NEW ISSUE — BOOK-ENTRY-ONLY

S&P Global Ratings: "A"
(See "RATING" herein)

In the opinion of Bond Counsel, under existing statutes and regulations, interest on the Series 2020 Bonds is included in gross income for federal income tax purposes pursuant to the Internal Revenue Code of 1986, as amended, as described in "APPENDIX I-B—FORM OF LEGAL OPINION OF BOND COUNSEL AND TAX STATUS" hereto. In the opinion of Bond Counsel, under existing statutes, interest on the Series 2020 Bonds is excluded from Connecticut taxable income for purposes of the Connecticut income tax on individuals, trusts and estates and is excluded from amounts on which the net Connecticut minimum tax is based in the case of individuals, trusts and estates required to pay the federal alternative minimum tax.

$16,795,000
CONNECTICUT GREEN BANK
State Supported Solar Home Renewable Energy Credit, Green Liberty Bonds, Series 2020 (Federally Taxable) (Climate Bond Certified)

Dated: Date of Delivery **Due: As shown below**

The Connecticut Green Bank (the "Green Bank") is offering its State Supported Solar Home Renewable Energy Credit, Green Liberty Bonds, Series 2020 (the "Series 2020 Bonds"), in the aggregate principal amount set forth above.

The Series 2020 Bonds will be limited obligations of the Green Bank, payable solely from and secured by the Trust Estate established pursuant to the Indenture of Trust, dated as of July 1, 2020 (the "Indenture"), between the Green Bank and The Bank of New York Mellon Trust Company, N.A., as trustee (the "Trustee"). The Trust Estate consists primarily of the revenues from a pool of renewable energy credits generated under the Green Bank's Residential Solar Incentive Program and related environmental attributes (as described herein), and the Funds and Accounts established pursuant to the Indenture, including the Special Capital Reserve Fund. Amounts are deemed to be appropriated to the Special Capital Reserve Fund from the State of Connecticut general fund in accordance with the Green Bank's enabling legislation in amounts necessary to maintain the balance therein at the Special Capital Reserve Fund Requirement. The Special Capital Reserve Fund Requirement will be established at the maximum amount of principal and interest becoming due on the Series 2020 Bonds by reason of maturity or required sinking fund payment in any single succeeding calendar year. See the caption "SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2020 BONDS" herein.

THE SERIES 2020 BONDS SHALL NOT BE DEEMED TO CONSTITUTE A DEBT OR LIABILITY OF THE STATE OR OF ANY POLITICAL SUBDIVISION THEREOF OR A PLEDGE OF THE FULL FAITH AND CREDIT OF THE STATE OR ANY SUCH POLITICAL SUBDIVISION THEREOF (OTHER THAN THE GREEN BANK), BUT SHALL BE PAYABLE SOLELY FROM THE TRUST ESTATE AND OTHER RECEIPTS, FUNDS OR MONEYS PLEDGED THEREFOR PURSUANT TO THE INDENTURE. THE STATE SHALL NOT BE OBLIGATED TO PAY THE SERIES 2020 BONDS OR THE INTEREST THEREON, NOR SHALL THE GREEN BANK BE OBLIGATED TO PAY THE SERIES 2020 BONDS OR THE INTEREST THEREON EXCEPT FROM THE REVENUES AND OTHER RECEIPTS, FUNDS AND MONEYS PLEDGED THEREFOR. NEITHER THE FULL FAITH AND CREDIT NOR THE TAXING POWER OF THE STATE OR OF ANY POLITICAL SUBDIVISION THEREOF (INCLUDING, FOR PURPOSES OF THIS SENTENCE, THE GREEN BANK) IS PLEDGED TO THE PAYMENT OF THE PRINCIPAL, INTEREST, OR PREMIUM, IF ANY, ON THE SERIES 2020 BONDS. THE GREEN BANK HAS NO TAXING POWER. THE ISSUANCE OF THE SERIES 2020 BONDS SHALL NOT DIRECTLY OR INDIRECTLY OR CONTINGENTLY OBLIGATE THE STATE OR ANY POLITICAL SUBDIVISION THEREOF TO LEVY OR TO PLEDGE ANY FORM OF TAXATION WHATEVER THEREFOR OR TO MAKE ANY APPROPRIATIONS FOR THEIR PAYMENT, EXCEPT AS PROVIDED IN THE INDENTURE.

The Series 2020 Bonds have been certified as "Climate Bond Certified" as described under the caption "USE OF PROCEEDS—Climate Bond Certified" herein, and the Green Bank has designated the Series 2020 Bonds as "Green Bonds."

Interest on the Series 2020 Bonds will be payable on May 15 and November 15 of each year, commencing on November 15, 2020. The Series 2020 Bonds will mature in the aggregate principal amounts set forth below:

Serial Series 2020 Bonds: $11,441,000

Maturity (November 15)	Principal Amount	Interest Rate	Price	CUSIP†
2021	$1,145,000	0.950%	100%	207580AA9
2022	1,148,000	1.080	100	207580AB7
2023	1,147,000	1.250	100	207580AC5
2024	1,146,000	1.450	100	207580AD3
2025	1,145,000	1.600	100	207580AE1
2026	1,144,000	1.900	100	207580AF8
2027	1,144,000	2.000	100	207580AG6
2028	1,143,000	2.200	100	207580AH4
2029	1,141,000	2.300	100	207580AJ0
2030	1,138,000	2.400	100	207580AK7

$5,354,000 2.900% Term Series 2020 Bonds due November 15, 2035 Price: 100% CUSIP† number: 207580AL5

The Term Series 2020 Bonds are subject to redemption prior to their stated maturity date. See the caption "THE SERIES 2020 BONDS—Redemption" herein.

See the caption "INVESTMENT CONSIDERATIONS" herein for a discussion of certain factors that investors should consider in making an informed investment decision.

The Series 2020 Bonds will be issued only as fully registered bonds, without coupons, and will be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York ("DTC"). DTC will act as the Securities Depository (as hereinafter defined) for the Series 2020 Bonds. Beneficial interests in the Series 2020 Bonds may be purchased in book-entry-only form, in minimum denominations of $1,000 or in any integral multiple thereof. See the caption "THE SERIES 2020 BONDS—Securities Depository" herein.

The Series 2020 Bonds are offered subject to prior sale, when, as and if issued by the Green Bank and accepted by the Underwriters, subject to the approval of legality by Shipman & Goodwin LLP, Hartford, Connecticut, Bond Counsel to the Green Bank. Certain other legal matters will be passed upon for the Underwriters by Kutak Rock LLP, Denver, Colorado, counsel to the Underwriters. It is expected that delivery of the Series 2020 Bonds against payment therefor will be made on or about July 29, 2020 in New York, New York.

Ramirez & Co., Inc. **Stifel**

Dated: July 15, 2020

† CUSIP numbers have been assigned by an independent company not affiliated with the Green Bank and are included solely for the convenience of the owners of the offered bonds. Neither the Green Bank nor the Underwriters are responsible for the selection or uses of these CUSIP numbers and no representation is made to their correctness on the offered bonds or as indicated above. The CUSIP number for a specific maturity is subject to being changed after the issuance of the offered bonds as a result of various subsequent actions including, but not limited to, a refunding in whole or in part of such maturity or as a result of the procurement of secondary market portfolio insurance or other similar enhancement by investors that is applicable to all or a portion of certain maturities of the offered bonds.

This Official Statement is not to be construed as a contract or agreement between the Green Bank and the purchaser or owners of any of the Series 2020 Bonds. Any statements in this Official Statement involving matters of opinion, whether or not expressly so stated, are intended as such and not as representations of fact. No representation is made that any of such statements will be realized. All quotations from and summaries and explanations of provisions of laws of the State of Connecticut (the "State") contained in this Official Statement do not purport to be complete and are qualified in their entirety by reference to the official compilations thereof. All references to the Series 2020 Bonds and the proceedings and agreements relating thereto are qualified in their entirety by reference to the definitive forms of the Series 2020 Bonds and such proceedings and agreements. This Official Statement is submitted only in connection with the sale of the Series 2020 Bonds by the Green Bank and may not be reproduced or used in whole or in part for any other purpose, except as specifically authorized by the Green Bank. Any electronic reproduction of this Official Statement may contain computer-generated errors or other deviations from the printed Official Statement. In any such case, the printed version controls.

This Official Statement contains forecasts, projections and estimates that are based on expectations and assumptions which existed at the time such forecasts, projections and estimates were prepared. The inclusion of such forecasts, projections and estimates should not be regarded as a representation by the Green Bank or the Underwriters that such forecasts, projections and estimates will occur. Such forecasts, projections and estimates are not intended as representation of fact or guarantees of results. If and when included in this Official Statement the words "expects," "forecasts," "intends," "anticipates," "estimates" and analogous expressions are intended to identify forward-looking statements and any such statements inherently are subjected to a variety of risks and uncertainties that could cause actual results to differ materially from those projected. Such risks and uncertainties include, among others, general economic and business conditions, changes in political, social and economic conditions, regulatory initiatives and compliance with governmental regulations, litigation and various other events, conditions and circumstances, many of which are beyond the control of the Green Bank. These forward-looking statements speak only as of the date they were prepared. The Green Bank disclaims any obligation or undertaking to release publicly any updates or revisions to any forward-looking statement contained herein (except as required by law) to reflect any change in the Green Bank's expectations with regards thereto or any change in events, conditions or circumstances on which any such statement is based.

The order and placement of material in this Official Statement, including the appendices, are not to be deemed a determination of relevance, materiality or importance. All material in this Official Statement, including its appendices, must be considered in its entirety.

The Underwriters may offer and sell Series 2020 Bonds to certain dealers (including dealers depositing Series 2020 Bonds into investment trusts) and others at prices lower than the offering prices stated on the cover page of this Official Statement. After the initial public offering, the Underwriters may change the price at which the Underwriters offer the Series 2020 Bonds for sale from time to time.

In connection with the offering, the Underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the Series 2020 Bonds. Specifically, the Underwriters may over allot the offering, creating a syndicate short position. The Underwriters may bid for and purchase Series 2020 Bonds in the open market to cover such syndicate short position or to stabilize the price of Series 2020 Bonds. Those activities may stabilize or maintain the market price of the Series 2020 Bonds above independent market levels. The Underwriters are not required to engage in these activities and may end any of these activities at any time.

The Underwriters have provided the following sentence for inclusion in this Official Statement. The Underwriters have reviewed the information in the Official Statement in accordance with, and as a part of, their responsibilities to investors under the Federal securities laws as applied to the facts and circumstances of this transaction, but the Underwriters do not guarantee the accuracy or completeness of such information.

Other than matters expressly set forth in "APPENDIX I-B—FORM OF LEGAL OPINION OF BOND COUNSEL AND TAX STATUS" hereto, Bond Counsel is not passing on and does not assume any responsibility to the accuracy or adequacy of the statement made in this Official Statement and makes no representation that it has independently verified the same.

IN MAKING AN INVESTMENT DECISION INVESTORS MUST RELY ON THEIR OWN EXAMINATION OF THE GREEN BANK, THE STATE AND THE TERMS OF THE OFFERING, INCLUDING THE SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2020 BONDS AS DESCRIBED HEREIN AND THE MERITS AND RISKS INVOLVED. THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION NOR HAS THE

SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS OFFICIAL STATEMENT.

No person has been authorized to give any information or to make any representations other than those contained in this Official Statement in connection with the offer made hereby, and if given or made, such information or representations must not be relied upon as having been authorized by the Green Bank or the Underwriters. Neither the delivery of this Official Statement nor any sale hereunder shall under any circumstances create any implication that there has been no change in the affairs of the Green Bank or the Residential Solar Incentive Program since the date hereof. This Official Statement does not constitute an offer or solicitation in any jurisdiction in which such offer or solicitation is not authorized, or in which the person making such offer or solicitation is not qualified to do so, or to any person to whom it is unlawful to make such offer or solicitation. The information set forth herein has been obtained from sources believed to be reliable.

[THIS PAGE INTENTIONALLY LEFT BLANK]

TABLE OF CONTENTS

PART I
INFORMATION CONCERNING THE GREEN BANK AND THE SERIES 2020 BONDS

PART I APPENDICES

Page

PART II
INFORMATION STATEMENT OF THE STATE OF CONNECTICUT
DATED FEBRUARY 15, 2020

Page

PART II APPENDICES

[THIS PAGE INTENTIONALLY LEFT BLANK]

SUMMARY OF TERMS

The following is qualified in its entirety by reference to the information appearing elsewhere in this Official Statement. Terms used in this Official Statement and not defined herein are defined in "APPENDIX I-A—FORM OF THE INDENTURE" hereto.

Issuer..	The Connecticut Green Bank (the "Green Bank") is a quasi-public entity of the State of Connecticut (the "State") created under Sections 16-245n and 16-245kk through 16-245mm of the Connecticut General Statutes, as amended from time to time (the "Act").
Securities Offered	$16,795,000 State Supported Solar Home Renewable Energy Credit, Green Liberty Bonds, Series 2020 of the Green Bank (the "Series 2020 Bonds") are to be issued pursuant to the Indenture of Trust, dated as of July 1, 2020 (the "Indenture"), between the Green Bank and The Bank of New York Mellon Trust Company, N.A., as trustee (the "Trustee"). The Series 2020 Bonds will be limited obligations of the Green Bank, payable solely from and secured by the Trust Estate held by the Trustee, which includes the amounts collected by the Green Bank with respect to the SHREC Receivables, and all interest or other income derived from the investment or deposit of moneys in the Funds and Accounts, including the Special Capital Reserve Fund. The interest payments on May 15, 2035 and November 15, 2035 and the final sinking fund payment on the Series 2020 Bonds maturing on November 15, 2035 will be paid from amounts on deposit in the Special Capital Reserve Fund. See the captions "THE TRUST ESTATE" and "INVESTMENT CONSIDERATIONS—The Expected Source of the Repayment is the Potential Stream of Payments Made Under the Master Purchase Agreements" herein.
Interest and Principal	Interest on the Series 2020 Bonds will accrue on the basis of a 360-day year, consisting of twelve 30-day months, from their delivery date at the rates set forth herein and will be payable semiannually on May 15 and November 15 of each year, commencing November 15, 2020 (each, an "Interest Payment Date"). The record date for payment of interest on the Series 2020 Bonds is the last business day of any calendar month proceeding the month in which there occurs an Interest Payment Date. Principal of the Series 2020 Bonds will be due as shown on the cover page of this Official Statement.
Optional Redemption...	The Term Series 2020 Bonds are subject to optional redemption prior to maturity at the option of the Green Bank, on or after November 15, 2030, at any time, in whole or in part, in such amounts as Green Bank may determine, at a redemption price equal to one hundred percent (100%) of the principal amount of the Series 2020

	Bonds to be redeemed, plus interest accrued and unpaid to the redemption date. See the caption "THE SERIES 2020 BONDS—Redemption—*Optional Redemption*" herein.
Mandatory Sinking Fund Redemption	The Term Series 2020 Bonds are subject to mandatory sinking fund redemption prior to maturity, beginning November 15, 2031, at a redemption price equal to one hundred percent (100%) of the principal amount of the Term Series 2020 Bonds to be redeemed, plus interest accrued and unpaid to the redemption date. See the caption "THE SERIES 2020 BONDS—Redemption—*Mandatory Sinking Fund Redemption*" herein.
Form and Denomination	The Series 2020 Bonds will be issued only in fully registered form registered in the name of Cede & Co. as nominee of The Depository Trust Company ("DTC"). The Series 2020 Bonds will be issued in denominations of $1,000 or in any integral multiple thereof.
The Offering	The Series 2020 Bonds are being offered to the public, subject to prior sale, when, as and if issued by the Green Bank and accepted by the Underwriters.
Purpose of Issue	The Series 2020 Bonds are being issued to (a) refinance expenditures of the Green Bank related to its Residential Solar Incentive Program ("RSIP"), (b) fund a Special Capital Reserve Fund and (c) pay the costs of issuing the Series 2020 Bonds.
Climate Bonds Initiative	The Green Bank has designated the Series 2020 Bonds as "Climate Bond Certified" and the Climate Bonds Initiative has provided a certification to the Green Bank of the Series 2020 Bonds as "Certified Climate Bonds." See the caption "USE OF PROCEEDS—Climate Bond Certified" herein and "APPENDIX I-E—CLIMATE BOND VERIFIER'S REPORT " hereto. The Green Bank has designated the Series 2020 Bonds as "Green Bonds" as the proceeds will be applied exclusively for projects and activities that promote renewable energy purposes.
Trustee	The Bank of New York Mellon Trust Company, N.A., Chicago, Illinois, is the Trustee under the Indenture.
SHRECs	A "SHREC" is a renewable energy credit created by the production of one megawatt hour of electricity under the Green Bank's Solar Home Renewable Energy Credit program, which was approved by the Connecticut State Legislature and signed by the Governor of the State of Connecticut as codified under Section 16-245gg of the Connecticut General Statutes (the "SHREC Statute") and any related Environmental Attributes (as defined herein). Under two Master Purchase Agreements (each, a "Master Purchase Agreement" and collectively the "Master Purchase Agreements"), statutorily required by the SHREC Statute, between the Green Bank and

	Connecticut's two investor-owned utilities (The Connecticut Light and Power Company, d/b/a Eversource Energy and United Illuminating, collectively the "Utilities"), the Green Bank aggregates SHRECs generated from solar photovoltaic systems participating in the RSIP into annual tranches (each a "SHREC Tranche"), and sells those SHREC Tranches to the Utilities at a fixed, predetermined price over a 15-year tranche lifetime. The SHRECs included in the Trust Estate will be SHRECs included in the 2019 SHREC Tranche ("SHREC Tranche 3"), and the revenue received from the Utilities for SHRECs within SHREC Tranche 3 from and after the delivery date of the Series 2020 Bonds is referred to herein as "SHREC Receivables", as described in this Official Statement. See the caption "THE TRUST ESTATE" herein. The 2017 SHREC Tranche ("SHREC Tranche 1") and the 2018 SHREC Tranche ("SHREC Tranche 2") are pledged to the repayment of SHREC Collateralized Notes, Series 2019-1 (the "Series 2019-1 Notes") issued by SHREC ABS 1, LLC, a direct wholly-owned subsidiary of the Green Bank.
Ineligible SHRECs and Related Remedies	An "Ineligible SHREC" is any SHREC for which (i) one or more eligibility criteria are found to have been breached at the time such SHREC was pledged to the Trust Estate, which breach (in the aggregate) materially and adversely affects the value of such SHREC; or (ii) neither the Green Bank nor the Trustee has a first priority perfected security interest. The Green Bank is required to remove any Ineligible SHREC pledged by the Green Bank to the Trustee under the Indenture by depositing an amount, established by the Green Bank, equal to the fair market value equivalent of the Ineligible SHREC originally pledged. Upon payment for the Ineligible SHREC, the Trustee will release the Ineligible SHREC from the lien of the Indenture (if requested). If the Trustee receives written notice of an Ineligible SHREC, the Trustee is required to give written notice thereof within five (5) Business Days of receipt thereof to the Green Bank.
Special Capital Reserve Fund	The Indenture establishes the Special Capital Reserve Fund for the Series 2020 Bonds, and provides that it shall be funded in an amount equal to the maximum amount of principal and interest becoming due on the Series 2020 Bonds by reason of maturity or required sinking fund payment in any single succeeding calendar year (the "Special Capital Reserve Fund Requirement"). Amounts are deemed to be appropriated to the Special Capital Reserve Fund from the State of Connecticut general fund in accordance with the Green Bank's enabling legislation in amounts necessary to maintain the balance therein at the Special Capital Reserve Fund Requirement.

Not Debt of State	THE SERIES 2020 BONDS SHALL NOT BE DEEMED TO CONSTITUTE A DEBT OR LIABILITY OF THE STATE OR OF ANY POLITICAL SUBDIVISION THEREOF OR A PLEDGE OF THE FULL FAITH AND CREDIT OF THE STATE OR ANY SUCH POLITICAL SUBDIVISION THEREOF (OTHER THAN THE GREEN BANK), BUT SHALL BE PAYABLE SOLELY FROM THE TRUST ESTATE AND OTHER RECEIPTS, FUNDS OR MONEYS PLEDGED THEREFOR PURSUANT TO THE INDENTURE. THE STATE SHALL NOT BE OBLIGATED TO PAY THE SERIES 2020 BONDS OR THE INTEREST THEREON, NOR SHALL THE GREEN BANK BE OBLIGATED TO PAY THE SERIES 2020 BONDS OR THE INTEREST THEREON EXCEPT FROM THE REVENUES AND OTHER RECEIPTS, FUNDS AND MONEYS PLEDGED THEREFOR. NEITHER THE FULL FAITH AND CREDIT NOR THE TAXING POWER OF THE STATE OR OF ANY POLITICAL SUBDIVISION THEREOF (INCLUDING, FOR PURPOSES OF THIS SENTENCE, THE GREEN BANK) IS PLEDGED TO THE PAYMENT OF THE PRINCIPAL, INTEREST, OR PREMIUM, IF ANY, ON THE SERIES 2020 BONDS. THE GREEN BANK HAS NO TAXING POWER. THE ISSUANCE OF THE SERIES 2020 BONDS SHALL NOT DIRECTLY OR INDIRECTLY OR CONTINGENTLY OBLIGATE THE STATE OR ANY POLITICAL SUBDIVISION THEREOF TO LEVY OR TO PLEDGE ANY FORM OF TAXATION WHATEVER THEREFOR OR TO MAKE ANY APPROPRIATIONS FOR THEIR PAYMENT, EXCEPT AS PROVIDED IN THE INDENTURE.
State Pledge and Agreement	Pursuant to the provisions of Section 16-245n of the Act (the "Green Bank Statute"), the State of Connecticut pledges to and agrees with any person with whom the Green Bank may enter into contracts pursuant to the Green Bank Statute that the State will not limit or alter the rights vested in the Green Bank pursuant to the Green Bank Statute until such contracts and the obligations thereunder are fully met and performed on the part of the Green Bank, provided nothing shall preclude such limitation or alteration if adequate provision shall be made by law for the protection of such persons entering into contracts with the Green Bank.
Indenture	The Indenture provides for the issuance of the Series 2020 Bonds pursuant to the Act, and the Indenture includes the Green Bank's pledge to the Trustee of the revenues, accounts and statutory and contractual covenants contained therein. The Trustee is authorized to enforce the Indenture and such covenants against the Green Bank. See "APPENDIX I-A—FORM OF THE INDENTURE" hereto.

No Bankruptcy Authorization	Under current law, the Green Bank is not authorized to seek protection from its creditors pursuant to the United States Bankruptcy Code.
Tax Matters	In the opinion of Shipman & Goodwin LLP, Hartford, Connecticut, Bond Counsel, interest on the Series 2020 Bonds (i) is included in gross income for Federal income tax purposes pursuant the Internal Revenue Code of 1986, as amended, and (ii) is excluded from Connecticut taxable income for purposes of the Connecticut income tax on individuals, trusts and estates and is excluded from the amounts on which Connecticut minimum tax is based in the case of individuals, trusts and estates required to pay the federal alternative minimum tax. See the caption "TAX MATTERS" herein.
Rating	The Series 2020 Bonds have been assigned a rating of "A" by S&P Global Ratings.
Green Bank Contact	Office of the General Counsel, Connecticut Green Bank, 845 Brook Street, Rocky Hill, CT 06067.

[THIS PAGE INTENTIONALLY LEFT BLANK]

OFFICIAL STATEMENT

$16,795,000
CONNECTICUT GREEN BANK
State Supported Solar Home Renewable Energy Credit,
Green Liberty Bonds, Series 2020
(Federally Taxable) (Climate Bond Certified)

PART I
INFORMATION CONCERING
CONNECTICUT GREEN BANK AND THE SERIES 2020 BONDS

INTRODUCTORY STATEMENT

The purpose of this Official Statement (this "Official Statement"), including the cover page, the Summary of Terms, Part I, Part II and the Appendices hereto, is to set forth certain information concerning Connecticut Green Bank (the "Green Bank"), its Residential Solar Incentive Program (the "RSIP") and the Green Bank's $16,795,000 State Supported Solar Home Renewable Energy Credit, Green Liberty Bonds, Series 2020 (the "Series 2020 Bonds"). The proceeds of the Series 2020 Bonds are being used to (a) refinance expenditures of the Green Bank related to its Residential Solar Incentive Program ("RSIP"), (b) fund a Special Capital Reserve Fund and (c) pay the costs of issuance. For a more complete description of the Green Bank's Residential Solar Incentive Program ("RSIP"), see the caption "THE TRUST ESTATE" herein.

The Series 2020 Bonds will be issued under an Indenture of Trust, to be dated as of July 1, 2020 (the "Indenture"), between the Green Bank and The Bank of New York Mellon Trust Company, N.A., as trustee (the "Trustee"), and will be limited obligations of the Green Bank, payable solely from and secured by the Trust Estate established thereunder. The Green Bank will pledge and assign to the Trustee: (i) the SHREC Receivables and RECs related to SHREC Tranche 3 owned by the Green Bank (other than with respect to any SHRECs that are reassigned to the Green Bank as Ineligible SHRECs following the issuance of the Series 2020 Bonds); (ii) the Revenues and all other property that may in the future be delivered, or by writing of any kind, conveyed, pledged, assigned or transferred to the Green Bank as additional security hereunder for the Series 2020 Bonds; (iii) the Green Bank's rights to the revenues under the Master Purchase Agreements related to the SHREC Receivables and under all other agreements that may in the future be delivered, or by writing of any kind, conveyed, pledged, assigned or transferred to the Green Bank as additional security hereunder for the Series 2020 Bonds, but specifically reserving all other rights under the Master Purchase Agreements and such other agreements; (iv) the Revenue Fund, the Debt Service Fund, the Redemption Fund and the 2020 SHREC Economic and Energy Security Fund together with any and all receipts, funds or moneys, investments and other property of every kind and nature from time to time hereafter on deposit in or payable to such funds and accounts thereof, including any Project Support Debt Service Amounts paid by the Green Bank for deposit into the Debt Service Fund; and (v) the Special Capital Reserve Fund, including all amounts on deposit in and if necessary certified by the Green Bank as necessary to restore the Special Capital Reserve Fund to the Special Capital Reserve Fund Requirement and deemed appropriated by the State and paid to the Green Bank, together with any and all moneys, investments and other property of every kind and nature from time to time hereafter on deposit in or payable to the Special Capital Reserve Fund, including any amounts paid by the Green Bank for deposit into the Special Capital Reserve Fund (collectively, the "Trust Estate"). The interest payments on May 15, 2035 and November 15, 2035 and the final sinking fund payment on the Series 2020 Bonds maturing on November 15, 2035 will be paid from amounts on deposit in the Special Capital Reserve Fund as there will not be any SHREC Receivables available to make such payments due to the 15 year limitation on payments required pursuant to the Master Purchase Agreements. See the captions "THE TRUST ESTATE," "INVESTMENT CONSIDERATIONS—The Expected Source of the Repayment is the Potential Stream of Payments Made Under the Master Purchase Agreements," "SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2020 BONDS—Covenants as to Special Capital Reserve Fund" and "DESCRIPTION OF THE INDENTURE—Debt Service Fund" and "—Special Capital Reserve Fund" herein.

There are no significant assets or sources of funds available to pay the Series 2020 Bonds other than the Trust Estate. See the caption "INVESTMENT CONSIDERATIONS" herein.

The factors affecting the Green Bank, the RSIP and the Series 2020 Bonds described throughout this Official Statement are complex and are not intended to be fully described in the preceding Summary of Terms or this Introductory

Statement. This Official Statement should be read in its entirety. Brief descriptions of Green Bank, the RSIP, the Series 2020 Bonds, the Indenture and certain related agreements are included in this Official Statement. The descriptions of such documents contained herein do not purport to be comprehensive or definitive and are qualified in their entirety by reference to the entire text of such documents, and references herein to the Series 2020 Bonds are qualified in their entirety by reference to the forms thereof included in the Indenture and the information with respect thereto included in such documents, all of which are available for inspection at the principal corporate trust office of the Trustee in Chicago, Illinois. A summary of the Indenture, together with defined terms used therein and in this Official Statement, is contained in "APPENDIX I-A—FORM OF THE INDENTURE" hereto.

All such descriptions are further qualified in their entirety by the application of bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and similar laws and laws and principles of equity relating to or affecting generally the enforcement of creditors' rights.

CONNECTICUT GREEN BANK

Connecticut Green Bank (the "Green Bank") was established by the Governor and the General Assembly of the State of Connecticut on July 1, 2011 through Public Act 11-80. The Green Bank was formed as body politic and corporate, constituting a public instrumentality and political subdivision of the State of Connecticut established and created for the performance of an essential public and governmental function. The Green Bank is not a department, institution or agency of the state. The Green Bank is a quasi-public agency that administers the Connecticut Clean Energy Fund.

As the nation's first state green bank, the Green Bank was formed with a mission to make green energy more accessible and affordable for all Connecticut citizens and businesses by creating a thriving marketplace to accelerate the growth of green energy.

The Green Bank facilitates green energy deployment by leveraging a public-private financing model that uses limited public dollars to attract private capital investments. By partnering with the private sector, the Green Bank creates solutions that result in long-term, affordable financing to increase the number of green energy projects statewide.

The Green Bank's vision is a world empowered by the renewable energy of community. The Green Bank's mission is to confront climate change and provide all of society a healthier and more prosperous future by increasing and accelerating the flow of private capital into markets that energize the green economy. To achieve its vision and mission, the Green Bank has established the following three goals:

- To leverage limited public resources to scale up and mobilize private capital investment in the green economy of Connecticut.
- To strengthen Connecticut's communities by making the benefits of the green economy inclusive and accessible to all individuals, families, and businesses.
- To pursue investment strategies that advance market transformation in green investing while supporting the organization's pursuit of financial sustainability.

The vision, mission, and goals support the implementation of Connecticut's clean energy policies be they statutorily required (e.g., CGS 16-245ff), planning (e.g., Comprehensive Energy Strategy) or regulatory in nature.

The powers of the Green Bank are vested in and exercised by a Board of Directors that is comprised of 11 voting and one (1) non-voting member, each with knowledge and expertise in matters related to the organization's purpose. The Green Bank Board of Directors and staff are governed through the statute, as well as an Ethics Statement and Ethical Conduct Policy, Resolutions of Purposes, Bylaws, and Comprehensive Plan. The following identifies the current Board of Directors of the Green Bank and its executive staff:

Board of Directors*

Lonnie Reed
Chair of Connecticut Green Bank .... Chair

Eric Brown
Vice President, Manufacturing Policy & Outreach, at the Connecticut Business & Industry Association .... Member

Binu Chandy
Deputy Director, Office of Brownfield Remediation & Development at the Connecticut Department of Economic & Community Development .... *Ex-Officio* Member

Thomas M. Flynn
Managing Member, Coral Drive Partners LLC .... Member

John Harrity
Chair, Connecticut Roundtable on Climate and Jobs .... Member

Michael Li
Energy Bureau Chief, Connecticut Department of Energy and Environmental Protection................ *Ex-Officio* Member

Matthew Ranelli
Partner, Environment, Energy and Land Use Group at Shipman & Goodwin LLP .... Member

Kevin Walsh
Senior Operating Partner, Stonepeak Infrastructure Partners .... Member

Brenda Watson
Executive Director, Operation Fuel .... Member

Shawn T. Wooden
Connecticut State Treasurer .... *Ex-Officio* Member

Bryan Garcia
President and CEO, Connecticut Green Bank .... *Ex-Officio* Member (non-voting)

Executive Staff

Bryan Garcia. .... President and CEO

Bert Hunter .... Executive Vice President and Chief Investment Officer

Michael Yu .... Director, Clean Energy Finance

Eric Shrago .... Managing Director

Brian Farnen .... General Counsel and Chief Legal Officer

Selya Price .... Director of Incentive Programs

Louise Della Pesca .... Associate Director

The State of Connecticut pledges to and agrees with any person with whom the Green Bank enters into contracts pursuant to the provisions of the Green Bank Statute that the State will not limit or alter the rights vested in the Green Bank until such contracts and the obligations under them are fully met and performed on the part of the Green Bank. The Green Bank Statute permits the Green Bank to appropriate in each year during the term of such contracts, an amount of money that

* There is presently one vacancy on the Board who will be appointed by the Governor.

is, when combined with other Green Bank funds available for such purpose, sufficient to pay such contracts and obligations or meet any contractual covenants or warranties.

SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2020 BONDS

General

The Series 2020 Bonds will be limited obligations of the Green Bank, payable solely from and secured by all money, revenues and receipts to be received under the Indenture, including all SHREC Receivables and other Revenues and all interest or other income derived from the investment or deposit of moneys in the Funds and Accounts, including amounts on deposit in the Special Capital Reserve Fund (to which, under certain circumstance described below, amounts may be paid from the State general fund pursuant to Section 16-245mm of the Connecticut General Statutes). See the captions "THE TRUST ESTATE" and "DESCRIPTION OF THE INDENTURE" herein, "APPENDIX I-A—FORM OF THE INDENTURE" hereto and the caption "OTHER FUNDS, DEBTS AND LIABILITIES—Contingent Liability Debt—*Special Capital Reserve Funds*" in Part II of this Official Statement.

THE SERIES 2020 BONDS SHALL NOT BE DEEMED TO CONSTITUTE A DEBT OR LIABILITY OF THE STATE OR OF ANY POLITICAL SUBDIVISION THEREOF OR A PLEDGE OF THE FULL FAITH AND CREDIT OF THE STATE OR ANY SUCH POLITICAL SUBDIVISION THEREOF (OTHER THAN THE GREEN BANK), BUT SHALL BE PAYABLE SOLELY FROM THE TRUST ESTATE AND OTHER RECEIPTS, FUNDS OR MONEYS PLEDGED THEREFOR PURSUANT TO THE INDENTURE. THE STATE SHALL NOT BE OBLIGATED TO PAY THE SERIES 2020 BONDS OR THE INTEREST THEREON, NOR SHALL THE GREEN BANK BE OBLIGATED TO PAY THE SERIES 2020 BONDS OR THE INTEREST THEREON EXCEPT FROM THE REVENUES AND OTHER RECEIPTS, FUNDS AND MONEYS PLEDGED THEREFOR. NEITHER THE FULL FAITH AND CREDIT NOR THE TAXING POWER OF THE STATE OR OF ANY POLITICAL SUBDIVISION THEREOF (INCLUDING, FOR PURPOSES OF THIS SENTENCE, THE GREEN BANK) IS PLEDGED TO THE PAYMENT OF THE PRINCIPAL, INTEREST, OR PREMIUM, IF ANY, ON THE SERIES 2020 BONDS. THE GREEN BANK HAS NO TAXING POWER. THE ISSUANCE OF THE SERIES 2020 BONDS SHALL NOT DIRECTLY OR INDIRECTLY OR CONTINGENTLY OBLIGATE THE STATE OR ANY POLITICAL SUBDIVISION THEREOF TO LEVY OR TO PLEDGE ANY FORM OF TAXATION WHATEVER THEREFOR OR TO MAKE ANY APPROPRIATIONS FOR THEIR PAYMENT, EXCEPT AS PROVIDED IN THE INDENTURE.

The Green Bank will pledge and assign to the Trustee in respect of the Series 2020 Bonds all its right, title and interest in and to the Trust Estate; that is, all money, revenues and receipts to be received under the Indenture, including all Revenues and all interest or other income derived from the investment or deposit of moneys in any Funds and Accounts, including the Special Capital Reserve Fund.

The Special Capital Reserve Fund

Section 16-245mm of the Connecticut General Statutes authorizes the Green Bank to establish one or more special capital reserve funds for its bonds. The Indenture establishes the Special Capital Reserve Fund for the Series 2020 Bonds, and provides that it shall be funded in an amount equal to the maximum amount of principal and interest becoming due on the Series 2020 Bonds by reason of maturity or required sinking fund payment in any single succeeding calendar year (the "Special Capital Reserve Fund Requirement").

If at any time any interest on the Series 2020 Bonds or the principal or Redemption Price of the Series 2020 Bonds has become due and payable and payment thereof in full has not been made or provided for, the Trustee is required to withdraw from the Special Capital Reserve Fund, to the extent of moneys therein, an amount which, together with other amounts available for such payment, shall be sufficient to provide for such payment in full.

Section 16-245mm of the Connecticut General Statutes states that:

> "Prior to December first, annually, the Connecticut Green Bank shall deposit into any special capital reserve fund, the balance of which has fallen below the required minimum capital reserve of such fund, the full amount required to meet the minimum capital reserve of such fund, as available to said bank from any resources of said bank not otherwise pledged or dedicated to another purpose. On or before December first, annually, but after said bank has made such required deposit, there is deemed to be

appropriated from the General Fund such sums, if any, as shall be certified by the chairperson or vice-chairperson of the Connecticut Green Bank to the Secretary of the Office of Policy and Management, the State Treasurer and the joint standing committees of the General Assembly having cognizance of matters relating to finance, revenue and bonding and energy, as necessary to restore each such special capital reserve fund to the amount equal to the required minimum capital reserve of such fund, and such amounts shall be allotted and paid to said bank."

In the opinion of Bond Counsel, such appropriation and payment from the general fund of the State does not require further legislative approval. The Indenture provides that it will be an Event of Default if: (i) with respect to Series 2020 Bonds secured by the Special Capital Reserve Fund, the Green Bank shall fail or refuse to comply with the provisions of the Indenture dealing with the Special Capital Reserve Fund, or such amounts as shall be certified by the chairperson of the Green Bank to the Secretary of the Office of Policy and Management and Treasurer of the State of Connecticut pursuant to such provisions of the Act shall not be allotted and paid by the State of Connecticut to the Green Bank for deposit therein and such allotment and payment is not made prior to the second day succeeding the final adjournment of (i) the session of the General Assembly of the State of Connecticut convening when such certification shall have been made or, if the General Assembly is not then in session, (ii) the first session of the General Assembly of the State of Connecticut convening after such certification shall have been made.

In the opinion of Bond Counsel, the Indenture constitutes a valid and binding agreement of the Green Bank, enforceable in accordance with its terms. The pledges and covenants made in the Indenture, including those relating to the Special Capital Reserve Fund, are for the equal and ratable benefit and security of the owners of the Series 2020 Bonds. Pursuant to the Act, the aggregate amount of outstanding bonds issued by the Green Bank which may be secured by special capital reserve funds is $100 million and, upon issuance of the Series 2020 Bonds, the aggregate amount of outstanding bonds of the Green Bank so secured will be $28,070,043. This amount includes the Series 2020 Bonds, the $2,689,289.87 outstanding amount of the Green Bank's Clean Renewable Energy Bonds (CGB Meriden Hydro LLC Project) issued pursuant to the Indenture of Trust, dated as of February 2, 2017, between the Green Bank and U.S. Bank National Association, as trustee, and the $8,585,753.13 outstanding amount of the Equipment Lease/Purchase Agreement, dated as of December 29, 2017, as amended October 25, 2018 (Taxable Direct Pay New Clean Renewable Energy Bond) Connecticut State Colleges and University System between Banc of America Leasing & Capital, LLC and the Green Bank.

Covenants as to Special Capital Reserve Fund

The Green Bank covenants that it shall at all times maintain the Special Capital Reserve Fund at the Special Capital Reserve Fund Requirement and do and perform or cause to be done and performed each and every act and thing with respect to the Special Capital Reserve Fund provided to be done or performed by or on behalf of the Green Bank or the Trustee under the terms and provisions of the Indenture and Section 16-245mm of the Connecticut General Statutes.

If at any time any Principal Payment on the Series 2020 Bonds, including any mandatory sinking fund installment, or any Interest Payment due thereon, or any Redemption Price of Series 2020 Bonds has become due and payable and payment thereof in full has not been made or provided for, the Trustee is required to (i) withdraw from the Special Capital Reserve Fund an amount which together with other amounts available for such payment is sufficient to provide for such payment in full and apply the amount so withdrawn to such payment, and (ii) no later than the next Business Day after such withdrawal, provide a notice to the Green Bank of such deficiency. Thirty (30) days prior to each Interest Payment Date and Principal Payment Date, the Trustee is required to determine whether the moneys or deposits in the respective Accounts within the Debt Service Fund are sufficient to make the next succeeding Interest Payment and Principal Payment. If such moneys or deposits are not sufficient to make such payments, the Trustee is required to, no later than the next Business Day, provide a notice of such insufficiency. The Green Bank has entered into a Project Support Commitment and Undertaking, dated as of the delivery date of the Series 2020 Bonds (the "Project Support Commitment and Undertaking"), for the benefit of the State of Connecticut, pursuant which the Green Bank agrees to deposit with the Trustee any Project Support Debt Service Amounts due and payable thereunder. The Green Bank is required to pay to the Trustee for deposit to the Debt Service Fund the Project Support Debt Service Amount as provided in the Project Support Commitment and Undertaking. The Project Support Commitment and Undertaking is solely for the benefit of the State of Connecticut and, other than amounts pledged pursuant to the Indenture, there are no other moneys or assets of the Green Bank pledged to the repayment of the Series 2020 Bonds or to the making of any Project Support Debt Service Amounts, and Owners of the Series 2020 Bonds should not rely upon the Green Bank to fund any deficiency in any Interest Payment or Principal Payment. See the captions "DESCRIPTION OF THE INDENTURE—Debt Service Fund" and "—Special Capital Reserve Fund" herein.

On or before December 1, annually, but after the Green Bank has made any required deposit, the State of Connecticut shall deem to be appropriated from the State of Connecticut general fund such sums, if any, as shall be certified by the chairperson or vice-chairperson of the Green Bank to the Secretary of the Office of Policy and Management, the State Treasurer and the joint standing committees of the General Assembly having cognizance of matters relating to finance, revenue and bonding and energy, as necessary to restore the Special Capital Reserve Fund to the Special Capital Reserve Fund Requirement, and such amounts shall be allotted and paid to the Green Bank. For the purpose of evaluation of any such fund, obligations acquired as an investment for the Special Capital Reserve Fund shall be valued at market value as of the date of calculation. Nothing described above shall preclude the Green Bank from establishing and creating other debt service reserve funds in connection with the issuance of bonds or notes of the Green Bank which are not a special capital reserve fund.

THE SERIES 2020 BONDS

The following is a summary of certain provisions of the Series 2020 Bonds. Reference is hereby made to the Indenture and the Series 2020 Bonds in their entirety for the detailed provisions thereof. The Series 2020 Bonds will be issued in the aggregate principal amount shown on the cover page of this Official Statement.

General

The Series 2020 Bonds will be issued initially in the form of one fully registered bond for each stated maturity, without coupons, in a denomination equal to the aggregate principal amount of such stated maturity and will be registered in the name of Cede & Co., as nominee of DTC. DTC will act as securities depository for the Series 2020 Bonds (together with any successor securities depository, the "Securities Depository"). See the caption "Securities Depository" below. Beneficial interests in the Series 2020 Bonds may be purchased in book-entry-only form, in denominations of $1,000 or any integral multiple thereof.

Payment of the principal of, and interest on, the Series 2020 Bonds at maturity shall be made upon the presentation and surrender of the Series 2020 Bonds as hereinafter described. All payments of interest and premium, if any, on, and of principal upon redemption of, the Series 2020 Bonds prior to maturity shall be paid through the Securities Depository in accordance with its normal procedures, which now provide for payment by the Securities Depository to its participants in same-day funds.

In accordance with DTC procedures, conveyance of notices and other communications are to be made by the Trustee to DTC and by DTC to Direct Participants (as hereinafter defined), by Direct Participants to Indirect Participants (as hereinafter defined), and by Direct and Indirect Participants to beneficial owners. Cede & Co. is the Bondholder for all purposes under the Series 2020 Bond documents, including for the purposes of granting consents and for changes to the Series 2020 Bond documents. Beneficial owners may wish to take steps to ensure the transmission to them of notices of significant events with respect to the Series 2020 Bonds, such as redemptions, tenders, tender offers, defaults, and proposed amendments to the Series 2020 Bond documents. Each beneficial owner of Series 2020 Bonds must make arrangements with its participant to receive notices and payments with respect to the Series 2020 Bonds.

Securities Depository

The information contained in the following paragraphs under this caption "Securities Depository" has been extracted from a schedule prepared by DTC entitled "SAMPLE OFFERING DOCUMENT LANGUAGE DESCRIBING BOOK-ENTRY-ONLY ISSUANCE." The Green Bank and the Underwriter make no representation as to the completeness or the accuracy of such information or as to the absence of material adverse changes in such information subsequent to the date hereof.

DTC, New York, New York, will act as Securities Depository for the Series 2020 Bonds. The Series 2020 Bonds will be issued as fully-registered bonds registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered bond certificate will be issued for each stated maturity of the Series 2020 Bonds, and will be deposited with DTC.

DTC is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC's participants ("Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). The DTC rules applicable to its Participants are on file with the Securities and Exchange Commission ("SEC"). More information about DTC can be found at www.dtcc.com (it being understood that information available at this website is not incorporated herein by reference).

Purchases of Series 2020 Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Series 2020 Bonds on DTC's records. The ownership interest of each actual purchaser of each Series 2020 Bond (the "beneficial owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial owners will not receive written confirmation from DTC of their purchase, but beneficial owners are expected to receive written confirmation providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the beneficial owner entered into the transaction. Transfers of ownership interests in the Series 2020 Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of beneficial owners. Beneficial owners will not receive certificates representing their ownership interests in Series 2020 Bonds, except in the event that use of the book-entry-only system for the Series 2020 Bonds is discontinued.

To facilitate subsequent transfers, all Series 2020 Bonds deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of Series 2020 Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual beneficial owners of the Series 2020 Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Series 2020 Bonds are credited, which may or may not be the beneficial owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants and by Direct Participants and Indirect Participants to beneficial owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial owners of Series 2020 Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Series 2020 Bonds, such as redemptions, tenders, defaults, and proposed amendments to the Series 2020 Bond documents. For example, beneficial owners of the Series 2020 Bonds may wish to ascertain that the nominee holding the Series 2020 Bonds for their benefit has agreed to obtain and transmit notices to beneficial owners. In the alternative, beneficial owners may wish to provide their names and addresses to the registrar and request that copies of notices be provided directly to them.

Redemption notices shall be sent to DTC. If less than all of the Series 2020 Bonds within a maturity are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such Series 2020 Bond to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to the Series 2020 Bonds unless authorized by a Direct Participant in accordance with DTC's Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the Green Bank as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts Series 2020 Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Redemption proceeds and principal and interest payments on the Series 2020 Bonds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detailed information from the Green Bank or the Trustee, on each payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to beneficial owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, the Trustee or the Green Bank, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds and principal and interest payments to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the Green Bank or the Trustee, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the beneficial owners will be the responsibility of Direct and Indirect Participants.

DTC may discontinue providing its services as depository with respect to the Series 2020 Bonds at any time by giving reasonable notice to the Green Bank or the Trustee. Under such circumstances, in the event that a successor depository is not obtained, certificates for the Series 2020 Bonds are required to be printed and delivered and thereafter, transfer, exchange and replacement of Series 2020 Bonds would be governed by the applicable terms of the Indenture.

The Green Bank may decide to discontinue use of the system of book entry transfers through DTC (or a successor depository). In that event, certificates for the Series 2020 Bonds will be printed and delivered.

The above information concerning DTC and DTC's book-entry-only system has been obtained from sources that the Green Bank and the Underwriter believe to be reliable, but neither of the Green Bank or the Underwriter takes responsibility for the accuracy thereof.

THE GREEN BANK, THE TRUSTEE AND THE UNDERWRITERS HAVE NO RESPONSIBILITY WITH RESPECT TO: (I) THE ACCURACY OF THE RECORDS OF THE SECURITIES DEPOSITORY OR ANY PARTICIPANT AS TO THE BENEFICIAL OWNERSHIP OF THE SERIES 2020 BONDS; (II) THE DELIVERY OF EITHER NOTICES OR PAYMENT TO ANY PARTY OTHER THAN THE SECURITIES DEPOSITORY OR ITS NOMINEE AS REGISTERED OWNER OF THE SERIES 2020 BONDS; (III) ANY CONSENT GIVEN OR OTHER ACTION TAKEN BY THE SECURITIES DEPOSITORY OR ITS NOMINEE AS THE OWNER OF RECORD OF ALL ISSUED AND OUTSTANDING SERIES 2020 BONDS; OR (IV) THE SELECTION BY THE SECURITIES DEPOSITORY OR ANY PARTICIPANTS OR ANY BENEFICIAL OWNERS TO RECEIVE PAYMENT IN THE EVENT OF A PARTIAL REDEMPTION OF SERIES 2020 BONDS.

Interest

Interest will be computed on the basis of a 360-day year, consisting of twelve 30-day months. Interest on the Series 2020 Bonds will be payable semi-annually on May 15 and November 15 of each year, commencing November 15, 2020 (each, an "Interest Payment Date"). The record date for payment of interest on the Series 2020 Bonds is the last business day of any calendar month proceeding the month in which there occurs an Interest Payment Date.

Redemption

Optional Redemption. The Term Series 2020 Bonds are subject to optional redemption prior to maturity at the option of the Green Bank, on or after November 15, 2030, at any time, in whole or in part, in such amounts as the Green Bank may determine, at a redemption price equal to one hundred percent (100%) of the principal amount of the Series 2020 Bonds to be redeemed, plus interest accrued and unpaid to the redemption date.

Mandatory Sinking Fund Redemption. The Term Series 2020 Bonds are subject to mandatory sinking fund redemption prior to maturity, beginning November 15, 2031, at a redemption price equal to one hundred percent (100%) of the principal amount of the Term Series 2020 Bonds to be redeemed, plus interest accrued and unpaid to the redemption date. Unless no portion of the Term Series 2020 Bonds to be so redeemed shall then be Outstanding and, subject to the provisions of the Indenture permitting amounts to be credited to part or all of any one or more Sinking Fund Installments, there shall be due from, and the Green Bank shall be required to pay for the retirement of the Term Series 2020 Bonds on November 15 of each of the years set forth below, the amount set forth opposite such year, and the said amount to be paid on each such date is hereby established as and shall constitute a Sinking Fund Installment for retirement of such portion of the Term Series 2020 Bonds.

Date (November 15)	Sinking Fund Installment
2031	$1,139,000
2032	1,151,000
2033	1,164,000
2034	1,020,000
2035[1]	880,000

[1] Final maturity.

Notice of Redemption. The Trustee is required to give notice, in the name of the Green Bank, of the redemption of the Series 2020 Bonds, which notice shall specify the Series 2020 Bonds to be redeemed, the redemption date and the place or places where amounts due upon such redemption will be payable and, if less than all of the Series 2020 Bonds are to be redeemed, the numbers or other distinguishing marks of such Series 2020 Bonds so to be redeemed. Such notice is required to further state whether the notice and the redemption are unconditional or conditional; if unconditional, that on such date there shall become due and payable upon each Series 2020 Bond to be redeemed the Redemption Price thereof, together with interest accrued to the redemption date; if conditional, that on such date that, if there shall be sufficient funds available to effect such redemption on the redemption date, there shall become due and payable upon each Series 2020 Bond to be redeemed the Redemption Price thereof, together with interest accrued to the redemption date, and, in either case, that if there shall be sufficient funds available to effect such redemption on the redemption date, then from and after such date interest thereon shall cease to accrue and be payable. The Trustee is required to mail a copy of such notice by first class mail, postage prepaid, not less than thirty (30) days before the redemption date, to the Bondholders of the Series 2020 Bonds which are to be redeemed, at their last addresses appearing upon the registry books.

Effect of Redemption. Notice having been given in the manner provided in the Indenture, if there shall be sufficient funds available to effect such redemption on the redemption date, the Series 2020 Bonds so called for redemption shall become due and payable on the redemption date so designated at the Redemption Price, plus interest accrued and unpaid to the redemption date, and, upon presentation and surrender thereof, at the office specified in such notice such Series 2020 Bonds shall be paid at the Redemption Price plus interest accrued and unpaid to the redemption date. If, on the redemption date, moneys for the redemption of all the Series 2020 Bonds to be redeemed together with interest to the redemption date, will be held by the Trustee as to be available therefor on said date and if notice of redemption shall have been given as aforesaid, then, from and after the redemption date interest on the Series 2020 Bonds so called for redemption shall cease to accrue and become payable. If said moneys shall not be so available on the redemption date, such Series 2020 Bonds or portions thereof shall continue to bear interest until paid at the same rate as they would have borne had they not been called for redemption.

THE TRUST ESTATE

As more fully described below, pursuant the RSIP, the Green Bank provides incentives to homeowners and third-party system owners ("TPOs") to deploy residential photovoltaic ("PV") systems (each, a "SHREC Project"). Pursuant to Public Act No. 16-212 and Public Act No. 15-194, the Green Bank purchases a specific type of Renewable Energy Credit ("REC") called a "solar home renewable energy credit" and the related Environmental Attributes (as defined herein) (a "SHREC") from the homeowners and TPOs receiving RSIP incentives and producing PV energy. The Green Bank is then required to sell such SHRECs, and each of The Connecticut Light and Power Company d/b/a Eversource Energy ("Eversource") and The United Illuminating Company ("United Illuminating" and together with Eversource, each, a "Utility" and together, the "Utilities") are required to purchase such SHRECs, pursuant to two 15-year contracts (each, a "Master Purchase Agreement" and together, the "Master Purchase Agreements").

Under each Master Purchase Agreement, SHRECs are divided into tranches based generally on the calendar year in which the related SHREC Project was installed (a "SHREC Tranche"). Each SHREC Tranche has a specific SHREC purchase price, as further described herein. The SHRECs included in the Trust Estate will be SHRECs related to SHREC Projects that were aggregated into a tranche in 2019 ("SHREC Tranche 3"). The revenue received from the Utilities for SHRECs within SHREC Tranche 3 from and after the delivery date of the Series 2020 Bonds is referred to herein as "SHREC Receivables".

The 2017 SHREC Tranche ("SHREC Tranche 1") and the 2018 SHREC Tranche ("SHREC Tranche 2") are pledged to the repayment of SHREC Collateralized Notes, Series 2019-1 (the "Series 2019-1 Notes") issued by SHREC ABS 1, LLC, a wholly-owned subsidiary of the Green Bank.

The “Trust Estate” will consist of (i) the SHREC Receivables and RECs related to SHREC Tranche 3 owned by the Green Bank (other than with respect to any SHRECs that are reassigned to the Green Bank as Ineligible SHRECs following the issuance of the Series 2020 Bonds); (ii) the Revenues and all other property that may in the future be delivered, or by writing of any kind, conveyed, pledged, assigned or transferred to the Green Bank as additional security hereunder for the Series 2020 Bonds; (iii) the Green Bank’s rights to the revenues under the Master Purchase Agreements related to the SHREC Receivables and under all other agreements that may in the future be delivered, or by writing of any kind, conveyed, pledged, assigned or transferred to the Green Bank as additional security hereunder for the Series 2020 Bonds, but specifically reserving all other rights under the Master Purchase Agreements and such other agreements; (iv) the Revenue Fund, the Debt Service Fund, the Redemption Fund and the 2020 SHREC Economic and Energy Security Fund together with any and all receipts, funds or moneys, investments and other property of every kind and nature from time to time hereafter on deposit in or payable to such funds and accounts thereof, including any Project Support Debt Service Amounts paid by the Green Bank for deposit into the Debt Service Fund; and (v) the Special Capital Reserve Fund, including all amounts on deposit in and if necessary certified by the Green Bank as necessary to restore the Special Capital Reserve Fund to the Special Capital Reserve Fund Requirement and deemed appropriated by the State and paid to the Green Bank, together with any and all moneys, investments and other property of every kind and nature from time to time hereafter on deposit in or payable to the Special Capital Reserve Fund, including any amounts paid by the Green Bank for deposit into the Special Capital Reserve Fund. The interest payments on May 15, 2035 and November 15, 2035 and the final sinking fund payment on the Series 2020 Bonds maturing on November 15, 2035 will be paid from amounts on deposit in the Special Capital Reserve Fund as there will not be any SHREC Receivables available to make such payments due to the 15 year limitation on payments required pursuant to the Master Purchase Agreements. See the captions “INVESTMENT CONSIDERATIONS—The Expected Source of the Repayment is the Potential Stream of Payments Made Under the Master Purchase Agreements,” “SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2020 BONDS—Covenants as to Special Capital Reserve Fund” and “DESCRIPTION OF THE INDENTURE—Debt Service Fund” and “—Special Capital Reserve Fund” herein.

Background Description of RSIP and SHRECs

The RSIP is a direct financial incentive program for qualifying residential solar photovoltaic (“PV”) systems designed by the Green Bank in 2011 to comply with the directives of Public Act 11-80 of the Connecticut General Assembly to help meet Connecticut’s Renewable Portfolio Standard goals and deploy 30 MW of new residential solar PV installation. The RSIP was quickly oversubscribed, meeting the state’s 30 MW deployment target in 2014, eight years ahead of schedule. As a result, the Connecticut General Assembly initiated a new deployment target of 300 MW by 2022 with the passage of Public Act 15-194. The development target was further increased to 350 MW by 2022 with the passage of Public Act 19-35.

Under RSIP, the Green Bank provides two types of incentives:

- Homeowners that own their own system are eligible for an Expected Performance Based Buydown (“EPBB”) incentive as a $/W installed upfront cost reduction for system purchases;

- TPOs may receive a Performance-Based Incentive (“PBI”) for systems leased to homeowners (or for systems whereby the electrical energy produced from such systems is sold to homeowners under a power purchase agreement) consisting of quarterly payments for 6 years based on actual system performance.

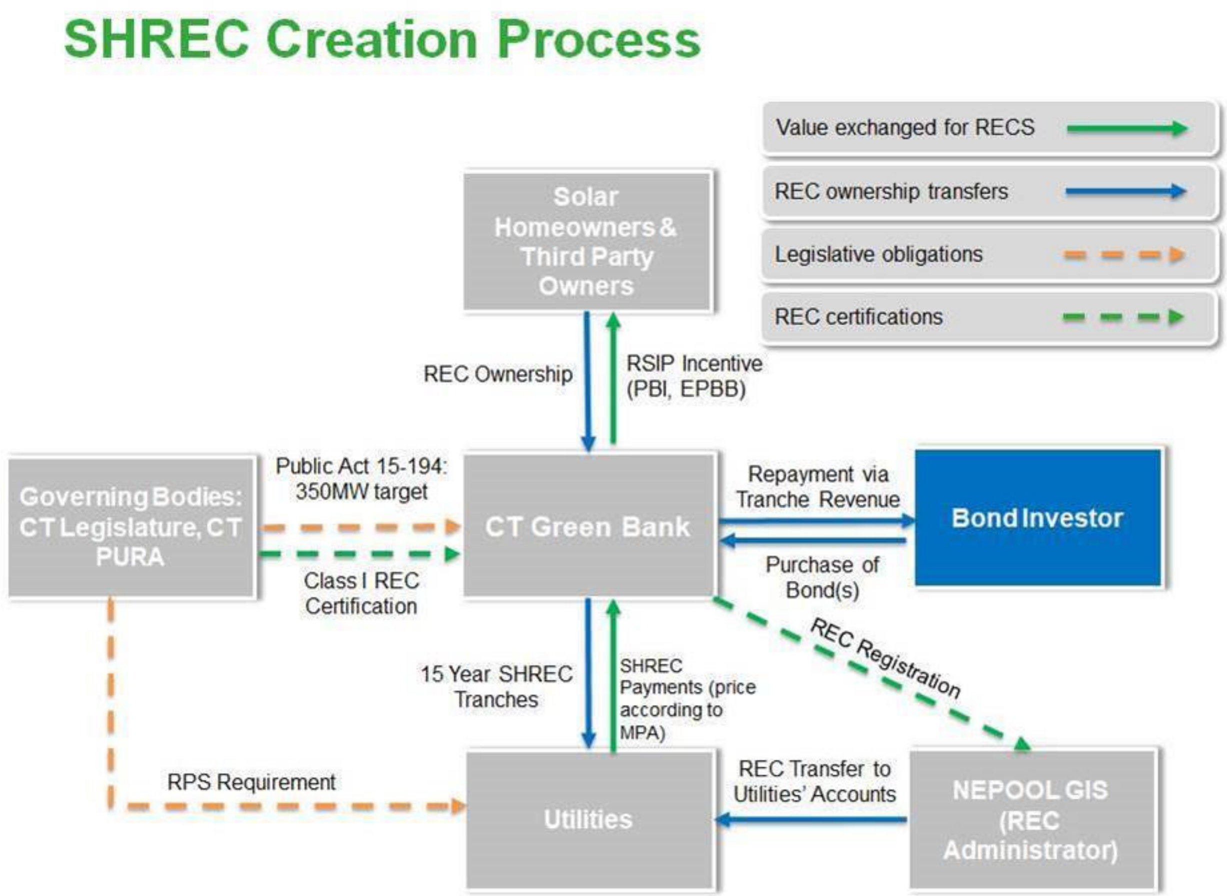
In exchange for providing the incentives described above, the Green Bank is assigned, in perpetuity, all rights, title and interest to SHRECs, as well as all Environmental Attributes in addition to certain energy attributes (such as forward capacity market benefits). To continue to meet Connecticut’s demand for residential solar energy and to fund the RSIP, the Connecticut Legislature established the SHREC program to enable the Green Bank to easily and reliably monetize the stream of RECs generated from the systems that receive incentives under the RSIP.

SHREC Program

Under the SHREC program, the Utilities are statutorily mandated to enter into 15-year contracts with the Green Bank to purchase the SHREC Tranches generated by solar PV systems receiving the RSIP incentive. The agreement is governed by the Master Purchase Agreements, which were jointly filed with and approved by the Connecticut Public Utilities Regulatory Authority (“CT PURA”), whose approval included approval of the full cost recovery by the Utilities of the SHREC costs pursuant to the Master Purchase Agreements (the “CT PURA Order”). Under the Master Purchase Agreements, if CT PURA ever fails to authorize or prohibits the Utilities’ full cost recovery of these costs and fees, including all amounts paid for SHRECs, then each Utility may reduce its obligation to pay the Green Bank to the extent of CT PURA's failure to authorize such Utility's full cost recovery. See the caption "The Master Purchase Agreements" below.

Each calendar year of newly installed solar PV systems constitutes a SHREC Tranche. The Utilities are obligated (by statute and the terms of the Master Purchase Agreements) to purchase each new SHREC Tranche for the 15-year delivery term of each SHREC Tranche, at a price fixed at the time the SHREC Tranche is sold to the Utilities. Under CT PURA Docket No. 16-05-07, CT PURA has guaranteed the Utilities cost recovery for the program via a statutorily-protected component of electric rates. Under the CT PURA Order referenced above, the CT PURA approved the Master Purchase Agreements for the purchase and sale of SHRECs and the CT PURA determined that the SHREC program costs will be recovered through a non-bypassable federally mandated congestion charge filed with CT PURA by each Utility.

A graphic explanation of the program structure is included below.



During installation of a SHREC Project, qualified solar homeowners or TPOs apply for the RSIP incentive with the Green Bank. If the Green Bank determines that the system meets eligibility criteria, the Green Bank grants either an EPBB or PBI incentive to the applicant. In exchange, the Green Bank is assigned in perpetuity, all rights, title and interest in the SHRECs, Environmental Attributes and other energy attributes.

As further explained under the caption "The Master Purchase Agreements" below, the Green Bank will register SHRECs with the New England Power Pool Generation Information System ("NEPOOL GIS") through their standard REC creation process, and once registered, these SHRECs will reside in the Green Bank's NEPOOL GIS account. Upon the agreed quarterly date, the Green Bank will then sell and transfer SHRECs to the Utilities via NEPOOL's Forward Certificate Transfer process at the price agreed upon in the Master Purchase Agreements.

The Utilities are then required to transfer payment electronically to the Green Bank by the final business day of the month following the quarterly SHREC transfer (i.e., every quarter during the life of each SHREC Tranche as the RECs are produced quarterly by the related SHREC Projects). As SHREC generation will occur quarterly, the stream of payments from the Utilities to the Green Bank will be quarterly as well.

The Master Purchase Agreements allow both the Green Bank and the Utilities to accomplish certain of the Connecticut Legislature's goals—specifically, the Green Bank's goal of 350 MW of residential solar deployment by 2022; and the Utilities' compliance with Connecticut's renewable portfolio standard (or "RPS") target.

Only residential solar PV systems with incentives from the Green Bank approved on or after January 1, 2015 are eligible for the SHREC program. As approximately 44.6 MW of residential solar PV were installed before January 1, 2015 under RSIP, the maximum amount of SHREC-eligible residential solar PV that can be deployed is approximately 305.4 MW.

The final element in the SHREC structure enables the Green Bank to monetize a SHREC Tranche with a SHREC Tranche investor or financing counterparty. The Master Purchase Agreements provide for collateral assignment of the revenue streams associated with SHREC generation without consent of the Utilities as it relates to financing the future revenue stream of the SHRECs. The SHREC Statute and the Master Purchase Agreements provide for these features specifically to allow the Green Bank to monetize the SHRECs' anticipated cash flow streams. Each Master Purchase Agreement requires the Green Bank to continue to perform its obligations under the applicable Master Purchase Agreement as the assignee of SHRECs in the event of such collateral assignment. The Green Bank will pass on the revenue streams associated with each Master Purchase Agreement to the assignee. Each Master Purchase Agreement was amended to allow the Green Bank to assign its interests in such Master Purchase Agreement and/or payments under the Master Purchase Agreements to such affiliate or affiliates of the Green Bank for the purpose of effectuating a financing of cash flow streams.

The program automatically terminates at the earlier to occur of (x) 350 MW of CT residential solar PV deployment, or (y) December 31, 2022. Therefore, at most, six SHREC Tranches may be sold, and no new SHREC Tranches will be created for post-December 31, 2022 systems. However, each Utility's obligation to purchase SHRECs will continue with respect to each SHREC Tranche sold to the Utilities until each SHREC Tranche has run its 15-year course.

Description of SHRECs

Background and Legislative Authority for SHRECs. Two pieces of Connecticut State legislation—Public Act No. 16-212 and Public Act No. 15-194—granted the Green Bank the authority to create SHRECs. A SHREC is a unique type of REC that is generated only under the specific circumstances that are described in the Master Purchase Agreements. Connecticut legislation permitted the Green Bank to enter into the Master Purchase Agreements, which were approved by CT PURA. Under the Master Purchase Agreements, the Green Bank sells SHRECs to the Utilities for a price determined by the Green Bank.

Under each of the Master Purchase Agreements, the Green Bank aggregates RECs generated from solar PV systems participating in the RSIP into SHREC Tranches and sells such SHREC Tranches to the Utilities at a fixed, predetermined price over each SHREC Tranche's 15-year term. To distinguish RECs generated under the RSIP from residential solar PV systems awarded an incentive before January 1, 2015, RECs for qualifying residential solar PV systems awarded an incentive on or after January 1, 2015 are referred to as "SHRECs".

In addition to the related REC, a SHREC also represents the related Environmental Attributes and certain energy attributes. Pursuant to the Master Purchase Agreements, an "Environmental Attribute" excludes electric energy and capacity produced, but means any other emissions, air quality, or other environmental attribute, aspect, characteristic, claim, credit, benefit, reduction, offset or allowance, howsoever entitled or designated, resulting from, attributable to or associated with the generation of energy by a qualifying residential solar photovoltaic system as defined in Connecticut Public Act No. 15-194 and as amended by Connecticut Public Act No. 16-212, whether existing as of the effective date of the Master Purchase Agreement or in the future, and whether as a result of any present or future local, state or federal laws or regulations or local, state, national or international voluntary program, as well as any and all generation attributes under the regulations promulgated pursuant to Section l6-245a of the Connecticut General Statutes, as amended, modified, restated and superseded from time to time, that require a minimum percentage of electricity sold to end-use customers in the State of Connecticut to be derived from certain renewable energy generating resources, regulations and under any and all other international, federal, regional, state or other law, rule, regulation, bylaw, treaty or other intergovernmental compact, decision, administrative decision, program (including any voluntary compliance or membership program), competitive market or business method (including all credits, certificates, benefits, and emission measurements, reductions, offsets and allowances related thereto) that are attributable, now or in the future; and further, means: (a) any such credits, certificates, benefits, offsets and allowances computed on the basis of the SHREC Project's (defined below) generation using renewable technology or displacement of fossil-fuel derived or other conventional energy generation; (b) any certificates issued pursuant to the NEPOOL GIS in connection with energy generated by a SHREC Project; and (c) any voluntary emission reduction credits obtained or obtainable by the Green Bank in connection with the generation of energy by a SHREC Project; provided, however, that Environmental Attributes will not include: (i) any production tax credits; (ii) any investment tax credits or other tax credits associated with the construction or ownership of a SHREC Project; or (iii) any state, federal or private grants relating to the construction or ownership of a SHREC Project or the output thereof. If during the delivery period, a change in laws or regulations occurs that creates value in Environmental Attributes, then at the applicable Utility's request, the Green Bank will cooperate with such Utility to register such Environmental Attributes or take other action necessary to obtain the value of such Environmental Attributes for such Utility. The below list constitutes the definition of a SHREC generation system that qualifies as a "SHREC Project" under the Master Purchase Agreements:

- The Connecticut Public Utilities Regulatory Authority (or any successor thereto) ("CT PURA") has issued an order, decision or ruling that the system uses a Class I renewable energy source, as defined by Section 16-1(a)(20) of the Connecticut General Statutes. (Solar PV systems are Class I renewable energy sources).

- The Green Bank provided an incentive for the installation of the system.

- The system emits no pollutants.

- The system's RSIP incentive was approved by the Green Bank on or after January 1, 2015.

- The system is installed on the customer side of the revenue meter of a residential property that comprises at least one and no more than four family dwelling units.

- The system serves the distribution system of an electric distribution company.

In addition to the enabling legislation and qualification criteria described above, the following actions are taken by the Green Bank when creating SHRECs:

- The Green Bank reviews the design details of systems and concludes whether they qualify to receive incentives and will be eligible to produce SHRECs.

- The Green Bank mandates that the system is connected to a revenue grade meter, which transmits, on a continuous basis, electricity generation data to the Green Bank when the system starts producing electricity.

- The Green Bank applies to the CT PURA to obtain Class I certification for any system the Green Bank has designated as SHREC-eligible through a standardized batch process.

- SHREC-eligible systems with Class I certification are placed into SHREC Tranches. To create a SHREC Tranche, the Green Bank and the Utilities execute standardized Transaction Confirmations. The Transaction Confirmations contain system details including location, size (kW), and approval to energize date, and are appended to the Master Purchase Agreements.

- The Master Purchase Agreements allow the Green Bank to create SHREC Tranches on an annual basis with the final SHREC Tranche to be created no later than January 1, 2022.

- The Green Bank fixes the SHREC price related to a SHREC Tranche, which means that every SHREC generated by the solar PV systems in a particular SHREC Tranche will have a fixed price for a 15-year term. Three SHREC Tranches have been created to date, and the SHREC price is $48/megawatt hour for SHREC Tranche 3.

SHREC Creation. On a quarterly basis, the Green Bank downloads the electricity generation data from SHREC-eligible, tranched residential solar PV systems. The Green Bank accesses the data via a web-hosted platform called Locus that receives generation data every 15 minutes from meters located on the platform.

To convert the downloaded electricity generation data to SHRECs, the Green Bank submits the data to the NEPOOL GIS. There is a time lag of one calendar quarter between when the electricity was generated and when the data is submitted to NEPOOL GIS and the SHRECs created:

Electricity generated (Calendar Quarter)	Green Bank submits electricity generation data to NEPOOL GIS (date)	SHRECs created by NEPOOL GIS (date)
1. (January 1—March 31)	July 10	July 15
2. (April 1—June 30)	October 10	October 15
3. (July 1—September 30)	January 10	January 15
4. (October 1—December 31)	April 10	April 15

NEPOOL GIS creates SHRECs on a one for one basis, i.e., one SHREC created for one megawatt hour of electricity generated.

Sale of SHRECs. On the day they are created, SHRECs are automatically transferred from the Green Bank's NEPOOL GIS account to the NEPOOL GIS accounts of the two Utilities. Under the terms of the Master Purchase Agreements, there is an 80%/20% split in this automatic transfer, with 80% of the SHRECs being transferred to Eversource's account and 20% to United Illuminating's account. Title to the SHRECs passes from the Green Bank to each respective Utility upon this transfer, and the Green Bank is able to invoice the Utilities for the sale.

The Green Bank issues invoices to the Utilities in the amount of the quantity of SHRECs sold, multiplied by the fixed price per SHREC, depending upon the SHREC Tranche from which the SHRECs were generated. Delivery of the SHRECs is deemed to occur upon the completion of the transfer and receipt of SHRECs via the NEPOOL GIS to the NEPOOL GIS account designated by each Utility. On or before the 15th day following the end of each SHREC creation month, the Green Bank is required to render to each Utility an invoice for the payment obligations incurred during the preceding month, based on the SHRECs delivered by the Green Bank in the preceding month to such Utility's NEPOOL GIS account. Payment from the Utilities is due on the last business day of the month following the month during which such SHRECs were delivered.

The Master Purchase Agreements

The following is a summary of the terms of the Master Purchase Agreements, as amended and in effect (the "Master Purchase Agreements") between the Green Bank and each of the Utilities.

Each Utility's Percentage Entitlement. Eversource is required to purchase 80% of the SHRECs created within each SHREC Tranche; and United Illuminating is required to purchase 20% of the SHRECs created within each SHREC Tranche. Eversource and United Illuminating are severally liable under their respective Master Purchase Agreements: Eversource, for example, is not required to purchase the remaining 20% of SHRECs set aside for United Illuminating in the event United Illuminating is unable to purchase its 20% percentage entitlement; and United Illuminating is not required to purchase the remaining 80% of SHRECs set aside for Eversource.

Effective Date. The effective date of the Master Purchase Agreements (the "Master Purchase Agreement Effective Date") was February 7, 2017.

Product Purchased Under Master Purchase Agreements: SHRECs. The product purchased under the Master Purchase Agreements is SHRECs, each representing one MWh of solar electricity generated on or after January 1, 2015 and qualifying for Connecticut Class I REC status. Individual SHRECs will be aggregated into SHREC Tranches.

SHREC Tranche Purchase Price. The purchase price agreed upon on a per SHREC basis for a particular SHREC Tranche is the "SHREC Tranche Purchase Price". The SHREC Tranche Purchase Price for SHREC Tranche 3 is $48 per SHREC as of the Master Purchase Agreement Effective Date and may be different for each subsequent SHREC Tranche, declining commensurate with RSIP as applicable. The SHREC Tranche Purchase Price is capped at the lesser of (i) small

Zero Emissions Renewable Energy Credit (ZREC) prices for the preceding year; and (ii) the price of the alternative compliance payment pursuant to Section 16-425(k) of the Connecticut General Statutes less five dollars (which for SHREC Tranche 3 amounts to a cap of $50).

Term. The Utilities' obligation to enter into Master Purchase Agreements commenced on the Master Purchase Agreement Effective Date and will expire at the earlier to occur of (a) the date that 305.4 MW of aggregate SHREC Projects (the Energy Act's 350MW target less the amount of projects approved for incentives under the RSIP prior to 2015) are approved under the RSIP program on and after January 1, 2015; and (b) December 31, 2022.

SHREC Project. For purposes of the Master Purchase Agreements, a qualifying SHREC project (a "SHREC Project") is a residential solar photovoltaic system, that satisfies the criteria listed for a SHREC Project. See the caption "Description of SHRECs" above.

Creating and Defining a "SHREC Tranche". The Master Purchase Agreements define a SHREC Tranche by identifying the SHREC Projects that generate SHRECs during the 12 calendar months commencing on January 1st of a particular year. For any given year, all SHRECs that are generated by SHREC Projects that have not been included in a prior SHREC Tranche and that start producing SHRECs in time to be included in the specified year's trading period for first quarter generation, will constitute a "SHREC Tranche" for that year. For example, the 2017 SHREC Tranche will include all SHRECs generated in the first quarter with a NEPOOL creation date of July 15, 2017. The same SHREC Tranche included all SHRECs generated by the associated systems for 15 years thereafter. In the example above, the 15-year period begins on January 1, 2017 and obligates the Utilities to purchase the SHRECs generated after January 1, 2017 by each of the SHREC Projects included in the 2017 SHREC Tranche.

Both the Utilities and the Green Bank are required to execute a SHREC Tranche confirmation that details, as to each SHREC Tranche, the SHREC Projects included in the SHREC Tranche, the aggregate capacity of such projects, the SHREC Tranche delivery term start date and the SHREC Tranche Purchase Price.

SHREC Creation Process. Under Rule 2.1 of the NEPOOL GIS Operating Rules, RECs are created quarterly on the 15th day of the calendar quarter that is the second calendar quarter following the calendar quarter in which the energy associated with a certificate was generated. For example, certificates from energy generation occurring in the first quarter of a calendar year will be created on July 15th of the same year. Under Rule 3.2 of the NEPOOL GIS Operating Rules, other than trading occurring under forward certificate transfers described below, each REC is transferrable from its creation date through 15 days prior to the end of its creation date quarter. From the above example, such RECs would be eligible for trades from July 15th through September 15th.

The NEPOOL GIS allows an owner to schedule SHREC transfers in advance of their creation date, under the "forward certificate transfers" process. After being scheduled in advance, the trade is completed during the trading period defined above. The Green Bank intends to execute the majority of its trades via forward certificate transfer.

SHREC Projects must be located behind the meter of a distribution customer of one of the two investor owned electric distribution companies (i.e., the Utilities) in Connecticut. Each SHREC Project must have a separate meter dedicated to SHREC measurement, the "REC Meter".

Green Bank's Obligations Regarding SHRECs. The Green Bank, as the seller of the SHRECs, is obligated to undertake the following, pursuant to the Master Purchase Agreements:

- The Green Bank will sell and deliver the Utility's applicable percentage entitlement of the SHRECs for a particular SHREC Tranche;

- The Green Bank will sell to the Utility all SHRECs generated by a particular SHREC Tranche's SHREC Projects beyond the 15-year term of the Master Purchase Agreements at no cost, for as long as a SHREC Project continues to generate SHRECs;

- The Green Bank will not transfer or assign SHRECs to anyone other than a Utility, except as specified in Section 9.2 of the applicable Master Purchase Agreement (which is discussed under the caption "*Green Bank Collateral Assignment Rights (Section 9.2 and First Amendment)*" below);

- The Green Bank will comply with all NEPOOL GIS operating rules, and maintain accounts required to store and deliver SHRECs with NEPOOL GIS and ISO-New England (the independent system operator (ISO) that is an independent not-for-profit regional transmission organization overseeing the New England region's bulk electric power system and transmission lines, which includes the states of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont and parts of New York and Canada);

- The Green Bank will verify all pre-requisites to sale;

- The Green Bank will provide the Utility with any necessary information and support to achieve regulatory and corporate approvals; however, the Green Bank shall not incur costs in excess of $100,000 per year to support this effort, unless the Utility agrees in writing to reimburse the Green Bank for an agreed-upon portion of the costs; and

- The Green Bank will warrant upon delivery that title to any and all of the SHRECs delivered to the Utility are delivered free and clear of any encumbrances. Upon delivery, the Green Bank will represent and warrant to the Utility that it has sold the SHRECs exclusively to such Utility and such SHRECs have not expired.

Green Bank Collateral Assignment Rights (Section 9.2 and First Amendment). The Green Bank has the right to collaterally assign, mortgage, pledge, grant security interests, or otherwise encumber its rights and obligations (including but not limited to the right to receive payments) in the Master Purchase Agreements to any lender in connection with a financing only pursuant to Section 9.2 of the applicable Master Purchase Agreement.

Additionally, each of the initial Master Purchase Agreements between the Green Bank and each of the Utilities, respectively, was amended by a First Amendment to Master Purchase Agreement made effective July 30, 2018 to enable the Green Bank to assign its interests in such Master Purchase Agreement including the income stream associated with the SHRECs, to an affiliate or affiliates of the Green Bank for the purpose of effectuating a monetization of the SHREC cash flow streams.

Utilities' Obligations. Each of the Utilities is obligated to undertake the following pursuant to the applicable Master Purchase Agreement:

- The Utility will purchase and receive its applicable percentage entitlement of the SHRECs for a particular SHREC Tranche; and

- The Utility will consent to the Green Bank's obtaining financing secured by all payments made by the Utility to the Green Bank under the Master Purchase Agreements.

Each Utility agrees that in an event of default, the Green Bank's collateral assignee will be entitled to exercise rights and remedies of Green Bank. Each Utility agrees that the collateral assignee will have the right but not the obligation to cure any default on the part of the Green Bank, unless the assignee has succeeded to the Green Bank's obligations under the Master Purchase Agreements. Each Utility agrees to execute any consents to assignment and provide a written acknowledgement within twenty days of written request.

Utility SHREC Utilization Rights. Each Utility has the right to utilize, resell or convey SHRECs at its sole discretion. If the statutory and regulatory framework governing SHRECs is amended or suspended following SHREC Tranche confirmation, such Utility may choose to qualify SHREC Projects in another state or federal program.

Delivery and Title Transfer; Payment for SHRECs. Delivery under the Master Purchase Agreement occurs when transfer and receipt via NEPOOL GIS to the account maintained by the applicable Utility is complete. The Green Bank will effect the transfer to the applicable Utility's account via a forward certificate transfer, and upon such Utility's receipt, all rights, title and interest in SHRECs will transfer to such Utility.

Payment for SHRECs delivered is due on the last business day of the month following the month during which such SHRECs were delivered. The Green Bank is required to render an invoice to each Utility by the 15th day of the month following the SHREC delivery month.

Any late payments under the Master Purchase Agreements will accrue interest at a rate equal to the federal funds effective interest rate as set forth in the weekly statistical release designated as H.15(519), or any successor publication, published by the Board of Governors of the Federal Reserve System.

If a party disputes a payment obligation, the disputing party must notify the other in writing and will withhold payment pending resolution of the dispute. Withheld amounts will accrue interest in the same manner as late payments on any amounts determined to have been properly billed. If a Utility seeks clarification from the CT PURA on uses or cost recovery methods for SHRECs, interest will not accrue during the period pending clarification. There will be a 24-month statute of limitations on new disputes for any particular payment. Interest on late payments will bear interest from and including the due date and will be calculated at the current date's Federal Funds Effective Rate.

Prerequisites for Purchase. A Utility's obligation to purchase SHRECs for any particular SHREC Tranche is contingent upon satisfaction of all of the following conditions:

- such Utility has received a final decision of approval from the CT PURA, as well as the Utility's corporate approval, of the Master Purchase Agreement (both of which have already been obtained);

- SHREC Tranche confirmations have been executed (such confirmations have been delivered with respect to SHREC Tranche 3); and

- the Green Bank has provided and such Utility has accepted a notice certifying (a) that generation associated with creation of SHRECs has begun prior to the Tranche Delivery Term Start Date; and (b) the amount of the SHREC Tranche Purchase Price; and (c) that each SHREC Project, as constructed, satisfies the criteria listed for a SHREC Project; and (d) the Green Bank has satisfied its obligations set forth in the Master Purchase Agreement necessary to complete the delivery of such SHRECs to such Utility (which notice has been provided by the Green Bank and accepted by each such Utility with respect to SHREC Tranche 3).

Failure to Obtain Regulatory Approval. The Master Purchase Agreements have already received final approval from the CT PURA under Docket No. 16-05-07. If for any reason the CT PURA were to reopen Docket No. 16-05-07 and the CT PURA were to make a decision that invalidates a provision of the Master Purchase Agreement, other than one that impacts the transfer of SHRECs or the applicable Utility cost recovery, (a) the remaining provisions of the Master Purchase Agreement will remain in full force and effect; and (b) the applicable Utility and the Green Bank will endeavor in good faith to replace the invalid provisions with provisions that preserve the economic effects and fundamental rights of the parties under the Master Purchase Agreement.

Events of Default and Remedies under the Master Purchase Agreements. An event of default under the Master Purchase Agreement has occurred when:

- A party breaches any of its obligations and (a) does not cure the breach within ten (10) business days of written notice from the non-breaching party, or (b) does not cure the breach within twenty (20) business days after notice, following a ten-day extension for diligent work; or

- A representation or warranty made by a party proves false in any material respect; or

- A party becomes bankrupt.

Upon the occurrence of an event of default under a Master Purchase Agreement, the non-defaulting party may do any one or more of the following:

- Pursue rights and remedies as may be available in law and equity;

- Withhold any payments due in respect of the Master Purchase Agreement up to the extent of its damages;

- Terminate the Master Purchase Agreement, subject to the limitations of early termination (described in the following paragraph); and

- Suspend performance of its obligations with regards to transfer of SHRECs until such event of default is cured.

Each Utility agrees that it will not exercise any right to terminate or suspend the Master Purchase Agreement unless it has given the defaulting party (the Green Bank or its assignee) prior written notice of its intent and the defaulting party has not caused the defaulting condition to be cured within 15 days after the later of: (a) such Utility's notice, or (b) the expiration of the applicable periods of grace provided under the Master Purchase Agreement. If such default cannot be reasonably cured by the defaulting party within 15 days, the cure period will be extended for a reasonable period of time not to exceed 15 days (for an aggregate 30-day cure period).

Force Majeure Events. Under the Master Purchase Agreement, a "Force Majeure Event" means any event or circumstance which is beyond the control and without the fault or negligence of the party affected and which by the exercise of reasonable diligence the party affected was unable to prevent, provided that such events or circumstances shall be limited to a list of circumstances.

"Force Majeure Events" are defined to include, generally: (1) Political instability events such as riot, war, compulsory acquisition or acts of terrorism; (2) Ionizing events such as contact with nuclear waste or radiation; (3) Natural disasters such as earthquakes or fires; and (4) Strikes or industrial disputes.

"Force Majeure Events" are defined not to include any of the following events: (1) Curtailment arising from mechanical or equipment failure attributable to wear and tear; (2) Financial hardship, including events that merely increase cost to one of the parties; (3) the Green Bank's ability to sell SHRECs at a price greater than the SHREC Tranche Purchase Price that has been established; or (4) a Utility's ability to purchase SHRECs at a price lower than the SHREC Tranche Purchase Price. In addition, a delay or inability to perform due to a party's lack of preparation for a known risk or condition to satisfy its obligations, a party's failure to timely obtain and maintain all necessary permits or approvals (excepting the regulatory approval necessary for entering into the Master Purchase Agreements) or qualifications, or a failure to satisfy contractual conditions or commitments, shall each not constitute a Force Majeure or be the basis for a claim of Force Majeure under the Master Purchase Agreements.

The implication of the Force Majeure definition in the Master Purchase Agreements is that it permits a party to be excused from or permitted a delay in performance of one or more of its obligations under the Master Purchase Agreements.

Governing Law. The Master Purchase Agreements are interpreted and governed by the laws of the State of Connecticut.

SHREC Tranche 3

SHREC Tranche 3, with a SHREC Tranche Delivery Term Start Date (as defined in the Master Purchase Agreements) of January 1, 2019, consisted of 4,818[*] SHREC Projects representing a total "nameplate" capacity of approximately 39.3 MW-DC and was executed by the Green Bank and the Utilities as of July 1, 2019. Taking into account an annual rate of degradation of one-half percent and a SHREC Tranche Purchase Price (as defined in the Master Purchase Agreement) of $48/MWh, the Green Bank projects gross SHREC Receivables of $25.2 million over the remaining 14-year term of SHREC Tranche 3.[†] The aggregation of these SHREC Projects in SHREC Tranche 3 was approved by PURA between April 17, 2019 and June 12, 2019 through Docket Nos. 190204, 190205, 190206, 1902070E (corrected), 190208, 190209, 190210, and 190211.

[*] This number diverges from the total number of SHREC Projects initiated under the Master Purchase Agreements due to cancelled/decommissioned SHREC Projects.

[†] These figures are estimates of production only, and no guarantee of future performance is offered, granted, suggested or implied.

SHREC Tranche 3 has the following characteristics as set forth in the following tables as of May 11, 2020 (the "Statistical Cutoff Date"):

Composition of SHREC Tranche 3
as of the Statistical Cutoff Date

Number of PV Systems[1]	4,811
Aggregate PV System Size (kW-DC)	39,205
Average PV System Size (kW-DC)	8.1
Range of PV System Size (kW-DC)	0.5 to 39.6
Average RSIP Incentive Approval Date	1/26/2018
Average Utility Interconnection Approval Date	5/19/2018
Average Panel Age - Months since RSIP Incentive Approval	27.9
Average Panel Age - Months since Utility Interconnection Approval	24.1
Third Party Owned	74%
Homeowner Owned	26%
Average FICO[2]	745
Range of Non-Zero Credit Score	447 to 850
Eversource Energy Grid Connection	68%
United Illuminating Grid Connection	32%

[1] This number diverges from the total number of SHREC Projects initiated under the Master Purchase Agreements due to cancelled/decommissioned SHREC Projects.
[2] As of May 31, 2019

Distribution of SHREC Tranche 3 by Owner
as of the Statistical Cutoff Date

Owner	Number of PV Systems	Percentage of PV Systems	Nameplate Capacity (kW-DC)	Percentage of Nameplate Capacity
Sunnova	1,694	35.2%	13,375	34.1%
Sunrun	532	11.1	4,364	11.1
PosiGen	518	10.8	3,401	8.7
Vivint Solar	453	9.4	3,670	9.4
SunPower	348	7.2	3,333	8.5
Other Owners (less than 5%)	7	0.1	49	0.1
Homeowner	1,259	26.2	11,012	28.1
Total	4,811	100.0%	39,205	100.0%

Distribution of SHREC Tranche 3 by Utility Company
as of the Statistical Cutoff Date

Utility Company	Number of PV Systems	Percentage of PV Systems	Nameplate Capacity (kW-DC)	Percentage of Nameplate Capacity
Eversource Energy	3,257	67.7%	27,475	70.1%
United Illuminating	1,554	32.3	11,730	29.9
Total	4,811	100.0%	39,205	100.0%

Distribution of SHREC Tranche 3 by Range of PV System Size (kW-DC) as of the Statistical Cutoff Date

Range of PV System Size (kW-DC)	Number of PV Systems	Percentage of PV Systems	Nameplate Capacity (kW-DC)	Percentage of Nameplate Capacity
0.001-2.000	5	0.1%	7	0.0%[1]
2.001-4.000	325	6.8	1,071	2.7
4.001-6.000	1,125	23.4	5,638	14.4
6.001-8.000	1,267	26.3	8,749	22.3
8.001-10.000	909	18.9	8,112	20.7
10.001-12.000	525	10.9	5,717	14.6
12.001-14.000	299	6.2	3,855	9.8
14.001-16.000	160	3.3	2,391	6.1
16.001-18.000	98	2.0	1,650	4.2
18.001-20.000	54	1.1	1,027	2.6
>20.000	44	0.9	988	2.5
Total	4,811	100.0%	39,205	100.0%

[1] Greater than 0.00%, but less than 0.05%.

Distribution of SHREC Tranche 3 by Host Customer County as of the Statistical Cutoff Date

Host Customer County	Number of PV Systems	Percentage of PV Systems	Nameplate Capacity (kW-DC)	Percentage of Nameplate Capacity
Fairfield County	857	17.8%	7,029	17.9%
Hartford County	1,272	26.4	9,784	25.0
Litchfield County	176	3.7	1,745	4.4
Middlesex County	255	5.3	2,200	5.6
New Haven County	1,566	32.6	12,443	31.7
New London County	382	7.9	3,334	8.5
Tolland County	156	3.2	1,371	3.5
Windham County	147	3.1	1,299	3.3
Total	4,811	100.0%	39,205	100.0%

Distribution of SHREC Tranche 3 by Module Manufacturer as of the Statistical Cutoff Date

Module Manufacturer	Number of PV Systems	Percentage of PV Systems	Nameplate Capacity (kW-DC)	Percentage of Nameplate Capacity
Hanwha Q-Cells	1,766	36.7%	13,834	35.3%
Silfab	624	13.0	4,313	11.0
LG Electronics Solar Cell Division	561	11.7	5,384	13.7
Jinko Solar	545	11.3	4,343	11.1
SunPower	497	10.3	4,670	11.9
Trina Solar	348	7.2	2,633	6.7
REC Solar	170	3.5	1,375	3.5
SolarCity	47	1.0	370	0.9
Other	253	5.3	2,283	5.8
Total	4,811	100.0%	39,205	100.0%

The Green Bank uses Clean Power Research's (CPR) SolarAnywhere FleetView to derive energy forecasts. The forecasts are derived from the following information for each installed system:

- Location;
- Number of arrays, inverters per array;
- PV module manufacturer, model, quantity, and cost;
- Inverter manufacturer, model, quantity, and cost;
- Fixed tilt or tracking array type;
- Azimuth and tilt for each array; and
- Solar obstruction (shading) angles or monthly (solar access) percentages for each array.

CPR SolarAnywhere FleetView maintains a database of typical meteorological year (TMY) 3 and satellite irradiation data. The TMY data sets hold hourly values of solar radiation and meteorological elements for a 1-year period. Their intended use is for computer simulations of solar energy conversion systems and building systems to facilitate performance comparisons of different system types, configurations, and locations in the United States and its territories. Using this information, the Green Bank can develop a solar radiation forecast for each system location.

The Green Bank's annual energy generation estimates are adjusted, with certain exceptions, using a fixed 10% derate factor (the derate factor for soiling accounts for dirt, snow, or other foreign matter on the surface of the PV module that reduces the amount of solar radiation reaching the solar cells of the PV module) and a 0.5% assumed annual system degradation rate.

The energy forecast for SHREC Tranche 3 was provided to DNV GL, independent engineers, to confirm the accuracy of the Green Bank's current and future energy production estimates. The Green Bank provided DNV GL with a dataset with detailed system information and monthly energy generation forecasts for 4,811 systems with Approval to Energize dates between 3 February 2015 and 17 January 2019.

DNV GL refined and analyzed the Green Bank's operational data and assessed all PV systems using available historical data to gain insight on the operational performance of SHREC Tranche 3. After making any appropriate adjustments, DNV GL developed a revised forecast of the annual electricity production for SHREC Tranche 3 at various probabilities of exceedance (e.g., P50, P90, P99, where P90 represents an electricity production forecast that will be matched or exceeded with 90% probability). These annual forecasts are multiplied by the $48 price per SHREC to calculate projected annual SHREC Receivables. The Green Bank then applied seasonality assumptions derived by CPR SolarAnywhere FleetView (projected annual production for a SHREC Project is assumed to be generated as follows: 19.18% in the first quarter; 33.64% in the second quarter; 32.55% in the third quarter; and 14.64% in the fourth quarter).

The following table indicates the Green Bank's and DNV GL's estimates of the Green Bank's Year One estimate of production for each of the 15 years of the SHREC Projects for the P50 production probability. Generally, DNV GL's production estimates were above those of the Green Bank; however, DNV GL had a higher degradation rate (0.68% for the DNV GL estimates vs. 0.50% for the Green Bank estimates).

Percent of Green Bank's Year 1 Estimates (P50)

Year	Green Bank Estimates	DNV GL Estimates
1	99.1%	102.3%
2	98.6	101.6
3	98.1	100.9
4	97.6	100.2
5	97.1	99.5
6	96.6	98.8
7	96.1	97.9
8	95.6	97.0
9	95.2	95.8
10	94.7	94.6
11	94.2	93.6
12	93.7	93.4
13	93.3	93.2
14	92.8	92.9
15	92.3	92.5

The following table provides DNV GL's annual production (MWh) forecasts for various probabilities of exceedance for 1-year periods, with Year 1 representing April 30, 2020 to May 1, 2021. The relative production forecasts shown below will change if the final SHREC Tranche 3 composition differs materially from the SHREC Projects analyzed by DNV GL.

Production Forecasts (MWh) for SHREC Trance 3 in MWh, 1-Year Period

Year	P50	P90	P99
1	40,937	37,811	35,262
2	40,659	37,528	34,974
3	40,382	37,236	34,664
4	40,103	36,933	34,333
5	39,823	36,620	33,980
6	39,530	36,286	33,597
7	39,191	35,901	33,156
8	38,809	35,469	32,662
9	38,358	34,966	32,095
10	37,852	34,407	31,468
11	37,447	33,935	30,913
12	37,391	33,771	30,633
13	37,319	33,586	30,325
14	37,189	33,342	29,956
15	37,024	33,060	29,547

Using the annual MWh production forecasts provided by DNV GL, adjusting the SHREC Receivables for annual periods ending on the principal payment dates (November 15), making the seasonality adjustments described above, assuming that only 96.4% of the SHREC Project production within SHREC Tranche 3 is available at any one time and multiply the result MWh production forecasts by the $48/MWh pursuant price under the Master Purchase Agreements, the following table provides the estimated SHREC Receivables (after the payment of Trustee fees, charges and expenses) available to pay debt service on the Series 2020 Bonds and the related debt service coverage ratios for each of the P50, P90 and P99 production probabilities. Although there will be no SHREC Receivables available to pay debt service on the Series 2020 Bonds in the calendar year 2035, it is anticipated that the amounts on deposit in the Special Capital Reserve Fund will be sufficient to make such payments.

Debt Service Coverage Table

	Expected Net SHREC Receivables (P50)*	Expected Net SHREC Receivables (P90)	Expected Net SHREC Receivables (P99)	Projected Annual Debt Service	Expected P50 Debt Service Coverage	Expected P90 Debt Service Coverage	Expected P99 Debt Service Coverage
11/15/2020	$ 350,756	$ 323,015	$ 300,399	$ 103,389	3.39x	3.12x	2.91x
11/15/2021	1,882,398	1,737,664	1,619,640	1,496,133	1.26x	1.16x	1.08x
11/15/2022	1,869,547	1,724,438	1,605,964	1,488,256	1.26x	1.16x	1.08x
11/15/2023	1,856,676	1,710,748	1,591,295	1,474,858	1.26x	1.16x	1.08x
11/15/2024	1,843,756	1,696,574	1,575,624	1,459,520	1.26x	1.16x	1.08x
11/15/2025	1,830,594	1,681,751	1,558,821	1,441,903	1.27x	1.17x	1.08x
11/15/2026	1,816,318	1,665,495	1,540,184	1,422,583	1.28x	1.17x	1.08x
11/15/2027	1,799,965	1,646,947	1,518,956	1,400,847	1.28x	1.18x	1.08x
11/15/2028	1,781,220	1,625,855	1,494,954	1,376,967	1.29x	1.18x	1.09x
11/15/2029	1,759,489	1,601,717	1,467,772	1,349,821	1.30x	1.19x	1.09x
11/15/2030	1,737,654	1,577,194	1,439,899	1,320,578	1.32x	1.19x	1.09x
11/15/2031	1,724,379	1,560,154	1,418,528	1,294,266	1.33x	1.21x	1.10x
11/15/2032	1,721,525	1,552,240	1,405,116	1,273,235	1.35x	1.22x	1.10x
11/15/2033	1,717,290	1,542,755	1,389,915	1,252,856	1.37x	1.23x	1.11x
11/15/2034	1,382,192	1,237,517	1,110,039	1,075,100	1.29x	1.15x	1.03x
11/15/2035	1,067,600**	1,067,600**	1,067,600**	905,520	1.18x	1.18x	1.18x

* Expected Net SHREC Receivables based on P50 production. P-measures are a statistical estimate of how often, given variances in weather and system performance, solar projects will exceed that value. P50 means that for each year, 50% of the time generation is expected to be above the generation forecast and 50% of the time generation is expected to be below the generation forecast for such year; Expected Net SHREC Receivables are net of Trustee fees, charges and expenses.

** Represents the reserve fund release net of trustee fees, charges and expenses.

Pursuant to the Indenture, the Green Bank is required to use its best efforts to direct all payments on the SHREC Receivables to the Trustee for deposit into the Funds and Accounts under the Indenture, and if such payments are misdirected or erroneously deposited into another Green Bank fund or account, the Green Bank is required to promptly transfer the applicable amount to the Trustee for deposit under the Indenture.

The Revenue Fund will be established to hold funds received from the Utilities as well as other Revenues (the "Revenue Fund"). Interest (net of that which represents a return of accrued interest paid in connection with the purchase of any investment) and other investment earnings (but not profits or losses) on any moneys or investments in the Funds and Accounts, other than the Special Capital Reserve Fund, shall be paid into the 2020 SHREC Economic Energy and Security Fund as and when received. Interest (net of that which represents a return of accrued interest paid in connection with the purchase of any investment) and other investment earnings (but not profits or losses) on any moneys or investments in the Special Capital Reserve Fund shall be paid into the Debt Service Fund.

USE OF PROCEEDS

Sources and Uses

The proceeds of the Series 2020 Bonds are being used to: (a) refinance expenditures of the Green Bank related to the RSIP, (b) fund a Special Capital Reserve Fund and (c) pay the costs of issuing the Series 2020 Bonds, including the Underwriters' discount. The following are the estimated sources and uses of proceeds of the Series 2020 Bonds:

Estimated Sources:	
Proceeds of the Series 2020 Bonds	$16,795,000
Total Sources	$16,795,000
Estimated Uses:	
Refinance expenditures of the Green Bank related to the RSIP	$14,704,810
Deposit to the Special Capital Reserve Fund	1,496,133
Pay the costs of issuing the Series 2020 Bonds	594,057
Total Uses	$16,795,000

Climate Bond Certified

The Green Bank is a recognized leader in Green Finance with a goal of increasing investment in green technology and renewable energy. The Green Bank has set goals to increase annual clean energy investment to $800 per person, which is the level needed to hold off the worst effects of climate change as identified by the Intergovernmental Panel on Climate Change.

Working to advance its mission to "confront climate change and provide all of society a healthier and more prosperous future by increasing and accelerating the flow of private capital into markets that energize the green economy," The Green Bank envisions a world powered by the renewable energy of community. With this vision in mind, the SHREC Projects are designed to support renewable energy production free from harmful emissions through solar energy production. See the caption "THE TRUST ESTATE" herein for more information on the SHREC Projects.

The information set forth below concerning (i) the Climate Bonds Initiative ("CBI") and the process for obtaining certification from CBI, and (ii) Kestrel Verifiers ("Kestrel") in its role as a verifier with respect to the certification of the Series 2020 Bonds as Climate Bond Certified, all as more fully described below, has been extracted from materials provided by CBI and Kestrel. Additional information relating to CBI and the certification process can be found at www.climatebonds.net. The CBI website is included for reference only and the information contained therein is not incorporated by reference in this Official Statement.

In connection with the Series 2020 Bonds and the SHREC Projects, the Green Bank applied to the Climate Bonds Initiative ("CBI") for designation of the Series 2020 Bonds as "Climate Bond Certified." CBI is an independent not-for-profit organization that works solely on mobilizing the bond market for climate change solutions. CBI has established a certification program that provides criteria for eligible projects to be considered a Certified Climate Bond. Rigorous scientific criteria ensure that financed activities are consistent with the 2 degrees Celsius warming limit established in the 2016 Paris Agreement which exists within the United Nations Framework Convention on Climate Change, to address greenhouse-gas-emissions mitigation, adaptation, and finance. The CBI certification program is used globally by bond issuers, governments, investors and the financial markets to prioritize investments which genuinely contribute to addressing climate change.

The CBI standards use credible, science-based, widely supported guidelines about what should and should not be considered a qualifying climate-aligned investment to assist investors in making informed decisions about the environmental credentials of a bond. In order to receive the CBI certification, the Green Bank engaged Kestrel, a third-party CBI approved verifier, to provide verification to the CBI Certification Board that the Green Bank's SHREC Projects meets the CBI standards and relevant sector criteria. Kestrel reviewed and provided an opinion on the Green Bank's Programmatic Green Bond Framework and verification to CBI on the first bond issued in the program, which CBI certified as Climate Bonds on

March 28, 2019. Kestrel will also provide a post-issuance report to CBI as to whether the proceeds of the Series 2020 Bonds have been allocated properly.

The terms “Climate Bond Certified” and “Green Bonds” are solely for identification purposes and are not intended to provide or imply that the owners of the Series 2020 Bonds are entitled to any security other than that described under the caption “SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2020 BONDS” herein.

The certification of the Series 2020 Bonds as Climate Bonds by the CBI is based solely on the Climate Bond Standard and does not, and is not intended to, make any representation or give any assurance with respect to any other matter relating to the Series 2020 Bonds or the SHREC Projects, including but not limited to this Official Statement, the transaction documents, the Green Bank or the management of the Green Bank

The certification of the Series 2020 Bonds as Climate Bonds by the CBI was addressed solely to the Green Bank’s Board of Directors and is not a recommendation to any person to purchase, hold or sell the Series 2020 Bonds and such certification does not address the market price or suitability of the Series 2020 Bonds for a particular investor. The certification also does not address the merits of the decision by the Green Bank or any third party to participate in any nominated project and does not express and should not be deemed to be an expression of an opinion as to the Green Bank or any aspect of the SHREC Projects (including but not limited to the financial viability of the SHREC Projects) other than with respect to conformance with CBI’s standards for Certified Climate Bonds.

