1, 2000 through March 31, 2018, the State has issued new debt resulting in $44.7 billion of debt outstanding applicable to the debt reform cap. This is about $6.5 billion below the statutory debt outstanding limitation. In addition, the debt service costs on this new debt totaled $4.5 billion in FY 2018, or roughly $3.8 billion below the statutory debt service limitation.

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 available room under the debt outstanding cap is expected to decline from $6.5 billion in FY 2018 to about $2.1 billion in FY 2023. 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 in 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 because these bonds do not meet the definition of "State-supported debt" as set forth in the Debt Reform Act. The bonds are backed solely with dormitory rental revenue. The State may adjust capital spending priorities and debt financing practices, from time to time, to preserve available debt capacity and stay within the statutory limits, as events warrant.

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 March 31, 2018, there were approximately $193 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 $99 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.

Economic and Demographic Trends

The National Economy.

The national economy grew 3.5 percent in the third quarter of calendar year 2018, following 4.2 percent growth in the second quarter of calendar year 2018. The third quarter was propelled primarily by stronger than expected household spending growth of 4.0 percent and a large swing in the change in private inventories from a decline of $36.8 billion in the second quarter to a $76.3 billion increase in the third quarter. That swing likely reflects some "stocking up" on the part of businesses seeking to avoid or minimize the impact of tariffs on their input costs. However, the most recent data indicate that global economic growth is slowing and rising interest rates are having an adverse impact on domestic growth. Thus, as the impact of the Federal tax cuts fades, interest rates rise, and global growth slows, DOB projects that the U.S. economy will decelerate in the fourth quarter of 2018 and slow even further in 2019. U.S. real GDP growth is estimated to fall from 2.9 percent in 2018 to 2.7 percent in 2019. Although the overall outlook represents an upward revision from the Enacted Budget Financial Plan forecast, the risks have heightened significantly going forward.

The strong labor market, coupled with moderate growth in wages, continues to support solid growth in household spending. As illustrated in the figure above, average quarterly real consumption growth has accelerated from 1.8 percent during the first half of the expansion to 3.0 percent during the more recent period starting in the first quarter of calendar year 2014. Household spending has been further buoyed in 2018 by the tax reductions embodied in the Federal TCJA. However, the impact of the tax cuts is expected to taper gradually starting in the first quarter of 2019. After growing 2.5 percent in 2017, real household spending growth has been revised up to 2.7 percent for both 2018 and 2019 on an annual average basis, but is expected to fall to 2.2 percent by 2020. One factor offsetting the positive impact of a lower tax bite on consumer spending has been a moribund housing market. Although long-term mortgage rates remain low from a historical perspective, their recent rise appears to be having a negative impact on the demand for new homes. DOB now estimates real growth in residential fixed investment of 0.4 percent for 2018 and 1.7 percent for 2019, representing a downward revision from the Enacted Budget Financial Plan forecast.

The private sector labor market added 206,000 jobs per month during the first 10 months of 2018, well above the average monthly gain of 179,000 during 2016 and 2017. Although weather events have likely contributed to recent labor market volatility, it is also likely that job gains will decelerate going forward as labor market slack continues to diminish. The conventional unemployment rate has averaged 3.9 percent over the first 10 months of 2018, fully half a percentage point below its pre-recession level. A broader measure of the unemployment rate that includes workers who are marginally attached to the labor force has also fallen below its pre-recession level, while the percentage of the workforce working part-time, a measure of underemployment, is inching closer to where it was before the Great Recession. Moreover, evidence of labor shortages continues to emerge in a number of sectors requiring special skills, such as construction and manufacturing. Total nonagricultural employment growth of 1.6 percent is projected for 2018, modestly above the Enacted Budget Financial Plan forecast, followed by 1.4 percent growth in 2019.