In issuing or monitoring, as applicable, the certification, CBI and Kestrel have assumed and relied upon and will assume and rely upon the accuracy and completeness in all material respects of the information supplied or otherwise made available to CBI and Kestrel. CBI does not assume or accept any responsibility to any person for independently verifying (and it has not verified) such information or to undertake (and it has not undertaken) any independent evaluation of any nominated project or the Green Bank.

In addition, CBI and Kestrel do not assume any obligation to conduct (and have not conducted) any physical inspection of any nominated project. The certification may only be used with the Series 2020 Bonds and may not be used for any other purpose without CBI’s prior written consent.

The certification does not and is not in any way intended to address the likelihood of timely payment of interest when due on the Series 2020 Bonds and/or the payment of principal at maturity or any other date.

The certification may be withdrawn at any time in the Climate Bonds Initiative’s sole and absolute discretion and there can be no assurance that such certification will not be withdrawn.

Approved Verifier for Third Party Verification of Programmatic Climate Bond

The Green Bank has engaged Kestrel to provide a Second Party Opinion on conformance of the Green Bank’s Programmatic Green Bond Framework with the International Capital Market Association Green Bond Principles and the Climate Bond Standard V3.0. In accordance with Programmatic Certification procedures established in the Climate Bonds Standard, Kestrel verified the first bond in the program, Solar Home Renewable Energy Credits (SHREC) Collateralized Notes, Series 2019-1 Class A and B on March 28, 2019. Following the Climate Bonds Programmatic Certification procedures, Connecticut Green Bank is approved to issue Certified Climate Bonds in the Solar Sector. Projects to be financed with the proceeds of the Series 2020 Bonds satisfy the Climate Bond Standard V3.0 and the Solar Sector Criteria. Accredited as an “Approved Verifier” by the Climate Bonds Initiative, Kestrel is qualified to evaluate bonds against the Climate Bonds Initiative Standards and Criteria in all sectors worldwide. Kestrel’s Second Party Opinion on the Programmatic Green Bond Framework can be found in “APPENDIX I-E—CLIMATE BOND VERIFIER’S REPORT” hereto.

“Green Bond” Designation

The Green Bank is designating the Series 2020 Bonds as “Green Bonds” (also known as “Climate Bonds”). The purpose of designating the Series 2020 Bonds as “Green Bonds” is to allow investors to invest directly in bonds that finance environmentally beneficial project (“Green Projects”). The particular improvements that the Green Bank has defined as “Green Projects” in connection with the Series 2020 Bonds are the SHREC Projects, which provide solar energy production. The term “Green Bonds” and “Climate Bonds” are neither defined in, nor related to, provisions in the Indenture. Owners of the Series 2020 Bonds do not have any security other than as provided in the Indenture nor do such owners of the Series 2020

Bonds assume any special project risk related on any of the SHREC Projects. The Green Bank will undertake reasonable efforts to ensure that any actions taken with respect to the Series 2020 Bonds will not result in a revision or withdrawal of the CBI certification described under the caption "Climate Bond Certified" above; however, there can be no guarantee that any such action or a further revision to the CBI's criteria for certifying bonds will not result in a withdrawal or revision of the CBI's certification.

United Nations Sustainable Development Goals

By reference to the International Capital Markets Association's "Green and Social Bonds: A High Level Mapping to the Sustainable Development Goals" (June 2019), the Green Bank has determined that the Green Bank's "Green Bonds" designation reflects the use of the proceeds of the Series 2020 Bonds in a manner that is consistent with the United Nations Sustainable Development Goals ("UNSDG"). The efforts of the Green Bank to increase investment in and deployment of clean energy projects – which result in increased benefits to Connecticut and all of society – can be looked at through the lens of its Green Bonds Framework, and thereby through the following UNSDG as well.

Goals 1 & 10. No Poverty and Reduced Inequalities: SHREC Tranche 3 has supported over $32 million of investment in houses where the area median income is 80% or less, and over $41 million in distressed communities across Connecticut.

Goal 3. Good Health and Well-Being: By reducing air pollution in terms of CO2, NOX, SO2, and other particulates, there is a contribution to public health. The lifetime benefits to public health from SHREC Tranche 3 are estimated to be between $21 million and $49 million.

Goal 7. Affordable Clean Energy: By providing incentives that bring down the cost of solar systems, the Residential Solar Investment Program is helping to ensure access to affordable, renewable, sustainable and modern energy for all. The lifetime clean energy generation of SHREC Tranche 3 is expected to be nearly 600,000 MWh.

Goals 8 & 9. Decent Work and Economic Growth, Industry, Innovation and Infrastructure: SHREC Tranche 3 is estimated to have created 548 direct job-years and 721 indirect and induced job-years.

Goal 11. Sustainable Cities and Communities: SHREC Tranche 3 has resulted in over $138 million of investment in 164 of 169 of Connecticut's cities and towns – an average of 29 projects and over $840,000 of investment per town.

DESCRIPTION OF THE INDENTURE

The following is a brief summary of certain provisions of the Indenture. For the full terms of the Indenture, see "APPENDIX I-A—FORM OF THE INDENTURE" hereto. The following brief summary, however, is to be considered a full statement of the terms of the Indenture and, accordingly, is qualified by reference thereto and are subject to the full text thereof. Capitalized terms not otherwise previously defined in this Official Statement or defined below have the meaning set forth in "APPENDIX I-A—FORM OF THE INDENTURE" hereto.

Funds

Each of the following Funds is established under and governed by the terms of the Indenture:

(a) Revenue Fund;

(b) Debt Service Fund;

(i) Interest Account, and

(i) Principal Account;

(c) Cost of Issuance Fund;

(d) Special Capital Reserve Fund;

(e) Redemption Fund; and

(f) 2020 SHREC Economic and Energy Security Fund.

In addition to the Accounts described above, the Trustee shall, at the written request of Green Bank, establish such additional Funds or, within any Fund held by the Trustee, such Accounts as shall be designated in the written instructions of an Authorized Representative of Green Bank and shall in like manner establish within any Account such subaccounts for the purposes of such Accounts as shall be so designated.

The Trustee is required to deposit into the Revenue Fund, as and when such amounts are received, (i) all Revenues, (ii) all amounts delivered by or at the direction of the Green Bank to the Trustee for deposit therein, and (iii) any other amounts required to be deposited therein pursuant to the Indenture.

Application of Revenues held in the Revenue Fund

The Trustee is required to use and withdraw amounts in the Revenue Fund on the second Business Day immediately preceding the first day of each calendar month and apply such amounts as follows:

FIRST: to the Trustee's unpaid fees, charges and expenses;

SECOND: to the Interest Account in the Debt Service Fund, the amount necessary to make the payment of the next succeeding Interest Payment, less any amounts in the Interest Account at each date of deposit;

THIRD: to the Principal Account in the Debt Service Fund, the amount necessary to make the next succeeding Principal Payment, less any amounts in the Principal Account at each date of deposit;

FOURTH: to the Special Capital Reserve Fund, the amount, if any, necessary to make the total on deposit equal the Special Capital Reserve Fund Requirement;

FIFTH: to the Redemption Fund, the amount, if any, required pursuant to the Indenture; and

SIXTH: to the 2020 SHREC Economic Energy and Security Fund, the balance.

Debt Service Fund

The Debt Service Fund is established to pay the Principal Payments and Interest Payments on the Series 2020 Bonds. See the caption "Funds and Accounts—*Debt Service Fund*" in "APPENDIX I-A—FORM OF THE INDENTURE" hereto.

The Trustee is required to pay from the moneys or deposits in the respective Accounts in the Debt Service Fund (i) on each Interest Payment Date, the amounts required for the payment of the Interest Payment due on such date, (ii) on each Principal Payment Date, the amounts required for the payment of the Principal Payment (including any Sinking Fund Installments) due on such date, and (iii) on any redemption date or date of purchase, the amounts required for the payment of accrued interest on the Series 2020 Bonds to be redeemed or purchased on such date unless the payment of such accrued interest shall be otherwise provided. Thirty (30) days prior to each Interest Payment Date and Principal Payment Date, the Trustee shall determine whether the moneys or deposits in the respective Accounts within the Debt Service Fund are sufficient to make the next succeeding Interest Payment and Principal Payment. If such moneys or deposits are not sufficient to make such payments, the Trustee shall, no later than the next Business Day, provide a notice of such insufficiency. The Green Bank will thereafter pay to the Trustee the Project Support Debt Service Amount as provided in the Project Support Commitment and Undertaking. The Project Support Commitment and Undertaking is solely for the benefit of the State of Connecticut and, other than amounts pledged pursuant to the Indenture, there are no other moneys or assets of the Green Bank pledged to the repayment of the Series 2020 Bonds or to the making of any Project Support Debt Service Amounts, and Owners of the Series 2020 Bonds should not rely upon the Green Bank to fund any deficiency in any Interest Payment or Principal Payment.

The amounts accumulated in the Principal Account of the Debt Service Fund for each Sinking Fund Installment will, if so directed in writing by an Authorized Representative, be applied (together with amounts with respect to interest on the Term Series 2020 Bonds for which such Sinking Fund Installment was established) by the Trustee prior to the forty-fifth (45th) day preceding the due date of such Sinking Fund Installment to the purchase of the Term Series 2020 Bonds and maturity for which such Sinking Fund Installment was established, at prices (including any brokerage and other charges) not exceeding the Redemption Price payable for such Term Series 2020 Bonds when such Term Series 2020 Bonds are redeemable by application of such Sinking Fund Installment, plus unpaid interest accrued to the date of purchase, such purchases to be made by the Trustee as directed in writing by an Authorized Representative.

Upon the purchase of any Term Series 2020 Bond described in the preceding paragraph, an amount equal to the principal amount of the Term Series 2020 Bond so purchased or redeemed shall be credited toward the next Sinking Fund Installment thereafter to become due and the amount of any excess of the amounts so credited over the amount of such Sinking Fund Installment shall be credited against future Sinking Fund Installments in direct chronological order.

In connection with each Sinking Fund Installment, the Trustee is required to provide notice of redemption to the Bondholders of the Term Series 2020 Bonds for which such Sinking Fund Installment was established in such amount as shall be necessary to complete the retirement of the principal amount specified for such Sinking Fund Installment of the Term Series 2020 Bonds. The Trustee shall so call such Term Series 2020 Bonds for redemption whether or not it then has moneys in the Debt Service Fund sufficient to pay the applicable Redemption Price thereof on the redemption date.

Special Capital Reserve Fund

The Special Capital Reserve Fund is established to secure the payment of the Principal Payments and Interest Payments on the Series 2020 Bonds. See the caption “USE OF PROCEEDS—Sources and Uses” herein and the caption “Funds and Accounts—*Special Capital Reserve Fund* ” in “APPENDIX I-A—FORM OF THE INDENTURE” hereto.

The Special Capital Reserve Fund will initially be funded in an amount equal to $1,496,133 from the proceeds of the Series 2020 Bonds (which amount is equal to the initial Special Capital Reserve Fund Requirement). Any additional amounts paid by the Green Bank to the Trustee shall, as provided by the Green Bank, be deposited by the Trustee into and credited to the Interest Account in the Debt Service Fund until such amount equals the amount required to pay the Interest Payment due on the next succeeding Interest Payment Date, then to the Principal Account in the Debt Service Fund until such amount equals the amount required to pay the Principal Payment due on the next succeeding Principal Payment Date, then to the Special Capital Reserve Fund to satisfy the Special Capital Reserve Fund Requirement; and any balance not so applied shall be transferred by the Trustee to the 2020 SHREC Economic Energy and Security Fund.

If at any time any Principal Payment, including any Sinking Fund Installment, or any Interest Payment due thereon, or any Redemption Price of Bonds has become due and payable and payment thereof in full has not been made or provided for, the Trustee shall (i) forthwith withdraw from the Special Capital Reserve Fund an amount which together with other amounts available for such payment shall be sufficient to provide for such payment in full and apply the amount so withdrawn to such payment, and (ii) no later than the next Business Day after such withdrawal, provide a Notice to the Green Bank that the Green Bank immediately pay to the Trustee any and all amounts available to the Green Bank necessary to restore the Special Capital Reserve Fund to the amount of the Special Capital Reserve Fund Requirement no later than November 30 of any calendar year after such Notice is given. Other than amounts pledged pursuant to the Indenture, there are no other moneys or assets of the Green Bank pledged to the repayment of the Series 2020 Bonds, and Owners of the Series 2020 Bonds should not rely upon the Green Bank to fund any deficiency in the Special Capital Reserve Fund Requirement.

In the case of any purchase, redemption in whole or in part, or payment of principal at maturity, of any Series 2020 Bonds, the Green Bank may, as provided in a Certificate of an Authorized Representative, direct the Trustee to apply moneys in the Special Capital Reserve Fund to the payment of the principal or Redemption Price of and interest on the Series 2020 Bonds being paid or redeemed up to the amount by which such amounts in the Special Capital Reserve Fund exceed the Special Capital Reserve Fund Requirement after giving effect to such purchase, redemption or payment.

On December 1 of each year if:

(1) the amount in the Special Capital Reserve Fund exceeds the Special Capital Reserve Fund Requirement, and

(2) all withdrawals from the Special Capital Reserve Fund provided for in two preceding paragraphs have been made, the Trustee will withdraw the excess from the Special Capital Reserve Fund and deposit the amount so withdrawn into the 2020 SHREC Economic Energy and Security Fund.

The Green Bank shall pay to the Trustee upon receipt thereof any moneys allotted and paid to the Green Bank by the State pursuant to the Act for the purpose of restoring the Special Capital Reserve Fund to the amount of the Special Capital Reserve Fund Requirement. See the captions "SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2020 BONDS—The Special Capital Reserve Fund" and "—Covenants as to Special Capital Reserve Fund" herein.

Cost of Issuance Fund

The Cost of Issuance Fund is established to pay the costs of issuing the Series 2020 Bonds. See the caption "USE OF PROCEEDS—Sources and Uses" herein and the caption "Funds and Accounts—*Cost of Issuance Fund*" in "APPENDIX I-A—FORM OF THE INDENTURE" hereto.

Moneys on deposit in the Costs of Issuance Fund shall be applied to pay the persons entitled thereto the Costs of Issuance relating to the issuance of the Series 2020 Bonds. Any moneys remaining on hand in the Costs of Issuance Fund upon the earlier of (i) payment of all Costs of Issuance or (ii) one hundred twenty (120) after the issuance of the Series 2020 Bonds, shall be transferred by the Trustee to the Revenue Fund.

Redemption Fund

The Redemption Fund is established to pay the Redemption Price on the Series 2020 Bonds. See the caption "Funds and Accounts—*Redemption Fund*" in "APPENDIX I-A—FORM OF THE INDENTURE" hereto.

There shall be deposited into the Redemption Fund amounts required to be deposited therein pursuant to paragraph "FIFTH" described under the caption "Application of Revenues held in the Revenue Fund" above for the redemption of Series 2020 Bonds. Amounts in the Redemption Fund may be applied as directed by the Green Bank to the purchase of Series 2020 Bonds at prices not exceeding the Redemption Price thereof applicable on the next redemption date plus accrued interest to such next redemption date (such redemption date shall be the earliest date upon which Series 2020 Bonds are subject to redemption from such amounts) or to the redemption of Bonds as described under the caption of "THE SERIES 2020 BONDS—Redemption" herein.

2020 SHREC Economic and Energy Security Fund

The 2020 SHREC Economic and Energy Security Fund is established to collect Revenues not otherwise required to be deposited to the other Funds and Accounts established pursuant to the Indenture. See the caption "Funds and Accounts—*2020 SHREC Economic and Energy Security Fund*" in "APPENDIX I-A—FORM OF THE INDENTURE" hereto.

The Trustee shall, no later than the second Business Day of each calendar month, transfer moneys credited to the 2020 SHREC Economic and Energy Security Fund to the Green Bank.

Consents to Amendment of the Indenture

Green Bank agrees that it will not amend the Indenture in any way that impairs the funding to and payments from the Funds and Accounts described under the caption "Debt Service Fund" above without the prior written consent of the Secretary of the Office of Policy and Management and the State Treasurer, unless all of the Series 2020 Bonds, together with the interest thereon, and all costs and expenses in connection with any action or proceeding by or on behalf of such holders, are fully met and discharged.

INVESTMENT CONSIDERATIONS

The following investment considerations describe certain risk factors of an investment in the Series 2020 Bonds. Additional investment considerations relating to an investment in the Series 2020 Bonds are described throughout this Official Statement, whether or not specifically designated as investment considerations. Investors should consider such investment considerations in deciding whether to purchase any of the Series 2020 Bonds. There can be no assurance that *other investment considerations will not become material in the future. In the event of a shortfall of Revenues, material delays in payments of principal or interest, or losses, on the Series 2020 Bonds could result and could materially reduce the value of the Series 2020 Bonds. These and other factors could result in a loss of marketability, or of market value, of the Series 2020 Bonds even if no such payment delay or loss occurs.*

Reliance on State of Connecticut Rating

The Series 2020 Bonds are supported by the State of Connecticut through a special capital reserve fund (see the caption "SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2020 BONDS—The Special Capital Reserve Fund" herein) and the Green Bank is advised by the rating agency that its State of Connecticut supported revenue bonds, including the Series 2020 Bonds, are rated based upon the creditworthiness of the State of Connecticut. See Part II of this Official Statement and the appendices thereto for a discussion of the State of Connecticut. To the extent that the Green Bank is unable to pay the interest on and principal of the Series 2020 Bonds from the SHREC Receivables, owners of the Series 2020 Bonds will be relying upon the State of Connecticut to fund the Special Capital Reserve Fund. In addition, due to the 15 year limitation on payments required pursuant to the Master Purchase Agreements, there will be not be any SHREC Receivables available to make the interest payments on May 15, 2035 and November 15, 2035 and the final sinking fund payment on the Series 2020 Bonds maturing on November 15, 2035, which will be paid from amounts on deposit in the Special Capital Reserve Fund. See the caption "The Expected Source of the Repayment is the Potential Stream of Payments Made Under the Master Purchase Agreements" below.

General Economic Conditions.

Worsening economic conditions within the State of Connecticut could have a negative impact on State of Connecticut's ability to cure a deficiency in the Special Capital Reserve Fund maintained to meet payments of debt service on Series 2020 Bonds. See the caption "SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2020 BONDS—The Special Capital Reserve Fund" herein. The State of Connecticut's financial results could be harmed by a national or localized outbreak of a highly contagious or epidemic disease. If an outbreak of an infectious disease such as, but not limited to, the COVID-19 disease, Zika virus or Ebola virus were to occur in the State of Connecticut, its financial results could be adversely affected. The effect of these factors, including the effect on the timing and amount of available funds to cure a deficiency in the Special Capital Reserve Fund, is impossible to predict.

The ability of the Utilities' customers who are generating SHRECs to keep systems operational may be affected by a variety of social and economic factors. Economic factors include interest rates, unemployment levels, upward adjustments in monthly mortgage payments, utility rate structures and the rate of inflation and consumer perceptions of economic conditions generally. Economic conditions may also be affected by localized natural disasters. The Green Bank is unable to determine and has no basis to predict to what extent social or economic factors will affect the Trust Estate and the Green Bank's ability to receive SHREC Receivables.

COVID-19 (Coronavirus Disease 2019)

On January 31, 2020, the United States Department of Health and Human Services Secretary declared a public health emergency in response to the spread of the novel coronavirus ("COVID-19" and the "COVID-19 Pandemic"). The COVID-19 Pandemic has affected travel, commerce and financial markets globally, and it widely expected to affect economic growth worldwide. On March 13, the President of the United States declared a national emergency beginning March 1, 2020. On March 10, 2020, Governor Lamont declared a public health emergency due to the spread of COVID-19 throughout the State. In addition, on March 28, 2020, President Trump approved Governor Lamont's request for a disaster declaration for the State. Under the declaration, it is expected that federal funding will be made available to state, tribal and eligible local governments and certain private nonprofit organizations for emergency protective measures, including direct federal assistance, for all areas of Connecticut impacted by COVID-19. The State has a dedicated website providing up-to-date information concerning the State's actions in response to COVID-19: ct.gov/coronavirus.

The Federal CARES Act. The United States Congress has enacted several COVID-19 Pandemic-related bills, including the Coronavirus Aid, Relief, and Economic Security Act, signed into law on March 27, 2020, the Paycheck Protection and Health Care Enhancement Act, signed into law on April 24, 2020 and the Student Veteran Coronavirus Response Act, signed into law on April 28, 2020 (collectively, the "CARES Acts"), that authorize numerous measures in response to the economic effects of the COVID-19 Pandemic. Such measures include, but are not limited to: direct financial aid to American families; temporary relief from certain federal tax requirements; scheduled payment of federally owned education loans and certain other federal higher education aid requirements; temporary relief for borrowers with federally-related mortgage loans; payroll and operating expense support for small businesses and nonprofit entities; loan assistance for distressed industries; federal funding of higher education institutions' emergency aid to students and operations and support for the capital markets.

The CARES Acts also authorize the United States Department of the Treasury (the "Treasury") to provide up to approximately $450 billion in loans, loan guarantees and other investments to support programs and facilities established by the Board of Governors of the Federal Reserve System (the "Federal Reserve") that are intended to provide liquidity to the financial system and facilitate lending to eligible businesses and to states, political subdivisions and instrumentalities. Such injection of liquidity follows recent actions by the Federal Reserve, including the purchase of Treasury securities and mortgage-backed securities, facilitating the flow of credit to municipalities by expanding its Money Market Mutual Fund Liquidity Facility to include a wider range of securities, including certain municipal variable rate demand notes, and facilitating the flow of credit to municipalities by expanding its Commercial Paper Funding Facility to include high-quality, tax-exempt commercial paper as eligible securities.

Potential Effects of the COVID-19 Pandemic Are Uncertain. The COVID-19 Pandemic has not had a significant operational impact on the Green Bank. The Green Bank operates out of two offices in the State (Stamford and Rocky Hill) with a total of 36 full-time employees. The Green Bank has previously established technology to facilitate access to systems and data by personnel from anywhere in the world at any point in time. The transition to a fully remote work environment took place on March 13, 2020 and was successfully implemented by taking advantage of these existing systems. The Green Bank is now working on transitioning back to on-site access in accordance with the Governor's guidelines, and expects to have a plan in place by June 20, 2020.

The administration of the Green Bank's RSIP and SHREC program has continued uninterrupted. The Green Bank maintains close contact with PV system owners and monitors their fleet through an on-line platform. Remote administration and operation has had no impact on fleet performance, systems, or SHREC creation and delivery.

The full impact of the COVID-19 Pandemic, and of directly and indirectly related developments, on the Green Bank's finances and operations, on the performance of the SHRECs constituting security for the Series 2020 Bonds, and on the security, market value and liquidity of Series 2020 Bonds cannot be predicted at this time. The Green Bank is monitoring and assessing the economic and legal impact of the COVID-19 Pandemic and of governmental responses thereto, including orders, laws, regulations and mandates adopted by the State or the federal government, on its operations and financial position.

State of Connecticut. For a description of the effects of COVID-19 on the State of Connecticut, see the caption "COVID-19 and Other Matter" in Part II of this Official Statement.

The Capacities of the SHREC Projects in the Portfolio are Estimates and Averages Only, Based on Assumptions, and Production May Not Meet These Estimates

The Green Bank has relied upon certain assumptions of the average capacity across the SHREC Tranche 3 portfolio in estimating what the SHREC Projects can be expected to generate in MWh of electricity.

The Green Bank has also relied upon estimates and assumptions concerning the annual rate of degradation over the 15-year term of SHREC Tranche 3. These assumptions and estimates may not accurately predict the actual MWh of electricity the SHREC Projects actually produce and that the Utilities are required to purchase under the Master Purchase Agreements. Under the Master Purchase Agreements, the Utilities are required to pay for only the SHRECs that are delivered by the Green Bank in the preceding month to the respective Utility's NEPOOL GIS account. Any decrease in the anticipated amount of such SHRECs generated by the SHREC Projects within SHREC Tranche 3 would result in reduced cash flow from the Utilities to the Green Bank. This would impair the Green Bank's ability to pay the principal and interest on the Series 2020 Bonds from the SHREC Receivables. These estimates of potential SHREC Project capacity are estimates of production only, and no guarantee of ultimate performance is offered, granted, suggested or implied. See the caption "THE TRUST ESTATE—SHREC Tranche 3" herein.

Impact of Natural Disasters, Weather Events, Man-Made Disasters

The occurrence of natural disasters, including hurricanes, floods, earthquakes, tornadoes, fires, explosions, pandemic disease and man-made disasters, including acts of terrorism and military actions, could adversely affect the functioning of any one or more of the SHREC Projects, the NEPOOL GIS, the Utilities' ability to make the requisite payments under the Master Purchase Agreements, and the Green Bank's ability to pay the principal and interest on the Series 2020 Bonds from the SHREC Receivables.

The Expected Source of the Repayment is the Potential Stream of Payments Made Under the Master Purchase Agreements

The periodic payments of principal and interest due on the Series 2020 Bonds initially rely on the payments made under the Master Purchase Agreements by the Utilities to the Green Bank in respect of SHRECs transferred to the Utilities from the Green Bank via the NEPOOL GIS. Under the Master Purchase Agreements, the Utilities are required to deliver payment for the SHRECs with respect to any SHREC Tranches exclusively to the Green Bank, and promise that the Utilities shall not sell, divert, grant, transfer or assign any such payment for SHRECs to any person other than the Green Bank during and following the relevant SHREC Tranche Delivery Term. The transfer of SHRECs occurs via the NEPOOL GIS from the Green Bank's NEPOOL GIS account to the Utilities' NEPOOL GIS accounts. The Green Bank invoices the Utilities for the value of the SHRECs transferred via the NEPOOL GIS. The payment of the amounts due on the Series 2020 Bonds is therefore reliant upon the Utilities' ability to pay the amounts due under the Master Purchase Agreements for the SHRECs transferred to the Utilities via NEPOOL GIS.

If an event of default occurs under the Master Purchase Agreements, the Utilities have the right to withhold payments thereunder up to the amount of its damages, terminate the Master Purchase Agreements, or suspend performance with respect to the transfer of SHRECs thereunder until such event of default is cured. Events of default under the Master Purchase Agreements include uncured breaches of representations and warranties, representations and warranties proving false, or the bankruptcy of any party thereto. See the caption "THE TRUST ESTATE—The Master Purchase Agreements—*Events of Default and Remedies Under the Master Purchase Agreements*" herein. Upon an event of default under the Master Purchase Agreements one or both of the Utilities could suspend performance or terminate the related Master Purchase Agreement, in which case SHREC Receivables would not be made available to the Green Bank for deposit into the Revenue Fund. Such an event would adversely affect the yield of the Series 2020 Bonds.

The Green Bank is statutorily required to sell SHRECs to the Utilities at the SHREC Tranche Purchase Prices determined pursuant to the Master Purchase Agreements, as described in this Official Statement under the caption "THE TRUST ESTATE—The Master Purchase Agreements—*SHREC Tranche Purchase Price*" herein. Therefore, even if the Green Bank could obtain a better price from a third-party purchaser, the Green Bank is required to sell SHRECs to the Utilities at the applicable SHREC Tranche Purchase Price. This will limit the amount of SHREC Receivables available to make payments on the Series 2020 Bonds.

In addition, due to the 15 year limitation on payments required pursuant to the Master Purchase Agreements, there will not be sufficient SHREC Receivables to make the interest payments on May 15, 2035 and November 15, 2035 and the final sinking fund payment on the Series 2020 Bonds maturing on November 15, 2035. Therefore, it is anticipated that such interest payments and final sinking fund payment will be paid from amounts on deposit in the Special Capital Reserve Fund. To the extent that there are insufficient amounts on deposit in the Special Capital Reserve Fund, the holders of the Series 2020 Bonds will rely solely on the State's obligation to replenish the Special Capital Reserve Fund. If there are sufficient amounts on deposit in the Special Capital Reserve Fund to pay the interest payments on May 15, 2035 and November 15, 2035 and the final sinking fund payment on the Series 2020 Bonds maturing on November 15, 2035 once the interest and sinking fund payments due on November 15, 2034 have been fully funded, it is likely that the Green Bank will redeem the Series 2020 Bonds maturing on November 15, 2035 prior to their final maturity date. See the captions "SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2020 BONDS—Covenants as to Special Capital Reserve Fund" and "DESCRIPTION OF THE INDENTURE—Special Capital Reserve Fund" herein.

The Utilities' Power Generation Capacity, Revenues, Costs and Results of Operations are Significantly Influenced by Weather Conditions and Seasonal Variations that are Not Within their Control

Electricity consumption is seasonal and is mainly affected by weather conditions. In Connecticut, electricity consumption is generally higher during the autumn and winter months, and the Utilities generally experience higher demand during the colder months of October through March and lower demand during the warmer months of April through September. As a result of these seasonal patterns, the Utilities' sales and results of operations are higher in the first and fourth quarters and lower in the second and third quarters. Sales and results of operations for all of the Utilities' energy operations can be negatively affected by periods of unseasonably warm weather during the autumn and winter months.

Political, Economic or Other Factors that are Beyond the Green Bank's Control May Have an Adverse Effect on the Utilities' Business, Results of Operation and Cash Flows

The Utilities are dependent on domestic, regional and market conditions. Their performance, growth, and market demand for energy may be adversely affected by an economic downturn in the local, regional or global economies. The Utilities' growth is affected by various factors, including Connecticut and New England energy consumption. Consequently, any future slowdown in Connecticut's or the New England region's economy could harm the Utilities' business, results of operations, cash flows and financial condition.

Impact of Bankruptcy of Utilities

There can be no assurance that one or both of the Utilities will not become insolvent and/or file a voluntary petition, or that an involuntary petition will not be filed against, either or both of the Utilities under the United States Bankruptcy Code, 11 U.S.C. Section 101, *et seq*., as amended (the "Bankruptcy Code"), or any similar applicable state law (collectively, with the Bankruptcy Code, the "Insolvency Laws"). Both debt risk and revenue risk can be contributing factors in a Utility bankruptcy. Utilities tend to have high credit ratings at all times, even when leading up to a bankruptcy, making the risk of a utility bankruptcy appear lower than the actual risk levels. These high credit ratings imply a low risk of default, but for utilities this can be a misleading representation of credit worthiness. Further, despite the fact that utilities provide an important and irreplaceable product, they still face the effects of economic downturns as economic activity is highly cyclical.

Neither of the Utilities is a special purpose bankruptcy remote entity. Both Connecticut Light and Power Company d/b/a Eversource Energy and United Illuminating Company (the "Utilities") are engaged in other business activities, in addition to being obligated under the Master Purchase Agreements to make payments to the Green Bank through the purchase of the SHRECs through the NEPOOL GIS. As a consequence, either or both of the Utilities may be the subject of a voluntary or involuntary petition for relief by or against either or both Utilities under the Bankruptcy Code or other applicable insolvency laws.

In a case under Chapter 11 of the Bankruptcy Code, assuming that the Master Purchase Agreements are considered to be executory contracts, a Utility's bankruptcy trustee, or the Utility as a debtor-in-possession (as to either, the "bankruptcy trustee") will have the opportunity to assume or reject the Master Purchase Agreement, and the decision may not be made until the time of a confirmation hearing on a final plan of reorganization. If the Master Purchase Agreement is not assumed or rejected at any time before confirmation of a plan of reorganization, the Green Bank will be obligated to continue performing under the applicable Master Purchase Agreement, without receiving return performance from the bankruptcy trustee, unless on request of the Green Bank and after notice and a hearing, the bankruptcy court orders the bankruptcy trustee to assume or reject the Master Purchase Agreement, or in the interim period before assumption or rejection, the bankruptcy court grants an order allowing such return performance, in whole or in part, as an administrative expense, or directs the payment of monies due under the Master Purchase Agreement (the return performance), or both.

The suspension of payments of amounts due to the Green Bank under the Master Purchase Agreement during the period after commencement of the Chapter 11 case, or the failure of the trustee in bankruptcy to resume making payments due to the Green Bank under the Master Purchase Agreement thereafter, could result in delays or reductions in SHREC Receivables.

If one or both of the Utilities were to become a debtor under the Bankruptcy Code, there can be no assurance that the Utilities will be able to successfully reorganize their businesses, and it is possible that the Utilities may be forced to sell their assets, otherwise liquidate or seek modifications to their obligations, including the obligation to purchase SHRECs pursuant to the applicable Master Purchase Agreement.

Risks Associated with the Green Bank

The Green Bank performs certain function with respect to the SHRECs, including the purchase and sale of SHRECs in accordance with the Master Purchase Agreements and critical functions regarding protection of the Trust Estate and the security interest in the Trust Estate. You must rely on the Green Bank to perform all of the necessary management functions for minting the SHRECs and selling the SHRECs to the Utilities under the Master Purchase Agreements and maintaining the payment streams and the Trust Estate for the Series 2020 Bonds.

The Green Bank is a public instrumentality and political subdivision of the State of Connecticut established and created for the performance of an essential public and governmental function. The Green Bank is reliant on public sources of funding to maintain its sophisticated operations. The Green Bank employees participate in the employee benefits programs and retirement programs offered by the State of Connecticut. Although payments of the amounts due under the Series 2020 Bonds do not rely on any of the State of Connecticut (other than the Special Capital Reserve Fund) or the Green Bank (as the Series 2020 Bonds are without recourse to the Green Bank), the obligations of the Green Bank rely on the continued performance of its workforce. As the State of Connecticut is faced with economic and budgeting pressures, the Green Bank's sources of funding may be reduced. These funding sources may be affected by a variety of political and economic factors outside of the Green Bank's control. Reduced funding could negatively affect the Green Bank's ongoing operations and ability to maintain the staff it needs to support the management function. See the caption "General Economic Conditions" above.

As the Green Bank was established and created by the State of Connecticut pursuant to the Green Bank Statute, the State of Connecticut would have the sole power and authority to discontinue the Green Bank's existence. However, under the terms of subsection (h) of the Green Bank Statute, the State of Connecticut pledges and agrees

> "with any person with whom Connecticut Green Bank may enter into contracts pursuant to the provisions of this section that the state will not limit or alter the rights hereby vested in said bank until such contracts and the obligations thereunder are fully met and performed on the part of said bank, provided nothing herein contained shall preclude such limitation or alteration if adequate provision shall be made by law for the protection of such persons entering into contracts with said bank."

Failure of the Green Bank to Remove Ineligible SHRECs When Required Will Reduce Funds Available to Make Payments on the Series 2020 Bonds

None of the SHRECs is insured or guaranteed by the State of Connecticut or any governmental agency or instrumentality. Pursuant to the Indenture, the Green Bank will be obligated remove any Ineligible SHREC pledged by the Green Bank to the Trustee under the Indenture by depositing an amount, established by the Green Bank, equal to the fair market value equivalent of the Ineligible SHREC originally pledged. Upon such deposit, the Green Bank may remove the related Ineligible SHREC from the Trust Estate.

The Green Bank is the sole warranting party in respect of the SHRECs pledged under the Indenture. In the event the Green Bank fails to fulfill its obligations, you could experience cash flow disruptions or losses on the Series 2020 Bonds. We cannot assure you that the Green Bank will effect such a payment and removal. In addition, the Green Bank may have various legal defenses available to it in connection with a removal obligation. Except for the foregoing obligations with respect to Ineligible SHRECs, the Green Bank will not have any payment or removal obligations in respect of the SHRECs.

Bankruptcy of the Green Bank May Adversely Affect Payments on the Series 2020 Bonds

The Green Bank cannot file for bankruptcy under the U.S. Bankruptcy Code (the "Bankruptcy Code"). Chapter 9 of the Bankruptcy Code allows a municipality to file a petition for bankruptcy under certain conditions. Under Chapter 9, a "municipality" is defined as a political subdivision or public agency or instrumentality of a state, and can also include revenue-producing bodies that provide services that are paid for by users rather than general taxes. The Green Bank falls within the Bankruptcy Code's definition of "municipality" because Section 16-245n of the Connecticut General Statutes defines Green Bank as "a body politic and corporate, constituting a public instrumentality and political subdivision of the State of Connecticut established and created for the performance of an essential public and governmental function." The Green Bank does not have the traditional powers associated with a "municipality," such as taxing power, police powers or eminent domain powers.

However, the Bankruptcy Code also requires a municipality to be specifically authorized to file for Chapter 9 bankruptcy by either state law, or a governmental officer or organization empowered to provide such authorization by state law. With regard to a "municipality," as that term is defined under Connecticut state law, Section 7-566 of the Connecticut General Statutes authorizes a Chapter 9 filing by a "municipality" only upon obtaining the Governor's express prior written consent. The definition of "municipality" under this statute only applies to entities traditionally considered state municipalities—any town, city, borough, metropolitan district, fire, sewer or other district—and any political subdivision of the State of Connecticut having the power to levy taxes and to issue bonds, notes or other obligations (Section 7-560 of the Connecticut General Statutes). Because the Green Bank is not a town, city, borough, metropolitan district, fire, sewer or other district, and is not authorized to levy taxes, it does not meet the definition of "municipality" under Section 7-566 of the Connecticut General Statutes, and therefore is not authorized to file for Chapter 9 bankruptcy under that state law, as presently codified.

The Series 2020 Bonds May Not Be Accelerated

The Series 2020 Bonds may not be accelerated following an Event of Default under the Indenture. The Bondholders sole remedy upon an Event of Default is to enforce the Green Bank's performance under the Indenture. See the caption "Defaults; Remedies on Default—*Remedies Upon Default*" in "APPENDIX I-A—FORM OF THE INDENTURE" hereto.

Political and State Risks

The Green Bank is reliant on public sources of funding to maintain operations. These funding sources may be affected by a variety of political and economic factors. The Green Bank is unable to determine and has no basis to predict to what extent political or economic factors will affect the Green Bank's ongoing operations.

Combination or "Layering" of Multiple Risks May Significantly Increase Risk of Loss

Although the various risks discussed in this Official Statement are generally described separately, prospective Bondholders should consider the potential effects on the Series 2020 Bonds of the interplay of multiple risk factors. Where more than one significant risk factor is present, the risk of loss to Bondholders may be significantly increased. There are many circumstances in which layering of multiple risks with respect to the Trust Estate and the Series 2020 Bonds may magnify the effect of those risks. In considering the potential effects of layered risks, prospective investors should carefully review the descriptions of the Trust Estate and the Series 2020 Bonds.

The Rating of the Series 2020 Bonds is Not a Recommendation to Purchase and may Change

It is a condition to the issuance of the Series 2020 Bonds that they be rated as described under the caption "SUMMARY OF TERMS—Rating" herein. The rating is based on the creditworthiness of the State of Connecticut, the amount of the Special Capital Reserve Fund Requirement and the legal structure of the transaction. The rating is not a recommendation to purchase, hold or sell the Series 2020 Bonds inasmuch as the rating does not comment as to the market price or suitability for any investor. The ratings may be increased, lowered or withdrawn by the rating agency if in the rating agency's judgment circumstances so warrant. A downgrade in the rating of the Series 2020 Bonds is likely to decrease the price a subsequent purchaser will be willing to pay for the Series 2020 Bonds. The rating of the Series 2020 Bonds will not address the market liquidity of the Series 2020 Bonds.

STATE PLEDGE AND AGREEMENT

The State of Connecticut pledges to and agree with any person with whom the Green Bank may enter into contracts pursuant to the provisions of the Green Bank Statute that the State will not limit or alter the rights hereby vested in the Green Bank until such contracts and the obligations thereunder are fully met and performed on the part of the Green Bank, provided nothing shall preclude such limitation or alteration if adequate provision shall be made by law for the protection of such persons entering into contracts with the Green Bank.

LEGALITY FOR INVESTMENT AND DEPOSIT

Bonds, including the Series 2020 Bonds, are securities in which all public officers and public bodies of the State and its political subdivisions, all insurance companies, state banks and trust companies, national banking associations, savings and loan associations, investment companies, executors, administrators, trustees and other fiduciaries may properly and legally invest funds, including capital in their control or belonging to them. Such bonds of the Green Bank are also securities which may properly and legally be deposited with and received by any agency or political subdivision of the State for any purpose for which the deposit of bonds or obligations of the State may be authorized by law.

TAX MATTERS

In the opinion of Bond Counsel, under existing statutes and regulations, interest on the Series 2020 Bonds is included in gross income for federal income tax purposes pursuant to the Internal Revenue Code of 1986, as amended, as described in "APPENDIX I-B—FORM OF LEGAL OPINION OF BOND COUNSEL AND TAX STATUS" herein. In the opinion of Bond Counsel, under existing statutes, interest on the Series 2020 Bonds is excluded from Connecticut taxable income for purposes of the Connecticut income tax on individuals, trusts and estates and is excluded from amounts on which the net Connecticut minimum tax is based in the case of individuals, trusts and estates required to pay the federal alternative minimum tax.

UNDERWRITING

The Underwriters have agreed, subject to certain conditions, to purchase the Series 2020 Bonds from the Green Bank at an aggregate purchase price of $16,570,943, reflecting an Underwriters' discount of $224,057. The Underwriters have agreed to purchase all Series 2020 Bonds if any are purchased.

The Underwriters may offer and sell Series 2020 Bonds to certain dealers (including dealers depositing Series 2020 Bonds into investment trusts) and others at prices lower than the offering prices stated on the cover page of this Official Statement. After the initial public offering, the Underwriters may change the price at which the Underwriters offer the Series 2020 Bonds for sale from time to time.

In connection with the offering, the Underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the Series 2020 Bonds. Specifically, the Underwriters may over allot the offering, creating a syndicate short position. The Underwriters may bid for and purchase Series 2020 Bonds in the open market to cover such syndicate short position or to stabilize the price of Series 2020 Bonds. Those activities may stabilize or maintain the market price of such Series 2020 Bonds above independent market levels. The Underwriters are not required to engage in these activities and may end any of these activities at any time.

The bond purchase agreement provides that the Green Bank has agreed to reimburse the Underwriters for the fees and expenses of their counsel.

LITIGATION

There is not now pending any litigation: (i) restraining or enjoining the issuance or delivery of the Series 2020 Bonds or questioning or affecting the validity of the Series 2020 Bonds or the proceedings and authority under which they are issued; (ii) contesting the creation, organization or existence of the Green Bank, or the title of the directors or officers of the Green Bank to their respective offices; or (iii) questioning the right of the Green Bank to enter into the Indenture and to pledge the Revenues and the Funds and other moneys and securities purported to be pledged by the Indenture in the manner and to the extent provided in the Indenture.

RATING

The Series 2020 Bonds have been assigned a rating of "A" by S&P Global Ratings ("S&P"). Such rating reflects only the view of such rating agency from which an explanation of the significance of such rating may be obtained. There is no assurance that such rating will continue for any given period of time or that any such rating will not be revised downward or withdrawn entirely if, in the judgment of S&P, circumstances so warrant. A revision or withdrawal of such rating may have an effect on the market price of the Series 2020 Bonds.

CONTINUING DISCLOSURE

Section 3-20e of the Connecticut General Statutes gives the State and political subdivisions of the State such as the Green Bank the specific authority to enter into continuing disclosure agreements in accordance with the requirements of Securities and Exchange Commission Rule 15c2-12 (the "Rule"). The Green Bank and the State will each enter into a Continuing Disclosure Agreement with respect to the Series 2020 Bonds, substantially in the forms attached as Appendix I-C and I-D, respectively, to this Official Statement (the "Continuing Disclosure Agreements"), to provide or cause to be provided, in accordance with the requirements of the Rule, (i) annual financial information and operating data, (ii) timely notice of a failure by the Green Bank or the State, respectively, to provide the required annual financial information on or before the date specified in the Continuing Disclosure Agreement for the Series 2020 Bonds, and (iii) with respect to the Green Bank, timely notice of the occurrence of certain material events with respect to the Series 2020 Bonds. To its knowledge, the Green Bank has not during the last five (5) years failed to comply in any material respect with its undertakings pursuant to a continuing disclosure agreement.

To its knowledge, in the last five years the State has not failed to comply in any material respect with its undertakings pursuant to a continuing disclosure agreement executed by the State. The State has determined it did not file an event notice for (i) a rating upgrade of its Bradley International Airport Special Obligation Parking Revenue Bonds, Series 2000A in May 2016, (ii) a rating downgrade of its Certificates of Participation (Connecticut Juvenile Training School Energy Center Project) in April 2018, (iii) a rating upgrade of the short-term rating on the State's General Obligation Bonds (2016C) (Variable Rate Demand Bonds) in June 2018 and (iv) a notice of the incurrence of a financial obligation in connection with the Connecticut Higher Education Supplemental Loan Authority's State Supported Revenue Bonds (CHESLA LOAN PROGRAM) 2020 Series B-AMT and State Supported Revenue Refunding Bonds (CHESLA LOAN PROGRAM) 2020 Series C Non-AMT. The State promptly filed such notices after discovering each omission. In making this disclosure, the State has not concluded and does not admit that these omissions are a material failure to comply with its continuing disclosure obligations. The State has modified its disclosure practices to prevent such failures in the future. Certain prior annual reports of the State and other required reports are available from the Electronic Municipal Market Access website ("EMMA") of the Municipal Securities Rulemaking Board (the "MSRB"), or such other website as may be designated from time to time by the MSRB or the Securities and Exchange Commission. Filings through EMMA are linked to particular obligations by a 9-digit CUSIP number, based on base (6-digit) CUSIP numbers, which are subject to being changed after the issuance of obligations as a result of various actions. The State has entered into continuing disclosure agreements requiring filings to be made with respect to thousands of CUSIP numbers. Most filings by the State through EMMA, such as annual reports, are made using the base 6-digit CUSIP numbers. Although the State endeavors through this process to link each report filed through EMMA to the correct CUSIP number (including those assigned without its knowledge), there can be no guarantee of complete accuracy in this process, given the large number of 9-digit CUSIP numbers assigned to the State's obligations. The State does not believe an inaccuracy resulting from such CUSIP process is a material failure to comply with its continuing disclosure obligations

The Underwriters' obligations to purchase the Series 2020 Bonds shall be conditioned upon their receiving, at or prior to the delivery date of the Series 2020 Bonds, executed copies of the Continuing Disclosure Agreements.

In addition, the Green Bank will, within thirty (30) days after each Interest Payment Date, commencing November 15, 2020, prepare a report setting forth a description of the Series 2020 Bonds Outstanding, the payments on or redemptions of Series 2020 Bonds on such Interest Payment Date and the distribution of the Revenues on such Interest Payment Date, and will post such report on EMMA.

THIRD-PARTY DUE DILIGENCE REPORTS

Section 15E(s)(4)(A) of the Securities Exchange Act requires the issuer or underwriter of any asset-backed security to make the findings and conclusions of any third-party due diligence report obtained by either of them publicly available. The Green Bank has engaged DNV GL, independent engineers, to perform certain agreed upon procedures with respect to evaluating certain information regarding the SHREC Projects within Tranche 3 in conjunction with the offering of the Series 2020 Bonds. The Green Bank will make the report available to the public by posting it to the Green Bank's website (https://ctgreenbank.com/).

FINANCIAL ADVISOR

Lamont Financial Services Corporation serves as financial advisor to the Green Bank for the Series 2020 Bonds. Lamont Financial Services Corporation has also assisted the Green Bank in the planning and development of the bond issue and the indentures. Lamont Financial Services Corporation has not undertaken to independently confirm the information provided by the Green Bank or its consultants and expresses no opinion thereon. Lamont Financial Services Corporation was founded in 1987 providing similar services to states, state authorities, and municipalities, and is a registered municipal advisor with both the MSRB and the SEC.

LEGAL OPINIONS

Legal matters incident to the authorization, issuance and sale of the Series 2020 Bonds will be subject to the approving opinion of Shipman & Goodwin LLP, Bond Counsel to the Green Bank. The approving Opinion of Bond Counsel is expected to be in substantially the form included in this Official Statement as Appendix I-B. Certain other legal matters will be passed upon for the Underwriter by Kutak Rock LLP, Denver, Colorado, counsel to the Underwriters.

This Official Statement has been duly executed and delivered by the Green Bank.

CONNECTICUT GREEN BANK

By /s/ Bryan Garcia
Bryan Garcia, President and CEO

APPENDIX I-A

FORM OF THE INDENTURE

[THIS PAGE INTENTIONALLY LEFT BLANK]

INDENTURE OF TRUST

Between

CONNECTICUT GREEN BANK

And

THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A.,
as Trustee

$16,795,000 STATE SUPPORTED SOLAR HOME RENEWABLE ENERGY CREDIT, GREEN LIBERTY BONDS, SERIES 2020

Dated as of

July 1, 2020

[THIS PAGE INTENTIONALLY LEFT BLANK]

TABLE OF CONTENTS

Page

Page

Page

INDENTURE OF TRUST

THIS INDENTURE OF TRUST (the "Indenture") dated as of July 1, 2020 is made by and between the Connecticut Green Bank ("Green Bank"), and The Bank of New York Mellon Trust Company, N.A. (the "Trustee"), a national banking association authorized to exercise corporate trust powers:

WHEREAS, Green Bank is established and created as a body politic and corporate constituting a public instrumentality and political subdivision of the State of Connecticut (the "State"); and

WHEREAS, pursuant to Sections 16-245n and 16-245kk through 16-245mm of the Connecticut General Statutes (the "Act"), Green Bank is authorized to support financing or other expenditures that promote investment in clean energy sources, and to enter into contracts with private sources to raise capital for such purposes; and

WHEREAS, on March 26, 2019, Green Bank issued its SHREC Collateralized Notes in the aggregate amount of $38,600,000 to fund its cost recovery under the Residential Solar Incentive Program ("RSIP") for Solar Home Renewable Energy Credits ("SHRECs") related to SHREC Systems that were aggregated into a tranche in 2017 (the "SHREC Tranche 1") and for SHRECs related to SHREC Systems that were aggregated into a tranche in 2018 (the "SHREC Tranche 2"); and

WHEREAS, pursuant to the Act, Green Bank's Board of Directors (the "Board") has approved a bond authorization of $25,000,000 to fund its cost recovery under the RSIP by selling its bonds secured by the SHRECs related to SHREC Systems that were aggregated into a tranche in 2019 (the "SHREC Tranche 3"), which bonds shall be secured by amounts receivable (the "SHREC Receivables") under Master Purchase Agreements between Green Bank and Eversource Energy and The United illuminating Company (the "Master Purchase Agreements"); and

WHEREAS, pursuant to the Act, Green Bank is authorized from time to time to issue negotiable bonds for any corporate purpose, as shall be authorized by resolution of the members of the Board; which resolution may contain provisions for Green Bank to pledge all or any part of the revenues from the SHREC Receivables or any revenue-producing contract or contracts to secure the payment of the bonds; and

WHEREAS, pursuant to the Act, at the discretion of Green Bank, any bonds may be secured by a trust agreement by and between Green Bank and a corporate trustee, which trust agreement may secure said bonds by a pledge or assignment of any revenues to be received, any contract or proceeds of any contract, or any other property, revenues, moneys or funds available to Green Bank for such purpose; and

WHEREAS, Green Bank has determined to authorize the issuance of its $16,795,000 State Supported Solar Home Renewable Energy Credit, Green Liberty Bonds, Series 2020 (the "Bonds") and to use the proceeds derived from the sale thereof to reimburse Green Bank for funds previously advanced and to otherwise terminate any Green Bank obligations previously incurred and that remain outstanding in order to release the SHREC Receivables from such obligations, and to otherwise carry out its corporate purposes under the Act and the Connecticut General Statutes; and

WHEREAS, Green Bank has determined that the Bonds shall be secured, in part, by a pledge to the Trustee under this Indenture of all of Green Bank's interests in the SHREC Receivables and the other revenues therefrom.

GRANTING CLAUSE

NOW, THEREFORE, THIS INDENTURE WITNESSETH, that to secure the payment of principal of, redemption premium, if any, and interest on the Bonds according to their true intent and meaning, and all other amounts due from time to time under this Indenture, including those due to the Trustee, to secure the performance and observance of all of the covenants, agreements, Bonds and conditions contained in the Bonds and in this Indenture, and to declare the terms and conditions upon and subject to which the Bonds are and are intended to be issued, held, secured and enforced and in consideration of the premises and the acceptance by the Trustee of the trusts created herein and of the purchase and acceptance of the Bonds by the Bondholders and for other good and valuable consideration, the receipt of which is acknowledged, Green Bank has executed and delivered this Indenture and absolutely and irrevocably grants, bargains, sells, conveys, releases, pledges and assigns to the Trustee and to its successors in trust, on the basis set forth herein, and its and their assigns, all right, title and interest of Green Bank in and to the following (collectively, the "Trust Estate"):

(1) the SHREC Receivables and RECs related to SHREC Tranche 3 owned by Green Bank (other than with respect to any SHRECs that are reassigned to Green Bank as Ineligible SHRECs following the issuance of the Bonds);

(2) the Revenues and all other property that may in the future be delivered, or by writing of any kind, conveyed, pledged, assigned or transferred to Green Bank as additional security hereunder for the Bonds;

(3) Green Bank's rights to the revenues under the Master Purchase Agreement related to the SHREC Receivables and under all other agreements that may in the future be delivered, or by writing of any kind, conveyed, pledged, assigned or transferred to Green Bank as additional security hereunder for the Bonds, but specifically reserving all other rights under the Master Purchase Agreements and such other agreements;

(4) the Revenue Fund, the Debt Service Fund, the Redemption Fund and the 2020 SHREC Economic and Energy Security Fund together with any and all receipts, funds or moneys, investments and other property of every kind and nature from time to time hereafter on deposit in or payable to such funds and accounts thereof, including any Project Support Debt Service Amounts paid by Green Bank to the Trustee for deposit into the Debt Service Fund; and

(4) the Special Capital Reserve Fund, including all amounts on deposit in and if necessary certified by Green Bank as necessary to restore the Special Capital Reserve Fund to the Special Capital Reserve Fund Requirement and deemed appropriated by the State and paid to

Green Bank, together with any and all moneys, investments and other property of every kind and nature from time to time hereafter on deposit in or payable to the Special Capital Reserve Fund, including any amounts paid by the Green Bank for deposit into the Special Capital Reserve Fund.

TO HAVE AND TO HOLD all in singular the Trust Estate, whether now owned or hereafter acquired, unto the Trustee and its successors and assigns forever, SUBJECT, HOWEVER, IN ALL CASES to the application thereof for the purposes and on the terms and conditions hereafter set forth in this Indenture;

IN TRUST, NEVERTHELESS, under and subject to the terms and conditions as hereinafter set forth for:

(a) the equal and proportionate benefit, security and protection of all present and future Bondholders from time to time issued and to be issued under and secured by this Indenture without privilege, priority or distinction as to the lien or otherwise of any Bond over any other Bonds equally secured, and for enforcement of the payment of the Bonds in accordance with their terms, and all other sums payable hereunder, on or in connection with the Bonds and for the performance of and compliance with the Bonds, covenants and conditions of and subject to the provisions of this Indenture, permitting the application and investment thereof for the purposes and on the terms and conditions set forth herein;

(b) the enforcement of the payment of the principal of, redemption premium, if any, and interest on the Bonds, and all other amounts due from time to time under this Indenture, including those due to the Trustee, when payable, according to the true intent and meaning thereof and of this Indenture, and

(c) security for the performance and observance of and compliance with the covenants, agreements, obligations, terms and conditions of this Indenture in connection with the issuance of the Bonds,

in each case, without preference, priority or distinction, as to lien or otherwise except as provided herein, of any one Bond over any other by reason of designation, number, date of the Bonds or of authorization, issuance, sale, execution, authentication, delivery or maturity thereof, or otherwise, so that each Bond and all Bonds shall have the same right, lien and privilege under this Indenture and shall be secured equally and proportionately by this Indenture, it being intended that the lien and security of this Indenture shall take effect from the date hereof, without regard to the date of the actual issue, sale or disposition of the Bonds, as though upon that date all of the Bonds were actually issued, sold and delivered to purchasers for value.

PROVIDED, HOWEVER, that upon satisfaction of and in accordance with the provisions of Section 1101, the rights assigned hereby shall cease, terminate and be void to the extent described therein, otherwise such rights shall be and remain in full force and effect; and

It is declared that the Bonds are the only bonds to be issued under and secured by this Indenture, and are to be issued, authenticated and delivered, and that all Revenues assigned or pledged hereby are to be dealt with and disposed of under, upon and subject to, the terms, conditions, stipulations, covenants, agreements, obligations, trusts, uses and purposes provided in this Indenture; and the Green Bank has agreed and covenanted, and agrees and covenants with the Trustee and with each and all holders of Bonds, as follows:

ARTICLE I

DEFINITIONS AND INTERPRETATION

Section 101. Definitions. In this Indenture the following terms shall have the following meanings unless the context otherwise requires:

"Account" shall mean one of the accounts created and established pursuant to this Indenture.

"Accountant" shall mean any firm of independent certified public accountants selected by Green Bank.

“Act” shall mean Sections 16-245n and 16-245kk through 16-245mm of the Connecticut General Statutes, as amended from time to time.

“Administrative Expenses” shall mean all expenses of Green Bank necessary to produce and assure the Revenues reasonably expected to be produced by SHREC Tranche 3, including overhead expenses and out of pocket costs of Green Bank.

"Authorized Representative" shall mean with respect to Green Bank, the President or any other person designated as an Authorized Representative by resolution of its Board of Directors.

"Bond" or "Bonds" shall mean the $16,795,000 State Supported Solar Home Renewable Energy Credit, Green Liberty Bonds, Series 2020, issued under this Indenture.

"Bond Payment Date" shall mean with respect to the Bonds issued or incurred hereunder, an Interest Payment Date or a Principal Payment Date.

"Bondholder", “owner” or "holder" or words of similar import shall mean, when used with reference to a Bond, the person in whose name the Bond is registered.

“Business Day” means any day other than a Saturday, a Sunday, or a day on which national banking associations or state banking institutions in the State of New York, the State of Connecticut or the State in which the corporate trust office of the Trustee is located are authorized or obligated by law or executive order to be closed.

"Bylaws" shall mean the bylaws of Green Bank, as amended from time to time.

"Certificate" shall mean a written certificate signed in the name of Green Bank by an Authorized Representative or in the name of the Trustee by its responsible officer.

"Code" shall mean the Internal Revenue Code of 1986, as amended.

"Connecticut General Statutes" shall mean the General Statutes of Connecticut, Revision of 1958, as amended.

"Costs of Issuance" shall mean all costs and expenses of Green Bank incurred in connection with the authorization, issuance, sale and delivery of the Bonds, including, but not limited to, underwriting fees and costs, rating fees, legal fees and expenses, financial advisory and other consultant fees, Trustee fees and expenses, paying agent fees and printing costs.

"Costs of Issuance Fund" shall mean the fund by that name established pursuant to Sections 502 and 504 hereof.

"Debt Service" shall mean the sum of (i) the Interest Payment due on the Bonds on an Interest Payment Date, except to the extent that such interest is to be paid from amounts representing investment (but not reinvestment) earnings on the Debt Service Fund or Special Capital Reserve Fund if such amounts shall have been invested in Investment Securities and the amount of such investment earnings taken into account may be determined precisely, and (ii) the Principal Payment due on the Bonds on such Principal Payment Date. Such Interest Payment and Principal Payment shall be calculated on the assumption that no Bonds Outstanding at the date of calculation will cease to be Outstanding except by reason of the payment thereof upon stated maturity or upon mandatory redemption by application of Sinking Fund Installments.

"Debt Service Accounts" shall mean the Interest Account and the Principal Account established in the Debt Service Fund.

"Debt Service Fund" shall mean the fund by that name established pursuant to Sections 502 and 504 hereof.

"Defeasance Obligations" shall mean (A) any bonds or other obligations which as to principal and interest constitute direct obligations of, or are guaranteed by, the United States of America, including obligations of any agency thereof or corporation which has been or may hereafter be created pursuant to an act of Congress as an agency or instrumentality of the United States of America to the extent unconditionally guaranteed as to timely payment of principal and interest by the United States of America or (B) any other receipt, certificate or other evidence of an ownership interest in obligations or in specified portions thereof (which may consist of specified portions of the interest thereon) of the character described in subclause (A).

"Environmental Attributes" shall mean, excluding electric energy and capacity produced, any other emissions, air quality, or other environmental attribute, aspect, characteristic, claim, credit, benefit, reduction, offset or allowance, howsoever entitled or designated, resulting from, attributable to or associated with the generation of energy by a qualifying residential solar photovoltaic system as defined in Connecticut Public Act No. 15-194 and as amended by Connecticut Public Act No. 16-212, whether existing as of the effective date of the Master Purchase Agreements or in the future, and whether as a result of any present or future local, state or federal laws or regulations or local, state, national or international voluntary program, as well as any and all generation attributes under the regulations promulgated pursuant to Section l6-245a of the Connecticut General Statutes, as amended, modified, restated and superseded from time to time, that require a minimum percentage of electricity sold to end use customers in the State of Connecticut to be derived from certain renewable energy generating resources, regulations and under any and all other international, federal, regional, state or other law, rule, regulation, bylaw, treaty or other intergovernmental compact, decision, administrative decision, program (including any voluntary compliance or membership program), competitive market or business method (including all credits, certificates, benefits, and emission measurements, reductions, offsets and allowances related thereto) that are attributable, now or in the future; and further, means: (a) any such credits, certificates, benefits, offsets and allowances computed on the basis of a SHREC Project's generation using renewable technology or displacement of fossil fuel derived or other conventional energy generation; (b) any certificates issued pursuant to the New England Power Pool Generation Information System in connection with energy generated by a SHREC Project; and (c) any voluntary emission reduction credits obtained or obtainable by Green Bank in connection with the generation of energy by a SHREC Project; provided, however, that Environmental Attributes shall not include: (i) any production tax credits; (ii) any investment tax credits or other tax credits associated with the construction or ownership of a SHREC Project; or (iii) any state, federal or private grants relating to the construction or ownership of a SHREC Project or the output thereof. If during the delivery period, a change in laws or regulations occurs that creates value in Environmental Attributes, then at the applicable Utility's request, Green Bank will cooperate with such Utility to register such Environmental Attributes or take other action necessary to obtain the value of such Environmental Attributes for such Utility.

"Event of Default" shall mean any of the events specified in Section 901 hereof.

"Fiscal Year" shall mean the period adopted by Green Bank as its annual accounting period. The Fiscal Year is initially the twelve month period commencing on July 1 and ending on June 30 in each year.

"Fund" shall mean any fund established pursuant to Sections 502 or 801 hereof.

"Green Bank" shall have the meaning set forth in the recitals to this Indenture.

"Indenture" shall mean this instrument as originally executed and as it may from time to time be supplemented, modified or amended in accordance with the terms hereof.

"Independent Consultant" shall mean a Person that (1) does not have any direct financial interest or any material indirect financial interest in Green Bank and (2) is not connected with an officer, employee, promoter, trustee, partner, director or Person performing similar functions, and designated by Green Bank, qualified to pass upon questions relating to the financial affairs of Green Bank and having a favorable reputation for skill and experience.

"Ineligible SHREC" shall mean a SHREC for which (i) one or more eligibility criteria are found to have been breached at the time such SHREC was conveyed to Green Bank pursuant to the Master Purchase Agreements, which breach materially and adversely affects the value of such SHREC, or (ii) neither Green Bank nor the Trustee has a first priority perfected security interest.

“Interest Payment” shall mean as of any date of calculation and with respect to any Bonds Outstanding, the interest amount on the Bonds due on the next Interest Payment Date.

"Interest Payment Date" shall mean November 15 and May 15 in each year until maturity, commencing on November 15, 2020.

"Investment Securities" shall mean and include any of the following, as confirmed to the Trustee in a Certificate of an Authorized Representative:

(1) Direct bonds issued or guaranteed by the United States of America or the State;

(2) Debt or bonds which are rated “A” or better by Moody’s and S&P if rated by both, or are rated “A” by Moody’s or S&P if not rated by both (without regard to the addition of a number or a plus (+) or a minus (-) to any rating) and are:

(a) Securities which are guaranteed fully as to principal and interest by the United States or the State or for which the full faith and credit of the United States or the State is pledged for the payment of principal and interest;

(b) Securities, including repurchase agreements, the principal and interest of which are irrevocably secured by securities described in clause (1) or subdivision (a) of clause (2) of this definition;

(c) Bonds of any agency of the United States, including government sponsored enterprises, which are not guaranteed fully as to principal and interest by the United States or for which the full faith and credit of the United States is not pledged for the payment of principal and interest; or

(d) Partnership interests in, shares of stock of, units of beneficial interest in or other ownership interest in any one investment company registered under the Investment Company Act of 1940, as from time to time amended, provided the portfolio of such investment company consists solely of investments described in subsections (a) to (c) above;

(3) Deposits of interest-bearing time or demand deposits or certificates of deposit or other similar banking arrangements that are allowable investments for Green Bank and are secured in such manner as Green Bank shall determine;

(4) Participation certificates in the short term investment fund created and existing under Section 3-27a of the Connecticut General Statutes.

“Master Purchase Agreements” shall mean the agreements authorized pursuant to Section 16-245gg of the Connecticut General Statutes (i) by and between Green Bank and The Connecticut Light and Power Company d/b/a Eversource Energy (“Eversource”) and (ii) by and between Green Bank and The United Illuminating Company ("United Illuminating") (collectively Eversource and United Illuminating are the "Utilities"), pursuant to which Green Bank is required to sell and the Utilities are required to purchase the SHRECs.

"Notice" shall mean, unless otherwise expressly specified or permitted by the terms of this Indenture, a notice in writing, sent by registered or certified mail, postage prepaid, or by national overnight courier service, or by personal delivery, or by electronic mail with a pdf attachment of such notice (with prompt telephonic confirmation of receipt), to the addresses provided in Section 1210 hereof, or to such other address as Green Bank or the Trustee shall from time to time designate by notice in writing to the other.

"Operating Expenses" means all reasonable and necessary current and future costs and expenses of Green Bank to function as a quasi-public entity in accordance with State law and fulfill its purposes, other than loans to Persons, including all employee wages, salaries and benefits, as provided in its approved budget. Operating Expenses do not include principal of or interest on the Bonds or other indebtedness of Green Bank.

"Opinion of Counsel" shall mean a written opinion signed by an attorney or firm of attorneys who may be counsel for Green Bank.

"Outstanding", when used with reference to Bonds, shall mean, as of any date of determination, all Bonds theretofore issued or incurred and not paid and discharged other than (a) Bonds theretofore cancelled by the Trustee or delivered to the Trustee for cancellation, (b) Bonds in lieu of which other Bonds have been authenticated and delivered or have been paid pursuant to the provisions of a Supplemental Indenture regarding mutilated, destroyed, lost or stolen Bonds unless proof satisfactory to the Trustee has been received that any such Bond is held by a protected purchaser, (c) any Bond held by Green Bank, and (d) Bonds deemed paid and no longer outstanding pursuant to the terms thereof.

"Person" means an individual, corporation, limited liability company, firm, association, partnership, trust, or other legal entity or group of entities, including a governmental entity or any agency or political subdivision thereof.

"President" shall mean the President or any Interim President of Green Bank appointed in accordance with Green Bank's Bylaws.

"Principal Payment" shall mean, as of any date of calculation and with respect to any Bonds Outstanding, (i) the principal amount of the Bonds due on a certain future date for which no Sinking Fund Installments have been established, or (ii) the unsatisfied balance of any Sinking Fund Installments due on a certain future date for the Bonds, or (iii) if such future dates coincide as to different Bonds, the sum of such principal amount of the Bonds and of such unsatisfied balance of Sinking Fund Installments due on such future date.

"Principal Payment Date" shall mean November 15 each year until maturity, commencing on November 15, 2021.

"Prior Bond Indenture" means the Indenture of Trust between the Connecticut Green Bank and U.S. Bank National Association as Trustee for $2,957,971.35 Clean Renewable Energy Bonds (CGB Meriden Hydro LLC Project) dated as of February 2, 2017.

"Prior Lease/Purchase Agreement" means the $9,101,729.15 Equipment Lease/Purchase Agreement (Taxable Direct Pay New Clean Renewable Energy Bond) Connecticut State Colleges and University System between Banc of America Leasing & Capital, LLC and Green Bank, dated as of December 29, 2017, as amended October 25, 2018.

"Project Support Commitment and Undertaking" means the agreement by Green Bank to pay to the Trustee the Project Support Debt Service Amounts due and payable thereunder.

"Project Support Debt Service Amount" means the amount payable by Green Bank pursuant to the Project Support Commitment and Undertaking and Section 504(a) of this Indenture as follows: (i) on the fifth (5^{th}) business day of November and May in each year, beginning in the year 2020, for deposit into the Interest Account within the Debt Service Fund, the amount necessary to make the next succeeding Interest Payment, less any amounts in the Interest Account at each date of deposit; and (ii) on the fifth (5^{th}) business day of November of each year, commencing in November 2021, for deposit into the Principal Account within the Debt Service Fund, the amount necessary to make the next succeeding Principal Payment, less any amounts in the Principal Account at each date of deposit.

"Rebate Amount" shall mean any amounts due and owing to the Department of the Treasury of the United States of America as required to obtain and maintain the tax exemption under the Code.

"RECs" shall mean the solar home renewable energy credits produced by qualifying residential solar photovoltaic systems pursuant to Section 16-245gg of the Connecticut General Statutes.

"Record Date" shall mean, unless otherwise determined by the Trustee upon the occurrence of an Event of Default, the last business day of any calendar month proceeding the month in which there occurs a Bond Payment Date.

"Redemption Fund" shall mean the fund by that name established pursuant to Sections 502 and 507 hereof.

"Redemption Price" shall mean, when used with respect to a Bond or portion thereof, the principal amount thereof plus the applicable premium, if any, payable upon redemption thereof pursuant to the terms of this Indenture.

"Related Secured Credit Facility" shall mean the outstanding obligations of Green Bank for which the SHREC Tranche 3 SHRECs have been pledged as security for the repayment thereof.

“Residential Solar Incentive Program” or “RSIP” means the program established by Green Bank pursuant to Section 16-245ff of the Connecticut General Statutes to support the deployment of residential solar photovoltaic installations in the State.

"Revenue Fund" shall mean the fund by that name established pursuant to Sections 502 and 503 hereof.

"Revenues" shall mean all payments, charges, rents, fees, insurance proceeds and other realized income derived or to be derived from or for the ownership of the RECs related to SHREC Tranche 3, including all investment proceeds received by Green Bank, and including all revenues from the Master Purchase Agreements related to the SHREC Receivables, but does not include (i) any amounts received or receivable from the State or the United States (or any agency of either thereof), or (ii) any amounts received by or paid to Green Bank under the terms of any grant agreement with the State or the United States (or any agency of either thereof) and which are received by or paid to Green Bank under such grant agreement.

“SHREC” or “SHRECs” shall mean the solar home renewable energy credits purchased by Green Bank from homeowners and third-party system owners receiving RSIP incentives, including any related Environmental Attributes and certain energy attributes, and which are required to be sold by Green Bank to the Utilities, pursuant to the Master Purchase Agreements.

“SHREC Program Expenditures” means the anticipated incentive payments payable by Green Bank under its Solar Home Renewable Energy Credit program, the deposits required from Green Bank to remove any Ineligible SHRECs, plus payments for administrative, operating and financing costs related thereto.

“SHREC Project” means a qualifying residential solar photovoltaic system, which is a solar photovoltaic project that (i) receives funding from Green Bank, (ii) is certified by the Authority as a Class I renewable energy source, as defined in subsection (a) of Section 16-1 of the Connecticut General Statutes, (iii) emits no pollutants, (iv) is located on the customer-side of the revenue meter of a one-to-four family home, (v) serves the distribution system of an electric distribution company, and (vi) which is capable of producing SHRECs.

“SHREC Receivables” shall mean the revenue received from the Utilities for SHRECs related to SHREC Tranche 3 on and after the date the Bonds are issued.

“SHREC System” shall mean a residential photovoltaic system for which the homeowner or a third-party owner deploying such system has been provided an incentive by Green Bank pursuant to the Residential Solar Incentive Program.

“SHREC Tranche 3” shall mean the SHRECs related to SHREC Systems that were aggregated into a tranche in 2019.

“Sinking Fund Installment" shall mean, as of any particular date of calculation, the amount required by this Indenture to be paid on a future date for the retirement of Outstanding Bonds which are stated to mature subsequent to such future date, but does not include any amount payable by reason only of the maturity of a Bond.

“Special Capital Reserve Fund” or “SCRF” shall mean the fund by that name established pursuant to Sections 502 and 506 hereof.

“Special Capital Reserve Fund Requirement” shall mean as of any date of calculation, an amount equal to the maximum amount of Principal Payments and interest thereon becoming due in the calendar year in which such computation is made, or in any single succeeding calendar year, on Outstanding Bonds.

"State" shall mean the State of Connecticut.

"Supplemental Indenture" shall mean a written agreement of Green Bank amending or supplementing this Indenture, adopted in accordance with Article VIII hereof.

"Trust Estate" shall have the meaning set forth in the Granting Clause in this Indenture.

"Trustee" shall mean The Bank of New York Mellon Trust Company, N.A. and its successor or successors and any other person which may at any time be substituted in its place pursuant to this Indenture.

“Utilities” shall mean, collectively, The Connecticut Light and Power Company, d/b/a Eversource Energy (“Eversource”) and The United Illuminating Company (“United Illuminating”).

"2020 SHREC Economic Energy and Security Fund" shall mean the fund by that name established pursuant to Sections 502 and 508 hereof.

Section 102. Interpretation.

(a) Any reference herein to any officer of Green Bank shall include those succeeding to his or her functions, duties or responsibilities pursuant to or by operation of law or who are lawfully performing his or her functions.

(b) Unless the context otherwise indicates, words of the masculine gender shall be deemed and construed to include correlative words of the feminine and neuter genders. The singular shall include the plural and vice versa.

(c) All accounting terms not specifically defined herein shall be construed in accordance with generally accepted accounting principles consistently applied, except as otherwise stated herein. If any change in accounting principles from those used in the preparation of the financial statements of Green Bank results from the promulgation of rules, regulations, pronouncements and opinions by or required by the Governmental Accounting Standards Board, American Institute of Certified Public Accountants, or other authoritative bodies that determine generally accepted accounting principles (or successors thereto or agencies with similar functions) and such change results in a change in the accounting terms used in this Indenture, the accounting terms used herein shall be modified to reflect such change in accounting principles so that the criteria for evaluating Green Bank’s financial condition shall be the same after such change as if such change had not been made. Any such modification shall be described in a Certificate of an Authorized Representative filed with the Trustee, which shall contain a certification to the effect that (i) such modifications are occasioned by such a change in accounting principles and (ii) such modifications will not have a material adverse effect on Green Bank's financial condition.

(d) Headings of Articles and Sections herein and the table of contents hereto are solely for convenience of reference, and do not constitute a part hereof and shall not affect the meaning, construction or effect hereof.

Section 103. References to Indenture. The terms "hereby," "hereof," "hereto," "herein," "hereunder," and any similar terms, used in this Indenture refer to this Indenture.

Section 104. Contents of Certificates and Opinions Every Certificate or opinion provided for herein by Green Bank with respect to compliance with any provision hereof shall include: (i) a statement that the Person making or giving such certificate or opinion has read such provision and the definitions herein relating thereto; (ii) a brief statement as to the nature and the scope of the examination or investigation upon which the certificate or opinion is based; (iii) a statement that, in the opinion of such Person, he, she or it has made, or caused to be made, such examination or investigation as is necessary to enable him, her or it to express an informed opinion with respect to the subject matter referred to in the instrument to which his, her or its signature is affixed; and (iv) a statement as to whether, in the opinion of such Person, such provision has been complied with.

Any such Certificate or opinion made or given by an officer of Green Bank or the Trustee may be based, insofar as it relates to legal, accounting or clean energy matters, upon a Certificate or opinion or representation of counsel, an Accountant or Independent Consultant unless such officer knows, or in the exercise of reasonable care should have known, that the Certificate, opinion or representation with respect to the matters upon which such Certificate or opinion may be based, as aforesaid, is erroneous. Any such Certificate, opinion or representation made or given by counsel, an Accountant, or an Independent Consultant, may be based, insofar as it relates to factual matters (with respect to which information is in the possession of Green Bank), upon the Certificate or opinion of, or representation by an officer of Green Bank unless such counsel, Accountant or Independent Consultant knows, or in the exercise or reasonable care should have known, that the Certificate, opinion of or representation by such officer, with respect to the factual matters upon which such Person's Certificate or opinion may be based, as aforesaid, is erroneous. The same officer of Green Bank or the same counsel or Accountant or Independent Consultant, as the case may be, need not certify as to all the matters required to be certified under any provision hereof, but different officers, counsel, Accountants or Independent Consultants may certify as to different matters, respectively.

ARTICLE II

AUTHORIZATION AND ISSUANCE OF BONDS

Section 201. Authorization of Indenture. This Indenture is entered into pursuant to the authority granted to Green Bank by the Act and the Bylaws. Green Bank has ascertained and hereby determines and declares that execution of this Indenture is necessary to carry out its purposes under the Act, that each and every act, matter, thing or course of conduct as to which provision is made herein is necessary in order to carry out and effectuate the corporate purposes of Green Bank in accordance with the Act and the Bylaws and to exercise the powers given thereby, and that each and every covenant or agreement herein contained and made is necessary, useful or convenient in order to better secure the Bonds and the contracts or agreements necessary, useful and convenient to carry out and effectuate its purposes under the Act.

Section 202. Indenture to Constitute Contract. In consideration of the purchase and acceptance of the Bonds by those who shall hold the same from time to time, the provisions of this Indenture shall constitute a contract among Green Bank, the Trustee and the holders from time to time of the Bonds. The pledge hereof and the provisions, covenants and agreements herein set forth to be performed by or on behalf of Green Bank shall be for the equal benefit, protection and security of the holders of any and all such Bonds each of which, regardless of the time or times of its issue or maturity, shall be of equal rank without preference, priority or distinction over any other thereof except as expressly provided in this Indenture.

Section 203. Authorization of Bonds; Obligation of Bonds.

(a) In order to provide sufficient funds for the purposes of financing and refinancing the SHREC Receivables, Bonds of Green Bank are hereby authorized to be issued and such Bonds shall be issued subject to the terms, conditions and limitations established in this Indenture.

(b) The Bonds issued hereunder shall be payable solely out of the Revenues and other receipts, funds and moneys pledged therefor pursuant to this Indenture and are secured by the liens created hereby, including the Trust Estate. The Bonds are not general obligations of Green Bank or the State. The Bonds shall not be deemed to constitute a debt or liability of the State or of any political subdivision thereof, or a pledge of the full faith and credit of the State or any of its political subdivisions, but shall be payable solely from the funds provided for such purposes by this Indenture. The Bonds shall not constitute indebtedness of the State within the meaning of any statutory or constitutional provision.

(c) The Bonds issued pursuant to this Indenture shall be special, limited Bonds of Green Bank and shall not be payable from nor charged upon any funds other than Revenues or other receipts, funds or moneys pledged therefor pursuant to this Indenture, nor shall Green Bank be subject to any liability thereon except to the extent of such Revenues or other receipts, funds and moneys pledged therefor pursuant to this Indenture; provided, however, that the foregoing shall in no way limit Green Bank's duties and obligations hereunder and any rights or remedies the Bondholders may have in respect of such duties and obligations. The issuance of Bonds pursuant hereto shall not directly or contingently obligate Green Bank to make any additional appropriation for their payment. The Bonds shall not constitute a charge, lien or encumbrance, legal or equitable, upon any property of Green Bank, other than Revenues or other receipts, funds or moneys pledged therefor as provided in this Indenture.

Section 204. Issuance and Delivery of the Bonds.

(a) There are hereby authorized to be issued under this Indenture Bonds in the principal amount of $16,795,000, in denominations of $1,000 or any integral multiple thereof, as follows: Connecticut Green Bank State Supported Solar Home Renewable Energy Credit, Green Liberty Bonds, Series 2020, dated, bearing interest, maturing, and subject to mandatory sinking fund redemption, as indicated on Schedule 1 hereof. The interest on the Bonds shall be includable in the gross income of the holders thereof for federal income tax purposes under the Code, it having been found and determined by Green Bank that such issuance is necessary, is in the public interest, and is in furtherance of the purposes and powers of Green Bank.

(b) The Bonds shall be issued in fully registered form, without coupons, in the principal amount of the Bonds, initially registered in the name of Cede & Co, the nominee for The Depository Trust Company. Interest on the Bonds will be calculated on the basis of a 360-day year consisting on twelve 30-day months. Subject to the provisions of this Indenture, the form of the Bonds and the Trustee's certificate of authentication shall be substantially in the form of bond in Exhibit A with such changes as are required hereby.

(c) Optional Redemption. The Bond maturing on November 15, 2035 is subject to redemption prior to maturity, at the option of Green Bank, on or after November 15, 2030 at any time, in whole or in part, in such amounts as Green Bank may determine, at the redemption price or prices (expressed as a percentage of the principal amount of the Bond to be redeemed) set forth in the following table, plus interest accrued and unpaid to the redemption date:

Redemption Date	Redemption Price
November 15, 2030 and thereafter	100.00%

(d) Mandatory Sinking Fund Redemption. The Bond maturing on November 15, 2035 shall be subject to redemption, in part, through application of Sinking Fund Installments beginning on November 15, 2031, at the Redemption Price of one hundred percent (100%) of the principal amount of each portion of the Bond to be redeemed, plus accrued interest, if any, to the date of redemption. Unless no portion of the Bond to be so redeemed shall then be Outstanding and, subject to the provisions of this Indenture permitting amounts to be credited to part or all of any one or more Sinking Fund Installments, there shall be due from, and Green Bank shall be required to pay for the retirement of the Bond on November 15 in each of the years set forth in Schedule 1 attached hereto, the amount set forth opposite such year in said Schedule 1, and the said amount to be paid on each such date is hereby established as and shall constitute a Sinking Fund Installment for retirement of such portion of the Bond.

(e) The net proceeds of the Bonds shall be used to reimburse Green Bank for funds previously advanced and to otherwise satisfy any Green Bank obligations previously incurred and that remain outstanding in order to release the SHREC Receivables from the Related Secured Credit Facility.

Section 205. [Not used]

Section 206. Special Capital Reserve Fund.

(a) For purposes of this Section, "required minimum capital reserve" means the maximum amount permitted to be deposited in a special capital reserve fund (i.e., debt service reserve fund) by the Code, to permit the Bonds to be issued on a tax-exempt basis, if the Bonds were to be issued on a tax-exempt basis.

(b) As provided in the Act:

(i) In connection with the issuance of Bonds or to refund Bonds previously issued by Green Bank, Green Bank has in Section 502 established a reserve fund for the Bonds to be known as a Special Capital Reserve Fund, and will pay into such fund (1) any moneys appropriated and made available by the State for purposes of such fund, (2) any proceeds of the sale of Bonds, to the extent provided in the resolution of Green Bank authorizing the issuance thereof, and (3) any other moneys which may be made available to Green Bank for the purpose of such fund from any other source or sources.

(ii) The moneys held in or credited to the Special Capital Reserve Fund, except as hereinafter provided, shall be used for (1) the payment of the principal of and interest, when due, whether at maturity or by mandatory sinking fund installments, on the Bonds of Green Bank as such payments become due, or (2) the purchase of such Bonds and the payment of any redemption premium required to be paid when such Bonds are redeemed prior to maturity, including in any such case by way of reimbursement of a provider of bond insurance or of a credit or liquidity facility that has paid such redemption premiums. Notwithstanding the provisions of subdivisions (1) and (2) of this subsection, Green Bank shall provide that no moneys shall be withdrawn from the Special Capital Reserve Fund at any time in such amount as would reduce the amount of such moneys to less than the maximum amount of principal and interest becoming due by reasons of maturity or a required sinking fund installment in the then current or any succeeding calendar year on the Bonds then Outstanding, or less than the required minimum capital reserve, except for the purpose of paying such principal of, redemption premium and interest on such Bonds becoming due and for the payment of which other moneys of Green Bank are not available. Green Bank shall not issue Bonds secured by the Special Capital Reserve Fund at any time if the required minimum capital reserve on the Bonds then Outstanding and the Bonds then to be issued and secured by the same fund at the time of issuance exceeds the moneys in the fund, unless Green Bank, at the time of the issuance of such Bonds, deposits in such fund from the proceeds of the Bonds so to be issued, or from other sources, an amount which, together with the amount then in such fund, will be not less than the required minimum capital reserve.

(iii) Prior to December first, annually, Green Bank shall deposit, or cause to be deposited, into the Special Capital Reserve Fund, the balance of which has fallen below the required minimum capital reserve of such fund, the full amount required to meet the minimum capital reserve of such fund, as available to Green Bank from any resources of Green Bank not otherwise pledged or dedicated to another purpose. On or before December first, annually, but after Green Bank has made such required deposit, the State shall deem to be appropriated from the State general fund such sums, if any, as shall be certified by the chairperson or vice-chairperson of Green Bank to the Secretary of the Office of Policy and Management, the State Treasurer and the joint standing committees of the General Assembly having cognizance of matters relating to finance, revenue and bonding and energy, as necessary to restore each such fund to the amount equal to the required minimum capital reserve of such fund, and such amounts shall be allotted and paid to Green Bank for deposit to the Special Capital Reserve Fund. For the purpose of evaluation of any such fund, obligations acquired as an investment for any such fund shall be valued at market value as of the date of calculation. Nothing contained in this Section shall preclude Green Bank from establishing and creating other debt service reserve funds in connection with the issuance of bonds or notes of Green Bank which are not a special capital reserve fund. Subject to any agreement or agreements with holders of outstanding notes and bonds of Green Bank, any amount or amounts allotted and paid to Green Bank pursuant to this Section shall be repaid to the State from moneys of Green Bank at such time as such moneys are not required for any other of Green Bank's corporate purposes, and in any event shall be repaid to the State on the date one year after all bonds and notes of Green Bank theretofore issued on the date or dates such amount or amounts are allotted and paid to Green Bank or thereafter issued, together with interest on such bonds and notes, with interest on any unpaid installments of interest and all costs and expenses in connection with any action or proceeding by or on behalf of the holders thereof, are fully met and discharged.

(iv) No Bonds secured by the Special Capital Reserve Fund shall be issued by Green Bank under this Indenture unless Green Bank is of the opinion and determines that the revenues from the SHREC Receivables shall be sufficient to (1) pay the principal of and interest on the Bonds issued to finance the SHREC Receivables, (2) establish, increase and maintain any reserves deemed by Green Bank to be advisable to secure the payment of the principal of and interest on such Bonds, (3) pay the cost of maintaining the SHREC Receivables, and (4) pay such other costs of the SHREC Receivables as may be required.

(v) Notwithstanding the provisions of this Section, no Bonds secured by the Special Capital Reserve Fund shall be issued by Green Bank until and unless such issuance has been approved by the Secretary of the Office of Policy and Management or his or her deputy. Any such approval by the Secretary pursuant to this subsection shall be in addition to (1) the otherwise required opinion of sufficiency by Green Bank set forth in subsection (b)(v) of this Section, and (2) the approval of the State Treasurer or the Deputy State Treasurer and the documentation by Green Bank otherwise required under subsection (a) of Section 1-124 of the Connecticut General Statutes. Such approval may provide for the waiver or modification of such other requirements of this Section as the Secretary determines to be necessary or appropriate in order to effectuate such issuance, subject to all applicable tax covenants of Green Bank and the State.

(c) The Special Capital Reserve Fund established pursuant to Section 502 hereof shall comply with and be subject to the provisions of the Act as provided in this Section. Green Bank shall take all actions required under the Act to maintain the balance within the Special Capital Reserve Fund at an amount not less than the Special Capital Reserve Fund Requirement.

ARTICLE III

GENERAL TERMS AND CONDITIONS OF BONDS

Section 301. Authorization. In addition to the provisions of Section 204 hereof, the Bonds issued hereunder shall contain on the face thereof a statement to the effect that neither the State of Connecticut nor any political subdivision thereof shall be obligated to pay the same or the interest thereon except from the Revenues or the other revenues thereof for which such Bonds are issued, and that neither the full faith and credit nor the taxing power of the State of Connecticut or of any political subdivision thereof is pledged to the payment of the principal of or the interest on such Bonds. The issuance of the Bonds under the provisions of this Section shall not directly, indirectly or contingently obligate the State or any political subdivision thereof to levy or to pledge any form of taxation or to make any appropriation for the payment of such Bonds.

Section 302. Place and Medium of Payment; Form. The Bonds shall be payable at the designated corporate trust office of the Trustee appointed or provided for such Bonds, in any coin or currency of the United States of America which at the time of payment is legal tender for the payment of public and private debts. The Bonds shall be issued in the form of fully registered bonds without coupons payable to a named person or registered assigns.

Section 303. Negotiability, Transfer and Registry.

(a) The Depository Trust Company ("DTC"), New York, NY, will act as securities depository for the Bonds. The Bonds will be issued as fully-registered Bonds registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered Bond certificate will be issued for each maturity of the Bonds, each in the aggregate principal amount of such maturity, and will be deposited with DTC.

(b) Principal and interest payments on, and redemption premium, if any, with respect to the Bonds will be made to Cede & Co. or such other nominee as may be requested by an authorized representative of DTC. Purchases of the Bonds under the DTC system must be made by or through DTC participants, which will receive a credit for the Bonds on DTC's records.

Section 304. Regulations with Respect to Exchanges and Transfers. In all cases in which the privilege of exchange Bonds or the registration of transfer Bonds is exercised, Green Bank shall execute and the Trustee shall authenticate and deliver Bonds in accordance with the provision of this Indenture. All Bonds surrendered in such exchanges or registrations of transfer shall forthwith be canceled by the Trustee. For every such change or the registration of transfer of bonds whether temporary or definitive, Green Bank or the Trustee may, as a condition precedent to the privilege of making such change or transfer, make a charge sufficient to reimburse it for its expenses and for any tax, fee or other governmental charge required to be paid with respect to such exchange or transfer. In connection with any such transfer or exchange, the transferor or owner shall provide or cause to be provided to the Trustee all information necessary to allow the Trustee to comply with any applicable tax reporting obligations, including without limitation any cost basis reporting obligations under Internal Revenue Code Section 6045. The Trustee may rely on the information provided to it and shall have no responsibility to verify or ensure the accuracy of such information.

Section 305. Bonds Mutilated, Destroyed, Stolen or Lost. In any case any Bond shall become mutilated or be destroyed, stolen or lost, Green Bank shall execute, and thereupon the Trustee shall authenticate and deliver, a new Bond, with the same maturity date and in the same principal amount as the Bond so mutilated, destroyed, stolen or lost; provided that (i) in the case of a mutilated Bond, upon surrender and cancellation of such mutilated Bond, and (ii) in the case of any Bond destroyed, stolen or lost, upon filing with the Trustee of evidence satisfactory to Green Bank and the Trustee that such Bond has been destroyed, stolen or lost and proof of ownership thereof, and upon furnishing Green Bank and the Trustee with indemnity satisfactory to them and complying with such other reasonable regulations as Green Bank and the Trustee may prescribe and paying such expenses as Green Bank and Trustee may incur. All Bonds so surrendered to the Trustee shall be canceled by it. Any such new Bonds issued pursuant to this Section in substitution for mutilated Bonds or Bonds alleged to be destroyed, stolen or lost shall constitute original additional contractual Bonds on the part of Green Bank, whether or not the Bonds so alleged to be destroyed, stolen or lost be at any time enforceable by anyone, and shall be equally secured by and entitled to equal and proportional benefits with all other Bonds issued under this Indenture.

Section 306. Preparation of Definitive Bonds, Temporary Bonds.

(a) Until the definitive Bonds are prepared, Green Bank may execute, in the same manner as is provided in Section 307, and, upon the request of Green Bank, the Trustee shall authenticate and deliver, in lieu of definitive Bonds, but subject to the same provisions, limitations and conditions as the definitive Bonds and as to interchangeability and registration of the transfer of Bonds, as permitted by law, one or more temporary Bonds substantially of the tenor of the definitive Bonds in lieu of which such temporary Bond or Bonds are issued in the same denomination as the definitive Bond, and with such omissions, insertions and variations as may be appropriate to temporary Bonds. Green Bank at its own expense shall prepare and execute and, upon the surrender therefor of such temporary Bonds the Trustee shall authenticate and, without charge to the holder thereof, deliver in exchange therefor, the definitive Bond of the same principal amount and maturity as the temporary Bonds surrendered. Until so exchanged the temporary Bonds shall in all respects be entitled to the same benefits and security as definitive Bonds authenticated and issued pursuant to this Indenture.

(b) All temporary Bonds surrendered in exchange either for another temporary Bond or Bonds or for a definitive Bond or Bonds shall be forthwith canceled by the Trustee.

Section 307. Execution and Authentication.

(a) After their authorization, Bonds may be executed by or on behalf of Green Bank and delivered to the Trustee for authentication. The Bonds shall be executed in the name and on behalf of Green Bank by the manual or facsimile signature of an Authorized Representative of Green Bank and the corporate seal of Green Bank (or a facsimile thereof) shall be thereunto affixed, imprinted, engraved or otherwise reproduced thereon, and attested by the manual or facsimile signature of another Authorized Representative of Green Bank, or in such other manner as may be required by law. In case any one or more of the officers or employees who shall have signed or sealed any of the Bonds shall cease to be such officer or employee before the Bonds so signed and sealed shall have been actually delivered, such Bonds may, nevertheless, be delivered as herein provided, and may be issued as if the person who signed or sealed such Bonds had not ceased to hold such offices or be so employed. Any Bond may be signed and sealed on behalf of Green Bank by such persons as at the actual time of the execution of such Bond shall be duly authorized to hold the proper office in or employment by Green Bank, although at the date of the Bonds such person may not have been so authorized to have held such office or employment.

(b) The Bonds shall bear thereon a certificate of authentication, in the form set forth in the form of Bonds, executed manually by the Trustee. No Bond shall be entitled to any right or benefit under this Indenture or shall be valid or obligatory for any purpose until such certificate of authentication shall have been duly executed by the Trustee. Such certificate of the Trustee upon any Bond executed on behalf of Green Bank shall be conclusive evidence that the Bond so authenticated has been authenticated and delivered under this Indenture and that the owner thereof is entitled to the benefits hereof.

ARTICLE IV

APPLICATION OF BOND PROCEEDS

Section 401. Application of Bond Proceeds. The proceeds (including accrued interest) from the sale of the Bonds shall be applied simultaneously with the delivery of such Bonds for the purposes of paying Green Bank's current secured indebtedness in order to release the SHREC Receivables from the Related Secured Credit Facility, and making deposits in the Funds and Accounts, as shall be provided in a Certificate of Authorized Representative, and all amounts not otherwise deposited shall be deposited in the Revenue Fund.

ARTICLE V

FUNDS AND ACCOUNTS

Section 501. The Pledge Effected by this Indenture. All Bonds issued pursuant to this Indenture shall be special, limited obligations of Green Bank. Pursuant to the Granting Clauses set forth herein, Green Bank has pledged the Trust Estate as security for the payment of the Bonds and the performance of any other obligation of Green Bank under this Indenture, in accordance with the terms and the provisions of this Indenture, subject only to the provisions of this Indenture permitting the application thereof for or to the purposes and on the terms and conditions herein set forth. As provided in the Act: this pledge shall be valid and binding from the time when the pledge is made; the lien of this pledge shall be valid and binding as against all parties having claims of any kind in tort, contract or otherwise against Green Bank, irrespective of whether the parties have notice of the claims; notwithstanding any provision of the Uniform Commercial Code, no instrument by which such pledge is created need be recorded or filed except in the records of Green Bank; any revenues, contract or proceeds of any contract, or other property, revenues, moneys or funds so pledged and thereafter received by Green Bank shall be subject immediately to the lien of the pledge without any physical delivery thereof or further act, and such lien shall have priority over all other liens.

Section 502. Establishment of Funds and Accounts.

(a) The following Funds and Accounts are hereby established:

(1) Revenue Fund

(2) Debt Service Fund

(a) Interest Account

(b) Principal Account

(3) Costs of Issuance Fund

(4) Special Capital Reserve Fund

(5) Redemption Fund

(6) 2020 SHREC Economic and Energy Security Fund

(b) In addition to the Accounts established in subsections (a) above, the Trustee shall, at the written request of Green Bank, establish such additional Funds, or within any Fund held by the Trustee such Accounts as shall be designated in the written instructions of an Authorized Representative of Green Bank and shall in like manner establish within any Account such subaccounts for the purposes of such Accounts as shall be so designated.

(c) Unless otherwise expressly provided in this Indenture, all of the Funds and Accounts shall be held by the Trustee.

Section 503. Revenue Fund.

(a) The Trustee shall establish, maintain and hold in trust a separate fund designated as the "Revenue Fund," and within said fund one or more separate accounts as directed by Green Bank from time to time, and administer said fund and such accounts as set forth in this Section. The Trustee shall deposit into the Revenue Fund, as and when such amounts are received, (i) all Revenues, (ii) all amounts delivered by or at the written direction of

Green Bank to the Trustee for deposit therein, and (iii) any other amounts required to be deposited therein pursuant to this Indenture.

(b) The Trustee shall use and withdraw amounts in the Revenue Fund on the second Business Day immediately following the last day of each calendar month and apply such amounts as follows:

FIRST: to the Trustee's unpaid fees, charges and expenses;

SECOND: to the Interest Account in the Debt Service Fund, the amount necessary to make the payment of the next succeeding Interest Payment, less any amounts in the Interest Account at each date of deposit;

THIRD: to the Principal Account in the Debt Service Fund, the amount necessary to make the next succeeding Principal Payment, less any amounts in the Principal Account at each date of deposit;

FOURTH: to the Special Capital Reserve Fund, the amount, if any, necessary to make the total on deposit equal the Special Capital Reserve Fund Requirement;

FIFTH: to the Redemption Fund, the amount, if any, required pursuant to Section 605 hereof; and

SIXTH: to the 2020 SHREC Economic Energy and Security Fund, the balance.

Section 504. Debt Service Fund.

(a) The Trustee shall pay from the moneys or deposits in the respective Accounts in the Debt Service Fund (i) on each Interest Payment Date, the amounts required for the payment of the Interest Payment due on such date, (ii) on each Principal Payment Date, the amounts required for the payment of the Principal Payment (including any Sinking Fund Installments) due on such date, and (iii) on any redemption date or date of purchase, the amounts required for the payment of accrued interest on Bonds to be redeemed or purchased on such date unless the payment of such accrued interest shall be otherwise provided. Thirty (30) days prior to each Interest Payment Date and Principal Payment Date, the Trustee shall determine whether the moneys or deposits in the respective Accounts within the Debt Service Fund are sufficient to make the next succeeding Interest Payment and Principal Payment. If such moneys or deposits are not sufficient to make such payments, the Trustee shall, no later than the next Business Day, provide a Notice to Green Bank of such insufficiency. Green Bank shall thereafter pay to the Trustee the Project Support Debt Service Amount as provided in the Project Support Commitment and Undertaking.

(b) The amounts accumulated in the Principal Account of the Debt Service Fund for each Sinking Fund Installment shall, if so directed in writing by an Authorized Representative, be applied (together with amounts with respect to interest on the Bonds for which such Sinking Fund Installment was established) by the Trustee prior to the forty-fifth (45^{th}) day preceding the due date of such Sinking Fund Installment to the purchase of the Bonds and maturity for which such Sinking Fund Installment was established, at prices (including any brokerage and other charges) not exceeding the Redemption Price payable for such Bonds when such Bonds are redeemable by application of such Sinking Fund Installment, plus unpaid interest accrued to the date of purchase, such purchases to be made by the Trustee as directed in writing by an Authorized Representative.

(c) Upon the purchase of any Bond pursuant to subsection (b) of this Section, an amount equal to the principal amount of the Bond so purchased or redeemed shall be credited toward the next Sinking Fund Installment thereafter to become due and the amount of any excess of the amounts so credited over the amount of such Sinking Fund Installment shall be credited against future Sinking Fund Installments in direct chronological order.

(d) In connection with each Sinking Fund Installment, the Trustee shall provide notice of redemption to the Bondholders, pursuant to Section 604, of the Bonds for which such Sinking Fund Installment was established in such amount as shall be necessary to complete the retirement of the principal amount specified for such Sinking Fund Installment of the Bonds. The Trustee shall so call such Bonds for redemption whether or not it then has moneys in the Debt Service Fund sufficient to pay the applicable Redemption Price thereof on the redemption date.

Section 505. Costs of Issuance Fund. (a) Upon the delivery of the Bonds, Green Bank shall, as provided in a Certificate of an Authorized Representative, pay to the Trustee, for deposit into the Costs of Issuance Fund, the Costs of Issuance.

(b) Moneys on deposit in the Costs of Issuance Fund shall, as provided in a Certificate of an Authorized Representative, be applied to pay the Persons entitled thereto the Costs of Issuance relating to the issuance of the Bonds. Any moneys remaining on hand in the Costs of Issuance Fund upon the earlier of (i) payment of all Costs of Issuance or (ii) one hundred twenty (120) days after the issuance of the Bonds, shall be transferred by the Trustee to the Revenue Fund.

Section 506. Special Capital Reserve Fund.

(a) Upon the delivery of the Bonds, Green Bank shall, as provided in a Certificate of an Authorized Representative, pay to the Trustee, for deposit into the Special Capital Reserve Fund, an amount equal to the Special Capital Reserve Fund Requirement.

(b) [Not Used]

(c) Green Bank shall, as provided in a Certificate of an Authorized Representative, pay to the Trustee upon receipt thereof any moneys allotted and paid to Green Bank by the State pursuant to the Act for the purpose of restoring the Special Capital Reserve Fund to the amount of the Special Capital Reserve Fund Requirement.

(d) If at any time any Principal Payment, including any Sinking Fund Installment, or any interest due thereon, or any Redemption Price of Bonds has become due and payable and payment thereof in full has not been made or provided for, the Trustee shall (i) forthwith withdraw from the Special Capital Reserve Fund an amount which together with other amounts available for such payment shall be sufficient to provide for such payment in full and apply the amount so withdrawn to such payment, and (ii) no later than the next Business Day after such withdrawal, provide a Notice to Green Bank that Green Bank immediately pay to the Trustee any and all amounts available to Green Bank necessary to restore the Special Capital Reserve Fund to the amount of the Special Capital Reserve Fund Requirement no later than November 30 of any calendar year after such Notice is given.

(e) In the case of any purchase, redemption in whole or in part, or payment of principal at maturity, of any Bonds, Green Bank may, as provided in a Certificate of an Authorized Representative, direct the Trustee to apply moneys in the Special Capital Reserve Fund to the payment of the principal or Redemption Price of and interest on the Bonds being paid or redeemed up to the amount by which such amounts in the Special Capital Reserve Fund exceed the Special Capital Reserve Fund Requirement after giving effect to such purchase, redemption or payment.

(f) On December 1 of each year if:

(1) the amount in the Special Capital Reserve Fund exceeds the Special Capital Reserve Fund Requirement, and

(2) all withdrawals from the Special Capital Reserve Fund provided for in subsections (d) and (e) have been made, the Trustee shall withdraw the excess from the Special Capital Reserve Fund and deposit the amount so withdrawn into the 2020 SHREC Economic Energy and Security Fund hereof.

(g) Amounts in the Special Capital Reserve Fund shall be invested in Investment Securities maturing not later than the next succeeding Principal Payment Date or Interest Payment Date.

Section 507. Redemption Fund. There shall be deposited into the Redemption Fund amounts required to be deposited therein pursuant to Section 605 hereof. Amounts in the Redemption Fund may be applied as directed by Green Bank, as provided in a Certificate of an Authorized Representative, to the purchase of Bonds at prices not exceeding the Redemption Price thereof applicable on the next redemption date plus accrued interest to such next redemption date (such redemption date shall be the earliest date upon which Bonds are subject to redemption from such amounts) or to the redemption of Bonds pursuant to Article VI hereof.

Section 508. 2020 SHREC Economic and Energy Security Fund. The Trustee shall, no later than the second Business Day of each calendar month, transfer moneys credited to the 2020 SHREC Economic and Energy Security Fund to Green Bank.

Section 509. Investment of Funds.