Business investment growth substantially improved during the first half of 2018, driven mainly by increasing global demand for U.S. exports, expanding energy sector production, and a lift from the TCJA. However, the most recent data suggest that the impact of all of these developments on investment growth may have peaked. Moreover, tariffs are winding their way through the supply chain, significantly raising input costs for some manufacturing firms. The most recent round of tariffs imposed by the US on another $200 billion of Chinese imports is likely to further slow domestic demand, and modestly boost inflation. With easing global growth and a strengthening dollar, net exports may become even more of a drag on national economic growth in 2019. Consequently, real export growth has been revised down to 4.3 percent for 2018 and down to 3.4 percent for 2019. Real business fixed investment growth of 6.9 percent is now estimated for 2018, which is stronger than the Enacted Budget Financial Plan forecast. But with provisions of the TCJA now thought likely to have pulled some spending forward into the first half of 2018, real business fixed investment growth has been revised down to 4.4 percent for 2019.

Inflation has picked up modestly. Rising energy prices have led to a 2.5 percent rise in consumer prices for the first 10 months of 2018, following 2.1 percent inflation for all of 2017. In the meantime, core CPI inflation, which excludes the volatile food and energy components, has also accelerated in 2018 from 1.8 percent in 2017 to 2.1 percent over the first 10 months of 2018. However, inflation remains moderate from a historical perspective and well within the Federal Reserve's target range. Moreover, domestic oil prices have fallen close to 20 percent, as evidence of slowing global growth is compounded by recent growth in supply and the uncertainty associated with a complicated geopolitical landscape is having on supply. Consumer price inflation of 2.5 percent is estimated for 2018 on annual average basis, falling to 2.3 percent for 2019. However, the uncertainty surrounding both future energy prices and the impact of present and future tariffs represent substantial risks to this forecast.

A tightening labor market also represents a risk to DOB's inflation forecast. Wage growth of 4.8 percent is projected for 2018, three-tenths of a percentage point higher than the Enacted Budget Financial Plan forecast. Overall personal income growth of 4.5 percent is estimated for 2018, three-tenths of a percentage point above the Enacted Budget Financial Plan estimate. In addition to stronger growth in pre-tax income, after-tax disposable income will continue to be supported by Federal income tax cuts before their simulative impact fades in 2019. With the national economy continuing to exhibit strength, the Federal Reserve has stayed on its interest rate normalization path, raising its federal funds rate target three times thus far this year. Although the Federal Reserve appears poised to raise rates again in December 2018, and possibly three more times in 2019, the risk of a policy error in this environment of relatively low wage and price inflation is becoming substantial.

Despite rising short-term rates, long-term interest rates have failed to sustain a commensurate rise. As a result, the yield curve, which tracks the difference between long- and short-term rates, remains relatively flat. Since yield curve inversion, which occurs when short-term rates actually exceed long-term rates, often precedes a recession, a flattening curve can be a cause of concern. But even in the absence of inversion, a flat yield curve could put downward pressure on banking system profits, particularly now that the rates that banks pay their depositors are finally rising from their historically low levels, as banks are forced to compete with the rise in risk-free short-term Treasury yields. The Federal Reserve Bank of New York breaks down long-term treasury bond yields into two components: (1) expectations for future risk-neutral short-term interest rates, which have been trending higher consistent with recent monetary policy moves, and (2) a term premium to compensate for the inflation risk associated with holding a multi-period instrument, which is currently near historic lows. Indeed, low inflation expectations and central bank purchases of long-duration assets to promote the recovery from the Great Recession are the main forces that held term premia down. Term premia are expected to increase as the Federal Reserve shrinks its balance sheet and inflation expectations firm, but this rebalancing is occurring quite slowly. For example, the 10-year Treasury yield is now roughly where it was at the end of September 2018, when the Federal Reserve raised its federal funds rate target by a full 25 basis points. This sluggishness is due in large part to the safe haven status of US Treasury securities and is therefore likely to persist, particularly as the global economy decelerates. DOB expects the 10-year Treasury yield to continue to rise only gradually, approaching 4 percent by the end of 2020.

Risks to the current economic outlook remain. Slower global growth than projected could result in lower demand for US exports, resulting in weaker growth in corporate profits, investment, and employment than reflected in this forecast. The disruption of trade flows due to the uncertainty surrounding tariffs could represent a significant setback for the manufacturing sector if firms delay production plans. In addition, if tariffs result in even higher input prices than anticipated, the current relatively benign inflation environment could deteriorate, possibly resulting in lower job and investment growth than reflected in this forecast. Higher inflation than anticipated could induce the Federal Reserve to tighten even faster than anticipated, which could result in slower household spending and residential construction growth. The risks associated with tariffs, rising interest rates, and the impact of slower global growth on corporate earnings have injected a large degree of volatility into equity markets in recent weeks. Lower and more volatile equity prices can result in lower household spending through both the wealth effect and as a signal that the road ahead is uncertain. This volatility could be further exacerbated by the risk surrounding the long-term impact of Federal tax reductions on budget deficits and the national debt.

On the positive side, if the impact of Federal tax reform on consumer spending and business investment is stronger than projected without significantly raising inflation, stronger growth in employment, wages, and the overall economy could result. Recent data indicate that year-over-year growth in the inventory of existing single-family homes has been tilting up since June 2018 after dropping for an unprecedented 36 straight months. If rising inventories result in slower home price growth, the resulting rise in home affordability could stimulate greater home sales than currently projected, which in turn could fuel stronger household spending than reflected in this forecast.

The New York State Economy.

New York State private sector job growth appears to be stabilizing at a historically healthy rate. The State's leading industrial sectors continue to be healthcare, management and administrative services, information, education, and construction. In contrast, the manufacturing, wholesale trade, and retail trade sectors continue to exhibit losses, while growth in the leisure and hospitality sector and the professional, scientific, and technical services sector is slowing. On balance, State private sector job growth remains strong, with growth of 1.5 percent estimated for 2018, representing an upward revision of 0.2 percent from the Enacted Budget Financial Plan forecast. Slower growth of 1.3 percent is projected for 2019 as national and global economic growth moderates, which represents an upward revision of 0.1 percent above the Enacted Budget Financial Plan forecast.

Finance and insurance sector bonuses are estimated to have grown 13.7 percent for the FY 2018 bonus season, the strongest growth in four years. This growth was associated with an impressive 2017 revenue performance for New York Stock Exchange member firms that was the strongest since 2006. However, FY 2018 Wall Street bonuses are also suspected to have been buttressed by one-time payments associated with the reduction in the corporate tax rate embodied in the TCJA. These payments are not expected to recur in FY 2019. Consequently, finance and insurance sector bonuses, which have been revised downward since the Enacted Budget Financial Plan forecast, are expected to fall 2.3 percent for FY 2019. Overall wage growth of 3.8 percent is estimated for FY 2019, following upwardly revised growth of 4.7 percent for FY 2018.

In September 2018, the U.S. BEA published a comprehensive revision to its state-level personal income estimates going back to 1947. The $68.5 billion revision in the NYS personal income estimate for the 2018 State fiscal year was an unusually large 2.2 percentage points, raising growth to 6.1 percent from the initial estimate of a 3.9 percent increase. The revision to BEA's estimate of New York State Wages aligns BEA's estimate more closely to the source data, the Quarterly Census of Employment and Wages (QCEW). Although over half of total State personal income is comprised of wages, the September 2018 revision to wages accounts for only 13 percent of the total personal income revision for FY 2018.