(a) Moneys held in the Funds and Accounts established hereunder shall, as provided in a Certificate of an Authorized Representative, be invested and reinvested by the Trustee to the fullest extent practicable in Investment Securities which mature not later than such times as shall be necessary to provide moneys when needed for payments to be made from such Funds and Accounts. The Trustee shall make all such investments of moneys held by it in accordance with the Certificate of an Authorized Representative, such instructions to specify the particular investment to be made. The Trustee shall bear no responsibility hereunder other than to follow the written instructions of Green Bank as provided in the Certificate of an Authorized Representative.

(b) Interest (net of that which represents a return of accrued interest paid in connection with the purchase of any investment) and other investment earnings (but not profits or losses) on any moneys or investments in the Funds and Accounts, other than the Special Capital Reserve Fund, shall be paid into the 2020 SHREC Economic Energy and Security Fund as and when received. Interest (net of that which represents a return of accrued interest paid in connection with the purchase of any investment) and other investment earnings (but not profits or losses) on any moneys or investments in the Special Capital Reserve Fund shall be paid into the Debt Service Fund.

(c) All Investment Securities acquired with moneys in any Fund or Account shall be held by the Trustee in favor of the Trustee. Although Green Bank recognizes that it may obtain a broker confirmation or written statement containing comparable information at no additional cost, Green Bank agrees that confirmations of Investment Securities are not required to be issued by the Trustee for each month in which a monthly statement is rendered.

(d) Nothing in this Indenture shall prevent any Investment Securities acquired as investments for Funds or Accounts held under this Indenture from being issued or held in book-entry form on the books of the United States Treasury.

Section 510. Valuation and Sale of Investments.

(a) Bonds purchased as an investment of moneys in any Fund or Account created under the provisions of this Indenture shall be deemed at all times to be a part of such Fund or Account and any profit realized from the liquidation of such investment shall be credited to such Fund or Account and any loss resulting from the liquidation of such investment shall be charged to such Fund or Account.

(b) In computing the amount in any Fund or Account created under the provisions of this Indenture for any purpose provided in this Indenture, Bonds purchased as an investment of moneys therein shall be valued at the cost of such Bonds or the market value thereof, whichever is lower; provided, however, that in the case of Bonds scheduled to mature, or subject to redemption at the option of the holder, in ten (10) years or less, such Investment Securities shall be valued at amortized cost; provided further, however, that funds held in the Special Capital Reserve Fund shall be valued at market price and Defeasance Obligations held in the Redemption Fund shall be valued at cost plus interest earned thereon. The accrued interest paid in connection with the purchase of any obligation shall be included in the value thereof until interest on such obligation is paid. Such computation shall be made by the Trustee as of July 1 of each year and on the date of the refunding of any Bonds and at such other times as Green Bank shall determine or as may be required by this Indenture.

(c) Except as otherwise provided in this Indenture, the Trustee shall sell or present for redemption, any obligation so purchased as an investment whenever it shall be directed in writing by Green Bank, as provided in a Certificate of an Authorized Representative. Whenever it shall be necessary in order to provide moneys to meet any payment or transfer from any Fund or Account held by the Trustee, the Trustee shall present for redemption such obligation or obligations designated by Green Bank, as provided in a Certificate of an Authorized Representative, or in the absence of such designation by Green Bank, as the Trustee shall elect, necessary to provide sufficient moneys for such payment or transfer. The Trustee shall not be liable or responsible for any loss, fee, tax or other charge resulting from the making of any such investment, reinvestment or the sale of any obligation pursuant to this Indenture.

Section 511. Financial and Other Reporting.

(a) Green Bank shall provide to the Trustee by December 31 of each year financial statements audited by an Accountant of all of the Revenues, expenses and accounts for the preceding Fiscal Year which shall be prepared in accordance with the provisions of generally accepted accounting principles related to accounting, auditing and financial reporting, and otherwise as required by the Connecticut General Statutes.

(b) The Trustee shall, upon becoming aware of a failure of Green Bank to comply with the above-referenced conditions, give notice of such non-compliance to Green Bank. Green Bank shall comply with the provisions of this Section as soon as practicable but no later than thirty (30) days after receipt of such notice by Green Bank.

ARTICLE VI

REDEMPTION OF BONDS

The provisions contained in the following Sections of this Article VI are applicable to the Bonds.

Section 601. Privilege of Redemption and Redemption Price. Bonds subject to redemption prior to maturity shall be redeemable, upon notice as provided in this Article, at such times, at such Redemption Prices and upon such terms as may be specified in this Indenture.

Section 602. Redemption at the Election of Green Bank. In the case of any redemption of Bonds as provided in Section 204(c), Green Bank shall, as provided in a Certificate of an Authorized Representative, give written notice to the Trustee of the election so to redeem, of the redemption date, of the principal amounts of the Bonds to be redeemed (principal amounts thereof to be redeemed shall be determined by Green Bank in its sole discretion) and whether such notice and such redemption are unconditional or conditional on funds being available on the redemption date to pay the Redemption Price. Such notice shall be given to the Trustee at least twenty (20) days prior to the redemption date.

Section 603. Redemption Other Than at Green Bank Election. Whenever by the terms of this Indenture Bonds are required to be redeemed otherwise than at the election of Green Bank, the Trustee shall select the Bonds to be redeemed, in any manner which the Trustee may determine, give the notice of redemption and apply the moneys available therefor to redeem on the redemption date at the Redemption Price therefor, together with accrued interest to the redemption date, of the Bonds to be redeemed.

Section 604. Notice of Redemption. The Trustee shall give notice, in the name of Green Bank, of the redemption of such Bonds, which notice shall specify the Bonds to be redeemed, the redemption date and the place or places where amounts due upon such redemption will be payable and, if less than all of the Bonds are to be redeemed, the numbers or other distinguishing marks of such Bonds so to be redeemed. Such notice shall further state whether the notice and the redemption are unconditional or conditional; if unconditional, that on such date there shall become due and payable upon each Bond to be redeemed the Redemption Price thereof, together with interest accrued to the redemption date; if conditional, that on such date that, if there shall be sufficient funds available to effect such redemption on the redemption date, there shall become due and payable upon each Bond to be redeemed the Redemption Price thereof, together with interest accrued to the redemption date, and, in either case, that if there shall be sufficient funds available to effect such redemption on the redemption date, then from and after such date interest thereon shall cease to accrue and be payable. The Trustee shall mail a copy of such notice by first class mail, postage prepaid, not less than thirty (30) days before the redemption date, to the owners of the Bonds which are to be redeemed, at their last addresses appearing upon the registry books.

Section 605. Payment of Redeemed Bonds. Notice having been given in the manner provided in Section 604, if there shall be sufficient funds available to effect such redemption on the redemption date, the Bonds so called for redemption shall become due and payable on the redemption date so designated at the Redemption Price, plus interest accrued and unpaid to the redemption date, and, upon presentation and surrender thereof at the office specified in such notice such Bonds shall be paid at the Redemption Price plus interest accrued and unpaid to the redemption date. If, on the redemption date, moneys for the redemption of all the Bonds to be redeemed together with interest to the redemption date, shall be held by the Trustee as to be available therefor on said date and if notice of redemption shall have been given as aforesaid, then, from and after the redemption date interest on the Bonds so called for redemption shall cease to accrue and become payable. If said moneys shall not be so available on the redemption date, such Bonds or portions thereof shall continue to bear interest until paid at the same rate as they would have borne had they not been called for redemption.

ARTICLE VII

REPRESENTATIONS AND COVENANTS OF GREEN BANK

Green Bank represents, covenants and agrees with the Trustee and the holders of the Bonds as follows:

Section 701. Payment of Bonds. Green Bank shall duly and punctually pay or cause to be paid, solely from the Trust Estate pledged hereunder for such payments, the Principal Payment or Redemption Price of every Bond and the Interest Payment thereon, at the dates and places and in the manner stated in the Bonds.

Section 702. Offices for Servicing Bonds. Green Bank shall at all times maintain an office or agency where Bonds may be presented for registration, transfer or exchange, and where notices, presentations and demands upon Green Bank in respect of the Bonds or of this Indenture may be served. Green Bank hereby appoints the Trustee as its agent to maintain such office or agency for the registration, transfer or exchange of the Bonds and for the service of such notices, presentations and demands upon Green Bank.

Section 703. Further Assurance. At any and all times, Green Bank shall, so far as each may be authorized by law, pass, make, do, execute, acknowledge and deliver, all and every such further resolutions, acts, deeds, conveyances, assignments, transfers and assurances as may be necessary or desirable for the better assuring, conveying, granting, pledging, assigning and confirming all and singular, the rights, assets, revenues and other moneys, securities, funds and property hereby pledged or assigned, or intended so to be, or which Green Bank, may become bound to pledge or assign.

Section 704. Power to Issue Bonds and Pledge Revenues. Green Bank is duly authorized under the Act and all applicable laws to authorize and issue and deliver the Bonds. Green Bank is duly authorized to execute and enter into this Indenture and to pledge the Revenues and assets purported to be pledged and assigned hereby in the manner and to the extent herein provided. Except to the extent permitted under this Indenture, the Revenues and assets so pledged and assigned are and will be free and clear of any pledge, lien, charge or encumbrance thereon or with respect thereto prior to, or of equal rank with, the pledge created hereby and all corporate or other action on the part of Green Bank to that end has been and will be duly and validly taken. The Bonds are and will be the valid and legally enforceable limited obligations of Green Bank in accordance with their terms and the terms of this Indenture. Green Bank shall at all times, to the extent permitted by law, defend, preserve and protect the pledge of the Revenues and other assets, including rights herein pledged and assigned under this Indenture and all the rights of the Bondholders under this Indenture against all claims and demands of all persons whomsoever. Green Bank shall not take any action or permit any action to be taken (unless taken by the State), to dissolve Green Bank.

Section 705. Green Bank Not to Amend Indenture. Green Bank agrees that it will not amend this Indenture in any way that impairs the funding to the funds and accounts herein pursuant to Section 504(a) hereof without the prior written consent of the Secretary of the Office of Policy and Management and the State Treasurer, unless all of the Bonds, together with the interest thereon, and all costs and expenses in connection with any action or proceeding by or on behalf of such holders, are fully met and discharged.

Section 705A. Green Bank Not to Subordinate Its Obligations Supported by State. Green Bank agrees that:

a. It shall not enter into any agreement, including any indenture, that results in its obligations to make timely payment of (i) the Project Support Debt Service Amounts under the Project Support Commitment and Undertaking, (ii) the amounts required under Section 206(b)(iii) hereof, or (iii) the amounts due and payable under the Prior Bond Indenture or Prior Lease/Purchase Agreement, to be subordinate to its obligations under such agreement; provided, for a specific Green Bank program or project, Green Bank may pledge the assets or revenues related thereto as security for its obligations thereunder.

b. It shall cause to be included in Operating Expenses all Administrative Expenses hereunder, and cause to be paid when due all such Administrative Expenses.

Section 706. Accounts and Periodical Reports and Certificates. Green Bank shall keep or cause to be kept proper books of record and account (separate from all other records and accounts) in which complete and correct entries shall be made of its transactions under this Indenture and which, together with all other books and papers of Green Bank, shall at all reasonable times be subject to the inspection of the Trustee, the State or the representative, duly authorized in writing, of the holder or holders of not less than a majority of the principal amount of the Bonds then Outstanding. Green Bank shall use its best efforts to direct all payments on the SHREC Receivables to the Trustee for deposit into the Funds and Accounts under this Indenture, and if such payments are misdirected or erroneously deposited into another Green Bank fund or account, Green Bank shall promptly transfer the applicable amount to the Trustee for deposit hereunder.

Section 707. Indebtedness and Liens. Green Bank shall not issue any bonds, notes or other evidences of indebtedness, other than the Bonds, secured by a pledge of or other lien or charge on the Revenues and shall not create or cause to be created any lien or charge on such Revenues or on any amounts held by the Trustee, under this Indenture; but this Section shall not prevent Green Bank from issuing notes payable from the proceeds of the Bonds or bonds or notes or other Bonds for the corporate purposes of Green Bank payable out of, or secured by a pledge of, Revenues to be derived on and after such date as the pledge of the Revenues provided in this Indenture shall be discharged and satisfied as provided in Section 1101.

Section 708. Special Capital Reserve Fund.

(a) Green Bank shall at all times maintain the Special Capital Reserve Fund pursuant to Section 506 and do and perform or cause to be performed each and every act and thing with respect to the Special Capital Reserve Fund provided to be done or performed by or on behalf of Green Bank or the Trustee pursuant to Section 206 and the other terms and provisions of this Indenture, or of the Act.

(b) In order to better secure the Bonds issued under this Indenture as Bonds secured by the Special Capital Reserve Fund, and in furtherance of the provisions of the Act, Green Bank shall cause the Chair of its Board of Directors annually, on or before the first day of December of each year, to make and deliver to the Secretary of the Office of Policy and Management and the Treasurer of the State a certificate stating such sums, if any, and after the transfers contemplated by Sections 503 and 506 hereof, as shall be necessary to restore the Special Capital Reserve Fund to the Special Capital Reserve Fund Requirement, and accompany such certificate with a request that such sums be paid directly to the Trustee for the account of Green Bank for deposit into the Special Capital Reserve Fund.

Section 709. General. Green Bank shall do and perform or cause to be done and performed all acts and things required to be done or performed by or on behalf of them under the provisions of the Act, the Bylaws and this Indenture in accordance with the terms of such provisions.

Section 710. Agreement of Green Bank. Green Bank agrees that it will not in any way impair the rights and remedies of Bondholders, until the Bonds, together with the interest thereon, and all costs and expenses in connection with any action or proceeding by or on behalf of such holders, are fully met and discharged.

Section 711. State Not to Impair Bonds of Green Bank. Pursuant to the Act, the State has pledged to and agreed with the Bondholders of Bonds issued under this Indenture pursuant to the Act, and with those parties who may enter into contracts with Green Bank or its successor agency pursuant to the Act, that the State will not limit or alter the rights vested in the Green Bank until such Bonds, together with the interest thereon, are fully met and discharged and such contracts are fully performed on the part of Green Bank, provided nothing contained in this Section shall preclude such limitation or alteration if and when adequate provisions shall be made by law for the protection of the Bondholders described in this Section or those entering into such contracts with Green Bank.

Section 712. Continuing Disclosure Requirements. Green Bank shall undertake all responsibility for compliance with continuing disclosure requirements related to the Bonds, and the Trustee shall have no liability to the Bondholders or any other Person with respect to such disclosure matters. Notwithstanding any other provision of this Indenture, failure of Green Bank to comply with the continuing disclosure requirements shall not be considered an Event of Default hereunder.

Section 713. Removal of Ineligible SHRECs. Green Bank shall remove any Ineligible SHREC pledged by Green Bank to the Trustee hereunder by depositing an amount established by Green Bank equal to the fair market value equivalent of the Ineligible SHREC originally pledged. Upon payment for the Ineligible SHREC, the Trustee shall release the Ineligible SHREC from the lien of the Indenture (if requested). If the Trustee receives written notice of an Ineligible SHREC, the Trustee shall give written notice thereof within five (5) Business Days of receipt thereof to Green Bank. If Green Bank discovers or receives notice of an Ineligible SHREC, Green Bank shall provide written notice thereof to the Trustee. The Trustee shall have no duties or responsibilities hereunder or otherwise in respect of an Ineligible SHREC other than those referred to in this Section.

ARTICLE VIII

SUPPLEMENTS AND AMENDMENTS

Section 801. Supplements Not Requiring Consent of Bondholders. Green Bank and the Trustee may, without the consent of any of the Bondholders, enter into any Supplemental Indenture for one or more of the following purposes:

(a) To add to the covenants and agreements of Green Bank contained in this Indenture, other covenants and agreements thereafter to be observed relative to the application, custody, use and disposition of the proceeds of the Bonds; or

(b) To confirm, as further assurance, any pledge under and the subjection to any lien on or pledge of the Revenues created or to be created by this Indenture; or

(c) To cure any ambiguity, supply any omission, or cure or correct any defect or inconsistent provision in this Indenture, unless such modification would result in a material reduction of the rights or interests of the Bondholders under this Indenture; or

(d) To grant to or confer on the Trustee for the benefit of the Bondholders any additional rights, remedies, powers, or security that Green Bank may lawfully be granted or conferred and which are not contrary to or inconsistent with this Indenture as theretofore in effect; or

(e) To create any additional Funds or Accounts hereunder; or

(f) To modify, alter, amend or supplement any provision of this Indenture if, prior to the execution of any such amendment there shall be delivered to the Trustee an Opinion of Counsel to the effect that such amendment will not have a material adverse effect on the security, remedies or rights of the Bondholders.

Section 802. Supplements Requiring Consent of Bondholders.

(a) Other than Supplemental Indentures referred to in Section 801 hereof, Green Bank and the Trustee may, with the consent of the Bondholders of not less than a majority in aggregate principal amount of the Bonds then Outstanding and anything contained herein to the contrary notwithstanding, enter into one or more Supplemental Indentures as Green Bank shall deem necessary and desirable for the purpose of modifying, altering, amending, adding to or rescinding, in any particular, any of the terms or provisions contained herein; provided, however, that nothing in this Section shall permit or be construed as permitting a Supplemental Indenture which would:

(i) Extend the stated maturity of or time for paying interest on any Bond or reduce the principal amount of or the redemption premium or rate of interest or method of calculating interest payable on any Bond without the consent of the Bondholder of such Bond;

(ii) Modify, alter, amend, add to or rescind any of the terms or provisions contained in Article IX hereof so as to affect the right of the Bondholders of any Bonds in default as to payment to compel the Trustee to declare the principal of all Bonds to be due and payable, without the consent of the Bondholders of all Bonds then Outstanding; or

(iii) Reduce the aggregate principal amount of Bonds then Outstanding the consent of the Bondholders of which is required to authorize such

Supplemental Indenture without the consent of the Bondholders of all Bonds then Outstanding.

(b) If at any time Green Bank shall request the Trustee to enter into a Supplemental Indenture pursuant to this Section, which request is accompanied by a copy of the resolution or other action of its Board of Directors certified by its secretary (or, if it has no secretary, its comparable officer) together with a copy of the proposed Supplemental Indenture, and if the Trustee shall receive an instrument or instruments, which instruments may be in electronic format, purporting to be executed by the Bondholders of not less than the aggregate principal amount of the Bonds specified in subsection (a) for the Supplemental Indenture in question, which instrument or instruments shall refer to the proposed Supplemental Indenture and shall specifically consent to and approve the execution thereof in substantially the form of the copy thereof as on file with the Trustee, the Trustee may execute such Supplemental Indenture in substantially such form, without liability or responsibility to any Bondholder of any Bond, whether or not such Bondholder shall have consented thereto.

(c) Any such consent shall be binding upon the Bondholder of the Bond giving such consent and upon any subsequent Bondholder of such Bond and of any Bond issued in exchange therefor (whether or not such subsequent Bondholder thereof has notice thereof), unless such consent is revoked in writing by the Bondholder of such Bond giving such consent or by a subsequent Bondholder thereof by filing with the Trustee, prior to the execution by the Trustee of such Supplemental Indenture, such revocation and, if such Bond or Bonds are transferable by delivery, proof that such Bonds are held by the signer of such revocation. At any time after the Bondholders of the required principal amount or number of Bonds shall have filed their consents to the Supplemental Indenture, the Trustee shall make and file with Green Bank a written statement to that effect. Such written statement shall be conclusive that such consents have been so filed.

(d) If the Bondholders of the required principal amount of the Outstanding Bonds shall have consented to and approved the execution of such Supplemental Indenture as herein provided, no Bondholder of any Bond shall have any right to object to the execution thereof, or to object to any of the terms and provisions contained therein or the operation thereof, or in any manner to question the propriety of the execution thereof, or to enjoin or restrain the Trustee or Green Bank from executing the same or from taking any action pursuant to the provisions thereof.

Section 803. <u>Execution and Effect of Supplemental Indentures</u>.

(a) In executing any Supplemental Indenture permitted by this Article, the Trustee shall be entitled to receive and to rely upon an Opinion of Counsel stating that the execution of such Supplemental Indenture is authorized or permitted hereby. The Trustee may but shall not be obligated to enter into any such Supplemental Indenture which materially and adversely affects the Trustee's own rights, duties or immunities.

(b) Upon the execution and delivery of any Supplemental Indenture in accordance with this Article, the provisions hereof shall be modified in accordance therewith and such Supplemental Indenture shall form a part hereof for all purposes and every Bondholder theretofore or thereafter authenticated and delivered hereunder shall be bound thereby.

(c) Any Bond authenticated and delivered after the execution and delivery of any Supplemental Indenture in accordance with this Article may, and, if required by Green Bank shall, bear a notation in form approved by Green Bank as to any matter provided for in such Supplemental Indenture. If Green Bank shall so determine, new Bonds so modified as to conform, as determined by Green Bank, to any such Supplemental Indenture may be prepared and executed by Green Bank and authenticated and delivered by the Trustee in exchange for and upon surrender of Bonds then Outstanding.

(d) The Trustee shall give notice, by first class mail, to the Bondholders then Outstanding of the execution and delivery of any Supplemental Indenture, setting forth the effective date of such Supplemental Indenture and a summary of the terms thereof (or, in lieu of such a summary, by attaching the form of such Supplemental Indenture to such notice).

ARTICLE IX

DEFAULTS; REMEDIES ON DEFAULT

Section 901. Events of Default. If one or more of the following events (in this Indenture called "Events of Default") shall occur:

(1) a failure to make due and punctual payment of a Principal Payment or the Redemption Price of any Bond when and as the same shall become due and payable, whether at maturity or upon call for redemption, or otherwise; or

(2) a failure to make due and punctual payment of any Interest Payment on any Bond, when and as such interest payment shall become due and payable; or

(3) with respect to Bonds secured by the Special Capital Reserve Fund, Green Bank shall fail or refuse to comply with the provisions of Sections 206 and 506 of this Indenture, or such amounts as shall be certified by the chairperson of Green Bank to the Secretary of the Office of Policy and Management and Treasurer of the State pursuant to such provisions of the Act shall not be allotted and paid by the State to Green Bank for deposit therein and such allotment and payment is not made prior to the second day succeeding the final adjournment of (i) the session of the General Assembly of the State convening when such certification shall have been made or, if the General Assembly is not then in session, (ii) the first session of the General Assembly of the State convening after such certification shall have been made; or

(4) a failure by Green Bank in the performance or observance of any other of its covenants, agreements or conditions in this Indenture, and such default shall

continue for a period of sixty (60) days after the giving of written notice thereof stating that such notice is a "Notice of Default" to Green Bank by the Trustee, or to Green Bank and to the Trustee by the holders of not less than a majority in principal amount of the Bonds Outstanding, except that, in each case, if such failure can be remedied but not within such 60-day period, such failure shall not become an Event of Default for so long as Green Bank shall commence such cure within such 60-day period and diligently proceeds to remedy the same within 180 days of the commencement of such cure.

Section 902. Remedies Upon Default.

(a) Upon the occurrence and continuance of any Event of Default, the Trustee may, and upon the written request of the Bondholders of not less than a majority in principal amount of the Bonds then Outstanding shall, subject to Section 906 hereof, proceed, in its own name, to protect and enforce the rights of the Bondholders by such of the following remedies, as the Trustee, being advised by counsel, shall deem most effectual to protect and enforce such rights:

(1) by mandamus or other suit, action or proceeding at law or in equity, to enforce all rights of the Bondholders, including the right to require Green Bank to receive and collect the Revenues adequate to carry out the covenants and agreements as to the pledge of such Revenues, and to require Green Bank to carry out any other covenants or agreements with Bondholders and to perform its duties under the Act;

(2) by bringing suit upon the Bonds;

(3) by action or suit in equity, to require Green Bank to account as if it were the Trustee of an express trust for the Bondholders as provided in Section 903 hereof; and

(4) by action or suit in equity, to enjoin any acts or things which may be unlawful or in violation of the rights of the Bondholders.

Section 903. Accounting and Examination of Records After Default. Green Bank covenants that if an Event of Default shall happen and shall not have been remedied, Green Bank will account, as if it were the trustee of an express trust, for all Revenues and other moneys, securities and funds pledged or held under this Indenture for such period.

Section 904. Application of Revenues and Other Moneys After Default.

(a) Green Bank covenants that if an Event of Default shall occur and shall not have been remedied, Green Bank, upon demand of the Trustee, shall pay over or cause to be paid over to the Trustee forthwith, any moneys, securities and funds then held by Green Bank and included in the Trust Estate hereof not already held in any Fund or Account established under this Indenture. Amounts on deposit in the Special Capital Reserve Fund shall be applied solely to the Bonds.

(b) During the continuance of an Event of Default, unless otherwise directed by the owners of a majority in principal amount of the Bonds at the time Outstanding, the

Trustee shall apply such Revenues and the income therefrom as follows and in the following order:

(1) to the payment of the reasonable and proper charges and expenses of the Trustee and its counsel;

(2) to the payment of the interest and principal or Redemption Price then due on the Bonds, as follows:

(i) unless the principal of all of the Bonds shall be due and payable,

First: To the payment to the Persons entitled thereto of all installments of interest then due in the order of the maturity of such installments, and, if the amount available shall not be sufficient to pay in full any installment or installments maturing on the same date, then to the payment thereof ratably, according to the amounts due thereon, to the Persons entitled thereto, without any priority or preference; and

Second: To the payment to the Persons entitled thereto of the unpaid principal or Redemption Price of any Bonds which shall have become due, whether at maturity or by call for redemption, in the order of their due dates, and, if the amount available shall not be sufficient to pay in full all the Bonds due on any date, then to the payment thereof ratably, according to the amounts of principal or Redemption Price due on such date, to the Persons entitled thereto, without any priority or preference.

(ii) If the principal of all of the Bonds shall be due and payable, to the payment of the principal and interest then due and unpaid upon the Bonds without preference or priority of principal over interest or of interest over principal, or of any installment of interest over any other installment of interest, or of any Bond over any other Bond, ratably, according to the amounts due respectively for principal, interest and net interest on notional amounts, to the Persons entitled thereto, without any priority or preference.

(c) if and when all overdue installments of interest on all Bonds, together with the reasonable and proper charges and expenses of the Trustee and its counsel, and all other sums payable by Green Bank under this Indenture, including the principal and Redemption Price of and accrued unpaid interest on all Bonds which shall then be payable by declaration or otherwise, shall either be paid by or for the account of Green Bank, and all defaults under this Indenture or the Bonds shall be made good or secured, the Trustee shall pay over to Green Bank all such Revenues then remaining unexpended in the hands of the Trustee (except Revenues deposited or pledged, or required by the terms of this Indenture to be deposited or pledged, with the Trustee), and thereupon Green Bank and the Trustee shall be restored, respectively, to their former positions and rights under this Indenture, and all Revenues shall thereafter be applied as provided in Article V. No such payment over to Green Bank by the Trustee or resumption of the application of Revenues as provided in Article V shall extend to or affect any subsequent default under this Indenture or impair any right consequent thereon.

Section 905. Proceedings Brought by Trustee.

(a) If an Event of Default shall occur and shall not have been remedied, then and in every such case, the Trustee, by its agents and attorneys, may proceed to protect and enforce its rights and the rights of the holders of the Bonds under this Indenture forthwith by a suit or suits in equity or at law, whether for the specific performance of any covenant herein contained, or in aid of the execution of any power herein granted, or for an accounting against Green Bank as if it were the trustee of an express trust, or in the enforcement of any other legal or equitable right as the Trustee, being advised by counsel, shall deem most effectual to enforce any of its rights or to perform any of its duties under this Indenture.

(b) All rights of action under this Indenture may be enforced by the Trustee without the possession of any of the Bonds or the production thereof at the trial or other proceedings, and any such suit or proceedings instituted by the Trustee shall be brought in its name.

(c) The holders of a majority in principal amount of the Bonds at the time Outstanding, may direct by instrument in writing the time, method and place of conducting any proceeding for any remedy available to the Trustee, or exercising any trust or power conferred upon the Trustee, provided that the Trustee shall have the right to decline to follow any such direction if the Trustee shall be advised by counsel that the action or proceeding so directed may not lawfully be taken, or if the Trustee in good faith shall determine that the action or proceeding so directed would subject the Trustee to personal liability or be unjustly prejudicial to the Bondholders not parties to such direction.

(d) Upon commencing a suit in equity or upon other commencement of judicial proceedings by the Trustee to enforce any right under this Indenture, the Trustee shall be entitled to exercise any and all rights and powers conferred in this Indenture and provided to be exercised by the Trustee upon the occurrence of an Event of Default; and, as a matter of right against Green Bank, without notice or demand and without regard to the adequacy of the security for the Bonds, the Trustee shall, to the extent permitted by law, be entitled to the appointment of a receiver of the moneys, securities and funds then held by Green Bank in any Fund or Account established under this Indenture and, subject to application of the Revenues, with all such powers as the court or courts making such appointment shall confer; but notwithstanding the appointment of any receiver, the Trustee shall be entitled to retain possession and control of and to collect and receive income from, any moneys, securities and funds deposited or pledged with it under this Indenture or agreed or provided to be delivered or pledged with it under this Indenture.

(e) Regardless of the happening of an Event of Default, the Trustee shall have the power to, but (unless requested in writing by the holders of a majority in principal amount of the Bonds then Outstanding, and furnished with security and indemnity satisfactory to it) shall be under no obligation to, institute and maintain such suits and proceedings as it may be advised shall be necessary or expedient to prevent any impairment of the security under this Indenture by any acts which may be unlawful or in violation of this Indenture, and such suits and proceedings as the Trustee may be advised shall be necessary or expedient to preserve or protect its interests and the interests of the Bondholders.

Section 906. Restriction on Bondholders' Action.

(a) No holder of any Bond shall have any right to institute any suit, action or proceeding at law or in equity for the enforcement of any provision of this Indenture or the execution of any trust under this Indenture or for any remedy under this Indenture, unless such holder shall have previously given to the Trustee written notice of the happening of an Event of Default, as provided in this Article, and the holders of at least a majority in principal amount of the Bonds then Outstanding shall have filed a written request with the Trustee, and shall have offered it reasonable opportunity, either to exercise the powers granted in this Section or to institute such action, suit or proceeding in its own name, and unless such holders shall have offered to the Trustee security and indemnity acceptable to the Trustee against the costs, expenses and liabilities to be incurred therein or thereby, and the Trustee shall have refused to comply with such request within a reasonable time; it being understood and intended that no one or more holders of Bonds shall have any right in any manner whatever by his/her or their action to affect, disturb or prejudice the pledge created by this Indenture, or to enforce any right under this Indenture, except in the manner therein provided; and that all proceedings at law or in equity to enforce any provision of this Indenture shall be instituted, had and maintained in the manner provided in this Indenture and for the equal benefit of all holders of the Outstanding Bonds.

(b) Nothing in this Indenture or in the Bonds contained shall affect or impair the obligation of Green Bank, which is absolute and unconditional, to pay at the respective dates of maturity and places therein expressed the principal of and interest on the Bonds to the respective holders thereof from the Trust Estate, or affect or impair the right of action, which is also absolute and unconditional, of any holder to enforce such payment of the Bonds. Notwithstanding the preceding sentence and anything in this Indenture or in the Bonds contained, Green Bank shall not be required to advance any moneys derived from any source other than the Revenues and assets pledged under this Indenture for any of the purposes in this Indenture mentioned whether for the payment of the principal of or the Redemption Price, if any, or interest on the Bonds or for any other purpose of this Indenture.

Section 907. Remedies Not Exclusive. No remedy by the terms of this Indenture conferred upon or reserved to the Trustee or the Bondholders is intended to be exclusive of any other remedy, but each and every such remedy shall be cumulative and shall be in addition to every other remedy given under this Indenture or existing at law or in equity or by statute on or after the date of adoption of this Indenture.

Section 908. Effect of Waiver and Other Circumstances.

(a) No delay or omission of the Trustee or of any Bondholder to exercise any right or power arising upon the happening of an Event of Default shall impair any right or power or shall be construed to be a waiver of any such default or to be an acquiescence therein; and every power and remedy given by this Article to the Trustee or to the Bondholders may be exercised from time to time and as often as may be deemed expedient by the Trustee or by the Bondholders.

(b) The holders of a majority in principal amount of the Bonds at the time Outstanding, or their attorneys-in-fact duly authorized, may on behalf of the holders of all of the Bonds waive any past default under this Indenture and its consequences, except a default in the payment of interest on or principal or Redemption Price of the Bonds. No such waiver shall extend to any subsequent or other default or impair any right consequent thereon.

Section 909. State Right to Act. With respect to any right of the Trustee to take action pursuant to this Article, the State (acting through the office of the State Treasurer) may act for and on behalf of the Trustee, at the option of the State, so long as any Bonds are secured by the Special Capital Reserve Fund; otherwise the State shall be deemed to have given its right to act to the Trustee.

ARTICLE X

THE TRUSTEE

Section 1001. Concerning the Trustee; Acceptance of Trustee. The Trustee hereby accepts and agrees to execute the trusts imposed upon it by this Indenture, but only upon the terms and conditions set forth in this Article and subject to the provisions of this Indenture, to all of which the parties hereto and the respective owners of the Bonds agree.

Section 1002. Obligation of Trustee. The Trustee shall be under no obligation to institute any suit, or to take any action or proceeding under this Indenture or to enter any appearance or in any way defend in any suit in which it may be made defendant, or to take any steps in the execution of the trusts hereby created or in the enforcement of any rights and powers hereunder, including, without limitation, pursuant to the direction of, or on behalf of, any of the Bondholders, until it shall be paid or reimbursed or indemnified to its satisfaction against any and all reasonable costs and expenses, outlays, liabilities, damages and counsel fees and expenses and other reasonable disbursements. The Trustee may nevertheless begin suit, or appear in and defend suit, or do anything else in its judgment proper to be done by it as the Trustee, and in such case Green Bank shall reimburse the Trustee for all costs and expenses, outlays, liabilities, damages and counsel fees and expenses and other reasonable disbursements properly incurred in connection therewith.

Section 1003. Responsibilities of Trustee.

(a) The recitals contained in this Indenture, any Supplemental Indenture and in the Bonds shall be taken as the statements of Green Bank and the Trustee assumes no responsibility for the correctness of the same. The Trustee makes no representations as to the validity or sufficiency of this Indenture, any Supplemental Indenture or of the Bonds or in respect of the security afforded by this Indenture or any Supplemental Indenture and the Trustee shall incur no responsibility in respect thereof. The Trustee shall be under no responsibility or duty with respect to: (i) the issuance of the Bonds for value; or (ii) the application of the proceeds thereof except to the extent that such proceeds are received by it in its capacity as Trustee; or (iii) the application of any moneys paid to Green Bank or others in accordance with this Indenture except as to the application of any moneys paid to it in its capacity as Trustee; or (iv) the recording or rerecording, registration or reregistration, filing or refiling of this Indenture or any security documents contemplated thereby; or (v) the validity of the execution by Green Bank of this Indenture; or (vi) compliance by Green Bank with the terms of this Indenture; or (vii) any information, statement or recital in any official statement, offering memorandum or any other disclosure material prepared or distributed with respect to the Bonds and shall have no responsibility for compliance with any state or federal securities laws in connection with the Bonds; or (viii) the review, verification or analysis of any financial statements filed with it hereunder and the Trustee shall hold any such financial statements solely as a repository for the benefit of the Bondholders and shall not be deemed to have notice of any information contained therein or default or event of default which may be disclosed therein in any manner (i.e., the delivery of any such reports, information and documents to the Trustee is for information purposes only and the Trustee's receipt of such shall not constitute notice or constructive notice of any information contained therein or determinable from information contained therein, including Green Bank's compliance with any of its covenants hereunder as to which the Trustee is entitled to rely exclusively on a Certificate of an Authorized Representative). The Trustee may require of Green Bank full information and advice regarding the performance of the covenants, conditions and agreements contained in this Indenture. The Trustee shall not be liable in connection with the performance of its duties hereunder except for its own negligence or willful misconduct.

(b) Except as otherwise provided in this Indenture, the Trustee shall not be bound to recognize any person as a holder of any Bond or to take action at such person's request, unless such person shall be the Bondholder of such Bond. Any action duly taken by the Trustee pursuant to this Indenture upon the request, authority or consent of any person who at the time of making such request or giving such authority or consent is the Bondholder of any Bond secured hereby shall be conclusive and binding upon all future Bondholders of such Bond.

(c) The duties and obligations of the Trustee shall be determined by the express provisions of this Indenture, and the Trustee shall not be liable except for the performance of such duties and obligations as are specifically set forth in this Indenture and no duties or obligations shall be implied to the Trustee. In the case of an Event of Default specified in Article IX hereof, which Event of Default has not been cured or waived and of which the Trustee is deemed to have knowledge, the Trustee shall exercise such of the rights and powers vested in it by this Indenture and shall use the same degree of care and skill in its exercise thereof as a prudent person would exercise or use under the circumstances in the conduct of his or her own affairs. The permissive right of the Trustee to do things enumerated in this Indenture shall not be construed as a duty. The Trustee may act through agents or attorneys and shall not be responsible for the misconduct or negligence of agents or attorneys appointed with due care.

(d) The Trustee shall not be charged with knowledge of any event hereunder unless an officer or administrator in the Trustee's corporate trust department has actual knowledge of such event.

(e) In the absence of bad faith on its part, the Trustee may rely conclusively, as to the truth of the statements and the correctness of the opinions expressed therein, upon certificates or opinions furnished to the Trustee and conforming to the requirements of this Indenture; but in the case of any such certificates or opinions which by any provision hereof are required specifically to be furnished to the Trustee, the Trustee shall be under a duty to examine the same to determine whether or not they conform to the requirements of this Indenture.

(f) Except as otherwise expressly provided by the provisions of this Indenture, the Trustee shall not be obligated and may not be required to give or furnish any notice, demand, report, request, reply, statement, advice or opinion to the Bondholder of any Bond and the Trustee shall not incur any liability for its failure or refusal to give or furnish the same unless obligated or required to do so by an express provision hereof. The Trustee shall not be liable for any action taken or omitted by it in good faith and believed by it to be authorized or within the discretion or rights or powers conferred upon it by this Indenture. The Trustee shall incur no liability in respect of any action taken or omitted by it in good faith in accordance with the direction of the Bondholders of the percentage of the Bonds specified herein relating to the time, method and place of conducting any proceeding for any remedy available to the Trustee or exercising any trust or power conferred upon the Trustee under this Indenture.

(g) In the event the Trustee shall receive inconsistent or conflicting requests and indemnity from two or more groups of Bondholders, each representing less than a majority of the principal amount of the Bonds then Outstanding, the Trustee, in its sole discretion, may determine what action, if any, shall be taken.

(h) The Trustee shall not be liable for interest on any funds deposited with it hereunder, except as the Trustee may otherwise specifically agree in writing.

Section 1004. Property Held in Trust. All moneys and securities held by the Trustee at any time pursuant to the terms of this Indenture shall be and hereby are assigned, transferred and set over unto the Trustee in trust for the purposes and under the terms and conditions of this Indenture.

Section 1005. Evidence on Which Trustee May Act. The Trustee shall be protected in acting upon any notice, resolution, request, consent, order, certificate, report, opinion, bond or other paper or document believed by it to be genuine, and to have been signed or presented by the proper party or parties. The Trustee may consult with counsel of its selection, who may or may not be counsel to Green Bank, and may rely on an opinion of such counsel. Any such opinion of counsel shall be full and complete authorization and protection in respect of any action taken or suffered, or any action not taken, by it in good faith and in accordance therewith, and the Trustee shall not be liable for any action taken or omitted in good faith in reliance on such opinion of counsel. Whenever the Trustee shall deem it necessary or desirable that a matter be proved or established prior to taking or suffering or not taking any action under this Indenture, such matter (unless other evidence in respect thereof be hereby specifically prescribed) may be deemed to be conclusively proved and established by a certificate signed by an Authorized Representative of Green Bank. Such certificate shall be full warrant for any action taken or suffered, or any action not taken, in good faith under the provisions hereof, but the Trustee may (but shall not be required to) in addition thereto or in lieu thereof require or accept other evidence of such fact or matter or may require such further or additional evidence as it may deem reasonable. Except as otherwise expressly provided herein, any request, order, notice or other direction required or permitted to be furnished pursuant to any provision hereof by Green Bank to the Trustee shall be sufficiently executed if executed in the name of Green Bank by an Authorized Representative.

Section 1006. Compensation and Indemnification. Unless otherwise provided by contract with the Trustee, Green Bank shall pay or cause to be paid to the Trustee after reasonable notice to Green Bank in light of the compensation sought to be received, reasonable compensation for all services rendered by it hereunder, including, if applicable, its services as registrar, paying agent and transfer agent, and also all its reasonable expenses, charges, counsel fees, expenses and other disbursements and those of its attorneys, agents, and employees, incurred in and about the performance of its powers and duties hereunder. Green Bank shall indemnify and save the Trustee harmless against any expenses and liabilities which it may incur in the exercise and performance of its powers and duties hereunder which are not due to its negligence or misconduct. None of the provisions contained in this Indenture shall require the Trustee to expend or risk its own funds or otherwise incur financial liability in the performance of any of its duties or in the exercise of any of its rights or powers. The obligations of Green Bank under this Section to compensate the Trustee, to pay or reimburse the Trustee for expenses, disbursements, charges and counsel fees and to indemnify and hold harmless the Trustee shall survive the satisfaction and discharge of this Indenture.

Section 1007. Permitted Acts. The Trustee may become the owner of or may deal in Bonds or may deal with Green Bank as fully and with the same rights as if it were not the Trustee. The Trustee may act as depository for, and permit any of its officers or directors to act as a member of, or in any other capacity with respect to, Green Bank or any committee formed to protect the rights of Bondholders or to effect or aid in any reorganization growing out of the enforcement of the Bonds or this Indenture, whether or not such committee shall represent the owners of a majority in principal amount of the Outstanding Bonds in respect of which any such action is taken.

Section 1008. Resignation of Trustee. The Trustee, or any successor thereof, may at any time resign and be discharged of its duties and obligations hereunder by giving not less than thirty (30) days' written notice to Green Bank and the Bondholders, specifying the date when such resignation shall take effect, provided such resignation shall not take effect until a successor shall have been appointed by Green Bank or a court of competent jurisdiction as provided in Section 1010 and shall have accepted such appointment.

Section 1009. Removal of Trustee. The Trustee, or any successor thereof, may be removed, upon thirty (30) days' written notice, with or without cause at any time by Green Bank, if no Event of Default under this Indenture shall have occurred and be continuing, or upon an Event of Default under this Indenture by the owners of a majority in principal amount of Outstanding Bonds, excluding any Bonds held by or for the account of Green Bank, by an instrument or concurrent instruments in writing signed and acknowledged by such Bondholders or by their attorneys-in-fact duly authorized and delivered to Green Bank, provided that such removal shall not take effect until a successor is appointed. Such removal shall take effect upon the date a successor shall have been appointed by Green Bank or a court of competent jurisdiction as provided in Section 1010 and shall have accepted such appointment. Copies of each instrument providing for any such removal shall be delivered by Green Bank to the Trustee and any successor thereof.

Section 1010. Successor Trustee. (a) In case the Trustee, or any successor thereof, shall resign or shall be removed or shall become incapable of acting, or shall be adjudged a bankrupt or insolvent, or if a receiver, liquidator or conservator of the Trustee or of its property shall be appointed, or if any public officer shall take charge or control of the Trustee, or of its property or affairs, Green Bank shall forthwith appoint a Trustee to act. Notice of any such appointment shall be delivered by Green Bank to the Trustee so appointed and the predecessor Trustee. Green Bank shall give or cause to be given written notice of any such appointment to the Bondholders.

(b) If in a proper case no appointment of a successor shall be made within forty-five (45) days after the giving of written notice in accordance with Section 1008 or after the occurrence of any other event requiring or authorizing such appointment, the Trustee or any Bondholder may apply to any court of competent jurisdiction for the appointment of such a successor, and such court may thereupon, after such notice, if any, as such court may deem proper, appoint such successor.

(c) Any successor appointed under the provisions of this Section shall be a bank or trust company or national banking association which is able to accept the appointment on reasonable and customary terms and authorized by law to perform all the duties required by this Indenture, which is approved by Green Bank (unless an Event of Default under Section 901 exists, in which case a successor shall be appointed by the owners of a majority in principal amount of Outstanding Bonds or by a court pursuant to the above paragraph, or unless a successor is appointed by a court pursuant to the above paragraph) and which has a combined capital and surplus aggregating at least $50,000,000 (or such other financial resources acceptable to Green Bank in its sole discretion), if there be such a bank or trust company or national banking association willing to serve as Trustee hereunder.

Section 1011. Transfer of Rights and Property to Successor Trustee. Any successor Trustee appointed under the provisions of Section 1010 shall execute, acknowledge and deliver to its predecessor, and also to Green Bank, an instrument accepting such appointment, and thereupon such successor, without any further act, deed or conveyance shall become fully vested with all moneys, estates, properties, rights, powers, duties and Bonds of its predecessor hereunder, with like effect as if originally appointed as Trustee. However, the Trustee then ceasing to act shall nevertheless, on request by Green Bank or of such successor, execute, acknowledge and deliver such instruments of conveyance and further assurance and do such other things as may reasonably be required for more fully and certainly vesting and confirming in such successor all the right, title and interest of such Trustee in and to any property held by it hereunder, and upon payment of its fees and expenses shall pay over, assign and deliver to such successor any moneys or other properties subject to the trusts and conditions herein set forth and subject to any indemnification rights of the Trustee hereunder. Should any deed, conveyance or instrument in writing from Green Bank be required by such successor for more fully and certainly vesting in and confirming to it any such moneys, estates, properties, rights, powers, duties or obligations, any and all such deeds, conveyances and instruments in writing shall, on request, and so far as may be authorized by law, be executed, acknowledged and delivered by Green Bank.

Section 1012. Merger or Consolidation of the Trustee. Any company into which the Trustee may be merged or with which it may be consolidated or any company resulting from any merger or consolidation to which it shall be a party or any company to which such Trustee may sell or transfer all or substantially all of its corporate trust business, provided such company shall be a bank or trust company or national banking association qualified to be a successor to such Trustee under the provisions of Section 1010 (except that the approval of Green Bank shall not be required), shall be the successor to such Trustee, without any further act, deed or conveyance.

Section 1013. Several Capacities. Anything in this Indenture to the contrary notwithstanding, the same entity may serve hereunder as the Trustee and in any other capacities, to the extent permitted by law. The Trustee is hereby appointed to serve initially in the capacity of Trustee.

Section 1014. Co-Trustees.

(a) With the consent of Green Bank, for the purpose of meeting the legal requirements of any applicable jurisdiction, the Trustee shall have power to appoint one or more persons to act as co-trustee under this Indenture, with such powers as may be provided in the instrument of appointment, and to vest in such person or persons any property, title, right or power deemed necessary or desirable, subject to the remaining provisions of this Section.

(b) Each co-trustee shall, to the extent permitted by applicable law, be appointed subject to the following terms:

(i) The rights, powers, duties and obligations conferred or imposed upon any such trustee shall not be greater than those conferred or imposed upon the Trustee, and such rights and powers shall be exercisable only jointly with the Trustee, except to the extent that, under any law of any jurisdiction in which any particular act or acts are to be performed, the Trustee shall be incompetent or unqualified to perform such act or acts, in which event such rights and powers shall be exercised by such co-trustee subject to the provisions of subsection (b) (iv) of this Section.

(ii) The Trustee may at any time, by an instrument in writing executed by it and with written notice to Green Bank, accept the resignation of or remove any co-trustee appointed under this Section.

(iii) No co-trustee under this Indenture shall be liable by reason of any act or omission of any other co-trustee appointed under this Indenture.

(iv) No power given to such co-trustee shall be separately exercised hereunder by such co-trustee except with the consent in writing of the Trustee, anything herein contained to the contrary notwithstanding.

Section 1015. Trustee May Fix Record Date. The Trustee may, but shall not be obligated to, fix a record date for the purpose of determining the Bondholders entitled to give their consent or take any other action pursuant to this Indenture. If a record date is fixed, then at such record date only those persons (or their duly designated proxies), shall be entitled to give such consent or to revoke any consent previously given or to take any such action, whether or not such persons continue to be Bondholders after such record date. No such consent shall be valid or effective for more than one hundred twenty (120) days after such record date.

Section 1016. When Bonds Disregarded. In determining whether the Bondholders of the required principal amount of Bonds have concurred in any direction, waiver or consent, Bonds owned by Green Bank or by any entity directly or indirectly controlling or controlled by or under direct or indirect common control with Green Bank shall be disregarded and deemed not to be Outstanding, except that, for the purpose of determining whether the Trustee shall be protected in relying on any such direction, waiver or consent, only Bonds which the Trustee knows are so owned shall be so disregarded. Also, subject to the foregoing, only Bonds Outstanding at the time shall be considered in any such determination.

Section 1017. Compliance with CGS Section 4a-60 and 4a-60a.

(a) CGS Section 4a-60. In accordance with Connecticut General Statutes Section 4a-60(a), as amended, and to the extent required by Connecticut law, the Trustee agrees and warrants as follows: (1) in the performance of this Indenture it will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, status as a veteran, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by the Trustee that such disability prevents performance of the work involved, in any manner prohibited by the laws of the United States or of the State of Connecticut and further to take affirmative action to insure that applicants with job-related qualifications are employed and that employees are treated when employed without regard to their race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, status as a veteran, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by the Trustee that such disability prevents performance of the work involved; (2) in all solicitations or advertisements for employees placed by or on behalf of the Trustee, to state that it is an "affirmative action-equal opportunity employer" in accordance with regulations adopted by the Commission on Human Rights and Opportunities (the "CHRO"); (3) to provide each labor union or representative of workers with which the Trustee has a collective bargaining agreement or other contract or understanding and each vendor with which the Trustee has a contract or understanding, a notice to be provided by the CHRO advising the labor union or workers' representative of the Trustee's commitments under Connecticut General Statutes Section 4a-60, and to post copies of the notice in conspicuous places available to employees and applicants for employment; (4) to comply with each provision of Connecticut General Statutes Sections 4a-60, 46a-68e and 46a-68f and with each regulation or relevant order issued by the CHRO pursuant to Connecticut General Statutes Sections 46a-56, 46a-68e, 46a-68f and 46a-86; (5) to provide the CHRO with such information requested by the CHRO, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the Trustee as relate to the provisions of Connecticut General Statutes Sections 4a-60a and 46a-56; and (6) to include provisions (1) through (5) of this section in every subcontract or purchase order entered into by the Trustee in order to fulfill any obligation of this Indenture, and such provisions shall be binding on a subcontractor, vendor or manufacturer unless exempted by regulations or order of the CHRO and take such action with respect to any such subcontract or purchase order as the CHRO may direct as a means of enforcing such provisions in accordance with Connecticut General Statutes Section 4a-60.

(b) CGS Section 4a-60a. In accordance with Connecticut General Statutes Section 4a-60a(a), as amended, and to the extent required by Connecticut law, the Trustee agrees and warrants as follows: (1) that in the performance of this Indenture, the Trustee will not discriminate or permit discrimination against any person or group of persons on the grounds of sexual orientation, in any manner prohibited by the laws of the United States or of the State of Connecticut, and that employees are treated when employed without regard to their sexual orientation; (2) to provide each labor union or representative of workers with which the Trustee has a collective bargaining agreement or other contract or understanding and each vendor with which the Trustee has a contract or understanding, a notice to be provided by the CHRO advising the labor union or workers' representative of the Trustee's commitments under Connecticut General Statutes Section 4a-60a, and to post copies of the notice in conspicuous places available to employees and applicants for employment; (3) to comply with each provision of Connecticut General Statutes Section 4a-60a and with each regulation or relevant order issued by the CHRO pursuant to Connecticut General Statutes Section 46a-56; (4) to provide the CHRO with such information requested by the CHRO, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the Trustee which relate to the provisions of Connecticut General Statutes Sections 4a-60a and 46a-56; and (5) to include provisions (1) through (4) of this section in every subcontract or purchase order entered into by the Trustee in order to fulfill any obligation of this Indenture, and such provisions shall be binding on a subcontractor, vendor or manufacturer unless exempted by regulations or orders of the CHRO and take such action with respect to any such subcontract or purchase order as the CHRO may direct as a means of enforcing such provisions in accordance with Connecticut General Statutes Section 4a-60a.

(c) Required Submissions. The Trustee agrees and warrants that (1) it has delivered to Green Bank an affidavit signed under penalty of false statement by a chief executive officer, president, chairperson, member, or other corporate officer duly authorized to adopt corporate or company policy in the form as required under the Connecticut General Statutes; (2) if there is a change in the information contained in the most recently filed affidavit, the Trustee will submit an updated affidavit not later than the earlier of the execution of a new contract with the State or a political subdivision of the State or thirty days after the effective date of such change; and (3) the Trustee will deliver an affidavit to Green Bank annually, not later than fourteen days after the twelve-month anniversary of the most recently filed affidavit, stating that the affidavit on file with Green Bank is current and accurate.

Section 1018. Compliance with CGS Section 9-612(g)(2). For all State contracts as defined in Public Act 07-1 having a value in a calendar year of $50,000 or more or a combination or series of such agreements or contracts having a value of $100,000 or more, the Trustee's authorized signatory to this Indenture expressly acknowledges receipt of the State Elections Enforcement Commission's notice advising State contractors of State campaign contribution and solicitation prohibitions, and will inform its principals of the contents of the notice.

ARTICLE XI

SATISFACTION AND DISCHARGE OF INDENTURE

Section 1101. Payment of Bonds; Defeasance. If (i) Green Bank shall deliver to the Trustee for cancellation all Bonds theretofore authenticated (other than any Bonds which shall have been mutilated, destroyed, lost or stolen and which shall have been replaced or paid) and not theretofore cancelled, or (ii) upon payment of all Bonds not theretofore cancelled or delivered to the Trustee for cancellation, or (iii) Green Bank shall deposit with the Trustee as trust funds cash or Defeasance Obligations or both, sufficient to pay at maturity or upon redemption all Bonds not theretofore cancelled or delivered to the Trustee for cancellation, including without limitation principal and interest due or to become due to such date of maturity or redemption date, as the case may be, and if in any case Green Bank shall also pay or cause to be paid all other sums payable hereunder by Green Bank, then this Indenture shall cease to be of further effect, and the Trustee, on demand of Green Bank and at the cost and expense of Green Bank, shall execute proper instruments acknowledging satisfaction of and discharging this Indenture. Green Bank shall cause a report to be prepared by a firm nationally recognized for providing verification services regarding the sufficiency of funds for such discharge and satisfaction, upon which report the Trustee may rely. Green Bank hereby agrees to reimburse the Trustee for any costs or expenses theretofore and thereafter reasonably and properly incurred by the Trustee in connection with this Indenture or such Bonds.

Section 1102. Payment of Bonds after Discharge of Lien. Notwithstanding the discharge of the lien hereof as in this Article, the Trustee shall nevertheless retain such rights, powers and duties hereunder as may be necessary and convenient for the payment of amounts due or to become due on the Bonds and the registration, transfer, exchange and replacement of Bonds as provided in this Indenture. Nevertheless, any moneys held by the Trustee or any paying agent for the payment of the principal of, premium, if any or interest on any Bond remaining unclaimed for two years after the principal of all Bonds have become due and payable, whether at maturity or upon proceedings for redemption or by declaration as provided herein, shall, subject to applicable law, then be paid to Green Bank and the Bondholders or coupons not theretofore presented for payment shall thereafter be entitled to look only to Green Bank for payment thereof as unsecured creditors and all liability of the Trustee or any paying agent with respect to such moneys shall thereupon cease.

ARTICLE XII

MISCELLANEOUS PROVISIONS

Section 1201. Evidence of Signatures of Bondholders and Ownership of Bonds.

(a) Any request, consent, revocation of consent or other instrument which this Indenture may require or permit to be signed and executed by the Bondholders may be in one or more instruments of similar tenor, and shall be signed or executed by such Bondholders in person or by their attorneys-in-fact appointed in writing. Proof of the execution of any such instrument, or of an instrument appointing any such attorneys, shall be sufficient for any purpose of this Indenture (except as otherwise therein expressly provided) if made in any manner satisfactory to the Trustee. Proof of the holding of Bonds on any date shall be provided by the registration books of Green Bank maintained by the Trustee.

(b) Any request or consent by the owner of any Bond shall bind all future owners of such Bond and any Bond issued in exchange therefor in respect of anything done or suffered to be done by Green Bank or any Trustee in accordance therewith.

Section 1202. Governing Law. This Indenture shall be construed and adjudicated in accordance with the laws of the State of Connecticut applicable to contracts made and performed in the State of Connecticut, without giving effect to any choice of law rules or provisions.

Section 1203. Counterparts. This Indenture may be executed in several counterparts, each of which shall be an original and all of which shall constitute one instrument.

Section 1204. Parties Interested Herein. Nothing in this Indenture expressed or implied is intended or shall be construed to confer upon, or to give to, any person or corporation, other than Green Bank, the Trustee, the State and the Bondholders, any right, remedy or claim under or by reason of this Indenture of any covenant, condition or stipulation thereof; and all covenants, stipulations, promises and agreements in this Indenture contained by and on behalf of Green Bank shall be for the sole and exclusive benefit of Green Bank, the Trustee, and the Bondholders.

Section 1205. No Recourse on the Bonds. No recourse shall be had for the payment of the principal of or interest on the Bonds or for any claim based thereon or on this Indenture against any officer of Green Bank or any person executing the Bonds, or any employee or agent of the foregoing.

Section 1206. Successors and Assigns. Whenever in this Indenture Green Bank is named or referred to, it shall be deemed to include its successors and assigns and all the covenants and agreements in this Indenture contained by or on behalf of Green Bank shall bind and inure to the benefit of its respective successors and assigns whether so expressed or not.

Section 1207. Severability of Invalid Provisions. If any one or more of the covenants or agreements provided in this Indenture on the part of Green Bank or the Trustee to be performed should be contrary to law, then such covenant or covenants, agreement or agreements, shall be deemed severable from the remaining covenants and agreements, and shall in no way affect the validity of the other provisions of this Indenture.

Section 1208. Payments on Saturdays, Sundays and Holidays. In any case where the date of any payment required to be made under this Indenture shall not be a Business Day, then such payment shall not be made on such date but shall be made on the next succeeding Business Day, with the same effect as if made on such prior date.

Section 1209. Effective Date This Indenture shall take effect upon its execution by the Authorized Representative of Green Bank.

Section 1210. Notice

(a) Except as provided in subsection (b) of this Section, unless otherwise expressly specified or permitted by the terms of this Indenture, all notices shall be in writing, sent by registered or certified mail, postage prepaid, or by national overnight courier service, or by personal delivery, or by Electronic Means (as defined in subsection (b) of this Section) with a pdf attachment of such notice (with prompt telephonic confirmation of receipt), to the following addresses, or to such other address as Green Bank or the Trustee shall from time to time designate by notice in writing to the other.

If to Green Bank:

Connecticut Green Bank
845 Brook Street
Rocky Hill, CT 06067
Attn: President

If to the Trustee:

The Bank of New York Mellon Trust Company, N.A.
2 North LaSalle Street, 7th Floor
Chicago, Illinois 60602
Attn: ______________________________________

If to the State:

Office of the Treasurer
165 Capitol Avenue
Hartford, Connecticut 06106
Attn: Assistant Treasurer for Debt Management

(b) The Trustee shall have the right to accept and act upon instructions, including funds transfer instructions ("Instructions") given pursuant to this Indenture and related financing documents and delivered using Electronic Means; provided, however, that Green Bank shall provide to the Trustee an incumbency certificate listing officers with the authorization to provide such Instructions ("Authorized Officers") and containing specimen signatures of such Authorized Officers, which incumbency certificate shall be amended by Green Bank whenever a person is to be added or deleted from the listing. If Green Bank elects to give the Trustee Instructions using Electronic Means and the Trustee in its discretion elects to act upon such Instructions, the Trustee's reasonable understanding of such Instructions shall be deemed controlling. Green Bank understands and agrees that the Trustee cannot determine the identity of the actual sender of such Instructions and that the Trustee shall conclusively presume that directions that purport to have been sent by an Authorized Officer listed on the incumbency certificate provided to the Trustee have been sent by such Authorized Officer. Green Bank shall be responsible for ensuring that only Authorized Officers transmit such Instructions to the Trustee and that Green Bank and all Authorized Officers are solely responsible to safeguard the use and confidentiality of applicable user and authorization codes, passwords and/or authentication keys upon receipt by Green Bank. The Trustee shall not be liable for any losses, costs or expenses arising directly or indirectly from the Trustee's reliance upon and compliance with such Instructions notwithstanding such directions conflict or are inconsistent with a subsequent written instruction. Green Bank agrees: (i) to assume all risks arising out of the use of Electronic Means to submit Instructions to the Trustee, including without limitation the risk of the Trustee acting on unauthorized Instructions, and the risk of interception and misuse by third parties; (ii) that it is fully informed of the protections and risks associated with the various methods of transmitting Instructions to the Trustee and that there may be more secure methods of transmitting Instructions than the method(s) selected by Green Bank; (iii) that the security procedures (if any) to be followed in connection with its transmission of Instructions provide to it a commercially reasonable degree of protection in light of its particular needs and circumstances; and (iv) to notify the Trustee immediately upon learning of any compromise or unauthorized use of the security procedures. "Electronic Means" shall mean the following communications methods: e-mail, facsimile transmission, secure electronic transmission containing applicable authorization codes, passwords and/or authentication keys issued by the Trustee, or another method or system specified by the Trustee as available for use in connection with its services hereunder.

SIGNATURE PAGE

IN WITNESS WHEREOF, the President of the Connecticut Green Bank, and the Trustee, in acceptance of the trusts created hereunder, has caused this Indenture to be signed in its corporate name by its officer thereunder duly authorized, all as of the day and year first written above.

CONNECTICUT GREEN BANK

BY:____

Bryan Garcia
President

THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., as Trustee

BY:____

____

Its: __________________________________

SCHEDULE 1

Connecticut Green Bank
State Supported Solar Home Renewable Energy Credit, Green Liberty Bonds, Series 2020

Dated: July 29, 2020

Interest Payment Dates: May 15 and November 15 of each year, commencing November 15, 2020.

Principal Payment Dates and Amounts:

Serial Bonds: $11,441,000

Maturity	Principal Amount	Interest Rate	Price
November 15, 2021	$1,145,000	0.950%	100.000%
November 15, 2022	1,148,000	1.080	100.000
November 15, 2023	1,147,000	1.250	100.000
November 15, 2024	1,146,000	1.450	100.000
November 15, 2025	1,145,000	1.600	100.000
November 15, 2026	1,144,000	1.900	100.000
November 15, 2027	1,144,000	2.000	100.000
November 15, 2028	1,143,000	2.200	100.000
November 15, 2029	1,141,000	2.300	100.000
November 15, 2030	1,138,000	2.400	100.000

$5,354,000 2.900% Term Bond due November 15, 2035, Price: 100.000%

Term Bond Mandatory Sinking Fund Payment Dates and Amounts:

Date (November 15)	Sinking Fund Installment
2031	$1,139,000
2032	1,151,000
2033	1,164,000
2034	1,020,000
2035[1]	880,000

[1] Final maturity.

EXHIBIT A

[FORM OF BOND]

[THIS PAGE INTENTIONALLY LEFT BLANK]

APPENDIX I-B

FORM OF LEGAL OPINION OF BOND COUNSEL AND TAX STATUS

The legal opinion of the firm of Shipman & Goodwin LLP of Hartford, Connecticut, Bond Counsel, will be furnished when the Bonds are delivered, and a copy of the legal opinion will be included in the record of proceedings of Green Bank authorizing the Bonds. The opinion will be dated and given on and will speak only as of the date of original delivery of the Bonds to the Underwriters.

July 29, 2020

Connecticut Green Bank
845 Brook Street
Rocky Hill, Connecticut 06067

Ladies and Gentlemen:

We have acted as bond counsel in connection with the issuance by the Connecticut Green Bank ("Green Bank") of its $16,795,000 State Supported Solar Home Renewable Energy Credit, Green Liberty Bonds, Series 2020 (Federally Taxable) (Climate Bond Certified) dated July 29, 2020, maturing on November 15 of each year from 2021 through 2030 and in 2035 (the "Bonds").

Green Bank is a body politic and corporate constituting a public instrumentality and political subdivision of the State of Connecticut (the "State"), operating and existing under the Constitution of the State (the "Constitution") and laws of the State. The Bonds are authorized to be issued pursuant to Sections 16-245n and 16-245kk through 16-245mm, inclusive, of the Connecticut General Statutes, as amended (the "Act"), the resolutions of Green Bank's Board of Directors dated March 23, 2020 and June 26, 2020 (the "Authorizing Resolutions"), and the Indenture of Trust dated as of July 1, 2020 (the "Indenture") between Green Bank and The Bank of New York Mellon Trust Company, N.A., as Trustee. Terms used but not defined herein shall have the meanings ascribed thereto in the Indenture.

In connection with our representation of Green Bank as bond counsel with respect to the Bonds, we have examined the executed Bonds and certified records of proceedings of Green Bank authorizing the Bonds. In addition, we have examined and relied on originals or copies, identified to us as genuine, of such other documents, instruments or records, and have made such investigations of law as we considered necessary or appropriate for the purposes of this opinion. In making the statements contained in this opinion, we have assumed, without independently verifying, the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to original documents of documents submitted to us as certified or photostatic copies, and the legal capacity and authority of all persons executing such documents.

On the basis of our review noted above and subject to the qualifications set forth herein, we are of the opinion that:

1. Under the Act, Green Bank exists as a body politic and corporate and a public instrumentality and political subdivision of the State, performing an essential public function with good right and lawful authority, among other things, to carry out its obligations with respect to the Residential Solar Incentive Program, and to provide funds therefor by the execution of the Indenture and the issuance and sale of the Bonds, and to perform its obligations under the terms and conditions of the Indenture, including collecting and enforcing the collection of Revenues as covenanted in and as defined in the Indenture, except to the extent that such enforcement may be limited by bankruptcy, insolvency, and other laws affecting creditors' rights and remedies heretofore or hereafter enacted, by public policy and by the application of equitable principles.

2. The Indenture has been duly authorized, executed and delivered by Green Bank and, assuming the due authorization, execution and delivery of the Indenture by the Trustee, is valid and binding upon Green Bank and enforceable in accordance with its terms.

3. The Bonds are valid and legally binding special obligations of Green Bank payable solely from the Trust Estate pledged therefor under the Indenture, and are entitled to the benefit, protection, and security of the provisions, covenants, and agreements of the Indenture. The Bonds do not constitute a general obligation of Green Bank nor are they guaranteed by Green Bank. Green Bank has no taxing power.

4. The Indenture creates the valid pledge of and the valid lien upon the Trust Estate as defined therein, including the monies and securities held or set aside or to be set aside and held in the Funds and Accounts established thereunder, which the Indenture purports to create, subject only to the provisions of the Indenture permitting the application thereof for or to the purposes and on the terms and conditions as set forth in the Indenture.

5. Pursuant to the Act, neither the State nor any political subdivision thereof, shall be obligated to pay the principal of or the interest on the Bonds. Neither the full faith and credit nor the taxing power of the State or of any political subdivision thereof, is pledged to the payment of the principal of or the interest on the Bonds. The issuance of the Bonds shall not directly, indirectly or contingently obligate the State or any political subdivision thereof to levy or to pledge any form of taxation or to make any appropriation for the payment of the Bonds.

6. Under existing law, interest on the Bonds is included in gross income of the owners thereof for federal income tax purposes pursuant to the Internal Revenue Code of 1986, as amended.

7. Under existing statutes, interest on the Bonds is excluded from Connecticut taxable income for purposes of the Connecticut income tax on individuals, trusts, and estates, and such interest is excluded from amounts on which the net Connecticut minimum tax is based in the case of individuals, trusts and estates required to pay the alternative minimum tax imposed under the Code with respect to individuals, trusts and estates. Interest on the Bonds is included in gross income for purposes of the Connecticut corporation business tax.

We express no opinion herein as to the accuracy, adequacy or completeness of the Official Statement relating to the Bonds.

The enforceability of rights and remedies with respect to the Bonds and the Indenture may be limited by bankruptcy, insolvency, and other laws affecting creditors' rights and remedies heretofore or hereafter enacted, by public policy, and by the application of equitable principles.

This opinion is given as of the date hereof and we assume no obligation to revise or supplement this opinion to reflect any change in facts or circumstances that may hereafter come to our attention or any changes in law that may hereafter occur.

Very truly yours,

Shipman & Goodwin LLP

TAX STATUS - CERTAIN ADDITIONAL FEDERAL TAX CONSEQUENCES

The following is a brief discussion of certain federal income tax matters with respect to the Bonds. It does not purport to deal with all aspects of federal taxation that may be relevant to a particular owner of a Bond. Prospective owners of the Bonds, particularly those that may be subject to special rules, are advised to consult their own tax advisors regarding the federal tax consequences of owning and disposing of the Bonds.

Federal Income Taxes

In the opinion of Bond Counsel, under existing law, interest on the Bonds is included in gross income for federal income tax purposes pursuant to the Internal Revenue Code of 1986, as amended (the "Code").

United States Tax Consequences

The following is a summary of certain United States federal income tax consequences resulting from the beneficial ownership of the Bonds by certain persons. This summary does not consider all possible federal income tax consequences of the purchase, ownership, or disposition of the Bonds, and is not intended to reflect the individual tax position of any beneficial owner. Moreover, except as expressly indicated, this summary is limited to those persons who purchase a Bond at its issue price, which is the first price at which a substantial amount of the Bonds is sold to the public, and who hold Bonds as "capital assets" within the meaning of the Code (generally, property held for investment). This summary does not address beneficial owners that may be subject to special tax rules, such as banks, insurance companies, dealers in securities or currencies, purchasers that hold Bonds as a hedge against currency risks or as part of a straddle with other investments or as part of a "synthetic security" or other integrated investment (including a "conversion transaction") comprising a bond and one or more other investments, or United States Holders (as defined below) that have a "functional currency" other than the United States dollar. This summary is applicable only to a person (a "United States Holder") who or that is the beneficial owner of Bonds and is (a) an individual citizen or resident of the United States, (b) a corporation or partnership or other entity created or organized under the laws of the United States or any State (including the District of Columbia), or (c) a person otherwise subject to federal income taxation on its worldwide income. This summary is based on the United States tax laws and regulations currently in effect and as currently interpreted and does not take into account possible changes in the tax laws or interpretations thereof any of which may be applied retroactively. Except as provided below, it does not discuss the tax laws of any state, local, or foreign governments.

United States Holders

Payments of Stated Interest. In general, for a United States Holder, interest on a Bond will be taxable as ordinary income at the time it is received or accrued, depending on the beneficial owner's method of accounting for tax purposes.

Bonds Purchased at a Market Discount. A Bond will be treated as acquired at a market discount (market discount bond) if the amount for which a United States Holder purchased the Bond is less than the Bond's adjusted issue price, unless such difference is less than a specified de minimis amount. In general, any payment of principal or any gain recognized on the maturity or disposition of a market discount bond will be treated as ordinary income to the extent that such gain does not exceed the accrued market discount on the Bond. Alternatively, a United States Holder of a market discount bond may elect to include market discount in income currently over the life of the market discount bond. That election applies to all debt instruments with market discount acquired by the electing United States Holder on or after the first day of the first taxable year to which the election applies and may not be revoked without the consent of the Internal Revenue Service ("IRS"). If an election is made to include market discount in income currently, the tax basis of the Bond in the hands of the United States Holder will be increased by the market discount thereon as such discount is included in income.

Market discount generally accrues on a straight-line basis unless the United States Holder elected to accrue such discount on a constant yield-to-maturity basis. That election is applicable only to the market discount bond with respect to which it is made and is irrevocable. A United States Holder of a market discount bond that does not elect to include market discount in income currently generally will be required to defer deductions for interest on borrowings allocable to the Bond in an amount not exceeding the accrued market discount on such Bond until maturity or disposition of the Bond.

Purchase, Sale, Exchange, and Retirement of Bonds. A United States Holder's tax basis in a Bond generally will equal its cost, increased by any market discount included in the United States Holder's income with respect to the Bond. A United States Holder generally will recognize gain or loss on the sale, exchange, or retirement of a Bond equal to the difference between the amount realized on the sale or retirement (not including any amount attributable to accrued but unpaid interest) and the United States Holder's tax adjusted basis in the Bond. Except to the extent described above under *Bonds Purchased at a Market Discount*, gain or loss recognized on the sale, exchange or retirement of a Bond will be capital gain or loss and will be long-term capital gain or loss if the Bond was held for more than one year. The material modification of the terms of any Bond may result in a deemed reissuance thereof, in which event a United States Holder may recognize taxable gain or loss without any corresponding receipt of proceeds.

Backup Withholding. United States Holders may be subject to backup withholding on payments of interest and, in some cases, disposition proceeds of the Bonds, if they fail to provide an accurate Form W-9, "Request for Taxpayer Identification Number and Certification," or a valid substitute form, or have been notified by the IRS of a failure to report all interest and dividends, or otherwise fail to comply with the applicable requirements of backup withholding rules. Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules will be allowed as a credit against the United States Holder's United States federal income tax liability (or refund) provided the required information is timely furnished to the IRS. Prospective United States Holders should consult their tax advisors concerning the application of backup withholding rules.

Medicare Tax Affecting United States Holders. For taxable years beginning after December 31, 2012, a United States Holder that is an individual or estate, or a trust that does not fall into a special class of trusts that is exempt from such tax, will be subject to a Medicare tax on the lesser of (1) the United States Holder's "net investment income" for the taxable year and (2) the excess of the United States Holder's modified adjusted gross income for the taxable year over a certain threshold. A United States Holder's net investment income will generally include its interest income and its net gains from the disposition of the Bonds, unless such interest income or net gains are derived in the ordinary course of the conduct of a trade or business (other than a trade or business that consists of certain passive or trading activities). A United States Holder that is an individual, estate, or trust, should consult its own tax advisor regarding the applicability of the Medicare tax.

Information Reporting

In general, information reporting requirements will apply with respect to payments to a United States Holder of principal and interest (and with respect to annual accruals of original issue discount) on the Bonds, and with respect to payments to a United States Holder of any proceeds from a disposition of the Bonds. This information reporting obligation, however, does not apply with respect to certain United States Holders including corporations, tax-exempt organizations, qualified pension and profit sharing trusts, and individual retirement accounts. In the event that a United States Holder subject to the reporting requirements described above fails to supply its correct taxpayer identification number in the manner required by applicable law or is notified by the IRS that it has failed properly to report payments of, interest and dividends, a backup withholding tax (currently at a rate of 24%) generally will be imposed on the amount of any interest and principal and the amount of any sales proceeds received by the United States Holder on or with respect to the Bonds.

Any payments of interest and original issue discount on the Bonds to a Non-United States Holder generally will be reported to the IRS and to the Non-United States Holder, whether or not such interest or original issue discount is exempt from United States withholding tax pursuant to a tax treaty or the portfolio interest exemption. Copies of these information returns also may be made available under the provisions of a specific treaty or agreement to the tax authorities of the country in which the payee resides.

Information reporting requirements will apply to a payment of the proceeds of the disposition of a Bond by or through (a) a foreign office of a custodian, nominee, other agent, or broker that is a United States person, (b) a foreign custodian, nominee, other agent, or broker that derives 50% or more of its gross income for certain periods from the conduct of a trade or business in the United States, (c) a foreign custodian, nominee, other agent, or broker that is a controlled foreign corporation for United States federal income tax purposes, or (d) a foreign partnership if at any time during its tax year one or more of its partners are United States persons who, in the aggregate, hold more than 50% of the income or capital interest of the partnership or if, at any time during its taxable year, the partnership is engaged in the conduct of a trade or business within the United States, unless the custodian, nominee, other agent, broker, or foreign partnership has documentary evidence in its records that the beneficial owner is not a United States person and certain other conditions are met, or the beneficial owner otherwise establishes an exemption.

The federal income tax discussion set forth above is included for general information only and may not be applicable depending upon a beneficial owner's particular situation. Beneficial owners should consult their tax advisors with respect to the tax consequences of the purchase, ownership, and disposition of the Bonds, including the tax consequences under state, local, foreign, and other tax laws and the possible effects of changes in federal or other tax laws.

State Taxes

In the opinion of Bond Counsel, under existing statutes, interest on the Bonds is excluded from Connecticut taxable income for purposes of the Connecticut income tax on individuals, trusts and estates and is excluded from amounts on which the net Connecticut minimum tax is based in the case of individuals, trusts and estates required to pay the federal alternative minimum tax.

Interest on the Bonds is included in gross income for purposes of the Connecticut corporation business tax.

Owners of the Bonds should consult their tax advisors with respect to other applicable state and local tax consequences of ownership of the Bonds and the disposition thereof, including the extent to which gains and losses from the sale or exchange of Bonds held as capital assets reduce and increase, respectively, amounts taken into account in computing the Connecticut income tax on individuals, trusts and estates and the net Connecticut minimum tax on such taxpayers who are also required to pay the federal alternative minimum tax.

General

The opinions of Bond Counsel are rendered as of their date and Bond Counsel assumes no obligation to update or supplement their opinions to reflect any facts or circumstances that may come to its attention or any changes in law or the interpretation thereof that may occur after the date of its opinions. The discussion above does not purport to address all aspects of federal, state or local taxation that may be relevant to a particular owner of a Bond. Prospective owners of the Bonds, particularly those who may be subject to special rules, are advised to consult their tax advisors regarding the federal, state and local tax consequences of owning and disposing of the Bonds.

[THIS PAGE INTENTIONALLY LEFT BLANK]

FORM OF CONTINUING DISCLOSURE AGREEMENT—GREEN BANK

In accordance with the requirements of Rule 15c2-12 promulgated by the Securities and Exchange Commission, the Green Bank will agree, pursuant to a Continuing Disclosure Agreement for the Series 2020 Bonds to be executed by the Green Bank substantially in the following form, to provide, or cause to be provided, (i) certain annual financial information and operating data, (ii) timely notice of the occurrence of certain events with respect to the Series 2020 Bonds, and (iii) timely notice of a failure by the Green Bank to provide the required annual financial information on or before the date specified in the Continuing Disclosure Agreement for the Series 2020 Bonds.

Continuing Disclosure Agreement

This Continuing Disclosure Agreement (the "Agreement") is made as of July 29, 2020 by the Connecticut Green Bank (the "Issuer") acting by its undersigned officers, duly authorized, in connection with the issuance of $16,795,000 State Supported Solar Home Renewable Energy Credit, Green Liberty Bonds, Series 2020 (the "Series 2020 Bonds"). The Series 2020 Bonds are being issued pursuant to an Indenture of Trust, dated as of July 1, 2020 (the "Indenture"), between the Issuer and The Bank of New York Mellon Trust Company, N.A., as trustee (the "Trustee").

Section 1. Definitions. For purposes of this Agreement, the following capitalized terms shall have the following meanings:

"Final Official Statement" means Part I of the official statement of the Issuer prepared in connection with the Series 2020 Bonds.

"MSRB" means the Municipal Securities Rulemaking Board established under the Securities Exchange Act of 1934, as amended, or any successor thereto.

"Repository" means the MSRB or any other information repository established pursuant to the Rule as amended from time to time.

"Rule" means Rule 15c2-12 under the Securities Exchange Act of 1934, as of the date of this Agreement.

"SEC" means the Securities and Exchange Commission of the United States, or any successor thereto.

Section 2. Annual and Semi-Annual Financial Information.

(a) The Issuer agrees to provide or cause to be provided to each Repository, in accordance with the provisions of the Rule and of this Agreement, annual financial information and operating data (commencing with information and data for the fiscal year ending June 30, 2020) as follows:

(i) Financial statements of the Issuer for the prior fiscal year, which statements shall be prepared in accordance with generally accepted accounting principles or mandated state statutory principles as in effect from time to time. As of the date of this Agreement, the Issuer prepares its financial statements in accordance with generally accepted accounting principles. The financial statements will be audited.

(ii) To the extent not included in the financial statements described in clause (i) above, the financial information and operating data within the meaning of the Rule described below (with references to the Final Official Statement); provided, however, that references to the Final Official Statement for the Series 2020 Bonds as a means of identifying such financial information and operating data shall not prevent the Issuer from reorganizing such material in subsequent official statements or annual information reports:

(A) the information under the tables entitled: “Composition of SHREC Tranche 3,” “Distribution of SHREC Tranche 3 by Owner,” “Distribution of SHREC Tranche 3 by Utility Company, ” “Distribution of SHREC Tranche 3 by Range of PV System Size (kW-DC),” “Distribution of SHREC Tranche 3 by Host Customer County” and “Distribution of SHREC Tranche 3 by Module Manufacturer” under the heading “THE TRUST ESTATE—SHREC Tranche 3” in the Official Statement as of the prior April 30;

(B) actual Production (MWh) for the prior April 1 to March 30 period; and

(C) actual SHREC Receivables for the prior April 1 to March 30 period, net of Trustee fees, charges and expenses.

(b) The financial statements and other financial information and operating data described above will be provided on or before the date eight months after the close of the fiscal year for which such information is being provided. The Issuer’s fiscal year currently ends on June 30.

(c) Annual financial information and operating data may be provided in whole or in part by cross-reference to other documents available to the public on the MSRB’s Internet site referenced in the Rule as amended from time to time or filed with the SEC. All or a portion of the financial information and operating data may be provided in the form of a comprehensive annual financial report, an annual information statement, or an Annual Report.

(d) In addition, the Green Bank will provide or cause to be provided to each Repository, within thirty (30) days after each May 15 and November 15 (each, an ” Interest Payment Date”), commencing November 15, 2020, a report setting forth a description of the Series 2020 Bonds outstanding, the payments on or redemptions of Series 2020 Bonds on such Interest Payment Date and the distribution of the Revenues (as defined in the Indenture) on such Interest Payment Date.

(e) The Issuer reserves the right (i) to provide financial statements which are not audited if no longer required by law, (ii) to modify from time to time the format of the presentation of such information or data, and (iii) to modify the accounting principles it follows to the extent required by law, by changes in generally accepted accounting principles, or by changes in accounting principles adopted by the Issuer; provided that the Issuer agrees that the exercise of any such right will be done in a manner consistent with the Rule.

Section 3. Event Notice.

The Issuer agrees to provide or cause to be provided, in a timely manner not in excess of ten business days after the occurrence of the event, to each Repository notice of the occurrence of any of the following events with respect to the Series 2020 Bonds:

(a) principal and interest payment delinquencies;

(b) non-payment related defaults, if material;

(c) unscheduled draws on debt service reserves reflecting financial difficulties;

(d) unscheduled draws on credit enhancements reflecting financial difficulties;

(e) substitution of credit or liquidity providers, or their failure to perform;

(f) adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Series 2020 Bonds, or other material events affecting the tax status of the Series 2020 Bonds;

(g) modifications to rights of holders of the Series 2020 Bonds, if material;

(h) Bond calls, if material and tender offers;

(i) Bond defeasances;

(k) release, substitution, or sale of property securing repayment of the Series 2020 Bonds, if material;

(l) rating changes;

(m) bankruptcy, insolvency, receivership or similar event of the Issuer;

(n) the consummation of a merger, consolidation, or acquisition involving the Issuer or the sale of all or substantially all of the assets of the Issuer, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material;

(o) appointment of a successor or additional trustee or the change of name of a trustee, if material;

(p) incurrence of a financial obligation of the Issuer, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a financial obligation of the Issuer, any of which affect security holders, if material; and

(q) default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a financial obligation of the Issuer, any of which reflect financial difficulties.

For purposes of (p) and (q), the term "financial obligation" is defined as a (i) debt obligation, (ii) derivative instrument entered into in connection with or pledged as security or a source of payment for an existing or planned debt obligation, or (iii) guarantee of (i) or (ii). The term financial obligation does not include municipal securities for which a final official statement has been filed with the MSRB pursuant to the Rule.

Section 4. Notice of Failure to Provide Annual Financial Information.

The Issuer agrees to provide or cause to be provided, in a timely manner, to each Repository notice of any failure by the Issuer to provide annual financial information as set forth in Section 2(a) hereof on or before the date set forth in Section 2(b) hereof.

Section 5. Use of Agents.

Annual financial information and operating data and notices to be provided pursuant to this Agreement may be provided by the Issuer or by any agents which may be employed by the Issuer for such purpose from time to time.

Section 6. Termination.

The obligations of the Issuer under this Agreement shall terminate upon the earlier of (i) payment or legal defeasance, at maturity or otherwise, of all of the Series 2020 Bonds, or (ii) such time as the Issuer ceases to be an obligated person with respect to the Series 2020 Bonds within the meaning of the Rule.

Section 7. Enforcement.

The Issuer acknowledges that the undertakings set forth in this Agreement are intended to be for the benefit of, and enforceable by, the beneficial owners from time to time of the Series 2020 Bonds. In the event the Issuer shall fail to perform its duties hereunder, the Issuer shall have the option to cure such failure within a reasonable time (but not exceeding 30 days with respect to the undertakings set forth in Section 2 of this Agreement or five business days with respect to the undertakings set forth in Sections 3 and 4 of this Agreement) from the time the Issuer's President & Chief Executive Officer, or a successor, receives written notice from any beneficial owner of the Series 2020 Bonds of such failure. The present address of the President & Chief Executive Officer is 845 Brook Street, Rocky Hill, CT 06067.

In the event the Issuer does not cure such failure within the time specified above, the beneficial owner of any Series 2020 Bonds shall be entitled only to the remedy of specific performance. The Issuer expressly acknowledges and the beneficial owners are hereby deemed to expressly agree that no monetary damages shall arise or be payable hereunder nor shall any failure to comply with this Agreement constitute an event of default with respect to the Series 2020 Bonds including, without limitation, an Event of Default under the Indenture, or a breach of any duty or obligation of the Trustee under the Indenture.

Section 8. Miscellaneous.

(a) All documents provided by the Issuer to a Repository pursuant to the Issuer's undertakings set forth in Sections 2, 3 and 4 of this Agreement shall be in an electronic format as prescribed by the MSRB from time to time and shall be accompanied by identifying information as prescribed by the MSRB from time to time.

(b) The Issuer shall have no obligation to provide any information, data or notices other than as set forth in this Agreement; provided however, nothing in this Agreement shall be construed as prohibiting the Issuer from providing such additional information, data or notices from time to time as it deems appropriate in connection with the Series 2020 Bonds. If the Issuer elects to provide any such additional information, data or notices, the Issuer shall have no obligation under this Agreement to update or continue to provide further additional information, data or notices of the type so provided.

(c) This Agreement shall be governed by the laws of the State of Connecticut.

(d) Notwithstanding any other provision of this Agreement, the Issuer may amend this Agreement, and any provision of this Agreement may be waived, if (i) such amendment or waiver is made in connection with a change of circumstances that arises from a change in legal requirements, a change in law, or a change in the identity, nature or status of the Issuer, (ii) the provisions of the Agreement as so amended or waived would have complied with the requirements of the Rule, taking into account any amendments or interpretations of the Rule as well as any changes in circumstances, in each case as of the date of such amendment to the Agreement or waiver and (iii) such amendment or waiver is supported by either an opinion of counsel expert in federal securities laws to the effect that such amendment or waiver would not materially adversely affect the beneficial owners of the Series 2020 Bonds or an approving vote by the holders of not less than 51% of the aggregate principal amount of the Series 2020 Bonds then outstanding pursuant to the terms of the Indenture. A copy of any such amendment or waiver will be filed in a timely manner with each Repository. The annual financial information provided on the first date following adoption of any such amendment or waiver will explain, in narrative form, the reasons for the amendment or waiver.

(e) This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, but such counterparts shall together constitute but one and the same instrument.

CONNECTICUT GREEN BANK

By ____________________________
Name: __________________________
Title: __________________________

APPENDIX I-D

FORM OF CONTINUING DISCLOSURE AGREEMENT—STATE

In accordance with the requirements of Rule 15c2-12 promulgated by the Securities and Exchange Commission, the State of Connecticut (the "State") will agree, pursuant to a Continuing Disclosure Agreement for the Series 2020 Bonds to be executed by the State substantially in the following form, to provide, or cause to be provided, (i) certain annual financial information and operating data and (ii) timely notice of a failure by the State to provide the required annual financial information on or before the date specified in the Continuing Disclosure Agreement for the Series 2020 Bonds.

Continuing Disclosure Agreement

This Continuing Disclosure Agreement (this "Agreement") is made as of July 29, 2020 by the State of Connecticut acting by its undersigned officers, duly authorized, in connection with the issuance by the Connecticut Green Bank (the "Issuer") of $16,795,000 State Supported Solar Home Renewable Energy Credit, Green Liberty Bonds, Series 2020 (the "Series 2020 Bonds"). The Series 2020 Bonds are being issued pursuant to an Indenture of Trust, dated as of July 1, 2020 (the "Indenture"), between the Issuer and The Bank of New York Mellon Trust Company, N.A., as trustee (the "Trustee").

Section 1. Definitions. For purposes of this Agreement, the following capitalized terms shall have the following meanings:

"Final Official Statement" means Part II of the official statement of the Issuer prepared in connection with the Series 2020 Bonds.

"MSRB" means the Municipal Securities Rulemaking Board established under the Securities Exchange Act of 1934 as amended, or any successor thereto.

"Repository" means the MSRB or any other information repository established pursuant to the Rule as amended from time to time.

"Rule" means Rule 15c2-12 under the Securities Exchange Act of 1934, as of the date of this Agreement.

"SEC" means the Securities and Exchange Commission of the United States, or any successor thereto.

Section 2. Annual Financial Information.

(a) The State agrees to provide or cause to be provided to each Repository, in accordance with the provisions of the Rule and of this Agreement, annual financial information and operating data (commencing with information and data for the fiscal year ending June 30, 2020) as follows:

(i) Audited financial statements of the State comprising its basic financial statements, currently consisting of the governmental activities, the business-type activities, the aggregate discretely presented component units, each major fund and the aggregate remaining fund information of the State for the prior fiscal year, which statements shall be prepared in accordance with generally accepted accounting principles or mandated state statutory principles as in effect from time to time. As of the date of this Agreement, the State is required to prepare financial statements of its various funds and accounts on a statutory basis (i.e., following the adopted budget and related statutes as described in Part II to the Final Official Statement, under the caption "FINANCIAL PROCEDURES - Accounting Procedures"). As of the date of this Agreement, the State also prepares its financial statements in accordance with generally accepted accounting principles but is not required to do so.

(ii) To the extent not included in the financial statements described in clause (i) above, the financial information and operating data within the meaning of the Rule described below (with references to the Final Official Statement); provided, however, that references to the Final Official Statement for the Series 2020 Bonds as a means of identifying such financial information and operating data shall not prevent the State from reorganizing such material in subsequent official statements or annual information reports:

1. Until such time as the State's only method of presenting its financial statements is substantially in accordance with generally accepted accounting principles ("GAAP"):

    a. General Fund - Summary of Operating Results - Statutory Basis (for most recent fiscal year) (See Table 2 and Appendices II-D-6 and II-D-7).

    b. General Fund - Summary of Operating Results - Statutory Basis vs. GAAP Basis (for most recent fiscal year) (See Table 3).

    c. General Fund - Unreserved Fund Balance - Statutory Basis (as of the end of the most recent fiscal year) (See Table 4 and Appendices II-D-4 and II-D-5).

    d. General Fund - Unreserved Fund Balance - Statutory Basis vs. GAAP Basis (as of the end of the most recent fiscal year) (See Table 5).

2. Statutory Debt Limit (as of end of most recent fiscal year or a later date) (See Table 7).

3. Direct General Obligation Indebtedness - Principal Amount Outstanding (as of end of most recent fiscal year or a later date) (See Table 8).

4. Summary of Principal, Mandatory Sinking Fund Payments, and Interest on Long-Term Direct General Obligation Debt (as of end of most recent fiscal year or a later date) (See Table 10).

5. Outstanding Long-Term Direct General Obligation Debt (as of end of most recent fiscal year) (See Table 11).

6. Authorized But Unissued Direct General Obligation Debt (as of end of most recent fiscal year or a later date) (See Table 12).

7. Statutory General Obligation Bond Authorizations and Reductions (for recent fiscal years, if any legislative action) (See Table 13).

8. Special Capital Reserve Fund Debt (as of end of most recent fiscal year or a later date) (See Table 16).

9. Funding status of the State Employees' Retirement Fund and the Teachers' Retirement Fund.

(b) The financial statements and other financial information and operating data described above will be provided on or before the date eight months after the close of the fiscal year for which such information is being provided. The State's fiscal year currently ends on June 30.

(c) Annual financial information and operating data may be provided in whole or in part by cross-reference to other documents available to the public on the MSRB's Internet Web site referenced in the Rule as amended from time to time or filed with the SEC. All or a portion of the financial information and operating data may be provided in the form of a comprehensive annual financial report or an annual information statement of the State.

(d) The State reserves the right (i) to provide financial statements which are not audited if no longer required by law, (ii) to modify from time to time the format of the presentation of such information or data, and (iii) to modify the accounting principles it follows to the extent required by law, by changes in generally accepted accounting principles, or by changes in mandated state statutory principles as in effect from time to time; provided that the State agrees that the exercise of any such right will be done in a manner consistent with the Rule.

Section 3. Material Events.

The State agrees to provide or cause to be provided, in a timely manner not in excess of ten business days after the occurrence of the event, to each Repository notice of the occurrence of any of the following events:

(a) incurrence of a financial obligation of the State, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a financial obligation of the State, any of which affect security holders, if material; and

(b) default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a financial obligation of the State, any of which reflect financial difficulties.

For purposes of events (a) and (b) above, the term “financial obligation” is defined as a (i) debt obligation, (ii) derivative instrument entered into in connection with or pledged as security or a source of payment for an existing or planned debt obligation, or (iii) guarantee of (i) or (ii). The term financial obligation does not include municipal securities for which a final official statement has been filed with the MSRB pursuant to the Rule.

Section 4. Notice of Failure to Provide Annual Financial Information.

The State agrees to provide or cause to be provided, in a timely manner, to each Repository notice of any failure by the State to provide annual financial information as set forth in Section 2(a) hereof on or before the date set forth in Section 2(b) hereof.

Section 5. Use of Agents.

Annual financial information and operating data and notices to be provided pursuant to this Agreement may be provided by the State or by any agents which may be employed by the State for such purpose from time to time.

Section 6. Termination.

The obligations of the State under this Agreement shall terminate upon the earlier of (i) payment or legal defeasance, at maturity or otherwise, of all of the Series 2020 Bonds, or (ii) such time as the State ceases to be an obligated person with respect to the Series 2020 Bonds within the meaning of the Rule.

Section 7. Enforcement.

The State acknowledges that its undertakings set forth in this Agreement are intended to be for the benefit of, and enforceable by, the beneficial owners from time to time of the Series 2020 Bonds. In the event the State shall fail to perform its duties hereunder, the State shall have the option to cure such failure within a reasonable time (but not exceeding 30 days with respect to the undertakings set forth in Section 2 of this Agreement or five business days with respect to the undertakings set forth in Section 4 of this Agreement) from the time the State’s Assistant Treasurer for Debt Management, or a successor, receives written notice from any beneficial owner of the Series 2020 Bonds of such failure. The present address of the Assistant Treasurer for Debt Management is 165 Capitol Avenue, Hartford, Connecticut 06106.

In the event the State does not cure such failure within the time specified above, the beneficial owner of any Series 2020 Bonds shall be entitled only to the remedy of specific performance. The State expressly acknowledges and the beneficial owners are hereby deemed to expressly agree that no monetary damages shall arise or be payable hereunder nor shall any failure to comply with this Agreement constitute an event of default with respect to the Series 2020 Bonds, including, without limitation, an Event of Default under the Indenture or a breach of any duty or obligation of the Trustee under the Indenture.

Section 8. Miscellaneous.

(a) All documents provided by the State to a Repository pursuant to the State's undertakings set forth in Sections 2, 3 and 4 of this Agreement shall be in an electronic format as prescribed by the MSRB from time to time and shall be accompanied by identifying information as prescribed by the MSRB from time to time.

(b) The State shall have no obligation to provide any information, data or notices other than as set forth in this Agreement; provided however, nothing in this Agreement shall be construed as prohibiting the State from providing such additional information, data or notices from time to time as it deems appropriate in connection with the Series 2020 Bonds. If the State elects to provide any such additional information, data or notices, the State shall have no obligation under this Agreement to update or continue to provide further additional information, data or notices of the type so provided.

(c) This Agreement shall be governed by the laws of the State.

(d) Notwithstanding any other provision of this Agreement, the State may amend this Agreement, and any provision of this Agreement may be waived, if (i) such amendment or waiver is made in connection with a change of circumstances that arises from a change in legal requirements, a change in law, or a change in the identity, nature or status of the State, (ii) the provisions of the Agreement as so amended or waived would have complied with the requirements of the Rule, taking into account any amendments or interpretations of the Rule as well as any changes in circumstances, in each case as of the date of such amendment to the Agreement or waiver and (iii) such amendment or waiver is supported by either an opinion of counsel expert in federal securities laws to the effect that such amendment or waiver would not materially adversely affect the beneficial owners of the Series 2020 Bonds or an approving vote by the holders of not less than 51% of the aggregate principal amount of the Series 2020 Bonds then outstanding pursuant to the terms of the Indenture. A copy of any such amendment or waiver will be filed in a timely manner with each Repository. The annual financial information provided on the first date following adoption of any such amendment or waiver will explain, in narrative form, the reasons for the amendment or waiver.

(e) This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, but such counterparts shall together constitute but one and the same instrument.

STATE OF CONNECTICUT

By: ______________________________

Shawn T. Wooden, Treasurer

APPENDIX I-E

CLIMATE BOND VERIFIER'S REPORT

[THIS PAGE INTENTIONALLY LEFT BLANK]

Confirmation of Climate Bond Eligibility
Issuer: Connecticut Green Bank

Solar Home Renewable Energy Credit, Green Liberty Bonds, Series 2020 (Federally Taxable) (Climate Bond Certified)

Sector: Solar

Date of review: April 1, 2020

Kestrel Verifiers has reviewed the Solar Home Renewable Energy Credit, Green Liberty Bonds, Series 2020 (Federally Taxable) (Climate Bond Certified) official statement and determined that in all material respects this bond issuance and subsequent use of proceeds in the solar re-financing initiative known as Solar Home Renewable Energy Credits (SHRECs) are aligned with Connecticut Green Bank's Programmatic Green Bond Framework. Furthermore, the bonds are eligible to be issued as Certified Climate Bonds, in accordance with the Climate Bonds Initiative Standard for Programmatic Certification.

Kestrel Verifiers previously reviewed the Connecticut Green Bank's Programmatic Green Bond Framework and published a Second Party Opinion confirming that the Framework met the International Capital Market Association's Green Bond Principles 2018 and the Climate Bonds Standard. Kestrel Verifiers also provided the Third-Party Verification of a 2019 financing for the SHRECs, the first Certified Climate Bond issued by the Green Bank.

Signed,

Evan Smith

Evan Smith, Lead Technical Verifier
Kestrel Verifiers
April 1, 2020

[THIS PAGE INTENTIONALLY LEFT BLANK]

INFORMATION STATEMENT OF THE
STATE OF CONNECTICUT

FEBRUARY 15, 2020

This Information Statement of the State of Connecticut (the "State") contains information through February 15, 2020. The State expects to include this Information Statement in its Official Statements for securities offerings as a "Part II" and has numbered the pages accordingly. The State expects to update this Information Statement from time to time with supplementary information in connection with such offerings, but except as expressly noted all information is as of February 15, 2020. Such updates are expected to include certain interim financial information prepared on a statutory basis, but are not expected to include interim financial information prepared in accordance with GAAP.

This Information Statement and any appendices attached hereto should be read collectively and in their entirety.

This Information Statement may be obtained electronically at www.buyctbonds.com or by contacting the Office of the State Treasurer, Attn.: Assistant Treasurer for Debt Management, 165 Capitol Avenue, Hartford, Connecticut 06106, (860) 702-3288.

Constitutional Elected Officers

Governor	**Edward ("Ned") Miner Lamont, Jr.**
Lieutenant Governor	**Susan Bysiewicz**
Secretary of the State	**Denise W. Merrill**
Treasurer	**Shawn T. Wooden**
Comptroller	**Kevin P. Lembo**
Attorney General	**William Tong**

TABLE OF CONTENTS

INDEX TO TABLES

FORWARD-LOOKING INFORMATION AND BONDHOLDER CONSIDERATIONS

The information in this section contains information through February 15, 2020 except as may otherwise be set forth below.

SUPPLEMENTARY INFORMATION AS OF JULY 15, 2020

This Information Statement and its appendices attached hereto include "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Without limiting the foregoing, the words "may," "believe," "could," "might," "possible," "potential," "project," "will," "should," "expect," "intend," "plan," "predict," "anticipate," "estimate," "approximate," "contemplate," "continue," "target," "goal" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these words. All forward-looking statements included in this Information Statement and its appendices are based on information available to the State up to the date as of which such statements are to be made, or otherwise up to, and including, the date of this document, and the State assumes no obligation to update any such forward-looking statements to reflect events or circumstances that arise after the date hereof or after the date of any report containing such forward-looking statement, as applicable. Actual results could differ materially from those anticipated in these forward-looking statements as a result of certain important factors, including, but not limited to (i) the effect of and from, future federal budgetary matters, including federal grants and other forms of financial aid to the State; (ii) federal tax policy, including the deductibility of state and local taxes for federal tax purposes; (iii) macroeconomic economic and business developments, both for the country as a whole and particularly affecting the State; (iv) future energy costs; (v) health care related matters including Medicaid reimbursements; (vi) federal defense spending; (vii) financial services industry developments; (viii) litigation or arbitration; (ix) climate and weather related developments, natural disasters and other acts of God; (x) changes in retirement rates, inflation rates, interest rates, increases in health care costs, longevity rates and other factors used in estimating future obligations of the State, among others; (xi) the effects of epidemics and pandemics, including economic effects; and (xii) other factors contained in this Information Statement and its appendices. Forward-looking statements and reports included in this Information Statement do not contemplate the economic or other effects related to COVID-19, unless specifically referenced. In addition, where so referenced, actual results could differ materially from those anticipated in such forward-looking statements and reports. For further information regarding COVID-19, see "***COVID-19 Impact on General Fund***" included in **STATE GENERAL FUND** and "***COVID-19 Outbreak***" included in **COVID-19 AND OTHER MATTERS**. Investors should carefully review all of the factors.

INTRODUCTION

This Information Statement of the State of Connecticut (the "State") contains certain information that a potential investor might consider material in reaching a decision to invest in securities of the State. Quotations from and summaries and explanations of provisions of laws of the State contained in this Information Statement do not purport to be complete and are qualified in their entirety by reference to such provisions of law. This Information Statement and any appendices attached hereto should be read collectively and in their entirety.

The information included in this Information Statement is organized as follows:

Financial Procedures discusses the legal and administrative processes, procedures, controls and policies that generally apply to all State funds.

State General Fund discusses the State's General Fund, which is the source of financing for most operating activity of the State. The discussion includes both prospective and historical information about the General Fund. Additional information regarding General Fund activity is included in **Appendices II-C, II-D and II-E** to this Information Statement.

State Economic Initiatives discusses formal programs enacted by the General Assembly targeted to encourage economic growth within the State.

State Debt describes the procedures for the authorization to incur State debt and the various ways in which the State may borrow funds to finance State functions and capital projects. This section provides both current and historical information about the State's borrowing practices and State indebtedness.

Other Funds, Debt and Liabilities provides an overview of certain obligations of the State that are not accounted for in the General Fund but that are contingent liabilities of the State. Certain additional information regarding these other funds, debt and liabilities of the State is included in **Appendix II-C** to this Information Statement.

Pension and Retirement Systems describes the major pension and retirement systems of the State. Additional information regarding these systems is included in **Appendix II-C** to this Information Statement.

Litigation comprises a summary of pending legal actions in which the fiscal impact of an adverse decision may not be determined at this time and the Attorney General is unable to opine that a final judgment against the State in such suits would not materially adversely affect the State's financial position.

COVID-19 and Other Matters includes additional matters that do not fall within the other headings.

Appendices II-A through II-E to this Information Statement contain detailed information relating to the information summarized in the Information Statement and should be read in their entirety. **Appendix II-A** provides information concerning the organization of the State government and services. **Appendix II-B** provides information about the State's economy. **Appendices II-C and II-D** provide financial statements of the State. **Appendix II-E** provides additional budgetary and financial information.

The State's fiscal year begins on July 1 and ends on June 30. References to "Fiscal Year" throughout this Information Statement refer to the referenced fiscal year ending June 30. For example, Fiscal Year 2020 refers to the fiscal year beginning July 1, 2019 and ending June 30, 2020.

References herein to "CGS" refer to the Connecticut General Statutes.

FINANCIAL PROCEDURES

The State has in place a number of constitutional provisions, statutes, regulations, and administrative policies and procedures that bear on fiscal management and accountability. These include provisions that limit debt and expenditures and provisions that lay out a sequence for planning future budgets, the development and adoption of a biennial budget, and the monitoring of the State's financial position against the current budget. Taken as a whole, the State believes these provisions provide budgetary discipline, financial controls and forecasting and monitoring resulting in sound fiscal management and accountability. These provisions include the following elements, each of which are explained in more detail in the text that follows:

Budget Discipline	***Balanced Budget Requirement***	The State Constitution provides that the General Assembly may not authorize general budget expenditures in excess of estimated revenues. State law requires that total net appropriations for each fund shall not exceed estimated revenues for such fund.
Financial Controls	***Spending Cap***	The General Assembly is prohibited by the State Constitution from increasing expenditures from year to year by a percentage exceeding the greater of the percentage increase in personal income or the percentage increase in inflation, with certain exceptions.
Budget Discipline	***Biennial Budget***	The budget covers a two year period and the power to propose, enact, and implement such budget rests with the Governor and General Assembly.
Budget Discipline	***Line Item Veto***	Under the State Constitution, the Governor has the power to veto any line of any itemized appropriations bill while at the same time approving the remainder of the bill.
Financial Controls	***Debt Limit***	By statute, the State may not authorize general obligation debt in excess of 1.6 times General Fund tax receipts, subject to statutory exceptions. The Treasurer certifies as to the debt limit in connection with each authorization of debt by the General Assembly and the State Bond Commission. In addition, there are additional issuance limits imposed on the Treasurer.
Forecasting and Monitoring	***Regular Revenue Forecasting, Monitoring of Fiscal Progress and Multiple-Year Planning Tools***	Monthly reports are required from the Comptroller and the Office of Policy and Management, and periodic reports from other governmental entities, including the Legislature's Office of Fiscal Analysis.
Financial Controls	***Rescission Authority and Deficit Mitigation***	The Governor is required to propose mitigation plans should projections indicate a General Fund deficit greater than 1% of total General Fund appropriations. The Governor is authorized to reduce allotments up to 5% of any appropriation, but not to exceed 3% of any fund and to make further reductions with legislative approval.
Budget Discipline	***Budget Reserve Fund***	There exists both a constitutional and a statutory regime for funding the Budget Reserve Fund.
Financial Controls	***GAAP Based Budgeting***	The State has transitioned from the use of a modified cash basis of accounting to the application of Generally Accepted Accounting Principles, as prescribed by the Government Accounting Standards Board.
Transition to GAAP		See Financial Procedures - Accounting Procedures – Financial Reporting.
Budget Discipline	***Bond Covenant***	The State has covenanted with bondholders to follow financial disciplines and controls.

The Budgetary Process

Balanced Budget Requirement and Spending Cap. The State Constitution provides that the amount of general budget expenditures authorized for any fiscal year may not exceed the estimated amount of revenue for such fiscal year. The Constitution also precludes the General Assembly from authorizing an increase in general budget expenditures for any fiscal year above the amount of general budget expenditures authorized for the previous fiscal year by a percentage that exceeds the greater of the percentage increase in personal income or the percentage increase in inflation unless the Governor declares an emergency or the existence of extraordinary circumstances and at least three fifths of the members of each house of the General Assembly vote to exceed such limit for the purposes of such emergency or extraordinary circumstances. The constitutional limitation on general budget expenditures does not include expenditures for the payment of bonds, notes or other evidences of indebtedness. There is no statutory or constitutional prohibition against bonding for general budget expenditures.

In 1996, the Connecticut Supreme Court ruled in *Nielson v. State* that the provisions of the constitutional spending cap require the passage of additional legislation by a three-fifths majority in each house of the General Assembly for implementation of the spending cap. In a 2015 opinion, the State Attorney General concluded that unless and until the General Assembly adopts, by the necessary three-fifths vote of the members of each house of the General Assembly, the definitions required by the constitutional spending cap, the constitutional spending cap has no legal effect. Pursuant to Public Act No. 17-2 of the June Special Session, (referred to herein as the "2017 Budget Act"), the General Assembly adopted such definitions by a three-fifths vote.

The General Assembly had been following a statutory provision similar to the constitutional spending cap. In addition to the exclusion of debt service from the budget cap, there are also excluded expenditures of any federal funds granted to the State or its agencies; expenditures to implement federal mandates and court orders in the first fiscal year in which such expenditures are authorized; expenditures for federal programs in which the State is participating for which the State received federal matching funds in the first fiscal year in which such expenditures are authorized and temporarily payments for a portion of the state employee and teachers' pension contributions. In addition, a base year adjustment is made in any fiscal year in which an expenditure item is moved on or off budget.

In addition to the above limitations on the authorization of general budget expenditures, the General Assembly is prohibited from authorizing General Fund and Special Transportation Fund appropriations for any fiscal year that, in the aggregate, exceed a specified percentage (beginning July 1, 2019 and declining over six years from 99.5% to 98%) of the estimated revenues included in a budget act, subject to certain exceptions. This is referred to as the "revenue cap".

Biennium Budget. The State's fiscal year begins on July 1 and ends on June 30. The General Statutes require that the budgetary process be on a biennium basis. The Governor is required to transmit a budget document to the General Assembly in February of each odd-numbered year setting forth the financial program for the ensuing biennium with a separate budget for each of the two fiscal years and a report that sets forth estimated revenues and expenditures for the three fiscal years after the biennium to which the budget document relates. In each even-numbered year, the Governor must prepare a report on the status of the budget enacted in the previous year with any recommendations for adjustments and revisions, and a report, with revisions, if any, that sets forth estimated revenues and expenditures for the three fiscal years after the biennium in progress.

Preparation of the Budget. Formulation of the budget document commences with the preparation of estimates of expenditure requirements for each fiscal year of the next biennium by the administrative head of each budgeted agency. These estimates are submitted on or before September 1 of each even-numbered year to the Office of Policy and Management ("OPM") and to the joint legislative standing committee on appropriations and the committee having cognizance of matters relating to such budgeted agency. On or before September 1 of each odd-numbered year, each agency submits its recommended adjustments or revisions of such estimates. A detailed statement showing revenue and estimated revenue for the current fiscal year and estimated revenue for the next fiscal year, and in the even-numbered year, for the next biennium, must also be submitted by such agency heads to OPM on or before September 1 and the joint legislative standing committee on finance, revenue and bonding on or before November 15. Upon receipt of such agency reports, it is OPM's practice to prepare a preliminary budget report.

Budget Document. The budget document is published and transmitted to the General Assembly in February of each odd-numbered year. A report summarizing recommended adjustments or revisions is submitted by the Governor to the General Assembly on the day the General Assembly first convenes in even-numbered years. By statute, the budget document must contain the Governor's budget message, the Governor's program for meeting the expenditure needs of the State, as well as financial statements detailing the condition of State debt, the financial position of all major State operating funds, recommended appropriations and State revenues on an actual basis for the last completed fiscal year and on an estimated basis for the fiscal year in progress and the fiscal years to which the budget relates. The Governor also will recommend the manner in which any deficit will be met or any surplus used.

Adoption of the Budget. Following publication and presentation of the budget document to the General Assembly, the Governor or a representative then appears before the appropriate committee of the General Assembly to explain and address questions concerning the budget document or related reports. Prior to June 30 of each odd-numbered year, the General Assembly enacts legislation making appropriations for the next two fiscal years and setting forth revenue estimates for those years.

Line Item Veto. Under the State Constitution, the Governor has the power to veto any line of any itemized appropriations bill while at the same time approving the remainder of the bill. The General Assembly may separately reconsider and repass such disapproved appropriation items by a two thirds vote of each house.

Statutory Debt Limit. In addition to the biennial budget, the General Assembly also authorizes a variety of types of debt. CGS Section 3-21 provides that no bonds, notes or other evidences of indebtedness for borrowed money payable from General Fund tax receipts of the State shall be authorized by the General Assembly or issued except as shall not cause the aggregate amount of (1) the total amount of bonds, notes or other evidences of indebtedness payable from General Fund tax receipts authorized by the General Assembly but which have not been issued and (2) the total amount of such indebtedness that has been issued and remains outstanding, to exceed 1.6 times the total estimated General Fund tax receipts of the State for the fiscal year in which any such authorization will become effective or in which such indebtedness is issued, as estimated for such fiscal year by the joint standing committee of the General Assembly having cognizance of finance, revenue and bonding. However, in computing the aggregate amount of indebtedness at any time, there are certain statutory exclusions and deductions. In addition, on and after July 1, 2018, the Treasurer may not issue general obligation bonds or notes pursuant to CGS Section 3-20 or credit revenue bonds pursuant to CGS Section 3-20j that exceed in the aggregate $1.9 billion in any fiscal year, subject to certain exclusions and inflationary adjustments, commencing July 1, 2019, and the State Bond Commission may not authorize bond issuances or credit revenue bond issuances of more than $2.0 billion in any calendar year, subject to certain exclusions and inflationary adjustments, commencing January 1, 2018. See **STATE DEBT – State Direct General Obligation Debt – *Statutory Debt Limit***.

Consensus Revenue Estimates. OPM and the Legislature's Office of Fiscal Analysis ("OFA") are required by statute to issue consensus revenue estimates each year by November 10. The estimates must cover a five-year period that includes the current biennium and the three following fiscal years. It also requires the two offices, by January 15 and April 30 each year, to issue either (1) a consensus revision of their previous estimate or (2) a statement that no revision is needed. If the two agencies cannot arrive at a consensus estimate, they must issue separate ones. In such a case, the Comptroller must issue the consensus estimate based upon the separate estimates. The Comptroller's estimate must equal one of the separate estimates or fall between the two.

Fiscal Accountability Report. By statute, by November 20 annually, the Secretary of OPM and the Director of OFA each submit the following to the joint standing committees of the General Assembly having cognizance of matters relating to appropriations and the budgets of State agencies and to finance, revenue and bonding: (1) for the current biennium and the next ensuing three fiscal years, an estimate of State revenues, the level of expenditure change from current year expenditures allowable by consensus revenue estimates in each fund, any changes to current year expenditures necessitated by fixed cost drivers, and the aggregate changes to current year expenditures required to accommodate fixed cost drivers without exceeding the current revenue estimate; (2) the projected tax credits to be used in the current biennium and the next ensuing three fiscal years, and the assumptions on which such projections are based; (3) a summary of any estimated deficiencies in the current fiscal year, the reasons for such deficiencies, and the assumptions upon which such estimates are based; (4) the projected balance in the Budget Reserve Fund at the end of each uncompleted fiscal year of the current biennium and the next ensuing three fiscal years; (5) the projected bond authorizations, allocations and issuances in each of the next ensuing five fiscal years and their impact on the debt service of the major funds of the State; (6) an analysis of revenue and expenditure trends and of the major cost drivers affecting State spending, including identification of any areas of concern and efforts undertaken to address such areas, including efforts to obtain federal funds; and (7) an analysis of possible uses of surplus funds, including the Budget Reserve Fund, debt retirement and funding of pension liabilities. By December 15 annually, the legislative committees then meet with the Secretary of OPM and the Director of OFA to consider the submitted reports.

Financial Controls

Expenditures. The financial control procedures utilized by the State are described below and may be generally summarized as follows: the legislature must appropriate funds for a particular purpose; such funds must then be allotted for such purpose by the Governor; and thereafter such funds are encumbered by the Comptroller upon the request of the responsible State agency. Once this appropriation, allotment and encumbrance procedure (which may be modified as described below) has been completed, State funds are paid by the Treasurer upon a warrant, draft or order of the Comptroller drawn at the request of the responsible agency. Certain receivables from the federal government or other sources do not require allotment by the Governor.

Governor's Role in Expenditure Control. Before an appropriation for a budgeted agency becomes available for expenditure, the agency must submit to the Governor not less than 20 days before the beginning of the fiscal year for which the appropriation is made, a requisition for the allotment of funds needed for each quarter of the fiscal year. Appropriations for capital outlays may be allotted in any manner the Governor deems advisable. The Governor may reduce the budget allotment request by not more than three percent of the total appropriation from any fund or not more than five percent of any appropriation under certain circumstances. Such allotments are subject to further modification by the Governor throughout the course of the fiscal year if conditions warrant.

If the cumulative monthly financial statement issued by the Comptroller indicates a projected General Fund deficit greater than one per cent of the total of General Fund appropriations, the Governor is required, within thirty days of such statement date, to file a report with the joint standing committees of the General Assembly on appropriations and on finance, revenue and bonding. The report must include a plan that the Governor shall implement to modify agency allotments to the extent necessary to prevent a deficit. The Governor is not authorized to reduce allotment requisitions or allotments in force concerning aid to municipalities or any budgeted agency of the legislative or judicial branch, except that the Governor may propose an aggregate allotment reduction of a specified amount for the legislative or judicial branch.

In addition, the Governor shall not approve allotment requisitions that would result in the issuance of general obligation bonds or notes pursuant to CGS Section 3-20 or credit revenue bonds pursuant to CGS Section 3-20j that exceed in the aggregate $1.9 billion in any fiscal year, subject to certain exclusions and inflationary adjustments. Not later than April first annually, the Governor shall provide the Treasurer with a list of general obligation bond and credit revenue bond expenditures that can be made July first commencing the next fiscal year totaling not more than $1.9 billion, subject to inflationary adjustments. See **STATE DEBT – State Direct General Obligation Debt – *Statutory Debt Limit***.

Comptroller's Role in Expenditure Control. The Comptroller is responsible for keeping an account in connection with each appropriation. No warrant, draft or order may be issued by the Comptroller in excess of the available balance of the applicable account unless the General Assembly has passed a deficiency bill for the purpose or unless such appropriation has been increased by the Governor in the limited circumstances of emergency expenditures or allotment modifications. The Comptroller is required to issue cumulative monthly financial reports concerning the State General Fund on or before the first day of the following month. OPM provides estimates to the Comptroller by the twentieth day of each month of the revenues and expenditures for the current fiscal year for use by the Comptroller in preparing the Comptroller's monthly report.

Treasurer's Role in Expenditure Control. The Treasurer is required to honor all warrants, drafts and orders properly drawn by the Comptroller. Payments of principal or interest of State bonds and payments of interest on funds held by the Treasurer on which the Treasurer is required to pay interest do not require specific appropriations.

Use of Appropriations; Unexpended Appropriations. No appropriation or part thereof may be used for any purpose other than for the purpose for which it was made, except with respect to certain transfers and revisions of appropriations permitted to be made by the Governor with the concurrence of the Finance Advisory Committee, composed of members of the executive and legislative departments. All unexpended balances of appropriations for each fiscal year lapse on the last day of such fiscal year and revert to the unappropriated surplus of the fund from which the appropriations were made, except for certain continuing appropriations.

Unappropriated Surplus – Budget Reserve Fund. The State Constitution provides that any unappropriated surplus shall be used to fund a Budget Reserve Fund, to reduce bonded indebtedness or for any other purpose authorized by at least three-fifths of each house of the General Assembly. The 2017 Budget Act, which was passed by a three-fifths vote of each house of the General Assembly, restructured the funding and use of the Budget Reserve Fund. All revenue in excess of $3.15 billion received by the State each fiscal year from estimated and final payments of the personal income tax imposed under Chapter 229 of the general statutes and the pass-through entity tax is to be transferred by the Treasurer to the Budget Reserve Fund. Pursuant to the midterm budget adjustments enacted into law as Public Act No. 18-81, the $3.15 billion amount is subject to annual adjustment by the compound annual growth rate of personal income in the State over the preceding five calendar years and further subject to amendment by a vote of at least three-fifths of the members of each house of the General Assembly due to changes in State or federal tax law or policy or significant adjustments to economic growth or tax collections. The State received approximately $3.164 billion in Fiscal Year 2017, $4.621 billion in Fiscal Year 2018 and $2.974 billion in Fiscal Year 2019 from estimated and final payments of such personal income tax. The large increase from Fiscal Year 2017 to Fiscal Year 2018 was largely due to some non-recurring factors: (i) hedge fund organizations were required to repatriate certain off-shore hedge fund profits back to the United States no later than December 31, 2017, (ii) federal tax legislation passed in 2017 resulted in taxpayer behavioral changes particularly in regards to the capping of the state and local tax deduction, and (iii) the strong stock market in 2017 resulted in additional capital gains. The Treasurer is also required to transfer any unappropriated surplus in the General Fund to a Budget Reserve Fund, unless otherwise directed by law. When the amount in the Budget Reserve Fund in any fiscal year equals 15% of the net General Fund appropriation for the current fiscal year, no further transfers shall be made by the Treasurer and the amount of such funds in excess of that transferred to such fund shall be deemed to be appropriated, as selected by the Treasurer in the best interests of the State, to (i) the State Employees' Retirement Fund, in addition to the contributions required pursuant to CGS Section 5-156a, up to 5% of the unfunded actuarial accrued liability or (ii) the Teachers' Retirement Fund, in addition to payments required pursuant to CGS Section 10-183z, up to 5% of the unfunded actuarial accrued liability of such fund. Thereafter, amounts are appropriated for redemption, purchase or extinguishment of outstanding indebtedness or additional contributions to the State Employees' Retirement Fund or Teachers' Retirement Fund or, under specified conditions, may be transferred to the General Fund. Whenever the amount in the Budget Reserve Fund equals or exceeds 5% of the net General Fund appropriations for the current fiscal year, the General Assembly may transfer funds in excess of the 5% threshold from the Budget Reserve Fund, for the purpose of paying unfunded past service liability of the State Employees' Retirement Fund or the Teachers' Retirement Fund, as the General Assembly, in consultation with the Treasurer, determines to be in the best interests of the State. Whenever in any fiscal year the Comptroller has determined that there is a deficit with respect to the immediately preceding fiscal year, to the extent necessary, funds credited to the Budget Reserve Fund shall be deemed to be appropriated for purposes of funding such deficit. In addition, the General Assembly may transfer funds from the Budget Reserve Fund to the General Fund if any consensus revenue estimate for the current biennium projects a decline in General Fund revenues for the current biennium of 1% or more from the total amount of General Fund estimated revenue on which the budget act or adjusted revenue plan enacted by the General Assembly was based or from the April 30th annual consensus revenue estimate. Any such transfer may be made at any time during the remainder of the current biennium.

Notwithstanding the above, legislation is passed from time to time that assigns different uses to such surpluses. The balance in the Budget Reserve Fund as of June 30, 2019 is $2,505.5 million after transfers made at the completion of the Fiscal Year 2019 audit, which is approximately 13.0% of the net General Fund appropriations for Fiscal Year 2020.

Bond Covenant. The Treasurer is required to include a covenant in general obligation bonds and credit revenue bonds issued on and after May 15, 2018 and prior to July 1, 2020 requiring the State to comply with various statutory provisions. See **STATE DEBT – State Direct General Obligation Debt – Bond Covenant** herein.

Accounting Procedures

Books and Records. The State uses an enterprise resource planning system called Core-CT to address its automated financial accounting and human resources needs. This statewide system uses technology to manage financial transaction activities ranging from contracting and purchasing to payment and reporting. The State's financial applications are fully integrated with human resources, providing a single comprehensive management and reporting system.

Financial Reporting. For a number of years, the State has prepared annual financial statements in two ways: financial statements prepared using the guidance of Generally Accepted Accounting Principles ("GAAP"), as prescribed by the Government Accounting Standards Board ("GASB"), and financial statements prepared on a statutory basis (that is, following the adopted budget and related statutes, "statutory basis"). As described below, the State has transitioned to both budgeting and statutory financial statement reporting more in line with GAAP standards.

While not required to prepare financial statements in accordance with GAAP, since 1988 the State has issued comprehensive annual financial reports in accordance with the guidelines established by GASB. These reports include audited annual financial statements prepared using the guidance of GAAP. The State does not prepare GAAP statements on an interim basis.

The Comptroller prepares financial statements annually on a statutory basis for submission to the Governor by September 30 of each year, unless extended by State law. The State's Auditors of Public Accounts must audit the books and accounts of the Treasurer and the Comptroller at least annually and have discretion to audit them at more frequent intervals.

The statutory basis of accounting used for budgetary financial reporting and the modified accrual basis used for GAAP financial reporting are different and, as a result, often produce varying financial results, primarily because of differences in the recognition of revenues and expenditures. As described below under "**GAAP Based Budgeting**", commencing in Fiscal Year 2014 appropriations have been made in line with the accrual of expenses for GAAP purposes, and the differences between the two methods are less significant than they would have been without the budgetary conversion to GAAP budgeting, discussed below. Under the statutory basis, expenditures are recorded in the fiscal year in which the payment is processed versus when the expense is realized under a GAAP basis. In addition, there is a recording of expenditure accruals to the fiscal year in which specific goods and services are received even though payment is not processed until the next fiscal year. Such accrued expenditures include State of Connecticut payroll expenses, general agency operating expenses, and Medicaid expenses. Certain appropriations that have not lapsed are reflected in the balance sheet through a reserve for continuing appropriations. Under the statutory basis, there are limited modifications from the cash basis in recording revenues permitted by statute or decision of the Comptroller. Under the modified accrual basis used for GAAP financial recording, generally all revenues are recognized when they are realized or realizable and earned.

The audited statutory basis financial statements for the fiscal year ending June 30, 2019 and the audited financial statements of the State prepared using the guidance of GAAP for the fiscal year ending June 30, 2019 appear in **Appendices II-C** and **II-D**.

GAAP Based Budgeting. Legislation passed in 2011 required the transition from the previously used modified cash basis of accounting to GAAP. This legislation required that the budget, commencing with Fiscal Year 2014, be prepared in accordance with GAAP, commonly referred to as GAAP budgeting. While GASB does not recognize a concept of GAAP budgeting or prescribe standards for GAAP budgeting, the State interprets the policy objectives of the GAAP budgeting requirement as a requirement to authorize expenditures in line with the accrual of the expenditures, to estimate revenues in line with the accrual of revenues, and an intention, over time, to eliminate the GAAP deficit. The transition to the implementation of the use of GAAP accrual principles with respect to the preparation of the biennial budget included changing the meaning of a deficit as it relates to the requirement that the Governor's budget include recommendations to the General Assembly regarding the manner in which any deficit shall be met. As a result, prior to the start of the biennium for which the budget document is transmitted to the General Assembly, the Governor now accounts for the amount necessary to extinguish any unreserved negative balance in each budgeted fund as addressed in the most recently issued statutory basis annual financial report issued by the Comptroller. The Governor is not required to account for the extinguishment of any unreserved negative balance resulting from adjustments that are not accounted for within the budget process.

The Comptroller initiated a process intended to result in the implementation of the policy objectives of GAAP with respect to the preparation and maintenance of the biennial budget and the annual financial statements of the State previously prepared on a modified cash basis. The Comptroller established an opening combined balance sheet for each appropriated fund reflecting GAAP accrual principles. This combined balance sheet reflected as a deferred charge the accumulated deficit in the General Fund on June 30, 2013 of $1,217.1 million, as determined on the modified accrual basis of GAAP and identified in the comprehensive annual financial report of the State as the unassigned fund balance in the General Fund ("Accumulated 2013 GAAP Deficit"). As part of a two-part plan to extinguish such deficit, the State issued bonds in October 2013 in the amount of $560.43 million ("GAAP Bonds") generating net proceeds of approximately $600 million, which were deposited in the General Fund and applied to reduce the Accumulated 2013 GAAP Deficit. The second part of the plan was additional legislation that deemed appropriated the amounts needed to amortize the remaining Accumulated 2013 GAAP Deficit from Fiscal Year 2016 to Fiscal Year 2028. The GAAP Bonds contain a contractual covenant with bondholders that no future action of the General Assembly may diminish the appropriation so long as the GAAP Bonds are outstanding, unless the Governor declares an emergency or there are other extraordinary circumstances.

In accordance with the second part of the plan, the deferred charge of the Accumulated 2013 GAAP Deficit is required to be amortized in each fiscal year of each biennial budget commencing with Fiscal Year 2016, and for the next succeeding twelve fiscal years. Commencing with Fiscal Year 2018 and for the succeeding ten years, the Secretary of OPM is required to annually publish an amortization schedule to fully reduce the Accumulated 2013 GAAP Deficit by June 30, 2028. Additionally, the unreserved negative balance in the General Fund reported in the comprehensive annual financial report of the State for Fiscal Year 2014, reduced by (i) the Accumulated 2013 GAAP Deficit and (ii) any funds from resources deposited in the General Fund for the purpose of reducing the negative unassigned balance of the General Fund, resulting in $108.7 million, is required to be amortized in each fiscal year of each biennial budget commencing with Fiscal Year 2018 and for the succeeding ten fiscal years. To date, there have been amortization payments made for the GAAP deficit totaling $47.58 million. In most years, enacted budgets have postponed the amortization payments. While delaying the amortization of the Accumulated 2013 GAAP Deficit, this plan is intended to result in the elimination of the Accumulated 2013 GAAP Deficit by the end of Fiscal Year 2028. The 2019 Budget Act provides for a $75.7 million amortization payment in Fiscal Year 2020 towards the Accumulated 2013 GAAP Deficit and eliminates any payment in Fiscal Year 2021. The Governor's proposed midterm budget revisions reduces the payment to $20.7 million in Fiscal Year 2020. There is no assurance that the General Assembly will adopt such proposal.

The negative unassigned fund balance in the General Fund to be amortized by June 30, 2028 pursuant to Public Act No. 17-51 was $679.6 million as of June 30, 2019.

Cash Management and Investment

The Treasurer has the investment responsibility for all funds of the State and functions as the trustee of all State pension, retirement and trust funds. The Treasurer is authorized to invest funds under the control of the Treasurer in a variety of investments allowed by statute, subject to certain conditions, including in certain circumstances the approval of the Investment Advisory Council.

Cash Management. The cash management system and the investment by the Treasurer of State monies, other than monies invested on a longer-term basis, including pension and certain trust funds, are based on the concept of available cash. Available cash consists of the State's common cash pool and funds invested in certain accounts in the Short-Term Investment Fund ("STIF"), including proceeds of various State bonding programs and miscellaneous other STIF accounts. The common cash pool is comprised of the operating cash of most State funds, including the General Fund and the Budget Reserve Fund, and is held or invested in bank deposits, STIF, and other short term investments. It is the State's practice to permit temporary inter-fund transfers to the common cash pool as needed to address mismatches in the timing of receipts and disbursements. This cash management policy is intended to provide flexibility for expenditures to occur when they are needed without the need to resort to short-term financing mechanisms that could impose additional costs on the State. Cash transferred pursuant to these temporary inter-fund transfers is returned as cash pool balances allow. The State's available cash varies from day to day. The week-ending balances of available cash for Fiscal Year 2019 averaged $4.134 billion.

In addition, the Treasurer has the authority to establish, and has in the past established, lines of credit and other short-term financing mechanisms to secure the availability of cash.

On a daily basis, the Treasurer calculates expected cash receipts and disbursements, necessary bank balances, and amounts available for investment. The Treasurer is required to submit a monthly report to certain legislative members and the OFA that includes among other items, a weekly list of the State's cash balance, a year to date total of authorized but unissued bonds, debt instruments or commercial paper of the State, and the amounts in the State's common cash pool.

Short-Term Investment Fund. STIF is a combined investment pool of high quality, short-term money market instruments, which is an investment vehicle for the temporary surplus cash of all funds for which the Treasurer is custodian and/or trustee, except certain bond funds, State pension funds and selected trust funds. All agencies, instrumentalities and political subdivisions of the State are permitted to invest in STIF. The State is responsible to these governmental entities to manage their deposits and accumulated earnings in a prudent manner. Individual participants in STIF can add or withdraw monies on a daily basis with interest earned from date of deposit to date of withdrawal. The primary investment objectives of STIF are the preservation of principal and the provision of liquidity to meet participants' daily cash flow needs, while seeking to earn competitive yields. STIF is managed in accordance with the investment guidelines established by the Treasurer and the investment restrictions of CGS Section 3-27d. These investment guidelines prohibit investment in derivative securities other than floating rate securities that vary in the same direction as individual short-term money market indices, and limit the ability to enter into reverse repurchase agreements to amounts not to exceed five percent (5%) of the STIF's net assets at the time of execution. STIF is rated "AAAm" by Standard & Poor's.

Other Funds. Other State monies are held in certain other funds. Up to $100 million of the State's operating cash may be invested in certificates of deposit of community banks and credit unions, pursuant to CGS Section 3-24k. In addition, investments may be made in individual securities pursuant to CGS Section 3-31a. Allowable investments under CGS Section 3-31a include United States government and agency obligations, shares or interests in an investment company or investment trust registered under the Investment Company Act of 1940, whose portfolio is limited to obligations of the United States, its agencies or instrumentalities, or repurchase agreements collateralized by such obligations, certificates of deposit, commercial paper, savings accounts, and bank acceptances. The Treasurer has adopted guidelines for investments made under CGS Section 3-31a that specify credit and diversification standards, and limit individual security maturities to three years and the total amount invested to $2.5 billion. Pursuant to CGS Section 3-28a and guidelines adopted by the Treasurer, the Treasurer is authorized to invest funds of the Medium-Term Investment Fund in obligations of the United States government and its agencies and instrumentalities, certificates of deposit, commercial paper, corporate debt securities, savings accounts and bankers acceptances, repurchase agreements collateralized by such securities and investment funds or pools comprised of securities in which the Medium-Term Investment Fund may directly invest.

Investment and Payment of Bond Proceeds. Proceeds of bonds are accounted for in various bond funds. Generally, all invested assets of the bond funds are invested in STIF. Bond proceeds are expended in accordance with the authorization and allotment procedure of the State Bond Commission and the Governor. Assets of the bond funds may from time to time be transferred temporarily to the common cash pool in accordance with the State's overall cash flow needs. Under the State's accounting system, transfer of the assets of the bond funds to the common cash pool is reflected in the accounts of the bond funds as an uninvested cash balance. That accounting balance can be reduced only when an approved payment for an expenditure is charged to the bond funds. In no case does the temporary transfer of bond fund assets to the common cash pool alter the timing or the extent of expenditures for the purposes for which the bonds were issued.

Investment of Pension and Trust Funds. Eleven investment funds serve as the investment medium for the various pension, retirement and trust funds of which the Treasurer is the trustee. They are the Domestic Equity Fund, the Developed Markets International Stock Fund, the Emerging Markets International Stock Fund, the Core Fixed Income Fund, the Private Credit Fund, the Emerging Markets Debt Fund, the High Yield Debt Fund, the Private Investment Fund, the Real Assets Fund, the Liquidity Fund and the Alternative Investment Fund. The pension, retirement and trust funds acquire units, in varying proportions depending on the investment policies of the funds, in one or more of the eleven investment funds. By statute no more than 60% of any of the State's trust funds may be invested in common stock and if market fluctuations cause this limit to be exceeded, after six months no more than 65% of the State's trust funds may remain invested in common stock. Other than these limits, the statutes of the State permit investment in securities under the "Prudent Investor" rule. See also **PENSION AND RETIREMENT SYSTEMS** herein.

Investment Advisory Council. Trust fund investments by the Treasurer are reviewed by the Investment Advisory Council, comprised of the Treasurer and the Secretary of OPM as *ex-officio* members, five members of the public with experience in investment matters, three representatives of the teachers' union and two representatives of the State employees' unions. The Treasurer, with the approval of the Council, adopts an Investment Policy Statement for trust funds. Under certain limited circumstances, all private equity or real estate investments require approval of the Investment Advisory Council. The Governor may direct the Treasurer to change any investments when, in the judgment of the Council, such action is in the best interest of the State.

STATE GENERAL FUND

The information in this section contains information through February 15, 2020 except as may otherwise be set forth below.

The State finances most of its operations through its General Fund. Certain State functions, such as the State's transportation budget, are financed through other State funds. See **OTHER FUNDS, DEBT AND LIABILITIES** herein. For budgetary purposes, the State's General Fund has been accounted for in accordance with accounting standards prescribed by statutes ("statutory-basis"). The State has not been required by law to prepare generally accepted accounting principles financial statements, although it has prepared such statements annually since 1988. Legislation passed in 2011 facilitated a transition from the prior modified cash basis of accounting to a basis of accounting that incorporates certain policy objectives of GAAP. For an explanation of the differences between the statutory basis and GAAP based accounting and a discussion of the transition to GAAP, see **FINANCIAL PROCEDURES — Accounting Procedures** herein.

GAAP based audited financial statements for certain funds including the General Fund of the State for Fiscal Year 2019 are included as **Appendix II-C**. Statutory basis audited financial statements for the General Fund for Fiscal Years 2015 through 2019 are included in **Appendix II-D**. The adopted budget and final financial statutory basis results for Fiscal Year 2019 and the adopted budget and estimated financial budget (as of December 31, 2019) for Fiscal Year 2020 and the adopted budget for Fiscal Year 2021 are included as **Appendix II-E**. Unless otherwise stated, amounts set forth in the discussion that follows under this caption **STATE GENERAL FUND** refer to such amounts as calculated on the statutory basis of accounting.

General Fund Revenues

Forecasted, Adopted and Historical Revenues

Procedure For Forecasting Revenues. Revenues are forecast by the legislature in adopting a budget and by the executive branch in proposing a budget and tracking performance through the year and for other planning purposes. Revenue forecasting incorporates a blend of econometric modeling and economic advice obtained from an array of expert sources. Some of these major sources include: "Blue Chip Economic Indicators," which is a compilation of the consensus forecast for major national economic indicators from the top 50 economic and financial institutions and IHS Global Inc. ("IHS"), a nationally recognized econometric forecasting firm.

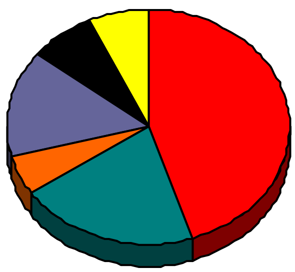
Because of the vast number of variables that can impact the revenue forecast, the State considers forecasting to be a process and not a product. While the economic data from available sources is analyzed and used to anticipate overall direction and trends, the revenue forecast is generated through a consensus interpretation of all available data. Annual revenue estimates from the beginning of each year attempt to account for possible variations in economic activity during the year. Periodic economic data, such as seasonal adjustments to estimated personal income growth, or a monthly drop in employment, are analyzed on an on-going basis. Adjustments are made when the aggregate values of such changes deviate beyond tolerance levels derived from aggregate and historical estimates. The State believes that the process followed in developing Connecticut's revenue forecast is consistent with approaches taken in many other states.

Fiscal Year 2020 and 2021 Adopted Revenues. General Fund revenues are forecasted by the legislature at the adoption of the budgets for Fiscal Years 2020 and 2021 ("Adopted Revenues") and are reflected in **Appendix II-E**.

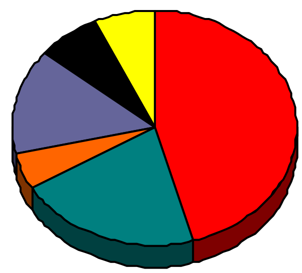
General Fund revenues are derived primarily from the collection of State taxes, including the personal income tax, the sales and use tax and the corporation business tax. The State, as of the forecast date, expected to derive approximately 70.7 percent and 71.3 percent of its General Fund revenues from these taxes during Fiscal Year 2020 and Fiscal Year 2021, respectively. A summary of anticipated General Fund revenue sources based on the Adopted Revenues for Fiscal Years 2020 and 2021, is set forth below:

Adopted General Fund Revenues (In Millions)

Adopted Revenues
Fiscal Year 2020
$19,446.0 [(a)]



Adopted Revenues
Fiscal Year 2021
$20,100.6 [(a)]



Personal Income Tax	$ 9,673.0	45.0%		Personal Income Tax	$ 10,005.4	45.5%
Sales and Use Tax	4,444.1	20.7%		Sales and Use Tax	4,588.4	20.9%
Corporate Business Tax	1,099.8	5.1%		Corporate Business Tax	1,082.5	4.9%
Other Taxes[(b)]	3,218.2	15.0%		Other Taxes[(b)]	3,197.1	14.6%
Unrestricted Federal Grants	1,588.9	7.4%		Unrestricted Federal Grants	1,571.5	7.2%
Other Non-Tax Revenues[(c)]	1,490.6	6.9%		Other Non-Tax Revenues[(c)]	1,527.3	7.0%

NOTE: Totals may not add to 100% due to rounding.

(a) The pie charts reflect the total of the listed tax and revenue amounts of $21,514.6 million for Fiscal Year 2020 and $21,972.2 million for Fiscal Year 2021, while the amounts in the title of the pie charts reflect reductions resulting from tax refunds, earned income tax, R&D Credit Exchange, refunds of payments, transfers to other funds, volatility cap adjustments and revenue cap deductions of $2,068.6 million for Fiscal Year 2020 and $1,871.6 million for Fiscal Year 2021. See **Appendix II-E** for anticipated adjustments to adopted tax revenues.

(b) Other taxes are comprised of inheritance and estate taxes; pass-through entity tax; taxes on gross receipts of public service corporations, on net direct premiums of insurance companies, on cigarettes and alcoholic beverages, on real estate transfers, on admissions and dues, on health care providers and other miscellaneous taxes. See **Appendix II-E**.

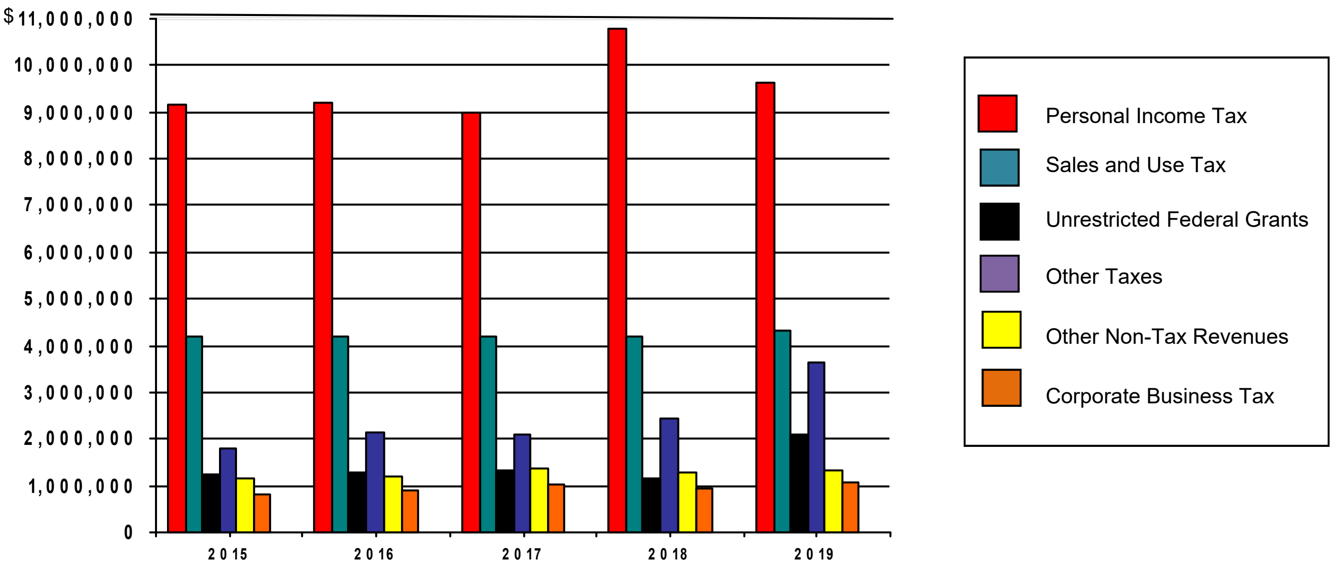
(c) Other non-tax revenues are comprised of special revenue transfers; Indian gaming payments; licenses, permits and fees; sales of commodities and services; rents, fines and escheats; investment income; other miscellaneous revenues; designated Tobacco Settlement Revenues and special transfers to the resources of the General Fund. **See Appendix II-E**.

SOURCE: Public Act No. 19-117 as amended by Public Act No. 19-1 of the December Special Session.

Historical General Fund Revenues

Actual General Fund revenues for Fiscal Years 2015 through 2019 are set forth in **Appendix II-D**. A summary of the composition of General Fund gross revenues for the last five fiscal years is illustrated below:

General Fund Revenues[(a)]
Fiscal Year Ending June 30
(In Thousands)



	2015	2016	2017	2018	2019
Taxes:					
Personal Income Tax	$ 9,151,037	$ 9,181,648	$ 8,988,667	$10,770,150	$ 9,640,164[(b)]
Sales Tax	4,205,051	4,181,852	4,192,203	4,202,246	4,338,061
Corporate Business Tax	814,805	880,449	1,037,565	920,746	1,060,877
Other Taxes[(c)]	1,792,973	2,142,039	2,106,400	2,447,461	3,631,038
Subtotal	$15,963,866	$16,385,988	$16,324,835	$18,340,603	$18,670,140
R & D Credit Exchange	(7,878)	(7,623)	(5,485)	(5,664)	(5,370)
Refunds of Taxes	(1,163,639)	(1,223,198)	(1,263,824)	(1,269,667)	(1,465,368)
Total Net Taxes	$14,792,349	$15,155,167	$15,055,526	$17,065,272	$17,199,401
Other Revenue:					
Federal Grants (Unrestricted)	$ 1,241,244	$ 1,301,532	$ 1,325,237	$ 1,143,075	$ 2,083,774
Other Non-Tax Revenues[(d)]	1,174,912	1,207,958	1,353,113	1,273,461	1,307,982
Transfers to Other Funds	(61,780)	(61,688)	(58,100)	(1,528,983)[(e)]	(1,051,495)[(f)]
Transfers from Other Funds	135,313	177,853	27,192	245,726	110,200
Total Other Revenues	$ 2,489,689	$ 2,625,655	$ 2,647,442	$ 1,133,279	$ 2,450,461
Total Revenues	$17,282,038	$ 17,780,822	$17,702,968	$18,198,551	$19,649,862

(a) The bar graph reflects the gross listed tax and revenue amounts and does not reflect the listed adjustments for tax credits and refunds and transfers to or from other funds. See **Appendix II-D** for adjustments to revenues.

(b) Personal Income Tax total is comprised of $6,665.8 million in the withholding portion and $2,974.4 million in the estimated and finals portion of Personal Income Tax.

(c) Other taxes are comprised of inheritance and estate taxes; taxes on gross receipts of public service corporations, net direct premiums of insurance companies, oil companies, cigarettes and alcoholic beverages, real estate transfers, admissions and dues, and health care providers; electric generation and other miscellaneous taxes. Fiscal Year 2019 also contains new pass-through entity tax in the amount of $1,172.1 million.

(d) Other non-tax revenues are comprised of special revenue transfers; Indian gaming payments; licenses, permits and fees; sales of commodities and services; rents, fines and escheats; investment income; other miscellaneous revenues, designated Tobacco Settlement Revenues and special transfers to the resources of the General Fund less refunds of payments.

(e) Includes transfer to the Budget Reserve Fund for the volatility adjustment of $1,471.3 million and transfer to the Pequot/Mohegan Fund.

(f) Includes transfer to the Budget Reserve Fund for the volatility adjustment of $994.7 million and transfer to the Pequot/Mohegan Fund.

SOURCE: 2015, 2016, 2017, 2018 and 2019 Annual Reports of the State Comptroller.

Components of Revenue

Personal Income Tax. The State imposes a Personal Income Tax on the income of residents of the State (including resident trusts and estates), part-year residents and certain non-residents who have taxable income derived from or connected with sources within Connecticut. The current tax is imposed on a graduated scale, with a maximum rate of 6.99% on Connecticut taxable income. Depending on federal income tax filing status, the taxable year and Connecticut adjusted gross income, personal exemptions are available to taxpayers, ranging from $15,000 to $24,000. In addition, tax credits ranging from 1% to 75% of a taxpayer's Connecticut tax liability are also available depending upon federal income tax filing status, the taxable year and Connecticut adjusted gross income. Such exemptions and tax credits are phased out at higher income levels. Under the current structure, the top rate increases to 6.99% with a rate of 3% applicable to taxable income up to certain amounts. The first $20,000 of taxable income for a joint filer and the first $10,000 of taxable income for a single filer is taxed at the 3% rate, rising thereafter to 6.99%. Lower rates are phased out for all filers who exceed certain income thresholds. There is an income tax credit available to certain filers for property taxes paid of $200 per filer for tax years beginning on or after January 1, 2016. Taxpayers also are subject to a Connecticut minimum tax, based on their liability, if any, for payment of the federal alternative minimum tax. Neither the personal exemption nor the tax credits described above are available to trusts or estates.

Sales and Use Taxes. A Sales Tax is imposed, subject to certain limitations, on the gross receipts from certain transactions within the State of persons engaged in business in the State, including (a) retail sales of tangible personal property, (b) the rendering of certain services, (c) the leasing or rental of tangible personal property, (d) the production, fabrication, processing, printing, or imprinting of tangible personal property to special order or with materials furnished by the consumer, (e) the furnishing, preparation or serving of food, meals, or drinks, and (f) hotel, lodging house rooms or bed and breakfast establishment for a period not exceeding thirty consecutive calendar days. A Use Tax is imposed, with certain exceptions, on the consideration paid for certain services or purchases or rentals of tangible personal property used within the State pursuant to a transaction not subject to the Sales Tax. The tax rate for each of the Sales and Use Taxes is 6.35% except as otherwise provided herein. A separate rate of 15% is charged on the occupancy of hotel rooms or lodging house rooms and 11% for bed and breakfast establishments. Various exemptions from the Sales and Use Taxes are provided, based on the nature, use or price of the property or services involved or the identity of the purchaser. Tax returns and accompanying payments with respect to these taxes are generally due monthly on or before the last day of the month next succeeding the taxable month.

Corporation Business Taxes. A Corporation Business Tax is imposed on any corporation, joint stock company or association, any dissolved corporation that continues to conduct business, any electric distribution company or fiduciary of any of the foregoing that carries on or has the right to carry on business within the State, owns or leases property, maintains an office within the State, or is a general partner in a partnership or a limited partner in a limited partnership, except an investment partnership, which does business, owns or leases property or maintains an office within the State. Certain financial services companies and domestic insurance companies are exempt from this tax. Corporations are required to compute their tax liability under three methods, determine which calculation produces the greatest tax, and pay that amount to the State.

- The first method of computing the Corporation Business Tax is a tax measured by the net income of a taxpayer (the "Income-Base Tax"). Net income means federal gross income with limited variations less certain deductions, most of which correspond to the deductions allowed under the Internal Revenue Code of 1986, as amended. The Income-Base Tax is at a rate of 7.5%.
- The second method of computing the Corporation Business Tax is a tax on capital (the "Capital Base Tax"). This tax is determined either as a specific maximum dollar amount or at a flat rate on a defined base, usually related in whole or in part to the corporation's capital stock and balance sheet surplus, profit and deficit.
- The third method of computing the Corporation Business Tax is a minimum tax in the amount of $250.

The State limits corporation credits from reducing tax liability by more than 50.01% for most credits. The State imposed a corporation business tax surcharge of 20% for income years 2012 through 2017 for businesses with over $100 million in federal adjusted gross income. Under current law, the surcharge decreased to 10% for income years 2018 through 2020 and is phased out completely for income year 2021.

A $250 charge, due biennially, is levied on LLCs, LLPs and S corporations. The tax extends to single-member LLCs that are not considered entities separate from their owners for federal tax purposes. This tax has been repealed beginning in income year 2020.

Other Taxes. Other tax revenues are derived from pass-through entities; inheritance and estate taxes; taxes on gross receipts of public service corporations, on net direct premiums of insurance companies, on cigarettes and alcoholic beverages, on real estate transfers, on admissions and dues, on health care providers, electric generation, and other miscellaneous taxes.

For taxable years commencing on or after January 1, 2018, the State imposes a Pass-Through Entity Tax on the income derived from or connected with Connecticut sources for: (a) partnerships, including limited liability companies that are treated as partnerships for federal income tax purposes, but excluding publicly-traded partnerships, and (b) S corporations, including limited liability companies that are treated as S corporations for federal income tax purposes. Formerly such income was subject to either the state's Personal Income Tax or the Corporation Business Tax. The current tax rate for the Pass-Through Entity tax is 6.99%. Members of a pass-through entity are entitled to a credit on the State's Personal Income Tax or Corporation Business Tax based upon their respective shares of the pass-through entity's tax liability. For taxable years that begin on or after January 1, 2018, but prior to January 1, 2019, the tax credit is 93.01% of the member's share of the Pass-Through Entity Tax. For taxable years that begin on or after January 1, 2019, the tax credit is 87.5% of the member's share of the Pass-Through Entity Tax.

Federal Grants. Depending upon the particular program being funded, federal grants-in-aid are normally conditioned, to some degree, on resources provided by the State. Most unrestricted federal grant revenue is based on expenditures. The largest components of federal grants in Fiscal Year 2019 were related to medical assistance provided to low income individuals under Medicaid and temporary assistance for needy families. The State also receives certain restricted federal grants that are not reflected in annual appropriations but that nonetheless are accounted for in the General Fund. In addition, the State receives certain federal grants that are not accounted for in the General Fund but are allocated to the Special Transportation Fund, various Capital Project Funds and other funds. In Fiscal Year 2014, the State commenced net budgeting Medicaid expenditures within the Department of Social Services, resulting in only the State's share of Medicaid expenditures being appropriated. Prior to calendar year 2017, the Medicaid expansion population was 100% federally reimbursed. Current federal regulations will have the reimbursement rate phased-down to 90% for calendar year 2020. The phase-down of federal reimbursement started in calendar year 2017 at 95% reimbursed and dropped to 94% for calendar year 2018 and 93% in calendar year 2019.

Other Non-Tax Revenues. Other non-tax revenues are derived from special revenue transfers; Indian gaming payments; licenses, permits and fees; sales of commodities and services; rents, fines and escheats; investment income; other miscellaneous revenue sources; and designated Tobacco Settlement Revenues.

General Fund Expenditures

Appropriated and Historical Expenditures

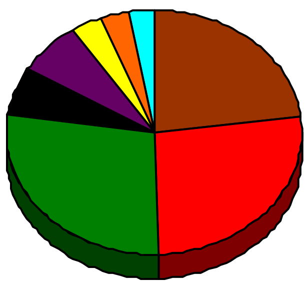
Fiscal Year 2020 and 2021 Appropriated Expenditures. State expenditures are categorized for budget and appropriation purposes under ten functional headings, with expenditures by agency generally shown as subheadings in the following functional categories: Human Services; Education, Libraries and Museums; Non-Functional (debt service and miscellaneous expenditures including fringe benefits); Health and Hospitals; Corrections; General Government; Judicial; Regulation and Protection; Conservation and Development; and

Legislative. State expenditures for Department of Transportation functions are generally paid from the Special Transportation Fund, although minor expenditures for transportation related expenditures are occasionally paid from the General Fund. See – **OTHER FUNDS, DEBT AND LIABILITIES - Special Transportation Fund and Debt** herein.

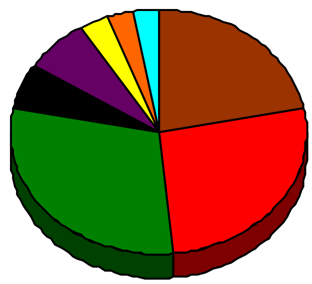
The adopted budget and final financial statutory basis results for Fiscal Year 2019, the adopted budget and estimated financial budget (as of December 31, 2019) for Fiscal Year 2020, and the adopted budget for Fiscal Year 2021 are included as **Appendix II-E**. A summary of appropriated General Fund expenditures for Fiscal Years 2020 and 2021 is set forth below.

Appropriated General Fund Expenditures (In Millions)

Appropriated Expenditures
Fiscal Year 2020
$19,423.2 [(a)]



Appropriated Expenditures
Fiscal Year 2021
$20,086.3 [(a)]



	Fiscal Year 2020		Fiscal Year 2021	
Human Services	$ 4,547.3	23.2%	$ 4,695.3	23.0%
Education, Libraries and Museums	5,181.3	26.4%	5,318.6	26.1%
Non-Functional	5,446.5	27.7%	5,758.7	28.2%
Health and Hospitals	1,245.8	6.3%	1,289.4	6.3%
Corrections	1,410.0	7.2%	1,471.9	7.2%
General Government	665.2	3.4%	686.1	3.4%
Judicial	597.6	3.0%	618.4	3.0%
Other Expenditures[(b)]	538.8	2.7%	557.4	2.7%

(a) The pie charts reflect the total listed expenditures of $19,632.5 million for Fiscal Year 2020 and $20,395.7 million for Fiscal Year 2021, while the references in the title of the pie charts reflect adjustments for unallocated lapses of $209.2 million for Fiscal Year 2020 and $309.4 million for Fiscal Year 2021. See **Appendix II-E** for anticipated adjustments to appropriated expenditures.

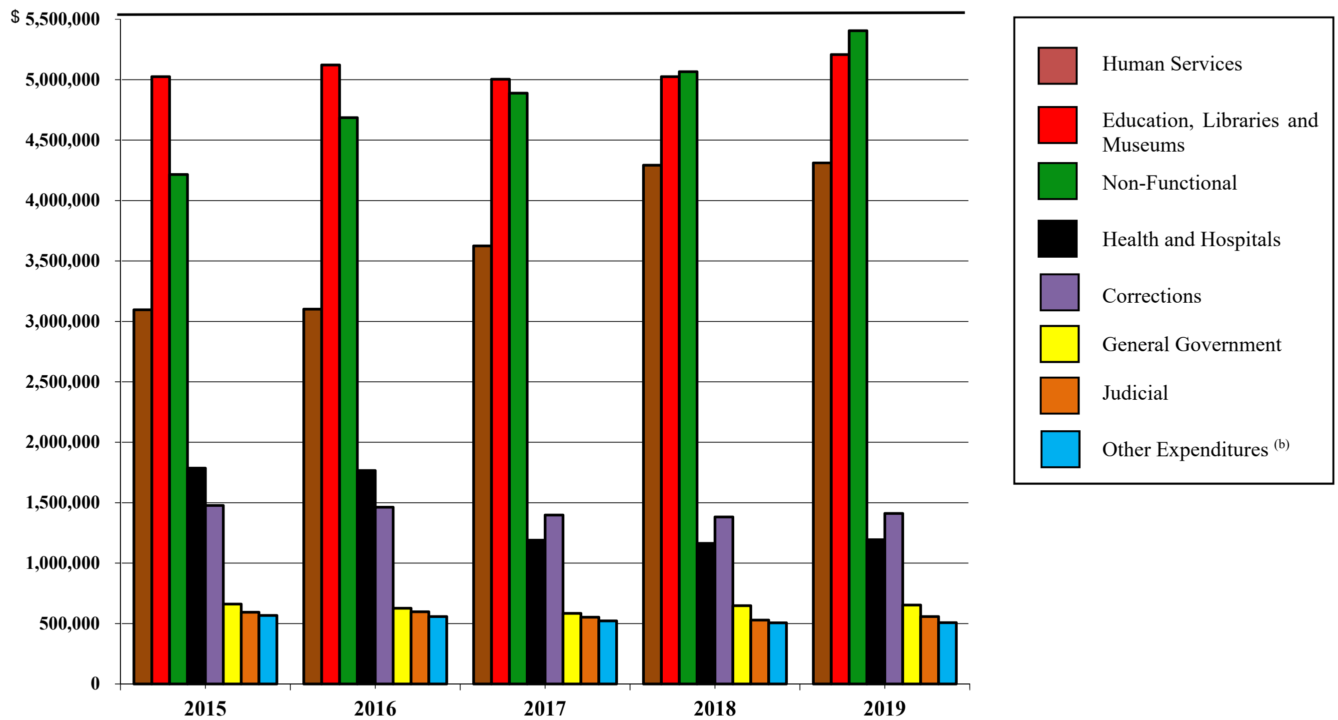
(b) Other expenditures are comprised of appropriations for Regulation and Protection; Conservation and Development; and Legislative.

SOURCE: Public Act No. 19-117 as amended by Public Act No. 19-1 of the December Special Session.

Historical General Fund Expenditures

Actual General Fund expenditures for Fiscal Years 2015 through 2019 are set forth in Appendix II-D to this Information Statement. A summary of the composition of General Fund expenditures for the last five fiscal years is illustrated below:

General Fund Expenditures By Function[a]
Fiscal Year Ending June 30
(In Thousands)



	2015	2016	2017	2018	2019
Human Services	$ 3,095,929	$ 3,102,021	$ 3,624,957[c]	$ 4,291,893	$ 4,311,721
Education, Libraries and Museums	5,025,391	5,122,029	5,003,923	5,024,541	5,208,399
Non-Functional	4,215,341	4,686,059	4,888,164	5,066,694	5,405,866
Health and Hospitals	1,785,337	1,765,944	1,189,787[c]	1,163,451	1,194,173
Corrections	1,476,753	1,463,065	1,397,113	1,382,304	1,410,966
General Government	661,000	627,035	584,707	647,508	653,270
Judicial	593,314	597,584	552,369	528,902	557,067
Other Expenditures[b]	566,624	557,521	522,020	505,415	507,188
Totals	$17,419,689	$17,921,258	$17,763,040	$18,610,709	$19,248,650

(a) The bar graphs and amounts listed do not reflect the offsetting effect of restricted federal and other grants. Amounts shown do not exclude expenditures or appropriations carried over from the prior fiscal year and do not include expenditures of appropriations carried into the next fiscal year. See Appendix II-D.

(b) Other expenditures are comprised of appropriations for Regulation and Protection; Conservation and Development; and Legislative.

(c) The Community Residential Services program, which expended $522.4 million in Fiscal Year 2017, was transferred from the Health and Hospital function to Human Services in Fiscal Year 2017.

NOTE: Totals may not add due to rounding.

SOURCE: 2015, 2016, 2017, 2018 and 2019 Annual Reports of the State Comptroller.

Components of Expenditures

Human Services. Virtually all of the State expenditures for Human Services are allocated to the Department of Social Services for various programs and services, including Medicaid payments, Temporary Assistance to Families, and General Assistance payments.

Education, Libraries and Museums. The majority of State expenditures for Education, Libraries and Museums is allocated to the Department of Education, the largest share of which consists of payments to local governments. The remaining consists of expenditures for higher education (including the University of Connecticut, Connecticut State Colleges and Universities and Office of Higher Education), the Office of Early Childhood Education, the Teachers' Retirement Board and the State Library.

Non-Functional. Non-Functional State expenditures consist of debt service payments, State employee fringe benefit accounts and other miscellaneous appropriations.

Health and Hospitals. State expenditures for Health and Hospitals are allocated primarily for programs and services provided by the State Departments of Public Health, Developmental Services, and Mental Health and Addiction Services.

Corrections. Appropriations to the State Department of Correction and the Department of Children and Families comprise the largest portion of State expenditures for Corrections.

General Government. State expenditures for General Government may be classified into three categories: executive, financial administration and legal, the largest of which is expenditures for financial administration. Such expenditures are primarily for salaries and other miscellaneous expenses of various State departments.

Judicial. Judicial expenditures are comprised of salaries, expenses and payments for special programs of the Judicial Department and the Public Defender Services Commission.

Regulation and Protection. State expenditures for Regulation and Protection consist primarily of appropriations for the Department of Public Safety for salaries, equipment, training and other services and expenses. Other agencies and programs for which appropriations are made include the Police Officer Standards and Training Council, the Board of Firearms Permit Examiners, the Military Department, the Commission on Fire Prevention and Control, the Department of Consumer Protection, the Department of Labor, the Commission on Human Rights and Opportunities, and the Office of the Child Advocate.

Conservation and Development. State expenditures for Conservation and Development fall into three general categories: agriculture; development of housing, historical sites, commerce and industry; and environment.

Legislative. Legislative expenditures are comprised primarily of salaries, equipment and other expenses necessary for Legislative Management and the Auditors of Public Accounts.

Expenditures by Type

General Fund appropriations and the corresponding State expenditures can be categorized into two groups, non-fixed costs and fixed costs. Non-fixed costs can be described as the costs of State administration and include expenditures used directly to operate the facilities and programs of State agencies. This includes such items as salaries and wages for State employees; utility and fuel costs; food; institutional and office supplies; equipment; rent for office space and other facilities; and other current expenses, variable costs and discretionary items.

SUPPLEMENTARY INFORMATION AS OF JULY 15, 2020

Fixed costs consist largely of payments to State employee and teacher benefits including pensions and retiree health, entitlement programs such as Medicaid, and payments of debt service. Fixed costs amount to approximately 49.2% of total General Fund expenditures for Fiscal Year 2018, 50.5% of total General Fund expenditures for Fiscal Year 2019 and 49.7% of total General Fund estimated expenditures for Fiscal Year 2020. A summary of non-fixed and fixed costs for the General Fund is shown below.

TABLE 1 is replaced and updated as follows:

TABLE 1[(a)]

Fixed Costs – General Fund
Summarized by Major Expenditure Category
(In Millions)

	Fiscal Year 2018 (Actual)	Fiscal Year 2019 (Actual)	Fiscal Year 2020 (Estimated)
Total Non-Fixed Costs	**$9,445.3**	**$9,528.0**	**$9,874.1**
Fixed Costs:			
Debt Service	2,301.5	2,579.0	2,264.7
Teachers' Pensions	1,271.0	1,292.3	1,208.8
State Employees' Retirement System	1,051.7	1,167.5	1,195.7
Other State Pensions	12.7	7.7	42.6
State and Teachers' OPEB	720.3	701.3	786.4
Medicaid	2,513.0	2,607.0	2,671.9
All Other Entitlement Accounts[(b)]	1,294.9	1,365.9	1,375.0
Total Fixed Costs	**$9,165.2**	**$9,720.6**	**$9,545.1**
Fixed Cost Percent of Total Expenditures	49.2%	50.5%	49.2%

(a) Table 1 includes actual expenditures for Fiscal Years 2018, 2019 and estimated expenditures for Fiscal Year 2020 per OPM's April 30, 2020 letter to the Comptroller.

(b) Includes entitlement programs under the Department of Mental Health and Addiction Services, Department of Development Services, Department of Social Services, Department of Children and Families and adjudicated claims under the Office of the State Comptroller.

NOTE: Totals may not add due to rounding.

SOURCE: OPM

Forecasted Operation

SUPPLEMENTARY INFORMATION AS OF JULY 15, 2020

Consensus Revenue Estimates

Pursuant to CGS Section 2-36c, on April 30, 2020, OPM and OFA issued their consensus revision to their January 15, 2020 consensus revenue estimates for the current biennium and the three ensuing fiscal years as follows:

General Fund Consensus Revenue Estimate
(in Millions)

	2020	2021	2022	2023	2024
Revenue Estimate January 15, 2020	$19,427.2	$20,317.3	$19,764.1	$20,091.7	$20,618.0
Revenue Estimate April 30, 2020	$18,485.1	$18,088.4	$17,434.7	$18,094.3	$18,590.6
Amount Changed	$ (942.1)	$ (2,228.9)	$(2,329.4)	$ (1,997.4)	$ (2,027.4)

The projections in the consensus revenue estimates are only estimates and no assurances can be given that future events will materialize as estimated or that subsequent estimates, adjustments or actions of the State will not indicate changes in the final results of the fiscal years reported.

Fiscal Accountability Report

Fiscal accountability reports were submitted by OPM and OFA on November 20, 2019. The reports show the level of expenditure change from current year expenditures allowable by consensus revenue estimates in the General Fund, the changes to current year expenditures necessitated by fixed cost drivers which include generally, pension and other retiree costs, debt service, Medicaid and certain other costs for the Department of Social Services and the Department of Children and Families, and the aggregate changes to current year expenditures required to accommodate such fixed cost drivers without exceeding current revenue estimates.

Both reports estimated revenue in the General Fund falling short of expenditures for Fiscal Year 2020 resulting in a projected deficit of $19.6 million by OPM and $29.7 million by OFA. Beyond Fiscal Year 2020, the OPM report projected year-over-year revenue growth vs. fixed cost growth as follows:

Year-Over-Year Revenue Growth vs. Fixed Cost Growth
(In Millions)

	Fiscal Year 2021 vs. Fiscal Year 2020	Fiscal Year 2022 vs. Fiscal Year 2021	Fiscal Year 2023 vs. Fiscal Year 2022	Fiscal Year 2024 vs. Fiscal Year 2023
Revenue Growth	$ 818.8	$ (459.6)	$ 336.5	$ 534.8
Total Fixed Cost Growth	449.6	527.7	657.2	365.4
Difference	**$ 369.2**	**$ (987.3)**	**$ (320.8)**	**$ 169.4**

The OFA report estimates that General Fund fixed costs are projected to grow in the out years from approximately $10.0 billion in Fiscal Year 2021 to approximately $11.5 billion in Fiscal Year 2024, reflecting net growth of $481.1 million from Fiscal Years 2021 to 2022, $744.8 million from Fiscal Years 2022 to 2023 and $286.4 million from Fiscal Years 2023 to 2024. The OFA report estimates a structural imbalance between fixed cost growth and revenue growth in Fiscal Years 2022 and 2023; in these years fixed cost growth is projected to exceed revenue growth by $39.7 million and $283.8 million, respectively.

The OPM report indicated the State's spending cap would allow growth in capped expenditures of approximately 3.52% in Fiscal Year 2021 over Fiscal Year 2020, 3.47% in Fiscal Year 2022 over Fiscal Year 2021, 3.62% in Fiscal Year 2023 over Fiscal Year 2022 and 3.62% in Fiscal Year 2024 over Fiscal Year 2023.

The OPM report noted that the revenue volatility cap directs any collections from the estimated and final component of the Personal Income Tax plus the Pass-Through Entity Tax that in total exceed a designated threshold (adjusted for personal income growth) to the Budget Reserve Fund.

The OPM report estimated the balance in the Budget Reserve Fund as follows:

Budget Reserve Fund Forecast[(a)]
(In Millions)

Fiscal Year	BRF Beginning Balance	Volatility Cap Transfer	Revenue Cap Transfer	Surplus/ (Deficit)	BRF Limit Transfer to SERS/TRS[(b)]	BRF Balance[(c)]	BRF Balance % of Net General Fund Appropriations
2019	$ 1,185.3	$ 949.7	$ -0-	$ 370.6	$ -0-	$2,505.5	13.0%
2020[(d)]	2,505.5	318.3	-0-	-0-	-0-	2,823.8	14.1
2021	2,823.8	276.6	151.5	-0-	(321.2)	2,930.6	15.0
2022	2,930.6	287.7	197.3	-0-	(442.6)	2,973.1	15.0
2023	2,973.1	259.2	250.9	-0-	(438.6)	3,044.6	15.0
2024[(e)]	3,044.6	229.4	309.1	-0-	(455.1)	3,127.9	15.0
Totals		**$2,320.8**	**$ 908.8**	**$ 370.6**	**$ (1,657.4)**		

(a) Per the November 12, 2019 Consensus Revenue forecast. Net appropriations for Fiscal Years 2021-2024 are assumed to comply with the revenue cap.
(b) Estimates the Budget Reserve Fund cap (15% of the net General Fund appropriations) will be reached in Fiscal Year 2021 resulting in the statutory transfer of excess to State Employees' Retirement System/Teachers' Retirement System.
(c) The OFA report estimated Budget Reserve Fund balances of $2,505.5 million, $2,794.2 million and $2,997.3 million for Fiscal Years 2019, 2020 and 2021, respectively.
(d) Assumes rescissions to bring the budget back into balance.
(e) In order to calculate the Budget Reserve Fund balance in Fiscal Year 2024, Fiscal Year 2025 revenues are projected to grow by 3%.

NOTE: Totals may not add due to rounding.

The OPM report further discussed the long-term liabilities facing the State that total approximately $84.8 billion, up 0.4% from Fiscal Year 2018's reported amount of $84.5 billion. The table below details the components of these long-term liabilities:

Long-Term Obligations
(In Billions)

Bonded Indebtedness – As of 6/30/19	$ 26.1
State Employee Pensions – Unfunded as of 6/30/18	21.2
Teachers' Pension – Unfunded as of 6/30/18	16.8
State Employee Post-Retirement Health and Life – Unfunded as of 6/30/17	17.4
Teachers' Post-Retirement Health and Life – Unfunded as of 6/30/18	3.1
Cumulative GAAP Deficit – As of 6/30/18	0.2
Total	**$ 84.8**

The reports also estimated general obligation bond authorizations, allocations, issuance and debt service for the current fiscal year and succeeding four fiscal years. The reports estimated fairly stable general obligation bond issuances over the five year period of $1.6 billion in each year and UCONN 2000/Next Generation bond issuances between $0.1 and $0.3 billion in each year with the expenditure on debt service generally gradually increasing over such period.

The projections of OPM and OFA are only estimates and no assurances can be given that future events will materialize as estimated, or that subsequent estimates, adjustments or actions of the State will not reflect changes in the operations of the General Fund or in the estimated or final results of such fiscal years. In addition, the State has a balanced budget requirement and a spending cap as discussed in the **Financial Procedures** section under the heading **The Budgetary Process –** ***Balanced Budget Requirement***. As such, budgets adopted for future fiscal years will need to comply with those requirements. As a result, the figures included in the report do not represent a projection of the actual financial results that might be expected, but instead serve as a planning tool.

Adopted Budget for Fiscal Years 2020 and 2021

On June 4, 2019, the General Assembly passed a biennial budget bill and the Governor signed the bill into law (the "2019 Budget Act"). The 2019 Budget Act makes General Fund appropriations of $19,319.1 million in Fiscal Year 2020, which represents 1.7% growth over Fiscal Year 2019 appropriations, and 19,982.0 million in Fiscal Year 2021. The budget projects General Fund revenues of $19,460.2 million in Fiscal Year 2020 and $20,148.2 million in Fiscal Year 2021. Taking into account the deduction for the cap on revenues, the General Fund is projected to have revenues of $19,362.9 million in Fiscal Year 2020 and $19,997.1 million in Fiscal Year 2021, resulting in a projected surplus of $43.8 million in Fiscal Year 2020 and $15.1 million in Fiscal Year 2021.

The budget bill includes $1,059.7 million in revenue enhancements in Fiscal Year 2020 and $1,458.4 million in Fiscal Year 2021. The significant revenue changes include:

- Taxes digital downloads at the full 6.35% sales tax rate, expands the sales tax to interior design services, dry-cleaning, parking, and safety apparel, and imposes an additional 1% sales tax rate on prepared foods and restaurant meals
- Maintains Hospital User Fee and Supplemental Payments at Fiscal Year 2019 levels

- Eliminates the $250 business entity tax and maintains the current 10% surcharge on corporations
- Adds a 10 cent fee on all disposable plastic bags for Fiscal Years 2020 and 2021. Bans the use of disposable plastic bags beginning in Fiscal Year 2022
- Maintains eligibility limits on Property Tax Credits taken on the Personal Income Tax for Income Years 2019 and 2020
- Reduces the Personal Income Tax credit for taxes paid under the Pass-Through Entity Tax
- Reduces the diversion of sales tax to the Special Transportation Fund in Fiscal Years 2020 and 2021

The notable expenditure changes as compared to current services include:

- Reduction of debt service by limiting debt issuance of general obligation bonds (excluding UConn) at $1.6 billion per fiscal year
- Sustaining non-educational municipal aid at Fiscal Year 2019 levels
- Assumes savings of $50 million in Fiscal Year 2020 and $135 million in Fiscal Year 2021 from state employee and retiree healthcare programs
- Savings of approximately $113.2 million in Fiscal Year 2020 and $121.2 million in Fiscal Year 2021 in the State Employees' Retirement System by revising the amortization period for a portion of the unfunded liability
- Savings of $183.4 million in Fiscal Year 2020 and $189.4 million in Fiscal Year 2021 in Teachers' Retirement System costs by extending the amortization period, transitioning to level dollar amortization, and reducing the assumed rate of return and enacting benefit reforms

CGS Section 2-33a sets out the State's spending cap. The adopted budget would be $0.2 million below the spending cap for Fiscal Year 2020 and $5.0 million below the spending cap for Fiscal Year 2021.

SUPPLEMENTARY INFORMATION AS OF JULY 15, 2020

Authorization for new bonding was not voted on by the General Assembly during the regular 2019 session but occurred during the 2020 regular session.

On December 6, 2019, the Governor presented a revised ten-year transportation plan to invest in the State's roads, bridges and public transit system. The plan includes investing $19 billion in the State's roads, bridges and public transit system through system preservation and maintenance projects as well as enhancement projects. The plan anticipates financing such projects from (i) federal grants, (ii) the State's Special Transportation Fund, (iii) borrowings through the Special Transportation Fund, the General Fund, and the federal government and (iv) user fees on commercial trucks. On February 19, 2020 the Governor announced he will no longer seek the passage of user fees on commercial trucks and will instead look to alternatives to fund transportation infrastructure. No assurances can be given as to (i) whether the Governor's plan or any other plan will be adopted by the General Assembly and signed by the Governor, (ii) the ultimate form of any adopted plan, or (iii) the impact of any adopted plan on the General Fund or the financial condition of the State.

Fiscal Year 2020 Operations

By statute, the State's fiscal position is reported on or before the first day of each month by the Comptroller. Pursuant to CGS Section 4-66, by the twentieth day of each month, OPM provides projected estimates to the

Comptroller of revenues and expenditures for the current fiscal year for use by the Comptroller in preparing the Comptroller's monthly report. The following summarizes OPM's and the Comptroller's estimates of General Fund revenues; expenditures and miscellaneous adjustments (including net appropriations continued and estimated lapses); and surplus/(deficit) balance in the General Fund for the 2020 Fiscal Year as of the referenced ending period in accordance with specific budgetary basis accounting standards set forth by statute, which incorporate new budgeted expenditure accruals consistent with specific statutory reporting requirements:

OPM and Comptroller Estimates Fiscal Year 2020
(in Millions)

	OPM's Report			Comptroller's Report		
Period Ending[a]	Revenues	Expenditures[b]	Surplus/ (deficit)	Revenues[c]	Expenditures[b][c]	Surplus/ (deficit)[c]
March 31, 2020	$18,485.1	$19,419.2	$(934.0)	$18,485.1	$19,418.8	$(933.7)
April 30, 2020	$18,734.7	$19,354.6	$(619.9)	$18,734.7	$19,354.6	$(619.9)
May 31, 2020	$18,818.3	$19,263.0	$(444.7)	$18,818.3	$19,262.7	$(444.4)

(a) Estimates reflect projections as of the period ending date for full Fiscal Year 2020.
(b) Expenditures include net appropriations, continued and estimated lapses and miscellaneous adjustments.
(c) Figures derived from the Comptroller's monthly letters to the Governor.

The Secretary of OPM noted that any year-end deficit will, by operation of existing law, be addressed through a transfer from the Budget Reserve Fund when the Comptroller closes the books for Fiscal Year 2020. Pursuant to OPM's estimates, after closing the anticipated Fiscal Year 2020 deficit, the estimated Budget Reserve Fund balance is expected to be approximately $2.38 billion by the beginning of Fiscal Year 2021, or 11.8% of net General Fund appropriations for that year.

The Secretary of OPM noted that the estimates include anticipated State costs for the State's response to the COVID-19 pandemic, however, updated federal guidance may result in future decisions by the State to shift costs among funding sources to maximize resources available for addressing the pandemic. The federal government has enacted four emergency supplemental funding bills which provide significant resources to the State. One of the vehicles for this relief is through a 6.2% increase in reimbursement for the Medicaid program which is reflected in both the estimate of Medicaid spending as well as in the revenue projections.

The Secretary of OPM further noted that although most of the due date extensions that have been implemented by the Internal Revenue Service and the State Department of Revenue Services to assist tax filers impacted by the pandemic currently fall within the existing statutory revenue accrual period for Fiscal Year 2020, previous monthly revenue forecasts had assumed certain statutory tax accrual language would have been legislatively modified prior to the end of the fiscal year to address tax refunds and inheritance and estate taxes. As such action has not been undertaken, the above changes to the revenue projections reflects existing law concerning tax accruals. In addition, the Secretary of OPM noted that the remittance deferments have presented challenges to the State's ability to forecast many tax revenue sources, including personal income tax collections and associated refunds. While the revenue estimate does not include a decline in either the personal income tax or the pass-through entity tax which are components of the volatility cap, the projection of a $318.3 million volatility deposit may be impacted if taxpayers reduce their estimated payments.

A significant component of the changes in the revenue estimate for the period ending March 31, 2020 is the timing of the anticipated receipt of federal reimbursement for the inpatient component of hospital supplemental payments, amounting to $369.5 million, which was originally expected to be received in Fiscal Year 2020. The receipt of these funds was moved to Fiscal Year 2021 for the March 31, 2020 estimate in anticipation of delayed necessary approvals. With the approvals now in hand, the receipt of these funds is now again expected to be received in Fiscal Year 2020, as reflected in the April 30, 2020 estimate.

Because the projected shortfall represents 2.3 percent of the General Fund, CGS Section 4-85 requires the Governor present a plan for mitigating this deficit. The Governor indicated that given the public health emergency associated with COVID-19, the critical pandemic response measures and the timing thereof, he is not offering expenditure reductions or revenue policy changes to address the Fiscal Year 2020 deficit.

On May 26, 2020, OFA projected a deficit in the General Fund of $596.6 million for Fiscal Year 2020.

The next monthly report of OPM is expected on or about July 20, 2020 and the next monthly report of the Comptroller is expected on August 1, 2020. The projections discussed above are only estimates and no assurances can be given that future events will materialize as estimated, or that subsequent estimates or adjustments by OPM, the Comptroller or other State agencies will not reflect changes in the estimated or final result of Fiscal Year 2020 operations of the General Fund. In addition, adjustments or audit or actions of the State may also result in changes in the final result of Fiscal Year 2020 operations of the General Fund.

COVID–19 Impact on General Fund

On March 10, 2020, Governor Lamont declared a public health emergency due to the spread of COVID-19 throughout the State. By and large, actions are being taken to support the Connecticut economy and businesses therein through tax filing deferments consistent with federal actions. Actions have also been taken to stabilize grants to providers, services and programs at a time where demand for such programs is high. The pandemic response is continually evolving, and further actions will likely be required to reduce the economic hardship the crisis has caused.

Most of the due date extensions that have been implemented by the Internal Revenue Service and the State Department of Revenue Services to assist tax filers impacted by the pandemic currently fall within the existing statutory revenue accrual period for this fiscal year for tax-types, and therefore remittance delays are not expected to have a material impact on budgetary balance outside of small losses in interest income from the change in timing of collections.

The economic impact of COVID-19 has not yet fully materialized. Current projections show the State slipping into recession starting in the fourth quarter of Fiscal Year 2020 as a result of significant pullback in consumption and significant increases in unemployment. Forecast data provided by IHS shows the State unemployment rate growing to 15.5% in Fiscal Year 2021 compared to an estimated 7.4% in Fiscal Year 2020. Connecticut Department of Labor’s Office of Research estimates the State’s average annual unemployment rate as of April 2020 to be in the range of 17.5%. All of these estimates are based on models developed for different circumstances and should not be viewed as anything other than an indication of the significant impact of COVID-19 on the State. Real Gross State Product is expected to contract by 2.8% in Fiscal Year 2021, the year in which the full economic impact of the pandemic is expected.

Current revenue projections are based on both anticipated economic factors as well as what the State is currently witnessing including a dramatic increase in filings for unemployment insurance, an across the board reduction in commuter traffic as residents abide by stay at home orders, a decline in electrical consumption, and a pull-back in public equity markets. Among the revenue sources being impacted include withholding taxes, sales taxes, motor fuels taxes, and Indian Gaming payments from the State’s two casinos.

On March 27, 2020, the United States Congress enacted the Coronavirus Aid, Relief, and Economic Stabilization Act that provides aid to industries and entities throughout the country, including state and local governments. The State received $1.382 billion to cover statewide costs associated with the response to the outbreak of COVID-19. These resources are intended to be broadly available and flexible to respond to direct and indirect costs associated with addressing the COVID-19 pandemic and are not counted towards revenues in the General Fund and cannot be used to offset budgetary deficits caused by a reduction in revenue. The State is unable to determine whether or not such funds will be sufficient to cover any such costs. Consistent with the State's practice in using federal grant funds, expenditures are not authorized through the General Fund. Funds not spent by December 31, 2020 are to be returned to the federal government.

See additional information under the heading ***COVID-19 Outbreak*** in the **COVID-19 AND OTHER MATTERS** section.

SUPPLEMENTARY INFORMATION AS OF JULY 15, 2020

Governor's Midterm Budget Revisions for Fiscal Year 2021

Per CGS Section 4-71, the Governor is required to submit a status report in each even year to the General Assembly on the biennial budget enacted in the previous year. The status report shall include any recommendations for adjustments and revisions to the enacted budget. On February 5, 2020, the Governor presented to the General Assembly a status report including detailed projections of expenditures and revenues and proposed midterm budget revisions for Fiscal Year 2021.

Due to the COVID-19 epidemic, the General Assembly did not pass any midterm budget adjustments prior to the scheduled adjournment date of May 6, 2020. There is no assurance that any such adjustments will be made in a special session of the General Assembly.

The General Assembly passed and the Governor signed into law, net total general obligation bond authorizations of $1.4 billion in Fiscal Year 2020 and $1.6 billion in Fiscal Year 2021. The General Assembly also passed and the Governor signed into law authorization for special tax obligation bonds for transportation of $777.6 million in Fiscal Year 2020 and $782.4 million in Fiscal Year 2021.

General Fund Budget History

The table below summarizes the results of operation of the General Fund on a budgetary-basis. Summaries of actual revenues and expenditures on the statutory basis for the Fiscal Years 2015 through 2019 are set forth in **Appendix II-D.**

TABLE 2

General Fund
Summary of Operating Results — Statutory Basis
(In Millions)

Fiscal Year	2015	2016	2017	2018	2019
Total General Fund Revenues[a]	$17,282.0	$17,780.8	$17,703.0	$18,198.5	$19,649.9
Net Appropriations/Expenditures[b]	17,395.2	17,951.2	17,725.7	18,681.4	19,279.3
Operating Surplus/(Deficit)[c]	$ (113.2)	$ (170.4)	$ (22.7)	$ (482.9)	$ 370.6[d]

(a) Does not include Restricted Accounts and Federal and Other Grants. See **Appendix II-D-6**.

(b) Does not include expenditures for Restricted Accounts and Federal and Other Grants. Includes Amounts Reserved for Prior Year Appropriations Less Appropriations Carried Forward and Other Adjustments. See **Appendix II-D**.

(c) The Fiscal Year 2015-2018 deficits were eliminated through the release of funds from the Budget Reserve Fund.

(d) In accordance with State statute, this amount will be transferred to the Budget Reserve Fund upon completion of the audit.

SOURCE: Comptroller's Office

The table below shows the reconciliation of the actual operations surplus (deficit) under the statutory basis to the GAAP basis of accounting for the last five fiscal years. Audited GAAP based financial statements for Fiscal Year 2019 are included in **Appendix II-C**.

TABLE 3

General Fund
Summary of Operating Results —Statutory Basis vs. GAAP Basis
(In Millions)

Fiscal Year	2015	2016	2017	2018	2019
Statutory Basis Operating Surplus/ (Deficit)	$ (113.2)	$ (170.4)	$ (22.7)	$ (482.9)	$ 370.6
Volatility Deposit Budget Reserve Fund	--	--	--	1,471.3	933.6
Statutory Surplus Reserve FY 2020-2021.................	--	--	--	--	160.0
Adjustments:					
Increases (decreases) in revenue accruals:					
Governmental Receivables..............................	147.7	(139.0)	(24.4)	515.5	(423.4)
Other Receivables	44.0	112.5	161.8	41.9	75.0
(Increases) decreases in expenditure accruals:					
Accounts Payable and Other Liabilities	(213.7)	(275.5)	19.8	3.9	(151.8)
Salaries and Fringe Benefits Payable	8.7	16.6	22.8	22.0	(26.6)
Increase (decrease) in Continuing Appropriations..	(21.0)	31.6	(36.3)	74.1	30.2
GAAP Based Operating Surplus/(Deficit)	$ (147.5)	$ (424.2)	$ 121.0	$1,645.8	$ 967.6

SOURCE: Comptroller's Office

The table below sets forth on the statutory basis the actual cumulative unreserved fund balance (deficit) for the General Fund for the last five fiscal years.

TABLE 4

General Fund
Unreserved Fund Balance —Statutory Basis
(In Millions)

Fiscal Year	2015	2016	2017	2018	2019
Operating Surplus/(Deficit)...	$(113.2)[(a)]	$(170.4)	$ (22.7)	$ (482.9)	$ 370.6
Fund Transfers and Reserves					
Transfers to Budget Reserve Fund	0.0	0.0	0.0	0.0	370.6
Transfers from Budget Reserve Fund...........................	113.2	170.4	22.7	482.9	--
Total Transfers/Reserves	$ 113.2	$ 170.4	$ 22.7	$ 482.9	$(370.6)
Unappropriated Surplus/(Deficit)...............................	$ 0.0	$ 0.0	$ 0.0	$ 0.0	$ 0.0

(a) $30 million reserved in Fiscal Year 2013 was released in Fiscal Year 2015.

The table below shows the reconciliation of the actual cumulative unreserved General Fund balance (deficit) under the statutory basis to the GAAP basis of accounting for the last five fiscal years.

TABLE 5

General Fund
Unreserved Fund Balance — Statutory Basis vs. GAAP Basis
(In Millions)

Fiscal Year	2015	2016	2017	2018	2019
Fund Balance (Deficit) Related to Statutory GAAP Budgeting	$ 0.0	$ 116.1	$ 116.1	$ 116.1	$ 116.1
GAAP Based Adjustments					
Additional Assets					
Taxes Receivable					
Income Tax Accrual Reduction	(475.0)	(447.1)	(387.5)	(425.0)	(515.8)
Eliminate Corporation Accrual	(19.3)	(18.5)	(39.6)	(17.7)	(14.9)
Additional Taxes Receivable	1.9	4.3	5.1	2.8	10.2
Net Increase (Decrease) Taxes	(492.4)	(461.3)	(422.0)	(439.9)	(520.5)
Net Accounts Receivable	398.1	388.0	449.5	448.7	510.3
Federal and Other Grants Receivable[(a)]	185.6	46.2	21.9	537.3	113.9
Due From Other Funds	48.7	46.4	43.7	45.0	47.7
GAAP Conversion Bonds	--	--	--	--	--
Total Additional Assets	$ 140.0	$ 19.3	$ 93.1	$ 591.1	$ 151.4
Additional Liabilities					
Salaries and Fringe Payable	(74.2)	90.8	113.6	135.6	109.1
Accounts Payable—Department of Social Services	(31.2)	(42.9)	(11.4)	(9.9)	(0.7)
Accounts Payable—Trade & Other	(432.3)	(728.6)	(681.1)	(706.2)	(754.2)
Payable to Federal Government	(304.7)	(360.8)	(357.7)	(288.7)	(326.9)
Due to Other Funds	(90.8)	(92.8)	(93.7)	(79.1)	(66.2)
Total Additional Liabilities	$ (933.2)	$(1,134.3)	$(1,030.3)	$ (948.3)	$(1,038.9)
Statutory Requirement – Change in Accounting Method	--	--	--	--	--
Unreserved Fund Balance (Deficit) GAAP Basis	$ (793.2)	$ (998.9)	$ (821.1)	$ (241.1)	$ (771.4)

(a) Primarily reimbursement for additional liabilities accrued to federal grant accounts or programs with federal participation, e.g., Medicaid.

SOURCE: Comptroller's Office

The table below sets forth on a GAAP basis the components of the fund balance for the General Fund for the last five fiscal years.

TABLE 6

General Fund Fund Balances-GAAP Basis
(In Millions)

Fiscal Year	2015	2016	2017	2018	2019
Reserved:					
Budget Reserve	$ 406.0	$ 235.6	$ 212.9	$ 1,201.4	$ 2,505.5
Future Budget Years	81.2	--	-	-	160.0
Loans & Advances to Other Funds	36.5	38.1	40.3	43.6	47.2
Inventories	14.6	14.4	13.3	12.8	15.2
Continuing Appropriations	65.0	96.6	60.2	134.3	164.5
Total	$ 603.3	$ 384.7	$ 326.7	$ 1,392.1	$ 2,892.4
Unreserved:	(793.2)	(998.9)	(821.1)	(241.1)	(771.4)
Total Fund Balance	$ (189.9)	$ (614.2)	$ (494.4)	$ 1,151.0	$ 2,121.0

SOURCE: Comptroller's Office

STATE ECONOMIC INITIATIVES

The General Assembly has enacted formal programs targeted at encouraging economic growth within the State. Below is a summary of certain of these programs, including several new initiatives.

First Five

Legislation passed in 2011 allowed the State's existing incentive and tax credit programs to be combined and augmented in order to create incentive packages for the first five companies that promise to either create not less than 200 new jobs within two years or invest not less than $25 million and create not less than 200 new jobs within five years. Legislation was passed to expand the program to allow incentives to be bundled in this manner for up to 20 companies by June 30, 2019. Nineteen companies agreed to participate in the program, and have created over 4,000 combined jobs in Connecticut in return for $247.6 million in forgivable loans, $129 million in grants, and up to $126 million in tax credits from the State.

Bioscience Connecticut

Legislation was passed in 2011 to expand the University of Connecticut Health Center ("Health Center") by making programmatic changes, providing State funding for expansion (including the construction of a new patient tower and renovation of existing facilities), and setting the framework for strengthening research capabilities in the State, including at the Health Center. The State also collaborated with Jackson Laboratory for the construction of a new research laboratory on the Health Center campus with a particular focus on genomic medicine. The State provided $290.7 million in in general obligation bond support for this project through fiscal year 2021, with $145 million in the form of a secured, forgivable construction loan; $46.7 million in the form of a secured, forgivable equipment loan; and $99 million in research partnership funding. The Jackson Laboratory was required.to create at least 300 jobs, including 90 senior scientists within 10 years. The ten year goal was exceeded in July 2018 when the workforce reached 385 people. The Jackson Laboratory expects to double its workforce in the coming years.

Bioscience Innovation Fund

Legislation passed in 2013 that in concert with the bioscience initiative above, supports the State's growing bioscience sector by strengthening the State's capacity to create competitive investment tools and attract additional federal and private dollars. The State will invest $204 million in the new Bioscience Innovation Fund over a twelve year period which is administered by Connecticut Innovations, Inc.

Economic and Manufacturing Assistance Act

Since 1990, the Economic and Manufacturing Assistance Act program has been one of the State's primary economic development incentive tools. The program provides incentive-driven direct loans for projects with strong economic development potential. The loan funds may be used for the planning of a municipal development project or business development project; the acquisition of real property, machinery or equipment; the construction of site and infrastructure improvements relating to a municipal development or business development project; the construction, renovation and demolition of buildings; relocation expenses for the purpose of assisting an eligible business to locate, construct, renovate or acquire a facility; or such other reasonable expenses necessary or appropriate for the initiation, implementation and completion of the project, including administrative expenses and business support services such as labor training, day care, energy conservation, and pollution control and recycling.

Small Business Express Program

Legislation passed in 2011 created a program to support the retention and growth of small businesses with 100 or fewer employees through a streamlined process that provides financial assistance in the form of revolving loans, job creation incentives, and matching grants. Loans are available from the revolving loan fund for a maximum of $100,000 per loan to assist small businesses with capital and operational needs. Job creation incentive loans of up to $300,000 per loan are also available to assist small businesses to spur growth, and payments on these loans may be deferred or forgiven if certain prescribed job creation goals are attained. A matching grant component provides grants up to $100,000 per grant to small businesses for training, working capital, acquisition of machinery and equipment, construction or leasehold improvements, relocation within the State, or other authorized expenses so long as the small business matches any funds awarded to it under this program.

Business Tax Credits

The State offers many business tax credits for firms conducting certain activities. Tax credits are offered for investments in human and fixed capital, research and development expenditures, and expenditures related to film production and investment, among others.

STATE DEBT

The information in this section contains information through February 15, 2020 except as may otherwise be set forth below.

SUPPLEMENTARY INFORMATION AS OF JULY 15, 2020

On June 11, 2020 the State of Connecticut issued $500,000,000 Taxable General Obligation Bonds (2020 Series A) maturing in varying amounts between July 1, 2021 and July 1, 2030 and bearing interest at rates ranging from 1.998% per annum to 3.00% per annum.

On June 25, 2020 the State of Connecticut issued $400,000,000 General Obligation Bonds (2020 Series C) maturing in varying amounts between June 1, 2021 and June 1, 2040 and bearing interest at rates ranging from 2.00% per annum to 5.00% per annum.

Constitutional Provisions

The State has no constitutional limit on its power to issue obligations or incur debt, except that it may borrow only for public purposes. There are no reported court decisions relating to State bonded debt other than two cases validating the legislative determination of the public purpose for improving employment opportunities and related activities. The State Constitution has never required a public referendum on the question of incurring debt. Therefore, the General Statutes govern the authorization and issuance of State debt, including the purpose, the amount and nature thereof, the method and manner of the incurrence of such debt, the maturity and terms of repayment thereof, the security therefor, and other related matters.

Types of State Debt

Pursuant to various public and special acts, the State has authorized a variety of types of debt. These types fall generally into the following categories: direct general obligation debt, which is payable from the State's General Fund; special tax obligation debt, which is payable from specified taxes and other funds that are maintained outside the State's General Fund; and special obligation and revenue debt, which is payable from specified revenues or other funds that are maintained outside the State's General Fund, including credit revenue bonds secured by a pledge of withholding tax receipts. In addition, the State provides annual appropriation support for, or is contingently liable on, the debt of certain State quasi-public agencies and political subdivisions. Whenever any general statute or public or special act, authorizes special tax obligation bonds or general obligations bonds of the State to be used for any purpose, such general statute or public or special act shall be deemed to have authorized such bonds to be issued as either special tax obligation bonds or general obligation bonds; provided in no event shall the total of the principal amount of special tax obligation bonds and general obligation bonds issued pursuant to the authority of any general statute or public or special act exceed the amount authorized thereunder. For purposes of presentation of authorized amounts included in the various tables and discussion herein, they are being included in the category in which they were originally authorized. See **OTHER FUNDS, DEBT AND LIABILITIES** for information concerning debt and contingent liabilities on debt other than direct general obligation debt.

State Direct General Obligation Debt

Statutory Authorization and Security Provisions. The State issues general obligation bonds pursuant to specific bond acts and CGS Section 3-20 (the "General Obligation Bond Procedure Act" or the "Act"). The Act provides that such bonds shall be general obligations of the State and that the full faith and credit of the State are pledged for the payment of the principal of and interest on such bonds as the same become due. The Act further provides that, as a part of the contract of the State with the owners of such bonds, there is made an appropriation of all amounts necessary for the punctual payment of principal and interest on such bonds, and the Treasurer shall pay such principal and interest as the same become due. In addition, the 2017 Budget Act authorized a new form of bonds secured by a statutory pledge of the State's withholding tax receipts ("credit revenue bonds"). See ***Credit Revenue Bond Program.***

There are no State constitutional provisions precluding the exercise of State power by statute to impose any taxes, including taxes on taxable property in the State or on income, in order to pay debt service on bonded debt now or hereafter incurred. The constitutional limit on increases in General Fund expenditures for any fiscal year does not include expenditures for the payment of bonds, notes or other evidences of indebtedness. There are also no constitutional or statutory provisions requiring or precluding the enactment of liens on or pledges of the State's General Fund revenues or taxes, or the establishment of priorities for payment of debt service on the State's general obligation bonds. There are no express statutory provisions establishing any priorities in favor of general obligation bondholders over other valid claims against the State.

Statutory Debt Limit. CGS Section 3-21 provides that no bonds, notes or other evidences of indebtedness for borrowed money payable from General Fund tax receipts of the State shall be authorized by the General Assembly or issued except as shall not cause the aggregate amount of (1) the total amount of bonds, notes or other evidences of indebtedness payable from General Fund tax receipts authorized by the General Assembly but which have not been issued and (2) the total amount of such indebtedness that has been issued and remains outstanding, to exceed 1.6 times the total estimated General Fund tax receipts of the State for the fiscal year in which any such authorization will become effective or in which such indebtedness is issued, as estimated for such fiscal year by the joint standing committee of the General Assembly having cognizance of finance, revenue and bonding. Credit revenue bonds issued pursuant to CGS Section 3-20j shall be considered as payable from General Fund tax receipts of the State for purposes of the debt limit. However, in computing the aggregate amount of indebtedness at any time, there shall be excluded or deducted (i) the principal amount of revenue anticipation notes having a maturity of one year or less, (ii) refunded indebtedness, (iii) bond anticipation notes, (iv) borrowings payable solely from the revenues of a particular project, (v) the balances of debt retirement funds associated with indebtedness subject to the debt limit as certified by the Treasurer, (vi) the amount of federal grants certified by the Secretary of OPM as receivable to meet the principal of certain indebtedness, (vii) all authorized and issued indebtedness to fund any budget deficit of the State for any fiscal year ending on or before June 30, 2009, (viii) all authorized debt to fund the tax increment bond program of Connecticut Innovations, Inc., (ix) any indebtedness represented by agreements entered into pursuant to certain provisions of the CGS, provided the indebtedness in connection with which such agreements were entered into shall be included in such aggregate amount of indebtedness, (x) any indebtedness issued for the purpose of meeting cash flow needs, (xi) any indebtedness issued for the purpose of covering emergency needs in times of natural disaster and (xii) any indebtedness authorized for transportation projects up to $500 million pursuant to Section 41 of Public Act No. 18-178. In addition, on and after July 1, 2018, the Treasurer may not issue general obligation bonds or notes pursuant to the Act or credit revenue bonds pursuant to CGS Section 3-20j that exceed in the aggregate $1.9 billion in any fiscal year, excluding bonds issued for the Connecticut State Colleges and Universities 2020 Program ("CSCU 2020") as defined in CGS Section 10a-91c(3) and UConn 2000 as defined in CGS Section 10a-109c (25), refunding bonds, revenue anticipation bonds, and up to $500 million in bonds for general obligation transportation projects. The $1.9 billion limit is subject to prescribed inflationary adjustments commencing July 1, 2019. Further, the Governor shall not approve allotment requisitions that would result in the issuance of general obligation bonds or notes pursuant to the Act or credit revenue bonds pursuant to CGS Section 3-20j that exceed in the aggregate $1.9 billion in any fiscal year, subject to certain exclusions, subject to prescribed inflationary adjustments commencing July 1, 2019. For purposes of the debt limit statute, all bonds and notes issued or guaranteed by the State and payable from General Fund tax receipts are counted against the limit, except for the exclusions or deductions described above, and certain other debt specifically excluded by statute (see **Table 7**, footnote (a)). In addition, the amount of authorized but unissued debt for the UConn 2000 program is limited to the amount permitted to be issued under the cap under CGS Section 3-21. See ***Types of Direct General Obligation Debt — UConn 2000 Financing Program***.

The Treasurer is required to compute the aggregate amount of indebtedness as of January 1 and July 1 each year and at other statutorily prescribed times and to certify the results of such computation to the Governor and the General Assembly. If the aggregate amount of indebtedness reaches 90% of the statutory debt limit, the Governor shall review each bond act for which no bonds, notes or other evidences of indebtedness have been issued, and recommend to the General Assembly priorities for repealing authorizations for remaining projects so that the aggregate amount of indebtedness authorized will be below 90% of the statutory debt limit. The General Assembly is not required to act upon such recommendations.

SUPPLEMENTARY INFORMATION AS OF JULY 15, 2020

The total tax receipts for Fiscal Year 2020, as last estimated by the General Assembly's joint standing committee on finance, revenue and bonding, the calculation of the debt limit, the aggregate amount of outstanding debt and of authorized but unissued debt subject to such limit, and the debt incurring margin, all as of May 1, 2020, are described in the following table.

TABLE 7 is replaced and updated as follows:

TABLE 7

Statutory Debt Limit
As of May 1, 2020

Total General Fund Tax Receipts	$17,033,400,000	
Multiplier	1.6	
Debt Limit		$27,253,440,000
Outstanding Debt[(a)]	$14,119,776,418	
Guaranteed Debt[(b)]	$ 2,059,244,563	
Authorized Debt[(c)]	$ 5,618,303,090	
Total Subject to Debt Limit		$21,797,324,071
Aggregate Net Debt		$21,797,324,071
Debt Incurring Margin		$ 5,456,115,929

(a) See **Table 8**. Includes accreted value of capital appreciation bonds. Excludes Pension Obligation Bonds, UConn 2000 Bonds, tax increment financings, CRDA Bonds, CHFA Supportive Housing Bonds, CHFA Emergency Mortgage Assistance Program Bonds, CHEFA Child Care Facilities Bonds and lease financings other than the Juvenile Training School.

(b) **Table 7** reflects only guarantees for certain outstanding debt of Southeastern Connecticut Water Authority, UConn 2000 Bonds, Municipal Contract Assistance secured by the State's debt service commitment and Small Business Energy Advantage Loans. See also **OTHER FUNDS, DEBT AND LIABILITIES – Contingent Liability Debt**.

(c) Includes UConn 2000 Bonds secured by the State's debt service commitment that are authorized but unissued under the statutory cap for Fiscal Year 2020.

SOURCE: State Treasurer's Office

State Bond Commission. The General Obligation Bond Procedure Act establishes the State Bond Commission (the "Commission") and empowers it to authorize the issuance of general obligation bonds and credit revenue bonds for purposes and in amounts and subject to other limits established by the legislature in a bond act. The Commission consists of the Governor, the Treasurer, the Comptroller, the Attorney General, the Secretary of OPM, the Commissioner of Administrative Services, and the Co-Chairpersons and Ranking Minority Members of the Joint Standing Committee on Finance, Revenue and Bonding of the General Assembly. The Secretary of OPM serves as secretary to the Commission.

Upon authorization, the principal amount of bonds so authorized is deemed to be appropriated for such purpose or project and, subject to allotment thereof by the Governor, contracts may be awarded and obligations incurred with respect to the project or purpose in amounts not exceeding the authorized principal amount. Such contracts and obligations may at any particular time exceed the amount of the bond proceeds received by the State up to that time. The Commission also determines the terms and conditions of the bonds authorized or delegates such determination to the Treasurer. The Commission generally meets monthly. Commencing January 1, 2017 and for each calendar year thereafter, the Commission may not authorize general obligation or credit revenue bond issuances of greater than $2.0 billion in the aggregate in any calendar year, subject to prescribed inflationary adjustments commencing January 1, 2018 and the exclusion of up to $500 million for transportation projects authorized pursuant to Section 41 of Public Act No. 18-178.

Bond Covenant. Pursuant to subsection (aa) of CGS Section 3-20, each fiscal year during which general obligation bonds or credit revenue bonds of the State issued on and after May 15, 2018 and prior to July 1, 2020 are outstanding, the State shall include a covenant in such bonds (which shall be applicable through June 20, 2023) that no public act or special act of the general assembly taking effect on or after May 15, 2018, and prior to July 1, 2023, shall alter the obligation of the State to comply with the provisions of (i) CGS Section 4-30a (funding of the Budget Reserve Fund and permissible expenditures therefrom), (ii) CGS Section 2-33c in effect on October 31, 2017 (the cap on General Fund and Special Transportation fund aggregate appropriations), (iii) CGS Section 2-33a (cap on spending), (iv) subsections (d) and (g) of CGS Section 3-20 (limitation of $2.0 billion on the authorization of bonds by the State Bond Commission in any calendar year), and (v) CGS Section 3-21 (the debt limit, including the limitation on the issuance by the State of general obligation bonds pursuant to CGS Section 3-20 or credit revenue bonds pursuant to CGS Section 3-20j to $1.9 billion in each fiscal year subject to certain exclusions and inflation adjustments, and the requirement that the Governor control spending allotments to ensure compliance with such limitation). Alterations are permissible (i) if and when adequate provision is made by law for the protection of the holders of the bonds, or (ii) (1) if and when the Governor declares an emergency or the existence of extraordinary circumstances, (2) at least 3/5 of the members of the General Assembly vote to alter such required compliance during the fiscal year for which the emergency or existence of extraordinary circumstances are determined, and (3) any such alteration is for the fiscal year in progress only.

During the 2018 Regular Session and prior to the issuance of any bonds containing the covenant, the General Assembly enacted three statutes amending the statutory provisions referenced above.