The source data for two other large personal income components — property income and proprietor's income — includes state tax return data, though with a lag. Indeed, the September 2018 release only now incorporates data from 2016 tax returns. In addition, a large portion of property income, which combines interest, dividend, and rental income, is imputed by BEA. BEA cites a recent improvement in the measurement of the implicit services of savings institutions and credit unions, such as free checking, as a source of the September revision. Property income accounts for 30 percent of the total value of the FY 2018 revision. Finally, a significant contributor to the large upward revision to proprietors' income was the incorporation of results from the 2008-2010 IRS Tax Gap study. The IRS defines the tax gap as the amount of tax liability faced by taxpayers that is not paid on time and is thus a measure of tax compliance. Since the incorporation of the 2008-2010 study was the first since the incorporation of results from the 2006 study in 2012, the associated revision was substantial. Proprietors' income accounts for 47 percent of the total FY 2018 revision. Together, the revisions to these three income components comprise just under 90 percent of the total revision to FY 2018 New York personal income. However, FY 2018 personal income growth will look quite different by the next comprehensive revision, three to five years from now.

Although the State's private-sector labor market has stabilized at a healthy pace of growth, 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 the recent 10 percent decline in S&P 500 equity prices, from a market peak realized in September 2018. Risks related to the impact of tariffs, the strong dollar, and weakening global growth are likely to continue to create volatility and restrain equity market growth over the near-term. Due to the disproportionate global tilt of financial markets, the State's finance sector is particularly vulnerable to these risks. Financial markets also tend to amplify the perturbations associated with shifting monetary policy, as businesses and investors adjust to interest rates that are approaching their highest levels in ten years. Weaker and/or more volatile markets than anticipated could result in weaker bonus and wage growth, as well as lower realizations of taxable capital gains than reflected in this forecast. 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.

APPENDIX D

BlackRock U.S. Registered Funds
iShares by BlackRock

Open-End Fund Proxy Voting Policy
Procedures Governing Delegation of Proxy Voting to Fund Adviser
December 29, 2017

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 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 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) 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[1], and (2) any changes to the BlackRock Proxy Voting Guidelines that have not previously been reported.

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[1] iShares MSCI Peru ETF and the Social Index Funds, as defined in Appendix A of the Proxy Voting Policy for Social Index Funds have separate Fund Proxy Voting Policies.

BlackRock

Global corporate governance & engagement principles

June 2014

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INTRODUCTION TO BLACKROCK

BlackRock is the world's preeminent asset management firm and a premier provider of global investment management, risk management and advisory services to institutional and individual clients around the world. BlackRock offers a wide range of investment strategies and product structures to meet clients' needs, including individual and institutional separate accounts, mutual funds, closed-end funds, and other pooled investment vehicles and the industry-leading iShares exchange traded funds. Through BlackRock Solutions®, we offer risk management, strategic advisory and enterprise investment system services to a broad base of clients.

PHILOSOPHY ON CORPORATE GOVERNANCE

BlackRock's corporate governance program is focused on protecting and enhancing the economic value of the companies in which it invests 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 share ownership. Companies and their boards should be accountable to shareholders and structured with appropriate checks and balances to ensure that they operate in shareholders' 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, the distribution of income and the capital structure. In order to exercise these rights effectively, we believe shareholders have the right to sufficient and timely information to be able to take an informed view of the proposals, and of the performance of the company and management.

Our focus is on the board of directors, as the agent of shareholders, which 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 the management and oversee management's performance. Our starting position is to be supportive of boards in their oversight efforts on our 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 interests of shareholders or have not responded adequately to shareholder concerns regarding strategy or performance.

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 vary internationally and our expectations in relation to individual companies are based on the legal and regulatory framework of each market. However, as noted above, we do believe that there are some overarching principles of corporate governance that apply globally. We assess voting matters on a case-by-case basis and in light of each company's unique circumstances. We are interested to understand from the company's reporting its approach to corporate governance, particularly where it is different from the usual market practice, and how it benefits shareholders.

BlackRock also believes that shareholders have responsibilities in relation to monitoring and providing feedback to companies, sometimes known as stewardship. These ownership responsibilities include, in our view, 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. Institutional shareholders also have responsibilities to their clients to have appropriate resources and oversight structures. Our own approach to oversight in relation to our corporate governance activities is set out in the section below titled "BlackRock's oversight of its corporate governance activities".