Section 7 of Public Act No. 18-49, effective May 31, 2018, amended CGS Section 4-30a by expanding the source of revenues that are to be deposited in the Budget Reserve Fund to include a new business entity tax. Section 8 of Public Act No. 18-49, effective May 15, 2018, amended subsection (aa) of CGS Section 3-20 to incorporate such change.

Section 20 of Public Act No. 18-81, effective May 15, 2018, provided that the amount to be deposited in the Budget Reserve Fund pursuant to CGS Section 4-30a shall be adjusted annually by the compound annual growth rate of personal income in the State over the preceding five calendar years, and that the threshold amount of the deposit to the Budget Reserve Fund may be amended by a super majority vote of each house of the General Assembly due to changes in state or federal tax law or policy, or significant adjustments to economic growth or tax collections.

Section 16 of Public Act No. 18-178, effective July 1, 2018, amended CGS Section 3-21(f)(1)(B) to provide that when calculating the $1.9 billion fiscal year limitation on the issuance of general obligation bonds pursuant to CGS Section 3-20 or credit revenue bonds pursuant to CGS Section 3-20j, there shall be excluded refunding bonds, revenue anticipation notes, and up to $500 million in bonds for transportation projects authorized during calendar years 2018 and 2019 in addition to bonds issued as part of the State's CSCU 2020 program and UConn 2000 program.

Because these amendments were in different acts with different effective dates, the Treasurer of the State requested guidance from the Attorney General of the State in the application and calculation of these provisions to the covenant. In the opinion of the Attorney General, all of the foregoing changes are given effect in the covenant. In reliance on this opinion, the Treasurer calculates the $1.9 billion general obligation and credit revenue bond issuance limit by applying the exclusions referred to above. The Attorney General further concluded that the legislature intended that the covenant requires that during the time the covenant is in effect, no further changes by the legislature are permitted. An opinion of the Attorney General is not binding upon a court and no assurance can be given that a court would come to the same conclusion in a case properly brought by a bondholder entitled to the benefit of the covenant. During the 2019 legislative session, the General Assembly adopted a Joint Resolution confirming the Attorney General's interpretation.

Types of Direct General Obligation Debt

General Obligation Bonds. Pursuant to various public or special bond acts, the General Assembly empowers the Commission to authorize bonds for a variety of projects or purposes. Each bond act is usually specific as to its projects or purposes and the amount of bonds to be issued therefor, although each bond act may contain several projects or purposes. Each bond act also generally sets forth a maximum maturity of the bonds.

The types of projects and purposes for which the State has authorized general obligation debt include the following: acquisition, construction, renovation and improvement of buildings and facilities for State departments and agencies, educational institutions, prisons, college and university facilities, library facilities and courthouses, acquisition of development rights to preserve open space and farmland, and the provision of grants and loans to promote economic development within the State. Some bonds authorized for university and college facilities are self-liquidating, and certain fees and charges collected by the college or university are set aside and used to service the debt on these bonds. Bonds are also authorized to fund a wide variety of grant programs. Such grants are made to local governments for local school construction projects or to finance a variety of local government, economic development, highway, bridge and other capital improvement projects. Certain bonds are authorized to finance grants and loans to local housing authorities and developers of affordable housing. Other general obligation debt finances grants and loans to municipalities for design and construction of water pollution control facilities, in addition to loans that are financed under the State's Clean Water revenue bond program.

Credit Revenue Bond Program. The 2017 Budget Act authorized the State to issue a new form of credit revenue bonds secured by a statutory gross pledge of the State's withholding tax receipts to fund its capital projects. As established in the 2017 Budget Act, credit revenue bonds will be revenue bonds secured by a statutory lien on withholding tax receipts of the State. These receipts will be paid into segregated pledged accounts from which the trustee for the credit revenue bonds will withdraw amounts to be set aside for debt service on the credit revenue bonds. Withholding tax revenues withdrawn to be set aside for debt service on the credit revenue bonds will not be available to pay debt service on general obligation bonds. Amounts in the segregated pledged accounts in excess of the amounts withdrawn for debt service will be swept daily into other accounts of the State, free of the credit revenue bond lien and available for all purposes of the General Fund, including payment of debt service on the State's general obligation bonds. The credit revenue bonds will have no claim on any other revenues of the State and will not be subject to acceleration. The credit revenue bonds may be issued for any purpose for which general obligation bonds are authorized, including refunding bonds, and, if issued, would be in lieu of general obligation bonds. Credit revenue bonds will be authorized in the same manner as general obligation bonds, and accounted for within the State's General Fund. The credit revenue bonds will be treated as general obligation bonds for purposes of the State bond cap, and therefore do not represent an avenue for additional bond issuance. Issuance of credit revenue bonds is subject to an additional bonds test requiring a debt service coverage ratio of three times. As of February 20, 2020, no credit revenue bonds have been issued and the State has no current plans to issue such bonds.

Teachers' Retirement Fund Pension Obligation Bonds. In April 2008 the State issued $2,277 million of bonds to fund up to $2 billion of the unfunded accrued liability in the Teachers' Retirement Fund plus capitalized interest and issuance costs. $2,388.4 million (reflecting the accreted value) of such bonds are outstanding as of February 1, 2020. The bonds are general obligations of the State, but are excluded from the calculation of the statutory debt limit.

UConn 2000 Financing Program. The University of Connecticut is a separate corporate entity and instrumentality of the State empowered to issue bonds and construct certain infrastructure improvements at the University's various campuses. Known as "UConn 2000", the infrastructure improvement program now is estimated to cost $4,619.3 million to be financed over a thirty-two year period. The UConn 2000 program contemplates total issuance of $4,282.9 million general obligation bonds of the University secured by the State's debt service commitment, which is an annual amount for any debt service requirements when due and payable. Under the enabling legislation, appropriations of all amounts of the State's debt service commitment are made out of the resources of the State's General Fund and the Treasurer is obligated to make such payments. For this reason, all general obligation borrowings by the University that are secured by the State's debt service commitment are treated as part of the State's general obligation debt, and are reflected in **Tables 8 through 14**. The amount of the University's bonds secured by the State's debt service commitment is capped for each fiscal year, but any amount not used may be carried forward to future fiscal years. As of February 1, 2020, $3,874.1 million of such debt secured by the State's debt service commitment had been issued (including refunding bonds), of which $1,652.0 million remain outstanding, with a remaining authorization of $294.0 million of which $199.6 million is allocated. It is anticipated that additional authorizations will become effective in future fiscal years.

Special obligation bonds of the University are secured by particular revenues of the University and are not subject to the cap on the University's general obligation debt service commitment bonds and are not counted against the State's debt limit.

The General Assembly has and may continue to authorize capital improvements for the University of Connecticut in addition to the UConn 2000 Program. General obligation bonds authorized for such purposes are reflected in the Authorized but Unissued Direct General Obligation Debt shown in **Table 12**. However, the construction of a new $203 million ambulatory care center at the University of Connecticut Health Center authorized in 2011, but financed through a lease financing through the University of Connecticut Health Center Finance Corporation is not reflected in **Table 12**. During 2018, a solicitation of interest was issued seeking proposals for a public-private partnership for the University's clinical health enterprises, John Dempsey Hospital and UConn Medical Group. A response that met all objectives was not received. However, the University continues to explore partnering opportunities that will meet its goals.

Lease Financing. The State has issued certificates of participation for the development of courthouse facilities (none of which are outstanding) and an energy facility at a juvenile training school, each based upon State rental payments under a lease purchase agreement between the State and the project developer. The State has treated this method of lease financing as general obligation debt. The State is evaluating opportunities for the lease financing of energy improvements under existing statutory authorizations. The State has entered into other leasing arrangements for the development of government facilities that are not treated as general obligation debt, most often in circumstances where the lease is an operating lease or the State is not a participant in the securitization of rental payments under the lease.

Tax Increment Financing. Connecticut Innovations, Inc. ("CI") is authorized to issue tax increment bonds for certain types of economic development projects. Under the program the amount of such bonds that may be issued is limited so that the debt service on the bonds may not exceed the estimated increases in the sales tax and the admissions, cabaret and dues taxes generated by the project and allocated by CI for debt service on the bonds. Debt service on the bonds is required to be paid from such tax receipts (whether or not the actual tax receipts equal or exceed the estimated amount) and is deemed appropriated from the General Fund. The State has classified such tax increment bonds as general obligation debt. No such tax increment bonds may be issued without the approval of the Commission. Such tax increment bonds are not reflected in **Table 7**, but are reflected in **Tables 8 through 12**.

Supportive Housing Financing. The Connecticut Housing Finance Authority ("CHFA") in conjunction with other state agencies developed a collaborative plan to create affordable housing and support services for specified eligible persons. The program is to be funded in part through mortgages, tax credits and grants from

CHFA and the Department of Economic and Community Development. CHFA is authorized to issue bonds in support of the program and the Commission has authorized the Treasurer and OPM to enter into a contract to provide State assistance and pay debt service on the bonds in the form of payments of principal, interest, interest swap payments, liquidity fees, letter of credit fees, trustee fees and other similar bond-related expenses. Bonds supported by such State assistance may not exceed $105 million in the aggregate. As of February 1, 2020, $48.6 million of such bonds were outstanding. Any provision in the contract providing for the payment of annual debt service constitutes a full faith and credit obligation of the State, and any bonds for which the State provides assistance are excluded from the calculation of the statutory debt limit.

Emergency Mortgage Assistance Program. CHFA is authorized to issue up to $50 million of bonds to fund an Emergency Mortgage Assistance Program and the Treasurer and OPM are required to enter into a contract to provide State assistance to pay debt service on such bonds in the form of payments of principal, interest, interest swap payments, liquidity fees, letter of credit fees, trustee fees and similar bond-related expenses. As of February 1, 2020, the entire $50 million had been issued, of which $33.7 million was then outstanding. Any provision in the contract providing for the payment of annual debt service constitutes a full faith and credit obligation of the State, and any bonds for which the State provides assistance are excluded from the calculation of the statutory debt limit.

Economic Recovery Notes. The Treasurer is authorized from time to time to issue notes to fund budget deficits of the State. Currently, no such authorization is in place and no notes are outstanding.

Municipal Contract Assistance. The 2017 Budget Act created the Municipal Accountability Advisory Board ("MARB") to supervise distressed municipalities in the State, and authorized the State, acting through the Treasurer and the Secretary of OPM, to enter into contract assistance agreements with municipalities operating as "Tier III" or "Tier IV" municipalities under the MARB. Such contract assistance may provide for payment by the State of all or a portion of annual debt service on refunding bonds issued to refund outstanding indebtedness of such a municipality, plus costs of issuance. The legislation also authorized the State to provide alternate forms of credit support, provided the alternate support is not in excess of the amount of contract assistance otherwise available. The contract assistance would be deemed appropriated, and would constitute the full faith and credit obligation of the State. Currently, the City of Hartford, the City of West Haven and the Town of Sprague are "Tier III" municipalities; there are no "Tier IV" municipalities. Hartford's outstanding debt is approximately $494 million. The State and Hartford entered into an agreement which obligates the State to make payments equal to principal and interest, when due, on all of Hartford's currently outstanding general obligation bonds with the State retaining the right to restructure the outstanding debt in the future. This contract assistance program is in addition to, but not in duplication of, assistance available to municipalities and described under "**OTHER FUNDS –** ***Assistance to Municipalities***".

Certain Short-Term Borrowings. The CGS authorize the Treasurer, subject to the approval of the Governor, to borrow such funds, from time to time, as may be necessary, and to issue obligations of the State therefor, which shall be redeemed by the Treasurer whenever, in the opinion of the Treasurer, there are funds in the treasury available for such purpose, or not later than two years from the date of issuance, whichever is earlier. The State has established programs of temporary note issuances and credit facilities from time to time to cover periodic cash flow requirements. No temporary notes are outstanding and no such credit facilities are in effect.

Forms of Debt. In addition to the bonds, notes and lease financings described above, the Treasurer has the authority to issue refunding bonds, bond anticipation notes, and capital appreciation bonds. The Act provides that the Treasurer may issue temporary notes and any renewals thereof in anticipation of the proceeds from the sale of bonds whenever the Commission has adopted a resolution authorizing bonds. The Treasurer is also authorized by the Act to issue refunding bonds whenever the Treasurer finds that a refunding is in the best interests of the State and that the State reasonably expects to achieve net debt service savings as a result of such refunding.

Certain of the State's general obligation bonds have been issued as capital appreciation bonds. Capital appreciation bonds are issued at a deep discount and interest on the bonds is compounded semi-annually and only paid at maturity. For purposes of the State's debt tables, the interest that has accrued on capital appreciation bonds up to the date of the table is added to the principal amount of the State's outstanding debt. Pursuant to State statute, accrued interest on UConn 2000 capital appreciation bonds is excluded from the calculation of the statutory debt limit.

Derivatives. The Treasurer, with the authorization of the Commission, has the power to enter into reimbursement and similar agreements in connection with liquidity or credit facilities and to pledge the full faith and credit of the State or other collateral to secure the State's payment obligations under any such agreement. The Treasurer, with the authorization of the Commission, has the power to enter into contracts to place the obligation of the State as represented by bonds or notes of the State, on such interest rate or cash flow basis as the Treasurer may determine, including swap agreements and other arrangements to manage interest rate risk. When any such arrangement is entered into, the counter-party to the arrangement must have a rating on its unsecured long-term obligations that is the same as or higher than the underlying rating of the State on the applicable bonds. The Commission may authorize the Treasurer to pledge the full faith and credit of the State and any other collateral pledged to secure the applicable bonds to also secure the State's payment obligations under any such contract.

The State has entered into swap agreements in connection with various bond issues. The swap agreements typically provide for early termination in certain events, and such "termination events" could result in the State being required to make unanticipated termination payments. Such payments, if any are due, may be substantial. In some cases the State has up to 270 days to make any such termination payments. The amounts payable to each swap provider under the respective swap agreement, including any termination payments, will be general obligations of the State. The State is obligated to make debt service payments on its bonds regardless of the performance of the swap provider of its obligations under the swap agreement. Listed below is a summary of the remaining swap agreement the State has entered into in connection with its general obligation bonds. See also **Appendix II-C, Note 19 – Derivative Financial Instruments**.

Swap Agreements as of February 1, 2020

Bond Issue	Notional Amount	Termination Date	Fixed Rate Paid by State
2005 Series B	$ 20,000,000	June 1, 2020	5.20%

Debt Statement. The following table shows all direct general obligation indebtedness (including the accreted value of capital appreciation bonds) for the payment of the principal and interest on which the State has pledged its full faith and credit or which is otherwise payable from the State's General Fund.

SUPPLEMENTARY INFORMATION AS OF JULY 15, 2020

TABLE 8 is replaced and updated as follows:

TABLE 8

Direct General Obligation Indebtedness[a]
Principal Amount Outstanding As of May 1, 2020
(In Thousands)

General Obligation Bonds	$14,004,865
Pension Obligation Bonds	2,393,806
UConn 2000 Bonds	1,568,905
Other [b]	215,781
Long-Term General Obligation Debt Total	$18,183,357
Short-Term General Obligation Debt Total	
Gross Direct General Obligation Debt	$18,183,357
Net Direct General Obligation Debt	$18,183,357

(a) The table does not include refunded bonds for which escrow funds and investments are sufficient to pay all debt service. The table also does not include limited or contingent liabilities of the State or obligations of the State to towns for participation in the construction and alteration of school buildings. See **OTHER FUNDS, DEBT AND LIABILITIES**.

(b) "Other" includes miscellaneous general obligation debt, lease financings, tax increment financings, CHFA Supportive Housing Bonds and CHFA Emergency Mortgage Assistance Program Bonds. However, it does not include CRDA Bonds or CHEFA Child Care Facilities Bonds or Municipal Contract Assistance secured by the State's debt service commitment. See **OTHER FUNDS, DEBT AND LIABILITIES – Other Debt Service and Contractual Commitments**.

SOURCE: State Treasurer's Office

Debt Ratios. The following table sets forth certain ratios relating to the State's gross and net direct general obligation indebtedness:

TABLE 9

Outstanding Long-Term General Obligation Debt and Debt Ratios

Fiscal Year	2015	2016	2017	2018	2019
Gross Direct Debt[(a)]	$16,879,336	$17,704,949	$18,534,494	$18,723,853	$18,705,288
Ratio of Debt to Personal Income[(b)]	6.89%	7.09%	7.18%	7.26%	6.85%
Ratio of Debt to Estimated Full Value of Equalized Grand List[(c)]	3.17%	3.27%	3.42%	3.41%	3.34%
Per Capita Debt[(d)]	$4,706	$4,948	$5,187	$5,242	$5,247

(a) In thousands. Includes gross direct general obligation bonded indebtedness outstanding as of June 30 of each fiscal year as set out in **Table 11** which includes bonds that are considered self-liquidating.

(b) See **Appendix II-B, Table B-2**. Personal Income: 2015 — $245.0 billion; 2016 — $249.6 billion; 2017 — $258.0 billion and 2018 — $273.2 billion. The 2019 ratio uses 2018 data.

(c) Full value estimated by OPM. Uses final equalized net grand lists: 2013 – $532.3 billion; 2014 – $541.1 billion; 2015 – $541.7 billion; 2016 – $549.2 billion and 2017 – $560.0 billion. Property is assessed as of October 1 in each year for the tax levy effective the following July 1. The 2015 ratio uses 2013 data; 2016 ratio uses 2014 data; 2017 ratio uses 2015 data; 2018 ratio uses 2016 data and 2019 ratio uses 2017 data.

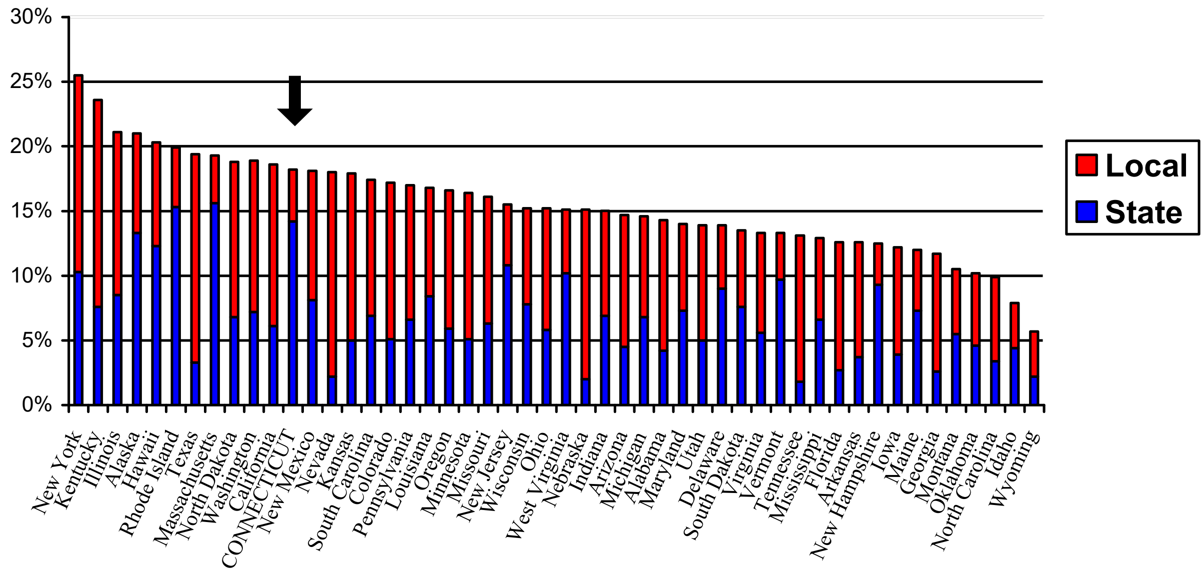
(d) See **Appendix II-B, Table B-1**. State population in thousands: 2015 — 3,587; 2016 — 3,578; 2017 — 3,573; 2018 — 3,572 and 2019 — 3,565.

Aggregate State and Local Debt

The following table sets forth the per capita aggregate debt level of each state, including debt issued at both the state and local levels, compared to per capita personal income within the state. As the chart shows, the State of Connecticut is 39th among all states in a ranking of states with the least aggregate debt per capita as a percentage of per capita personal income. The chart below also indicates that the State has the sixth lowest ratio of per capita local debt to per capita personal income and second lowest ratio of local debt to aggregate debt. This is due in part to the State's practice of financing school construction primarily at the state level and the absence of county-level government in the State.

TABLE 9a(a)(b)

Combined State and Local Debt Compared to State Personal Income



(a) The percentages along the vertical axis are calculated by dividing per capita aggregate debt over per capita personal income. Population figures used in the underlying calculations are the population estimates as of July 1, 2018 from the U.S. Census Bureau, Population Division. State and local debt figures used in the underlying calculations are from the U.S. Census Bureau, 2017 Annual Surveys of State and Local Finances. Per capita income figures used in the underlying calculations are from the Bureau of Economic Analysis, which used data from 2018.

(b) The Census Bureau state and local debt figures include debt obligations of all dependent agencies of the state and local government, respectively, including agencies, boards, commissions, or other organizations, regardless of the responsibility for debt service. This differs from the components of debt in other places within this Information Statement.

SOURCE: United States Department of Commerce, Bureau of Economic Analysis; U.S. Census Bureau

SUPPLEMENTARY INFORMATION AS OF JULY 15, 2020

Debt Service Schedule. The following table sets forth the principal, sinking fund and interest payments required on all outstanding long-term direct general obligation debt of the State, as of May 1, 2020. Although not specifically reflected as a result of combining all outstanding long-term direct debt, the State generally issues general obligation bonds maturing within twenty years. The exceptions include thirty-year Rental Housing Term Bonds and certain other bonds with maturities of less than twenty years where required by statute or in instances where the expected period of usefulness of the project or purpose financed does not warrant a maturity of twenty years.

TABLE 10 is replaced and updated as follows:

TABLE 10

Summary of Principal, Mandatory Sinking Fund Payments, and Interest on Long-Term Direct General Obligation Debt[(a)]
As of May 1, 2020

Fiscal Year	Principal Payments[(b)]	Interest Payments[(b)(c)]	Total Debt Service
2020	$ 313,225,000	$ 89,090,536	$ 402,315,536
2021	1,509,116,206	806,268,240	2,315,384,446
2022	1,470,929,111	791,726,414	2,262,655,525
2023	1,506,851,122	737,068,349	2,243,919,471
2024	1,401,624,066	697,280,352	2,098,904,419
2025	1,350,202,437	637,334,751	1,987,537,188
2026	1,321,310,000	491,378,400	1,812,688,400
2027	1,275,960,000	428,363,417	1,704,323,417
2028	1,225,405,000	365,959,758	1,591,364,758
2029	1,114,945,000	307,445,211	1,422,390,211
2030-2040	5,508,050,000	904,918,996	6,412,968,996
Totals	$ 17,997,617,942	$ 6,256,834,426	$ 24,254,452,368

(a) Includes long-term general obligation debt as outlined in Table 8. The future principal payments ($17,997,617,942), plus accreted interest ($185,739,545), total the amount of such long-term debt ($18,183,357,487) as shown in **Table 8**. See footnotes (b) and (c) for further explanation.

(b) Principal payments include aggregate stated initial values of capital appreciation bonds. Interest payments include the difference between the aggregate stated initial values and the aggregate maturity amounts of capital appreciation bonds. Capital appreciation bonds mature in Fiscal Years 2020 through 2025.

(c) Some of the State's direct debt pays interest at variable rates. For purposes of this **Table 10**, the interest on such debt is calculated based on the following assumed average rates:

Year Issued	Amount Issued	Amount Outstanding	Maturities	Interest Rate
2005	$ 300,000,000	$ 10,000,000	2023	3.50%
2005*	20,000,000	20,000,000	2020	5.20
2013	244,570,000	87,495,000	2020-2025	3.50
2013	115,000,000	15,000,000	2020	3.50
2014	47,000,000	10,000,000	2020-2023	3.50
2015	200,000,000	158,310,000	2020-2024	3.50
2015	180,745,000	64,525,000	2020-2022	3.50
2016	300,000,000	288,235,000	2020-2034	3.50
2017	300,000,000	284,215,000	2020-2037	3.50
2017	134,865,000	44,865,000	2020-2024	3.50
Totals	$1,842,180,000	$982,645,000		

* Assumed average interest rate based on interest rate swap agreement(s), including projected basis risk.

SOURCE: State Treasurer's Office

Outstanding Long-Term Direct General Obligation Debt

The following table sets forth the total long-term direct general obligation debt outstanding at the end of each of the last ten fiscal years. The long-term debt outstanding includes bonds that are considered self-liquidating. See **Table 8**.

TABLE 11

Outstanding Long-Term Direct General Obligation Debt
As of June 30
(In Thousands)

Fiscal Year	Gross Debt
2010	$15,066,507
2011	14,680,676
2012	14,678,736
2013	14,762,696
2014	15,819,826
2015	16,879,336
2016	17,704,949
2017	18,534,494
2018	18,723,853
2019	18,705,288

SOURCE: State Treasurer's Office

Future Issuance of Direct General Obligation Debt

SUPPLEMENTARY INFORMATION AS OF JULY 15, 2020

Authorized But Unissued Direct General Obligation Debt. The General Assembly has empowered the Commission to authorize direct general obligation bonds pursuant to certain bond acts. The table below shows, as of May 1, 2020, the amount of bonds authorized by bond acts in effect, the amount the Commission has authorized, the amount of bonds issued pursuant to Commission authorizations, the balance remaining authorized but unissued and the balance available for authorization. The following table shows the same information for UConn 2000 bonds secured by the State's debt service commitment authorized to be issued under the cap through June 30, 2020.

TABLE 12 is replaced and updated as follows:

TABLE 12

Authorized but Unissued Direct General Obligation Debt
As of May 1, 2020
(In Thousands)

	State Direct Debt[(a)]	Pension Obligation Bonds[(b)]	UCONN 2000[(c)]	Tax Increment[(d)]	Total
Bond Acts in Effect	$41,724,441	$2,276,578	$3,323,837	$74,750	$47,399,606
Amount Authorized[(e)]	39,187,251	2,276,578	3,323,837	74,750	44,862,417
Amount Issued	36,304,278	2,276,578	3,124,237	68,040	41,773,133
Authorized but Unissued	2,882,973	0	199,600	6,710	3,089,283
Available for Authorization	2,537,190	0	0	0	2,537,190

(a) Includes CHFA Supportive Housing Bonds, CHFA Emergency Mortgage Assistance Program Bonds and GAAP Deficit Bonds. Excludes CRDA Bonds, CHEFA Child Care Facilities Bonds and lease financings.

(b) The amount available does not include additional amounts which may exceed the cap to finance issuance costs and capitalized interest.

(c) Includes new money bonds that may be issued under the cap in effect on the date of the table. The amount available for authorization does not include additional amounts which may exceed the cap to finance reserve funds, issuance costs and capitalized interest. The amount issued has been adjusted to reflect increases due to closing costs and decreases due to premiums.

(d) The amount of tax increment bonds authorized is based on the amount authorized by the Commission, since there is no statutory amount of authorization.

(e) The amount authorized reflects amounts allocated by the Commission.

SOURCE: State Treasurer's Office; OPM

Bond Authorizations and Reductions. The General Assembly authorizes bonds in various public and special acts each year or each biennium. In addition to authorizing bonds for new projects and purposes, the General Assembly reviews prior authorizations and may repeal certain projects and bond authorizations or otherwise reduce prior bond authorizations. The following table and graph list the amount of new authorizations of general obligation debt that take effect during the fiscal year listed, and the net amount after subtracting prior bond authorizations that have been repealed or reduced. Pension obligation bonds and economic recovery notes are not included since they are not recurring authorizations.

SUPPLEMENTARY INFORMATION AS OF JULY 15, 2020

TABLE 13 is replaced and updated as follows:

TABLE 13

Statutory General Obligation Bond Authorizations and Reductions[(a)]
(In Millions of Dollars)

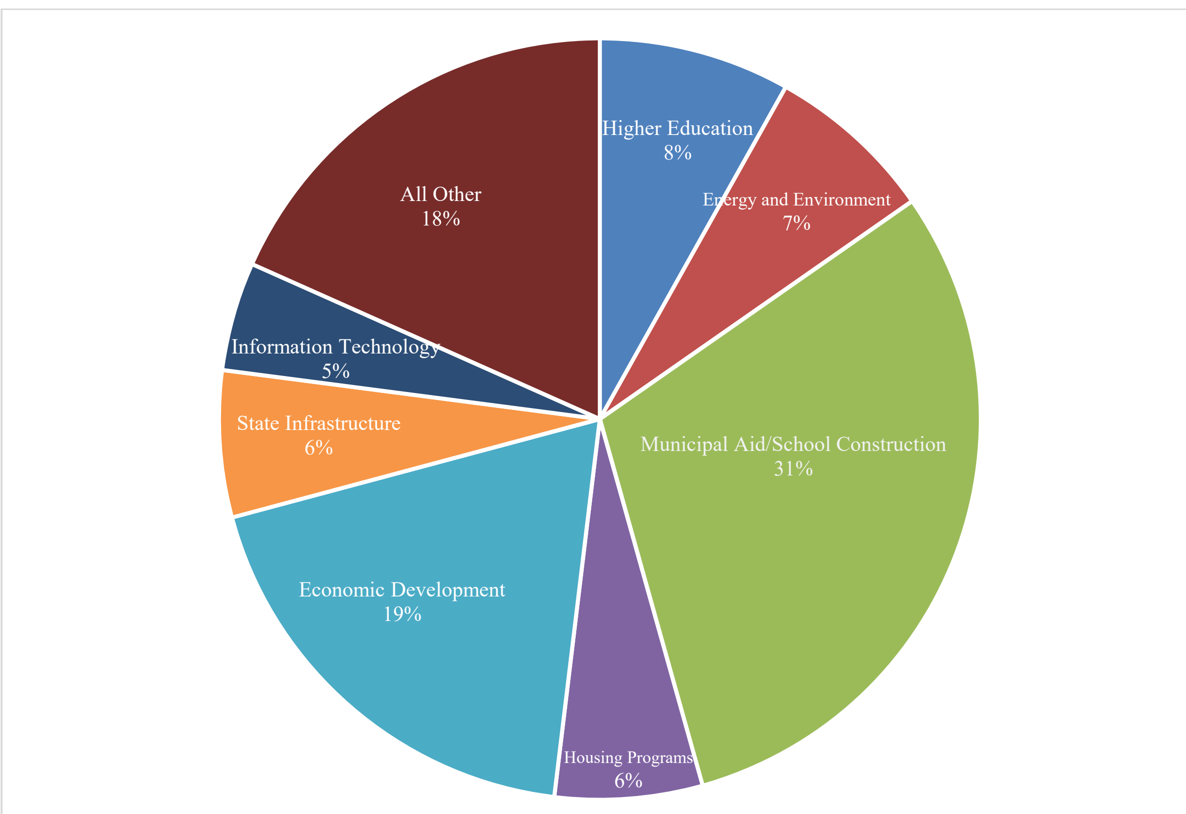
Fiscal Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
New Authorizations	1,724.8	2,673.3	1,993.6	2,843.6	2,391.5	2,661.3	1,875.6	1,800.0	1,895.4	1,899.5
Reductions	(10.8)	(22.3)	(12.0)	(27.8)	(272.5)	(985.7)	(263.3)	(406.3)	(3.4)	0.0
Net New Authorizations	1,714.0	2,651.0	1,981.6	2,815.8	2,119.0	1,675.6	1,612.3	1,393.7	1,892.0	1,899.5

(a) Does not include Pension Obligation Bonds, Economic Recovery Notes, lease financings, tax increment or cash flow borrowings. Does not include GAAP Deficit Bonds authorized in Fiscal Year 2014 in an aggregate principal amount sufficient to generate net proceeds of not more than $598.5 million. Includes amount for UConn 2000 bonds available under the cap for Fiscal Years 2010 through 2021, as amended, but does not include additional amounts which may exceed the cap to finance reserve funds, issuance costs and capitalized interest. Amounts are listed in the fiscal year that the bond authorizations become effective. Does not include any authorizations which take effect after Fiscal Year 2021. See **Table 14**.

SOURCE: State Treasurer's Office; OPM

TABLE 14

General Obligation Bond Allocations for Fiscal Years 2015 – 2019



SOURCE: OPM

OTHER FUNDS, DEBT AND LIABILITIES

The information in this section contains information through February 15, 2020 except as may otherwise be set forth below.

SUPPLEMENTARY INFORMATION AS OF JULY 15, 2020

The following information supplements information contained within this OTHER FUNDS, DEBT AND LIABILITIES section:

On May 29, 2020 the State of Connecticut issued $850,000,000 Special Tax Obligation Bonds Transportation Infrastructure Purposes, 2020 Series A maturing in varying amounts between May 1, 2021 and May 1, 2040 and bearing interest at rates ranging from 3.00% per annum to 5.00% per annum.

On June 11, 2020 the Connecticut Higher Education Supplemental Loan Authority issued $19,000,000 of State Supported Revenue Bonds maturing in varying amounts between November 15, 2022 and November 15, 2036 and bearing interest at rates ranging from 3.25% per annum to 5.00% per annum and $7,955,000 of State Supported Revenue Bonds maturing in varying amounts between November 15, 2020 and November 15, 2027 and bearing interest at a rate of 5.00% per annum, which bonds are secured by a State supported SCRF.

The Connecticut Green Bank expects to issue approximately $16,000,000 Solar Home Renewable Energy Credit, Green Liberty Bonds in or around July, 2020 which bonds will be secured by a State supported SCRF.

The State conducts certain of its operations through State funds other than the State General Fund and may issue debt secured by the special taxes or revenues pledged to certain of such funds. In addition, the State is contingently liable, or has limited liability, from the resources of the State's General Fund, for payment of debt service on certain obligations of quasi-public State agencies and municipalities of the State. The State also has committed to pay debt service on loans to finance certain child care facilities and has committed to certain municipalities to make future grant payments for school construction projects, payable over a period of years, and has certain other contingent liabilities for future payments.

Special Transportation Fund and Debt

In 1984 the State adopted legislation establishing a transportation infrastructure program and authorizing Special Tax Obligation ("STO") bonds to finance the program. The transportation infrastructure program is a continuous program for planning, construction and improvement of transportation infrastructure, and is administered by the Department of Transportation.

The cost of the transportation infrastructure program for Fiscal Years 1985-2022, which will be met from federal, State, and local funds, is currently estimated at $41.2 billion. The State's share of such cost, estimated at $20.7 billion, is to be funded from transportation-related taxes, fees and revenues deposited in the Special Transportation Fund, as described below, and from the proceeds of STO bonds. The portion of State program costs not financed by STO bonds is estimated at $0.9 billion and includes the expenses of the transportation infrastructure program that either are not sufficiently large or do not have a long enough life expectancy to justify the issuance of long-term bonds.

The State's share of the cost of the infrastructure program for Fiscal Years 1985-2022 to be financed by STO bonds currently is estimated at $19.8 billion, of which approximately $14.7 billion has been financed through Fiscal Year 2018.

During Fiscal Years 1985-2019, $35.0 billion of the total transportation infrastructure program was approved by the appropriate governmental authorities. The remaining $6.2 billion of such infrastructure costs required for Fiscal Years 2020-2022 is anticipated to be funded with the proceeds of $4.1 billion of future STO bonds, $2.0 billion in anticipated federal funds, and $99.0 million in anticipated revenues and other available funds.

The State has established the Special Transportation Fund for the purpose of budgeting and accounting for all transportation-related taxes, fees and revenues credited to such Fund and securing the STO bonds. STO bonds are payable solely from revenues of the Special Transportation Fund and other pledged receipts, funds or moneys. The aggregate of certain transportation related taxes and other transportation related revenue sources, and any direct pay federal interest subsidy received by the State in connection with the issuance of any taxable STO bonds (Build America Bonds) are intended to cover the cost of the State's share of the infrastructure program, including debt service requirements on STO bonds.

The table below shows the amount of STO bonds authorized by bond acts in effect, the amount the State Bond Commission has authorized, the amount of bonds issued pursuant to Commission authorizations, the balance remaining authorized but unissued, the balance available for authorization, and the amount outstanding. It is anticipated that additional STO bonds will be authorized by the General Assembly annually in an amount necessary to finance and complete the transportation infrastructure program. Such additional bonds may be issued on an equal rank with the outstanding bonds provided certain pledged revenue coverage requirements of the STO bond indentures controlling the issuance of such bonds are met.

SUPPLEMENTARY INFORMATION AS OF JULY 15, 2020

TABLE 15 is replaced and updated as follows:

TABLE 15

Special Tax Obligation Bonds
As of May 1, 2020
(In Millions)

	New Money	Refundings[a]	Total
Bond Acts in Effect	$19,134.2	N/A	$19,134.2
Amount Authorized[b]	17,275.4	N/A	17,275.4
Amount Issued	12,270.2	$4,327.0	16,597.2
Authorized but Unissued	5,005.2	N/A	5,005.2
Available for Authorization	1,858.8	N/A	1,858.8
Amount Outstanding	5,025.3	549.4	5,574.7

(a) Refunding Bonds do not require legislative approval.
(b) The Amount Authorized reflects amounts allocated by the Commission.

SOURCE: State Treasurer's Office

In 2015, legislation created a new statutory transportation "lock box" that established the Special Transportation Fund as a perpetual fund, the resources of which are to remain in the Special Transportation

Fund to be expended solely for transportation purposes, including the payment of debt service. All sources of moneys required by State law to be credited to the Special Transportation Fund after June 29, 2015 are to continue to be credited to such fund to the extent the State collects or receives such moneys. Further, at a referendum held November 6, 2018, the electors approved an amendment to the Constitution of the State "to ensure (1) that all moneys contained in the Special Transportation Fund shall be used solely for transportation purposes, including debts of the state incurred for transportation purposes, and (2) that sources of funds deposited in the Special Transportation Fund be deposited in said fund so long as such sources are authorized by statute to be collected or received by the state."

On December 6, 2019, the Governor presented a revised ten-year transportation plan to invest in the State's roads, bridges and public transit system. The plan includes investing $19 billion in the State's roads, bridges and public transit system through system preservation and maintenance projects as well as enhancement projects. The plan anticipates financing such projects from (i) federal grants, (ii) the State's Special Transportation Fund, (iii) borrowings through the Special Transportation Fund, the General Fund, and the federal government and (iv) user fees on commercial trucks. On February 19, 2020 the Governor announced he will no longer seek the passage of user fees on commercial trucks and will instead look to alternatives to fund transportation infrastructure. No assurances can be given as to (i) whether the Governor's plan or any other plan will be adopted by the General Assembly and signed by the Governor, (ii) the ultimate form of any adopted plan, or (iii) the impact of any adopted plan on the General Fund or the financial condition of the State.

Other Special Revenue Funds and Debt

Bradley International Airport. Bradley International Airport, located in Windsor Locks, Connecticut, is owned and operated by the Connecticut Airport Authority ("CAA"), a quasi-public authority of the State. The General Assembly authorized the issuance of revenue bonds for improvements at Bradley International Airport payable from all or a portion of the revenues generated at the Airport. As of February 1, 2020, there were $94.6 million of Bradley International Airport Revenue Refunding Bonds outstanding. In addition, the State is a party to certain interest rate swap agreements with respect to certain of these bonds. Any obligations of the State under the interest rate swap agreements are payable from all or a portion of the revenues generated at the Airport. See ***Quasi-Public Agencies - Connecticut Airport Authority ("CAA")***.

Additional special obligation bonds to finance self-sustaining special facilities at Bradley International Airport payable solely from the revenues derived from such special facilities were authorized in 1993. In March 2000 the State issued $53.8 million Bradley International Airport Special Obligation Parking Revenue Bonds to finance the construction of a five story parking garage facility at the airport and as of February 1, 2020, $19.2 million of such bonds were outstanding.

State Revolving Fund ("SRF"). The General Assembly has authorized the issue of revenue bonds for the purpose of funding various State and federally mandated water pollution control and drinking water projects for up to $3,884.1 million, of which $2,466.6 million have been issued. The revenue bonds are payable solely from the revenues or other receipts, funds or moneys of the SRF. The proceeds of the revenue bonds are loaned primarily to Connecticut municipalities and public water systems to finance water pollution control and drinking water improvements, and the loan repayments by the municipalities and public water systems secure the revenue bonds. The loan obligations of the municipalities and public water systems are secured by either the full faith and credit of each such entity, or the revenues and other funds of a municipal sewer or public water system. As of February 1, 2020, $1,055.0 million revenue bonds were outstanding (including refunding bonds).

SUPPLEMENTARY INFORMATION AS OF JULY 15, 2020

Unemployment Compensation. The State pays unemployment compensation benefits from the State's Unemployment Compensation Fund, which is funded by unemployment compensation taxes collected from employers. To fund possible shortfalls, the State may borrow from the Federal Unemployment Trust Fund or issue revenue bonds payable from such sources in an aggregate amount outstanding at any time not in excess of $1.0 billion, plus amounts for certain reserves and costs of issuance. Given the recent increase in unemployment claims, the State anticipates borrowing from the Federal Government to cover unemployment compensation benefits.

Second Injury Fund. The Second Injury Fund is a State-run workers' compensation insurance fund that pays lost wages and medical benefits to qualified injured workers. The Second Injury Fund is now closed to future second injury claims. However, there remain authorized the issuance of an amount not to exceed $750 million in revenue bonds and notes outstanding at any one time to provide funds for paying past claims. No bonds or short-term borrowings are currently outstanding. The State's management objective is to pay additional claims and settlements from current income and, if necessary, short term borrowings.

Contingent Liability Debt

The General Assembly has the power to impose limited or contingent liabilities upon the State in such a manner as it may deem appropriate and as may serve a public purpose. This power has been used to support the efforts of quasi-public agencies, municipalities and other authorities formed to carry out essential public and governmental functions by authorizing these entities to issue indebtedness backed, partially or fully, by General Fund resources of the State. Not all entities that are authorized to issue such indebtedness have done so, and the description below of the State's limited or contingent liability is restricted only to specific indebtedness backed by the State.

Special Capital Reserve Funds. The primary vehicle through which the State has undertaken contingent or limited liability is the special capital reserve fund ("SCRF"). A SCRF, if established, provides additional security for certain bonds issued by a quasi-public agency, municipality or other authority. Subject to certain legislative exceptions, monies held in and credited to a SCRF are intended to be used solely for the payment of the principal of bonds secured by such SCRF, the purchase of such bonds, the payment of interest on such bonds or the payment of any redemption premium required to be paid when such bonds are redeemed prior to maturity. The SCRF is frequently funded with bond proceeds to a specified amount (the minimum of which is often the maximum annual principal and interest payments due on the bonds). The State undertakes the obligation to restore a SCRF to its minimum level. The method for determining such required minimum capital reserve is set out in the legislation authorizing the SCRF. If the SCRF should fall below the required minimum capital reserve amount, an official of the issuer that established the SCRF is to certify to the Secretary of OPM or the Treasurer or both the amount necessary to restore such SCRF to the required minimum capital reserve amount. On or before December 1, annually, there is deemed to be appropriated from the State's General Fund such amount as specified in the certificate, which amount shall be allotted and paid to the entity that established the SCRF. On an annual basis, the State's liability under any SCRF mechanism is limited to its obligation to restore each SCRF to its minimum capital reserve amount.

By statute, the Capital Region Development Authority; the Connecticut Airport Authority; the Connecticut Green Bank; the Connecticut Health and Educational Facilities Authority; the Connecticut Higher Education Supplemental Loan Authority; the Connecticut Housing Finance Authority; Connecticut Innovations, Incorporated; the Connecticut Port Authority; and the Materials Innovation and Recycling Authority may borrow money or issue bonds or notes that are guaranteed or otherwise supported by the State or for which there is a State supported SCRF with the approval of the Treasurer or the Deputy Treasurer, and for certain of these quasi-public issuers, the Secretary of OPM. The approval shall be based on documentation provided by the authority that the authority anticipates receiving sufficient revenues to (1) pay the principal of and interest on the bonds and notes to be issued, (2) establish, increase and maintain any reserves deemed by the authority to be advisable to secure the payment of the principal of and interest on such bonds and notes, (3) pay the cost of maintaining, servicing and properly insuring the purpose for which the proceeds of the bonds and notes have been issued, if applicable, and (4) pay such other costs as may be required.

Similarly, no municipality may issue any obligation for which there is a State supported SCRF without the approval of the Treasurer. The Treasurer's approval shall be based upon factors delineated in the general statutes, including the establishment of a property tax intercept procedure to service the municipality's debt.

Quasi-Public Agencies

The State has established a number of quasi-public agencies that are not departments, institutions or agencies of the State. They are, however, bodies politic and corporate that constitute public instrumentalities and political subdivisions of the State. These organizations provide a wide range of services that might otherwise be provided directly by the State.

Each of these public authorities is authorized to issue bonds in its own name to facilitate its activities and, with the exception of the Connecticut Airport Authority and the Connecticut Port Authority, each has issued bonds secured by a SCRF, or other contractual arrangement, for which the State has limited contingent liability.

Capital Region Development Authority ("CRDA"). CRDA was granted authority to issue revenue bonds for a convention center project in the City of Hartford. The bonds are backed by State contractual assistance equal to annual debt service. CRDA retains authority to use SCRFs in connection with additional revenue bonds, but there are currently no plans to do so. The CRDA's charge includes projects to stimulate development and redevelopment in the City of Hartford and the surrounding towns.

Connecticut Airport Authority ("CAA"). CAA has ownership of and responsibility for the management and operations of Bradley International Airport and the State's other general aviation airports. The CAA is authorized to issue revenue bonds, including bonds backed by a SCRF.

Connecticut Green Bank ("Green Bank"). The Green Bank, was designated for the purposes of administering the Clean Energy Fund. The Green Bank is an energy finance authority, designed to leverage public and private funds to drive investment and increase clean energy deployment in Connecticut. The Green Bank is authorized to issue bonds to facilitate its activities, which bonds may be secured by a SCRF.

Connecticut Health and Educational Facilities Authority ("CHEFA"). CHEFA was established to assist in the financing of facilities for educational or health care purposes, including colleges and universities, secondary schools, nursing homes, hospitals, child care facilities, and any other qualified non-profit institutions through the issuance of bonds and other obligations. CHEFA loans the proceeds of its bond issues to client institutions, which make debt service payments on such loans that match CHEFA's payment obligations under its bonds. CHEFA is also authorized to issue tax-exempt and taxable revenue bonds secured by one or more SCRFs solely to finance projects for housing, student centers, food service facilities and other auxiliary service facilities at public institutions of higher learning, including the Connecticut State University System, or for clinical services projects for the University of Connecticut Health Center, and up to $100.0 million to finance equipment acquisitions by hospitals.

CHEFA also is authorized to issue bonds and loan the proceeds to various entities to finance child care facilities. The State Treasurer is committed to pay the debt service on these loans, subject to annual appropriation. See **Other Debt Service and Contractual Commitments** – ***CHEFA Child Care Program***.

Connecticut Higher Education Supplemental Loan Authority ("CHESLA"). CHESLA, a subsidiary of CHEFA, provides financial assistance in the form of education loans to students in or from the State.

CHESLA is also authorized to provide loans to refinance eligible education loans of qualified borrowers. CHESLA is authorized to issue bonds the proceeds of which are used to fund or refinance education loans to applicants meeting certain eligibility requirements. The repayment of such loans is used to make debt service payments on CHESLA bonds. CHESLA bonds are further secured by a SCRF.

Connecticut Housing Finance Authority ("CHFA"). CHFA was established to meet the needs of low and moderate income families and persons for decent housing and to encourage and assist the development and construction of multi-family housing. CHFA is authorized to issue bonds the proceeds of which are used to fund mortgage loans to applicants meeting certain eligibility requirements. CHFA also is authorized to make or purchase construction and permanent mortgage loans that are guaranteed or insured by the United States of America or any agency or instrumentality thereof, by the Federal Home Loan Mortgage Corporation, by a private mortgage insurance company or the State or the Authority itself without limitation as to amount and to make or purchase mortgage loans not so insured or guaranteed in an aggregate amount not to exceed $2.25 billion. In order to finance these activities, CHFA established a Housing Mortgage Finance Program and issued its general obligation bonds under a General Bond Resolution. Bonds issued under CHFA's General Bond Resolution are secured by a SCRF.

CHFA has also established a Special Needs Housing Mortgage Finance Program (formerly known as the Group Home Mortgage Finance Program) and has issued and expects to issue additional State-Supported Special Obligation Bonds which bonds are and will be secured by a SCRF. CHFA also issues bonds for supportive housing and emergency mortgage assistance for which the debt service is paid by the State pursuant to contracts for State assistance. See **State Debt – *Types of Direct General Obligation Debt – Supportive Housing Financing and Emergency Mortgage Assistance Program***.

Connecticut Innovations, Incorporated ("CI"). CI is authorized to offer various financing programs including The Mortgage Insurance and Loan Program (the "Insurance Fund"). As of February 1, 2020, $25 million of State bonds have been authorized but remain unissued to fund the Insurance Fund.

Under its General Obligation Bond Program, CI may issue bonds secured by a SCRF to finance eligible economic development and information technology projects. As of February 1, 2020, no such bonds are outstanding. Although there remains legislative authority for the issuance of bonds secured by SCRFs under the Umbrella Bond Program, no loans have been initiated under that program since 1985, and CI does not anticipate a resumption of any lending activity under that program.

Connecticut Municipal Redevelopment Authority ("CMRA"). The 2019 Budget Act established a new quasi-public agency, effective October 1, 2019, named the Connecticut Municipal Redevelopment Authority (the "CMRA") for the purpose of, among others, stimulating economic and transit-oriented development, encouraging residential housing development, stimulating new investments, and assisting municipalities in development and redevelopment efforts. The CMRA is authorized to issue bonds, notes and other obligations in such amounts as in the opinion of the board are necessary to provide sufficient funds for carrying out its purposes which shall be general obligations of the CMRA. However, in the event any bond, note or other obligation of the CMRA cannot be paid by the CMRA, the State shall assume the liability of and make payment on such debt.

Connecticut Port Authority ("CPA"). The CPA is charged with marketing and coordinating the development of the State's ports and maritime economy. CPA bonds may be secured by a SCRF.

Materials Innovation and Recycling Authority ("MIRA"). MIRA is charged with the development and operation of solid waste disposal, volume reduction, recycling, intermediate processing, resource recovery and related support facilities necessary to carry out the State's Solid Waste Management Plan. MIRA bonds may be secured by a SCRF.

UConn 2000 Special Obligation Financing. The University of Connecticut may issue special obligation bonds that may be secured by a SCRF. The University may also issue special obligation bonds that are not secured by such a SCRF. As of February 1, 2020, the University has outstanding $206.7 million special obligation student fee revenue bonds that are not secured by such a SCRF.

Assistance to Municipalities

The State has undertaken certain limited or contingent liabilities to assist municipalities. The State currently has limited or contingent liabilities outstanding in connection with bonds issued by the Southeastern Connecticut Water Authority. The State previously was obligated to secure certain SCRF-backed bonds issued by the Cities of Bridgeport, Waterbury and West Haven to fund past deficits of such municipalities; however no such bonds are currently outstanding. Legislation also authorized distressed municipalities, in certain circumstances and subject to various conditions, to issue deficit funding obligations secured by a SCRF. There are no such obligations currently outstanding. See, also discussion under **STATE DEBT – State Direct General Obligation Debt –** ***Municipal Contract Assistance***.

Southeastern Connecticut Water Authority. The Southeastern Connecticut Water Authority was established for the purpose of developing a reliable water supply for southeastern Connecticut. The Commission is authorized to approve a State guarantee of obligations of the Southeastern Connecticut Water Authority. Amounts borrowed by the Southeastern Connecticut Water Authority are to be repaid by July 1, 2045.

Outstanding Special Capital Reserve Fund Debt

The amount of authorized and outstanding debt that is secured by special capital reserve funds as described above is outlined in the following table.

TABLE 16

Special Capital Reserve Fund Debt
As of February 1, 2020
(In Millions)

Indebtedness Secured by SCRF	Authorized Debt	Outstanding Debt	Minimum SCRF Requirement
Capital Region Development Authority	$ (a)	$ 74.3 (b)	$ N.A.
Connecticut Airport Authority	(a)	0.0	0.0
Connecticut Green Bank	100.0	11.3(c)	1.2
Connecticut Health and Educational Facilities Authority			
Connecticut State University System	(a)	332.2	32.2
Hospital Equipment Program	100.0	0.0	0.0
UCONN Health Center Program	(a)	0.0	0.0
Connecticut Higher Education Supplemental Loan Authority	300.0	159.4(d)	20.5
Connecticut Housing Finance Authority			
Housing Mortgage Finance Program	(a)	4,476.0	308.1
Special Needs Housing Mortgage Finance Program	(a)	62.9	5.2
Connecticut Innovations	450.0	0.0	0.0
Connecticut Port Authority	50.0	0.0	0.0
Materials Innovation and Recycling Authority	725.0	0.0(e)	0.0
Southeastern Connecticut Water Authority	15.0	0.7(b)	N.A.
University of Connecticut	(a)	0.0(f)	N.A.

(a) No statutory limit.

(b) Debt is secured by a non SCRF State guarantee.

(c) The Green Bank is planning to issue approximately $16 million in SCRF backed debt during July 2020.

(d) CHESLA is planning to issue approximately $44 million, of which approximately $25 million are current refunding bonds, in SCRF backed debt during June 2020. Additionally, CHESLA has requested legislative approval of an increase in authorized SCRF debt to $500 million.

(e) MIRA is exploring redevelopment of certain facilities which could involve the issuance of approximately $333 million in SCRF supported debt in Fiscal Year 2022.

(f) Debt is secured by a non SCRF State guarantee, but excludes general obligation bonds of the University which are secured by the State's debt service commitment.

Other Debt Service and Contractual Commitments

CHEFA Child Care Program. CHEFA is authorized to issue Child Care Facilities Bonds and loan the proceeds to various entities to finance child care facilities. Debt service payments are made by the State Treasurer and the State Office of Early Childhood is obligated to reimburse a portion of the debt service payments from intercepts of revenues from providers. The obligation by the State Treasurer to pay such debt service is subject to annual appropriation. As of February 1, 2020, CHEFA had approximately $46.0 million in Child Care Facilities Bonds outstanding under this program, with annual debt service of approximately $4.53 million, of which the State Office of Early Childhood is committed to reimburse approximately $0.72 million. The State's obligation under the assistance agreement is not included in any of the debt calculations in **Tables 7, 8, 9, 10, 11, 12 or 16**. Two other Child Care Facilities programs also authorize the Commissioner of the State Office of Early Childhood to enter into guaranties of loans made to entities to finance the development of child care and child development centers or programs. CHEFA is administering this program on behalf of the State Office of Early Childhood, and is currently limiting the aggregate amount of guaranties to the balance of monies in the reserve funds for the respective programs. The State's obligations in connection with these programs are not included in any of the debt calculations in **Tables 7, 8, 9, 10, 11, 12 or 16**.

Capital Region Development Authority. The Commission approved up to $122.5 million of revenue bonds and other borrowings for the Hartford convention center project. The predecessor authority to CRDA issued $110 million of its revenue bonds backed by the State's contract assistance agreement equal to annual debt service on the revenue bonds. As of February 1, 2020, $74.3 million of CRDA revenue bonds was outstanding. The State's aggregate obligation under the contract assistance agreement is limited to $9.0 million per year, and the CRDA's debt obligations are structured not to exceed this amount. An additional $12.5 million of borrowing, not backed by the contract assistance agreement, has also been incurred. Debt service on the revenue bonds is payable from debt service appropriations in the General Fund and CRDA is obligated to reimburse the State for such contract assistance payments from parking and energy fee revenues after payment of operating expenses of the parking garage and the energy facility. Under the agreement between CRDA and the State, after completion of the convention center project, CRDA is required to maintain pledged revenues equal to 1.2 times debt service, after operating expenses. The State's obligation under the assistance agreement is not included in any of the debt calculations in **Tables 7, 8, 9, 10, 11, 12 or 16**.

A delay in completion of all elements of the project, along with higher than anticipated startup expenses and operating expenses have resulted in insufficient parking revenues, after operating expenses, to fully reimburse the State for debt service payments. This situation is expected to continue at least until all elements of the project are completed and placed in service. As debt service on CRDA's revenue bonds continues to be paid under the contract assistance agreement, CRDA's reimbursement obligation will increase, and this reimbursement obligation will need to be satisfied before excess parking revenues are available to fund the operations of the convention center, which itself is partially funded by General Fund appropriations from the State to CRDA.

School Construction Grant Commitments. The State is obligated to various cities, towns and regional school districts under a grant-in-aid public school building program to fund a portion of the costs of construction and alteration of school buildings. For certain school projects approved by the General Assembly, cities, towns and districts are ranked according to their adjusted equalized net grand list per capita and, based on such rankings, a percentage is assigned that determines the amount of grant money a town or regional school district is eligible to receive. The State pays its share of construction projects on a progress payment basis during the construction period. Each year the legislature authorizes grant commitments in varying amounts. The State expects to authorize new school construction grant commitments of approximately $209 million that take effect in Fiscal Year 2021. It is anticipated that in future years new authorizations will average approximately $300 million per year. As of June 30, 2019, the Commissioner of Administrative Services estimates that current grant obligations for school construction projects are approximately $2,182 million.

The legislature has authorized the issuance of State bonds for the school construction grant program based on the amount of grants that the Commissioner of Administrative Services estimates will be paid during each fiscal year. Since there is generally a lapse of one or more years from the time grant commitments are approved to the time grant payments are required to be made, the amount of unpaid grant commitments will be significantly greater than the amount of bonds authorized to fund the grant commitments.

Connecticut Lottery Corporation. The Connecticut Lottery Corporation (the "Corporation") was created in 1996 as a public instrumentality of the State to operate the State's lottery pursuant to the Connecticut Lottery Corporation Act (the "CLC Act"). The State and the Corporation purchase annuities under contracts with insurance companies that provide payments corresponding to the obligation for payments to lottery prize winners. The State has transferred to the Corporation all annuities purchased by it, and the Corporation has assumed responsibility for the collection of revenue generated from the lottery and for the payment of all lottery prizes. Under the CLC Act, the termination of the Corporation would not affect any outstanding contractual obligation of the Corporation and the State would succeed to the obligations of the Corporation under any such contract. As of June 30, 2019 the current and long-term liabilities of the Corporation total $275.5 million.

PENSION AND RETIREMENT SYSTEMS

The information in this section contains information through February 15, 2020 except as may otherwise be set forth below.

The State sponsors several public employee retirement systems and provides other post-employment benefits. This section will describe these plans in turn. It should be noted that the characteristics of the pension plan systems, where significant assets are available to meet the State's obligations, are different than the characteristics of the systems providing other post-employment benefits, which have not accumulated significant assets. Both types of plans have unfunded liabilities that represent significant financial obligations of the State, both now and in the future. In round numbers, the unfunded actuarial accrued liability ("UAAL") of the major pension systems aggregate approximately $39.1 billion and the UAAL of the other major post-employment benefits systems aggregate approximately $21.4 billion, based on the most recent actuarial valuations.

Pension Systems - Overview

The State sponsors several public employee retirement systems discussed in more detail in this section. The two largest of these are the State Employees' Retirement System ("SERS") and the Teachers' Retirement System ("TRS"). These plans have been in operation for a number of years and have significant assets held for the purposes of each plan. Like other similar plans, each plan began with "pay-as-you-go" funding, whereby benefits to beneficiaries were paid from the General Fund when due. In 1971, the plans were converted to actuarially funded plans and irrevocable trusts were established to accumulate assets that are invested on a long-term basis to fund future liabilities on an actuarial basis. In an actuarially funded pension plan, plan contributions, plus plan assets and the return on plan assets, are designed to meet the future benefits payments over the life of the plan.

The transition of the plans from a "pay-as-you-go" basis to a fully funded actuarial basis requires setting aside significant assets. As it would be impractical to set aside the accumulated liability in a short period, it was contemplated that the plans would achieve full funding over a period of time. The actuarially determined employer contribution ("ADEC") (formerly referred to as the actuarially recommended contribution or "ARC") is the recommended annual payment by the State to the applicable pension plan in order to achieve full funding of the plan over the applicable period, assuming that the actuarial assumptions are met.

When both of the State's major pension plans were converted to an actuarial funding method, the original time period determined to achieve full funding was set at 40 years, a period that was subsequently extended, most recently in accordance with the 2019 Budget Act for Fiscal Years 2020 and 2021. Under the funding models in effect as of June 30, 2019, the remaining periods as of that date to reach full funding were approximately 26.9 years for the State Employees' Retirement Fund and approximately 29.0 years for the Teachers' Retirement Fund, as long as the State fully funded the annual funding requirement recommended by the actuary and the actuarial assumptions were realized.

It is important that the funding plan be revisited periodically. Accordingly, by statute, actuarial valuations are performed with respect to the systems every two years. Because these valuations are estimating future resources and future liabilities, it is necessary to make important assumptions in arriving at these future assets and liabilities. Using these assumptions, the actuarial valuation compares the actuarial accrued liability with the actuarial value of assets and any excess of that liability over the assets forms an UAAL. This UAAL represents the remaining amortization of the original unfunded status, changes in the UAAL arising from actual experience compared to these assumptions (including actual investment performance compared to assumed performance), changes in the actuarial assumptions, and any failure to fully fund ADECs in prior years. The actuarial valuation then arrives at a recalculated ADEC for future years, which represents the sum of benefits to be accrued in these years, plus the amortization of the recalculated UAAL over the remaining amortization period.

In addition to these recalculations, the State has taken several additional steps in the last few years to address the funding issues with the plans. In the case of SERS, it has negotiated reduced benefits, as described below, made more conservative assumptions which have had the effect of increasing the UAAL, and eliminated the provisions that permitted the State to not fund its full ADEC payment. In the case of TRS, it has issued pension obligation bonds to augment the funding of the system, which bonds included a covenant requiring the State to fund the ADEC while the bonds (or any refunding of the bonds) are outstanding, subject to certain exceptions. These additional steps are described in more detail below for each plan.

While the UAAL for each plan is large and the funded ratio is low, in addition to statutory commitments (which can be, and have been, changed by legislation), and unlike many similar plans, the State now has contractual commitments requiring annual funding of the ADEC. In the case of SERS, the State is required to annually fund the ADEC pursuant to its bargaining agreement with SEBAC. In the case of TRS, the State is required to fund the annual amount as a condition of a bond covenant so long as the State's pension obligation bonds issued in April 2008 to fund the $2.0 billion deposit to the Teachers' Retirement Fund ("TRF Bonds"), or any refunding of the TRF bonds, are outstanding, as more fully discussed under ***Pension Obligation Bonds*** below.

Actuarial Valuations

The actuarial value of the liabilities of the plan are not current liabilities but represent a present value measure of the stream of benefits that the plan is expected to pay over the foreseeable future. These benefits in turn depend on future events, such as the size of the workforce, the rate workers leave the workforce, the rate of retirement, the rate of mortality of retirees, the rate of salary increase and the rate benefits accrued at retirement increase by future cost of living increases, among other factors. The State engages actuaries to assist it in selecting assumptions about these factors, and based on these assumptions, the actuary estimates the current stream of future benefits. In order to come to an estimate of the accrued liabilities of the plan, this stream of estimated future benefits is discounted to a present value based on an assumed discount rate. The State uses a discount rate that is the same as its investment return assumption. The significant assumptions used in making these calculations are described below for each plan.

One measure of the level of plan funding is the "funded ratio", which is calculated by dividing the actuarial value of the assets of the plan by the actuarial accrued liability of the plan. The actuarial valuation will state the funded ratio for each plan, and is shown herein. Also shown is the funded ratio calculated based on the market value of the assets of the plan.

The actuarial valuation also will state an ADEC, which is the recommended payment of the State to the applicable pension plan. These recommendations are used in the next budget cycle. The ADEC consists of two components: (1) normal cost, which represents the portion of the present value of retirement benefits that are allocable to active members' current year of service, and (2) an amortization of a portion of the UAAL. The normal cost is partially funded from active member contributions, if required under the particular plan, with the remainder funded by State contributions. The UAAL amortization component is made over the length of time chosen as the amortization period, and designed to eliminate the UAAL and bring the plan to the state of being fully funded. Following the full amortization of the UAAL, to maintain this full funding only the normal cost amount would need to be contributed, plus any contribution necessary due to the effect of actual experience compared to the actuarial assumptions.

One of the most significant factors in determining the annual UAAL amortization amount, and determining the point in time when the plan should be fully funded, is the remaining period over which the UAAL will be amortized. The State Employees' Retirement Fund now uses a layered amortization method, as further described under ***June 2019 Revised Actuarial Valuation and Revised Fiscal Year 2020 Employer Contribution Requirements*** below, with a weighted average amortization period 26.9 years as of June 30, 2019. The Teachers' Retirement Fund now amortizes the UAAL as of June 30, 2018 over a closed period of thirty years (remaining amortization period of 29.0 years as of June 30, 2019), with future actuarial gains and losses amortized over separate closed periods of twenty-five years, beginning the year each separate base is established. A second important factor is determining the amount to be amortized in each year of the remaining amortization period. Previously, both of the State plans used a "level percent of payroll" formula for this purpose, where in each year the same percent of assumed payroll for that year is calculated as the amount to be amortized. This method assumes that the amortization payments increase in future years by the assumed increase in payroll since it calculates amortization payments as a constant percentage of projected payroll over a given number of years. This makes the assumption of the rate at which payroll increases each year an important assumption. SERS is now phasing in a "level dollar" amortization over a five year period, where the cost is amortized in equal dollar amounts to be paid over the specified number of years. This method generally results in decreasing inflation-adjusted payments over time. TRS continues to use a "level percent of payroll" amortization method, but will be transitioning over a five year phase-in period beginning in Fiscal Year 2020 to a level dollar amortization method.

Both SERS and TRS now use an "entry age normal" actuarial cost method to calculate the annual amortization payments needed to amortize the UAAL. The entry age normal method calculates the annual normal cost for a member as a uniform and constant rate of employer contribution that, if applied to the compensation of the average new member during the entire period of the member's anticipated covered service, would be required in addition to contributions of the member to meet the cost of all benefits payable on behalf of the member. The actuaries have indicated that the entry age normal method is the most widely used cost method of large public sector plans and has demonstrated the highest degree of contribution stability to alternative methods. It also is the only method allowed under the Governmental Accounting Standards Board ("GASB") reporting standards which came into effect for 2014. Prior to the most recent actuarial valuation method, SERS used a "projected unit credit" method. The projected unit credit method calculates the annual normal cost as the present value of the portion of the projected benefit attributable to the year following the actuarial valuation date, generally resulting, with respect to an individual member, in an increase in the annual normal cost as an employee draws closer to the end of service.

Pension Reporting Pursuant to GASB Statement Nos. 67 and 68

Beginning with Fiscal Year 2014, the State began reporting pensions in accordance with GASB Statement No. 67 ("GASB 67"), and GASB Statement No. 68 ("GASB 68"), which prescribe certain methods for comparability and other purposes. These methods are not necessarily the same as those used in calculating the ADEC of the State, which are determined by statute and/or contract.

GASB 67 requires a determination of the Total Pension Liability ("TPL") for a plan using the Entry Age Normal actuarial funding method. The Net Pension Liability ("NPL") is then set equal to the TPL minus the plan's Fiduciary Net Position ("FNP") which, generally, is the market value of assets in the plan as of the measurement date. Among the assumptions needed for the liability calculation is a Single Equivalent Interest Rate ("SEIR"). To determine the SEIR, the FNP must be projected into the future for as long as there are anticipated benefits payable to the membership and beneficiaries of the system on the measurement date. If the FNP of the plan is not expected to be depleted at any point in the future, the plan may use its long-term expected rate of return as the SEIR. If, on the other hand, the FNP of the plan is expected to be depleted, then the SEIR is the single rate of interest that will generate a present value of benefits equal to the sum of (i) the present value of all benefits through the date of depletion at a discount rate equal to the long-term expected rate of return, plus (ii) the present value of benefits after the date of depletion discounted at a rate based on 20-year, tax-exempt, general obligation municipal bonds, with an average credit rating of AA/Aa or higher.

GASB 68 requires, among other things, that Pension Expense ("PE") be calculated and a proportionate share of NPL and PE be recognized in the employer's financial reporting. PE includes amounts for service cost (the normal cost under the Entry Age Normal actuarial cost method for the year), interest on the TPL, changes in benefit structure, amortization of increases/decreases in liability due to actuarial experience and actuarial assumption changes, and amortization of investment gains/losses. The actuarial experience and assumption change impacts are amortized over the average expected remaining service life of the plan membership as of the measurement date, and investment gains/losses are amortized over five years. PE should not be considered a proxy for funding or contribution levels.

OPEB Reporting Pursuant to GASB Statement Nos. 74 and 75

In June 2015, GASB released new accounting standards for public sector plans providing post-employment benefits other than pensions ("OPEB") and sponsoring employees, including GASB Statement No. 74 ("GASB 74"), effective for Fiscal Year 2017, and GASB Statement No. 75 ("GASB 75"), effective for Fiscal Year 2018. GASB 74 and GASB 75 supersede GASB Statement No. 43 and GASB Statement No. 45, respectively. Generally, the changes made by GASB 74 and GASB 75 to OPEB plan reporting substantially parallel the changes made by GASB 67 and GASB 68 to pension plan reporting.

GASB 74 requires a determination of the Total OPEB Liability ("TOL") for a plan using the Entry Age Normal actuarial funding method. The Net OPEB Liability ("NOL") is then set equal to the TOL minus the plan's Fiduciary Net Position ("FNP") which, generally, is the market value of assets in the plan as of the measurement date. Among the assumptions needed for the liability calculation is a SEIR, which is determined in the same manner as provided by GASB 67 for pension plans.

GASB 75 requires, among other things, that OPEB Expense ("OE") be calculated and a proportionate share of NOL and OE be recognized in the employer's financial reporting. OE is calculated in a manner similar to the manner provided by GASB 68 for the calculation of TOL for pension plans. OE should not be considered a proxy for funding or contribution levels.

State Employees' Retirement Fund

SERS is one of the systems maintained by the State with approximately (i) 49,429 active members, consisting of 32,463 vested members and 16,966 non-vested members, (ii) 2,185 deferred vested members, and (iii) 51,745 retired members and beneficiaries as of June 30, 2019.

Payments into the State Employees' Retirement Fund ("SERF") are made from employee contributions, General and Special Transportation Fund appropriations and grant reimbursements from Federal and other funds. State contributions to the fund are made monthly on the basis of transfers submitted by the Office of the State Comptroller.

By statute full actuarial valuations are required to be performed as of June 30th of each even-numbered year. The State intends to perform annual actuarial valuations commencing with the valuation as of June 30, 2019. The actuarial valuation uses recognized actuarial methods to calculate the actuarial value of assets and the actuarial accrued liability of the SERF. The valuation uses an asset valuation method that smoothes the difference between the market value of assets and actuarial value of assets to prevent extreme fluctuations that may result from short-term or cyclical economic and market conditions. The actuarial value of assets is determined by first projecting the actuarial value forward from the beginning of the prior fiscal year based on the actual cash flow during the fiscal year and the assumed investment rate of return. One fifth of any difference between this expected actuarial value and the actual market value is added to or subtracted from the expected actuarial value to arrive at the actuarial value of assets in order to "smooth" year to year changes in market values. The unfunded actuarial liability is the actuarial accrued liability less the actuarial value of assets. The valuation includes a projection from the valuation date to future years based on certain key assumptions such as the investment return on the market value of assets, the active population count for hazardous and nonhazardous duty members, total payroll growth, age and salary distributions for new entrants, and actual plan experience with respect to terminations, retirement, mortality, and cost of living increases, among other things.

Between full actuarial valuations the State generally has received an interim valuation, in which the actuarial value of assets are "rolled forward" but the actuarial value of liabilities are not recalculated. Where these interim valuations have been performed the new funding ratios that results are set out below.

June 2019 Revised Actuarial Valuation and Revised Fiscal Year 2020 Employer Contribution Requirements

SUPPLEMENTARY INFORMATION AS OF JULY 15, 2020

The SER Commission received from Cavanaugh Macdonald Consulting, LLC a revised actuarial valuation as of June 30, 2018 dated June 18, 2019, revising the actuarial valuation as of June 30, 2018 approved by the Commission on November 15, 2018. The revised actuarial valuation was approved by the SER Commission on June 20, 2019, conditioned on (1) the 2019 Budget Act for the 2020-2021 biennium becoming law, and (2) the State reaching an agreement with SEBAC on the proposed revisions to the UAAL amortization schedule reflected in the actuarial report. On July 17, 2019 the Governor announced that the State and SEBAC had reached an agreement approving the amortization schedule revisions. The agreement was subsequently approved by the General Assembly. Under the proposal, the remaining amortization period for the UAAL would be extended from approximately 22.8 years to approximately 27.9 years as of June 30, 2018, as follows.

Portion of UAAL	Year Established	Remaining Amortization Period
Statutory Base	1984	28 years [(a)]
Transitional Base	2016	28 years
2018 Base	2018	25 years

(a) Changed from 13 years to 28 years.

The June 2019 revised actuarial valuation reported the following results as of June 30, 2018 with respect to the SERF:

Actuarial Valuation as of June 30, 2018	
Market Value of Assets	$12,452.8 million
Actuarial Value of Assets	$12,990.4 million
Actuarial Accrued Liability	$34,214.2 million
UAAL	$21,223.8 million
Funded Ratio (based on the actuarial value of assets)	38.0%
Funded Ratio (based on the market value of assets)	36.4%

The June 2019 revised actuarial valuation was based on the following assumptions and methodologies in addition to the change to the remaining amortization period for the UAAL as described above:

- 6.90% investment return assumption (including inflation at 2.50%)
- Entry Age Normal actuarial cost method
- Level dollar amortization method being phased in over a five year period

- A 2.1% payroll growth assumption. The payroll growth assumption was originally set at 3.5% in the actuarial valuation as of June 30, 2016. In accordance with the phase-in to a level dollar amortization method over a five year period, the payroll growth assumption will be reduced by 0.7% each year for the next three years until the phase-in to the level dollar amortization method is complete in the actuarial valuation as of June 30, 2021.
- Following Fiscal Year 2019, projected salary increases of 3.5% to 19.5% (including inflation at 3.50%)
- For Fiscal Years 2017 through 2019, the projected rate of salary increases was reduced to 0%, and the projected rate of promotion and merit salary increases was reduced by 50% from the January 2017 actuarial valuation assumption
- COLA of 1.95% to 3.25%
- A COLA moratorium for employees retiring on or after July 1, 2022 for the first 30 months of retirement, and that the partial COLA available during the COLA moratorium period to take into account a potential environment where CPI is greater than 5.5% will result in the first COLA being 0.15% higher
- Social security wage base increase of 3.5%
- An approximately 20% increase in rates of retirement in the year before July 1, 2022 to reflect potential behavior of future eligible members to avoid the July 1, 2022 COLA change and moratorium
- The actuarial value of assets recognizes 20% of the difference between the market value of assets and the expected actuarial value of assets

The June 2019 revised actuarial valuation determined the ADEC requirement for Fiscal Year 2020, and the annual contribution rate as a percentage of payroll, based on a covered payroll as of June 30, 2018 of $3,428.1 million, as follows:

Annual Employer Contributions for:		
	Amount (in millions)	Percent of Payroll
Employer Normal Cost	$ 235.4	6.9%
Amortization of Net Unfunded Actuarial Accrued Liabilities (amortized over 27.9 years as of June 30, 2018)	$1,380.9	40.3%
Total Employer Contribution Requirement	$1,616.3	47.2%

The 2019 Budget Act for Fiscal Years 2020 and 2021 contains appropriations sufficient, together with anticipated grant reimbursement from Federal and other funds, to fully fund the employer contribution requirement for Fiscal Year 2020 pursuant to the June 2019 revised actuarial valuation.

December 2019 Actuarial Valuation and Fiscal Year 2021 and Estimated Fiscal Year 2022 Employer Contribution Requirements

The SER Commission received on December 19, 2019 from Cavanaugh Macdonald Consulting, LLC an actuarial valuation as of June 30, 2019, which was approved by the SER Commission on December 19, 2019. The December 2019 actuarial valuation reported the following results as of June 30, 2019 with respect to the SERF:

Actuarial Valuation as of June 30, 2019	
Market Value of Assets	$13,275.7 million
Actuarial Value of Assets	$13,795.4 million
Actuarial Accrued Liability	$36,087.9 million
UAAL	$22,292.5 million
Funded Ratio (based on the actuarial value of assets)	38.2%
Funded Ratio (based on the market value of assets)	36.8%

The December 2019 actuarial valuation assumptions and methodologies are unchanged from those used in June 2019 revised actuarial valuation.

The December 2019 actuarial valuation determined the ADEC requirement for Fiscal Year 2021 and an estimated ADEC requirement for Fiscal Year 2022, and the annual contribution rate as a percentage of payroll, based on a covered payroll as of June 30, 2019 of $3,686.4 million, as follows:

Annual Employer Contributions for:	**Fiscal Year 2021**		**Fiscal Year 2022 (Estimated)**	
	Amount (in millions)	Percent of Payroll	Amount (in millions)	Percent of Payroll
Employer Normal Cost	$210.2	5.70%	$217.6	5.70%
Amortization of Net Unfunded Actuarial Accrued Liabilities (amortized over 26.8 years as of June 30, 2019)	$1,596.5	43.31%	$1,750.7	45.89%
Total Employer Contribution Requirement	$1,806.7	49.01%	$1,968.3	51.59%

The 2019 Budget Act for Fiscal Years 2020 and 2021 contains appropriations sufficient, together with anticipated grant reimbursement from Federal and other funds, to fully fund the employer contribution requirement for Fiscal Year 2021 pursuant to the December 2019 actuarial valuation. The State budget for Fiscal Year 2022 has not yet been adopted.

SERS Plan Results – Five Prior Years

Set forth in the following table are State contributions to the SERF, Federal grant programs, employee contributions, investment income, net realized gains and losses, net unrealized gains and losses, benefits paid, actuarially determined employer contributions and market value of assets for each of the past five fiscal years, and the actuarial accrued liabilities, the actuarial values of fund assets, the resulting unfunded accrued liabilities and the funded ratios on an actuarial and market basis for the actuarial valuations as of June 30, 2016, June 30, 2018 (as revised June 18, 2019), and June 30, 2019 and interim “roll forward” valuations as of June 30, 2015 and June 30, 2017. The actuaries do not recommend that the results of a roll forward valuation be used as the basis for adjusting the scheduled contribution requirements but rather as information as to the expected condition of the SERF Fund as of the end of the interim year.

TABLE 17
State Employees' Retirement Fund
(In Millions)

	2015	2016	2017	2018	2019
General Fund Contributions	$ 970.9	$ 1,096.8	$ 1,124.7	$ 1,051.3	$ 1,165.6
Transportation Fund Contributions	130.1	122.1	129.2	116.4	126.3
Federal and Other Reimbursements	270.6	282.8	288.4	275.3	286.2
Employee Contributions ...	187.3	134.9	132.6	194.0	489.1[(a)]
Total Contributions..........	$ 1,558.9	$ 1,636.6	$ 1,674.9	$ 1,637.0	$ 2,067.2
Benefits Paid[(b)]	$ 1,653.6	$ 1,729.1	$ 1,845.3	$ 1,952.4	$ 2,025.1
Investment Income/Net Gains (Losses)[(c)]............	$ 370.2	$ (0.3)	$ 1,509.7	$ 875.6	$ 705.9
Actuarially Determined Employer Contribution ..	$ 1,379.2	$ 1,514.5	$ 1,569.1	$ 1,443.1	$ 1,574.5
Percentage of Actuarially Determined Employer Contribution Made.........	99.5%	99.2%	98.3%	100.1%	100.2%
Actuarial Accrued Liabilities......................	$26,255.5	$32,310.3[(d)]	$33,077.6	$34,214.2	$36,087.9
Actuarial Values of Assets	$11,375.8	$11,923.0	$12,593.8	$12,990.4	$13,795.4
Unfunded Accrued Liabilities......................	$14,879.7	$20,387.4[(e)]	$20,483.9[(e)]	$21,223.8	$22,292.5
Market Value of Assets.....	$10,668.4[(f)]	$10,636.7[(g)]	$11,929.2[(h)]	$12,452.8[(i)]	$13,275.7[(j)]
Funded Ratio (Assets Actuarial Value)..	43.3%	36.9%	38.1%	38.0%	38.2%
Funded Ratio (Assets Market Value) ...	40.6%	32.9%	36.1%	36.4%	36.8%
Ratio of Actuarial Value of Assets to Market Value of Assets.............	106.6%	112.1%	105.6%	104.3%	103.9%

(a) Includes $273.0 million in contributions resulting from former members of the State's Alternate Retirement Plan that elected to pay the actuarial cost associated with joining the State Employees' Retirement System. This was a limited, one-time transfer opportunity that expired in January 2019.

(b) Does not include refunds with respect to withdrawals of account balances by inactive members who terminate membership.

(c) Adjusted to comply with GASB 72.

(d) The increase in the Actuarial Accrued Liabilities from June 30, 2015 to June 30, 2016 did not result from changes to SERS retirement benefits, but rather, in substantial part, from changes in the actuarial assumptions and methodologies used for the January 2017 actuarial valuation from those used in prior actuarial valuations. Among the more significant assumption and methodology changes were the reduction of the investment return assumption from 8.00% to 6.90%, changes to the demographic assumptions including the extension of post-retirement life expectancy, changes to expected experience and a change of the actuarial cost method from the "projected unit credit" method to the "entry age normal" method.

(e) Does not total due to rounding.

(f) As reported in Roll Forward Actuarial Valuation. This amount includes $6.2 million of receivables.

(g) As reported in Actuarial Valuation. This amount includes $16.0 million of receivables.

(h) As reported in Roll Forward Valuation. This amount includes $15.0 million of receivables.

(i) As reported in Actuarial Valuation. This amount includes $11.4 million of receivables.

(j) As reported in Actuarial Valuation. This amount includes $13.2 million of receivables.

The December 2019 actuarial valuation breaks out the normal cost component and the amortization component associated with the several tiers of employees as determined by the valuation for Fiscal Year 2021 as set forth below:

TABLE 18

Normal Cost by Tier

Group	Number of Active Members[(a)]	Average Age (years)[(a)]	Average Service (years)[(a)]	Normal Cost	Normal Rate (percent of payroll)
Tier I-Hazardous	3	55.0	8.3	$ 36,476	9.46%
Tier I-Plan B	505	62.8	36.7	3,512,489	6.71
Tier I-Plan C	29	61.2	32.0	124,834	4.43
Tier II-Hazardous	543	53.1	24.6	9,552,579	16.63
Tier II-Hybrid	468	59.9	26.0	2,869,864	4.87
Tier II-Others	8,932	56.5	26.8	46,384,648	5.60
Tier IIA-Hazardous	4,204	46.3	15.1	50,378,022	13.60
Tier IIA-Hybrid	992	53.7	15.2	4,853,945	4.85
Tier IIA-Others	16,045	50.1	14.9	55,244,346	4.38
Tier III-Hazardous	1,999	37.2	5.8	12,693,353	9.17
Tier III Hybrid	710	43.0	5.4	1,361,954	2.77
Tier III-Others	8,627	41.8	5.5	16,898,676	3.24
Tier IV-Hazardous	837	32.8	1.0	2,140,605	5.99
Tier IV Hybrid	741	41.8	0.6	481,337	1.92
Tier IV-Others	4,794	36.5	0.9	3,708,920	2.02
Total	49,429	47.5	13.6	$210,242,048	5.70%

(a) As of June 30, 2019.

Modeling of Future Funded Ratios and Annual Contributions through Fiscal Year 2051

The consulting actuary for the SERF prepared a baseline open group model of future funded ratios and annual contribution requirements for the SERF through Fiscal Year 2051. The modeling presented in Table 19 is based on the assumptions used for the actuarial valuation and actuarial methods of future annual employer contribution requirement figures as set out in the December 2019 actuarial valuation. The modeling does not represent a forecast, estimate or projection. The modeling does not reflect future factors or conditions that would cause the actual future experience of the SERF to diverge from the model. In particular, future actuarial valuations mandated by statute over the period of the modeling will result in recalculation of the annual employer contribution requirements for each biennial budget. No representation is made that future annual employer contribution requirements or funded ratios will conform to the modeling.

TABLE 19

Modeling Of State Employees' Retirement Fund
Future Funded Ratios and Annual Contribution Requirements
(In Millions)[a]

The funded ratio and annual contributions for each fiscal year have been modeled based on the assumption of an actuarial valuation prepared as of the June 30 two years prior to the end of such fiscal year.

Fiscal Year Ending June 30	Valuation Date June 30	Unfunded Accrued Liability	Funded Ratio as of Valuation Date	Normal Cost	Amortization of Unfunded Accrued Liability	Total State Contribution
2021	2019	$22,292.5	38.2%	$210.2	$1,596.5	$1,806.7
2022	2020	22,549.1	38.8	208.8	1,766.4	1,975.2
2023	2021	22,614.9	39.8	206.3	1,929.1	2,135.4
2024	2022	22,538.6	41.1	201.8	1,954.0	2,155.7
2025	2023	22,210.6	42.9	200.0	1,984.4	2,184.4
2026	2024	21,819.3	44.7	199.3	1,963.4	2,162.7
2027	2025	21,360.3	46.6	197.9	1,963.3	2,161.3
2028	2026	20,882.5	48.5	196.5	1,964.3	2,160.8
2029	2027	20,364.2	50.3	195.1	1,964.8	2,159.9
2030	2028	19,803.8	52.1	193.4	1,964.7	2,158.1
2031	2029	19,193.0	54.0	192.7	1,963.6	2,156.4
2032	2030	18,533.7	55.9	192.6	1,962.0	2,154.5
2033	2031	17,821.1	57.9	193.1	1,959.4	2,152.6
2034	2032	17,055.8	59.9	193.9	1,956.4	2,150.3
2035	2033	16,229.3	62.0	195.9	1,952.4	2,148.3
2036	2034	15,341.4	64.2	198.3	1,947.7	2,146.1
2037	2035	14,405.9	66.4	200.7	1,943.8	2,144.5
2038	2036	13,403.3	68.8	203.2	1,939.3	2,142.5
2039	2037	12,329.1	71.4	206.1	1,934.2	2,140.3
2040	2038	11,179.0	74.1	209.3	1,928.6	2,137.9
2041	2039	9,947.8	76.9	212.7	1,922.3	2,134.9
2042	2040	8,631.7	80.0	216.2	1,915.4	2,131.6
2043	2041	7,224.5	83.3	219.9	1,908.0	2,127.9
2044	2042	5,719.7	86.8	224.0	1,899.9	2,123.9
2045	2043	4,113.3	90.5	228.3	1,841.3	2,069.5
2046	2044	2,402.7	94.5	232.4	1,740.7	1,973.1
2047	2045	630.1	98.5	236.8	1,695.0	1,931.8
2048	2046	0.0	102.7	240.8	0.0	240.8
2049	2047	0.0	106.9	244.4	0.0	244.4
2050	2048	0.0	107.2	247.5	0.0	247.5
2051	2049	0.0	107.2	250.3	0.0	250.3

(a) In fiscal year ending June 30, 2048 and thereafter the annual employer contribution requirement consists only of the payment of the normal cost, which represents the portion of the present value of retirement benefits that are allocable to active members' current year of service. In the model, there no longer remains an unfunded actuarial accrued liability to be amortized.

Contribution, Eligibility and Benefits Requirements

Generally, State employees hired before July 2, 1984 participate in the Tier I plan of the SERS, which requires employee contributions and State employees hired thereafter and before July 1, 1997 participate in the Tier II plan, which is non-contributory for certain members and provides somewhat lesser benefits. Employees hired after July 1, 1997 participate in the Tier IIA plan, which requires contributions from its employee members. The 2011 agreement between the State and SEBAC ("SEBAC 2011") provides for two new retirement plans: the Tier III Plan for State employees first hired on and after July 1, 2011 and the Tier III Hybrid Plan for unclassified employees of the Connecticut State System of Higher Education and the central office staff of the Department of Higher Education. SEBAC 2011 also provides a one-time, irrevocable opportunity for members of the Connecticut Alternate Retirement Program to transfer membership to the new Hybrid Plan and purchase credit for their prior State service in that plan at the full actuarial cost. The 2017 agreement between the State and SEBAC ("SEBAC 2017") provides for two new retirement plans: the Tier IV Plan for State employees first hired on and after July 1, 2017, and the Tier IV Hybrid Plan for unclassified employees of the Connecticut State System of Higher Education and the central office staff of the Department of Higher Education. From time-to-time the State has instituted, and in the future may institute, early retirement incentive plans that may impact retirement plan eligibility and benefits. The SERS also provides disability and pre-retirement death benefits.

Set forth in the following table are the percentages of the total State workface in each Tier of the SERS plan as of July 1, 2019, and approximate average annual benefit payable to a retired member in Fiscal Year 2019 in each Tier.

	Percentage of Total Workforce as of July 1, 2019	**Average Annual Benefit Payable to Retired Member in Fiscal Year 2019**
Tier I	1.1%	$40,577
Tier II	19.2	33,569
Tier II Hybrid	0.1	38,291
Tier IIA	43.0	18,970
Tier III	21.5	16,929
Tier III Hybrid	1.4	39,721
Tier IV	11.4	N/A[a]
Tier IV Hybrid	1.5	N/A[a]
	100.0%[b]	

(a) As of June 30, 2019, there were no retired Tier IV or Tier IV Hybrid members.

(b) Does not total due to rounding.

Member contribution requirements, and the eligibility for and calculation of normal retirement benefits varies by tier and plan, as set forth in the following table:

TABLE 20

State Employees' Retirement System Member Contribution Requirements, Eligibility Requirements and Normal Retirement Benefits

Tier	Member Contribution Requirements	Eligibility For Normal Retirement Benefits	Normal Retirement Benefits Based On Final Average Earnings ("FAE")[(a)]
Tier I - Hazardous	6% of earnings up to the Social Security Taxable Wage Base plus 7% of earnings above that level	20 years of hazardous duty credited service	50% of FAE plus 2% for each year of service in excess of 20 years
Tier I - Plan A or C	7% of earnings	Earliest of age 55 with 25 years of service, age 60 with 10 years of service, or age 70 with 5 years of service	2% of FAE times years of service. At age 70, greater of 2.5% of FAE times years of service (maximum 20 years) or 2.0% of FAE times years of service with a minimum benefit with 25 years of $833.34 per month 25 years of service of $833.34 per month
Tier I - Plan B	4% of earnings up to Social Security Taxable Wage Base plus 7% of earnings above that level	Earliest of age 55 with 25 years of service, age 60 with 10 years of service, or age 70 with 5 years of service	2% of FAE times years of service up to Social Security maximum age; for retirements after Social Security maximum age, 1% of FAE up to $4,800, plus 2% of FAE in excess of $4,800 times years of service, with a minimum benefit with 25 years of service of $833.34 per month; for retirements at or after age 70, the greater of 1.25% of FAE up to $4,800 plus 2.5% of FAE in excess of $4,800 times years of service (maximum 20 years) or 1.0% of FAE up to $4,800 plus 2% of FAE in excess of $4,800 times year of service. Minimum benefit with 25 years is $833.34 per month
Tier II – Hazardous	6% of earnings	20 years of hazardous duty credited service	2.5% of FAE times years of service up to 20 years plus 2.0% of FAE times years of service in excess of 20 years, if any, with a minimum benefit with 25 years of service of $360 per month
All Other Tier II	2% of earnings	Prior to July 1, 2022: Earliest of age 62 with 10 years of vesting service (effective July 1, 1992), age 60 with 25 years of vesting service, age 70 with 5 years of vesting service, or age 62 with 5 years of actual state service for terminations on or after July 1, 1997 Effective July 1, 2022: Earliest of age 63 with 25 years of vesting service or age 65 with at least 10 but less than 25 years of vesting service	1.40% of FAE plus (a) 0.433% of FAE in excess of the year's Breakpoint (but not greater than Social Security Covered Compensation) times years of service up to 35 years, and (b) 1.625% of FAE times any years of service in excess of 35 years, with a minimum benefit with 25 years of service of $360 per month
Tier IIA – Hazardous	7% of earnings	20 years of hazardous duty credited service	2.5% of FAE times years of service up to 20 years plus 2.0% of FAE times years of service in excess of 20 years, if any, with a minimum benefit with 25 years of service of $360 per month
All Other Tier IIA	4% of earnings	Prior to July 1, 2022: Earliest of age 62 with 10 years of vesting service (effective July 1, 1992), age 60 with 25 years of vesting service, age 70 with 5 years of vesting service, or age 62 with 5 years of actual state service for terminations on or after July 1, 1997 Effective July 1, 2022: Earliest of age 63 with 25 years of vesting service or age 65 with at least 10 but less than 25 years of vesting service	1.40% of FAE plus (a) 0.433% of FAE in excess of the year's breakpoint (not greater than Social Security Covered Compensation) times years of service up to 35 years, and (b) 1.625% of FAE times any years of service in excess of 35 years, with a minimum benefit with 25 years of service of $360 per month

Tier	Member Contribution Requirements	Eligibility For Normal Retirement Benefits	Normal Retirement Benefits Based On Final Average Earnings ("FAE")[(a)]
Tier III - Hazardous	7% of earnings	25 years of hazardous duty credited service or age 50 with at least 20 years of hazardous duty credited service	2.5% of FAE times years of service up to 20 years plus 2% for each year of service in excess of 20
Tier III - Hybrid Plan	7% of earnings for members first hired on or after July 1, 2011 7% of earnings for members with original date of hire on or after July 1, 1997 5% of earnings for members with original date of hire prior to July 1, 1997	Earliest of age 63 with 25 years of vesting service or age 65 with at least 10 but less than 25 years of vesting service For those members with original date of hire prior, on or after July 1, 1997 but prior to July 1, 2011 eligible for the following: Prior to July 1, 2022: Earliest of age 62 with 10 years of vesting service (effective July 1, 1992), age 60 with 25 years of vesting service, age 70 with 5 years of vesting service, or age 62 with 5 years of actual state service for terminations on or after July 1, 1997 Effective July 1, 2022: Earliest of age 63 with 25 years of vesting service or age 65 with at least 10 but less than 25 years of vesting service	1.40% of FAE plus (a) 0.433% of FAE in excess of the year's breakpoint (but not greater than Social Security Covered Compensation) times years of service up to 35 years, and (b) 1.625% of FAE times any years of service in excess of 35 years, with a minimum benefit with 25 years of service of $360 per month[(b)]
All Other Tier III	4% of earnings	Earliest of age 63 with 25 years of vesting service or age 65 with at least 10 but less than 25 years of vesting service	1.40% of FAE plus (a) 0.433% of FAE in excess of the year's breakpoint (but not greater than Social Security Covered Compensation) times years of service up to 35 years, and (b) 1.625% of FAE times any years of service in excess of 35 years, with a minimum benefit with 25 years of service of $360 per month
Tier IV-Hazardous	8% of earnings plus 1% of earnings to plan qualified under I.R.C. 401(a)	25 years of hazardous duty credited service	2.5% of FAE times years of service up to 20 years plus 2% for each year of service in excess of 20
Tier IV-Hybrid Plan	8% of earnings plus 1% of earnings to plan qualified under I.R.C. 401(a)	Earliest of age 63 with 25 years of vesting service or age 65 with at least 10 but less than 25 years of vesting service	1.33% of FAE and (b) 1.625% of FAE times any years of service in excess of 35 years, with a minimum benefit with 25 years of service of $360 per month
All other Tier IV	5% of earnings plus 1% of earnings to plan qualified under I.R.C. 401(a)	Earliest of age 63 with 25 years of vesting service or age 65 with at least 10 but less than 25 years of vesting service	1.33% of FAE and (b) 1.625% of FAE times any years of service in excess of 35 years, with a minimum benefit with 25 years of service of $360 per month

(a) For all members of all Tiers other than Tier III and Hybrid, "FAE" is defined as the average salary of the three highest paid years of service, provided that, effective January 1, 1986, no one year's earnings can be greater than 130% of the average of the two preceding years for purposes of calculating the FAE. For Tier III and the Hybrid Plan members, FAE is defined as the average salary of the five highest paid years of service, provided that no one year's earnings can be greater than 130% of the average of the preceding two years. Effective July 1, 2014, this limit will be 150% for Tier III and the Hybrid Plan members with mandatory overtime earnings.

(b) The Hybrid Plan provides members with the option to receive at retirement a lump sum payment of their contributions plus a five percent (5%) employer match and four percent (4%) interest in lieu of their receipt of monthly benefit payments.

The SERS provides annual cost-of-living allowance adjustments each July 1 as set forth below:

TABLE 21

State Employees' Retirement Benefit Cost-Of-Living Allowances [(a)]

Retirement Date	Adjustment Based On	Minimum Increase	Maximum Increase	Maximum Increase For Members And Beneficiaries Not Covered By Social Security And Age 62 And Over
Prior to July 1, 1980	Increase in National Consumer Price Index for Urban Wage Earners and Clerical Workers ("CPI-W")	3.0%	5.0%	6.0%
On and after July 1, 1980 but prior to July 1, 1997	N/A	3.0%	3.0%	6.0%
On and after July 1, 1997 but prior to July 1, 1999, an irrevocable choice between one of the two following plans required:	(1) 60% of the increase in "CPI-W" up to 6.0% and 75.0% of the increase in the CPI-W over 6.0%	2.5%	6.0%	N/A
	(2) N/A	3.0%	3.0%	N/A
On or after July 1, 1999, but prior to October 1, 2011	60% of the increase in CPI-W up to 6.0% and 75.0% of the increase in the CPI-W over 6.0%	2.5%	6.0%	N/A
On or after October 1, 2011	60% of the increase in CPI-W up to 6.0% and 75.0% of the increase in the CPI-W over 6.0%	2.0%	7.5%	N/A
On or after July 1, 2022	60% of the increase in CPI-W up to 6.0% and 75.0% of the increase in the CPI-W over 6.0%	None	7.5%	N/A

(a) An employee from Tier IIA must have at least ten years of actual State service or directly make the transition into retirement in order to be eligible for annual adjustments.

GASB 67 and GASB 68 Disclosure as of June 30, 2019

The SER Commission received from Cavanaugh Macdonald Consulting, LLC a report prepared as of June 30, 2019 and dated January 15, 2020 containing information to assist the SER Commission in meeting the requirements of GASB 67. Much of the material provided in the report is based on the data, assumptions and results of the December 2019 actuarial valuation. This report reported the following results as of June 30, 2019 with respect to the SERF in accordance with GASB 67:

January 2020 GASB 67 Report as of June 30, 2019	
Total Pension Liability	$36,087.9 million
Fiduciary Net Position	$13,275.7 million
Net Pension Liability	$22,812.2 million
Ratio of Fiduciary Net Position to Total Pension Liability	36.79%

The GASB 67 report used a discount rate of 6.90%, which was the rate used in the December 2019 actuarial valuation, since the results currently indicate that the FNP will not be depleted at any point in the future. GASB 67 also requires sensitivity calculations based on a SEIR of 1% in excess and 1% less than the SEIR used, which would decrease the NPL to $19,115.5 million or increase the NPL to $27,243.9 million, respectively.

The SER Commission received from Cavanaugh Macdonald Consulting, LLC a report prepared as of June 30, 2019 and dated January 15, 2020 containing information to assist the SER Commission in meeting the requirements of GASB 68. This report indicates a Pension Expense of $2,771.4 million for the fiscal year ending June 30, 2019.

The audited financial statements for Fiscal Year 2019 which are included as **Appendix II-C** hereto, and in particular note 10 and the Pension Plans Required Supplementary Information of the accompanying Basic Financial Statements, reflect the supplemental information reported in the February 20, 2019 GASB 67 and GASB 68 reports. As those reports were prepared as of June 30, 2018 based on data, assumptions and results of the November 2018 actuarial valuation, they do not reflect data, assumptions and results of the June 2019 revised actuarial valuation or the December 2019 actuarial valuation.

Teachers' Retirement Fund

The Teachers' Retirement Fund ("TRF"), administered by the Teachers' Retirement Board, provides benefits for any teacher, principal, supervisor, superintendent or other eligible employee in the public school systems of the State, with certain exceptions. While setting and paying salaries for teachers, municipalities do not provide contributions to the maintenance of the fund. As of June 30, 2019, there were 104,264 active and former employees and beneficiaries, consisting of (i) 50,940 active members, (ii) 2,139 inactive vested members, (iii) 11,626 inactive non-vested members, (iv) 1,499 annuity reserve members, (v) 37,772 retired members and beneficiaries, and (vi) 288 members on disability allowance.

Contributions to the fund are made by employees and by General Fund appropriations from the State. State contributions to the fund are made quarterly on the basis of certifications submitted by the Teachers' Retirement Board and are funded with annual appropriations from the General Fund. State contributions to the fund for Fiscal Year 2008 included $2.0 billion of the proceeds of the State's Taxable General Obligation Bonds (Teachers' Retirement Fund 2008 Series), as discussed under ***Pension Obligation Bonds*** below.

Actuarial valuations are performed as of June 30th of each even-numbered year. The actuarial valuation uses recognized actuarial methods to calculate the actuarial value of assets and the actuarial accrued liability of the TRF. The valuation uses an asset valuation method of smoothing the difference between the market value of assets and actuarial value of assets to prevent extreme fluctuations that may result from short-term or cyclical economic and market conditions. The actuarial value of assets is determined by first projecting the actuarial value forward from the beginning of the prior fiscal year based on the actual cash flow during the fiscal year and the assumed investment rate of return. One fourth of any difference between this expected actuarial value and the actual market value is added to or subtracted from the expected actuarial value to arrive at the actuarial value of assets in order to "smooth" year to year changes in market values. The unfunded actuarial liability is the actuarial liability less the actuarial value of assets. The valuation includes a projection from the valuation date to future years based on certain key assumptions such as the investment return on the market value of assets, the rates of withdrawal of active members who leave covered employment before qualifying for any monthly benefit, the rates of mortality, the rates of disability, the rates of pay increases and the assumed age or ages at actual retirement.

November 2018 Actuarial Valuation and June 2019 Revised Actuarial Valuation, and Fiscal Years 2020 and 2021 Employer Contribution Requirements

The Teachers' Retirement Board received from Cavanaugh Macdonald Consulting, LLC an actuarial valuation as of June 30, 2018 dated November 7, 2018. At its meeting held June 5, 2019, the Teachers' Retirement Board approved the reduction of the investment return assumption for the TRF from 8.0% to 6.9% and adopted a credited interest percentage for member accounts of 4.0% per annum, as required by the 2019 Budget Act for Fiscal Year 2020 and Fiscal Year 2021. As more fully discussed under ***Pension Obligation Bonds*** below, the 2019 Budget Act for Fiscal Years 2020 and 2021 includes the establishment of the Connecticut Teachers' Retirement Fund Bonds Special Capital Reserve Fund to provide adequate provision by law for the protection of the holders of the TRF Bonds, permitting the State to reamortize unfunded liabilities of the TRF and provide for the full funding of the actuarial determined employer contribution to the Fund in a manner consistent with its pledge to the holders of the TRF Bonds. Following the June 5, 2019 revisions to the investment return assumption for the TRF and the credited interest percentage for member accounts, the Teachers' Retirement Board received from Cavanaugh Macdonald Consulting, LLC a revised actuarial valuation as of June 30, 2018 dated June 18, 2019.

The November 2018 actuarial valuation and the June 2019 revised actuarial valuation reported the following results as of June 30, 2018 with respect to the TRF:

Actuarial Valuation as of June 30, 2018		
	June 2019 Revised Actuarial Valuation	**November 2018 Actuarial Valuation**
Market Value of Assets	$17,946.8 million	$17,946.8 million
Actuarial Value of Assets	$17,951.8 million	$17,951.8 million
Actuarial Accrued Liability	$34,712.0 million	$31,110.9 million
UAAL	$16,760.3 million[(a)]	$13,159.1 million
Funded Ratio (based on the actuarial value of assets)	51.7%	57.7%
Funded Ratio (based on the market value of assets)	51.7%	57.7%

(a) Does not total due to rounding.

The November 2018 actuarial valuation was based upon the following assumptions and methodologies, among others, which are unchanged from those used in the prior valuation:

- 8.0% earnings assumption (including inflation at 2.75%)
- Entry Age Normal actuarial cost method
- Level percent of payroll amortization method over an amortization period beginning with 40 years as of July 1, 1991 for the contribution for Fiscal Year 1993, resulting in a net effective amortization period for the computed State contribution amounts as of June 30, 2018 of approximately 16.6 years
- Projected salary increases of 3.25% to 6.5% (including inflation at 2.75%)

- Cost-of-living adjustments of 3.0% annually for members retired before September 1992, 2.0% for members retired on and after September 1, 1992 and hired prior to July 1, 2007 and 1.75% for members retired on and after September 1, 1992 and hired on or after July 1, 2007
- Payroll Growth Rate of 3.25%
- Net effective amortization period for the computed State contribution amounts for Fiscal Year 2017 is 16.6 years
- The actuarial value of assets recognizes 20% of the difference between the market value of assets and the expected actuarial value of assets

The June 2019 revised actuarial valuation assumptions and methodologies are unchanged from those used in the November 2018 actuarial valuation, other than the following:

- The UAAL as of June 30, 2018 is amortized over a closed 30-year period rather than over the prior approximately 19-year remaining amortization period. Future changes to the UAAL will be amortized utilizing layered 25-year closed amortization bases established at the end of each plan year. Prior thereto, the UAAL was being amortized over a 40-year period that commenced in Fiscal Year 1993.
- The UAAL as of June 30, 2018 is amortized at a level percent of pay and will grade to a level dollar method beginning with the June 30, 2024 valuation
- Reduction of the inflation assumption from 2.75% to 2.50%
- Reduction of the real rate of return assumption from 5.25% to 4.40% which, when combined with the inflation assumption change, results in a decrease in the investment rate of return assumption from 8.00% to 6.90%
- Increase in the annual rate of wage increase assumption from 0.50% to 0.75%

The November 2018 actuarial valuation and the June 2019 revised actuarial valuation determined the ADEC requirements for Fiscal Year 2021 and Fiscal Year 2022, and the annual contribution rate as a percentage of payroll, based on a covered payroll as of June 30, 2018 of $4,075.9 million, as follows:

Annual Employer Contributions for:		
	June 2019 Revised Actuarial Valuation	**November 2018 Actuarial Valuation**
Fiscal Year 2020	$1,208.8 million	$1,392.2 million
Fiscal Year 2021	$1,249.8 million	$1,437.4 million
Annual Employer Contribution as Percent of Payroll as of June 30, 2018	27.77%	32.04%

The 2019 Budget Act for Fiscal Year 2020 and Fiscal Year 2021 contains appropriations sufficient, taking into account reallotments of available funds, to fully fund the employer contribution requirement for those years pursuant to the June 2019 revised actuarial valuation.

Pension Obligation Bonds

In April 2008 the State issued $2,276.6 million general obligation bonds (“TRF Bonds”) to fund a $2.0 billion deposit to the TRF plus amounts required for costs of issuance and up to two years of capitalized interest. Section 8 of Public Act No. 07-186, which authorized the TRF Bonds, provides that in each fiscal year that any TRF Bonds (or any refunding of TRF Bonds) are outstanding, there shall be deemed appropriated from the

General Fund an amount equal to the annual required contribution to the TRF, and such amount shall be deposited in the fund in such fiscal year. The amounts of the annual required contributions for each biennial budget shall be based on the actuarial valuation required to be completed by the December 1 prior to the beginning of the next biennial budget. Under Section 8 the State has pledged to and agreed with the holders of any TRF Bonds that, so long as the actuarial evaluation of the TRF is completed and the certification of the annual contribution amounts is made as required by such Section, no public or special act of the General Assembly shall diminish such required contribution until such bonds, together with interest thereon, are fully met and discharged unless adequate provision is made by law for the protection of the holders of the bonds. Such contributions may be reduced in any biennium, however, if (i) the Governor declares an emergency or the existence of extraordinary circumstances (which may include changes in actuarial methods or accounting standards) in which the provisions of CGS Section 4-85 is invoked, (ii) at least three-fifths of the members of each Chamber of the General Assembly vote to diminish such required contributions during the biennium for which the emergency or extraordinary circumstances are determined, and (iii) the funded ratio of the fund is at least equal to the funded ratio immediately after the sale of the bonds in accordance with the actuarial method used at the time. If such conditions are met, the funding of the annual required actuarial contribution may be diminished, but in no event shall such diminution result in a reduction of the funded ratio of the fund by more than 5% from the funded ratio that would otherwise have resulted had the State funded the full required contribution, or the funded ratio immediately after the sale of the bonds, whichever is greater.

The 2019 Budget Act for Fiscal Years 2020 and 2021 includes the establishment of the Connecticut Teachers' Retirement Fund Bonds Special Capital Reserve Fund ("TRF Bonds SCRF"), a special capital reserve fund for the benefit of the holders of the TRF Bonds. The TRF Bonds SCRF is established to provide adequate provision by law for the protection of the holders of the TRF Bonds, permitting the State to reamortize unfunded liabilities of the Teachers' Retirement Fund and provide for the full funding of the actuarial determined employer contribution to the Fund in a manner consistent with its pledge to the holders of the TRF Bonds. The Attorney General of the State has advised that the proposal satisfies the requirements of the applicable covenants contained in the TRF Bonds.

The TRF Bonds SCRF is pledged to and used solely for the payment of the principal of and interest on, or the redemption or purchase of, the TRF Bonds. In the event the State has not otherwise timely made available moneys to pay principal or interest due on the TRF Bonds, the Treasurer shall direct the trustee of the TRF Bonds SCRF to transfer from the fund to the paying agent for the bonds the amount necessary to timely pay such principal or interest then due.

The TRF Bonds SCRF is funded at an amount not less than the maximum amount of principal and interest becoming due on the currently outstanding TRF Bonds, and any bonds refunding the TRF Bonds then outstanding, by reason of maturity or a required sinking fund installment in any succeeding fiscal year ("Required Minimum Capital Reserve"). The TRF Bonds SCRF is initially funded by a deposit of $380.9 million of General Fund resources. When the amount on deposit in the TRF Bonds SCRF is less than the Required Minimum Capital Reserve, funds of the Connecticut Lottery Corporation that exceed the current needs of the Corporation for the payment of prizes, the payment of current operating expenses and funding of approved reserves of the Corporation are to be deposited in the TRF Bonds SCRF, rather than the General Fund, until the amount on deposit in the TRF Bonds SCRF equals the Required Minimum Capital Reserve.

TRF Plan Results – Five Prior Years

Set forth in the following table are State contributions to the TRF, employee contributions, investment income, net realized gains and losses, net unrealized gains and losses, benefits paid, actuarially determined employer contributions and market value of assets for each of the past five fiscal years, and the actuarial accrued liabilities, the actuarial values of fund assets, the resulting unfunded accrued liabilities and the funded ratios on an actuarial and market basis for the actuarial valuations as of June 30, 2016 and June 30, 2018 (as revised June 18, 2019).

TABLE 22

Teachers' Retirement Fund[(a)]
(In Millions)

	2015	2016	2017	2018	2019
General Fund Contributions	$ 984.1	$ 975.5	$ 1,012.2	$1,271.0	$1,292.3
Employee Contributions[(b)]	278.9	290.5[(e)]	292.2	313.4[(e)]	313.6
Total Contributions	$ 1,263.0	$ 1,266.0	$ 1,304.4	$1,584.4	$1,605.9
Benefits Paid[(c)]	$ 1,773.4	$ 1,842.9	$ 1,889.2	$1,994.1	$2,004.7
Investment Income/Net Gains (Losses)	$ 569.1[(d)]	$ (18.8)[(d)]	$2,199.6[(d)]	$1,224.0[(d)]	$997.8[(d)]
Actuarially Determined Employer Contribution	$ 984.1	$ 975.5	$ 1,012.2	$1,271.0	$1,292.3
Percentage of Actuarially Determined Employer Contribution Made	100.0%	100.0%	100.0%	100.0%	100.0%
Actuarial Accrued Liabilities	N/A	$29,860.3	N/A	$34,712.0	N/A
Actuarial Values of Assets	N/A	$16,712.3	N/A	$17,951.8	N/A
Unfunded Accrued Liabilities	N/A	$13,148.0	N/A	$16,760.3[(f)]	N/A
Market Value of Assets	$16,110.4	$15,584.6[(e)]	$17,126.8	$17,946.8 [(e)]	$18,492.5
Funded Ratio (Assets Actuarial Value)	N/A	55.97%	N/A	51.72%	N/A
Funded Ratio (Assets Market Value)	N/A	52.19%	N/A	51.70%	N/A
Ratio of Actuarial Value of Assets to Market Value of Assets	N/A	107.2%	N/A	100.0%	N/A

(a) As actuarial valuations are performed every two years, not all of the data is available for each year.

(b) Includes municipal contributions under early retirement incentive programs ($0.7 million during Fiscal Year 2015, $0.5 million during Fiscal Year 2016, $0.5 million during Fiscal Year 2017, $0.9 million during Fiscal Year 2018 and $0.8 million during Fiscal Year 2019). Does not include employee contributions to the Teachers' Retirement Health Insurance Fund.

(c) Does not include refunds with respect to withdrawals of account balances by inactive members who terminate membership ($50.3 million during Fiscal Year 2015, $46.1 million during Fiscal Year 2016, $73.3 million during Fiscal Year 2017, $57.1 million during Fiscal Year 2018 and $61.9 million during Fiscal Year 2019).

(d) Adjusted to comply with GASB 72.

(e) Figure derived from actuarial valuation.

(f) Does not total due to rounding.

Modeling of Future Funded Ratios and Annual Contributions through Fiscal Year 2052

The consulting actuary for the TRF prepared a baseline open group model of future funded ratios and annual contribution requirements for the TRF through Fiscal Year 2052. The modeling presented in Table 22a is based on the assumptions used for the actuarial valuation and actuarial methods of future annual employer contribution requirement figures as set out in the June 2019 revised actuarial valuation. The modeling does not represent a forecast, estimate or projection. The modeling does not reflect future factors or conditions that would cause the actual future experience of the TRF to diverge from the model. In particular, future actuarial valuations mandated by statute over the period of the modeling will result in recalculation of the annual employer contribution requirements for each biennial budget. No representation is made that future annual employer contribution requirements or funded ratios will conform to the modeling.

TABLE 22a

Modeling Of Teachers' Retirement Fund
Future Funded Ratios and Annual Contribution Requirements
(Dollars In Millions)[(a)]

The funded ratio and annual contributions for each fiscal year have been modeled based on the assumption of an actuarial valuation prepared as of the June 30 two years prior to the end of such fiscal year modeling.

Fiscal Year Ending June 30	Valuation Date June 30	Unfunded Accrued Liability	Funded Ratio as of Valuation Date	Normal Cost	Amortization of Unfunded Accrued Liability	Total State Contribution
2020	2018	$17,064.6	52.0%	$292.4	$ 916.4	$1,208.8
2021	2019	17,126.9	52.9	301.9	947.9	1,249.8
2022	2020	17,392.7	53.2	300.7	1,067.9	1,368.6
2023	2021	17,524.9	53.8	306.5	1,179.4	1,486.0
2024	2022	17,554.7	54.7	312.8	1,289.5	1,602.3
2025	2023	17,476.5	55.8	319.6	1,395.5	1,715.1
2026	2024	17,286.9	57.1	326.5	1,495.1	1,821.7
2027	2025	16,984.6	58.7	333.9	1,495.1	1,829.0
2028	2026	16,661.4	60.3	341.4	1,495.1	1,836.5
2029	2027	16,315.9	61.9	349.1	1,495.1	1,844.2
2030	2028	15,946.6	63.5	357.2	1,495.1	1,852.3
2031	2029	15,551.8	65.1	365.5	1,495.1	1,860.6
2032	2030	15,129.8	66.7	374.1	1,495.1	1,869.2
2033	2031	14,678.6	68.4	382.9	1,495.1	1,878.0
2034	2032	14,196.3	70.1	392.0	1,495.1	1,887.1
2035	2033	13,680.8	71.7	401.5	1,495.1	1,896.6
2036	2034	13,129.6	73.4	411.3	1,495.1	1,906.4
2037	2035	12,540.4	75.1	421.4	1,495.1	1,916.5
2038	2036	11,910.6	76.9	432.1	1,495.1	1,927.2
2039	2037	11,237.3	78.6	443.0	1,495.1	1,938.1
2040	2038	10,517.6	80.4	454.9	1,495.1	1,950.0
2041	2039	9,748.2	82.2	467.0	1,495.1	1,962.1
2042	2040	8,925.7	84.0	479.4	1,495.1	1,974.5
2043	2041	8,046.5	85.9	492.3	1,495.1	1,987.4
2044	2042	7,106.6	87.8	505.4	1,495.1	2,000.5
2045	2043	6,101.8	89.8	518.8	1,480.6	1,999.4
2046	2044	5,042.3	91.7	532.8	1,488.2	2,021.0
2047	2045	3,902.0	93.7	547.3	1,484.0	2,031.3
2048	2046	2,687.2	95.8	562.5	1,484.2	2,046.8
2049	2047	1,388.4	97.9	577.9	1,484.2	2,062.1
2050	2048	0.0	100.0	593.5	0.0	593.5
2051	2049	0.0	100.0	609.3	0.0	609.3
2052	2050	0.0	100.0	625.6	0.0	625.6

(a) In fiscal year ending June 30, 2050 and thereafter the annual employer contribution requirement consists only of the payment of the normal costs, which represents the portion of the present value of retirement benefits that are allocable to active members' current year of service. In the model, there no longer remains an unfunded actuarial accrued liability to be amortized.

Contribution, Eligibility and Benefits Requirements

Each member of the TRS is required to contribute 7% of annual salary for the pension benefit effective on and after January 1, 2018 (an increase of 1% from its prior level). The State's contribution requirement is determined in accordance with CGS Section 10-183z, which requires the retirement system to be funded on an actuarial reserve basis.

Eligibility for normal retirement benefits is available at age 60 for those with 20 years of credited Connecticut service, or 35 years of credited service including at least 25 years of service in Connecticut. The normal retirement benefit is 2% of average annual salary received during three years of highest salary times years of credited service (maximum benefit is 75% of average annual salary received during three years of highest salary), subject to certain maximum dollar limits under the Internal Revenue Code of 1986, as amended. In addition, amounts derived from the accumulation of supplemental account contributions made prior to July 1, 1989 and voluntary contributions by the member are payable. Effective January 1, 1999, there is a minimum monthly retirement benefit of $1,200 to members who retire under the normal retirement provisions and who have completed at least 25 years of full time Connecticut service at retirement. The plan also provides reduced early retirement and pro-ratable retirement benefit, disability benefits, return with interest on certain contributions upon termination of employment, and pre-retirement death benefits for spouses and dependent children. The average annual benefit payable to a retired member in fiscal year ending June 30, 2019 was approximately $55,554.

The plan includes cost-of-living allowances as set forth below:

TABLE 23

Teachers' Retirement Benefit Cost-Of-Living Allowances

Retirement Date	Adjustments Consistent With Adjustments To:	Minimum Increase	Maximum Increase	Limitation On Maximum Increase Based On Previous Year's Plan Assets Return
Prior to September 1, 1992	National Consumer Price Index for Urban Wage Earners and Clerical Workers	3.0% per annum	5.0% per annum	N/A
On or after September 1, 1992, and became System member before July 1, 2007	Social Security benefits	0.0% per annum	6.0% per annum	If asset return less than 8.5% per annum, the maximum increase is 1.5%
On or after July 1, 2007, and became System member after July 1, 2007	Social Security benefits	0.0% per annum	5.0% per annum	If asset return less than 11.5% per annum, the maximum increase is 3.0%; if less than 8.5% per annum, maximum increase is 1.0%.

A board of education may offer a retirement incentive plan. Such plan is required to provide for the purchase by the board of education and a member of the system who chooses to participate in the plan of additional credited service from the TRS for such member and for payment by the board of education of not less than 50% of the entire cost of such total cost. Any such plan shall specify a maximum number of years to be purchased, not to exceed five. Members must have attained age 50 and be eligible for retirement with the additional purchased service. The amount of service purchased cannot exceed the lesser of five years or one-fifth of the member's credited service.

GASB 67 and GASB 68 Disclosure as of June 30, 2019

The Teachers' Retirement Board received from Cavanaugh Macdonald Consulting, LLC a report prepared as of June 30, 2019 and dated February 19, 2020 containing supplemental information to assist the Board in meeting the requirements of GASB 67. Much of the material provided in the report is based on the data, assumptions and results of the June 2019 revised actuarial valuation as of June 30, 2018. This report reported the following results as of June 30, 2019 with respect to the TRF in accordance with GASB 67:

February 2020 GASB 67 Report as of June 30, 2019	
Total Pension Liability	$35,566.2 million
Fiduciary Net Position	$18,493.5 million
Net Pension Liability	$17,072.7 million
Ratio of Fiduciary Net Position to Total Pension Liability	52.00%

The GASB 67 report used a discount rate of 6.90%, which was the rate used in the June 2019 revised actuarial valuation as of June 30, 2018, since the results currently indicate that the FNP will not be depleted at any point in the future. GASB 67 also requires sensitivity calculations based on a SEIR of 1% in excess and 1% less than the SEIR used, which would decrease the NPL to $13,521.7 million or increase the NPL to $21,296.6 million, respectively.

The Teachers' Retirement Board received from Cavanaugh Macdonald Consulting, LLC a report prepared as of June 30, 2019 and dated February 19, 2020, containing supplemental information to assist the Teachers' Retirement Board in meeting the requirements of GASB 68. This report reported a collective Pension Expense of $2,096.8 million for the fiscal year ending June 30, 2019.

The audited financial statements for Fiscal Year 2019 which are included as **Appendix II-C** hereto, and in particular note 10 and the Pension Plans Required Supplementary Information of the accompanying Basic Financial Statements, reflect the supplemental information reported in the February 4, 2019 GASB 67 report and the February 7, 2019 GASB 68 report. As those reports were prepared as of June 30, 2018 based on data, assumptions and results of the November 2018 actuarial valuation, they do not reflect data, assumptions and results of the June 2019 revised actuarial valuation.

State Employees' Retirement Fund/Teachers' Retirement Fund Sensitivity and Stress Test Analyses

Pursuant to CGS Section 4-68ee, the Secretary of OPM is required to develop and annually report to the Appropriations Committee of the General Assembly sensitivity and stress test analyses for SERS and TRF. The report is to include projections of benefit levels, pension costs, liabilities, and debt reduction under various economic and investment scenarios. The Secretary received from The Pew Charitable Trusts a report, dated November 13, 2018, to meet the legislative reporting requirement (the "2018 Pew Report").

The 2018 Pew Report and the accompanying "Proposed Legislative Stress Report for Connecticut Public Pensions" providing sensitivity analyses of the liability and normal costs for SERS and TRF, are based on the valuation results for SERS and TRF as of June 30, 2016. Both systems have had sensitivity analyses performed in accordance with GASB 68 based on the results of subsequent actuarial valuations, as discussed above. The return of 7.43% is based on the average of the discount rates between the SERS (6.9%) and TRF (8.0%) plans weighted by respective 2017 plan liabilities. Projections are based on a roll-forward model using publicly available actuarial data and assumptions.

The report employed a stress test simulation model that forecasts pension balance sheet, contribution, and cash flow metrics over a 30-year period, using both deterministic and stochastic methods. The report focused on investment risk (the risk that investments deviate from expected performance), and contribution risk (the risk that contributions fall below the rate required to meet funding objectives).

The report used two economic scenarios to examine the impact of investment risk on SERS and TRF: (i) a fixed 5% return scenario, under which a fixed 5% return is applied to the model for each year in the forecast period, providing estimates of pension costs to the State should long-term target returns not be met, and (ii) an asset shock scenario, incorporating an initial decline in the stock market of approximately 25% followed by three years of recovery with average annual investment returns of 12% and subsequent years' returns of 5%, modeling the impact of a recession on asset levels and pension costs.

The report used two behavioral assumptions to examine the impact of contribution risk on SERS and TRF: (i) the State policy assumption, under which the State increases funding to offset losses based on written State policy, and (ii) the revenue constrained assumption, under which contributions are set at a fixed percentage of State revenue, modeling a situation where the State chooses to avoid limiting other State spending to allow for increased pension contributions. The revenue constrained contribution policy scenario projects employer contributions growing at the same rate as own source revenue instead of following the current contribution policy. Own source revenue is projected based on long-term forecasts of the State's gross state product ("GSP") growth, as estimated by Moody's Analytics, and the historical relationship in each state between GSP growth and growth in own source revenue.

The 2018 Pew Report findings include:

- The State budget is exposed to significant spikes in required pension contributions in scenarios where investment returns fall short of expectations. In a 5% investment return scenario, for example, the report estimates that total employer contributions required under State policy would increase from 13% of revenue currently to over 19% by 2028, and potentially reach $10 billion in 2030. This result is driven primarily by the funding requirements of TRF.
- SERS has minimal exposure to solvency risk or fiscal distress under an adverse recession scenario; however, TRF's risk of insolvency is not insignificant if required contributions are not met, but instead are kept constant as a share of the State budget. Recent changes to SERS' assumptions, contribution policy, and plan design protect the plan from insolvency despite a low funded rate of 36%. In contrast, TRF would face declining assets and potential insolvency in an asset shock scenario in which contributions only increased at the same rate as State revenue.
- Recent reforms to SERS demonstrate positive results in managing financial market volatility and mitigating investment risk. The new funding policy for SERS translates into a relatively stable level of required contributions under a range of scenarios. In addition, placing new state employees in a hybrid plan is projected to significantly mitigate risk of higher costs, with estimated savings of $1.0 billion to $2.5 billion over 30 years depending on investment performance.
- Low funded levels of SERS and TRF may result in persistently high pension expense for decades if investments underperform. While the State's current level of contributions helps to diminish the likelihood of fiscal distress as described above, a realistic and achievable plan to reach full funding will still be needed to lower the impact of pension costs on the State budget over time.

Investment of Pension Funds

Eleven investment funds serve as the investment medium for both SERF and TRF, as listed below along with the percentage allocation of holdings for the SERF and the TRF as of June 30, 2019 in each of these funds. See also **FINANCIAL PROCEDURES** herein.

TABLE 24

Pension Fund Investment Allocations
As of June 30, 2019[a]

	State Employees' Retirement Fund	Teachers' Retirement Fund
Domestic Equity Fund[b]	23.7%	23.5%
Developed Markets International Stock Fund	19.8	20.6
Emerging Markets International Stock Fund	9.1	9.5
Real Estate Fund	6.5	6.6
Core Fixed Income Fund	9.6	7.8
Inflation Linked Bond Fund	4.9	3.3
Emerging Markets Debt Fund	5.0	6.1
High Yield Debt Fund	5.4	6.1
Liquidity Fund	0.8	1.0
Private Investment Fund	7.2	7.3
Alternative Investment Fund	8.0	8.2
	100.0%	100.0%

(a) Effective February 19, 2020, the Real Estate Fund was discontinued and a Real Assets Fund created; the Inflation Linked Bond Fund was discontinued, and a Private Credit Fund created.

(b) Formerly named the Mutual Equity Fund.

Investment Returns

Annualized Net Returns on Investment Assets in Retirement Funds
Periods Ending June 30, 2019

	5 Year	10 Year	15 Year	20 Year	25 Year
SERF	6.0%	8.9%	6.6%	5.9%	7.6%
TRF	6.0%	8.8%	6.7%	5.9%	7.6%

Other Retirement Systems

The other minor retirement systems funded by the State include the Judges, Family Support Magistrates and Compensation Commissioners Retirement System (the Judicial Retirement System), the General Assembly Pension System, the State Attorneys' Retirement Fund and the Public Defenders' Retirement Fund. As of June 30, 2019, there were approximately 445 active members of these plans and approximately 315 retired members.

Unclassified employees of the Connecticut State System of Higher Education and the central office staff of the Department of Higher Education are eligible to participate in the Connecticut Alternate Retirement Program. This program is a defined contribution program, and thus the State has no unfunded liability with respect to the program. All member contributions and State appropriations are held in a separate retirement fund by the third party administrator of the plan, who invests the fund's assets allocable to a member at the direction of such member in the investment funds available under the plan. A member may not withdraw funds from the plan unless such member has reached age 55 and has terminated from service, retired or died, provided that any member with less than five years of participation in the plan who is under the age of 55 and terminates from service may rollover such member's entire account into an eligible retirement plan.

The State is the administrator of the Connecticut Municipal Employees' Retirement System and the Connecticut Probate Judges and Employees' Retirement System. As the administrator of these systems the State owes a fiduciary obligation to these systems; however, the State has no direct financial liability to pay benefits under these systems.

Social Security and Other Post-Employment Benefits ("OPEB")

Social Security

State employees and teachers are treated in various ways for purposes of federal social security. Most State employees are covered under social security, and most teachers are not. As of June 30, 2019, approximately 55,072 State employees were entitled to Social Security coverage. The following table summarizes this treatment.

Category	Covered
Teachers	No
State employees under the SERF	Yes
State employees under other retirement systems hired after 2/21/1958	No
State police hired after 2/21/58 and before 5/8/1984	No
State police hired after 5/8/1984	Yes
Employees under the Connecticut Alternate Retirement Program hired after 7/12/1990	Yes
Employees under the Connecticut Alternate Retirement Program hired before 7/12/1990	Could elect

The amount expended by the State for Social Security coverage for Fiscal Year 2019 was $308.3 million. Of that amount, $224.5 million was paid from appropriated funds consisting of $209.1 million from the General Fund and $15.4 million from the Special Transportation Fund. The $83.8 million balance was funded from other funds, including federal funds, university operating funds, industry-funded agencies, private grants and capital projects funds. The State has appropriated $225.0 million for Social Security coverage for Fiscal Year 2020, consisting of $208.5 million from the General Fund and $16.5 million from the Special Transportation Fund. The State has appropriated $235.4 million for Social Security coverage for Fiscal Year 2021, consisting of $218.2 million from the General Fund and $17.2 million from the Special Transportation Fund. The balance of the State's expenditures for Social Security coverage for Fiscal Year 2020 and Fiscal Year 2021 will be funded from other funds, the amounts of which have not yet been determined.

Other Post-Employment Benefits – State Employees

The State provides post-retirement health care and life insurance benefits to eligible employees who retire from State employment. The State currently finances the cost of such benefits on a pay-as-you-go basis through a transfer of an appropriation from the General Fund to a trust fund (the "OPEB Trust") established for the payment of post-retirement health care and life insurance benefits, and for the accumulation of assets with which to pay post-retirement health care benefits and post-retirement life insurance benefits to future retirees. Beginning on July 1, 2009 new hires were required to contribute 3% of salary for ten years, to be deposited into the trust. Commencing July 1, 2010, employees with less than five years of service were required to contribute 3% of salary until they completed ten years of service, to be deposited into the trust. SEBAC 2011 extended the requirement of trust contributions to all health-care eligible State employees phased in beginning July 1, 2013, as follows: 0.5% of salary for fiscal year ending June 30, 2013, 2.0% of salary for fiscal year ending June 30, 2014, and 3.0% of salary for fiscal ending June 13, 2015 and thereafter, with a period of required contribution of ten years or the beginning of retirement (whichever occurs first). SEBAC 2017 extended the requirement of trust contributions for a period of fifteen (15) years to all State employees hired on or after July 1, 2017. As of June 30, 2019, the fair market value of the net assets within the trust totaled $1,152.4 million, adjusted to comply with GASB 72, invested in the Combined Investment Funds. See also notes 13 and 14 of **Appendix II-C** hereto and **FINANCIAL PROCEDURES** herein. It is not currently anticipated that the trust will provide any significant contribution to the funding for post-retirement health care and life insurance benefits in the near future. The State's contribution to the OPEB Trust to match State employee contributions consists of a combination of General Fund and Transportation Fund appropriations, and OPEB fringe benefit recoveries through the application of fringe benefit rates for the SERS and Alternative Retirement Plans. For Fiscal Year 2020, the State's matching contribution is projected to be $125.8 million, including an aggregate $101.9 million appropriated in the 2019 Budget Act for Fiscal Years 2020 and 2021, consisting of a $95.8 million General Fund appropriation and a $6.1 million Transportation Fund appropriation. The balance of the Fiscal Year 2020 contribution is anticipated to be funded through projected $23.9 million in fringe benefit recoveries. For Fiscal Year 2021, the State's matching contribution is projected to be $109.9 million, including an aggregate $88.9 million appropriated in the 2019 Budget Act for Fiscal Years 2020 and 2021, consisting of an $83.7 million General Fund appropriation and a $5.2 million Transportation Fund appropriation. The balance of the Fiscal Year 2021 contribution is anticipated to be funded through projected $21.0 million in fringe benefit recoveries. The State will need to make significant General Fund appropriations for post-retirement health care and life insurance benefits in upcoming fiscal years. Because the plan is being funded on a pay-as-you-go basis, the amounts are much less than the annual required employer contribution payment calculated for the plan, which includes a component to amortize the UAAL.

In an effort to control health care costs, the State has established a Health Care Cost Containment Committee, and has implemented or is investigating various structural changes to the SERS health care benefits plans, including but not limited to value-based contracts with prescribers, e-prescribing tools, establishment of a regional network of surgical centers of excellence for certain complex medical procedures, agreement with the State's pharmacy benefit manager to reduce the State's pharmaceutical costs by approximately 10% through the elimination of "spread pricing" and other measures, and to provide prescription drug net price transparency to providers.

SERS OPEB GASB 74 Report as of June 30, 2018

The State received from The Segal Group a report prepared as of June 30, 2018 and dated February 4, 2019 ("2019 SERS OPEB GASB 74 Report") containing supplemental information to assist the State in meeting the requirements GASB 74 with respect to the State's liability for post-retirement health care benefits (which include medical, prescription drug, dental and life insurance benefits) for eligible persons covered under SERS and other State retirement systems, excluding the TRS.

The 2019 SERS OPEB GASB 74 Report indicated the following as of June 30, 2018:

SERS OPEB GASB 74 Report as of June 30, 2018	
Total OPEB Liability	$18,114.3 million
Fiduciary Net Position	$849.9 million
Net OPEB Liability ("NOL")	$17,264.4 million
Ratio of Fiduciary Net Position to Total OPEB Liability	4.69%
Actuarially Determined Employer Contribution (Fiscal Year 2018)	$1,157.1 million

In Fiscal Year 2018, the State contributed $801.9 million to the Plan, 69.3% of the Actuarially Determined Employer Contribution and 65.5% of the Annual OPEB Expense.

The 2019 SERS OPEB GASB 74 Report was based upon the following assumptions and methodologies, among others:

- An entry age normal actuarial cost method
- Level percent-of-payroll contributions over a 30-year amortization period over a closed 30-year amortization period with a remaining amortization period of 20 years as of June 30, 2018
- An expected long-term rate of return on Plan assets of 6.90%
- A discount rate applied to projected benefit payments of 3.58% as of June 30, 2019 and 3.95% as of June 30, 2018
- A payroll growth rate of 3.50%
- Medical cost trend rate of 6.5% graded to 4.5% over four years
- Drug cost trend rate of 8.0% graded to 4.5% over seven years
- Dental and Part B trend rates of 4.5%

The tables below presents the NOL of the Plan, calculated using the health care cost trend rates, as well as what the Fund's NOL as of June 30, 2018 would be if it were calculated using a health care cost trend rate that is 1% lower or higher than the current rate, and rate that is 1% lower or higher than the current discount rate, as set out in the 2019 SERS OPEB GASB 74 Report:

Net SERS OPEB Liability Changes to Health Care Cost Trend Rates (In Millions)			
Health Care Cost Trend Rates	1% Decrease	Current (Medical: 6.5% graded to 4.5% over 4 years; Prescription Drug: 8.0% graded to 4.5% over 7 years; Dental and Plan B: 4.5% Administrative Expense: 3.0%)	1% Increase
Net OPEB Liability (in millions)	$14,705.3	$17,264.4	$20,507.2

Net SERS OPEB Liability Changes to Discount Rates (In Millions)			
Discount Rate	1% Decrease (2.95%)	Current (3.95%)	1% Increase (4.95%)
Net OPEB Liability (in millions)	$20,025.4	$17,264.4	$15,022.3

SERS OPEB GASB 75 Report as of June 30, 2018

The State received from The Segal Group a report prepared as of June 30, 2018 and dated March 13, 2019 ("2019 SERS OPEB GASB 75 Report") containing supplemental information to assist the State in meeting the requirements GASB 75 with respect to the State's liability for post-retirement health care benefits (which include medical, prescription drug, dental and life insurance benefits) for eligible persons covered under SERS and other State retirement systems, excluding the TRS. Much of the material provided in the report is based on the data, assumptions and results of the 2019 OPEB GASB 74 Report. The 2019 SERS OPEB GASB 75 Report indicates an Annual OPEB Expense of $1,187.3 million for the fiscal year ending June 30, 2018.

SERS OPEB GASB 74 Report as of June 30, 2019

The State received from The Segal Group a report prepared as of June 30, 2019 and dated January 29, 2020 ("2020 SERS OPEB GASB 74 Report") containing supplemental information to assist the State in meeting the requirements GASB 74 with respect to the State's liability for post-retirement health care benefits (which include medical, prescription drug, dental and life insurance benefits) for eligible persons covered under SERS and other State retirement systems, excluding the TRS.

The 2020 SERS OPEB GASB 74 Report indicated the following as of June 30, 2019:

SERS OPEB GASB 74 Report as of June 30, 2019	
Total OPEB Liability	$19,958.0 million
Fiduciary Net Position	$1,196.0 million
Net OPEB Liability ("NOL")	$18,762.0 million
Ratio of Fiduciary Net Position to Total OPEB Liability	5.99%
Actuarially Determined Employer Contribution (Fiscal Year 2019)	$1,203.4 million

The 2020 SERS OPEB GASB 74 Report was based upon the same assumptions, methodologies and plan provisions as used in the 2019 SERS OPEB GASB 74 Report, other than a decrease to the discount rate in accordance with GASB 74 from 3.95% as of June 30, 2018 to 3.58% as of June 30, 2019. The change in the discount rate accounted for $943.1 million of the $1,843.7 million increase in the Total OPEB Liability from June 30, 2018 to June 30, 2019.

The tables below presents the NOL of the Plan, calculated using the health care cost trend rates, as well as what the Fund's NOL as of June 30, 2019 would be if it were calculated using a health care cost trend rate that is 1% lower or higher than the current rate, and rate that is 1% lower or higher than the current discount rate, as set out in the 2020 SERS OPEB GASB 74 Report:

Net SERS OPEB Liability Changes to Health Care Cost Trend Rates (In Millions)			
Health Care Cost Trend Rates	1% Decrease	Current (Medical: 6.5% graded to 4.5% over four years; Prescription Drug: 8.0% graded to 4.5% over seven years; Dental and Plan B: 4.5%; Administrative Expense: 3.0%)	1% Increase
Net OPEB Liability (in millions)	$15,738.0	$18,762.0	$22,625.4

Net SERS OPEB Liability Changes to Discount Rates (In Millions)			
Discount Rate	1% Decrease (2.58%)	Current (3.58%)	1% Increase (4.58%)
Net OPEB Liability (in millions)	$21,893.0	$18,762.0	$16,226.6

Actuarially Determined Employer Contribution and Annual OPEB Expense for Fiscal Years 2019, 2020 and 2021

In Fiscal Year 2019, the State contributed $752.9 million to the Plan, 62.6% of the Actuarially Determined Employer Contribution for the Plan. There has been no actuarial determinations of the Annual OPEB Expense applicable to Fiscal Year 2019 with respect to the Plan. There have been no actuarial determinations of the ADEC or Annual OPEB Expense applicable to the Plan for Fiscal Year 2020 or Fiscal Year 2021.

For Fiscal Years 2015 through 2019, the State paid $598.6 million, $646.0 million, $706.5 million, $701.1 million and $682.0 million, respectively, for retirees' health care costs. While not a part of post-employment costs, for Fiscal Years 2015 through 2019, the State paid $635.1 million, $662.9 million, $644.7 million, $608.5 million and $634.2 million, respectively, for General Fund eligible employees' health care costs. For Fiscal Year 2020, the projected General Fund expenditure for retirees' health care costs is $755.5 million. For Fiscal Years 2015 through 2019, General Fund expenditures on life insurance benefits were $7.6 million, $7.8 million, $7.7 million, $7.9 million and $7.7 million, respectively. For Fiscal Year 2020, the projected General Fund expenditure on life insurance benefits is $8.6 million.

Set forth below for each of the past five fiscal years are the number of employees retired from State employment eligible to receive post-retirement health care and life insurance benefits, the number of retirees, respectively, actually receiving health care benefits and life insurance benefits, and the amount of General Fund appropriations by the State for such coverage.

TABLE 25

State Employee Retirees Health Care and Life Insurance Benefits
(In Millions)

	2015	2016	2017	2018	2019
Retirees Eligible to Receive Benefits	50,356	51,350	52,916	53,572	54,887
Retirees Receiving Health Care Benefits	47,556	48,089	49,596	50,562	51,198
Retirees Receiving Life Insurance Benefits	29,164	30,064	29,431	29,845	29,010
General Fund Appropriations for Retiree Health Care and Life Insurance Benefits (millions)	$598.6[(a)]	$653.7[(b)]	$649.4[(c)]	$616.4[(d)]	$689.7[(e)]

(a) The $598.6 million appropriated for Fiscal Year 2015 includes a combined appropriation of $7.6 million for active employees and retiree life insurance benefits. Of the $598.6 million appropriation, $591.1 million was expended on retiree health care benefits and $4.4 million was expended on retiree life insurance benefits.

(b) The $653.7 million appropriated for Fiscal Year 2016 includes a combined appropriation of $7.8 million for active employees and retiree life insurance benefits. Of the $653.7 million appropriation, $646.0 million was expended on retiree health care benefits and $4.6 million was expended on retiree life insurance benefits.

(c) The $649.4 million appropriated for Fiscal Year 2017 includes a combined appropriation of $7.7 million for active employees and retiree life insurance benefits. Of the $649.4 million appropriation, $644.7 million was expended on retiree health care benefits and $4.7 million was expended on retiree life insurance benefits.

(d) The $616.4 million appropriated for Fiscal Year 2018 includes a combined appropriation of $7.9 million for active employees and retiree life insurance benefits. Of the $616.4 million appropriation, $608.5 million was expended on retiree health care benefits and $4.8 million was expended on retiree life insurance benefits.

(e) The $689.7 million appropriated for Fiscal Year 2019 includes a combined appropriation of $7.7 million for active employees and retiree life insurance benefits. Of the $689.7 million appropriation, $682.0 million was expended on retiree health care benefits and $4.8 million was expended on retiree life insurance benefits.

Other Post-Employment Benefits – Teachers

The State is required to (i) make General Fund appropriations to the Teachers' Retirement Board to cover one-third of retiree health insurance costs plus any portion of the balance of such costs that is not funded from the amounts available in the Teachers' Retirement Health Insurance Fund ("TRHIF"); (ii) subsidize the health insurance costs of retired teachers who are not members of the Teachers' Retirement Board's health benefit plan; and (iii) provide an additional health insurance subsidy of at least $110 per month on behalf of retired teachers who are ineligible to participate in Medicare Part A "premium free" and who pay at least $220 per month to participate in the local board of education plan available to active teachers. The State made General Fund appropriations of $22.4 million, $20.2 million, $19.9 million, $19.2 million and $19.2 million for Fiscal Years 2015, 2016, 2017, 2018 and 2019, respectively, to subsidize the TRHIF. The 2019 Budget Act for Fiscal Years 2020 and 2021 includes $31.5 million and $35.3 million for Fiscal Years 2020 and 2021, respectively, to subsidize the Fund. In addition, pursuant to Section 22 of Public Act No. 18-81, effective May 31, 2018, in September 2018 the State made a one-time transfer of $16.1 million from General Fund balances to subsidize the Fund. The Governor's midterm budget adjustments for Fiscal Year 2013, reduced the State's appropriation from 33% to 25% of the Medicare supplemental health insurance program cost, and utilized retiree drug subsidies which would have otherwise been available to the TRHIF, to offset, in part, the State's share of retiree health costs. As of Fiscal Year 2015 the retiree drug subsidies have expired. For Fiscal Year 2016, the State contribution was further reduced to 15% of the Medicare supplemental health insurance program cost. The 2019 Budget Act for Fiscal Years 2020 and 2021 includes funding for the Medicare Advantage program cost of $26.0 million and $29.8 million for Fiscal Years 2020 and 2021, respectively.

The Teachers' Retirement Board anticipates that balances in the TRHIF will be reduced in upcoming years due to a combination of health care cost increases, the State's flat funding of its contributions to the Fund at a level less than one-third of the Board's health benefit plan's cost, the relatively static number of active Connecticut teachers contributing to the Fund, and the increasing number of retirees participating in the Board's health benefit plan.

To address this concern, the Board implemented an Anthem Blue Cross Medicare Advantage PPO plan as the base plan, effective July 1, 2018. The Anthem plan replaces the existing Stirling Benefits Medicare/supplemental benefits plan as the base benefit program for the purposes of determining retiree health care plan subsidies and/or cost sharing amounts, with the Stirling Benefits plan continuing as an optional benefit plan. Effective January 1, 2020 the optional Medicare Supplement plan will be administered by Anthem. Members opting to remain in the Medicare Supplement plan are required to pay the full excess cost of the plan. The Teachers' Retirement Board has a two year waiting period for re-enrollment in a system-sponsored health care plan for those who cancel their coverage or choose not to enroll in a health care coverage option. In addition the Teachers' Retirement Board has made changes to its prescription drug plan, including modifications to compound drug rules and increases in the maximum coinsurance amount.

The TRHIF is invested in the Short Term Investment Fund. See also **FINANCIAL PROCEDURES** herein. Fund assets do not constitute plan assets for purposes of GASB Statements Nos. 43 and 45, and for actuarial valuation purposes fund assets are not treated as valuation assets available to offset the accrued liability of the plan. During the period commencing July 1, 1994 and prior to the July 1, 2018 effective date of the changes to the Board's health care plan described above, retiree health benefits sponsored through the Teachers' Retirement Board were self-insured.

TRHIF OPEB Valuation Report as of June 30, 2018

The Teachers' Retirement Board received from Cavanaugh Macdonald Consulting, LLC an actuarial report prepared as of June 30, 2018 and dated February 12, 2019 ("February 2019 TRHIF Report") with respect to post-retirement health care benefits for members of the Teachers' Retirement Fund and for retired teachers who are not members of the Teachers' Retirement Board's health benefit plan. The report also contained supplemental information to assist the Board in meeting the requirements of GASB 74 with respect to the TRHIF. The report indicated the following as of June 30, 2018:

TRHIF OPEB Actuarial Valuation/GASB 74 Report as of June 30, 2018	
Actuarial Accrued Liability	$3,093.8 million
Actuarial Value of Assets	$39.7 million
Unfunded Actuarial Liability	$3,054.1 million
Ratio of Actuarial Value of Assets to Unfunded Actuarial Liability	1.28%
Actuarially Determined Employer Contribution (Fiscal Year 2019)	$167.8 million
Actuarially Determined Employer Contribution (Fiscal Year 2020)	$173.3 million
Annual Employer Contribution as a Percentage of Payroll	4.187%
Total OPEB Liability	$2,671.3 million
Fiduciary Net Position	$39.7 million
Net OPEB Liability ("NOL")	$2,631.6 million
Ratio of Fiduciary Net Position to Total OPEB Liability	1.49 %

The February 2019 TRHIF Report was based upon the following assumptions and methodologies among others:

- An individual entry-age actuarial cost method
- Level percent-of-payroll contributions over an open 30-year amortization period
- An expected long-term rate of return on Plan assets of 3.0%
- A discount rate of 3.87% to measure Plan obligations as of June 30, 2018
- Payroll growth rate of 3.25%
- Projected salary increases, including wage inflation, of 3.25% to 6.50%
- Medicare Supplement Plan option claim and member contribution trend rates of 5.95% decreasing to ultimate rate of 4.75%
- Medicare Advantage Plan option claim trend rates of 5.00% decreasing to ultimate rate of 4.75%, with member contribution trend rates initially of 0.00%, increasing to 5.00%, and decreasing to an ultimate rate of 4.75%
- Local school district subsidies trend rate of 5.95% decreasing to ultimate rate of 0.00% when maximum subsidy rate reached

The February 2019 TRHIF Report also reported the NOL of the Plan, calculated using the health care cost trend rates, as well as what the Fund's NOL as of June 30, 2018 would be if it were calculated using a health care cost trend rate that is 1% lower or higher than the current rate, and a SEIR that is 1% lower or higher than the current SEIR, as set forth in the following table:

Net TRHIF OPEB Liability Changes to Health Care Cost Trend Rates (In Millions)			
Health Care Cost Trend Rates	1% Decrease (4.95% / 4.00% Initial; 3.75% Ultimate)	Current (5.95% / 5.00% Initial; 4.75% Ultimate)	1% Increase (6.95% / 6.00% Initial; 5.75% Ultimate)
Net OPEB Liability (in millions)	$2,205.3	$2,631.6	$3,197.4

Net TRHIF OPEB Liability Changes to Discount Rates (In Millions)			
Discount Rate	1% Decrease (2.87%)	Current (3.87%)	1% Increase (4.87%)
Net OPEB Liability (in millions)	$3,124.8	$2,631.6	$2,237.9

TRHIF OPEB GASB 75 Report as of June 30, 2018

The Teachers' Retirement Board received from Cavanaugh Macdonald Consulting, LLC a report dated April 25, 2019, prepared as of the June 30, 2018 measurement date for financial reporting as of June 30, 2019, and containing information to assist the Board in meeting the requirements of GASB 75 with respect to the TRHIF. Much of the material provided in the report is based on the data, assumptions and results of the February 2019 TRHIF Report. The report indicates a collective OPEB Expense of -$874.2 million for the fiscal year ending June 30, 2018.

TRHIF OPEB GASB 74 Report as of June 30, 2019

The Teachers' Retirement Board received from Cavanaugh Macdonald Consulting, LLC a, actuarial report prepared as of June 30, 2019 and dated February 12, 2020 ("2020 TRHIF OPEB GASB 74 Report") with respect to post-retirement health care benefits for members of the Teachers' Retirement Fund and for retired teachers who are not members of the Teachers' Retirement Board's health benefit plan. The report also contained supplemental information to assist the Board in meeting the requirements of GASB 74 with respect to the TRHIF. The report indicated the following as of June 30, 2019:

TRHIF OPEB GASB 74 Report as of June 30, 2019	
Total OPEB Liability	$2,719.0 million
Fiduciary Net Position	$56.5 million
Net OPEB Liability ("NOL")	$2,662.6 million[(a)]
Ratio of Fiduciary Net Position to Total OPEB Liability	2.08%

(a) Does not total due to rounding.

The 2020 TRHIF OPEB GASB 74 Report was based upon the same assumptions, methodologies and plan provisions as used in the "February 2019 TRHIF Report", other than the following:

- A discount rate used to measure Plan obligations was lowered from 3.87% as of the June 30, 2018 measurement date to 3.50% as of the June 30, 2019 measurement date.

- The Plan was amended effective January 1, 2019, to incorporate a new prescription drug plan, which is expected to reduce overall costs and allow for the Board to receive a government subsidy for members whose claims reach a catastrophic level.
- Expected annual per capita claims costs were updated to better reflect anticipated medical and prescription drug claim experience both before and after the plan change that became effective on January 1, 2019.

The 2020 TRHIF OPEB GASB 74 Report also reported the NOL of the Plan, calculated using the health care cost trend rates, as well as what the Fund's NOL as of June 30, 2019 would be if it were calculated using a health care cost trend rate that is 1% lower or higher than the current rate, and a SEIR that is 1% lower or higher than the current SEIR, as set forth in the following table:

Net TRHIF OPEB Liability Changes to Health Care Cost Trend Rates (In Millions)			
Health Care Cost Trend Rates	1% Decrease (4.95% / 4.00% Initial; 3.75% Ultimate)	Current (5.95% / 5.00% Initial; 4.75% Ultimate)	1% Increase (6.95% / 6.00% Initial; 5.75% Ultimate)
Net OPEB Liability (in millions)	$2,218.2	$2,662.6	$3,256.2

Net TRHIF OPEB Liability Changes to Discount Rates (In Millions)			
Discount Rate	1% Decrease (2.50%)	Current (3.50%)	1% Increase (4.50%)
Net OPEB Liability (in millions)	$3,173.0	$2,662.6	$2,256.1

TRHIF OPEB GASB 75 Report as of June 30, 2019

The Teachers' Retirement Board received from Cavanaugh Macdonald Consulting, LLC a report dated February 12, 2020, prepared as of the June 30, 2019 measurement date for financial reporting as of June 30, 2020, and containing information to assist the Board in meeting the requirements of GASB 75 with respect to the TRHIF. Much of the material provided in the report is based on the data, assumptions and results of the February 2019 TRHIF Report as of June 30, 2018. The report indicates a collective OPEB Expense of $194.8 million for the fiscal year ending June 30, 2019.

Set forth below for each of the past five fiscal years are State contributions to the TRHIF to cover retiree health insurance costs and the portions of such contribution attributable to post-retirement Medicare supplement health insurance and to the health insurance cost subsidy for retired teachers who are not members of the Board's health benefit plan, active and retired teachers' contributions, investment income, the expenditures from the Fund, and the reported fund balance of the Fund as of June 30.

TABLE 26

Teachers' Retirement Health Insurance Fund
(In Thousands)

	Fiscal Year				
	2015	2016	2017	2018	2019
General Fund Contribution Attributable To Post Retirement Medicare Supplement Health Insurance	$ 19,698.1[(a)]	$ 14,566.8	$ 14,566.8	$ 14,554.5	$ 14,575.3
General Fund Contribution Attributable To Non-Board Health Insurance Cost Subsidy	5,447.3	5,392.8	5,355.1	4,644.7	4,644.7
One-Time General Fund Transfer Pursuant to P.A. 18-81, § 22	N/A	N/A	N/A	N/A	16,100.0
Total General Fund Contributions	$ 25,145.4	$ 19,959.6	$ 19,922.0	$ 19,199.2	$ 35,320.0
Teacher Contributions (Active and Retired)	85,566.4	92,135.4	95,690.6	101,590.1	106,710.2
Investment Income	109.1	220.1	369.0	461.6	1,090.5
Total Receipts	$ 110,820.9	$ 112,315.1	$ 115,981.6	$ 121,250.9	$ 143,120.7
Fund Expenditures	($124,992.1)[(b)]	$(129,654.3)	$(133,159.6)	$(147,205.0)	$(121,031.7)
Fund Balance as of June 30	$ 95,361.2	$ 78,022.0	$ 60,844.4	$ 34,890.3	$ 56,979.3

(a) A fifteen year audit of the fund determined the reported fund balance of June 30, 2014 was overstated by $13.0 million. A correcting adjustment was made as of June 30, 2015.

(b) Includes correcting adjustment as to prior fund expenditures; does not reflect actual activity.

Additional Information

The audited financial statements for Fiscal Year 2019 included as **Appendix II-C** hereto, and in particular notes 10 through 14 and note 16 and the Pension Plans and Other Postemployment Benefit Plans Required Supplementary Information of the accompanying Basic Financial Statements, provide additional information about the foregoing retirement systems and their funding.

The cumulative value of the annual differences between the State's contribution to a public employee pension or OPEB plan and the actuarially determined employer contribution to the plan for that fiscal year constitutes the "net pension obligation" or "net OPEB obligation" of the State with respect to such plan, and is reported as a liability in the State's financial statements. The net pension obligation or net OPEB obligation of the State with respect to a plan is not the equivalent of the State's actuarial accrued liability with respect to such plan.

LITIGATION

The information in this section contains information through February 15, 2020 except as may otherwise be set forth below.

SUPPLEMENTARY INFORMATION AS OF JULY 15, 2020

The short-term and long-term effects of COVID-19 and resulting potential litigation flowing from COVID-19 are not yet known and difficult to project at this time. See additional information under the heading ***COVID-19 Outbreak*** in the **COVID-19 AND OTHER MATTERS** section.

The State and its officers and employees are parties to numerous legal proceedings, many of which normally occur in government operations. The final outcomes of most of these legal proceedings are not, in the opinion of the Attorney General, either individually or in the aggregate likely to have a material adverse impact on the State's financial position.

There are, however, several legal proceedings which, if decided adversely against the State, either individually or in the aggregate may require the State to make material future expenditures or may impair revenue sources. It is not possible to determine the impact that the outcomes of these proceedings, either individually or in the aggregate, could have on the State's financial position. Among these proceedings, an adverse judgment in the matters described below, in the opinion of the Attorney General, individually could have a fiscal impact on the State of $50 million or more.

Sheff v. O'Neill is an action originally brought in 1989, on behalf of school children in the Hartford public school system, alleging racial and ethnic segregation. The State Supreme Court directed the legislature to develop appropriate remedial measures, and in 1997, the General Assembly enacted Public Act No. 97-290, An Act Enhancing Educational Choices and Opportunities, in response to the Supreme Court's decision. The plaintiffs filed subsequent motions to require the State to adhere to the Supreme Court ruling and the parties entered into various settlement agreements through the years.

Specifically, the parties reached a settlement agreement which was deemed approved by the General Assembly and approved by the Superior Court in March 2003. That agreement obliged the State over a four year period to institute a number of measures and programs designed to advance integration for Hartford students. The March 2003 agreement expired in June 2007, but the State and the plaintiffs subsequently negotiated a number of follow-on agreements obligating the State to programming and other efforts designed to promote achievement of specified integration goals. In January 2020, the parties reached an interim agreement, which the Superior Court approved, that is structured to lead to a final agreement in 2022. The January 2020 agreement does not call for expenditures of more than $2.5 million beyond existing appropriations. The costs associated with a subsequent final agreement, which will likely require legislative approval, have not been estimated and could be significant over time.

State Employees Bargaining Agent Coalition ("SEBAC") v. Rowland is a Federal District Court case in which a class of approximately 50,000 laid off State employees sued the Governor and the Secretary of OPM alleging that they were laid off in violation of their constitutional rights. The parties reached a settlement that provides for cash payments payable over several fiscal years, pension adjustments, and vacation and personal time accruals. The overall value of the settlement, inclusive of attorneys' fees, is estimated at $175 million to $210 million. The damages for approximately 49,750 class members have been settled and accounted for in the State's financial statements and budget. The parties are still in the process of calculating economic damages for the approximately remaining 250 class members who sustained economic damages as a result of the layoffs.

American Indian Tribes. It is possible that land claims could be brought by American Indian groups who have petitioned the Federal Government for federal recognition. In any of the land claims matters, irrespective of whether federal recognition is granted, denied or upheld, a particular tribe could institute or renew land claims against the State or others, or press the claims it has already asserted. The federal Bureau of Indian Affairs ("BIA") has adopted new regulations for the federal recognition of tribes under relaxed standards, but those regulations do not presently allow for previously denied petitioners, such as the Schaghticoke Tribal Nation, Golden Hill Paugussett Tribe and the Eastern Pequot Tribal Nation, to seek recognition under new regulations. The Historical Eastern Pequot Tribe ("HEP") filed a petition with the BIA seeking to be acknowledged as a federal American Indian Tribe. The BIA declined to accept the petition on the grounds that the HEP were previously denied acknowledgment. The HEP appealed to the U.S. Department of Interior's Office of Hearings and Appeals and such office has closed this matter.

In October, 2016, the Schaghticoke Tribal Nation initiated a lawsuit against the State and the Commissioner of the Department of Energy and Environmental Protection seeking approximately $610.5 million for the alleged unconstitutional taking of reservation lands in the nineteenth and early twentieth centuries. The suit alleges that from 1801 to 1918, state-appointed overseers sold portions of the Schaghticoke Tribal Nation reservation and used the proceeds of those sales to lend monies to State residents in the form of mortgages and loans and not for the benefit of the Schaghticoke Tribal Nation. It further alleges that these actions were in violation of the federal and state constitutional prohibitions against taking property without just compensation and in breach of the State's fiduciary duties. It seeks money damages and declaratory and injunctive relief to account for the funds allegedly due, and to make the Schaghticoke Tribal Nation whole. In December 2017, the trial court dismissed the plaintiff's takings claim as to reservation lands because the plaintiff lacked a property interest in those lands, but ordered supplemental briefing on the remainder of plaintiff's claims. In May 2019, the trial court dismissed the remainder of the plaintiff's claims and the plaintiffs have appealed.

D.J. v. Conn. State Board of Education is a federal court case brought by a special education student and a purported class of similarly situated special education students. Plaintiffs allege that state law violates the Individuals with Disabilities in Education Act ("IDEA") by terminating the obligation of local school districts to provide special education at the end of the school year in which a special education student turns 21. Plaintiffs' allegations are premised on the fact that Connecticut provides education services to non-special education students beyond the age of 21 and that such a distinction is not permitted under the IDEA. Plaintiffs seek a declaration that Connecticut violates the IDEA by limiting public schools' obligation to provide education services to all special education students before the end of the school year of their 22nd birthday. The plaintiffs further seek compensatory education for the class which is made up of all special education students deprived of special education services after reaching the age of 21 for the two years before the action was filed and during the pendency of the case. If plaintiffs are successful, the State could be ordered to ensure the provision of a one year extension of current duration of services for all special education students. The State has filed a motion for summary judgment and an objection to certification of the class, both of which are pending.

Leticia Colon De Mejia, et al. v. Malloy, et. al. is a federal district court case in which the plaintiffs seek to declare unconstitutional and enjoin the General Assembly's transfer of $14 million from the State's Clean Energy Fund and $63.5 million from the State's Energy Conservation and Load Management Fund to the State General Fund in each of the fiscal years ending on June 30, 2018 and June 30, 2019, for a total of $155 million. Because the legislature restored $10 million of those transfers at the conclusion of the legislative session ending May 9, 2018, if the plaintiffs prevail, the total adverse revenue impact to the General Fund would be $145 million. The plaintiffs appealed the granting of the State's motion for summary judgment and the parties are awaiting a decision.

COVID-19 AND OTHER MATTERS

The information in this section contains information through February 15, 2020 except as may otherwise be set forth below.

<u>SUPPLEMENTARY INFORMATION AS OF JULY 15, 2020</u>

COVID-19 Outbreak

The outbreak of COVID-19, a respiratory disease caused by a new strain of coronavirus, has been declared a Public Health Emergency of International Concern by the World Health Organization and, on March 13, 2020 and was declared a national emergency by the President of the United States. The outbreak of the virus has affected travel, commerce and financial markets globally, and is widely expected to affect economic growth worldwide.

It is expected that the reaction to concerns related to COVID-19 may materially affect state, national, and global activity; increase public health emergency response costs; and, consequently, materially adversely impact the financial condition of the State. Many states and municipalities have begun and continue to take measures that are having negative effects on global and local economies. In addition, businesses and people have altered behaviors in manners that are and may continue to negatively affect the economy. The financial, stock and bond markets in the United States and globally have seen significant volatility attributed to COVID-19 concerns.

On March 10, 2020, Governor Lamont declared a state of emergency throughout the State of Connecticut as a result of the COVID-19 outbreak. Pursuant to Governor Lamont's declaration of a state of emergency and numerous Executive Orders, State agencies have been directed to use all resources necessary to prepare for and respond to the outbreak. The State has a dedicated website providing up-to-date information concerning the State's actions in response to COVID-19: ct.gov/coronavirus.

On March 27, 2020, the United States Congress enacted the Coronavirus Aid, Relief, and Economic Stabilization Act (the "CARES Act") that provides in excess of $2 trillion of relief to industries and entities throughout the country, including state and local governments. On April 24, 2020, the United States Congress enacted legislation that provided an additional $484 billion to replenish a small business lending program, support hospitals and expand COVID-19 testing. The State received $1.382 billion to cover statewide costs associated with the response to the outbreak of COVID-19. In addition, on March 28, 2020, President Trump approved Governor Lamont's request for a disaster declaration for the State. Under the declaration, it is expected that federal funding will be made available to state, tribal and eligible local governments and certain private nonprofit organizations for emergency protective measures, including direct federal assistance, for all areas of Connecticut impacted by COVID-19.

The extent to which COVID-19 impacts the State's operations and its financial condition will depend on future developments, which are uncertain and cannot be fully predicted with confidence at this time, including the duration of the outbreak, new information which may emerge concerning the severity of COVID-19 and the actions to contain COVID-19 or treat its impact, among others. The information in this Official Statement reflects current estimates and projections, which consider the impact of this outbreak to the extent practicable. There can be no assurances that the outbreak will not further materially adversely affect the financial condition of the State.

Hospital Tax Dispute. In Fiscal Year 2012, the State began levying a tax on the net patient revenue of most hospitals in the State. A petition for a declaratory ruling was received by the Department of Social Services

("DSS") and the Department of Revenue Services ("DRS") claiming that the tax was invalid as implemented under various constitutional and administrative provisions. On September 22, 2016, DSS and DRS issued a ruling that rejected the assertions of the petitioning hospitals. The petitioning hospitals subsequently appealed the Departments' ruling to the Superior Court. On December 18, 2019, the General Assembly approved a settlement agreement among the State and the Connecticut Hospital Association and the petitioning hospitals that is expected to have a cost impact on the State of approximately $60 million to $186 million in each fiscal year through Fiscal Year 2026. In anticipation of the settlement, funding of $160 million was made available from the Fiscal Year 2019 surplus for use of Fiscal Years 2020 and 2021 for a portion of such costs.

If the federal government does not issue the required initial approvals of the State plan amendments for the tax and Medicaid expenditures required under the settlement agreement, the parties are obligated to meet and attempt to resolve the issues raised by the federal government and, if unable to do so, the settlement agreement is terminated. If after initial approval, during the term of the settlement agreement, federal requirements impact the ability of the State to implement the settlement agreement's requirements as to the tax or Medicaid expenditures in excess of $100 million on an annual basis, the State has the option to terminate the settlement agreement. If the federal requirements impact the State in excess of $50 million on an annual basis, the parties can either agree to an amendment to the settlement agreement or seek a court ordered modification that is designed to maintain a proportionate balance of benefits and burdens on the parties. Under the settlement agreement, for Fiscal Years 2020 to 2026 the hospitals agree not to challenge the hospital tax or the Medicaid rates and supplemental payments.

Based on the terms of the settlement agreement, the General Assembly passed a bill, which the Governor signed into law, that (i) modifies the hospital provider tax rate and base to reduce the total amount of annual revenue to be collected under the tax from $900 million to $820 million in four steps from Fiscal Year 2020 to Fiscal Year 2026, (ii) for any tax period beginning before July 1, 2026, generally prohibits the State from amending the hospital provider tax, imposing new taxes on hospitals or new health care related taxes or fees on hospital net revenue from inpatient or outpatient services, or repealing or changing any tax exemptions available to hospitals, (iii) for Fiscal Years 2020 through 2026, terminates the hospital provider tax if the Centers for Medicare and Medicaid Services determines that the tax is an impermissible tax under federal law or disapproves the Medicaid State plan amendments necessary for the State to receive federal reimbursements for the supplemental payments and (iv) requires DSS to annually increase hospital Medicaid rates from 2020 to 2026 by implementing 2% and 2.2% increases for various rate components and make the payments, regardless of eligibility for federal reimbursement and prior to obtaining federal approval. However, if federal approvals of the rate increases are not obtained, the payment of the rate increases may later be recovered by DSS by recoupment against Medicaid payments due to a hospital or in any manner authorized by law. Of note, the legislation does allow the passage of taxes of general applicability that can apply to hospitals provided that the hospital portion of the tax revenue is less than 15%. Lastly, the law makes related adjustments to General Fund appropriations and revenue estimates for Fiscal Years 2020 and 2021.

Information Technology, Cybersecurity and Related Matters

The State operates information technology systems critical to its operations. An increasing number of these systems are operated centrally by the Department of Administrative Services / Bureau of Enterprise Systems and Technology ("DAS/BEST"), including email, wide-area networking and datacenter services. However, approximately 50% of the State's overall systems remain single-agency systems built around legacy applications. Agencies using these applications may utilize internal or outside consulting assistance for improvements and maintenance of these systems. In Fiscal Year 2016, the State introduced its first five-year technology strategy that outlined the critical technology activities to guide State actions. In Fiscal Year 2018, the State announced its first cybersecurity strategy and released the first Cybersecurity Action Plan. These documents outline the critical importance of protected all the digital assets in the State.

In accordance with these plans and prior initiatives, the State continues to make progress in improvements to its systems. Since 2015, the State's shared systems have been primarily operated through two data centers which allows infrastructure continuity through duplication at the two facilities. The two data centers operate in an "active/passive" mode, whereby the overall system load is handled by one of the two centers, and the applications and datasets are replicated in each. If one data center is offline, the entire load would shift to the other data center. Depending on the application criticality, some manual intervention may be required to return to operation. One data center is located in Groton, Connecticut and the other in Springfield, Massachusetts. Since these centers were put in operation, the State has been incrementally moving agency computing from the older, location-based technology to a shared private cloud infrastructure. The datasets are regularly verified for integrity, and backed up incrementally in stages covering approximately six months. Some of these backups are maintained externally to the datacenters. DAS/BEST has systems in place to monitor and protect against malicious events. The datacenters of the State have procedures in place to protect against unauthorized physical access, against misconduct or risks associated by personnel with physical access and similar risks, on a level comparable to the other parties collocated with it in the datacenters.

The State continues to roll out the enterprise Voice over IP telephone system to State agencies to improve agency communication capabilities and reduce operational and maintenance costs. In Fiscal Year 2020 State agencies will also begin migrating to a Microsoft-based Office365 common set of applications, which will introduce multi-factor authentication and represent an upgrade of these applications to more secure and updated products. The State maintains a State-wide fiber-optic networking system for its Connecticut Education Network and its Public Safety Data Network. This network relatively stable, however, does not see incremental expansion as schools, towns, libraries, state agencies, first responders and others are connected. The State's E911 system operates on this network, with microwave radio backup for the state police systems. Because of the critical nature of these systems, DAS/BEST has taken steps to ensure the continuity of the systems for natural events, the continuity of the systems for malicious events, and safeguarding the information maintained against theft and misuse. The systems are regularly monitored, evaluated, tested, and improved. Individual offices of the State access the systems through internet facilities maintained by third parties, and those offices have varied levels of backup power and redundancy. None of the offices are believed to be critical to the integrity of the overall systems, but events such as snowstorms, flooding, fire and other hazards may affect the ability of the State to deliver services as contemplated.

Generally, the State's centralized systems are also protected by methods limiting access of users to relevant portions of the system. Malware infection introduced by one user may therefor be limited to the portions of the system accessible by that user. In the past five years, no malware corruptions have materially affected State data or operations.

The State's systems, both shared and legacy, contain significant amounts of personally identifiable and non-public information. This includes social security identification numbers, credit card information, criminal and arrest records, medical records, driving records, educational records, information made available from the federal government and other states. The State limits misuse of this information by compartmentalizing access and endeavoring to design systems such that such information is encrypted, segmented and otherwise not available to unauthorized individuals gaining access to some portion of the State's systems. This information is nevertheless vulnerable to misuse by persons with authorized access to such information, persons with unauthorized access to such information (such as through phishing or other social attack vectors), persons inadvertently granting access, and other means. The consequences of any such potential misuse, to the persons involved and to the State, cannot be predicted. To date the State has uncovered no such material unauthorized access. The State endeavors to further mitigate any such potential misuse with through training of its users to recognize common attack vectors.

The State's IT strategic plan for Fiscal Year 2020 focuses on four goals: (i) to embark on a process of setting a new five year plan which is expected to increase agency cooperation; (ii) to establish digital government services, which will increase online services to residents and businesses; (iii) to improve cybersecurity statewide; and (iv) to empower agencies through the use of Microsoft M365 cloud based tools.

INDEX TO APPENDICES TO INFORMATION STATEMENT

GOVERNMENTAL ORGANIZATION AND SERVICES

Introduction

The components and structure of State governmental organization are laid out in the State's Constitution and the General Statutes of Connecticut. A number of State-wide and regional authorities and similar bodies are also created or provided for in the General Statutes or by Special Act of the General Assembly. County government was functionally abolished in Connecticut in 1960. Local governmental functions are generally performed by the 169 cities and towns, or by special purpose authorities, districts and similar bodies located within the cities and towns. A number of regional bodies exist to perform governmental functions that would otherwise be performed at the local level. Most of the State's 169 cities and towns were established or incorporated during the 18th and 19th centuries, and many are still governed under charters enacted by the General Assembly by Special Act. The State's Constitution grants home rule powers to cities and towns, within certain limitations. A large number of smaller municipalities lack charters, and the components and structure of these municipalities are determined directly by the General Statutes. The General Statutes also contain a variety of provisions pertaining to the organization and operation of all units of local government, including both those with charters and those without. In addition to the 169 cities and towns that are the basic units of local government in Connecticut, the General Statutes provide procedures for the creation of many types of local special purpose authorities, districts and similar bodies. These include, among others, local housing authorities, regional school districts, and a variety of special tax and service districts.

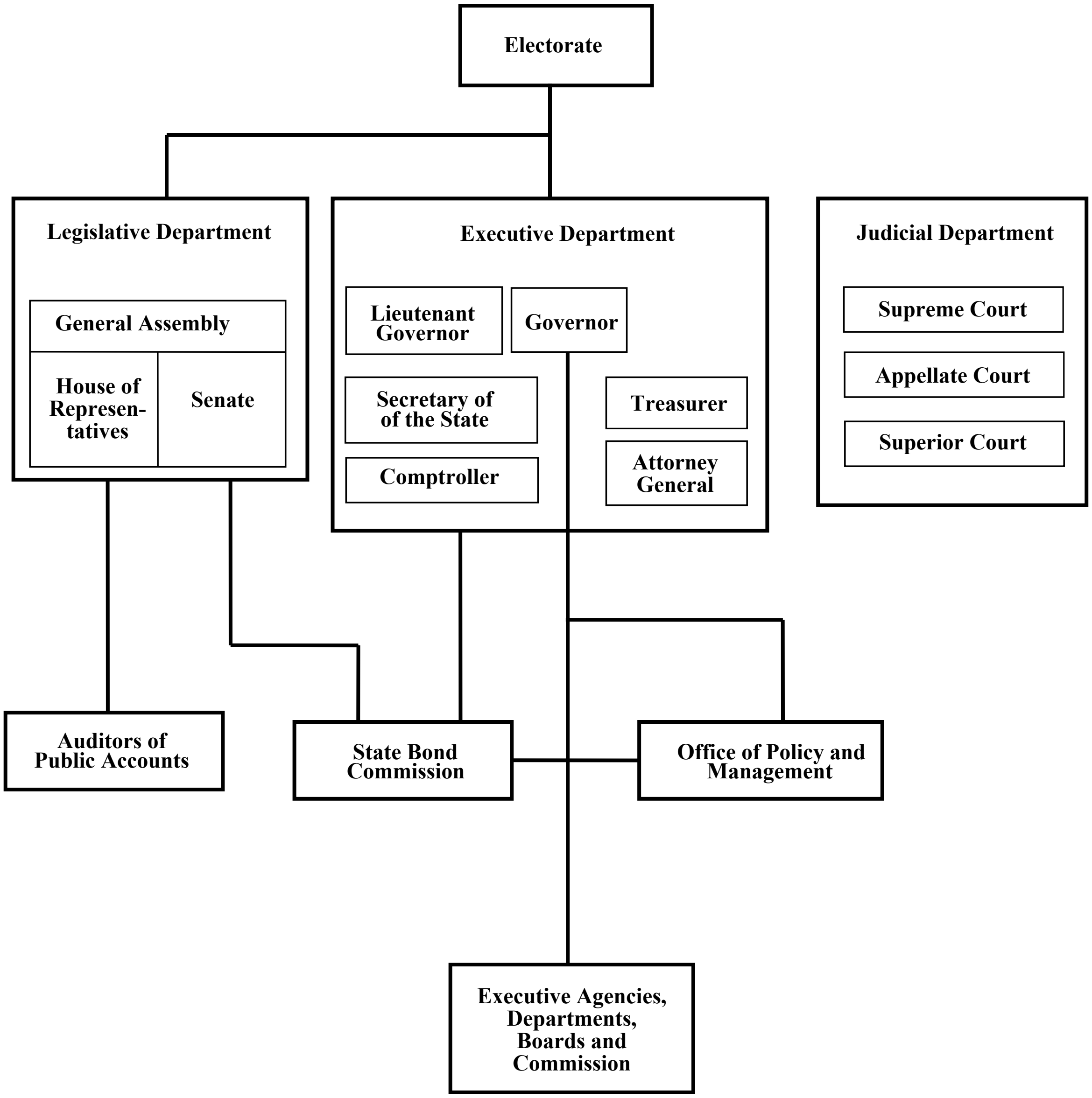
Under Connecticut law, all municipal governmental bodies have only the powers specifically granted to them by the State and the ancillary powers that are necessarily implied by powers explicitly granted. Municipalities which have the power to tax and to issue debt are explicitly denied the power by statute to file petitions to become debtors under Chapter Nine of Title 11 of the Federal Bankruptcy Code without the prior written consent of the Governor.

State Government Organization

Under the State Constitution, the legislative, executive and judicial functions and powers of State government are divided among three distinct branches referred to in the Constitution as "departments": the legislative department, the executive department and the judicial department. The following table shows the structure of the three departments.

TABLE A-1

Structure of State Government



Legislative Department. Legislative power is vested in the General Assembly, composed of the Senate and House of Representatives. Currently the Senate consists of 36 members, each representing a single senatorial district, and the House of Representatives consists of 151 members, each representing a single assembly district. Both the number of members and the boundaries of the legislative districts may vary in accordance with the requirements of the State's Constitution. The General Assembly is assisted by a full-time staff. General Assembly employees are included under the legislative function in **Tables A-2** and **A-3** below.

General Assembly members are elected biennially at the general election in November in even numbered years and take office in the January following their election. Elections for the General Assembly were held in November 2018, and the new members took office in January 2019.

A regular session of the General Assembly is held each year. These sessions run from January through June in odd-numbered years and February through May in even-numbered years. The General Assembly reconvenes for special sessions in general only in emergencies or to consider bills or appropriations vetoed by the Governor. Even-year sessions are supposed to be limited to budgetary, revenue and financial matters, bills and resolutions raised by committees of the General Assembly and certified emergencies.

Two Auditors of Public Accounts, who cannot be of the same political party, are appointed by the General Assembly to four-year terms. The State Auditors are required to make an annual audit of the accounts of the Treasurer and the Comptroller and, biennially or as frequently as they deem necessary, to audit the accounts of each officer, department, commission, board and court of the State government authorized to expend State appropriations. The Auditors are required to report unauthorized, illegal, irregular or unsafe handling or expenditure of State funds or quasi-public agency funds or any actual or contemplated breakdown in the safeguarding of any resources of the State or a quasi-public agency promptly upon discovery to the Governor, the State Comptroller, the Attorney General and appropriate legislative agencies. The Auditors may give an agency a reasonable amount of time to conduct an investigation in certain circumstances prior the Auditors reporting the matter to such officials. Each budgeted agency of the State must keep its accounts in such form and by such methods as to exhibit facts required by the State Auditors. A full-time staff assists the State Auditors. Employees of the State Auditors are included under the legislative function in **Tables A-2** and **A-3** below.

Executive Department. The Governor, Lieutenant Governor, Secretary of the State, Treasurer, Comptroller and Attorney General, whose offices are mandated by the State's Constitution, were elected at the general election in November 2018 for terms beginning in January 2019. Elections for all of these offices are held every four years. The Governor and Lieutenant Governor are elected as a unit.

The supreme executive power of the State is vested in the Governor. The Governor has the constitutional responsibility for ensuring that the laws are faithfully executed, giving the General Assembly information on the state of the government, and recommending to the General Assembly such measures as the Governor may deem expedient. The Governor is empowered to veto bills and line items in appropriations bills, but the General Assembly may reconsider and repass such matters upon a two-thirds vote of each house, whereupon such bills or appropriations become law. Broad appointive and investigative powers are conferred upon the Governor by statute. The Lieutenant Governor serves as President of the Senate and becomes Governor in case of the inability of the Governor to exercise the powers and perform the duties of the office.

The Treasurer is primarily responsible for receiving and disbursing all monies belonging to the State, superintending the collection of State taxes and revenues and the investment of State funds, administering certain State trust funds and managing State property. Subject to the approval of the Governor, the Treasurer is authorized, when necessary, to make temporary borrowings evidenced by State obligations. In addition, the State Bond Commission may delegate to the Treasurer the responsibility for determining the terms and conditions and carrying out the issuance of State debt.

The Secretary of the State administers elections, has custody of all public records and documents, and certifies to the Treasurer and the Comptroller the amount and purpose of each appropriation made by the General Assembly.

The Comptroller's primary duties include adjusting and settling public accounts and demands and prescribing the method of keeping and rendering all public accounts. All warrants and orders for the disbursement of public money are registered with the Comptroller. The Comptroller also has authority to require reports from State agencies upon any matter of property or finance and to inspect all records in any public office, and is responsible for examining the amount of all debts and credits of the State. The Comptroller is required to issue monthly reports on the financial condition of the State, which are prepared on a modified cash basis and are not audited.

The Attorney General has general supervision over all legal matters in which the State is an interested party except those legal matters over which prosecuting officers have discretion. The duties of the office include giving advice and, on request, rendering legal opinions to the legislative and executive departments as to questions of law. Among the Attorney General's statutory duties concerning State financial matters are membership on the State Bond Commission, the approval of all State contracts or leases and appearing before any committee of the General Assembly to represent the State's best interests when any measure affecting the State Treasury is pending.

In addition to the constitutionally mandated offices, the General Statutes provide for a number of executive branch agencies, departments and commissions, each of which generally has its own agency head appointed by the Governor, in most cases with the advice and consent of one or both houses of the General Assembly. Of these statutorily established offices, the one most directly related to the fiscal operation and condition of the State is the Office of Policy and Management. The Secretary of the Office of Policy and Management is directly responsible to the Governor for policy development in four major areas: budget and financial management, policy development and planning, management and program evaluation, and intergovernmental policy. The Office of Policy and Management has significant responsibility in preparing the State budget, in assisting the Governor in policy development and in representing the State in most collective bargaining negotiations. It is the duty of the Office of Policy and Management to prepare and furnish to the General Assembly and Comptroller financial and accounting statements relating to the State's financial condition and general accounts, and to examine and assist in the organization, management and policies of departments and institutions supported by the State in order to improve their effectiveness. The Secretary of the Office of Policy and Management, like the Comptroller, is empowered to inspect the financial records and to require reports of State agencies.

Employees of the executive department are included in **Tables A-2** and **A-3** below under all function headings except the legislative and judicial functions. A list of the major executive branch agencies, departments and commissions, by function headings, is found in **Table A-5**.

Judicial Department. The State's judicial department consists of three principal trial and appellate courts: the Superior Court, the Appellate Court, and the Supreme Court.

The Superior Court is vested with original trial court jurisdiction over all civil and criminal matters. By statute, there are 201 authorized Superior Court judges, with approximately 164 sitting judges as of January 1, 2019, each nominated by the Governor and appointed by the General Assembly to eight-year terms.

The Appellate Court hears appeals from decisions of the Superior Court except for certain matters which are directly appealable to the Supreme Court. There are nine Appellate Court judges nominated by the Governor and appointed by the General Assembly to eight-year terms.

The Connecticut Supreme Court reviews decisions of the Appellate Court and, in certain cases, of the Superior Court. Except in cases where original jurisdiction exists in the Supreme Court, there is no right of review in the Supreme Court unless specifically provided by statute. The Supreme Court consists of seven Justices (one Chief

Justice and six Associate Justices) nominated by the Governor and appointed by the General Assembly to eight-year terms.

In addition to the principal trial and appellate courts, there is a Court of Probate in each of 54 probate districts situated throughout the State.

Employees of the judicial department are shown in **Tables A-2** and **A-3** under the judicial function heading.

Quasi-Public Agencies. In addition to the budgeted components of State government provided for in the State's Constitution and the General Statutes, important State-wide governmental functions are performed by quasi-public agencies, authorities and similar bodies created under the General Statutes. A number of these entities receive significant funding from the State, although they are not budgeted agencies of the State. Each of these entities is governed by a board of directors chosen in accordance with its respective enabling statute. These boards generally include legislative appointees, gubernatorial appointees and ex-officio directors holding certain executive branch offices.

State Employees

Employment Statistics. Statistics regarding approximate filled permanent full-time positions within budgeted components of State government are shown on the following two tables.

TABLE A-2

State Employees [a]
By Function of Government

Function Headings[b]	2015	2016	2017	2018	2019
Legislative	721	693	557	535	531
General Government	3,092	2,995	2,849	2,690	2,735
Regulation and Protection	4,345	4,201	4,075	3,793	3,685
Conservation and Development	1,397	1,365	1,491	1,289	1,338
Health and Hospitals	6,977	6,807	5,906	5,917	5,813
Transportation	4,008	4,258	4,638	4,380	4,288
Human Services	1,915	1,834	1,677	2,025	2,070
Education	17,272	17,311	17,232	16,445	16,045
Corrections	8,826	8,695	8,248	8,187	8,616
Judicial	4,543	4,490	4,068	3,862	4,154
Total	53,096	52,649	50,741	49,123	49,275

(a) Table shows count of employees by fund category and function of government paid in April of each year. Employees working in multiple government functions or paid through multiple fund sources are counted multiple times.

(b) A breakdown of the budgeted agencies, boards, commissions and similar bodies included in each of the listed government function headings is shown in **Table A-5**.

SOURCE: OPM

TABLE A-3

State Employees As of April 30, 2019 [a][b]
By Function of Government and Fund Categories

Function Headings	General Fund	Special Transportation Fund	Other Appropriated Funds	Special Funds – Non-Appropriated	Federal Funds	TOTALS
Legislative	531	--	--	--	--	531
General Government	2,466	--	6	118	145	2,735
Regulation and Protection	1,931	613	399	477	265	3,685
Conservation and Development	765	32	121	62	358	1,338
Health and Hospitals	5,418	--	23	--	372	5,813
Transportation	--	2,867	--	589	832	4,288
Human Services	1,772	--	6	--	292	2,070
Education	5,104	--	--	10,746	195	16,045
Corrections	8,516	--	--	83	17	8,616
Judicial	4,080	--	14	21	39	4,154
Total	30,583	3,512	569	12,096	2,515	49,275

(a) Table shows a count of paid employees by fund category. Employees working in multiple government functions or paid through multiple fund sources are counted multiple times.

(b) Reflects funding source based on Core-CT chart of accounts coding.

SOURCE: OPM

Collective Bargaining Units and Process. The General Statutes guarantee State employees, other than elected or appointed officials and certain management employees and others with access to confidential information used in collective bargaining, the right to organize and participate in collective bargaining units. There are presently 44 such bargaining units representing State employees. The General Statutes establish the general parameters of the collective bargaining process with respect to bargaining units representing State employees. At any given point in time, there are generally a number of collective bargaining units with agreements under negotiation. All collective bargaining agreements require approval of the General Assembly. The General Assembly may approve any such agreement as a whole by a majority vote of each house or may reject any such agreement as a whole by a majority vote of either house. An arbitration award may be rejected in whole by a two-thirds vote of either house of the General Assembly upon a determination that there are insufficient funds for full implementation of the award.

If an agreement is rejected, the matter shall be returned to the parties who shall initiate arbitration. The parties may submit any award issued pursuant to such arbitration to the General Assembly in the same manner as the rejected agreement. If the arbitration award is rejected by the General Assembly, the matter shall be returned again to the parties for further arbitration. Any award issued pursuant to such further arbitration shall be deemed approved by the General Assembly.

The General Statutes deny State employees the right to strike. Questions concerning employment or bargaining practices prohibited by the sections of the General Statutes governing collective bargaining with regard to State employees may generally be brought before the State Board of Labor Relations.

Information regarding employees participating in collective bargaining units and employees not covered by collective bargaining is shown in the following table:

TABLE A-4

Full-Time Work Force
Collective Bargaining Units and
Those Not Covered by Collective Bargaining

Bargaining Unit/Status Group	Percentage of State Employees Represented[a]	Contract Status, if any[b]
Covered by Collective Bargaining		
Administrative and Residual (P-5)	5.80%	Contract in place through 6/30/2021
Administrative Clerical (NP-3)	5.70	Contract in place through 6/30/2021
AFSCME-DCF Program Supervisors (P-8)	0.21	Pending legislative approval
American Federation of School Administrators	0.11	Contract in place through 6/30/2021
Assistant Attorneys General (P-6)	0.36	Contract in place through 6/30/2021
Assistant Attorney General Dept. Heads (P-7)	0.03	Contract in place through 6/30/2021
Board for State Academic Awards	0.12	Contract in place through 6/30/2021
Community College Administration - AFSCME	0.16	Contract in place through 6/30/2021
Community College Administration – CCCC	1.46	Contract in place through 6/30/2021
Community College AFT – Counselors/Librarians	0.03	Contract in place through 6/30/2021
Community College Faculty – AFT	0.35	Contract in place through 6/30/2021
Community College Faculty – CCCC	1.22	Contract in place through 6/30/2021
Connecticut Association of Prosecutors	0.43	Contract in place through 6/30/2021
Correctional Officers (NP-4)	8.83	Contract in place through 6/30/2021
Correctional Supervisor (NP-8)	1.06	Contract in place through 6/30/2021
Criminal Justice Inspectors	0.13	Contract in place through 6/30/2021
Criminal Justice Residual	0.23	Contract in place through 6/30/2021
DPDS Public Defenders	0.34	Contract in place through 6/30/2021
DPDS Supervising Attorneys - AFSCME	0.05	Contract in place through 6/30/2021
Education Administrative (P-3A)	0.41	Contract in place through 6/30/2021
Education Technical (P-3B)	0.95	Contract in place through 6/30/2021
Engineering, Scientific and Technical (P-4)	4.85	Contract in place through 6/30/2021
GEU-UAW Graduate Empl Union	2.87	Contract in place through 6/30/2021
Health Care Unit-Non-Professional (NP-6)	5.17	Contract in place through 6/30/2021
Health Care Unit-Professional (P-1)	5.93	Contract in place through 6/30/2021
Higher Education – Professional Employees	0.04	Contract in place through 6/30/2021
Judicial - Judicial Marshals	1.29	Contract in place through 6/30/2021
Judicial – Law Clerks	0.15	Contract in place through 6/30/2021
Judicial – Non-Professional	2.59	Contract in place through 6/30/2021
Judicial – Professional	2.87	Contract in place through 6/30/2021
Judicial - Supervising Judicial Marshals	0.11	Contract in place through 6/30/2021
Protective Services (NP-5)	1.56	Contract in place through 6/30/2021
Service/Maintenance (NP-2)	7.20	Contract in place through 6/30/2021
Social and Human Services (P-2)	7.78	Contract in place through 6/30/2021
State Vocational Federation of Teachers	2.32	Contract in place through 6/30/2021
State Police (NP-1)	1.85	Contract in place through 6/30/2022
State Police Lieutenants and Captains (NP-9)	0.06	Contract in place through 6/30/2021
State University-Faculty	2.89	Contract in place through 6/30/2021
State University- Non-Faculty Professional	1.65	Contract in place through 6/30/2021
UCHC – Faculty	0.81	Contract in place through 6/30/2021
UCHC University Health Professionals	3.93	Contract in place through 6/30/2021
UConn – Faculty	3.51	Contract in place through 6/30/2021
UConn – Law School Faculty	0.09	Contract in place through 6/30/2021
UConn - Non-Faculty	3.75	Contract in place through 6/30/2021
Total Covered by Collective Bargaining	91.27%	
Not Covered by Collective Bargaining		
Auditors of Public Accounts	0.22%	Not Applicable
Other Employees	8.51%	Not Applicable
Total Not Covered by Collective Bargaining	8.73%	
Total Full-Time Work Force	100.00%	

(a) Percentage expressed reflects approximately 48,686 filled full-time positions as of February 3, 2020.

(b) With the exception of the DCF Program Supervisors bargaining unit, all collective bargaining contracts expire on June 30, 2021 or June 30, 2022. Additional groups of employees have made application for certification and are in negotiation.

SOURCE: OPM

Governmental Services

Services provided by the State or financed by State appropriations are classified under one of ten major government function headings or are classified as "non-functional". These function headings are used for the State's General Fund and for other funds of the State used to account for appropriated moneys. State agencies, boards, commissions and other bodies are each assigned to one of the function headings for budgeting purposes. The following table shows a breakdown of the government function headings according to the major agencies, boards, commissions and other bodies assigned to them.

TABLE A-5

Function of Government Headings [a][b]

Conservation and Development
Department of Agriculture
Department of Energy and Environmental Protection
Council on Environmental Quality
Department of Economic and Community Development
Department of Housing
Agricultural Experiment Station

Corrections
Department of Corrections
Department of Children and Families

Education, Libraries and Museums
Department of Education
State Library
Office of Early Childhood
University of Connecticut
University of Connecticut Health Center
Connecticut State Colleges and Universities
Office of Higher Education
Teachers' Retirement Board

General Government
Governor's Office
Lieutenant Governor's Office
Secretary of the State
Office of Governmental Accountability
State Treasurer
State Comptroller
Department of Revenue Services
Office of Policy and Management
Department of Veterans Affairs
Department of Administrative Services
Attorney General
Division of Criminal Justice

Health and Hospitals
Department of Public Health
Office of Health Strategy
Office of the Chief Medical Examiner
Department of Developmental Services
Department of Mental Health and Addiction Services
Psychiatric Security Review Board

Human Services
Department of Social Services
Department of Rehabilitation Services

Judicial
Judicial Department
Public Defender Services Commission

Legislative
Legislative Management
Auditors of Public Accounts
Commission on Women, Children Seniors, Equity and Opportunity

Regulation and Protection
Department of Emergency Services and Public Protection
Department of Motor Vehicles
Military Department
Department of Banking
Insurance Department
Office of Consumer Counsel
Office of the Health Care Advocate
Department of Consumer Protection
Department of Labor
Commission on Human Rights and Opportunities
Workers' Compensation Commission

Transportation
Department of Transportation

(a) In addition to the ten listed government function headings, the State also employs a "non-functional" heading under which are grouped various miscellaneous accounts including debt service and State employee fringe benefit accounts.

(b) Listing of agencies, boards, commissions and similar bodies is as of July 1, 2019.

SOURCE: OPM

In addition to services provided directly by the State, various State-wide and regional quasi-public agencies, authorities and similar bodies also provide services. Such entities principally assist in the financing of various types of facilities and projects. In addition to their own budgetary resources and the proceeds of their borrowings, a number of such entities have received substantial funding from the State, which the entities generally use to provide financial assistance to the general public and the private and nonprofit sectors.

Because Connecticut does not have an intermediate county level of government between State and local government, local entities provide all governmental services not provided by the State and quasi-public agencies. Such services are financed principally from property tax revenues, State funding of various types and federal funding.

Department of Emergency Services and Public Protection. The Department of Emergency Services and Public Protection (DESPP) is responsible for providing a coordinated, integrated program for the protection of life and property and for state-wide emergency management and homeland security. Through the Division of Emergency Management and Homeland Security (DEMHS), the Department is responsible for the preparation of a comprehensive civil preparedness plan and program, including integration and coordination with planning and activities of the federal government, other states, and towns, cities and tribal nations within the State. The State's plans include the State Response Framework and the State Disaster Recovery Framework and the State Natural Hazard Mitigation Plan, which includes consideration of how climate change is and will continue to affect the frequency, intensity, and distribution of specific hazards. For planning purposes, DEMHS has given priority for preparedness to the following potential scenarios: (i) a severe weather event in or affecting Connecticut; (ii) a terrorist attack in or affecting Connecticut (cyber and/or physical), and (iii) a release of contamination from the Millstone Power Plant. Current planning activities at the State level include multiple cyber security initiatives, including a State Cyber Security Strategy and Action Plan, Cyber Incident Response Plan, and Cyber Disruption Response Plan, which is an annex to the State Response Framework. DESPP/DEMHS also operates the State's fusion center – the Connecticut Intelligence Center – which is a multi-agency, multi-jurisdictional entity which collects, analyzes and disseminates intelligence information to law enforcement and other groups as appropriate. DESPP/CSP operates the CT State Police Cyber Crimes Investigative Unit. DEMHS includes a Radiological Emergency Preparedness Unit, which, among other things, conducts regular exercises evaluated by the Federal Emergency Management Agency (FEMA). Pursuant to the Connecticut General Statutes, the Commissioner of the Department is required to file an annual report each January to the joint standing committee of the General Assembly having cognizance of matters relating to public safety, which report specifies and evaluates statewide emergency management and homeland security activities during the preceding calendar year. In April 2015, the State received accreditation for its emergency management and homeland security activities from the nationally recognized Emergency Management Accreditation Program; the state emergency management and homeland security re-accreditation process is scheduled to be conducted in February, 2020.

[THIS PAGE INTENTIONALLY LEFT BLANK]

The information in this section contains information through February 15, 2020 except as may otherwise be set forth below.

STATE ECONOMY

Connecticut is a highly developed and urbanized state. It is situated directly between the financial centers of Boston and New York. Connecticut is located on the northeast coast and is the southernmost of the New England States. It is bordered by the Long Island Sound, New York, Massachusetts and Rhode Island. Over one quarter of the total population of the United States and more than 50% of the Canadian population live within a 500-mile radius of the State.

Economic Resources

Population Characteristics. The State's population growth rate, which exceeded the United States' rate of population growth during the period from 1940 to 1970, slowed substantially and trailed the national average markedly during the past four decades. The following table presents the population trends of Connecticut, New England, and the United States since 1940. Connecticut's population increased 0.3% from 2009 to 2019 versus 3.1% in New England and 6.6% for the nation. The mid-2019 population in Connecticut was estimated at 3,565,287, a -0.2% change from a year ago, compared to increases of 0.1% and 0.5% for New England and the United States, respectively. From 2010 to 2019, within New England, Massachusetts (5.0%), New Hampshire (3.3%), Maine (1.2%), Rhode Island (0.5%) and Vermont (-0.3%) all experienced growth higher than Connecticut (-0.4%).

TABLE B-1

Population
(In Thousands)

	Connecticut		New England		United States	
Calendar Year	Total	% Change	Total	% Change	Total	% Change
1940 Census	1,709		8,437		132,165	
1950 Census	2,007	17.4%	9,314	10.4%	151,326	14.5%
1960 Census	2,535	26.3	10,509	12.8	179,323	18.5
1970 Census	3,032	19.6	11,847	12.7	203,302	13.4
1980 Census	3,108	2.5	12,349	4.2	226,542	11.4
1990 Census	3,287	5.8	13,207	6.9	248,710	9.8
2000 Census	3,406	3.6	13,923	5.4	281,422	13.2
2010 Census	3,574	4.9	14,445	3.7	308,746	9.7
2010….	3,579	0.3	14,470	0.3	309,322	0.6
2011….	3,588	0.3	14,531	0.4	311,557	0.7
2012….	3,595	0.2	14,590	0.4	313,831	0.7
2013….	3,595	0.0	14,644	0.4	315,994	0.7
2014….	3,595	(0.0)	14,702	0.4	318,301	0.7
2015….	3,587	(0.2)	14,727	0.2	320,635	0.7
2016….	3,578	(0.3)	14,756	0.2	322,941	0.7
2017….	3,573	(0.1)	14,797	0.3	324,986	0.6
2018….	3,572	(0.0)	14,829	0.2	326,688	0.5
2019….	3,565	(0.2)	14,845	0.1	328,240	0.5

NOTE: 1940-2010, April 1 Census. Figures are for census comparison purposes.
2010-2019 Mid-year estimates. Estimates for New England include the sum of six states – Connecticut, Massachusetts, New Hampshire, Rhode Island, Maine and Vermont.

SOURCE: United States Census Bureau

The State is highly urbanized with a 2019 population density of 738 persons per square mile, as compared with 87 for the United States as a whole. Of the eight counties in the State, according to the U.S. Bureau of Census for the 2010 Census count, 75% of the population resides within Fairfield (26%), Hartford (25%), and New Haven (24%) counties.

Education. In 2017 Connecticut ranked 5th in the nation with 38.7% of the State population over the age of 25 holding a bachelor's degree or higher.

Connecticut is home to over 45 colleges and universities, including among others: Yale University, Wesleyan University, Trinity College, Connecticut College, University of Connecticut, Southern Connecticut State University, Central Connecticut State University, Eastern Connecticut State University, Western Connecticut State University, Fairfield University, Quinnipiac University, Hartford Seminary, Coast Guard Academy, University of New Haven, University of Hartford, and Sacred Heart University.

Industry Landscape. Connecticut is home to some of the country's leading companies, including, but not limited to the following members of the 2019 Fortune 500: United Technologies, Cigna, Charter Communications, Hartford Financial Services, Synchrony Financial, XPO Logistics, Booking Holdings, Stanley Black & Decker, Xerox, Frontier Communications, Amphenol, EMCOR Group, United Rentals and W.R. Berkley. The historical presence of the insurance industry in the State, and especially in its capital city of Hartford, has caused it to be referred to as the "insurance capital of the world".

SUPPLEMENTARY INFORMATION AS OF JULY 15, 2020

Raytheon Company and United Technologies Corporation merged to form Raytheon Technologies Corporation in April 2020 with the merged company headquartered in Massachusetts. The Governor released a statement that it is expected that nearly all of United Technologies Corporation's 19,000 employees will remain in Connecticut, with approximately 100 moving to the new headquarters. There is no assurance that the expected number of jobs will either remain or move from the State.

Transportation. Connecticut has an extensive network of expressways and major arterial highways which provide easy access to local and regional markets. Bradley International Airport, in Windsor Locks, currently offers more than 500 commercial flights every day to 30 non-stop destinations and is served by virtually all the major passenger and cargo air carriers. These flights serve nearly 6.7 million customers annually. It is accessible from all areas of the State and western Massachusetts via the highway network and public transportation system.

The Connecticut Department of Transportation funds and oversees the operation of rail, bus, paratransit and ferry services throughout the State. The New Haven Line (including the Waterbury, Danbury and New Canaan branch lines), Shore Line East and Hartford Line serve approximately 42 million passengers each year. State-funded, contracted public bus and paratransit transportation programs provide approximately 42 million passenger trips a year on urban transit, commuter express bus, rural transit, and Americans with Disabilities Act paratransit services. The overall program includes State-funded CT*transit* bus services in 8 urbanized areas and CT*fastrak* bus rapid transit services in the greater Hartford area, as well as urban and rural transit and paratransit services provided by 13 independent, locally-governed and operated transit districts. The State also operates two historic passenger and vehicular ferries, linking communities on the Connecticut River.

Railroad freight service is provided to most major towns and cities in the State, and connections are provided with major eastern railroads, as well as direct access to Canadian markets. Positioned between the ports of New York and Boston, with access to European and South American markets, the State's deep draft harbors at Bridgeport, New Haven, and New London offer similar direct access to international markets and U.S. ports.

Utility Services. The power grid that supplies electricity to the entire State is owned and operated by both private and municipal electric companies. Transmission lines connect Connecticut with New York, Massachusetts and Rhode Island. These interconnections allow the companies serving Connecticut to meet large or unexpected electric load requirements from resources located outside of Connecticut's boundaries. All electric utilities in the State are members of the New England Power Pool and operate as part of the regional bulk power system, the Regional Transmission Organization for New England. An independent system operator, ISO New England, Inc., operates this regional system.

Most consumers in Connecticut can choose an independent electric supplier as their provider of electricity. Consumers that do not choose an independent electric supplier will automatically be placed on Connecticut's standard service. The electricity is delivered to the consumer over the wires of the regulated distribution companies (Eversource Energy and The United Illuminating Company). Electric suppliers are not subject to rate regulation by the State Public Utilities Regulatory Authority (PURA), formerly known as the Department of Public Utility Control (DPUC), but must receive a license issued by the PURA before commencing service to consumers. In general, Connecticut consumers located in a municipally owned electric service territory can continue to purchase and receive their electrical needs from the municipal electric company.

Legislation enacted in 2011 merged PURA under a new Department of Energy and Environmental Protection (DEEP) structure, where it continues its mandates related to rates, reliability and safety, but now must also be guided in accordance with the goals of DEEP as outlined in its Integrated Resource Plan and Comprehensive Energy Strategy. These include a focus on clean energy, creating jobs and building a state energy economy. The legislation declares DEEP as a successor to the PURA, and divides DEEP into three bureaus, Energy, Environmental Protection and PURA.

PURA staff is responsible for developing a plan for the procurement of electric generation services and related wholesale electricity market products that will enable each electric distribution company to manage a portfolio of contracts to reduce the average cost of "standard service" while maintaining "standard service" cost volatility within reasonable levels.

Lastly, the legislation created a quasi-public authority, the Connecticut Green Bank to administer the Clean Energy Fund which is funded by a charge on consumer's electric bills. Pursuant to legislation, Green Bank's scope was expanded to include more types of projects the fund can support with respect to the financing of clean energy sources and energy efficiency.

Natural gas is delivered to Connecticut through pipelines that traverse the State. Natural gas pipeline supplies are generally shipped to Connecticut from Canada and the Gulf of Mexico area. Connecticut also receives natural gas through the interstate pipelines from a terminal located in Boston, Massachusetts which is supplied by tanker ships. Natural gas service is provided to parts of the State through one municipal and three private gas distribution companies, including Eversource Energy, Connecticut Natural Gas Company, and Southern Connecticut Gas Company. Over the past few years, UIL Holdings Corp. has acquired both Connecticut Natural Gas and Southern Connecticut Gas. UIL Holdings Corp., the parent company of The United Illuminating Company, is a New Haven, Connecticut-based utility holding company.

Since 1996 the PURA has allowed some competitive market forces to enter the natural gas industry in Connecticut. Commercial and industrial gas consumers can choose non-regulated suppliers for their natural gas requirements. The gas is delivered to the consumer using the local distribution company's mains and pipelines. This competitive market is not yet available to the residential consumer.

In addition to the electric and natural gas industries, telecommunications services are also open to competition. Local exchange telephone service is provided in the State by incumbent local exchange carriers (ILECs) and competitive local exchange carriers (CLECs). Two ILECs currently offer local telephone services in Connecticut. They are Frontier Corporation and Verizon New York, Inc. Connecticut also has 109 CLECs certified to provide local exchange services including Comcast Phone of Connecticut, Inc., Cox Connecticut Telecommunication, LLC and Connecticut Telephone and Communications Systems, Inc.

Connecticut is dependent upon oil, including imported oil, for a portion of its energy requirements. This dependence is greatest in the transportation sector. Connecticut also relies on heating oils in both the residential and commercial sectors, and is reliant on residual oils and diesel fuels for the production of electricity. This petroleum dependence can make Connecticut particularly affected by developments in the oil commodity markets. Events that affect the international or domestic production of oil, the domestic and international refining capabilities, or the transportation of petroleum products within the United States or into the New England region can affect Connecticut's local oil markets.

Although Connecticut is heavily dependent upon petroleum, the State is ranked one of the most efficient states for energy consumption. According to the most recent available data from the Energy Information Administration, an independent agency within the U.S. Department of Energy that collects and analyzes energy data, Connecticut consumed 3.0 thousand British Thermal Units (BTU) per 2012 chained dollar of Gross State Product in 2017, the latest available data, ranking it the 3rd most efficient state among the 50 states and 44.0% less than the national average of 5.4 thousand BTU. When compared to the national per person average, Connecticut residents use a moderate amount of energy. Connecticut consumed 203.2 million BTU of energy per person in 2017, ranking it 46th among the 50 states and 32.3% less than the national average of 300.2 million BTU.

Energy prices in Connecticut have been relatively flat since 2018 but remain elevated relative to the nation. Nationally, home heating oil, gasoline and natural gas prices have begun to flatten after rising since 2016, signaling market stability after dramatic declines in prices starting in 2014. For the past decade the United States has experienced a significant rise in oil production, due in large part to technological innovations in the area of shale oil fracking. To maintain market share oil exporters increased production, even as prices declined, as many of their economies rely heavily on such energy resources. All of this, in combination with a reduction in demand in Europe and weakening economic growth in China and emerging markets, have led to a historic oversupply in the oil market which drove prices down. The Energy Information Administration does not forecast significant changes in energy prices and expects to see prices remain flat into the near future.

Economic Performance

Personal Income. Connecticut has a high level of personal income. Historically, the State's average per capita income has been among the highest in the nation. The high per capita income is due to the State's concentration of relatively high paying manufacturing jobs along with a higher portion of residents working in the non-manufacturing sector in such areas as finance, insurance, and real estate, as well as educational services. A concentration of major corporate headquarters located within the State also contributes to the high level of income. In calendar year 2018, per capita personal income in Connecticut equaled $76,504, the highest of any state in the nation. This high level of personal income is not concentrated in a single county, but is widely distributed throughout the State. County-level data from the United States Department of Commerce, Bureau of Economic Analysis for calendar year 2018 indicates that if they were states, four of the State's eight counties would each rank within the top ten of all states in the nation for state per capita personal income. The following table shows total and per capita personal income for Connecticut residents during the period from 2009 to 2018 and compares Connecticut per capita personal income as a percentage of both New England and the United States.