CORPORATE GOVERNANCE, ENGAGEMENT AND VOTING

We recognize that accepted standards of corporate governance differ between markets but we believe that there are sufficient common threads globally to identify an overarching set of principles. The primary objective of our corporate governance 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
- Remuneration and benefits
- Social, ethical and environmental issues
- General corporate governance matters

At a minimum we would expect companies to observe the accepted corporate governance standard 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 take into account research from proxy advisors, other internal and external research, information published by the company or provided through engagement and the views of our equity portfolio managers.

BlackRock views engagement as an important activity; engagement provides BlackRock with the opportunity to improve our understanding of investee companies and their governance structures, so that our voting decisions may be better informed. Engagement also allows us to share our philosophy and approach to investment and corporate governance with companies to enhance their understanding of our objectives. 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.

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 its engagements and sees the election of directors as one of its 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 strategy;
- ensuring the integrity of financial statements;
- making decisions regarding mergers, acquisitions and disposals;
- establishing appropriate executive compensation structures; and
- addressing business issues including social, ethical and environmental 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 sub-committees of the board and the 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 interest of shareholders. We will 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. Concerns about directors may include their role on the board of a different company where that board has performed poorly and failed to protect shareholder interests.

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 that shareholders can 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 employment at the company or a subsidiary;
- former employment within the past several years as an executive of the company;
- providing substantial professional services to the company and/or members of the company's management;
- having had a substantial business relationship in the past three years;
- having, or representing a shareholder with, a substantial shareholding in the company;
- being an immediate family member of any of the aforementioned; and
- interlocking directorships.

BlackRock believes that the operation of the board is enhanced when there is a clearly independent, senior non-executive director to lead it. Where the chairman is also the CEO or is otherwise not independent the company should have 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 if they have concerns that they wish to discuss.

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 diversity of experience and expertise of the current directors and how that 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 independent members of the board form a sub-committee to deal with such matters. In many markets, these sub-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.

Auditors and audit-related issues

BlackRock recognizes the critical importance of financial statements which should provide a complete and accurate 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 also have in place a procedure for assuring 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-emption rights are a key protection for shareholders against the dilution of their interests.

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 executive and/or board members' financial interests in a given transaction have not 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 would prefer only non-conflicted shareholders to vote on the proposal.

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 would expect any so-called 'shareholder rights plans' being proposed by a board to be subject to shareholder approval on introduction and periodically thereafter for continuation.

Remuneration 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 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 packages 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 accountable for poor compensation practices or structures.

BlackRock believes that there should be a clear link between variable pay and company performance as reflected in returns to shareholders. We are not supportive of one-off or special bonuses unrelated to company or individual performance. We support incentive plans that pay out rewards earned over multiple and extended time periods. We believe consideration should be given to building claw back provisions into incentive plans such that executives would be required to repay rewards where they were 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 should be reasonable in light of market practice.

Outside directors should be compensated in a manner that does not risk compromising their independence or aligning their interests too closely with those of the management, whom they are charged with overseeing.

Social, ethical, and environmental 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 we undertake our corporate governance activities. We believe that well-managed companies will deal effectively with the social, ethical and environmental ("SEE") aspects of their businesses.

BlackRock expects companies to identify and report on the material, business-specific SEE 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 SEE 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 SEE aspects of 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 SEE 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 SEE matters. 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.

More commonly, given that these are often not voting issues, we will engage directly with the board or management. The trigger for engagement on a particular SEE concern is our assessment that there is potential for material economic ramifications for shareholders.

We do not see it as our role to make social, ethical or political judgments on behalf of clients. 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 such laws or regulations are contradictory or ambiguous.

General corporate governance matters

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 helps shareholders assess whether the economic interests of shareholders have been protected and the quality of the board's oversight of management. BlackRock believes shareholders should have the right to vote on key corporate governance matters, including on changes to governance mechanisms, to submit proposals to the shareholders' meeting and to call special meetings of shareholders.

BLACKROCK'S OVERSIGHT OF ITS CORPORATE GOVERNANCE ACTIVITIES

Oversight

BlackRock holds itself to a very high standard in its corporate governance activities, including in relation to executing proxy votes. This function is executed by a team of dedicated BlackRock employees without sales responsibilities (the "Corporate Governance Group"), and which is considered an investment function. BlackRock maintains three regional oversight committees ("Corporate Governance Committees") for the Americas, Europe, the Middle East and Africa (EMEA) and Asia-Pacific, consisting of senior BlackRock investment professionals. All of the regional Corporate Governance Committees report to a Global Corporate Governance Oversight Committee, which is a risk-focused committee composed of senior representatives of the active and index equity investment businesses, the Deputy General Counsel, the Global Executive Committee member to whom the Corporate Governance Group reports and the head of the Corporate Governance Group. The Corporate Governance Committees review and approve amendments to their respective proxy voting guidelines ("Guidelines") and grant authority to the Global Head of Corporate Governance ("Global Head"), a dedicated BlackRock employee without sales responsibilities, to vote in accordance with the Guidelines. The Global Head leads the Corporate Governance Group to carry out engagement, voting and vote operations in a manner consistent with the relevant Corporate Governance Committee's mandate. The Corporate Governance Group engages companies in conjunction with the portfolio managers in discussions of significant governance issues, conducts research on corporate governance issues and participates in industry discussions to keep abreast of the field of corporate governance. The Corporate Governance Group, or vendors overseen by the Corporate Governance Group, also monitor upcoming proxy votes, execute proxy votes and maintain records of votes cast. The Corporate Governance Group may refer

complicated or particularly controversial matters or discussions to the appropriate investors and/or regional Corporate Governance Committees for their review, discussion and guidance prior to making a voting decision.

BlackRock's Equity Policy Oversight Committee (EPOC) is informed of certain aspects of the work of the Global Corporate Governance Oversight Committee and the Corporate Governance Group.

Vote execution

BlackRock carefully considers proxies submitted to funds and other fiduciary accounts ("Funds") for which it has voting authority. BlackRock votes (or refrains from voting) proxies for each Fund for which it has voting authority based on BlackRock's evaluation of the best long-term economic interests of shareholders, in the exercise of its independent business judgment, and without regard to the relationship of the issuer of the proxy (or any dissident shareholder) to the Fund, the Fund's affiliates (if any), BlackRock or BlackRock's affiliates.

When exercising voting rights, BlackRock will normally vote on specific proxy issues in accordance with its 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 Corporate Governance Committees. The Corporate Governance Committees may, in the exercise of their business judgment, conclude that the Guidelines do not cover the specific matter upon which a proxy vote is requested 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 the Corporate Governance Group 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; and (vi) 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 in these markets only on a "best-efforts" basis. In addition, the Corporate Governance Committees may determine that it is generally in the best interests of BlackRock clients not to vote proxies of companies in certain countries if the committee determines that 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 issuer's proposal.

While it is expected that BlackRock, as a fiduciary, will generally seek to vote proxies over which BlackRock exercises voting authority in a uniform manner for all BlackRock clients, the relevant Corporate Governance Committee, in conjunction with the portfolio manager of an account, may determine that the specific circumstances of such an account require that such account's proxies be voted differently due to such account's investment objective or other factors that differentiate it from other accounts. In addition, BlackRock believes portfolio managers may from time to time legitimately reach differing but equally valid views, as fiduciaries for their funds and the client assets in those Funds, on how best to maximize economic value in respect of a particular investment. Accordingly, portfolio managers retain full discretion to vote the shares in the Funds they manage based on their analysis of the economic impact of a particular ballot item.

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