TABLE B-2

Connecticut Personal Income by Place of Residence

Calendar Year	Connecticut Total (Millions of Dollars)	Connecticut Per Capita (Dollars)	Connecticut Per Capita as Percent of New England	Connecticut Per Capita as Percent of United States
2009	$213,612	$59,938	119.6%	152.9%
2010	222,226	62,081	119.2	153.4
2011	228,929	63,788	118.0	149.5
2012	233,338	64,920	116.5	145.7
2013	228,471	63,557	114.7	141.9
2014	238,999	66,516	114.9	141.5
2015	244,982	68,319	112.8	139.7
2016	249,581	69,758	112.3	140.0
2017	258,079	72,225	111.9	139.4
2018	273,152	76,504	112.5	140.7

SOURCE: United States Department of Commerce, Bureau of Economic Analysis

The following table indicates the annual growth rate of personal income, on a current and constant dollar basis, of Connecticut, New England and the United States.

TABLE B-3

Annual Growth Rates in Personal Income By Place of Residence

Calendar Year	Conn. (Current)	New England (Current)	U.S. (Current)	Conn. (Constant)	New England (Constant)	U.S. (Constant)
2009	(1.5)%	(1.3)%	(3.1)%	(1.1)%	(0.9)%	(3.0)%
2010	4.0	4.4	4.1	3.0	3.0	2.3
2011	3.0	4.3	6.2	0.9	2.0	3.6
2012	1.9	3.5	5.1	(0.2)	1.9	3.2
2013	(2.1)	(0.2)	1.2	(2.8)	(1.4)	(0.1)
2014	4.6	4.8	5.7	3.0	2.9	4.2
2015	2.5	4.8	4.8	2.4	4.4	4.6
2016	1.9	2.8	2.6	1.1	1.7	1.5
2017	3.4	4.1	4.7	2.0	2.7	2.9
2018	5.8	5.6	5.6	3.8	3.5	3.4

Note — Real dollars are adjusted for inflation using the national personal consumption expenditures price index and regional price parities.

SOURCE: United States Department of Commerce, Bureau of Economic Analysis

The following table indicates the sources of personal income by place of residence for Connecticut and the United States in 2018.

TABLE B-4

Sources of Personal Income By Place of Residence
Calendar Year 2018
(In Millions)

	Conn.	Percent of Total	U.S.	Percent of Total
Wages in Non-manufacturing	$118,235	43.3%	$8,005,300	44.9%
Property Income (Div., Rents & Int.)	62,092	22.7	3,686,900	20.7
Wages in Manufacturing	15,075	5.5	883,200	5.0
Transfer Payments less Social Insurance Paid	15,410	5.6	1,615,000	9.1
Other Labor Income	30,419	11.1	2,040,000	11.4
Proprietor's Income	31,922	11.7	1,588,800	8.9
Personal Income — Total	$273,152	100p.0%	$17,819,200	100.0%

Note—Columns may not add due to rounding.

SOURCE: United States Department of Commerce, Bureau of Economic Analysis

Gross State Product. The State's and the region's economic vitality are evidenced in the rate of growth of their respective Gross State Products. The State's Gross State Product is the current market value of all final goods and services produced by labor and property located within the State.

In 2018, the State produced $275.7 billion worth of goods and services and $244.9 billion worth of goods and services in 2012 chained dollars.

The following table shows the Gross State Product in current dollars for Connecticut, New England, and the United States.

TABLE B-5

Gross State Product
(In Millions)

	Connecticut		New England[(a)]		United States[(b)]	
Calendar Year	$	Percent Growth	$	Percent Growth	$	Percent Growth
2009	236,393	(1.9)%	813,921	0.1%	14,448,933	(1.8)%
2010	237,653	0.5	839,958	3.2	14,992,052	3.8
2011	236,524	(0.5)	857,725	2.1	15,542,582	3.7
2012	243,801	3.1	889,223	3.7	16,197,007	4.2
2013	246,632	1.2	907,187	2.0	16,784,851	3.6
2014	248,865	0.9	934,408	3.0	17,527,258	4.4
2015	260,073	4.5	983,979	5.3	18,224,780	4.0
2016	263,696	1.4	1,010,689	2.7	18,715,041	2.7
2017	268,311	1.7	1,042,753	3.2	19,519,424	4.3
2018	275,727	2.8	1,088,379	4.4	20,580,223	5.4

(a) Sum of the New England States' Gross State Products.

(b) Denotes the Gross Domestic Product, which is the total market value of all final goods and services produced in the U.S.

SOURCE: United States Department of Commerce, Bureau of Economic Analysis

The following table shows the Gross State Product in 2012 chained dollars.

TABLE B-6

Gross State Product
(In Millions of 2012 Chained Dollars*)

	Connecticut		New England		United States	
Calendar Year	$	Percent Growth	$	Percent Growth	$	Percent Growth
2009	248,041	(4.5)%	850,817	(2.1)%	15,208,834	(2.5)%
2010	247,461	(0.2)	871,834	2.5	15,598,754	2.6
2011	242,020	(2.2)	876,672	0.6	15,840,664	1.6
2012	243,801	0.7	889,223	1.4	16,197,008	2.2
2013	241,081	(1.1)	887,834	(0.2)	16,495,370	1.8
2014	237,784	(1.4)	895,284	0.8	16,912,038	2.5
2015	242,911	2.2	921,337	2.9	17,403,843	2.9
2016	242,794	(0.0)	931,990	1.2	17,688,890	1.6
2017	243,683	0.4	947,219	1.6	18,108,082	2.4
2018	244,926	0.5	967,647	2.2	18,638,164	2.9

* 2012 chained dollar series are calculated as the product of the chain-type quantity index and the 2012 current-dollar value of the corresponding series, divided by 100. Figures for the United States represent Gross Domestic Product.

SOURCE: United States Department of Commerce, Bureau of Economic Analysis

The table below shows the contribution to Connecticut's Gross State Product of the manufacturing and non-manufacturing sectors in the State's economy. The table shows that in 2018 Connecticut's production was concentrated in four areas: finance, insurance and real estate (FIRE), services, manufacturing and government. Production in these four industries accounted for 77.0% of total production in Connecticut compared to 78.0% in 2011 and 72.1% for the nation in 2018. This demonstrates that Connecticut's economy is more heavily concentrated in a few industries than the nation as a whole and that this concentration has changed little in recent years.

The output contribution of manufacturing, however, has been declining over time as the contributions of services has been increasing. The share of production from the manufacturing sector decreased from 12.0% in 2011 to 10.8% in 2018 caused by increased competition with foreign countries and other states. The broadly defined services in the private sector, which excludes industries in agriculture and construction, wholesale and retail trades, but includes industries in information, professional and technical services, health care and education, FIRE, and other services, have increased to 61.0% of the total GSP in 2018 from 60.2% in 2011. The broadly defined services in the private sector increased by 18.3% from 2011 to 2018 compared to 14.6% for the public sector during the comparable period. A stable service sector may help smooth the business cycle, reducing the span and depth of recessions and prolonging the length of expansions. Normally, activities in service sectors relative to manufacturing are less susceptible to pent-up demand, less subject to inventory-induced swings, less intensive in capital requirements, and somewhat less vulnerable to foreign competition. Therefore, this shift to the service sectors may serve to smooth output fluctuations.

TABLE B-7

Gross State Product by Industry in Connecticut
(In Millions)

Calendar Year	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Sector								
Manufacturing	$ 28,353	$ 28,980	$ 30,232	$ 29,320	$ 29,904	$ 27,777	$ 28,722	$ 29,659
Construction[(a)]	6,520	6,786	6,809	7,060	7,647	8,099	8,111	8,375
Agriculture[(b)]	376	409	427	352	369	324	346	331
Utilities[(c)]	8,074	8,630	8,789	9,423	9,602	8,975	9,109	9,697
Wholesale Trade	14,848	16,060	16,506	16,868	17,763	17,369	17,282	17,690
Retail Trade	11,730	12,464	12,706	12,939	13,266	13,251	13,315	13,835
Information	10,414	10,056	11,576	11,342	12,724	13,109	12,657	13,551
Finance[(d)]	69,960	70,261	68,002	66,944	71,198	75,290	77,564	77,699
Services[(e)]	61,953	65,904	66,536	68,920	70,825	72,583	74,009	77,058
Government	24,297	24,250	25,049	25,697	26,775	26,919	27,195	27,833
Total GSP	$236,524	$243,801	$246,632	$248,865	$260,073	$263,696	$268,311	$275,727

Note—Columns may not add due to rounding.
(a) Includes mining.
(b) Includes forestry and fisheries.
(c) Includes transportation, communications, electric, gas, and sanitary services.
(d) Includes finance, insurance and real estate.
(e) Covers a variety of activities, including professional, business, education, health care and personal services.

SOURCE: United States Department of Commerce, Bureau of Economic Analysis

Employment

Non-agricultural employment includes all persons employed except federal military personnel, the self-employed, proprietors, unpaid workers, and farm and household domestic workers. The following table compares non-agricultural establishment employment for Connecticut, New England, and the United States between 2009 and 2018. Connecticut's nonagricultural employment reached a high in March 2008 of 1,717,100 persons employed, but began declining with the onset of the recession falling to 1,597,100 jobs by February 2010, and has since risen to 1,699,600 by November 2019.

TABLE B-8

Non-agricultural Employment [(a)(b)]
(In Thousands)

Calendar Year	Connecticut Employment	Connecticut Percent Growth	New England Employment	New England Percent Growth	United States Employment	United States Percent Growth
2009	1,630.5	(4.3)%	6,821.6	(3.6)%	131,077.2	(4.5)%
2010	1,612.0	(1.1)	6,807.2	(0.2)	130,393.0	(0.5)
2011	1,628.7	1.0	6,871.2	0.9	132,046.1	1.3
2012	1,642.4	0.8	6,955.1	1.2	134,306.1	1.7
2013	1,654.7	0.8	7,039.2	1.2	136,623.3	1.7
2014	1,665.8	0.7	7,137.2	1.4	139,291.7	2.0
2015	1,678.7	0.8	7,241.5	1.5	142,159.0	2.1
2016	1,684.3	0.3	7,339.3	1.3	144,598.1	1.7
2017	1,687.5	0.2	7,407.7	0.9	146,670.9	1.4
2018	1,689.8	0.1	7,454.9	0.6	148,877.1	1.5

(a) Non-agricultural employment excludes agricultural workers, proprietors, self-employed individuals, domestic workers, family workers and members of the armed forces.
(b) In March 2009, the Connecticut Department of Labor revised and updated employment statistics back to 2004.

SOURCE: United States Department of Labor, Bureau of Labor Statistics

In an effort to provide a broader employment picture, the following table, based on residential employment, was developed. Total residential employment is estimated based on household surveys which include individuals excluded from establishment employment figures such as self-employed and workers in the agricultural sector. By this measure, residential employment in 2018 increased by 18,388 jobs. Likewise, the level of establishment employment based on the survey response increased by 2,217 jobs in 2018.

Based on residential employment Connecticut lost approximately 51,900 jobs from March 2008 to February 2010. Since then, Connecticut regained all those lost jobs by November 2014 and in November 2019 residential employment was up 125,700 jobs from that low point.

TABLE B-8a

Connecticut Survey Employment Comparisons
(In Thousands)

Calendar Year	Establishment Employment	Percent Growth	Residential Employment	Percent Growth
2009	1,630.5	(4.3)%	1,741.0	(1.9)%
2010	1,612.0	(1.1)	1,737.8	(0.2)
2011	1,628.7	1.0	1,746.0	0.5
2012	1,642.4	0.8	1,729.7	(0.9)
2013	1,654.7	0.8	1,718.7	(0.6)
2014	1,665.8	0.7	1,762.7	2.6
2015	1,678.7	0.8	1,781.0	1.0
2016	1,684.3	0.3	1,794.1	0.7
2017	1,687.5	0.2	1,807.4	0.7
2018	1,689.8	0.1	1,825.8	1.0

SOURCE: United States Department of Labor, Bureau of Labor Statistics

Composition of Employment. The following table shows the distribution of non-agricultural employment in Connecticut and the United States in 2018. The table shows that Connecticut has a larger share of employment in services, manufacturing, and finance than the nation as a whole.

TABLE B-9

Connecticut Non-agricultural Employment, Calendar Year 2018
(In Thousands)

	Connecticut		United States	
	Total	**Percent**	**Total**	**Percent**
Services[(a)]	778.8	46.1%	66,490.3	44.7%
Trade[(b)]	296.7	17.6	27,670.2	18.6
Manufacturing	160.3	9.5	12,664.2	8.5
Government	236.8	14.0	22,779.8	15.3
Finance[(c)]	126.0	7.5	8,471.7	5.7
Information[(d)]	31.9	1.9	2,840.2	1.9
Construction[(e)]	59.3	3.5	7,960.8	5.3
Total[(f)]	1,689.8	100.0%	148,877.1	100.0%

(a) Covers a considerable variety of activities, including professional, business, education, health care and personal services.
(b) Includes wholesale and retail trade, transportation, and utilities.
(c) Includes finance, insurance, and real estate.
(d) Includes publishing, broadcasting, telecommunications, internet providers, and data processing.
(e) Includes natural resources and mining.
(f) Totals may not equal sum of individual categories due to rounding and seasonal statistical data adjustments.

SOURCE: United States Department of Labor, Bureau of Labor Statistics

Recent trends in the State's non-agricultural employment are reflected in the following table. Throughout the last five decades, while manufacturing employment in Connecticut has been steadily declining, employment in the services industries has surged. In calendar year 2018, approximately 90.5% of the State's workforce was employed in non-manufacturing jobs, up from roughly 50% in the early 1950s.

TABLE B-10

Connecticut Non-agricultural Employment
(Annual Averages In Thousands)

Calendar Year	Manufacturing	Trade[(a)]	Services[(b)]	Government	Finance[(c)]	Information[(d)]	Construction[(e)]	Total Non-agricultural Employment[(f)]
2009	168.4	288.2	692.0	254.6	137.6	34.4	55.3	1,630.5
2010	162.8	285.2	695.8	250.7	135.2	31.8	50.5	1,612.0
2011	163.4	288.1	711.6	247.2	135.0	31.4	52.1	1,628.7
2012	161.9	290.5	727.8	245.6	133.1	31.4	52.0	1,642.4
2013	160.2	293.1	739.5	245.2	130.6	32.1	54.0	1,654.7
2014	157.2	294.9	752.0	244.7	128.8	32.1	56.1	1,665.8
2015	157.0	296.3	760.7	243.7	130.1	32.5	58.5	1,678.7
2016	156.6	297.4	767.6	241.1	129.5	32.4	59.8	1,684.3
2017	158.8	297.1	774.6	238.6	127.9	31.6	59.0	1,687.5
2018	160.3	296.7	778.8	236.8	126.0	31.9	59.3	1,689.8

(a) Includes wholesale and retail trade, transportation, and utilities.
(b) Covers a considerable variety of activities, including professional, business, education, health care and personal services.
(c) Includes finance, insurance, and real estate.
(d) Includes publishing, broadcasting, telecommunications, internet providers, and data processing.
(e) Includes natural resources and mining.
(f) Totals may not equal sum of individual categories due to rounding and seasonal statistical adjustments.

SOURCE: United States Department of Labor, Bureau of Labor Statistics, Connecticut Labor Department

Manufacturing

The manufacturing industry, despite its continuing downward employment trend over the past five decades, has traditionally served as an economic base industry and has been of prime economic importance to Connecticut. Based on the number of jobs derived from this sector, Connecticut ranked 20th in the nation for manufacturing employment as a percentage of total employment in calendar year 2018. The following table provides a ten-year historical picture of manufacturing employment in Connecticut, the New England region and the United States. This downward movement in manufacturing employment levels is also reflected in the New England region and the nation. The transformation in the State's manufacturing base confirms that the State's employment share in the manufacturing sector is converging to the national average. In calendar year 2018 approximately 9.5% of the State's workforce, versus 8.5% for the nation, was employed in the manufacturing sector.

TABLE B-11

Manufacturing Employment
(In Thousands)

Calendar Year	Connecticut Number	Connecticut Percent Growth	New England Number	New England Percent Growth	United States Number	United States Percent Growth
2009	168.4	(8.7)%	619.9	(9.9)%	11,847.8	(11.6)%
2010	162.8	(3.3)	602.4	(2.8)	11,528.7	(2.7)
2011	163.4	0.4	603.4	0.2	11,727.1	1.7
2012	161.9	(0.9)	601.2	(0.4)	11,927.0	1.7
2013	160.2	(1.1)	597.9	(0.5)	12,019.2	0.8
2014	157.2	(1.9)	594.6	(0.6)	12,184.6	1.4
2015	157.0	(0.2)	595.2	0.1	12,335.7	1.2
2016	156.6	(0.3)	591.3	(0.7)	12,352.7	0.1
2017	158.8	1.4	593.1	0.3	12,439.1	0.7
2018	160.3	1.0	597.1	0.7	12,688.0	2.0

Source: United States Department of Labor, Bureau of Labor Statistics, Connecticut State Labor Department

Connecticut has a diverse manufacturing sector, with the construction of transportation equipment (primarily aircraft engines and submarines) being the dominant industry. The State is also a leading producer of military and civilian helicopters. Employment in the transportation equipment sector is followed by fabricated metals, machinery, and computer and electronics for the total number employed in 2018.

TABLE B-12

Manufacturing Employment
By Industry
(In Thousands)

Calendar Year	Transportation Equipment	Fabricated Metals	Computer & Electronics	Machinery	Other[(a)]	Total Manufacturing Employment [(b)]
2009	43.1	29.4	13.5	16.0	66.4	168.4
2010	42.2	28.1	13.3	15.0	64.2	162.8
2011	42.2	28.6	13.4	14.8	64.5	163.4
2012	42.0	29.2	13.1	14.5	63.1	161.9
2013	41.4	30.0	12.8	14.1	61.9	160.2
2014	40.1	29.7	12.6	14.0	60.8	157.2
2015	40.7	29.2	12.3	14.1	60.6	157.0
2016	41.7	29.2	11.7	13.6	60.4	156.6
2017	44.0	29.4	11.2	13.3	60.8	158.8
2018	45.7	29.7	10.9	13.0	61.1	160.3

(a) Includes other industries such as wood products, furniture, glass/stone, primary metals, and instruments in the durable sector, as well as all industries such as chemicals, paper, and plastics in the nondurable sector.

(b) Totals may not equal sum of individual categories due to rounding and seasonal statistical adjustments.

SOURCE: United States Department of Labor, Bureau of Labor Statistics

During the past ten years, Connecticut's manufacturing employment was at its highest in 2009 at 168,400 workers. Since that year, employment in manufacturing continued on a downward trend until 2018. A number of factors, such as heightened foreign competition, outsourcing to offshore locations, and improved productivity played a significant role in affecting the overall level of manufacturing employment. Total manufacturing jobs in Connecticut continued to decline to a recent low of 156,600 in 2016, before rising again in 2018 to 160,317. The total number of manufacturing jobs dropped 8,083, or 4.8%, from its decade high in 2009.

Exports. In Connecticut, the export sector of manufacturing is an important component of the overall economy. According to figures published by the United States Census Bureau Foreign Trade Division, compiled by the World Institute for Strategic Economic Research, exports of manufacturing products registered at $17.4 billion in 2018, accounting for 6.3% of Gross State Product. From 2014 to 2018, the State's export of goods grew at a compound annual rate of 2.2% versus 2.6% growth for the Gross State Product. The following table shows the growth in exports of manufacturing products.

TABLE B-13

Exports Originating in Connecticut
(In Millions)

			Calendar Year			Percent of 2018	Compound Annual Growth Rate
	2014	**2015**	**2016**	**2017**	**2018**	**Total**	**2014-2018**
A. Manufacturing Products							
Transportation Equipment	$7,318.6	$7,012.5	$6,216.3	$6,066.4	$7,670.2	44.1%	1.2%
Computer & Electronics	1,270.6	1,191.0	1,108.7	1,132.4	1,260.6	7.2	(0.2)%
Machinery, Except Electronics	2,072.8	1,666.6	1,769.7	1,945.7	2,259.8	13.0	2.2%
Fabricated Metal Production	733.6	706.7	790.3	829.5	907.8	5.2	5.5%
Chemicals	971.0	1,039.5	865.0	954.5	1,224.7	7.0	6.0%
Misc. Manufacturing	330.7	326.2	327.3	312.6	339.4	2.0	0.6%
Electrical Equipment	1,002.9	1,032.9	958.9	983.6	919.5	5.3	(2.1)%
Plastics & Rubber	233.5	230.3	224.9	269.9	297.7	1.7	6.3%
Paper	142.7	131.2	137.0	152.2	157.7	0.9	2.5%
Primary Metal Mfg.	637.8	675.1	505.1	410.4	323.9	1.9	(15.6)%
Others	1,248.6	1,229.7	1,490.9	1,734.1	2,042.1	11.7	13.1%
Total	$15,962.8	$15,241.8	$14,394.0	$14,791.2	$17,403.4	100.0%	2.2%
% Growth	(2.8)%	(4.5)%	(5.6)%	2.8%	17.7%		
B. Gross State Product[(a)]	$248,865.2	$260,072.6	$263,696.4	$268,310.6	$275,726.9		2.6%
Mfg Exports as a % of GSP	6.4%	5.9%	5.5%	5.5%	6.3%		

(a) In millions.

SOURCE: United States Census Bureau Foreign Trade Division
World Institute for Strategic Economic Research

Defense Industry. One important component of the manufacturing sector in Connecticut is the defense industry. Approximately one quarter of the State's manufacturing employees are employed in defense related business. Nonetheless, this sector's significance in the State's economy has declined considerably since the early 1980s. Connecticut had witnessed a marked reduction in the amount of federal spending earmarked for defense related industries in the State; however, these amounts have been climbing most years since federal Fiscal Year 2002. In federal Fiscal Year 2018 Connecticut received $14.7 billion of prime contract awards. These total awards accounted for 4.4% of national total awards and ranked 6th in total defense dollars awarded and 2nd in per capita dollars awarded among the 50 states. In federal Fiscal Year 2018, Connecticut had $4,114 in per capita defense awards, compared to the national average of $1,027. As measured by a three year moving average of defense contract awards as a percent of Gross State Product, awards to Connecticut-based firms were 6.7% of Gross State Product in Fiscal Year 2018.

Connecticut is a leading producer of aircraft engines and parts, submarines, and helicopters. The largest employers in these industries are United Technologies Corporation, including its Pratt and Whitney Aircraft Division with headquarters in East Hartford, Lockheed Martin with its Sikorsky Division in Stratford, and General Dynamics Corporation's Electric Boat Division in Groton.

The following table provides a historical perspective of defense contract awards for the past ten fiscal years. Defense contracts are awarded in their entirety and multi-year awards are credited in the year they are awarded, thus giving rise to some of the fluctuation.

TABLE B-14

Defense Contract Awards

Federal Fiscal Year	Connecticut Total Contract Award (Thousands)	Connecticut Rank Among States Total Awards	Percent Change from Prior Year: Connecticut	Percent Change from Prior Year: U.S.
2009	$11,851,941	9th	(3.1)%	(6.7)%
2010	11,238,753	8th	(5.2)	(2.4)
2011	12,491,324	7th	11.1	1.9
2012	12,750,298	7th	2.1	(3.1)
2013	10,032,845	8th	(21.3)	(15.8)
2014	13,207,996	4th	31.6	(3.0)
2015	12,148,167	5th	(8.0)	(2.8)
2016	14,134,319	4th	16.3	10.1
2017	11,623,106	7th	(17.8)	7.7
2018	14,699,901	6th	26.5	11.8

SOURCE: United States Department of Defense

Non-manufacturing. The non-manufacturing sector is comprised of industries that primarily provide services. Services differ significantly from manufactured goods in that the output is generally intangible, it is produced and consumed concurrently, and it cannot be inventoried. Consumer demand for services is not as postponable as the purchase of goods, making the flow of demand for services more stable. An economy will therefore generally become more stable as it becomes more service oriented. Over the past several decades the non-manufacturing sector of the State's economy has risen in economic importance, from just over 50% of total State employment in 1950 to approximately 90.5% by 2018. This trend has diluted the State's dependence on manufacturing. From 2009 to 2018, Connecticut gained 59,275 jobs in non-agricultural employment. During this period total non-manufacturing jobs increased by 67,358, while manufacturing jobs declined by 8,083.

The table below provides a ten year profile of non-manufacturing employment in Connecticut, New England and the United States.

TABLE B-15

Non-manufacturing Employment
(In Thousands)

	Connecticut		New England		United States	
Calendar Year	Number	Percent Growth	Number	Percent Growth	Number	Percent Growth
2009	1,462.1	(3.8)%	6,201.7	(2.9)%	119,255.8	(3.7)%
2010	1,449.2	(0.9)	6,204.7	0.0	118,876.3	(0.3)
2011	1,465.3	1.1	6,267.8	1.0	120,312.3	1.2
2012	1,480.4	1.0	6,353.9	1.4	122,362.6	1.7
2013	1,494.5	1.0	6,441.3	1.4	124,597.5	1.8
2014	1,508.5	0.9	6,542.6	1.6	127,092.5	2.0
2015	1,521.8	0.9	6,646.3	1.6	129,809.8	2.1
2016	1,527.8	0.4	6,748.0	1.5	132,240.0	1.9
2017	1,528.8	0.1	6,814.6	1.0	134,223.7	1.5
2018	1,529.4	0.0	6,857.8	0.6	136,213.0	1.5

SOURCE: United States Department of Labor, Bureau of Labor Statistics
Connecticut State Labor Department

Services, retail and wholesale trade, state and local government, as well as finance, insurance, and real estate (FIRE), collectively comprise approximately 84.0% of the State's employment in the non-manufacturing sector. Connecticut non-manufacturing employment for 2009, 2016, 2017 and 2018 is shown in the table below. Total non-manufacturing employment has been broken down by industry. Percent changes over the year and over the decade are also provided. Between 2009 and 2018, employment in the non-manufacturing sector expanded by 67,358 workers driven primarily by an increase of 12.5% in the service industry. Construction and trade also experienced positive growth of 7.3% and 2.9% respectively.

TABLE B-16

Connecticut Non-manufacturing Employment By Industry
(In Thousands)

Industry	Calendar Year 2009	Calendar Year 2016	Calendar Year 2017	Calendar Year 2018	Percent Change 2016-18	Percent Change 2009-18
Construction[(a)]	55.3	59.8	59.0	59.3	(0.8)%	7.3%
Information	34.4	32.4	31.6	31.9	(1.7)	(7.3)
Trade[(b)]	288.2	297.4	297.1	296.7	(0.2)	2.9
Finance, Insurance & Real Estate	137.6	129.5	127.9	126.0	(2.7)	(8.4)
Services[(c)]	692.0	767.6	774.6	778.8	1.5	12.5
Federal Government	19.3	17.8	18.0	18.1	1.7	(5.9)
State and Local Government	235.4	223.2	220.6	218.6	(2.1)	(7.1)
Total Non-manufacturing Employment[(d)]	1,462.1	1,527.8	1,528.8	1,529.4	0.1%	4.6%

(a) Includes natural resources and mining.
(b) Includes wholesale & retail trade, transportation, and utilities.
(c) Covers a considerable variety of activities, including professional, business, education, health care and personal services.
(d) Totals may not agree with detail due to rounding and seasonal statistical data adjustments.

SOURCE: Connecticut State Labor Department

Retail Trade. Personal spending on goods and services generally accounts for over two-thirds of the Gross Domestic Product. Approximately half of personal spending is generally done through retail stores. At the State level, retail trade therefore constitutes approximately one third of the State's economic activity, measured by Gross State Product. During the last decade, variations in retail trade closely matched variations in Gross State Product growth, making retail trade an important barometer of economic health.

The following table shows the major group in each North American Industry Classification System (NAICS) code as well as the State's retail trade history for the past five fiscal years. Connecticut retail trade in Fiscal Year 2019 totaled $60.1 billion, an increase of 5.7% from Fiscal Year 2018. Sales in the durable goods category, which were severely impacted during the recession, registered three consecutive yearly declines before beginning to recover in Fiscal Year 2011 and accelerating further through Fiscal Year 2019. Durable goods are mostly big ticket items such as appliances, furnishings, and automobiles.

TABLE B-17

Retail Trade In Connecticut [(a)]
(In Millions)

NAICS		Fiscal Year 2015	Percent of Fiscal Year 2015 Total	Fiscal Year 2016	Percent of Fiscal Year 2016 Total	Fiscal Year 2017	Percent of Fiscal Year 2017 Total	Fiscal Year 2018	Percent of Fiscal Year 2018 Total	Fiscal Year 2019	Percent of Fiscal Year 2019 Total	Compound Annual Growth Rate 2015-2019
441	Motor Vehicle and Parts Dealers	$9,585.4	17.5%	$9,898.6	17.9%	$10,072.3	18.0%	$10,140.8	17.8%	$11,435.0	19.0%	4.5%
442	Furniture and Home Furnishings Stores	1,306.1	2.4	1,897.6	3.4	2,009.3	3.6	2,003.9	3.5	2,043.1	3.4	11.8
443	Electronics and Appliance Stores	1,653.1	3.0	1,643.8	3.0	1,656.5	3.0	1,633.7	2.9	1,629.9	2.7	(0.4)
444	Building Material and Garden Supply Stores	2,827.5	5.2	3,034.6	5.5	3,020.9	5.4	3,187.3	5.6	3,331.4	5.5	4.2
445	Food and Beverage Stores[(b)]	10,742.8	19.6	10,964.2	19.8	11,045.6	19.7	10,588.4	18.6	10,873.3	18.1	0.3
446	Health and Personal Care Stores	4,847.5	8.8	5,074.7	9.2	5,274.6	9.4	4,291.3	7.5	4,124.3	6.9	(4.0)
447	Gasoline Stations	3,329.8	6.1	3,196.1	5.8	3,297.8	5.9	3,729.1	6.6	3,792.5	6.3	3.3
448	Clothing and Clothing Accessories Stores	2,992.7	5.5	3,083.1	5.6	3,035.6	5.4	3,084.0	5.4	3,083.5	5.1	0.7
451	Sporting Goods, Hobby, Book and Music Stores	1,054.6	1.9	1,084.9	2.0	1,125.1	2.0	1,047.9	1.8	936.4	1.6	(2.9)
452	General Merchandise Stores	5,508.7	10.1	5,503.2	9.9	5,419.0	9.7	5,523.3	9.7	5,465.0	9.1	(0.2)
453	Miscellaneous Store Retailers	5,739.5	10.5	5,773.9	10.4	5,978.1	10.7	6,989.2	12.3	7,916.6	13.2	8.4
454	Nonstore Retailers	5,208.0	9.5	4,204.1	7.6	4,095.5	7.3	4,641.6	8.2	5,451.4	9.1	1.1
	Total[(a)]	$54,795.7	100.0%	$55,358.8	100.0%	$56,030.3	100.0%	$56,860.5	100.0%	$60,082.4	100.0%	2.3%
Durables (NAICS 441, 442, 443, 444)		$15,843.0	29.0%	$16,475.0	29.8%	$16,759.0	29.9%	$16,966.0	29.8%	$18,439.0	30.7%	1.7%
Non Durables (all other NAICS)		$38,712.0	71.0%	$38,884.0	70.2%	$39,271.0	70.1%	$39,895.0	70.1%	$41,643.0	69.3%	0.8%

(a) Totals may not agree with detail due to rounding.

SOURCE: Connecticut Department of Revenue Services

Unemployment Rates. The unemployment rate is the proportion of persons in the civilian labor force who do not have jobs but are actively looking for work. Unemployment rates tend to be high during economic slowdowns and low when the economy is expanding. The rate is widely utilized as a proxy for consumer confidence. In general, when the unemployment rate is high consumer spending is lower and vice versa.

After enjoying an extraordinary boom during the late 1990s, Connecticut, as well as the rest of the Northeast and the Nation, experienced an economic slowdown during the recession of the early 2000s. The unemployment rate in the State reached a low of 2.4% in 2000, compared to New England's average of 2.8% and the national average of 4.0%. After climbing to 5.4% in 2003, Connecticut's unemployment rate declined to 4.3% by 2006, but climbed during the most recent recession to 9.1% in 2010. Connecticut's average unemployment rate fell to 3.8% in 2019 (average of the first six months) compared to the New England average of 3.2% and the national average of 3.8% for the same period.

The following table compares the unemployment rate averages of Connecticut, New England, and the United States for the calendar years 2009 through 2019.

SUPPLEMENTARY INFORMATION AS OF JULY 15, 2020

TABLE B-18 is replaced and updated as follows:

TABLE B-18

Unemployment Rate[(a)]

Calendar Year	**Unemployment Rate**		
	Connecticut	**New England**	**United States**
2009	7.9%	8.0%	9.3%
2010	9.1	8.4	9.6
2011	8.8	7.7	8.9
2012	8.4	7.2	8.1
2013	7.8	6.9	7.4
2014	6.6	5.9	6.2
2015	5.7	4.9	5.3
2016	5.2	4.2	4.9
2017	4.7	3.8	4.4
2018	4.1	3.5	3.9
2019	3.7	3.1	3.7

(a) On a preliminary basis, Connecticut's average annual unemployment rate was estimated by the federal Bureau of Labor Statistics at 7.9% for April 2020, compared to the national average of 14.7%. Connecticut Department of Labor's Office of Research has indicated that the State's unemployment rate appears severely underestimated due to the challenges encountered in the collection of data and the department estimates, based on unemployment compensation filings, the Connecticut unemployment rate to be in the range of 17.5% for April 2020. Recent projections from IHS estimate the State's Fiscal Year 2020 average annual unemployment rate to be 7.4% and the State's Fiscal Year 2021 unemployment rate to grow to 15.5%.

SOURCE: Connecticut State Labor Department
Federal Reserve Bank of Boston
United States Department of Labor, Bureau of Labor Statistics

[THIS PAGE INTENTIONALLY LEFT BLANK]

APPENDIX II-C

KEVIN LEMBO
STATE COMPTROLLER

MARTHA CARLSON
DEPUTY COMPTROLLER

STATE OF CONNECTICUT
OFFICE *of the* STATE COMPTROLLER
165 Capitol Ave.
Hartford, CT 06106

February 21, 2020

The Honorable Shawn T. Wooden
State Treasurer
165 Capitol Avenue
Hartford, CT 06106

Dear Treasurer Wooden:

I have reviewed the accompanying general purpose financial statements of the State of Connecticut for the Fiscal Year ended June 30, 2019. The statements and the subsequent Independent Auditors' Report are incorporated within the Comprehensive Annual Report of the State of Connecticut, which is prepared by my office using the guidance of generally accepted accounting principles.

Sincerely,

Kevin Lembo
State Comptroller

STATE OF CONNECTICUT

AUDITORS OF PUBLIC ACCOUNTS

JOHN C. GERAGOSIAN

STATE CAPITOL
210 CAPITOL AVENUE
HARTFORD, CONNECTICUT 06106-1559

ROBERT J. KANE

INDEPENDENT AUDITORS' REPORT

Governor Ned Lamont
Members of the General Assembly

Report on the Financial Statements

We have audited the accompanying financial statements of the governmental activities, the business-type activities, the aggregate discretely presented component units, certain major funds, and the aggregate remaining fund information of the State of Connecticut as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise the state's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We did not audit:

Government-wide Financial Statements

- the financial statements of the Special Transportation Fund account within the Transportation Fund and the Transportation Special Tax Obligations account within the Debt Service Fund, which in the aggregate, represent 6% of the assets, 3% of the net position and 8% of the revenues of the Governmental Activities;
- the financial statements of the John Dempsey Hospital account within the University of Connecticut and Health Center, the Connecticut State University System, Bradley International Airport Parking Facility, and the federal accounts for the Clean Water Fund and Drinking Water Fund, which in the aggregate, represent 44% of the assets, 29% of the net position and 31% of the revenues of the Business-Type Activities;
- the financial statements of the discretely presented component units.

Fund Financial Statements

- the financial statements of the Special Transportation Fund account, which represents 99% of the assets and 98% of the revenues of the Transportation Fund;
- the financial statements of the Transportation Special Tax Obligations account, which represents 100% of the assets and 100% of the revenues of the Debt Service Fund;
- the financial statements of the John Dempsey Hospital account within the University of Connecticut and Health Center, the Connecticut State University System, Bradley International Airport Parking Facility, and the federal accounts for the Clean Water Fund and Drinking Water Fund, which in the aggregate, represent 44% of the assets, 29% of the net position and 31% of the revenues of the Enterprise Funds.

Those financial statements were audited by other auditors whose reports thereon have been furnished to us, and our opinion, insofar as it relates to the amounts included for the aforementioned funds and accounts, is based solely on the reports of the other auditors.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement. In addition, the financial statements of the Special Transportation Fund, Transportation Special Tax Obligations Fund, Clean Water Fund, Drinking Water Fund, Connecticut Housing Finance Authority, Connecticut Airport Authority, Materials Innovation and Recycling Authority, Connecticut Health and Educational Facilities Authority, Capital Region Development Authority, Connecticut Innovations Incorporated, Connecticut Green Bank, Connecticut Lottery Corporation and Connecticut Health Insurance Exchange were audited by other auditors in accordance with standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. The audits of the financial statements of the Bradley International Airport Parking Facility, Connecticut State University System, and the University of Connecticut Foundation were not conducted in accordance with *Government Auditing Standards*.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Basis for Qualified Opinion on the Major Enterprise Fund Board of Regents

The Board of Regents includes the financial activity of the Connecticut State University System and the Connecticut Community Colleges. As noted above, the financial statements of the Connecticut State University System were audited by other auditors whose reports were furnished to us, and which we are relying on. The financial statements of the Connecticut Community Colleges were not audited, and we were not engaged to audit the Connecticut Community Colleges' financial statements as part of our audit of the State of Connecticut's basic financial statements. The financial activities of the Connecticut Community Colleges represent 33%, 39%, and 23% of the assets, net position, and revenues, respectively, of the Board of Regents, and furthermore, represent 9%, 11% and 4% of the assets, net position, and revenues, respectively, of the Business-Type Activities.

Qualified Opinion

In our opinion, except for the possible effects of the matter described in the *Basis for Qualified Opinion on the Major Enterprise Fund Board of Regents* paragraph, the financial statements referred to above present fairly, in all material respects, the financial position and cash flows of the Board of Regents of the State of Connecticut, as of and for the year ended June 30, 2019, and the respective changes in financial position and cash flows thereof for the year then ended in conformity with accounting principles generally accepted in the United States of America.

Unmodified Opinions

In our opinion, based upon our audit and the reports of other auditors, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities, the business-type activities, the aggregate discretely presented component units, the General Fund, Debt Service Fund, Transportation Fund, Restricted Grants & Accounts Fund, Grants & Loan Programs Fund, University of Connecticut & Health Center Fund, Employment Security Fund, Clean Water Fund, and the aggregate remaining fund information of the State of Connecticut, as of June 30, 2019, and the respective changes in financial position, and, where applicable, cash flows thereof for the year then ended in conformity with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, budgetary comparison schedules, pension plan schedules and information, and the other postemployment benefits schedules, as listed in the accompanying table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information, in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during the course of our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary and Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the State of Connecticut's basic financial statements. The combining and individual nonmajor fund financial statements are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The combining and individual nonmajor fund financial statements are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America by us and the other auditors. In our opinion, based on our audit, the procedures performed as described above, and the reports of the other auditors, the combining and individual nonmajor fund financial statements are fairly stated, in all material respects, in relation to the basic financial statements taken as a whole.

The introductory and statistical sections are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information has not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated February 21, 2020, on our consideration of the State of Connecticut's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report will be issued under separate cover in the *Auditors' Report on Internal Control over Financial Reporting and on Compliance and Other Matters for the Fiscal Year Ended June 30, 2019, State of Connecticut Comprehensive Annual Financial Report* and is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be considered in assessing the results of our audit.

John C. Geragosian
State Auditor

Robert J. Kane
State Auditor

February 21, 2020
State Capitol
Hartford, Connecticut

MANAGEMENT'S DISCUSSION AND ANALYSIS

THIS PAGE INTENTIONALLY LEFT BLANK

MANAGEMENT'S DISCUSSION AND ANALYSIS

INTRODUCTION

The following is a discussion and analysis of the State's financial performance and condition providing an overview of the State's activities for the fiscal year ended June 30, 2019. The information provided here should be read in conjunction with the letter of transmittal in the front of this report and with the State's financial statements, which follow this section.

HIGHLIGHTS

Government-wide Financial Statements
The State's total net position (deficit) decreased $1.4 billion (or 2.9 percent) as a result of this year's operations. Net position (deficit) of governmental activities decreased by $1.1 billion (or 2.1 percent) and net position of business-type activities increased by $263.7 million (or 3.8 percent). At year-end, net position (deficit) of governmental activities and business-type activities totaled a negative $53.5 billion and $7.3 billion, respectively.

Component units reported net position of $2.26 billion, an increase of $18.1 million or 0.81 percent from the previous year. Most of the net position is attributable to the Connecticut Housing Finance Authority, a major component unit.

Fund Financial Statements
The governmental funds reported combined ending fund balance of $6.5 billion, an increase of $1.7 billion in comparison with the prior year. Of this total fund balance, $205.4 million represents nonspendable fund balance, $4.2 billion represents restricted fund balance, $2.7 billion represents committed fund balance, and $183.8 million represents assigned fund balance. A negative $772.2 million unassigned fund balance offsets these amounts. This deficit belongs primarily to the General Fund which increased by $530.4 million during the fiscal year.

The State's stabilization account, the General Fund Budget Reserve Fund (Rainy Day Fund) ended the fiscal year with a balance of $2.5 billion compared to the prior year's balance of $1.2 billion. The primary reason for the increase as in the prior fiscal year, significant progress was made toward building the balance of the Budget Reserve Fund. This was primarily due to the revenue volatility cap, first implemented in fiscal year 2018. This statutory provision requires revenues above a certain threshold to be transferred to the Budget Reserve Fund. For fiscal year 2019, the cap was $3,196.8 million for estimated and final income tax payments and revenue from the Pass-through Entity tax. At year-end, a volatility transfer of $949.7 million was made to the Budget Reserve Fund.

Prior to the close of fiscal year 2019, the balance in the Budget Reserve Fund was $1,185.3 million, which represented approximately 6.2 percent of net General Fund appropriations. Adding the $949.7 million volatility transfer and the surplus transfer of $370.67 million would bring the year-end balance of the Budget Reserve Fund to just over $2.5 billion or approximately 13 percent of net General Fund appropriations for fiscal year 2020. Therefore, the Budget Reserve Fund balance more than doubled based on fiscal year 2019 results. This represents a major step forward, but there is still more work to do. In order to help protect against future economic downturns, Connecticut must maintain financial discipline and continue building the Budget Reserve Fund balance to the statutory target of 15 percent.

Tax revenues in the governmental funds increased $132.9 million or 0.7 percent. General fund tax revenues increased $100.2 million or 0.6 percent.

The Enterprise funds reported net position of $7.3 billion at year-end, an increase of $263.7 million during the year, substantially all of which was invested in capital assets or restricted for specific purposes.

Long–Term Debt
Total long-term debt was $83.1 billion for governmental activities at year-end, of which $26.7 billion was bonded debt.

Total long-term debt was $2.1 billion for business-type activities at year-end, of which $1.6 billion was bonded debt.

OVERVIEW OF THE FINANCIAL STATEMENTS

This discussion and analysis is an introduction to the State's basic financial statements. The State's basic financial statements are comprised of three components: 1) government-wide financial statements, 2) fund financial statements, and 3) notes to the financial statements. The report also contains other supplementary information to provide additional support to the basic financial statements.

Government-wide Financial Statements – Reporting the State as a Whole
The Statement of Net Position and the Statement of Activities beginning on page II-C-29 together comprise the government-wide financial statements. These financial statements are designed to provide readers with a broad overview of the State's finances, in a manner similar to a private-sector business. All revenues and expenses are recognized regardless of when cash is received or spent, and all assets, deferred outflows of resources, liabilities and deferred inflows of resources, including capital assets and long-term debt, are reported at the entity level. The government-wide statements report the State's net position and changes in net position. Over time, increases and decreases in net position measure whether the State's overall financial condition is getting better or worse. Non-financial factors such as the State's economic outlook, changes in its demographics, and the condition of capital assets and infrastructure should also be considered when evaluating the State's overall condition.

The statement of net position presents information on all of the State's assets and deferred outflows of resources, and liabilities and deferred inflows of resources with the difference between them reported as net position. Net position is displayed in three components – net investment in capital assets; restricted; and unrestricted.

The statement of activities presents information showing how the State's net position changed during fiscal year 2019. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of the related cash flows. Thus, revenues and expenses are reported in this statement for some items that will result in cash flows in future fiscal periods (e.g., uncollected taxes and earned but unused vacation leave).

Both the Statement of Net Position and Statement of Activities report three separate activities. These activities are described as follows:

- **Governmental Activities** – The State's basic services fall under this activity including legislative, general government, regulation and protection, conservation and development, health and hospital, transportation, human services, education, corrections, and judicial. Taxes and intergovernmental revenues are major funding sources for these programs.

- **Business-type Activities** – The State operates certain activities much like private-sector companies by charging fees to cover all or most of the costs of providing goods and services. The major business-type activities of the State include the University of Connecticut and Health Center, Board of Regents (Connecticut State Universities & Community Colleges), Employment Security Fund, and Clean Water Fund.

- **Discretely Presented Component Units** – A number of entities are legally separate from the State, yet the State remains financially accountable for them. The major component units of the State are Connecticut Housing Finance Authority, Connecticut Lottery Corporation, and Connecticut Airport Authority.

Fund Financial Statements – Report the State's Most Significant Funds
The fund financial statements beginning on page I-C-34 provide detailed information about individual major funds, not the State as a whole. A fund is a group of related accounts that is used to maintain control over resources that have been segregated for specific activities or objectives. The State uses fund accounting to ensure and demonstrate compliance with finance-related legal requirements. All of the funds of the State can be divided into three categories: governmental funds, proprietary funds, and fiduciary funds.

- **Governmental Funds –** Most of the State's basic services are accounted for in governmental funds and are essentially the same functions reported as governmental activities in the government-wide financial statements. Governmental funds use the modified accrual basis of accounting, which measures the flow of current financial resources that can be converted to cash and the balances left at year-end that are available for future spending. This short-term view of the State's financial position helps determine whether the State has sufficient resources to cover expenditures for its basic services in the near future.

  Because the focus of governmental funds is narrower than that of the government-wide financial statements, it is useful to compare the information presented for governmental funds with similar information presented for governmental activities in the government-wide financial statements. By doing so, readers may better understand the long-term impact of the State's near-term financing decisions. Both the governmental fund balance sheet and the governmental fund statement of revenues, expenditures, and changes in fund balance provide a reconciliation to facilitate the comparison between governmental funds and governmental activities. These reconciliations are presented on the page immediately following each governmental fund financial statement.

  The State reports five individual governmental funds. Information is presented separately in the governmental fund statements for the General Fund, Debt Service Fund, Transportation Fund, Restricted Grants and Accounts Fund, and Grants and Loan Programs Fund, all of which are considered major funds. Data from the other nineteen governmental funds is combined into a single, aggregated presentation. Individual fund data for each of these nonmajor governmental funds is provided in the combining statements immediately following the required supplementary information.

- **Proprietary Funds** – Proprietary funds include enterprise funds and internal service funds and account for activities that operate more like private-sector businesses and use the full accrual basis of accounting. Enterprise funds charge fees for services provided to outside customers. Enterprise funds are reported as business-type activities on the government-wide financial statements. Internal Service funds are an accounting device used to accumulate and allocate costs internally among the State's various functions. The State uses Internal Service funds to account for correction industries, information technology, and administrative services. Because these services predominately benefit governmental rather than business-type functions, they have been included within governmental activities in the government-wide financial statements.

  The State reports four individual proprietary funds. Information is presented separately in the proprietary fund statements for the University of Connecticut and Health Center, Board of Regents (Connecticut State Universities & Connecticut Community Colleges), Employment Security, and Clean Water all of which are considered major funds. Data from the other enterprise funds is combined into a single, aggregated presentation. Individual fund data for all nonmajor proprietary funds is provided in the combining statements immediately following the required supplementary information.

- **Fiduciary Funds –** Fiduciary funds account for resources held by the State in a trustee or agency capacity for others. Fiduciary funds are not included in the government-wide financial statements because the resources of those funds are not available to support the State's own programs. The accounting used for fiduciary funds is much like that used for proprietary funds. The State's fiduciary activities are reported in separate Statements of Fiduciary Net Position and Changes in Fiduciary Net Position.

- **Component Units –** The government-wide financial statements report information for all component units into a single, aggregated presentation. Information is provided separately in the component unit fund statements for the Connecticut Housing Finance Authority, Connecticut Lottery, and Connecticut Airport Authority. Data from the other component units is combined into a single, aggregated presentation. Individual fund data for all other nonmajor component units is provided in the combining statements immediately following the required supplementary information.

Reconciliation between Government-wide and Fund Statements
The financial statements include schedules on pages II-C-35 and II-C-37 which reconcile and explain the differences between the amounts reported for governmental activities on the government-wide statements (full accrual basis of accounting, long-term focus) with amounts reported on the governmental fund statements (modified accrual basis of accounting, short-term focus). The following are some of the major differences between the two statements.

- Capital assets and long-term debt are included on the government-wide statements but are not reported on the governmental fund statements.
- Capital outlay spending results in capital assets on the government-wide statements but is expenditures on the governmental fund statements.
- Bond proceeds result in liabilities on the government-wide statements but are other financing sources on the governmental fund statements.
- Net Pension Liability and Net OPEB Liability are included on the government-wide statements but are not reported on the governmental fund statements.
- Certain tax revenues that are earned but not yet available are reported as revenue on the government-wide statements but are deferred inflows of resource on the governmental fund statements.

Notes to the Financial Statements
The notes to the financial statements provide additional information that is essential to a full understanding of the data provided in the government-wide and fund financial statements. The notes to the financial statements can be found immediately following the component unit fund financial statements.

Required Supplementary Information (RSI)
Following the basic financial statements are budgetary comparison schedules for major funds with legally adopted budgets. In addition, within the RSI there is a reconciliation schedule for Budgetary vs. GAAP basis of accounting. The RSI also includes information regarding employer contributions for pension and other postemployment benefits, change in employers' net pension liability and OPEB liability, and investment return for the State's pension and OPEB plans.

Supplementary Information
The combining financial statements for the State's nonmajor governmental, nonmajor enterprise, nonmajor fiduciary funds, and nonmajor discretely presented component units.

Statistical Section
This section provides up to ten years of financial, economic, and demographic information.

FINANCIAL ANALYSIS OF THE GOVERNMENT AS A WHOLE

Net Position

The combined net position deficit of the State decreased $1.4 billion or 2.9 percent. In comparison, last year the combined net position deficit decreased $11.1 billion or 18.9 percent. The net position deficit of the State's governmental activities decreased $1.1 billion (2.1 percent) to $53.5 billion during the current fiscal year.

State Of Connecticut's Net Position (Expressed in Millions)

	Governmental Activities		Business-Type Activities		Total Primary Government	
	2019	2018	2019	2018	2019	2018
ASSETS						
Current and Other Assets	$ 7,481	$ 5,818	$ 2,844	$ 2,659	$ 10,325	$ 8,477
Noncurrent Assets	18,055	17,417	7,065	7,112	25,120	24,529
Total Assets	25,536	23,235	9,909	9,771	35,445	33,006
Deferred Outflows of Resources	8,507	9,084	8	12	8,515	9,096
LIABILITIES						
Current Liabilities	4,718	4,967	671	673	5,389	5,640
Long-term Liabilities	80,814	80,877	1,984	2,066	82,798	82,943
Total Liabilities	85,532	85,844	2,655	2,739	88,187	88,583
Deferred Inflows of Resources	1,983	1,076	6	7	1,989	1,083
NET POSITION						
Net Investment in Capital Assets	4,508	4,321	4,262	4,287	8,770	8,608
Restricted	3,690	3,027	1,087	1,099	4,777	4,126
Unrestricted	(61,670)	(61,949)	1,907	1,651	(59,763)	(60,298)
Total Net Position (Deficit)	$ (53,472)	$ (54,601)	$ 7,256	$ 7,037	$ (46,216)	$ (47,564)

Total investment in capital assets net of related debt was $4.5 billion (buildings, roads, bridges, etc.); and $3.7 billion was restricted for specific purposes, resulting in an unrestricted net position deficit of $61.7 billion for governmental activities. This deficit is the result of having long-term obligations that are greater than currently available resources. The State has recorded the following outstanding long-term obligations which contributed to the deficit: a) general obligation bonds outstanding of $18.4 billion to finance various municipal grant programs (e.g., school construction) and $2.2 billion issued to finance a contribution to a pension trust fund; and b) other long-term obligations in the amount of $56.4 billion, which are partially funded or not funded by the State (e.g., net pension and OPEB liabilities and compensated absences).

Net position of the State's business-type activities increased $263.7 million (3.8 percent) to $7.3 billion during the current fiscal year. Of this amount, $4.3 billion was invested in capital assets and $1.1 billion was restricted for specific purposes, resulting in unrestricted net position of $1.9 billion. These resources are not available to make up for the net position deficit of the State's governmental activities. The State can only use these net positions to finance the ongoing operations of its Enterprise funds (such as the University of Connecticut and Health Center and others).

Changes in net position for the years ended June 30, 2019 and 2018 were as follows:

State of Connecticut's Changes in Net Position
(Expressed in Millions)

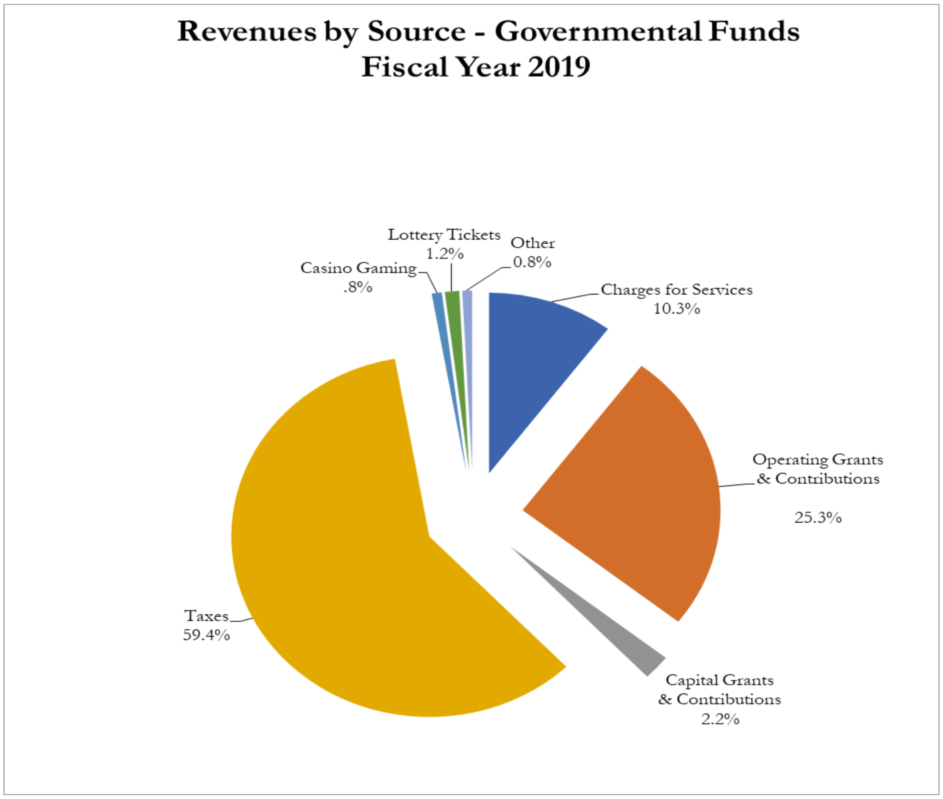
	Governmental Activities		Business-Type Activities		Total		% change
	2019	2018	2019	2018	2019	2018	19-18
REVENUES							
Program Revenues							
Charges for Services	$ 3,190	$ 2,642	$ 2,991	$ 2,947	$ 6,181	$ 5,589	10.6%
Operating Grants and Contributions	7,883	7,563	365	350	8,248	7,913	4.2%
Capital Grants and Contributions	696	651	4	5	700	656	6.7%
General Revenues							
Taxes	18,471	18,309	-	-	18,471	18,309	0.9%
Casino Gaming Payments	255	273	-	-	255	273	-6.6%
Lottery Tickets	361	336	-	-	361	336	7.4%
Other	251	166	44	29	295	195	51.3%
Total Revenues	31,107	29,940	3,404	3,331	34,511	33,271	3.7%
EXPENSES							
Legislative	107	72	-	-	107	72	48.6%
General Government	2,781	1,518	-	-	2,781	1,518	83.2%
Regulation and Protection	841	542	-	-	841	542	55.2%
Conservation and Development	1,177	636	-	-	1,177	636	85.1%
Health and Hospital	2,629	1,612	-	-	2,629	1,612	63.1%
Transportation	2,120	1,284	-	-	2,120	1,284	65.1%
Human Services	9,736	5,950	-	-	9,736	5,950	63.6%
Education, Libraries, and Museums	5,051	3,189	-	-	5,051	3,189	58.4%
Corrections	2,115	1,335	-	-	2,115	1,335	58.4%
Judicial	973	605	-	-	973	605	60.8%
Interest and Fiscal Charges	978	889	-	-	978	889	10.0%
University of Connecticut & Health Center	-	-	2,485	2,402	2,485	2,402	3.5%
Board of Regents	-	-	1,398	1,365	1,398	1,365	2.4%
Employment Security	-	-	620	696	620	696	-10.9%
Clean Water	-	-	42	44	42	44	-4.5%
Other	-	-	65	58	65	58	12.1%
Total Expenses	28,508	17,632	4,610	4,565	33,118	22,197	49.2%
Excess (Deficiency) Before Transfers	2,599	12,308	(1,206)	(1,234)	1,393	11,074	
Transfers	(1,470)	(1,562)	1,470	1,562	-	-	
Increase in Net Position	1,129	10,746	264	328	1,393	11,074	
Net Position (Deficit) - Beginning (as restated)	(54,601)	(65,347)	6,992	6,709	(47,609)	(58,638)	
Net Position (Deficit) - Ending	(53,472)	(54,601)	7,256	7,037	(46,216)	(47,564)	-2.8%

Note: The beginning Net Position for Business-Type Activities was restated due to a restatement for Uconn and the Health Center.

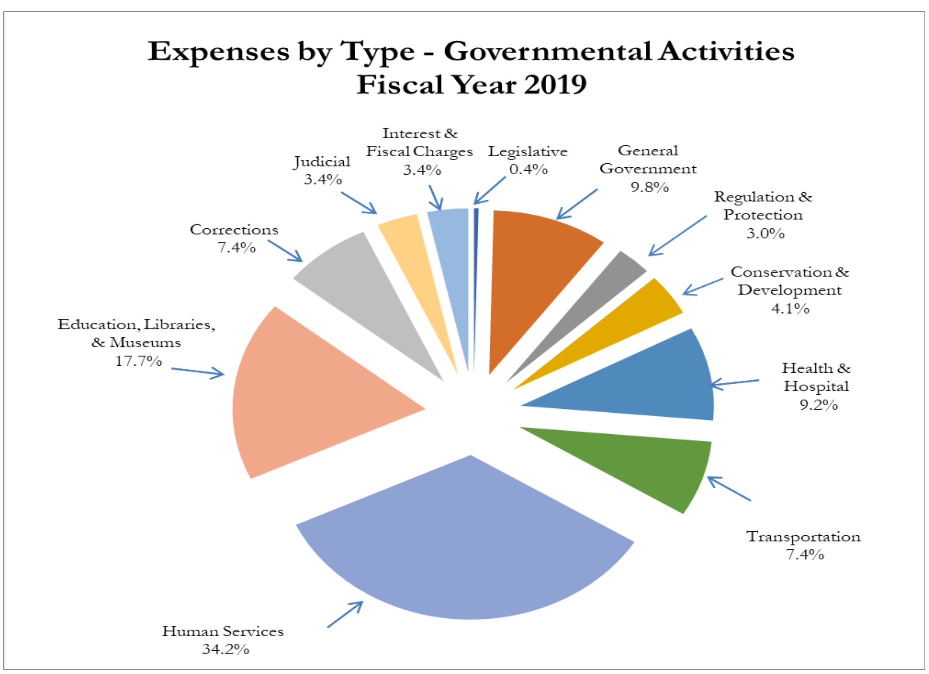
Changes in Net Position

This year the State's governmental activities received 59.4 percent of its revenue from taxes and 27.6 percent of its revenues from grants and contributions. In the prior year, taxes accounted for 61.2 percent and grants and contributions were 27.4 percent of total revenues. Charges for services such as licenses, permits and fees, rents and fines, and other miscellaneous collections comprised 13.0 percent of total revenue in fiscal year 2019, compared to 11.4 percent in fiscal year 2018.

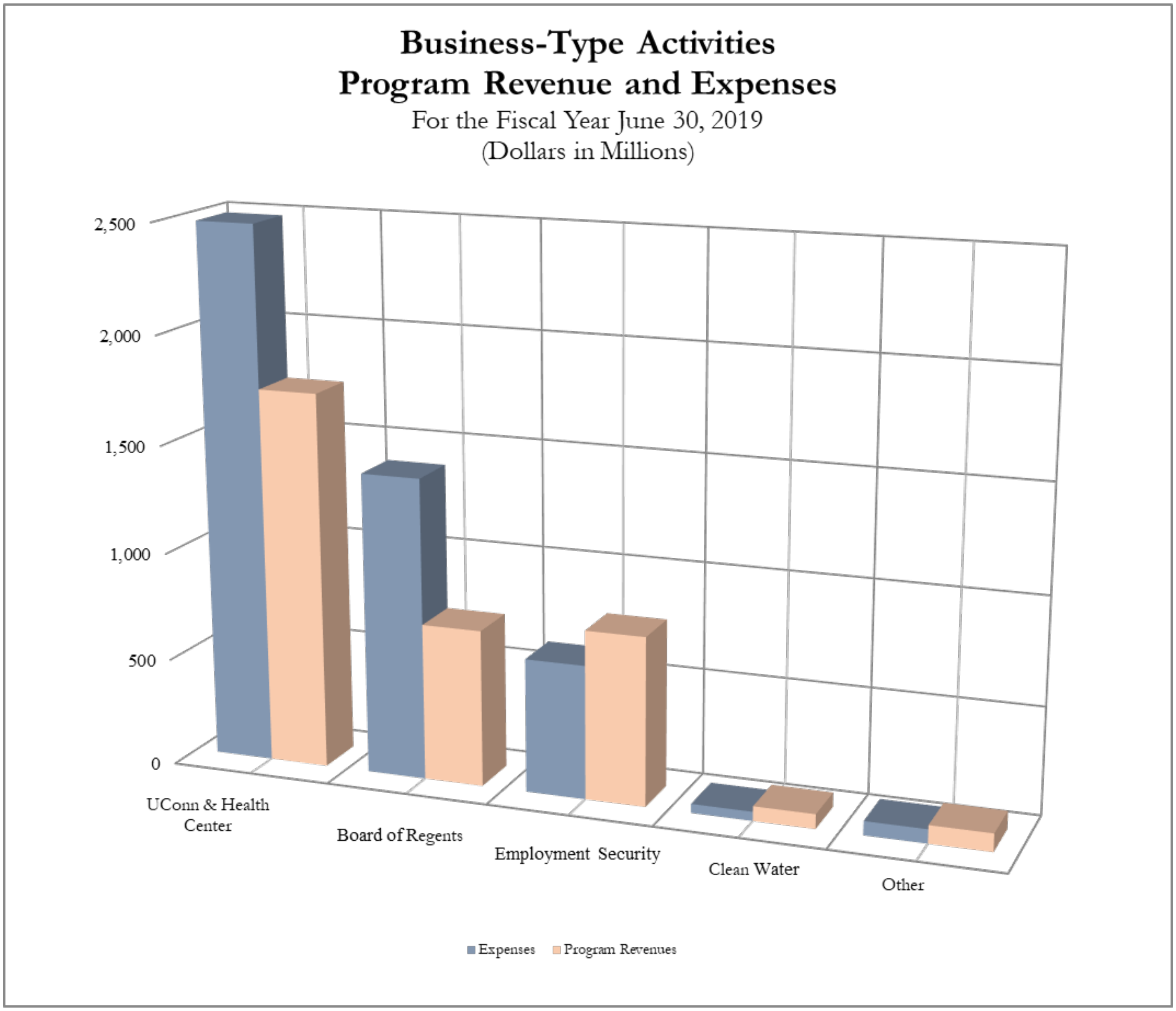
Governmental Activities
The following graph is a representation of the Statement of Activities revenues for governmental activities. Governmental activities revenues increased by $1.2 billion, or 3.9 percent. This increase is primarily due to an increase of $548 million in charges for services and an increase of $320 million in operating grants and contributions.



The following graph is a representation of the Statement of Activities expenses for governmental activities. Governmental activities expenses increased by $10.9 billion, or 61.7 percent.



Business-Type Activities
Net position of business-type activities increased by $263.7 million during the fiscal year. The following chart highlights the changes in net position for the major enterprise funds.



During the year, total revenues of business-type activities increased 2.2 percent to $3.4 billion, while total expenses increased 1.0 percent to $4.6 billion. In comparison, last year total revenues increased 1.8 percent, while total expenses increased 1.5 percent. The increase in total expenses of $45.5 million was due mainly to an increase in University of Connecticut and Health Center expenses of $83.3 million or 3.5 percent. Although total expenses exceeded total revenues by $1.2 billion, this deficiency was reduced by transfers of $1.5 billion, resulting in an increase in net position of $263.7 million.

FINANCIAL ANALYSIS OF THE STATE'S GOVERNMENTAL FUNDS

As of the end of the fiscal year, the State's governmental funds had fund balances of $6.5 billion, an increase of $1.7 billion over the prior year ending fund balances. Of the total governmental fund balances, $4.2 billion represents fund balance that is considered restricted for specific purposes by external constrains or enabling legislation; $205.4 million represents fund balance that is non-spendable and $2.9 billion represents fund balance that is committed or assigned for specific purposes. A negative $772.2 million unassigned fund balance offsets these amounts.

General Fund

The General Fund is the chief operating fund of the State. At the end of the fiscal year, the General Fund had a fund balance of $2.1 billion, an increase of $969.9 million in comparison with the prior year. Of this total fund balance, $2.9 billion represents non-spendable fund balance, committed or assigned for specific purposes, leaving a deficit of $771.4 million in unassigned fund balance.

Specific changes to the General Fund balance included the following:

- Nonspendable fund balance increased by $5.9 million or 10.5 percent.
- Committed fund balance increased by $1.3 billion or 99.9 percent. The primary reason for the increase as in the prior fiscal year, significant progress was made toward building the balance of the Budget Reserve Fund. This was primarily due to the revenue volatility cap, first implemented in fiscal year 2018. This statutory provision requires revenues above a certain threshold to be transferred to the Budget Reserve Fund.
- Assigned fund balance increased by $160.0 million due to a Surplus transfer to fiscal year 2020-2021.
- Unassigned fund balance deficit increased by $530.4 million.

At the end of fiscal year 2019, General Fund revenues were .55 percent, or $113.6 million, higher than fiscal year 2018 revenues. This change in revenue results from increases of $201.0 million primarily attributable to taxes ($100.2 million), lottery tickets ($24.8 million), investment earnings ($33.0 million), and fines, forfeits, and rents ($43.0 million). These increases were offset by decreases of $87.4 million primarily attributable to licenses, permits, and fees ($14.3 million), charges for services ($6.1 million), casino gaming ($17.7 million), federal grants ($28.7 million), and other revenue ($20.6 million).

At the end of fiscal year 2019, General Fund expenditures were 1.6 percent, or $281.2 million, higher than fiscal year 2018. This was primarily attributable to increases in human services ($46.7 million), general government ($245.9 million), and education, libraries, and museums ($51.5 million).

Debt Service Fund

At the end of fiscal year 2019, the Debt Service Fund had a fund balance of $991.8 million, all of which was restricted, an increase of $89.9 million in comparison with the prior year.

Transportation Fund

The State's Transportation Fund had a fund balance of $397.6 million at the end of fiscal 2019. Of this amount, $23.5 million was in nonspendable form and $374.1 million was restricted or committed for specific purposes. Fund balance increased by $76.1 million during the current fiscal year.

At the end of fiscal year 2019, Transportation Fund revenues increased by $53.4 million, or 3.2 percent, and expenditures increased by $60.9 million, or 6.4 percent. The growth in revenue was primarily due to an increase in tax receipts.

Restricted Grants and Accounts Fund

At the end of fiscal year 2019, the Restricted Grants and Accounts Fund had a fund balance of $616.8 million, all of which was restricted for specific purposes, an increase of $338.6 million in comparison with the prior year.

Total revenues were 11.0 percent, or $782.4 million, higher than in fiscal year 2018. Overall, total expenditures were 5.3 percent, or $383.5 million, higher than fiscal year 2018.

Grant and Loan Programs

As of June 30, 2019, the Grant and Loan Programs Fund had a fund balance of $726.3 million, all of which was restricted or committed for specific purposes, a decrease of $161.0 million in comparison with the prior year.

FINANCIAL ANALYSIS OF THE STATE'S PROPRIETARY FUNDS

Proprietary funds report activities of the State that are similar to for-profit business. Proprietary fund financial statements provide the same type of information as the government-wide financial statements, only in more detail. Accordingly, a discussion of the financial activities of the Proprietary funds is provided in that section.

FINANCIAL ANALYSIS OF THE STATE'S FIDUCIARY FUNDS

The State maintains Fiduciary funds for the assets of Pension and Other Employee Benefit Trust funds, an Investment Trust fund, and a Private-Purpose Trust fund. The net positions of the State's Fiduciary funds totaled $37.9 billion, an increase of $2.0 billion when compared to the prior year ending net position.

Budget Highlights - General and Transportation Funds

The State budget is formulated during odd-numbered years; the General Assembly generates a two-year (biennial) budget. The process begins with the Executive Branch, when the governor asks the commissioner of each state agency to prepare draft budgets for the following biennium. Over several months the governor's budget office, the Office of Policy and Management (OPM), compiles this information, makes changes as it sees fit, and then works to match the agencies' spending projections with revenue estimates for the same period.

The results referred to as the 'governor's budget,' is delivered to the General Assembly in a formal address by the governor in early February. The annual budget address often includes policy initiatives, spending proposals, and vehicles through which additional revenue may be generated. In the address, the governor identifies his priorities for the biennium.

Thereafter, the legislature goes through a similar process to determine spending priorities and corresponding revenue requirements. Later in the session, the Appropriations and Finance Committees approve a budget, which is often different from the governor's proposal. Negotiations with the governor's office reconcile the two versions and determine the final budget language and the state's fiscal path for the following two years. Lastly, the budget must be voted on and passed by both the House and Senate and signed into law by the governor.

The General Fund ended Fiscal Year 2019 with a surplus of $370,597,419 on the statutory basis of accounting. In accordance with Section 4-30a of the Connecticut General Statutes, the surplus was transferred to the Budget Reserve Fund (BRF). The Special Transportation Fund had an operating surplus of $74,395,384 which left a positive fund balance of $320,116,310 at the close of Fiscal Year 2019.

In FY 2019, as in the prior fiscal year, significant progress was made toward building the balance of the BRF. This was primarily due to the revenue volatility cap, first implemented in FY 2018. This statutory provision requires revenues above a certain threshold to be transferred to the BRF. For FY 2019, the cap was $3,196.8 million for estimated and final income tax payments and revenue from the Pass-through Entity tax. At year-end, a volatility transfer of $949,680,660 was made to the BRF.

Prior to the close of FY 2019, the balance of the BRF was $1,185,259,428, which represented approximately 6.2 percent of net General Fund appropriations. Adding the $949.7 million volatility transfer and the FY 2019 surplus of $370.6 million brought the year-end balance of the BRF to just over $2.5 billion or approximately 13 percent of net General Fund appropriations for FY 2020. Therefore, the BRF balance more than doubled based on FY 2019's operating results. This represents a major step forward, but there is still more work to do. In order to help protect against future economic downturns, Connecticut must maintain financial discipline and continue building the BRF balance to the statutory target of 15 percent.

Unlike the earlier years of the economic recovery, FY 2019 was characterized by more stability and less uncertainty. For example, no deficits were projected for the General Fund at any time during the fiscal year and no mid-year deficit mitigation plans were necessary. This was largely the result of net revenues exceeding their budget targets, combined with moderate increases in spending overall. At the same time, as will be described in more detail in the Economic Outlook section below, Connecticut has still not fully recovered from the Great Recession and a few fiscal challenges remain.

In FY 2019, General Fund expenditures totaled $19,248,650,540 on the statutory basis of accounting. This represented growth of 3.4 percent over actual FY 2018 spending levels, a net increase of $637.9 million. Closer analysis reveals that spending growth was concentrated in a few specific areas for FY 2019.

For example, the three appropriations with the greatest dollar increases in FY 2019 all fall under the category of fixed costs. The largest was debt service, which grew by $273.9 million or 14.0 percent over FY 2018 levels. This increase was the result of a year-end transfer to the new Special Capital Reserve Fund for Teachers' Retirement that was established in Public Act 19-117. The second largest dollar increase was the employer contribution to the State Employee Retirement System (SERS), which grew by $115.8 million or 11.0 percent. Third was the State's share of Medicaid expenditures, which increased by $93.9 million, but by a relatively modest 3.7 percent. Together these three-line items accounted for three-quarters of the spending growth in the General Fund for FY 2019.

Employee General Fund salary and wage costs (from all appropriations) totaled $2.73 billion in FY 2019. This represented an increase of $132.4 million or 5.1 percent compared with FY 2018. However, once programmatic changes are factored in, the actual growth rate was significantly smaller. In FY 2019, the Correction Managed Health Care group was transferred from the University of Connecticut Health Center's operating fund to a General Fund appropriation within the Department of Correction. This program shift accounted for $51.6 million of the total increase in salaries. After adjusting for this change, the actual FY 2019 growth rate for General Fund salary and wages was 3.1 percent.

One notable example of a year-over-year reduction in costs was in the General Fund retiree health insurance account. Despite increasing enrollment and medical trend growth, retiree health insurance expenditures were $19.1 million lower in FY 2019, which represented a reduction of 2.7 percent versus FY 2018. The primary factor was savings associated with the implementation of a Medicare Advantage plan for retirees and dependents age 65 and over.

As noted, a few General Fund revenue categories out-performed their budget targets in FY 2019. Overall, realized revenues totaled $19,649,862,151 on the statutory basis of accounting and came in a net $641.2 million above the budget plan. Compared with the prior year, this represented General Fund revenue growth of 8 percent over FY 2018. However, this growth rate is overstated due to some timing issues around the receipt of over $400 million in Federal Medicaid reimbursements related to hospital supplemental payments. Due to delays in the Federal review of the State's claim, these payments were received in FY 2019 instead of FY 2018, as originally anticipated. Therefore, adjusting for this timing difference, General Fund revenues grew by closer to 3.5 percent over FY 2018 realized amounts. Of course, had the revenue been received in FY 2018 as planned, the prior year deficit would have been substantially reduced.

Among the most notable results was the performance of the withholding portion of the income tax, which brought in $518 million or 8.4 percent more than budgeted. In addition, the Pass-through Entity (PET) tax on partnerships and S-corporations came in $572 million over its target, nearly twice as much as budgeted. The Sales and Use Tax out-performed its target by $184.5 million or 4.4 percent, while the Corporations Tax was $140.7 million or 15.3 percent above the budget plan. These positive developments were partially offset by reductions in other tax categories. These included the Insurance Companies Tax ($40.5 million below budget or -17.3 percent) and the Cigarettes and Tobacco Tax ($23.5 million below budget or -6.2 percent).

For non-tax revenues, lottery receipts totaled $364.1 million or $11.4 million above the budget plan. In addition, casino gaming payments totaled $255.2 million or $51.6 million over budget as competition from out of state casinos had a smaller impact than anticipated. Licenses, Permits, and Fees revenue underperformed, falling $31.4 million below target, while Sales of Commodities and Services was $10.6 million under budget.

On a statutory basis of accounting, Special Transportation Fund (STF) spending of $1,609,093,578 in FY 2019 grew by $125.4 million or 8.5 percent from the prior fiscal year. Over half of that spending growth was for debt service, which rose by $67.2 million or 11.7 percent over FY 2018, as borrowing increased for transportation infrastructure improvements. The largest programmatic spending increase for FY 2019 was for Department of Transportation bus operations, which grew $29.8 million or 18.0 percent. The primary reason for this increase was the end of Federal Highway Administration subsidies for the CT Fastrak transit system. STF state employee retirement contributions increased by $9.8 million or 8.4

percent in FY 2019. However, employee salary and wages experienced modest growth of $4.5 million in FY 2019, just 2.2 percent over FY 2018 totals.

The STF had revenue of $1,688,144,080 in FY 2019, which exceeded the budget plan by $67.6 million. As with the prior fiscal year, the strongest performing tax category was the Oil Companies tax, which benefitted from higher oil prices and finished the year $33.2 million above target.

CAPITAL ASSETS AND DEBT ADMINISTRATION

Capital Assets

The State's investment in capital assets for its governmental and business-type activities as of June 30, 2019 totaled $21.1 billion (net of accumulated depreciation). This investment in capital assets includes land, buildings, improvements other than buildings, equipment, infrastructure, and construction in progress. The net increase in the State's investment in capital assets for the fiscal year was $522 million.

Major capital asset events for governmental activities during the fiscal year include additions to buildings, land, and construction in progress of $593.4 million and depreciation expense of $733.4 million.

The following table is a two-year comparison of the investment in capital assets presented for both governmental and business-type activities:

State of Connecticut's Capital Assets
(Net of Depreciation, in Millions)

	Governmental Activities		Business-Type Activities		Total Primary Government	
	2019	2018	2019	2018	2019	2018
Land	$ 1,863	$ 1,833	$ 54	$ 69	$ 1,917	1,902
Buildings	2,769	2,744	3,317	3,697	6,086	6,441
Improvements Other Than Buildings	88	106	294	201	382	307
Equipment	47	45	1,081	410	1,128	455
Infrastructure	5,550	5,652	-	-	5,550	5,652
Construction in Progress	5,591	5,053	401	723	5,992	5,776
Total	$ 15,908	$ 15,433	$ 5,147	$ 5,100	$ 21,055	$ 20,533

Additional information on the State's capital assets can be found in Note 9 of this report.

Long-Term Debt - Bonded Debt

At the end of the current fiscal year, the State had total debt outstanding of $28.3 billion. Pursuant to various public and special acts, the State has authorized the issuance of the following types of debt: general obligation debt (payable from the General Fund), special tax obligation debt (payable from the Debt Service Fund), and revenue debt (payable from specific revenues of the Enterprise funds).

The following table is a two-year comparison of bonded debt presented for both governmental and business-type activities:

State of Connecticut's Bonded Debt (in millions)
General Obligation and Revenue Bonds

	Governmental Activities		Business-Type Activities		Total Primary Government	
	2019	2018	2019	2018	2019	2018
General Obligation Bonds	$ 18,369	$ 18,763	$ -	$ -	$ 18,369	$ 18,763
Direct Borrowings & Direct Placement	374	$ -	-	-	374	-
Transportation Related Bonds	5,958	5,541	-	-	5,958	5,541
Revenue Bonds	-	-	1,456	1,494	1,456	1,494
Premiums and Deferred Amounts	2,000	1,919	174	178	2,174	2,097
Total	$ 26,701	$ 26,223	$ 1,630	$ 1,672	$ 28,331	$ 27,895

The State's total bonded debt increased by $435.3 million (1.6 percent) during the current fiscal year. This increase resulted mainly from an increase in Transportation related bonds of $417.1 million.

Section 3-21 of the Connecticut General Statutes provides that the total amount of bonds, notes or other evidences of indebtedness payable from General Fund tax receipts authorized by the General Assembly but have not been issued and the total amount of such indebtedness which has been issued and remains outstanding shall not exceed 1.6 times the total estimated General Fund tax receipts of the State for the current fiscal year. In computing the indebtedness at any time, revenue anticipation notes, refunded indebtedness, bond anticipation notes, tax increment financing, budget deficit bonding, revenue bonding, balances in debt retirement funds and other indebtedness pursuant to certain provisions of the General Statutes shall be excluded from the calculation. As of July 2019, the State had a debt incurring margin of $3.4 billion.

Other Long-Term Debt
State of Connecticut Other Long - Term Debt (in Millions)

	Governmental Activities		Business-Type Activities		Total Primary Government	
	2019	2018	2019	2018	2019	2018
Net Pension Liability	$ 34,821	$ 34,566	$ -	$ -	$ 34,821	$ 34,566
Net OPEB Liability	19,663	20,591	-	-	19,663	20,591
Compensated Absences	498	498	176	197	674	695
Workers Compensation	772	747	-	-	772	747
Nonexchange Financial Guarantee	510	532	-	-	510	532
Other	126	260	343	355	469	$ 615
Total	$ 56,390	$ 57,194	$ 519	$ 552	$ 56,909	$ 57,746

The State's other long-term obligations decreased by $837.3 million (1.4 percent) during the fiscal year. This decrease was due mainly to a decrease in the net OPEB liability (Governmental activities) of $928.0 million or 4.5 percent. Additional information on the State's long-term debt can be found in Notes 16 and 17 of this report.

ECONOMIC OUTLOOK AND NEXT YEAR'S BUDGET

During FY 2019 Connecticut's economy experienced low unemployment and moderate growth as the recovery from the Great Recession entered its tenth year. However, based on two significant indicators – job growth and housing prices – Connecticut continued to lag the nation's economic recovery.

According to U.S. Bureau of Labor Statistics data reported by the state Department of Labor (DOL), Connecticut gained 4,600 nonfarm seasonally-adjusted payroll jobs over the course of FY 2019 and had a total of 1,692,800 employed residents as of June 2019. However, most of the employment growth (+8,600 jobs) occurred in the first six months of the fiscal year, from July through December 2018. In the second half of the fiscal year, Connecticut lost a net total of 4,000 jobs. Looking at year-over-year job growth, information, leisure & hospitality, and education & health services were the fastest growing sectors in the state's labor market on a percentage basis. The other services, construction, and trade, transportation, and utilities sectors experienced the largest job losses.

As the fiscal year closed, Connecticut's unemployment rate stood at 3.7 percent in June, down one-tenth of a point from May 2019 and down four-tenths of point from a year earlier when it was 4.1 percent. Nationally, the unemployment rate was also 3.7 percent in June 2019, up one-tenth of a point from May 2019 and down three-tenths of point from the prior year when it stood at 4.0 percent.

As of July 2019, Connecticut had recovered 79.7 percent (95,900 payroll job additions) of the 119,100 seasonally adjusted jobs lost in the Great Recession (3/08-2/10).

At that point in time the job recovery was into its 113th month and the state needed an additional 24,400 new net jobs to reach an overall employment expansion. Within the job recovery numbers, Connecticut's Department of Labor points out a significant distinction. The private sector recovered more than the total jobs lost in the recession (103.4 percent), which means the remaining employment losses were from the government sector. This sector includes all federal, state and local government employment, including public education, and Native American tribal government.

The Connecticut housing market's results were mixed for FY 2019. An August 27, 2019 release by the Federal Housing Finance Agency (FHFA) reported housing price appreciation statistics by state for the period ending June 30, 2019. FHFA's Housing Price Index (HPI) tracks changes in home values for individual properties owned or guaranteed by the Federal National Mortgage Association (Fannie Mae) or the Federal Home Loan Mortgage Corporation (Freddie Mac). Over the past year, based on the HPI, Connecticut home prices continued to grow more slowly than most of the nation. Connecticut homes appreciated only 2.98 percent for the year, which ranked 45th in the nation overall. The U.S. average appreciation for the period was 4.99 percent. A comparison of five-year housing prices showed similar results: Single family houses in Connecticut appreciated 10.06 percent for the period versus a 32.92 percent increase for the nation.

A separate measure by data and analytics firm CoreLogic showed U.S. home prices increased by 3.6 percent year-over-year in July. At the same time, Connecticut was one of only two states that experienced a decrease in home prices (-0.3 percent) for the period. The other state was South Dakota, which saw a price decline of 3.4 percent. CoreLogic also reported Connecticut's housing market still has a long way to go to recover its pre-recession peak. As of July 2019, Connecticut's home prices were the farthest in the nation below their all-time high, still 16.4 percent below the peak reached in July 2006.

In a November 7, 2019 report, the Bureau of Economic Analysis (BEA) released Real Gross Domestic Product (GDP) results by state for the second quarter of 2019. Connecticut experienced a seasonally adjusted annual growth rate of 1.0 percent, which ranked 47th in the nation overall. This growth rate was below both the national average of 2.0 percent and the New England regional average of 1.3 percent. The percent change in real GDP in the second quarter ranged from 4.7 percent in Texas to 0.5 percent in Hawaii.

According to September 24, 2019 report by BEA, Connecticut's personal income grew by a 4.8 percent annual rate between the first and second quarters of 2019. Based on this result, Connecticut ranked 31st in the nation for second quarter income growth. This growth rate was below the national average of 5.4 percent. However, it represented a stronger performance than the New England region's average growth rate of 4.3 percent.

Despite the great recession of 2008 to 2010 and the moderate pace of recovery, Connecticut continues to be a wealthy state. BEA reports that in 2018, Connecticut had an annual per capita personal income (PCPI) of $76,456. This PCPI ranked first in the United States and was 140 percent of the national average of $54,446. Connecticut's 2018 PCPI reflected an increase of 5.9 percent from 2017. The 2017-2018 national change was 4.9 percent. In 2008, the PCPI of Connecticut was $61,165 and ranked first in the United States. The 2008-2018 compound annual growth rate of PCPI was 2.3 percent in Connecticut. The compound annual growth rate for the nation was 2.9 percent.

Connecticut's high income is partially explained by the high level of educational achievement attained by its residents. According to the U.S. Census Bureau, 38.4 percent of Connecticut's population age 25 and over has a bachelor's degree or higher, which was fourth in the nation among U.S. states. In addition, Connecticut ranked third in the country for the percentage of the population with advanced degrees.

Connecticut has a long history of technological innovation dating back centuries and innovation will continue to be a key factor for Connecticut's economic growth moving forward. In recent years, Connecticut has remained near the top on a number of science, technology and innovation-related categories. In Bloomberg's 2019 U.S. State Innovation Index, for example, Connecticut was ranked the fourth most innovative state economy in the nation, up from seventh place in 2016. The innovation index is based on six equally-weighted metrics: research and development intensity; productivity; clusters of companies in technology; jobs in science, technology, engineering and mathematics (STEM); proportion of the population with degrees in science and engineering; and patent activity. On the innovation index measures, Connecticut showed strength across all six categories. Connecticut ranked seventh in patent activity and was ranked eighth in the nation in research and development (R&D) intensity, productivity and technology company density. On the last two measures, Connecticut ranked 12th in science and engineering degree holders and 13th in STEM-related jobs.

Connecticut continues to be a leader in the field of high-tech manufacturing, producing submarines, helicopters, jet engines and parts, electronics, computer equipment and electronic machinery. Much of Connecticut's manufacturing is for the military and the outlook for Connecticut's defense industry remains strong. According the state's Office of Military Affairs (OMA), Connecticut ranked fourth in the nation in U.S. defense spending per capita and second in the nation for defense procurement purchases (not including military pay). OMA reports that the recent defense appropriations bills approved by Congress provided substantial funding for Virginia-class submarines and the new generation of Columbia-Class ballistic missile submarines, with Connecticut-based Electric Boat (EB) as a prime contractor for both. In addition, other Connecticut companies fared well, including Pratt & Whitney, which builds engines for the F-35 Joint Strike Fighter, and Sikorsky, which builds Blackhawk helicopters and other military aircraft.

Finance, insurance and real estate (FIRE) is an important industry grouping that represents over a quarter of the State's Real Gross Domestic Product (GDP). Connecticut's FIRE sector has lost 11.5 percent of the jobs held at the pre-recession peak in March of 2008, a reduction of 16,000 jobs. These are some of the highest paying jobs within the state. In the past decade, the strongest job gains continue to be in fields with mid to below average wages, including educational & health services and leisure & hospitality. In the last fiscal year, however, the financial sector performed well adding 2,000 jobs, an increase of 1.6 percent over June 2018.

Through the first six months of FY 2020, the state has continued to add jobs at a modest pace and the unemployment rate remains near historical lows. The State's General Fund is currently projected to end the year with a small deficit, but the shortfall is manageable and will be addressed through agency efforts to curtail hiring and reduce discretionary expenditures. The FY 2020 budget plan includes a revenue volatility transfer to the Budget Reserve Fund (BRF) of $318.3 million. Therefore, if present projections hold, a significant deposit will be made to the BRF for the third year in a row.

Looking forward to the next biennium, Connecticut faces a few challenges as fixed costs related to entitlements, State pension and retirement health costs and debt service represent a growing share of the state budget. Future budget stability continues to be dependent on economic growth coupled with spending restraint. However, due to its highly educated, productive workforce and its capacity for innovation, Connecticut is well positioned to create a strong economy moving into the future.

CONTACTING THE STATE'S OFFICES OF FINANCIAL MANAGEMENT

This financial report is designed to provide our citizens, taxpayers, customers, investors, and creditors with a general overview of the State's finances and to demonstrate the State's accountability for the money it receives. If you have any questions about this report, please contact the State Comptroller's Office at (860) 702-3352.

BASIC FINANCIAL STATEMENTS

THIS PAGE INTENTIONALLY LEFT BLANK

GOVERNMENT-WIDE FINANCIAL STATEMENTS

THIS PAGE INTENTIONALLY LEFT BLANK

STATEMENT OF NET POSITION

June 30, 2019
(Expressed in Thousands)

	Primary Government			
	Governmental Activities	Business-Type Activities	Total	Component Units
Assets				
Current Assets:				
Cash and Cash Equivalents	$ 4,161,951	$ 868,624	$ 5,030,575	$ 289,626
Deposits with U.S. Treasury	-	737,430	737,430	-
Investments	120,323	121,863	242,186	549,917
Receivables, (Net of Allowances)	3,236,847	682,536	3,919,383	75,979
Due from Primary Government	-	-	-	5,731
Inventories	43,912	13,454	57,366	5,779
Restricted Assets	-	277,131	277,131	1,128,712
Internal Balances	(93,970)	93,970	-	-
Other Current Assets	12,075	49,226	61,301	21,527
Total Current Assets	7,481,138	2,844,234	10,325,372	2,077,271
Noncurrent Assets:				
Cash and Cash Equivalents	-	459,554	459,554	-
Due From Component Units	44,069	-	44,069	-
Investments	-	54,271	54,271	233,779
Receivables, (Net of Allowances)	1,110,443	1,162,315	2,272,758	137,169
Restricted Assets	991,788	237,860	1,229,648	5,586,783
Capital Assets, (Net of Accumulated Depreciation)	15,908,193	5,146,855	21,055,048	778,810
Other Noncurrent Assets	124	4,118	4,242	92,480
Total Noncurrent Assets	18,054,617	7,064,973	25,119,590	6,829,021
Total Assets	$ 25,535,755	$ 9,909,207	$ 35,444,962	$ 8,906,292
Deferred Outflows of Resources				
Accumulated Decrease in Fair Value of Hedging Derivatives	$ 331	$ -	$ 331	$ 13,740
Unamortized Losses on Bond Refundings	63,932	7,028	70,960	97,610
Related to Pensions	8,442,736	-	8,442,736	76,648
Other Deferred Outflows	-	1,131	1,131	2,847
Total Deferred Outflows of Resources	$ 8,506,999	$ 8,159	$ 8,515,158	$ 190,845
Liabilities				
Current Liabilities:				
Accounts Payable and Accrued Liabilities	$ 993,023	$ 387,173	$ 1,380,196	$ 134,663
Due to Component Units	5,731	-	5,731	-
Due to Primary Government	-	-	-	44,069
Due to Other Governments	328,561	74	328,635	-
Current Portion of Long-Term Obligations	2,276,526	165,130	2,441,656	315,128
Amount Held for Institutions	-	-	-	210,149
Unearned Revenue	25,765	37,734	63,499	-
Medicaid Liability	591,139	-	591,139	-
Liability for Escheated Property	375,836	-	375,836	-
Other Current Liabilities	121,007	81,327	202,334	45,606
Total Current Liabilities	4,717,588	671,438	5,389,026	749,615
Noncurrent Liabilities:				
Non-Current Portion of Long-Term Obligations	80,814,234	1,984,230	82,798,464	5,989,989
Total Noncurrent Liabilities	80,814,234	1,984,230	82,798,464	5,989,989
Total Liabilities	$ 85,531,822	$ 2,655,668	$ 88,187,490	$ 6,739,604
Deferred Inflows of Resources				
Related to Pensions	$ 1,982,567	$ -	$ 1,982,567	$ 46,853
Other Deferred Inflows	-	5,998	5,998	51,051
Total Deferred Inflows of Resources	$ 1,982,567	$ 5,998	$ 1,988,565	$ 97,904
Net Position				
Net Investment in Capital Assets	$ 4,508,124	$ 4,261,844	$ 8,769,968	$ 448,257
Restricted For:				
Transportation	318,114	-	318,114	-
Debt Service	898,146	4,508	902,654	14,255
Federal Grants and Other Accounts	644,925	-	644,925	-
Capital Projects	484,088	184,663	668,751	130,268
Grant and Loan Programs	737,733	-	737,733	-
Clean Water and Drinking Water Projects	-	784,257	784,257	-
Bond Indenture Requirements	-	-	-	781,724
Loans	-	3,197	3,197	-
Permanent Investments or Endowments:				
Expendable	-	39,108	39,108	11,865
Nonexpendable	122,925	15,492	138,417	605,081
Other Purposes	484,119	55,902	540,021	144,206
Unrestricted (Deficit)	(61,669,809)	1,906,729	(59,763,080)	123,974
Total Net Position (Deficit)	$ (53,471,635)	$ 7,255,700	$ (46,215,935)	$ 2,259,630

The accompanying Notes to the Financial Statements are an integral part of this statement.

STATEMENT OF ACTIVITIES

For the Fiscal Year Ended June 30, 2019

(Expressed in Thousands)

		Program Revenues		
Functions/Programs	Expenses	Charges for Services, Fees, Fines, and Other	Operating Grants and Contributions	Capital Grants and Contributions
Primary Government				
Governmental Activities:				
Legislative	$ 106,749	$ 2,675	$ -	$ -
General Government	2,780,978	1,159,500	87,549	-
Regulation and Protection	841,022	729,665	174,712	-
Conservation and Development	1,177,438	263,563	197,369	-
Health and Hospitals	2,629,517	674,495	202,677	-
Transportation	2,119,874	133,398	-	695,772
Human Services	9,735,789	75,217	6,389,855	-
Education, Libraries, and Museums	5,050,837	13,471	661,259	-
Corrections	2,114,689	11,020	150,118	-
Judicial	973,087	126,815	19,231	-
Interest and Fiscal Charges	978,034	-	-	-
Total Governmental Activities	28,508,014	3,189,819	7,882,770	695,772
Business-Type Activities:				
University of Connecticut & Health Center	2,485,461	1,474,927	251,341	3,907
Board of Regents	1,397,779	659,228	54,329	-
Employment Security	619,685	755,712	25,939	-
Clean Water	42,635	33,211	21,851	-
Other	65,075	68,048	11,227	-
Total Business-Type Activities	4,610,635	2,991,126	364,687	3,907
Total Primary Government	$ 33,118,649	$ 6,180,945	$ 8,247,457	$ 699,679
Component Units				
Connecticut Housing Finance Authority (12/31/18)	$ 223,740	$ 165,331	$ -	$ -
Connecticut Lottery Corporation	1,336,573	1,333,987	-	-
Connecticut Airport Authority	90,432	105,097	-	20,200
Other Component Units	361,364	331,199	6,450	4,071
Total Component Units	$ 2,012,109	$ 1,935,614	$ 6,450	$ 24,271

General Revenues:
Taxes:
Personal Income
Corporate Income
Sales and Use
Other
Restricted for Transportation Purposes:
Motor Fuel
Other
Casino Gaming Payments
Tobacco Settlement
Lottery Tickets
Unrestricted Investment Earnings
Transfers-Internal Activities
Total General Revenues, Contributions, and Transfers
Change in Net Position
Net Position (Deficit)- Beginning (as restated)
Net Position (Deficit)- Ending

The accompanying Notes to the Financial Statements are an integral part of this statement.

Net (Expense) Revenue and Changes in Net Position

Primary Government			
Governmental Activities	Business-Type Activities	Total	Component Units
$ (104,074)	$ -	$ (104,074)	$ -
(1,533,929)	-	(1,533,929)	-
63,355	-	63,355	-
(716,506)	-	(716,506)	-
(1,752,345)	-	(1,752,345)	-
(1,290,704)	-	(1,290,704)	-
(3,270,717)	-	(3,270,717)	-
(4,376,107)	-	(4,376,107)	-
(1,953,551)	-	(1,953,551)	-
(827,041)	-	(827,041)	-
(978,034)	-	(978,034)	-
(16,739,653)	-	(16,739,653)	-
-	(755,286)	(755,286)	-
-	(684,222)	(684,222)	-
-	161,966	161,966	-
-	12,427	12,427	-
-	14,200	14,200	-
-	(1,250,915)	(1,250,915)	-
(16,739,653)	(1,250,915)	(17,990,568)	-
-	-	-	(58,409)
-	-	-	(2,586)
-	-	-	34,865
-	-	-	(19,644)
-	-	-	(45,774)
8,377,644	-	8,377,644	-
957,031	-	957,031	-
4,332,195	-	4,332,195	-
3,550,946	-	3,550,946	-
827,816	-	827,816	-
425,828	-	425,828	-
255,239	-	255,239	-
124,508	-	124,508	-
360,996	-	360,996	-
127,543	44,318	171,861	63,854
(1,470,321)	1,470,321	-	-
17,869,425	1,514,639	19,384,064	63,854
1,129,772	263,724	1,393,496	18,080
(54,601,405)	6,991,976	(47,609,429)	2,241,550
$ (53,471,633)	$ 7,255,700	$ (46,215,933)	$ 2,259,630

THIS PAGE INTENTIONALLY LEFT BLANK

FUND FINANCIAL STATEMENTS

BALANCE SHEET
GOVERNMENTAL FUNDS

June 30, 2019
(Expressed in Thousands)

	General	Debt Service	Transportation	Restricted Grants & Accounts	Grant & Loan Programs	Other Funds	Total Governmental Funds
Assets							
Cash and Cash Equivalents	$ 1,927,034	$ -	$ 194,986	$ 527,818	$ 247,594	$ 1,253,792	$ 4,151,224
Investments	-	-	-	-	50	120,273	120,323
Securities Lending Collateral	-	-	-	-	-	11,900	11,900
Receivables:							
Taxes, Net of Allowances	1,780,927	-	203,927	-	-	-	1,984,854
Accounts, Net of Allowances	484,881	-	39,094	44,706	12,428	39,025	620,134
Loans, Net of Allowances	3,419	-	-	189,364	504,265	413,395	1,110,443
From Other Governments	114,032	-	-	504,612	-	9,383	628,027
Interest	-	2,563	787	-	-	-	3,350
Other	-	-	-	-	-	3	3
Due from Other Funds	47,737	-	2,563	790	4	13,727	64,821
Due from Component Units	43,735	-	-	132	-	202	44,069
Inventories	15,188	-	23,559	-	-	-	38,747
Restricted Assets	-	991,788	-	-	-	-	991,788
Total Assets	$ 4,416,953	$ 994,351	$ 464,916	$ 1,267,422	$ 764,341	$ 1,861,700	$ 9,769,683
Liabilities, Deferred Inflows, and Fund Balances							
Liabilities							
Accounts Payable and Accrued Liabilities	$ 357,955	$ -	$ 30,092	$ 223,697	$ 26,267	$ 76,546	$ 714,557
Due to Other Funds	74,651	2,563	-	3,827	35	72,363	153,439
Due to Component Units	-	-	-	5,731	-	-	5,731
Due to Other Governments	326,994	-	-	1,567	-	-	328,561
Unearned Revenue	11,039	-	-	-	-	14,726	25,765
Medicaid Liability	242,356	-	-	348,783	-	-	591,139
Liability For Escheated Property	375,836	-	-	-	-	-	375,836
Securities Lending Obligation	-	-	-	-	-	11,900	11,900
Other Liabilities	93,263	-	-	15,844	-	-	109,107
Total Liabilities	1,482,094	2,563	30,092	599,449	26,302	175,535	2,316,035
Deferred Inflows of Resources							
Receivables to be Collected in Future Periods	813,873	-	37,212	51,172	11,725	36,852	950,834
Fund Balances							
Nonspendable:							
Inventories/Long-Term Receivables	62,342	-	23,560	-	-	-	85,902
Permanent Fund Principal	-	-	-	-	-	119,543	119,543
Restricted For:							
Debt Service	-	991,788	-	-	-	-	991,788
Transportation Programs	-	-	340,752	-	-	-	340,752
Federal Grant and State Programs	-	-	-	616,801	-	-	616,801
Grants and Loans	-	-	-	-	725,308	-	725,308
Other	-	-	-	-	-	1,507,651	1,507,651
Committed For:							
Continuing Appropriations	164,550	-	33,300	-	-	-	197,850
Budget Reserve Fund	2,505,538	-	-	-	-	-	2,505,538
Assigned To:							
Surplus Transfer to Fiscal Year 2020-2021	160,000	-	-	-	-	-	160,000
Grants and Loans	-	-	-	-	1,006	-	1,006
Other	-	-	-	-	-	22,834	22,834
Unassigned	(771,444)	-	-	-	-	(715)	(772,159)
Total Fund Balances	2,120,986	991,788	397,612	616,801	726,314	1,649,313	6,502,814
Total Liabilities, Deferred Inflows, and Fund Balances	$ 4,416,953	$ 994,351	$ 464,916	$ 1,267,422	$ 764,341	$ 1,861,700	$ 9,769,683

RECONCILIATION OF GOVERNMENTAL FUNDS BALANCE SHEET TO THE STATEMENT OF NET POSITION

June 30, 2019

(Expressed in Thousands)

Total Fund Balance - Governmental Funds		$ 6,502,814
Amounts reported for governmental activities in the Statement of Net Position are different because:		
Capital assets used in governmental activities are not financial resources and, therefore, are not reported in the funds (see Note 9). These consist of:		
Cost of capital assets (excluding internal service funds)	32,156,531	
Less: Accumulated depreciation (excluding internal service funds)	(16,295,431)	
Net capital assets		15,861,100
Some assets such as receivables, are not available soon enough to pay for current period's expenditures and thus, are offset by unavailable revenue in the governmental funds.		950,834
Deferred losses on refundings are reported in the Statement of Net Position (to be amortized as interest expense) but are not reported in the funds.		63,932
Deferred outflows for pensions and OPEB are reported in the Statement of Net Position but are not reported in the funds (see Note 10 & 13).		8,442,736
Long-term debt instruments such as bonds and notes payable, are not due and payable in the current period and, therefore, the outstanding balances are not reported in the funds (see Note 16). Also, unamortized debt premiums and interest payable are reported in the Statement of Net Position but are not reported in the funds. These balances consist of:		
General obligation bonds payable	(18,368,713)	
Transportation bonds payable	(5,957,640)	
Direct Borrowings & Direct Placements	(374,080)	
Unamortized premiums	(2,000,370)	
Accrued interest payable	(276,369)	
Net long-term debt		(26,977,172)
Other liabilities not due and payable in the current period and, therefore, not reported in the funds (see Note 16).		
Net pension liability	(34,820,505)	
Net OPEB liability	(19,663,039)	
Obligations for worker's compensation	(771,753)	
Capital leases payable	(27,997)	
Compensated absences (excluding internal service funds)	(497,059)	
Claims and judgments payable	(63,444)	
Landfill postclosure care	(33,535)	
Nonexchange Financial guarantee	(510,275)	
Total other liabilities		(56,387,607)
Deferred inflows for pensions and OPEB are reported in the Statement of Net Position but are not reported in the funds (see Note 10 & 13).		
Pension and OPEB related		(1,982,567)
Internal service funds are used by management to charge the costs of certain activities to individual funds. The assets and liabilities of the internal service funds are included in governmental activities in the Statement of Net Position.		54,295
Total Net Position - Governmental Activities		$ (53,471,635)

The accompanying Notes to the Financial Statements are an integral part of this statement.

STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES GOVERNMENTAL FUNDS

For the Fiscal Year Ended June 30, 2019

(Expressed in Thousands)

	General	Debt Service	Transportation	Restricted Grants & Accounts	Grant & Loan Programs	Other Funds	Total Governmental Funds
Revenues							
Taxes	$ 17,133,724	$ -	$ 1,248,312	$ -	$ -	$ -	$ 18,382,036
Licenses, Permits, and Fees	288,055	-	338,685	7,004	-	147,258	781,002
Tobacco Settlement	-	-	-	-	-	124,508	124,508
Federal Grants and Aid	2,267,084	-	12,259	6,229,391	-	69,809	8,578,543
Lottery Tickets	360,996	-	-	-	-	-	360,996
Charges for Services	27,105	-	66,928	-	-	1,039	95,072
Fines, Forfeits, and Rents	147,538	-	19,005	-	-	900	167,443
Casino Gaming Payments	255,239	-	-	-	-	-	255,239
Investment Earnings	48,950	29,065	16,164	3,686	13,395	16,269	127,529
Interest on Loans	-	-	-	-	-	14	14
Miscellaneous	247,597	-	15,944	1,656,846	29,778	100,572	2,050,737
Total Revenues	20,776,288	29,065	1,717,297	7,896,927	43,173	460,369	30,923,119
Expenditures							
Current:							
Legislative	103,362	-	-	1,896	-	42	105,300
General Government	1,504,690	-	12,992	629,617	471,503	95,418	2,714,220
Regulation and Protection	435,627	-	105,245	113,434	4,835	166,164	825,305
Conservation and Development	217,743	-	4,717	284,290	475,718	166,886	1,149,354
Health and Hospitals	1,654,556	-	-	816,838	20,878	71,126	2,563,398
Transportation	-	-	892,624	631,359	31,601	-	1,555,584
Human Services	4,998,915	-	-	4,478,462	30	4,229	9,481,636
Education, Libraries, and Museums	4,338,242	-	-	570,665	16,303	2,618	4,927,828
Corrections	2,040,489	-	-	23,808	1,242	2,007	2,067,546
Judicial	867,606	-	-	27,929	-	56,535	952,070
Capital Projects	-	-	-	-	-	955,637	955,637
Debt Service:							
Principal Retirement	1,060,482	323,470	-	-	-	-	1,383,952
Interest and Fiscal Charges	1,136,304	279,499	547	99,594	3,569	5,434	1,524,947
Total Expenditures	18,358,016	602,969	1,016,125	7,677,892	1,025,679	1,526,096	30,206,777
Excess (Deficiency) of Revenues Over Expenditures	2,418,272	(573,904)	701,172	219,035	(982,506)	(1,065,727)	716,342
Other Financing Sources (Uses)							
Bonds Issued	-	-	-	-	817,964	1,356,822	2,174,786
Premiums on Bonds Issued	-	91,930	-	-	75,033	138,910	305,873
Transfers In	1,095,660	685,437	21,810	145,591	-	453,248	2,401,746
Transfers Out	(2,552,943)	(56,068)	(647,168)	(26,072)	(71,464)	(534,452)	(3,888,167)
Refunding Bonds Issued	-	803,985	-	-	-	-	803,985
Payment to Refunded Bond Escrow Agent	-	(861,512)	-	-	-	-	(861,512)
Capital Lease Obligations	6,639	-	-	-	-	-	6,639
Total Other Financing Sources (Uses)	(1,450,644)	663,772	(625,358)	119,519	821,533	1,414,528	943,350
Net Change in Fund Balances	967,628	89,868	75,814	338,554	(160,973)	348,801	1,659,692
Fund Balances (Deficit) - Beginning	1,151,043	901,920	321,508	278,247	887,287	1,300,512	4,840,517
Change in Reserve for Inventories	2,315	-	290	-	-	-	2,605
Fund Balances (Deficit) - Ending	$ 2,120,986	$ 991,788	$ 397,612	$ 616,801	$ 726,314	$ 1,649,313	$ 6,502,814

The accompanying Notes to the Financial Statements are an integral part of this statement.

RECONCILIATION OF THE STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES OF GOVERNMENTAL FUNDS TO THE STATEMENT OF ACTIVITIES

For the Fiscal Year Ended June 30, 2019

(Expressed in Thousands)

Net change in fund balances - total governmental funds		$ 1,659,691
Amounts reported for governmental activities in the Statement of Activities are different because:		
Long-term debt proceeds provide current financial resources to governmental funds, while the repayment of the related debt principal consumes those financial resources. These transactions, however, have no effect on net position. Also, governmental funds report the effect of premiums and similar items when debt is first issued, whereas these amounts are deferred and amortized in the Statement of Activities. In the current period, these amounts consist of		
Debt issued or incurred:		
Bonds issued	(2,174,786)	
Refunding bonds issued	(819,074)	
Premium on bonds issued	(296,415)	
Principal repayment:		
Principal Retirement	1,744,440	
Payments to refunded bond escrow agent	852,710	
Capital lease payments	6,218	
Net debt adjustments		(686,907)
Some capital assets acquired this year were financed with capital leases. The amount financed by leases is reported in the governmental funds as a source of financing, but lease obligations are reported as long-term liabilities on the Statement of Activities		(6,639)
Capital outlays are reported as expenditures in the governmental funds. However, in the Statement of Activities the cost of those assets is allocated over their estimated useful lives and reported as depreciation expense. In the current period, these amounts and other reductions were as follows:		
Capital outlays (including construction-in-progress)	1,206,355	
Depreciation expense (excluding internal service funds)	(732,889)	
Net capital outlay adjustments		473,466
Inventories are reported as expenditures in the governmental funds when purchased. However, in the Statement of Activities the cost of these assets is recognized when those assets are consumed. This is the amount by which purchases exceeded consumption of inventories.		2,605
Some expenses reported in the Statement of Activities do not require the use of current financial resources and therefore are not recognized in the funds. In the current period, the net adjustments consist of:		
Increase in accrued interest	(36,846)	
Amortization of bond premium	215,528	
Amortization of loss on debt refundings	(5,207)	
Decrease in Net OPEB Liability	927,961	
Increase in net deferred inflows related to other post employment benefits {OPEB}	(601,701)	
Increase in net deferred outflows related to other post employment benefits {OPEB}	156,408	
Increase in compensated absences	(168)	
Increase in workers compensation	(24,519)	
Decrease in claims and judgments	132,099	
Decrease in landfill postclosure cost	1,530	
Decrease in non-exchange financial guarantees	21,285	
Increase in pension liability	(254,016)	
Increase in net deferred inflows related to pensions	(305,355)	
Decrease in net deferred outflows related to pensions	(728,263)	
Net expense accruals		(501,264)
Some revenues in the Statement of Activities do not provide current financial resources and, therefore, are deferred inflows of resources in the funds. Also, revenues related to prior periods that became available during the current period are reported in the funds but are eliminated in the Statement of Activities. This amount is the net adjustment.		184,989
Internal service funds are used by management to charge the costs of certain activities, to individual funds. The net revenues (expenses) of internal service funds are included with governmental activities in the Statement of Activities.		3,829
Change in net position - governmental activities		$ 1,129,770

The accompanying Notes to the Financial Statements are an integral part of this statement.

STATEMENT OF NET POSITION
PROPRIETARY FUNDS

June 30, 2019

(Expressed in Thousands)

	Business-Type Activities						Governmental
	Enterprise Funds						Activities
	University of Connecticut & Health Center	Board of Regents	Employment Security	Clean Water	Other Funds	Total	Internal Service Funds
Assets							
Current Assets:							
Cash and Cash Equivalents	$ 486,269	$ 306,334	$ 158	$ 4,961	$ 70,902	$ 868,624	$ 10,727
Deposits with U.S. Treasury	-	-	737,430	-	-	737,430	-
Investments	667	121,196	-	-	-	121,863	-
Receivables:							
Accounts, Net of Allowances	150,514	65,308	185,563	-	6,987	408,372	100
Loans, Net of Allowances	2,295	2,552	-	214,744	41,462	261,053	-
Interest	-	-	-	3,668	503	4,171	-
From Other Governments	-	2,729	5,481	-	730	8,940	-
Due from Other Funds	45,871	78,683	501	-	-	125,055	4,850
Inventories	13,454	-	-	-	-	13,454	5,165
Restricted Assets	277,131	-	-	-	-	277,131	-
Other Current Assets	40,236	8,963	-	-	27	49,226	175
Total Current Assets	1,016,437	585,765	929,133	223,373	120,611	2,875,319	21,017
Noncurrent Assets:							
Cash and Cash Equivalents	-	143,875	-	218,034	97,645	459,554	-
Investments	16,187	33,196	-	4,888	-	54,271	-
Receivables:							
Loans, Net of Allowances	6,510	5,754	-	1,003,187	146,864	1,162,315	-
Restricted Assets	463	-	-	210,804	26,593	237,860	-
Capital Assets, Net of Accumulated Depreciation	3,183,505	1,939,404	-	-	23,946	5,146,855	47,093
Other Noncurrent Assets	3,733	200	-	-	185	4,118	124
Total Noncurrent Assets	3,210,398	2,122,429	-	1,436,913	295,233	7,064,973	47,217
Total Assets	$ 4,226,835	$ 2,708,194	$ 929,133	$ 1,660,286	$ 415,844	$ 9,940,292	$ 68,234
Deferred Outflows of Resources							
Unamortized Losses on Bond Refundings	$ -	$ -	$ -	$ 6,867	$ 161	$ 7,028	$ -
Other Deferred Outflows	135	996	-	-	-	1,131	-
Total Deferred Outflows of Resources	$ 135	$ 996	$ -	$ 6,867	$ 161	$ 8,159	$ -
Liabilities							
Current Liabilities:							
Accounts Payable and Accrued Liabilities	$ 236,772	$ 130,608	$ 16	$ 9,556	$ 10,221	$ 387,173	$ 1,241
Due to Other Funds	25,963	4,825	297	-	-	31,085	10,679
Due to Other Governments	-	-	74	-	-	74	-
Current Portion of Long-Term Obligations	68,347	27,158	-	58,363	11,262	165,130	82
Unearned Revenue	-	37,734	-	-	-	37,734	-
Other Current Liabilities	70,335	10,992	-	-	-	81,327	-
Total Current Liabilities	401,417	211,317	387	67,919	21,483	702,523	12,002
Noncurrent Liabilities:							
Noncurrent Portion of Long-Term Obligations	577,869	461,719	-	789,863	154,779	1,984,230	1,937
Total Noncurrent Liabilities	577,869	461,719	-	789,863	154,779	1,984,230	1,937
Total Liabilities	$ 979,286	$ 673,036	$ 387	$ 857,782	$ 176,262	$ 2,686,753	$ 13,939
Deferred Inflows of Resources							
Other Deferred Inflows	$ 5,998	$ -	$ -	$ -	$ -	$ 5,998	$ -
Total Deferred Inflows of Resources	$ 5,998	$ -	$ -	$ -	$ -	$ 5,998	$ -
Net Position (Deficit)							
Net Investment in Capital Assets	$ 2,465,937	$ 1,794,292	$ -	$ -	$ 1,615	$ 4,261,844	$ 47,217
Restricted For:							
Debt Service	-	-	-	-	4,508	4,508	-
Clean and Drinking Water Projects	-	-	-	617,328	166,929	784,257	-
Capital Projects	184,663	-	-	-	-	184,663	-
Nonexpendable Purposes	15,005	487	-	-	-	15,492	-
Expendable Endowment	-	39,108	-	-	-	39,108	-
Loans	3,197	-	-	-	-	3,197	-
Other Purposes	23,304	32,598	-	-	-	55,902	-
Unrestricted (Deficit)	549,580	169,669	928,746	192,043	66,691	1,906,729	7,078
Total Net Position	$ 3,241,686	$ 2,036,154	$ 928,746	$ 809,371	$ 239,743	$ 7,255,700	$ 54,295

The accompanying Notes to the Financial Statements are an integral part of this statement.

STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN FUND NET POSITION PROPRIETARY FUNDS

For the Fiscal Year Ended June 30, 2019

(Expressed in Thousands)

	Business-Type Activities						Governmental
	Enterprise Funds						Activities
	University of Connecticut & Health Center	Board of Regents	Employment Security	Clean Water	Other Funds	Totals	Internal Service Funds
Operating Revenues							
Charges for Sales and Services (Net of allowances & discounts $235,837)	$ 1,185,676	$ 504,423	$ -	$ -	$ 32,135	$ 1,722,234	$ 53,649
Assessments	-	-	731,022	-	31,459	762,481	-
Federal Grants, Contracts, and Other Aid	179,789	21,604	11,761	-	-	213,154	-
State Grants, Contracts, and Other Aid	17,959	22,345	14,178	-	-	54,482	-
Private Gifts and Grants	53,593	10,380	-	-	-	63,973	-
Interest on Loans	-	-	-	24,243	3,719	27,962	-
Other	157,020	12,077	24,690	-	735	194,522	141
Total Operating Revenues	1,594,037	570,829	781,651	24,243	68,048	3,038,808	53,790
Operating Expenses							
Salaries, Wages, and Administrative	2,122,758	1,253,068	-	1,017	20,535	3,397,378	33,359
Unemployment Compensation	-	-	619,685	-	-	619,685	-
Claims Paid	-	-	-	-	22,879	22,879	-
Depreciation and Amortization	191,673	95,841	-	-	1,160	288,674	17,553
Other	161,412	37,414	-	3,661	1,790	204,277	-
Total Operating Expenses	2,475,843	1,386,323	619,685	4,678	46,364	4,532,893	50,912
Operating Income (Loss)	(881,806)	(815,494)	161,966	19,565	21,684	(1,494,085)	2,878
Nonoperating Revenue (Expenses)							
Interest and Investment Income	13,369	13,329	-	12,888	4,732	44,318	760
Interest and Fiscal Charges	(9,618)	(11,456)	-	(37,957)	(6,775)	(65,806)	-
Other - Net	132,231	142,728	-	8,968	(11,936)	271,991	192
Total Nonoperating Revenues (Expenses)	135,982	144,601	-	(16,101)	(13,979)	250,503	952
Income (Loss) Before Capital Contributions, Grants, and Transfers	(745,824)	(670,893)	161,966	3,464	7,705	(1,243,582)	3,830
Capital Contributions	3,907	-	-	-	-	3,907	-
Federal Capitalization Grants	-	-	-	21,851	11,227	33,078	-
Transfers In	807,623	667,393	-	336	384	1,475,736	-
Transfers Out	-	-	(5,415)	-	-	(5,415)	-
Change in Net Position	65,706	(3,500)	156,551	25,651	19,316	263,724	3,830
Total Net Position (Deficit) - Beginning (as restated)	3,175,980	2,039,654	772,195	783,720	220,427	6,991,976	50,465
Total Net Position (Deficit) - Ending	$ 3,241,686	$ 2,036,154	$ 928,746	$ 809,371	$ 239,743	$ 7,255,700	$ 54,295

The accompanying Notes to the Financial Statements are an integral part of this statement.

STATEMENT OF CASH FLOWS
PROPRIETARY FUNDS

For the Fiscal Year Ended June 30, 2019

(Expressed in Thousands)

	Business-Type Activities						Governmental
	Enterprise Funds						Activities
	University of Connecticut & Health Center	Board of Regents	Employment Security	Clean Water	Other	Totals	Internal Service Funds
Cash Flows from Operating Activities							
Receipts from Customers	$ 1,165,814	$ 518,871	$ 733,509	$115,552	$ 78,590	$ 2,612,336	$ 53,280
Payments to Suppliers	(744,244)	(243,275)	-	(3,661)	(9,429)	(1,000,609)	(21,422)
Payments to Employees	(1,461,071)	(955,262)	-	(957)	(12,108)	(2,429,398)	(10,281)
Other Receipts (Payments)	446,133	65,528	(730,374)	(155,386)	(73,225)	(447,324)	(843)
Net Cash Provided by (Used in) Operating Activities	(593,368)	(614,138)	3,135	(44,452)	(16,172)	(1,264,995)	20,734
Cash Flows from Noncapital Financing Activities							
Proceeds from Sale of Bonds	13,000	-	-	-	-	13,000	-
Retirement of Bonds and Annuities Payable	(38,358)	-	-	(53,831)	(10,054)	(102,243)	-
Interest on Bonds and Annuities Payable	(26,929)	-	-	(37,497)	(6,395)	(70,821)	-
Transfers In	495,283	550,087	-	336	384	1,046,090	-
Transfers Out	-	-	(5,415)	-	-	(5,415)	-
Other Receipts (Payments)	133,136	142,727	(12,845)	-	(4,030)	258,988	192
Net Cash Flows from Noncapital Financing Activities	576,132	692,814	(18,260)	(90,992)	(20,095)	1,139,599	192
Cash Flows from Capital and Related Financing Activities							
Additions to Property, Plant, and Equipment	(267,767)	(126,541)	-	-	(823)	(395,131)	(19,673)
Proceeds from Capital Debt	187,000	-	-	-	-	187,000	-
Principal Paid on Capital Debt	(112,471)	(18,940)	-	-	-	(131,411)	-
Interest Paid on Capital Debt	(69,543)	(11,456)	-	-	-	(80,999)	-
Transfer In	184,234	117,307	-	-	-	301,541	-
Federal Grant	-	-	-	21,851	10,621	32,472	-
Other Receipts (Payments)	23,165	(18,474)	-	-	-	4,691	-
Net Cash Flows from Capital and Related Financing Activities	(55,382)	(58,104)	-	21,851	9,798	(81,837)	(19,673)
Cash Flows from Investing Activities							
Proceeds from Sales and Maturities of Investments	-	54,656	-	-	-	54,656	-
Purchase of Investment Securities	(462)	(111,173)	-	-	-	(111,635)	-
Interest on Investments	12,450	13,329	13,985	13,156	4,408	57,328	760
(Increase) Decrease in Restricted Assets	-	-	-	(21,055)	-	(21,055)	-
Other Receipts (Payments)	-	-	-	121,392	21,743	143,135	-
Net Cash Flows from Investing Activities	11,988	(43,188)	13,985	113,493	26,151	122,429	760
Net Increase (Decrease) in Cash and Cash Equivalents	(60,630)	(22,616)	(1,140)	(100)	(318)	(84,804)	2,013
Cash and Cash Equivalents - Beginning of Year	824,493	472,826	1,298	5,061	71,220	1,374,898	8,714
Cash and Cash Equivalents - End of Year	$ 763,863	$ 450,210	$ 158	$ 4,961	$ 70,902	$ 1,290,094	$ 10,727
Reconciliation of Operating Income (Loss) to Net Cash Provided by (Used In) Operating Activities							
Operating Income (Loss)	$ (881,806)	$(815,494)	$ 161,966	$ 19,565	$ 21,685	$(1,494,084)	$ 2,878
Adjustments not Affecting Cash:							
Depreciation and Amortization	191,673	95,841	-	-	1,160	288,674	17,553
Other	120,315	37,414	-	-	-	157,729	-
Change in Assets and Liabilities:					-		
(Increase) Decrease in Receivables, Net	2,781	(40,292)	(158,240)	(64,017)	(749)	(260,517)	(19)
(Increase) Decrease in Due from Other Funds	-	54,666	171	-	-	54,837	(350)
(Increase) Decrease in Inventories and Other Assets	12,443	(2,008)	-	-	(21,999)	(11,564)	(985)
Increase (Decrease) in Accounts Payables & Accrued Liabilities	(38,774)	56,734	(679)	-	(16,269)	1,012	1,657
Increase (Decrease) in Due to Other Funds	-	(999)	(83)	-	-	(1,082)	-
Total Adjustments	288,438	201,356	(158,831)	(64,017)	(37,857)	229,089	17,856
Net Cash Provided by (Used In) Operating Activities	$ (593,368)	$(614,138)	$ 3,135	$ (44,452)	$ (16,172)	$(1,264,995)	$ 20,734
Reconciliation of Cash and Cash Equivalents to the Statement of Net Assets							
Cash and Cash Equivalents - Current	$ 486,269	$ 306,334					
Cash and Cash Equivalents - Noncurrent	463	143,875					
Cash and Cash Equivalents - Restricted	277,131	-					
	$ 763,863	$ 450,209					
Noncash Investing, Capital, and Financing Activities:							
Amortization of Premiums, Discounts, and net loss on debt refunding's	$ 16,460						
Loss on disposal of capital assets	15,401						
Acquisition of software license under long term purchase contract	4,846						
Accruals of expenses related to construction in progress	40,014						
Unrealized gain (loss) on investment	(108)						
	$ 76,613						

The accompanying Notes to the Financial Statements are an integral part of this statement.

STATEMENT OF FIDUCIARY NET POSITION
FIDUCIARY FUNDS

June 30, 2019

(Expressed in Thousands)

	Pension & Other Employee Benefit Trust Funds	Investment Trust Fund External Investment Pool	Private-Purpose Trust Fund Escheat Securities	Agency Funds	Total
Assets					
Current:					
Cash and Cash Equivalents	$ 146,498	$ -	$ -	$ 133,622	$ 280,120
Receivables:					
Accounts, Net of Allowances	46,778	-	-	9,143	55,921
From Other Governments	456	-	-	-	456
From Other Funds	2,874	-	-	-	2,874
Interest	1,045	3,096	-	156	4,297
Inventories				14	14
Investments (See Note 3)	35,994,470	1,695,173	-	-	37,689,643
Securities Lending Collateral	2,080,404	-	-	-	2,080,404
Other Assets	-	13	-	334,473	334,486
Noncurrent:					
Due From Employers	17,060	-	-	-	17,060
Other Assets	-	-	985	-	985
Total Assets	$ 38,289,585	$ 1,698,282	$ 985	$ 477,408	$ 40,466,260
Liabilities					
Accounts Payable and Accrued Liabilities	$ 52,574	$ 3,469	$ -	$ 46,505	102,548
Securities Lending Obligation	2,080,404	-	-	-	2,080,404
Due to Other Funds	2,018	-	-	379	2,397
Funds Held for Others	-	-	-	430,524	430,524
Total Liabilities	$ 2,134,996	$ 3,469	$ -	$ 477,408	$ 2,615,873
Net Position					
Restricted for:					
Pension Benefits	$ 34,865,427	$ -	$ -		$ 34,865,427
Other Postemployment Benefits	1,289,162	-	-		1,289,162
Pool Participants	-	1,694,813	-		1,694,813
Individuals, Organizations, and Other Governments	-	-	985		985
Total Net Position	$ 36,154,589	$ 1,694,813	$ 985		$ 37,850,387

The accompanying Notes to the Financial Statements are an integral part of this statement.

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FIDUCIARY FUNDS

For the Fiscal Year Ended June 30, 2019

(Expressed in Thousands)

	Pension & Other Employee Benefit Trust Funds	Investment Trust Fund External Investment Pool	Private-Purpose Trust Fund Escheat Securities	Total
Additions				
Contributions:				
Plan Members	$ 1,048,973	$ -	$ -	$ 1,048,973
State	3,686,325	-	-	3,686,325
Municipalities	84,432	-	-	84,432
Total Contributions	4,819,730	-	-	4,819,730
Investment Income	2,149,013	48,178	-	2,197,191
Less: Investment Expense	(180,789)	(542)	-	(181,331)
Net Investment Income	1,968,224	47,636	-	2,015,860
Escheat Securities Received	-	-	37,839	37,839
Pool's Share Transactions	-	197,176	-	197,176
Transfer In	16,100	-	-	16,100
Other	15,507	-	-	15,507
Total Additions	6,819,561	244,812	37,839	7,102,212
Deductions				
Administrative Expense	17,880	-	-	17,880
Benefit Payments and Refunds	5,003,126	-	-	5,003,126
Escheat Securities Returned or Sold	-	-	39,589	39,589
Distributions to Pool Participants	-	47,636	-	47,636
Other	17,535	-	524	18,059
Total Deductions	5,038,541	47,636	40,113	5,126,290
Change in Net Position Held In Trust For:				
Pension and Other Employee Benefits	1,781,020	-	-	1,781,020
Individuals, Organizations, and Other Governments	-	197,176	(2,274)	194,902
Net Position - Beginning	34,373,569	1,497,637	3,259	35,874,465
Net Position - Ending	$ 36,154,589	$ 1,694,813	$ 985	$ 37,850,387

The accompanying Notes to the Financial Statements are an integral part of this statement.

STATEMENT OF NET POSITION
COMPONENT UNITS

June 30, 2019
(Expressed in Thousands)

Assets	Connecticut Housing Finance Authority (12-31-18)	Connecticut Lottery Corporation	Connecticut Airport Authority	Other Component Units	Total
Current Assets:					
Cash and Cash Equivalents	$ -	$ 20,880	$ 110,270	$ 158,476	$ 289,626
Investments	-	5,403	-	544,514	549,917
Receivables:					
Accounts, Net of Allowances	-	30,548	7,468	22,339	60,355
Loans, Net of Allowances	-	-	-	10,816	10,816
Other	-	1,206	-	446	1,652
Due From Other Governments	-	-	3,156	-	3,156
Due From Primary Government	-	-	5,567	164	5,731
Restricted Assets	798,771	-	11,075	318,866	1,128,712
Inventories	-	-	-	5,779	5,779
Other Current Assets	-	6,057	59	15,411	21,527
Total Current Assets	798,771	64,094	137,595	1,076,811	2,077,271
Noncurrent Assets:					
Investments	-	120,913	-	112,866	233,779
Accounts, Net of Allowances	-	-	-	40,193	40,193
Loans, Net of Allowances	-	-	-	96,976	96,976
Restricted Assets	4,962,804	-	281,949	342,030	5,586,783
Capital Assets, Net of Accumulated Depreciation	3,046	641	353,793	421,330	778,810
Other Noncurrent Assets	-	10,927	-	81,553	92,480
Total Noncurrent Assets	4,965,850	132,481	635,742	1,094,948	6,829,021
Total Assets	$ 5,764,621	$ 196,575	$ 773,337	$ 2,171,759	$ 8,906,292
Deferred Outflows of Resources					
Accumulated Decrease in Fair Value of Hedging Derivatives	$ -	$ -	$ 13,740	$ -	$ 13,740
Unamortized Losses on Bond Refundings	96,056	-	1,554	-	97,610
Related to Pensions & Other Postemployment Benefits	19,419	16,626	22,367	18,236	76,648
Other	-	-	-	2,847	2,847
Total Deferred Outflows of Resources	$ 115,475	$ 16,626	$ 37,661	$ 21,083	$ 190,845
Liabilities					
Current Liabilities:					
Accounts Payable and Accrued Liabilities	$ 24,048	$ 10,067	$ 26,380	$ 74,168	$ 134,663
Current Portion of Long-Term Obligations	278,391	5,969	7,510	23,258	315,128
Due To Primary Government	-	-	132	43,937	44,069
Amount Held for Institutions	-	-	-	210,149	210,149
Other Liabilities	-	40,525	5,081	-	45,606
Total Current Liabilities	302,439	56,561	39,103	351,512	749,615
Noncurrent Liabilities:					
Pension & OPEB Liability	131,043	97,690	143,009	99,574	471,316
Noncurrent Portion of Long-Term Obligations	4,613,052	121,254	262,738	521,629	5,518,673
Total Noncurrent Liabilities	4,744,095	218,944	405,747	621,203	5,989,989
Total Liabilities	$ 5,046,534	$ 275,505	$ 444,850	$ 972,715	$ 6,739,604
Other Deferred Inflows					
Related to Pensions & Other Postemployment Benefits	$ 15,279	$ 13,613	$ 7,395	$ 10,566	$ 46,853
Other Deferred Inflows	49,544	-	-	1,507	51,051
Total Deferred Inflows of Resources	$ 64,823	$ 13,613	$ 7,395	$ 12,073	$ 97,904
Net Position					
Net Investment in Capital Assets	$ 3,046	$ 641	$ 231,305	$ 213,265	$ 448,257
Restricted:					
Debt Service	-	-	14,255	-	14,255
Bond Indentures	765,693	-	16,031	-	781,724
Expendable Endowments	-	-	-	11,865	11,865
Nonexpendable Endowments	-	-	-	605,081	605,081
Capital Projects	-	-	130,268	-	130,268
Other Purposes	-	-	-	144,206	144,206
Unrestricted (Deficit)	-	(76,558)	(33,106)	233,638	123,974
Total Net Position	$ 768,739	$ (75,917)	$ 358,753	$ 1,208,055	$ 2,259,630

The accompanying Notes to the Financial Statements are an integral part of this statement.

STATEMENT OF ACTIVITIES
COMPONENT UNITS

For the Fiscal Year Ended June 30, 2019

(Expressed in Thousands)

		Program Revenues		
Functions/Programs	**Expenses**	**Charges for Services**	**Operating Grants and Contributions**	**Capital Grants and Contributions**
Connecticut Housing Finance Authority (12/31/18)	$ 223,740	$ 165,331	$ -	$ -
Connecticut Lottery Corporation	1,336,573	1,333,987	-	-
Connecticut Airport Authority	90,432	105,097	-	20,200
Other Component Units	361,364	331,199	6,450	4,071
Total Component Units	$ 2,012,109	$ 1,935,614	$ 6,450	$ 24,271

General Revenues:
Investment Income
Total General Revenues
Change in Net Position
Net Position - Beginning (as restated)
Net Position - Ending

The accompanying Notes to the Financial Statements are an integral part of this statement.

Net (Expense) Revenue and Changes in Net Position				
Connecticut Housing Finance Authority (12-31-18)	**Connecticut Lottery Corporation**	**Connecticut Airport Authority**	**Other Component Units**	**Totals**
$ (58,409)	$ -	$ -	$ -	$ (58,409)
-	(2,586)	-	-	(2,586)
-	-	34,865	-	34,865
-	-	-	(19,644)	(19,644)
(58,409)	(2,586)	34,865	(19,644)	(45,774)
12,922	6,348	2,882	41,702	63,854
12,922	6,348	2,882	41,702	63,854
(45,487)	3,762	37,747	22,058	18,080
814,226	(79,679)	321,006	1,185,997	2,241,550
$ 768,739	$ (75,917)	$ 358,753	$ 1,208,055	$ 2,259,630

THIS PAGE INTENTIONALLY LEFT BLANK

INDEX

Page

Note 1
Summary of Significant Accounting Policies

a. Basis of Presentation
The accompanying financial statements of the State of Connecticut have been prepared in conformity with generally accepted accounting principles as prescribed in pronouncements of the Governmental Accounting Standards Board, except for the financial statements of the University of Connecticut Foundation, Incorporated (a component unit), and the Board of Regents. Those statements are prepared according to generally accepted accounting principles as prescribed in pronouncements of the Financial Accounting Standards Board.

b. Reporting Entity
For financial reporting purposes, the State's reporting entity includes the "primary government" and its "component units." The primary government includes all funds, agencies, departments, bureaus, commissions, and component units that are considered an integral part of the State's legal entity. Component units are legally separate organizations for which the State is financially accountable. Financial accountability exists if (1) the State appoints a voting majority of the organization's governing board, and (2) there is a potential for the organization to provide specific financial benefits to or impose specific financial burdens on the State.

Component units are reported in separate columns and rows in the government-wide financial statements (discrete presentation) to emphasize that they are legally separate from the primary government. Financial statements for the major component units are included in the accompanying financial statements after the fund financial statements. Audited financial statements issued separately by each component unit can be obtained from their respective administrative offices.

The following organizations (Connecticut Housing Finance Authority, Materials Innovation and Recycling Authority, Connecticut Health and Educational Facilities Authority, Connecticut Higher Education Supplemental Loan Authority, Connecticut Student Loan Foundation, and Capital Region Development Authority) are reported as component units because the State appoints a voting majority of the organization's governing board and is contingently liable for the portion of the organization's bonded debt that is secured by a special capital reserve fund, or other contractual agreement.

The State appoints a voting majority of the organization's governing board and can access the resources for the following organizations (Connecticut Innovations, Incorporated and Connecticut Green Bank) therefore, these organizations are reported as component units.

The Connecticut Lottery Corporation is reported as a component unit because the State appoints a voting majority of the corporation's governing board and receives a significant amount of revenues from the operations of the lottery.

The Connecticut Airport Authority is reported as a component unit because the nature and significance of its relationship with the State are such that it would be misleading to exclude the authority from the State's reporting entity.

The State's major and nonmajor component units are:

Connecticut Housing Finance Authority (CHFA)
CHFA was created for the purpose of increasing the housing supply and encouraging and assisting in the purchase, development, and construction of housing for low and moderate-income families and persons throughout the State. The Authority's fiscal year is for the period ended on December 31, 2018.

Connecticut Airport Authority (CAA)
The Connecticut Airport Authority was established in July 2011 to develop, improve and operate Bradley International Airport and the state's five general aviation airports (Danielson, Groton-New London, Hartford-Brainard, Waterbury-Oxford, and Windham airports).

Materials Innovation and Recycling Authority (MIRA)
MIRA is responsible for the planning, design, construction, financing, management, ownership, operations and maintenance of solid waste disposal, volume reduction, recycling, intermediate processing, resource recovery and related support facilities necessary to carry out the State's Solid Waste Management Plan.

Connecticut Higher Education Supplemental Loan Authority (CHESLA)
CHESLA was created to assist students, their parents, and institutions of higher education to finance the cost of higher education through its bond funds. CHESLA is a subsidiary of CHEFA.

Connecticut Health and Educational Facilities Authority (CHEFA)
CHEFA was created to assist certain health care institutions, institutions of higher education, and qualified for-profit and not-for-profit institutions in the financing and refinancing of projects to be undertaken in relation to programs for these institutions.

Connecticut Student Loan Foundation (CSLF)
CSLF was established as a Connecticut state chartered nonprofit corporation established pursuant to State of Connecticut Statute Chapter 187a for the purpose of improving educational opportunity. CSLF is empowered to achieve this by originating and acquiring student loans and providing appropriate service incident to the administration of programs, which are established to improve educational opportunities. CSLF no longer originates or acquires student loans.

In July 2014, CSLF was statutorily consolidated with CHEFA as a subsidiary and became a quasi-public agency of the State of Connecticut.

Capital Region Development Authority (CRDA)
CRDA, formerly the Capital City Economic Development Authority markets major sports, convention, and exhibition venues in the region.

Connecticut Innovations, Incorporated (CI)
CI was established to stimulate and promote technological innovation and application of technology within Connecticut and encourage the development of new products, innovations, and inventions or markets in Connecticut by providing financial and technical assistance.

Connecticut Green Bank (CGB)
CGB was established on July 1, 2011 as a quasi-public agency to supersede the Connecticut Clean Energy Fund. CGB uses public and private funds to finance and support clean energy investment in residential, municipal, small business and larger commercial projects and stimulate demand for clean energy and the deployment of clean energy sources within the state.

Connecticut Lottery Corporation (CLC)
The corporation was created in 1996 for the purpose of generating revenues for the State through the operation of a lottery.

In addition, the State also includes the following non-governmental nonprofit corporation as a component unit.

University of Connecticut Foundation, Incorporated
The Foundation was created exclusively to solicit, receive, and administer gifts and financial resources from private sources for the benefit of all campuses and programs of the University of Connecticut and Health Center, a major Enterprise fund. The Foundation is reported as a component unit because the nature and significance of its relationship with the State are such that it would be misleading to exclude the Foundation from the State's reporting entity.

c. Government-wide and Fund Financial Statements

Government-wide Financial Statements
The Statement of Net Position and the Statement of Activities report information on all the nonfiduciary activities of the primary government and its component units. These statements distinguish between the governmental and business-type activities of the primary government by using separate columns and rows. Governmental activities are generally financed through taxes and intergovernmental revenues. Business-type activities are financed in whole or in part by fees charged to external parties. For the most part, the effect of interfund activity has been removed from these statements.

The Statement of Net Position presents the reporting entity's assets, deferred outflows of resources, liabilities, deferred inflows of resources, and net position. Net position is reported in three components:

1. Net Investment in Capital Assets – This component of net position consists of capital assets, net of accumulated depreciation, reduced by the outstanding balances of bonds issued to buy, construct, or improve those assets. Deferred outflows of resources and deferred inflows of resources that are attributable to the purchase, construction, or improvement of those assets or related debt should be included in this component of net position.

2. Restricted – This component of net position consists of restricted assets reduced by liabilities and deferred inflows of resources related to those assets.

3. Unrestricted – This component of net position is the remaining balance of net position, after the determination of the other two components of net position.

When both restricted and unrestricted resources are available for use, the State generally uses restricted resources first, then unrestricted resources as needed. There may be occasions when restricted funds may only be spent in proportion to unrestricted funds spent.

The Statement of Activities demonstrates the degree to which the direct expenses of a given function or segment is offset by program revenues. Direct expenses are those that are clearly identifiable with a specific function or segment. Indirect expenses are not allocated to the various functions or segments. Program revenues include a) fees, fines, and charges paid by the recipients of goods or services offered by the functions or segments and b) grants and contributions that are restricted to meeting the operational or capital needs of a function or segment. Revenues that are not classified as program revenues, including all taxes, are reported as general revenues.

Fund Financial Statements

The fund financial statements provide information about the State's funds, including its fiduciary funds and blended component units. Separate statements for each fund category (governmental, proprietary, and fiduciary) are presented. The emphasis of fund financial statements is on major governmental and enterprise funds, each displayed in a separate column. All remaining governmental and enterprise funds are aggregated and reported as nonmajor funds.

In the governmental fund financial statements, fund balance (difference between assets and liabilities) is classified as nonspendable, restricted, and unrestricted (committed, assigned, or unassigned). Restricted represents those portions of fund balance where constraints on the resources are externally imposed or imposed by law through constitutional provisions or enabling legislation. Committed fund balance represents amounts that can only be used for specific purposes pursuant to constraints by formal action of the Legislature, such as appropriation or legislation. Assigned fund balance is constrained by the Legislature's intent to be used for specific uses but is neither restricted nor committed.

The State reports the following major governmental funds:

General Fund - This is the State's primary operating fund. It is used to account for all financial resources which are not required to be accounted in other funds and which are spent for those services normally provided by the State (e.g., health, social assistance, education, etc.).

Debt Service - This fund is used to account for the resources that are restricted for payment of principal and interest on special tax obligation bonds of the Transportation fund.

Transportation - This fund is used to account for motor fuel taxes, vehicle registration and driver license fees, and other revenues that are restricted for the payment of budgeted appropriations of the Transportation and Motor Vehicles Departments.

Restricted Grants and Accounts - This fund is used to account for resources which are restricted by Federal and other providers to be spent for specific purposes.

Grant and Loan Programs - This fund is used to account for resources that are restricted by state legislation for the purpose of providing grants and/or loans to municipalities and organizations located in the State.

The State reports the following major enterprise funds:

University of Connecticut & Health Center - This fund is used to account for the operations of the University of Connecticut, a comprehensive institution of higher education, which includes the University of Connecticut Health Center and John Dempsey Hospital.

Board of Regents - This fund is used to account for the operations of the State University System & the State Community Colleges which consists of four universities: Central, Eastern, Southern, and Western and twelve regional community colleges.

Colleges and universities do not have separate corporate powers and sue and are sued as part of the state with legal representation provided through the state Attorney General's Office. Since the colleges and universities are legally part of the state their financial operations are reported in the state's financial statements using the fund structure prescribed by GASB.

Employment Security - This fund is used to account for unemployment insurance premiums from employers and the payment of unemployment benefits to eligible claimants.

Clean Water - This fund is used to account for resources used to provide grants and loans to municipalities to finance waste water treatment facilities.

In addition, the State reports the following fund types:

Internal Service Funds - These funds account for goods and services provided to other agencies of the State on a cost-reimbursement basis. These goods and services include prisoner-built office furnishings, information services support, telecommunications, printing, and other services.

Pension Trust Funds - These funds account for resources held in the custody of the state for the members and beneficiaries of the State's pension plans. These plans are discussed more fully in Notes 10, 11, and 12.

Other Postemployment Benefit (OPEB) Trust Funds - These funds account for resources held in trust for the members and beneficiaries of the state's other postemployment benefit plans which are described in notes 13 and 14.

Investment Trust Fund - This fund accounts for the external portion of the State's Short-Term Investment Fund, an investment pool managed by the State Treasurer.

Private-Purpose Trust Fund - This fund accounts for escheat securities held in trust for individuals by the State Treasurer.

Agency Funds - These funds account for deposits, investments, and other assets held by the State as an agent for inmates and patients of State institutions, insurance companies, municipalities, and private organizations.

d. Measurement Focus and Basis of Accounting

Government-wide, Proprietary, and Fiduciary Fund Financial Statements

The government-wide, proprietary, and fiduciary fund financial statements are reported using the economic resources measurement focus and the accrual basis of accounting. Revenues are recorded when earned and expenses are recorded at the time the liabilities are incurred, regardless of when the related cash flows take place. Taxes and casino gaming payments are recognized as revenues in the period when the underlying exchange transaction has occurred. Grants and similar items are recognized as revenues in the period when all eligibility requirements imposed by the provider have been met.

Proprietary funds distinguish operating revenues and expenses from nonoperating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund's principal ongoing operations. The principal operating revenues of the State's enterprise and internal service funds are charges to customers for sales and services, assessments, and intergovernmental revenues. Operating expenses for enterprise and internal service funds include salaries, wages, and administrative expenses, unemployment compensation, claims paid, and depreciation expense. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

Governmental Fund Financial Statements

Governmental funds are reported using the current financial resources measurement focus and the modified accrual basis of accounting. Under this method, revenues are recognized when measurable and available. The State considers taxes and other revenues to be available if the revenues are collected within 60 days after year-end. Exceptions to this policy are federal grant revenues, which are available if collection is expected within 12 months after year-end, and licenses and fees which are recognized as revenues when the cash is collected. Expenditures are recorded when the related fund liability is incurred, except for principal and interest on general long-term debt, compensated absences, and claims and judgments, which are recognized as expenditures to the extent they have matured. General capital asset acquisitions are reported as expenditures in governmental funds. Proceeds of general-long term debt and acquisitions under capital leases are reported as other financing sources.

e. Assets and Liabilities

Cash and Cash Equivalents (see Note 3)

In addition to petty cash and bank accounts, this account includes cash equivalents – short-term, highly liquid investments with original maturities of three months or less when purchased. Cash equivalents consist of investments in the Short-Term Investment Fund which are reported at the fund's share price.

In the Statement of Cash Flows, certain Enterprise funds exclude from cash and cash equivalents investments in STIF reported as noncurrent or restricted assets.

Investments (see Note 3)

Investments include Equity in Combined Investment Funds and other investments. Equity in Combined Investment Funds is reported at fair value based on the funds' current share price. Other investments are reported at fair value, except for the following investments which are reported at cost or amortized cost:

- Nonparticipating interest-earning investment contracts.

- Money market investments that mature within one year or less at the date of their acquisition.
- Investments of the External Investment Pool fund (an Investment Trust fund).

The fair value of other investments is determined based on quoted market prices except for:

- The fair value of State bonds held by the Clean Water and Drinking Water funds (Enterprise funds) which is estimated using a comparison of other State bonds.

- The fair value of securities not publicly traded held by the Connecticut Innovations, Incorporated, a component unit. The fair value of these investments is determined by an independent valuation committee of the Corporation, after considering pertinent information about the companies comprising the investments, including but not limited to recent sales prices of the issuer's securities, sales growth, progress toward business goals, and other operating data.

The State invests in derivatives. These investments are held by the Combined Investment Funds and are reported at fair value in each fund's statement of net position.

Inventories

Inventories are reported at cost. Cost is determined by the first-in first-out (FIFO) method. Inventories in the governmental funds consist of expendable supplies held for consumption whose cost was recorded as an expenditure at the time the individual inventory items were purchased. Reported inventories in these funds are offset by a fund balance designation (nonexpendable) to indicate that they are unavailable for appropriation.

Capital Assets and Depreciation

Capital assets include property, plant, equipment, and infrastructure assets (e.g. roads, bridges, railways, and similar items), are reported in the applicable governmental or business-type activities columns in the government-wide financial statements. Capital assets are defined by the State as assets with an initial individual cost of more than $5,000 and an estimated useful life in excess of one year. Such assets are recorded at historical cost or estimated fair market value at the date of donation or in the case of gifts at acquisition value.

Collections of historical documents, rare books and manuscripts, guns, paintings, and other items are not capitalized. These collections are held by the State Library for public exhibition, education, or research; and are kept protected, cared for, and preserved indefinitely. The costs of normal maintenance and repairs that do not add to the value of the asset or materially extend assets lives are also not capitalized.

Major outlays for capital assets and improvements are capitalized as projects are constructed. Interest incurred during the construction phase of capital assets of business-type activities is included as part of the capitalized value of the assets constructed.

Property, plant, and equipment of the primary government are depreciated using the straight-line method over the following estimated useful lives:

Buildings	40 years
Improvements Other than Buildings	10-20 years
Machinery and Equipment	5-30 years
Infrastructure	20-28 years

Securities Lending Transactions (see Note 3)

Assets, liabilities, income, and expenses arising from securities lending transactions of the Combined Investment Funds are allocated ratably to the participant funds based on their equity in the Combined Investment Funds.

Escheat Property

Escheat property is private property that has reverted to the State because it has been abandoned or has not been claimed by the rightful owners for a certain amount of time. State law requires that all escheat property receipts be recorded as revenue in the General fund. Escheat revenue is reduced, and a fund liability is reported to the extent that it is probable that escheat property will be refunded to claimants in the future. This liability is estimated based on the State's historical relationship between escheat property receipts and amounts paid as refunds, considering current conditions and trends.

Deferred Outflows of Resources

Deferred outflows of resources are defined as the consumption of net assets in one period that are applicable to future periods. These amounts are reported in the Statement of Net Position on the government-wide and fund financial statements in a separate section, after total assets.

Unearned Revenues

In the government-wide and fund financial statements, this liability represents resources that have been received, but not yet earned.

Long-term Obligations

In the government-wide and proprietary fund financial statements, long-term debt and other long-term obligations are reported as liabilities in the applicable governmental activities, business-type activities, or proprietary fund statement of net position. Bond premiums and issuance costs are deferred and amortized over the life of the bonds using the straight-line method. Bonds payable are reported net of the applicable bond premium. Bond issuance costs are reported as an expense in the year they are incurred. Other significant long-term obligations include the net pension liability, OPEB obligation, compensated absences, workers' compensation claims, and federal loans. In the fund financial statements, governmental fund types recognize bond premiums and bond issuance costs during the current period. The face amount of debt issued is reported as other financing sources. Premiums received on debt issuances are reported as other financing sources. Issuance costs, whether withheld from the actual debt proceeds received, are reported as debt service expenditures.

Capital Appreciation Bonds

Capital appreciation (deep discount) bonds issued by the State, unlike most bonds, which pay interest semi-annually, do not pay interest until the maturity of the bonds. An investor who purchases a capital appreciation bond at its discounted price and holds it until maturity will receive an amount which equals the initial price plus an amount which has accrued over the life of the bond on a semiannual compounding basis. The net value of the bonds is accreted (the discount reduced), based on this semiannual compounding, over the life of the bonds. This deep-discount debt is reported in the government-wide statement of net position at its net or accreted value rather than at face value.

Compensated Absences

The liability for compensated absences reported in the government-wide and proprietary fund statements consist of unpaid, accumulated vacation and sick leave balances. The liability has been calculated using the vesting method, in which leave amounts for both employees who currently are eligible to receive termination payments and other employees who are expected to become eligible in the future to receive such payments upon termination are included.

Vacation and sick policy are as follows: Employees hired on or before June 30, 1977, and managers regardless of date hired can accumulate up to a maximum of 120 vacation days. Employees hired after that date can accumulate up to a maximum of 60 days. Upon termination or death, the employee is entitled to be paid for the full amount of vacation days owed. No limit is placed on the number of sick days that an employee can accumulate. However, the employee is entitled to payment for accumulated sick time only upon retirement, or after ten years of service upon death, for an amount equal to one-fourth of his/her accrued sick leave up to a maximum payment equivalent to sixty days.

f. Derivative Instruments

The State's derivative instruments consist of interest rate swap agreements, all of which have been determined by the State to be effective cash flow hedges. Accumulated decreases in the fair value of some of the swaps are reported as deferred outflows of resources in the Statement of Net Position. These agreements are discussed in more detail in Note No. 18.

g. Deferred Inflows of Resources

Deferred inflows of resources are defined as the acquisition of net assets in one period that are applicable to future periods. These amounts are reported in the Statement of Net Position and Balance Sheet in a separate section, after total liabilities.

h. Interfund Activities

In the fund financial statements, interfund activities are reported as follows:

Interfund receivables/payables - The current portion of interfund loans outstanding at the end of the fiscal year is reported as due from/to other funds; the noncurrent portion as advances to/from other funds. All other outstanding balances between funds are reported as due from/to other funds. Any residual balances outstanding between the governmental activities and business-type activities are reported in the government-wide financial statements as "internal balances."

Interfund services provided and used - Sales and purchases of goods and services between funds for a price approximating their external exchange value. Interfund services provided and used are reported as revenues in seller funds and expenditures or expenses in purchaser funds. In the statement of activities, transactions between the primary government and its discretely presented component units are reported as revenues and expenses, unless they represent repayments of loans or similar activities.

Interfund transfers - Flows of assets without equivalent flows of assets in return and without a requirement for repayment. In governmental funds, transfers are reported as other financing uses in the funds making transfers and as other financing sources in the funds receiving transfers. In proprietary funds, transfers are reported after nonoperating revenues and expenses.

Interfund reimbursements - Repayments from the funds responsible for certain expenditures or expenses to the funds that initially paid for them. Reimbursements are not reported in the financial statements.

i. Endowments

The University of Connecticut and Health Center designate the University of Connecticut Foundation (a component unit of the State) as the manager of the University's and Health Center's endowment funds. The Foundation makes spending distributions to the University and Health Center for each participating endowment. The allocation is spent by the University and Health Center in accordance with the respective purposes of the endowments, the policies and procedures of the University and Health Center, and State statutes, and in accordance with the Foundation's endowment spending policy.

Additional information regarding endowments is presented in the UConn Foundation financial report.

j. Supplemental Nutrition Assistance Program (SNAP)

Nutrition assistance distributed to recipients during the year is recognized as an expenditure and a revenue in the governmental fund financial statements.

k. External Investment Pool

Assets and liabilities of the Short-Term Investment Fund are allocated ratably to the External Investment Pool Fund based on its investment in the Short-Term Investment Fund (see Note 3). Pool income is determined based on distributions made to the pool's participants.

l. Upcoming Accounting Pronouncements

In January 2017, GASB issued Statement No. 84, *Fiduciary Activities*. The objective of this Statement is to improve guidance concerning the identification of fiduciary activities for accounting and financial reporting purposes and how those activities should be reported. This Statement is effective for fiscal years beginning after December 15, 2018. The State is currently evaluating the impact this standard will have on its financial statements.

The GASB issued Statement No. 87, *Leases* in June 2017. This Statement establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources. This Statement is effective for fiscal years beginning after December 15, 2019. The State is currently evaluating the impact this standard will have on its financial statements.

In June 2018, GASB issued Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period.* This Statements objective are (1) to enhance the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period and (2) to simplify accounting for interest cost incurred before the end of a construction period. This Statement requires that interest cost incurred before the end of a construction period be recognized as an expense in the period in which the cost is incurred for financial statements prepared using the economic resources measurement focus. As a result, interest cost incurred before the end of a construction period will not be included in the historical cost of a capital asset reported in a business-type activity or enterprise fund. This Statement is effective for reporting periods beginning after December 15, 2019. The State is currently evaluating the impact this standard will have on its financial statements.

In May 2019, GASB issued Statement No. 91, *Conduit Debt Obligations*. The objectives of this Statement are to provide a single method of reporting conduit debt obligations by issuers and eliminate diversity in practice related to (1) commitments extended by issuers, (2) arrangements related with debt obligations, and (3) related note disclosures. This Statement is effective for reporting periods beginning after December 15, 2020. The State is currently evaluating the impact this standard will have on its financial statements.

m. Use of Estimates

The preparation of the financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts and disclosures in the financial statements. Actual results could differ from those estimates.

Note 2
Nonmajor Fund Deficits

The following funds have deficit fund/net position balances at June 30, 2019, none of which constitutes a violation of statutory provisions (amounts in thousands).

Capital Projects		
Transportation	$	718
Special Revenue		
Regional Market	$	172
Tourism	$	2,446
Enterprise		
Bradley Parking Garage	$	6,607

The Transportation deficit will be eliminated in the future by the sale of bonds. Bonds have not been issued in this fund since fiscal year 2008.

The Regional Market fund deficit was because of additional expenditures this fiscal year and lower revenue collections. This deficit should be eliminated in the future. The Tourism fund deficit was a result of revenues being recognized in fiscal year 2020 not fiscal year 2019, this deficit should be eliminated in the future.

The Bradley parking garage is designed to generate cash flows from operations that, after operating and maintenance expenses are sufficient to service debt and make State and developer payments as well as to provide a return to the State of minimum guarantee payments, both of which are reflected as expenses in the accompanying statement of operations and accumulated deficit.

Note 3
Cash Deposits and Investments

According to GASB Statement No. 40, "*Deposit and Investment Risk Disclosures*", the State is required to make certain disclosures about deposit and investment risks that have the potential to result in losses. Thus, the following deposit and investment risks are discussed in this note:

Interest Rate Risk - the risk that changes in interest rates will adversely affect the fair value of an investment.

Credit Risk - the risk that an issuer or other counterparty to an investment will not fulfill its obligations.

Concentration of Credit Risk - the risk of loss attributed to the magnitude of an investment in a single issuer.

Custodial Credit Risk (deposits) - the risk that, in the event of a bank failure, the State's deposits may not be recovered.

Foreign Currency Risk - the risk that changes in exchange rates will adversely affect the fair value of an investment or deposit.

Primary Government

The State Treasurer is the chief fiscal officer of State government and is responsible for the prudent management and investment of monies of State funds and agencies as well as monies of pension and other trust funds. The State Treasurer with the advice of the Investment Advisory Council, whose members include outside investment professionals and pension beneficiaries, establishes investment policies and guidelines. Currently, the State Treasurer manages one Short-Term Investment Fund and twelve Combined Investment Funds.

Short-Term Investment Fund (STIF)

STIF is a money market investment pool in which the State, municipal entities, and political subdivisions of the State are eligible to invest. The State Treasurer is authorized to invest monies of STIF in United States government and agency obligations, certificates of deposit, commercial paper, corporate bonds, savings accounts, bankers' acceptances, repurchase agreements, and asset-backed securities. STIF's investments are reported at amortized cost (which approximates fair value) in the fund's statement of net position.

For financial reporting purposes, STIF is a mixed investment pool – a pool having external and internal portions. The external portion of STIF (i.e. the portion that belongs to participants which are not part of the State's financial reporting entity) is reported as an investment trust fund (External Investment Pool fund) in the fiduciary fund financial statements. The internal portion of STIF (i.e., the portion that belongs to participants that are part of the State's financial reporting entity) is not reported in the accompanying financial statements. Instead, investments in the internal portion of STIF by participant funds are reported as cash equivalents in the government-wide and fund financial statements.

For disclosure purposes, certificates of deposit held by STIF are reported in this note as bank deposits, not as investments.
As of June 30, 2019, STIF had the following investments and maturities (amounts in thousands):

Short-Term Investment Fund			
		Investment Maturities (in years)	
Investment Type	Amortized Cost	Less Than 1	1-5
Federal Agency Securities	$ 1,948,287	$ 1,684,224	$ 264,063
Bank Commercial Paper	1,873,824	1,873,824	-
Repurchase Agreements	610,395	610,395	-
Total Investments	$ 4,432,506	$ 4,168,443	$ 264,063

Interest Rate Risk

STIF's policy for managing interest rate risk is to limit investment to a very short weighted average maturity, not to exceed 90 days, and to comply with Standard and Poor's requirement that the weighted average maturity not to exceed 60 days. As of June 30, 2019, the weighted average maturity of STIF was 43 days. Additionally, STIF is allowed by policy to invest in floating-rate securities. However, investment in these securities having maturities greater than two years is limited to no more than 20 percent of the overall portfolio. For purposes of the fund's weighted average maturity calculation, variable-rate securities are calculated using their rate reset date. Because these securities reprice frequently to prevailing market rates, interest rate risk is substantially reduced. As of June 30, 2019, the amount of STIF's investments in variable-rate securities was $1,909 million.

Credit Risk

STIF's policy for managing credit risk is to purchase short-term, high-quality fixed income securities that fall within the highest short-term or long-term rating categories by nationally recognized rating organizations.

As of June 30, 2019, STIF's investments were rated by Standard and Poor's as follows (amounts in thousands):

Short-Term Investment Fund				
		Quality Ratings		
Investment Type	Amortized Cost	AAAm	AA+/A-1+	A/A-1
Federal Agency Securities	$ 1,948,287	$ -	$ 1,948,287	$ -
Corporate & Bank Commercial Paper	1,873,824	-	1,873,824	-
Repurchase Agreements	610,395	-	450,000	160,395
Total Investments	$ 4,432,506	$ -	$ 4,272,111	$ 160,395

Concentration of Credit Risk

STIF reduces its exposure to this risk by insuring that at least 75 percent of fund assets will be invested in securities rated "A-1+" or equivalent. In addition, exposure to any single non-governmental issuer will not exceed 5 percent (at the time a security is purchased), exposure to any single money market mutual fund (rated AAAm) will not exceed 5 percent of fund assets and exposure to money market mutual funds in total will not exceed 10 percent. As of June 30, 2019, STIF's investments in any one issuer that represents more than 5 percent of total investments were as follows (amounts in thousands):

Investment Issuer	Amortized Cost
Federal Home Loan Bank	$ 790,143
Federal Farm Credit Bank	$ 721,876
Royal Bank of Canada	$ 625,025

Custodial Credit Risk-Bank Deposits-Nonnegotiable Certificate of Deposits (amounts in thousands):

STIF follows policy parameters that limit deposits in any one entity to a maximum of ten percent of assets. Further, the certificates of deposit must be issued from commercial banks whose short-term debt is rated at least "A-1" by Standard and Poor's and "F-1" by Fitch and whose long-term debt is rated at least "A-" or backed by a letter of credit issued by a Federal Home Loan bank. As of June 30, 2019, $3,612,723 of the bank balance of STIF's deposits of $3,664,973 was exposed to custodial credit risk as follows:

Uninsured and uncollateralized	$	2,779,248
Uninsured and collateral held by trust department of either the pledging bank or another bank not in the name of the State		833,475
Total	$	3,612,723

Combined Investment Funds (CIFS)

The CIFS are open-ended, unitized portfolios in which the State pension trust and permanent funds are eligible to invest. The State pension trust and permanent funds own the units of the CIFS. The State Treasurer is also authorized to invest monies of the CIFS in a broad range of fixed income and equity securities, as well as real estate properties, mortgages and private equity. CIFS' investments are reported at fair value in each fund's statement of net position.

For financial reporting purposes, the CIFS are external investment pools and are not reported in the accompanying financial statements. Instead, investments in the CIFS by participant funds are reported as equity in the CIFS in the government-wide and fund financial statements.

	Primary Government		
	Governmental Activities	Business-Type Activities	Fiduciary Funds
Equity in the CIFS	$ 119,543	$ 667	$ 35,994,470
Other Investments	780	121,196	1,695,173
Total Investments-Current	$ 120,323	$ 121,863	$ 37,689,643

The CIFS measure and record their investments using fair value measurement guidelines. Fair value is the price that would be received to sell an asset, or paid to transfer a liability, in an orderly transaction between market participants at the measurement date. The guidelines recognize a three-tiered fair value hierarchy, as follows: Level 1: Quoted prices for identical investments in active market; Level 2: Observable inputs other than quoted market price; and Level 3: Unobservable inputs.

As of June 30, 2019, the CIFS had the following investments (amounts in thousands):

	Fair Value Measurements			
Investments by Fair Value Level	**Total**	**Level 1**	**Level 2**	**Level 3**
Cash Equivalents	$ 547,506	$ 10,019	$ 537,487	$ -
Asset Backed Securities	139,086	-	139,086	-
Government Securities	4,195,366	1,670,610	2,524,756	-
Government Agency Securities	923,626	-	923,626	-
Mortgage Backed Securities	240,813	-	240,813	-
Corporate Debt	4,538,294	-	4,380,266	158,028
Convertible Securities	27,070	-	27,070	-
Common Stock	16,561,339	16,551,372	(318)	10,285
Preferred Stock	61,977	47,521	14,456	-
Real Estate Investment Trust	420,639	335,697	84,942	-
Mutual Fund	809,576	809,576	-	-
Limited Partnerships	531	531	-	-
Total	28,465,823	$ 19,425,326	$ 8,872,184	$ 168,313
Investments Measured by Net Asset Value (NAV)		**Unfunded Commitments**	**Redemption Frequency**	**Redemption Notice Period**
Limited Liability Corporation	1,156	$ -	Illiquid	N/A
Limited Partnerships	7,890,572	2,513,490	Illiquid	N/A
Total	7,891,728	$ 2,513,490		
Total Investments in Securities at Fair Value	$ 36,357,551			

Interest Rate Risk

CIFS' investment managers are given full discretion to manage their portion of CIFS' assets within their respective guidelines and constraints. The guidelines and constraints always require each manager to maintain a diversified portfolio. In addition, each core manager is required to maintain a target duration that is like its respective benchmark which is typically the Barclays Aggregate-an intermediate duration index.

Following is a schedule which provides information about the interest rate risks associated with the CIFS' investments. The investments include short-term cash equivalents including certificates of deposit and collateral, long-term investments and restricted assets by maturity in years (amounts in thousands):

Combined Investment Funds

		Investment Maturities (in Years)			
Investment Type	**Fair Value**	**Less Than 1**	**1 - 5**	**6 - 10**	**More Than 10**
Cash Equivalents	$ 547,506	$ 547,506	$ -	$ -	$ -
Asset Backed Securities	139,085	(1,362)	48,735	58,115	33,597
Government Securities	4,195,366	144,857	1,384,282	1,356,583	1,309,644
Government Agency Securities	923,626	10,845	18,844	41,043	852,894
Mortgage Backed Securities	240,813	-	9,623	10,622	220,568
Corporate Debt	4,538,295	1,332,936	1,615,672	1,130,129	459,558
Convertible Debt	27,069	3,898	3,937	9,546	9,688
	$ 10,611,760	$ 2,038,680	$ 3,081,093	$ 2,606,038	$ 2,885,949

Credit Risk

The CIFS minimize exposure to this risk in accordance with a comprehensive investment policy statement, as developed by the Office of the Treasurer and the State's Investment Advisory Council, which provides policy guidelines for the CIFS and includes an asset allocation plan. The asset allocation plan's main objective is to maximize investment returns over the long term at an acceptable level of risk. As of June 30, 2019, CIFS' debt investments were rated by Moody's as follows (amounts in thousands):

Combined Investment Funds

	Fair Value	Cash Equivalents	Asset Backed Securities	Government Securities	Government Agency Securities	Mortgage Backed Securities	Corporate Debt	Convertible Debt
Aaa	$ 2,723,104,174	$ 2,552,375	$ 108,555,291	$ 1,846,859,461	$ 616,727,644	$ 129,104,495	$ 19,304,907	$ -
Aa	524,071,220	-	2,870,941	455,577,146	-	7,783,898	57,839,236	-
A	756,333,083	-	3,452,800	413,989,495	-	3,628,122	335,262,665	-
Baa	1,158,028,757	-	3,435,754	518,584,720	-	157,386	635,850,897	-
Ba	863,446,449	3,245,076	926,892	190,880,217	-	-	657,403,371	10,990,893
B	1,131,465,493	-	-	289,874,278	-	-	841,188,133	403,081
Caa	433,392,813	-	-	38,448,591	-	-	394,944,223	-
Ca	6,241,204	-	-	-	-	-	6,241,204	-
C	360,985	-	-	-	-	-	360,985	-
Prime 1	737,805,605	36,862,349	-	-	-	-	700,943,256	-
Prime 2	67,160,910	13,952,040	-	-	-	-	53,208,870	-
Prime 3	6,137,289	3,387,904	-	-	-	-	2,749,385	-
U.S. Government fixed income securities (not rated)	328,809,509	-	-	21,911,096	306,898,413	-	-	-
Non US Government fixed income securities (not rated)	419,240,763	-	-	419,240,763	-	-	-	-
Not Rated	1,456,161,864	487,506,246	19,843,870	-	-	100,138,722	832,996,911	15,676,115
	$ 10,611,760,118	$ 547,505,992	$ 139,085,548	$ 4,195,365,767	$ 923,626,057	$ 240,812,624	$ 4,538,294,042	$ 27,070,088

Foreign Currency Risk

The CIFS manage exposure to this risk by utilizing a strategic hedge ratio of 50 percent for the developed market portion of the International Stock Fund (a Combined Investment Fund). This strategic hedge ratio represents the neutral stance or desired long-term exposure to currency for the ISF. To implement this policy, currency specialists actively manage the currency portfolio as an overlay strategy to the equity investment managers. These specialists may manage the portfolio passively or actively depending on opportunities in the marketplace. While managers within the fixed income portion of the portfolio can invest in non-U.S. denominated securities, managers are required to limit that investment to a portion of their respective portfolios.

As of June 30, 2019, CIFS' foreign deposits and investments were as follows (amounts in thousands):

Combined Investment Funds										
				Fixed Income Securities				Equities		
Foreign Currency	Total	Cash	Cash Equivalent Collateral	Government Securities	Corporate Debt	Asset Backed	Mortgage Backed	Common Stock	Preferred Stock	Real Estate Investment Trust Fund
Argentine Peso	$ 7,639	$ 4	$ -	$ 7,264	$ 371	$ -	$ -	$ -	$ -	$ -
Australian Dollar	385,256	882	-	39,292	-	-	-	323,793	-	21,289
Brazilian Real	304,698	4	-	123,000	-	-	-	166,984	14,710	-
Canadian Dollar	121,409	897	(62)	16,633	-	-	-	103,185	-	756
Chilean Peso	17,362	-	-	17,362	-	-	-	-	-	-
Chinese Yuan Renminbi	49	-	38	-	-	11	-	-	-	-
Colombian Peso	75,589	252	-	73,785	1,460	-	-	92	-	-
Czech Koruna	3,424	-	-	1,297	-	-	-	2,127	-	-
Danish Krone	119,935	14	-	1,038	-	-	-	118,883	-	-
Dominican Rep Peso	11,492	-	-	11,492	-	-	-	-	-	-
Egyptian Pound	15,229	-	-	6,591	-	-	-	8,638	-	-
Euro Currency	2,351,558	3,172	756	256,837	21,907	(526)	-	2,043,301	11,992	14,119
Hong Kong Dollar	937,082	2,173	-	-	-	-	-	906,878	-	28,031
Hungarian Forint	62,232	467	-	27,417	-	-	-	34,348	-	-
Indian Rupee	4,111	-	-	287	3,824	-	-	-	-	-
Indonesian Rupiah	208,293	146	-	62,091	59,724	-	-	86,332	-	-
Israeli Shekel	58,171	239	-	-	-	-	-	57,932	-	-
Japanese Yen	1,352,691	7,796	27	32,106	-	31	-	1,304,647	-	8,084
Kazakhstan Tenge	5,318	-	-	-	5,318	-	-	-	-	-
Georgian Lari	1,415	-	-	-	1,415	-	-	-	-	-
Malaysian Ringgit	73,083	1,070	-	66,193	-	97	-	5,723	-	-
Mexican Peso	195,459	825	232	157,253	6,640	-	-	30,509	-	-
New Zealand Dollar	107,556	692	1,010	83,747	-	(1,165)	-	23,272	-	-
Nigerian Naira	5,243	-	-	1,019	4,104	-	-	120	-	-
Norwegian Krone	47,760	722	-	1,703	-	-	-	45,335	-	-
Peruvian Nouveau Sol	43,629	38	-	37,662	5,929	-	-	-	-	-
Philippine Peso	21,140	-	-	6,088	-	-	-	15,052	-	-
Polish Zloty	133,210	50	(7)	91,765	-	110	-	41,292	-	-
Pound Sterling	1,391,329	2,780	449	308,804	4,717	(339)	-	1,057,615	-	17,303
Romanian Leu	14,098	44	-	14,054	-	-	-	-	-	-
Russian Ruble	95,471	275	-	82,803	-	-	-	12,393	-	-
Singapore Dollar	138,762	179	-	-	-	-	-	125,585	-	12,998
South African Rand	218,627	154	-	89,957	-	-	-	128,516	-	-
South Korean Won	328,998	1	-	-	-	-	-	320,075	8,922	-
Sri Lanka Rupee	3,538	-	-	-	3,538	-	-	-	-	-
Swedish Krona	179,020	453	-	3,405	-	-	-	175,162	-	-
Swiss Franc	537,091	218	-	-	-	-	-	536,873	-	-
Thailand Baht	166,290	12	-	61,504	-	-	-	104,774	-	-
Turkish Lira	47,086	24	-	30,667	-	-	-	16,395	-	-
Ukraine Hryvana	6,235	-	-	-	6,235	-	-	-	-	-
Uruguayan Peso	4,596	-	-	4,596	-	-	-	-	-	-
	$ 9,801,174	$ 23,583	$ 2,443	$ 1,717,712	$ 125,182	$ (1,781)	$ -	$ 7,795,831	$ 35,624	$ 102,580

Derivatives

As of June 30, 2019, the CIFS held the following derivative investments (amounts in thousands):

	2019 Fair Value	2018 Fair Value
Adjustable Rate Securities	$ 357,004	$ 724,765
Asset Backed Securities	142,835	257,317
Mortgage Backed Securities	164,087	269,910
Collateralized Mortgage Obligations	76,726	63,289
Forward Mortgage Backed Securities (TBA's)	306,359	140,844
Interest Only	2,317	341
Options	(1,163)	(179)
Total	$ 1,048,165	$ 1,456,287

The Inflation Linked Bond Fund held futures with a notional cost of $4,225. Also, the Core Fixed Income held futures with a notional cost of $74,891. The High Yield Debt Fund held futures with a negative notional cost of ($2,727), the Developed Market International Stock held futures with a notional cost of $88,301.

The CIFS invest in derivative investments for trading purposes and to enhance investment returns. The credit exposure resulting from these investments is limited to their fair value at year end.

The CIFS also invest in foreign currency contracts. Contracts to buy are used to acquire exposure to foreign currencies, while contracts to sell are used to hedge the CIFS' investments against currency fluctuations. Losses may arise from changes in the value of the foreign currency or failure of the counterparties to perform under the contracts' terms. As of June 30, 2019, the fair value of contracts to buy and contracts to sell was $8.2 billion and $8.2 billion, respectively.

Custodial Credit Risk-Bank Deposits

The CIFS minimize this risk by maintaining certain restrictions set forth in the Investment Policy Statement. The CIFS use a Liquidity Account which is a cash management pool investing in highly liquid money market securities. As of June 30, 2019, the CIFS had deposits with a bank balance of $63.8 million which was uninsured and uncollateralized.

Complete financial information about the STIF and the CIFS can be obtained from financial statements issued by the Office of the State Treasurer.

Other Investments

The University of Connecticut measures and records its investments using fair value measurement guidelines. These guidelines have a three tired fair value hierarchy, as follows: Level 1; Quoted prices for identical investments in active market; Level 2: Observable inputs other than quoted market price; and Level 3: Unobservable inputs. As of June 30, 2019, UConn had the following recurring fair value measurements. (amounts in thousands):

Fair Value Measurements				
Investments by Fair Value Level	**Total**	**Level 1**	**Level 2**	**Level 3**
Cash Equivalents	$ 353	$ 353	$ -	$ -
Fixed Income Securities	1,837	1,837	-	-
Equity Securities	11,627	10,874	753	-
Total	$ 13,817	$ 13,064	$ 753	$ -
Investments Measured by Net Asset Value (NAV)		**Unfunded Commitments**	**Redemption Frequency**	**Redemption Notice Period**
Private Capital Partnerships	$ 1,031	$ 78	N/A	N/A
Private Real Estate Partnerships	24	39	N/A	N/A
Natural Resource Partnerships	419	76	N/A	N/A
Long/Short Equities	1	-	N/A	N/A
Relative Value	925	-	N/A	N/A
Other	723	-	N/A	N/A
Total	3,123	$ 193		
Total Investments in Securities at Fair Value	$ 16,940			

As of June 30, 2019, the State had other investments and maturities as follows (amounts in thousands):

Other Investments				
		Investment Maturities (in years)		
Investment Type	Fair Value	Less Than 1	1-5	6-10
State Bonds	$ 8,067	$ 2,676	$ 5,391	$ -
U.S. Government and Agency Securities	375,127	140,752	3,922	230,453
Guaranteed Investment Contracts	96,299	7,906	36,327	52,066
Money Market Funds	29,641	29,641	-	-
Total Debt Investments	509,134	$ 180,975	$ 45,640	$ 282,519
Endowment Pool	15,005			
Corporate Stock	1,212			
Other Investments	723			
Total Investments	$ 526,074			

Credit Risk

As of June 30, 2019, other debt investments were rated by Standard and Poor's as follows (amounts in thousands):

Other Investments					
	Fair	Quality Ratings			
Investment Type	Value	AA	A	BBB	Unrated
State Bonds	$ 8,067	$ 2,449	$ 5,618	$ -	$ -
U.S. Government and Agency Securities	235,300	235,300	-	-	-
Guaranteed Investment Contracts	96,299	14,565	51,816	13,071	16,847
Money Market Funds	29,641	-	-	-	29,641
Total	$ 369,307	$ 252,314	$ 57,434	$ 13,071	$ 46,488

Connecticut State Universities had $140 million as U.S. Government Securities, these securities have no credit risk therefore, these securities are not included in the above table.

Custodial Credit Risk-Bank Deposits (amounts in thousands):

The State maintains its deposits at qualified financial institutions located in the state to reduce its exposure to this risk. These institutions are required to maintain, segregated from its other assets, eligible collateral in an amount equal to 10 percent, 25 percent, 100 percent, or 120 percent of its public deposits. The collateral is held in the custody of the trust department of either the pledging bank or another bank in the name of the pledging bank. As of June 30, 2019, $148,607 of the bank balance of the Primary Government of $171,976 was exposed to custodial credit risk as follows:

Uninsured and uncollateralized	$ 63,822
Uninsured and collateral held by trust department of either the pledging bank or another bank not in the name of the State	84,785
Total	$ 148,607

Component Units

The Connecticut Housing Finance Authority (CHFA) and the Connecticut Lottery Corporation (CLC) reported the following investments and maturities as of December 31, 2018 and June 30, 2019, respectively (amounts in thousands):

Major Component Units					
		Investment Maturities (in years)			
Investment Type	Fair Value	Less Than 1	1-5	6-10	More Than 10
Collateralized Mortgage Obligations	$ 304	$ -	$ -	$ 304	$ -
GNMA & FNMA Program Assets	1,966,992	-	-	2,478	1,964,514
Money Market	3,998	3,998	-	-	-
Municipal Bonds	53,388	310	1,483	1,951	49,644
STIF	495,561	495,561	-	-	-
MBS's	402	-	41	43	318
Structured Securities	1,100	-	-	1,100	-
U.S. Government Agency Securities	835	-	-	-	835
U.S. Treasury Bills	79,816	79,816	-	-	-
Total Debt Investments	2,602,396	$ 579,685	$ 1,524	$ 5,876	$ 2,015,311
Annuity Contracts	126,316				
Total Investments	$ 2,728,712				

The CHFA and the CLC own 95.4 percent and 4.6 percent of the above investments, respectively. GNMA Program Assets represent securitized home mortgage loans of CHFA which are guaranteed by the Government National Mortgage Association. Annuity contracts are the only investment held by the CLC, which are not subject to investment risks discussed next.

Interest Rate Risk
CHFA
Exposure to declines in fair value is substantially limited to GNMA Program Assets. The Authority's investment policy requires diversification of its investment portfolio to eliminate the risk of loss resulting from, among other things, an over-concentration of assets in a specific maturity. This policy also requires the Authority to attempt to match its investments with anticipated cash flows requirements and to seek diversification by staggering maturities in such a way that avoids undue concentration of assets in a specific maturity sector.

Credit Risk
CHFA
The Authority's investments are limited by State statutes to United States Government obligations, including its agencies or instrumentalities, investments guaranteed by the state, investments in the state's STIF, and other obligations which are legal investments for savings banks in the state. The Fidelity Funds are fully collateralized by obligations issued by the United States Government or its agencies. Mortgage Backed Securities are fully collateralized by the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation or the Government National Mortgage Association, and Collateralized Mortgage Obligations are fully collateralized by the United States Department of Housing and Urban Development mortgage pools.

CHFA's investments were rated as of December 31, 2018 as follows (amounts in thousands):

Component Units					
	Fair		Quality Ratings		
Investment Type	**Value**	**AAA**	**CCC**	**D**	**Unrated**
Collateralized Mortgage Obligations	$ 304	$ -	$ 304	$ -	$ -
Municipal Bonds	53,388	-	-	-	53,388
Money Market	3,998	-	-	-	3,998
STIF	495,561	495,561	-	-	-
Structured Securities	1,100	-	-	1,100	-
Total	$ 554,351	$ 495,561	$ 304	$ 1,100	$ 57,386

Concentration of Credit Risk
CHFA
The Authority's investment policy requires diversification of its investment portfolio to eliminate the risk of loss resulting from, among other things, an over-concentration of assets with a specific issuer. As of December 31, 2018, the Authority had no investments in any one issuer that represents 5 percent or more of total investments, other than investments guaranteed by the U.S. Government (GNMA and FNMA Program Assets), and investments in the State's STIF.

Security Lending Transactions
Certain of the CIFS are permitted by State statute to engage in security lending transactions to provide incremental returns to the funds. The CIFS' Agent is authorized to lend available securities to authorized broker-dealers and banks subject to a formal loan agreement.

During the year, the Agent lent certain securities and received cash or other collateral as indicated on the Securities Lending Authorization Agreement. The Agent did not have the ability to pledge or sell collateral securities received absent a borrower default. Borrowers were required to deliver collateral for each loan equal to at least 102 percent of the fair value of the domestic loaned securities or 105 percent of the fair value of foreign loaned securities.

According to the Agreement, the Agent has an obligation to indemnify the funds in the event any borrower failed to return the loaned securities or pay distributions thereon. There were no such failures during the fiscal year that resulted in a declaration or notice of default of the borrower. During the fiscal year, the funds and the borrowers maintained the right to terminate all securities lending transactions upon notice. The cash collateral received on each loan was invested in an individual account known as the State of Connecticut Collateral Investment Trust. At year end, the funds had no credit risk exposure to borrowers because the fair value of the collateral held and the fair value of securities on loan were $2,092.4 million and $2,049.6 million, respectively.

Under normal circumstances, the average duration of collateral investments is managed so that it will not exceed 60 days. At year end, the average duration of the collateral investments was 5.79 days and an average weighted maturity of 38.99 days.

Note 4
Receivables-Current

As of June 30, 2019, current receivables consisted of the following (amounts in thousands):

	Primary Government		
	Governmental Activities	Business-Type Activities	Component Units
Taxes	$ 2,245,384	$ -	$ -
Accounts	1,351,969	509,700	60,981
Loans-Current Portion	-	261,053	10,816
Other Governments	630,850	8,940	3,156
Interest	3,350	2,496	1,233
Other (1)	383	1,675	419
Total Receivables	4,231,936	783,864	76,605
Allowance for Uncollectibles	(995,091)	(101,328)	(626)
Receivables, Net	$ 3,236,845	$ 682,536	$ 75,979

(1) Includes a reconciling amount of $379 thousand from fund financial statements to government-wide financial statements.

Note 5
Taxes Receivable

Taxes receivable consisted of the following as of June 30, 2019 (amounts in thousands):

	Governmental Activities		
	General Fund	Transportation Fund	Total
Sales and Use	$ 806,430	$ -	$ 806,430
Income Taxes	698,028	-	698,028
Corporations	59,679	-	59,679
Gasoline and Special Fuel	-	204,022	204,022
Various Other	477,226	-	477,226
Total Taxes Receivable	2,041,363	204,022	2,245,385
Allowance for Uncollectibles	(260,436)	(95)	(260,531)
Taxes Receivable, Net	$ 1,780,927	$ 203,927	$ 1,984,854

Note 6
Receivables-Noncurrent

Noncurrent receivables for the primary government and its component units, as of June 30, 2019, consisted of the following (amounts in thousands):

	Primary Government		
	Governmental Activities	Business-Type Activities	Component Units
Accounts	$ -	$ -	$ 40,193
Loans	1,138,650	1,164,417	114,643
Total Receivables	1,138,650	1,164,417	154,836
Allowance for Uncollectibles	(28,207)	(2,102)	(17,667)
Receivables, Net	$ 1,110,443	$ 1,162,315	$ 137,169

The Grants and Loans fund (governmental activities) makes loans through the Department of Economic and Community Development to provide financial support to businesses, municipalities, nonprofits, economic develop agencies and other partners for a wide range of activities that create and retain jobs; strengthen the competitiveness of the workforce; promote tourism, the arts and historic preservation; and help investigate and redevelop brownfields. The department's investments are helping build stronger neighborhoods and communities and improving the quality of life for state residents. These loans are payable over a ten-year period with rates ranging from 2 percent to 4 percent.

Clean Water fund (business-type activities) loans funds to qualified municipalities for planning, design, and construction of water quality projects. These loans are payable over a 20-year period at an annual interest rate of 2 percent and are secured by the full faith and credit or revenue pledges of the municipalities, or both. At year end, the noncurrent portion of loans receivable was $1.0 billion.

The Connecticut Higher Education Supplemental Loan Authority (a component unit) makes loans to individuals from the proceeds of bonds issued by the Authority. The loans bear interest rates ranging from 0 percent to 9.2 percent. At year end, the noncurrent portion of loans receivable was $112.0 million.

Note 7
Restricted Assets

Restricted assets are defined as resources that are restricted by legal or contractual requirements. As of June 30, 2019, restricted assets were comprised of the following (amounts in thousands):

	Cash & Cash Equivalents	Investments	Loans, Net of Allowances	Other	Total Restricted Assets
Governmental Activities:					
Debt Service	$ 991,788	$ -	$ -	$ -	$ 991,788
Total Governmental Activities	$ 991,788	$ -	$ -	$ -	$ 991,788
Business-Type Activities:					
UConn/Health Center	$ 277,594	$ -	$ -	$ -	$ 277,594
Clean Water	101,618	109,186	-	-	210,804
Other Proprietary	19,648	6,945	-	-	26,593
Total Business-Type Activities	$ 398,860	$ 116,131	$ -	$ -	$ 514,991
Component Units:					
CHFA	$ 580,049	$ 2,022,711	$ 3,057,849	$ 100,966	$ 5,761,575
CAA	289,086	(1)	-	3,939	293,024
Other Component Units	310,038	31,479	313,073	6,306	660,896
Total Component Units	$ 1,179,173	$ 2,054,189	$ 3,370,922	$ 111,211	$ 6,715,495

Note 8
Current Liabilities

Accounts Payable and Accrued Liabilities

As of June 30, 2019, accounts payable and accrued liabilities consisted of the following (amounts in thousands):

	Vendors	Salaries and Benefits	Interest	Other	Total Payables & Accrued Liabilities
Governmental Activities:					
General	$ 140,326	$ 217,629	$ -	$ -	$ 357,955
Transportation	17,640	12,452	-	-	30,092
Restricted Accounts	210,889	12,808	-	-	223,697
Grants and Loans	21,317	111	-	4,839	26,267
Other Governmental	69,397	6,648	-	501	76,546
Internal Service	360	881	-	-	1,241
Reconciling amount from fund financial statements to government-wide financial statements	-	-	276,369	856	277,225
Total-Governmental Activities	$ 459,929	$ 250,529	$ 276,369	$ 6,196	$ 993,023
Business-Type Activities:					
UConn/Health Center	$ 94,158	$ 89,726	$ -	$ 52,888	$ 236,772
Board of Regents	28,843	98,750	2,355	660	130,608
Other Proprietary	5,827	-	11,574	2,392	19,793
Total-Business-Type Activities	$ 128,828	$ 188,476	$ 13,929	$ 55,940	$ 387,173
Component Units:					
CHFA	$ -	$ -	$ 17,447	$ 6,601	$ 24,048
Connecticut Lottery Corporation	8,862	-	1,205	-	10,067
Connecticut Airport Authority	13,760	5,662	2,472	4,486	26,380
Other Component Units	2,345	-	961	70,862	74,168
Total-Component Units	$ 24,967	$ 5,662	$ 22,085	$ 81,949	$ 134,663

Note 9

Capital Assets

Capital asset activity for the year was as follows (amounts in thousands):

	Beginning Balance	Additions	Retirements	Ending Balance
Governmental Activities				
Capital Assets not being Depreciated:				
Land	$ 1,833,257	$ 29,329	$ -	$ 1,862,586
Construction in Progress	5,053,268	1,154,027	616,105	5,591,190
Total Capital Assets not being Depreciated	6,886,525	1,183,356	616,105	7,453,776
Capital Assets being Depreciated:				
Buildings	4,633,387	145,392	7,276	4,771,503
Improvements Other than Buildings	473,267	5,758	198	478,827
Equipment	2,613,097	100,319	73,186	2,640,230
Infrastructure	16,607,608	390,238	31,461	16,966,385
Total Other Capital Assets at Historical Cost	24,327,359	641,707	112,121	24,856,945
Less: Accumulated Depreciation For:				
Buildings	1,890,082	119,287	7,276	2,002,093
Improvements Other than Buildings	367,178	23,882	198	390,862
Equipment	2,568,119	98,198	73,186	2,593,131
Infrastructure	10,955,897	492,006	31,461	11,416,442
Total Accumulated Depreciation	15,781,276	733,373	112,121	16,402,528
Other Capital Assets, Net	8,546,083	(91,666)	-	8,454,417
Governmental Activities, Capital Assets, Net	$ 15,432,608	$ 1,091,690	$ 616,105	$ 15,908,193

* Depreciation expense was charged to functions as follows:

Governmental Activities:	
Legislative	$ 4,746
General Government	20,914
Regulation and Protection	22,127
Conservation and Development	9,711
Health and Hospitals	9,023
Transportation	592,559
Human Services	743
Education, Libraries and Museums	29,229
Corrections	28,348
Judicial	15,489
Capital assets held by the government's internal service funds are charged to the various functions based on the usage of the assets	484
Total Depreciation Expense	$ 733,373

	Beginning Balance	Additions	Retirements	Ending Balance
Business-Type Activities				
Capital Assets not being Depreciated:				
Land	$ 68,643	$ -	$ 15,070	$ 53,573
Construction in Progress	723,540	193,005	515,685	400,860
Total Capital Assets not being Depreciated	792,183	193,005	530,755	454,433
Capital Assets being Depreciated:				
Buildings	6,073,127	464,607	923,561	5,614,173
Improvements Other Than Buildings	449,565	119,819	33,631	535,753
Equipment	1,105,319	1,073,171	77,106	2,101,384
Total Other Capital Assets at Historical Cost	7,628,011	1,657,597	1,034,298	8,251,310
Less: Accumulated Depreciation For:				
Buildings	2,375,705	233,659	312,161	2,297,203
Improvements Other Than Buildings	248,554	14,303	21,672	241,185
Equipment	695,194	397,746	72,440	1,020,500
Total Accumulated Depreciation	3,319,453	645,708	406,273	3,558,888
Other Capital Assets, Net	4,308,558	1,011,889	628,025	4,692,422
Business-Type Activities, Capital Assets, Net	$ 5,100,741	$ 1,204,894	$ 1,158,780	$ 5,146,855

Component Units

Capital assets of the component units consisted of the following as of June 30, 2019 (amounts in thousands):

Land	$ 59,964
Buildings	713,055
Improvements other than Buildings	349,454
Machinery and Equipment	630,944
Construction in Progress	47,521
Total Capital Assets	1,800,938
Accumulated Depreciation	1,022,128
Capital Assets, Net	$ 778,810

Note 10
State Retirement Systems

The State sponsors three major public employee retirement systems: the State Employees' Retirement System (SERS)-consisting of Tier I (contributory), Tier II (noncontributory) Tier IIA (contributory) and Tier III (contributory), the Teachers' Retirement System (TRS), and the Judicial Retirement System (JRS). The three plans in this note do not issue separate financial statements, nor are they reported as a part of other entities. Beginning in fiscal year 2018, all new hires to SERS will be in a new Tier IV Hybrid Plan structure. The financial statements and other required information are presented in Note 12 and in the Required Supplementary Information (RSI) section of these financial statements.

The State Comptroller's Retirement Division under the direction of the Connecticut State Employees' Retirement Commission administers SERS and JRS. The sixteen members are: the State Treasurer or a designee who serves as a non-voting ex-officio member, six trustees representing employees are appointed by the bargaining agents in accordance with the provisions of applicable collective bargaining agreements, one "neutral" Chairman, two actuarial trustees and six management trustees appointed by the Governor. The Teachers' Retirement Board administers TRS. The fourteen members of the Teachers' Retirement Board include: the State Treasurer, the Secretary of the Office of Policy and Management, the Commissioner of Education, or their designees, who serve as ex-officio voting members. Six members are elected by teacher membership and five public members are appointed by the Governor.

Special Funding Situation

The employer contributions for the Teachers' Retirement System (TRS) are funded by the State on behalf of the participating municipal employers. Therefore, these employers are in a special funding situation and the State is treated as a non-employer contributing entity as defined by GASB 68. As a result, the State reports a liability, deferred outflows of resources and deferred inflows of resources, and expenses. Additionally, the autonomous Component Units that benefit from the services provided by employees of the State are considered, as defined by GASB 68, to be non-employer contributing entities. As such they report a liability, deferred outflows of resources and deferred inflows of resources, and expenses as a result of being statutorily required to contribute to SERS.

a. Plan Descriptions and Funding Policy

Membership of each plan consisted of the following at the date of the latest actuarial evaluation:

	SERS	TRS	JRS
Inactive Members or their Beneficiaries receiving benefits	50,441	37,446	284
Inactive Members Entitled to but not yet Receiving Benefits	1,281	2,194	3
Active Members	49,153	50,594	209

State Employees' Retirement System
Plan Description

SERS is a single-employer defined-benefit pension plan covering substantially all the State full-time employees who are not eligible for another State sponsored retirement plan. Plan benefits, cost-of-living allowances, contribution requirements of plan members and the State, and other plan provisions are described in Sections 5-152 to 5-192 of the General Statutes. The plan provides retirement, disability, and death benefits, and annual cost-of-living allowances to plan members and their beneficiaries.

Funding Policy

The contribution requirements of plan members and the State are established and may be amended by the State legislature subject to the contractual rights established by collective bargaining. Tier I Plan B regular and Hazardous Duty members are required to contribute 3.5 percent and 5.5 percent of their annual salary, respectively, up to the Social Security Taxable Wage Base plus 6.5 percent above that level; Tier I Plan C members are required to contribute 6.5 percent of their annual salary; Tier II Plan Hazardous Duty members are required to contribute 5.5 percent of their annual salary; Tier IIA and Tier III Plans regular and Hazardous Duty members are required to contribute 3.5 percent and 6.5 percent of their annual salary, respectively. Individuals hired on or after July 1, 2011 otherwise eligible for the Alternative Retirement Plan (ARP) are eligible to become members of the Hybrid Plan in addition to their other existing choices. The Hybrid Plan has defined benefits identical to Tier II/IIA and Tier III for individuals hired on or after July 1, 2011 but requires employee contributions 3 percent higher than the contribution required from the applicable Tier II/IIA/III plan. Employees in the new Tier IV Hybrid Plan will be required to contribute 3 percent more than Tier II employees into the defined benefit plan. The State is required to contribute at an actuarially determined rate. Administrative costs of the plan are funded by the State.

Teachers' Retirement System
Plan Description
TRS is a cost-sharing multiple-employer defined-benefit pension plan covering any teacher, principal, superintendent, or supervisor engaged in service of public schools in the State. Plan benefits, cost-of-living allowances, required contributions of plan members and the State, and other plan provisions are described in Sections 10-183b to 10-183ss of the General Statutes. The plan provides retirement, disability, and death benefits, and annual cost-of-living allowances to plan members and their beneficiaries.

Funding Policy
The contribution requirements of plan members and the State are established and may be amended by the State legislature. Plan members are required to contribute 7 percent of their annual salary. Administrative costs of the plan are funded by the State.

Judicial Retirement System
Plan Description
JRS is a single-employer defined-benefit pension plan covering any appointed judge or compensation commissioner in the State. Plan benefits, cost-of-living allowances, required contributions of plan members and the State, and other plan provisions are described in Sections 51-49 to 51-51 of the General Statutes. The plan provides retirement, disability, and death benefits, and annual cost-of-living allowances to plan members and their beneficiaries.

Funding Policy
The contribution requirements of plan members and the State are established and may be amended by the State legislature. Plan members are required to contribute 5 percent of their annual salary. The State is required to contribute at an actuarially determined rate. Administrative costs of the plan are funded by the State.

b. Investments
The State Treasurer employs several outside consulting firms as external money and investment managers, to assist the Chief Investment Officer, as they manage the investment programs of the pension plans. Plan assets are managed primarily through asset allocation decisions with the main objective being to maximize investment returns over the long term at an acceptable level of risk. There is no concentration of investments in any one organization that represents 5.0 percent or more of plan net position available for benefits. The following is the asset allocation policy as of June 30, 2018.

	SERS		TRB		JRS	
Asset Class	Target Allocation	Long-Term Expected Real Rate of Return	Target Allocation	Long-Term Expected Real Rate of Return	Target Allocation	Long-Term Expected Real Rate of Return
Large Cap U.S. Equities	21.0%	5.8%	21.0%	5.8%	21.0%	5.8%
Developed Non-U.S. Equiti	18.0%	6.6%	18.0%	6.6%	18.0%	6.6%
Emerging Markets (Non-U.	9.0%	8.3%	9.0%	8.3%	9.0%	8.3%
Real Estate	7.0%	5.1%	7.0%	5.1%	7.0%	5.1%
Private Equity	11.0%	7.6%	11.0%	7.6%	11.0%	7.6%
Alternative Investment	8.0%	4.1%	8.0%	4.1%	8.0%	4.1%
Fixed Income (Core)	8.0%	1.3%	7.0%	1.3%	8.0%	1.3%
High Yield Bonds	5.0%	3.9%	5.0%	3.9%	5.0%	3.9%
Emerging Market Bond	4.0%	3.7%	5.0%	3.7%	4.0%	3.7%
Inflation Linked Bonds	5.0%	1.0%	3.0%	1.0%	5.0%	1.0%
Cash	4.0%	0.4%	6.0%	0.4%	4.0%	0.4%

The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

Rate of Return: For the year ended June 30, 2019, the annual money-weighted rate of return on pension plan investments, net of pension plan expense, was 5.88 percent, 5.85 percent, and 6.12 percent for SERS, TRS, and JRS, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts invested.

Net Pension Liability

The components of the net pension liability as of the measurement June 30, 2018 were as follows (amounts in millions):

	SERS	TRS	JRS
Total Pension Liability	$ 34,214	$ 31,111	$ 443
Fiduciary Net Position	12,528	17,947	223
Net Pension Liability	$ 21,686	$ 13,164	$ 220
Ratio of Fiduciary Net Position to Total Pension Liability	36.62%	57.69%	50.29%

Deferred Retirement Option Program (DROP)

Section 10-183v of the General Statute authorizes that a TRS member teacher receiving retirement benefits from the system may be reemployed for up to one full school year by a local board of education, the State Board of Education or by a constituent unit of the state system of higher education in a position (1) designated by the Commissioner of Education as a subject shortage area, or (2) at a school located in a school district identified as a priority school district. Such reemployment may be extended for an additional school year, by written request for approval to the Teachers' Retirement Board.

As of June 30, 2019, the balance held for the DROP was not available from the Teachers' Retirement Board.

Discount Rate

The discount rate used to measure the total pension liability was 6.9, 8.0, and 6.9 percent for SERS, TRS, and JRS respectively. The projection of cash flows used to determine the SERS, TRS, and JRS discount rates assumed employee contributions will be made at the current contribution rate and that contributions from the State will be made at actuarially determined rates in future years. Based on those assumptions, SERS, TRS, and JRS pension plans' fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the net pension liability to changes in the discount rate

The following presents the net pension liability of the State, calculated using the discount rates of 6.9, 8.0 and 6.9 percent for SERS, TRS, and JRS, as well as what the State's net pension liabilities would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate (amounts in millions):

	1% Decrease in Rate	Current Discount Rate	1% Increase in Rate
SERS Net Pension Liability	$ 25,580	$ 21,436	$ 17,979
TRS Net Pension Liability	$ 16,637	$ 13,164	$ 10,227
JRS Net Pension Liability	$ 266	$ 220	$ 181
Component Units	$ 299	$ 250	$ 210

c. GASB Statement 68 Employer Reporting

Employer Contributions

The following table presents the primary government's and component units' contributions recognized by the pension plans at the reporting date June 30, 2019 (amounts in thousands):

	SERS	TRS	JRS	Total
Primary Government	$ 1,561,658	$ 1,292,314	$ 27,427	$ 2,881,399
Component Units	16,666	-	-	16,666
Total Employer Contributions	$ 1,578,324	$ 1,292,314	$ 27,427	$ 2,898,065

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

As of the measurement date June 30, 2018, the primary government and component units reported net pension liabilities for the following plans administered by the State as follows (amounts in thousands):

	Primary Government	Component Units
Proportionate Share of the Net Pension Liability		
State Employees' Retirement System	$ 21,436,166	$ 250,455
Net Pension Liability		
Teachers' Retirement System	13,164,059	-
Judicial Retirement System	220,279	-
Total Net Pension Liability	$ 34,820,504	$ 250,455

The primary government's and component units' proportions of the collective net pension liability for the State Employees' Retirement System as of the measurement date June 30, 2018 as follows:

	Primary Government	Component Units
State Employees' Retirement System		
Proportion-June 30, 2018	98.85%	1.15%

For the measurement June 30, 2018, the primary government and component units' recognized pension expense for the following pension plans administered by the State as follows (amounts in thousands):

	Primary Government	Component Units
Pension Expense		
State Employees' Retirement System	$ 2,662,043	$ 27,624
Teachers' Retirement System	1,477,433	-
Judicial Retirement System	34,485	-
	$ 4,173,961	$ 27,624

Deferred Outflows and Inflows of Resources

As of the reporting date June 30, 2019, the State reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Primary Government		Component Units	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
State Employees' Retirement System				
Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	$ -	$ 67,208	$ -	$ 785
Difference Between Expected and Actual Experience	756,619	-	8,840	-
Changes in Proportion & Differences Between Employer Contributions & Proportionate Share of Contributions	-	-	11,765	20,724
Change in Assumptions	2,335,711	-	27,290	-
Employer Contributions Subsequent to Measurement Date	1,561,658	-	16,666	-
Total	$ 4,653,988	$ 67,208	$ 64,561	$ 21,509
Teachers' Retirement System				
Net Difference Between Projected and Actual Experience	$ -	$ 543,452		
Change in Assumptions	1,238,217	-		
Net Difference Between Projected and Actual Earnings on Plan Investments	243,425	-		
Employer Contributions Subsequent to Measurement Date	1,292,314	-		
Total	$ 2,773,956	$ 543,452		
Judicial Retirement System				
Net Difference Between Projected and Actual Earnings on Plan Investments	$ 1,636	$ -		
Difference Between Expected and Actual Experience	-	15,792		
Change in Assumptions	16,511	-		
Employer Contributions Subsequent to Measurement Date	27,427	-		
Total	$ 45,574	$ 15,792		

The amount reported as deferred outflows of resources related to pensions resulting from the State contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability reported in the following fiscal year. The amount reported as deferred inflows of resources related to pensions will be recognized as pension expense as follows (amounts in thousands):

State Employees' Retirement System Year Ending June 30	Primary Government	Component Units
2019	$ 1,185,841	$ 10,376
2020	1,079,216	9,112
2021	642,497	5,120
2022	72,248	1,258
2023	54,279	520
	$ 3,034,081	$ 26,386

Teachers' Retirement System Year Ending June 30	Primary Government
2019	$ 490,835
2020	310,485
2021	37,060
2022	181,537
2023	(62,868)
Thereafter	(18,859)
	$ 938,190

Judges' Retirement System Year Ending June 30	Primary Government
2019	$ 11,291
2020	(4,025)
2021	(5,171)
2022	260
2023	-
	$ 2,355

Actuarial Assumptions

The total pension liability was determined by an actuarial valuation as of June 30, 2018, using the following actuarial assumptions, applied to all periods included in the measurement:

	SERS	TRS	JRS
Valuation Date	6/30/2018	6/30/2018	6/30/2018
Inflation	2.50%	2.75%	2.50%
Salary Increases	3.5%-19.5%	3.25%-6.50%	4.50%
Investment Rate of Return	6.90%	8.0%	6.90%

The actuarial assumptions used in the June 30, 2018 SERS and JRS reported mortality rates based on the RP-2014 White Collar Mortality Table projected to 2020 by scale BB at 100 percent for males and 95 percent for females for periods after service retirement and dependent beneficiaries. The RP-2014 Disabled Retiree Mortality Table at 65 percent for males and 85 percent for females is used for periods after disability.

The actuarial assumptions used in the June 30, 2018 TRS actuarial report were based on RPH-2014 White Collar table with employee and annuitant rates blended from ages 50 to 80, projected to the year 2020 using the BB improvement scale, and further adjusted to grade in increases (5% for females and 8% for males) to rates over age 80 for the period after service retirement and for dependent beneficiaries as well as for active members. The RPH-2014 Disabled Mortality Table projected to 2017 with Scale BB is used for the period after disability retirement.

Changes in Net Pension Liability

The following schedule presents changes in the State's pension liability and fiduciary net position for each plan for the measurement date June 30, 2018 (amounts in thousands):

Total Pension Liability	SERS	TRS	JRS
Service Cost	$ 429,321	$ 465,207	$ 11,352
Interest	2,212,890	2,371,168	29,954
Benefit Changes	-	28,036	-
Difference between expected and actual experience	482,904	(396,067)	(18,528)
Changes of assumptions	-	-	-
Benefit payments	(1,955,985)	(1,994,092)	(27,616)
Refunds of Contributions	(7,659)	-	-
Net change in total pension liability	1,161,471	474,252	(4,838)
Total pension liability - beginning (a)	33,052,692	30,636,646	447,925
Total pension liability - ending (c)	**$ 34,214,163**	**$ 31,110,898**	**$ 443,087**
Plan fiduciary net position			
Contributions - employer	$ 1,443,053	$ 1,272,277	$ 25,458
Contributions - member	193,942	312,150	1,663
Net investment income	875,944	1,224,931	13,178
Benefit payments	(1,955,985)	(1,994,092)	(27,616)
Administrative Expense	(391)	-	-
Refunds of Contributions	(7,659)	-	-
Other	(3,139)	(2,753)	-
Net change in plan fiduciary net position	545,765	812,513	12,683
Plan net position - beginning (b)	11,981,777	17,134,326	210,125
Plan net position - ending (d)	**$ 12,527,542**	**$ 17,946,839**	**$ 222,808**
Net pension liability - beginning (a)-(b)	**$ 21,070,915**	**$ 13,502,320**	**$ 237,800**
Net pension liability - ending (c)-(d)	**$ 21,686,621**	**$ 13,164,059**	**$ 220,279**

d. Defined Contribution Plan

The State also sponsors the Connecticut Alternate Retirement Program (CARP), a defined contribution plan. CARP is administered by the State Comptroller's Retirement Office under the direction of the Connecticut State Employees' Retirement Division. Plan provisions, including contribution requirements of plan members and the State, are described in Section 5-156 of the General Statutes.

Unclassified employees at any of the units of the Connecticut State System of Higher Education are eligible to participate in the plan. Plan members are required to contribute 5 percent of their annual salaries. The State is required to contribute 8 percent of covered salary. During the year, plan members and the State contributed $32.1 million and $44.9 million, respectively.

Note 11
Other Retirement Systems Administered by the State of Connecticut

The State acts solely as the administrator and custodian of the assets of the Connecticut Municipal Employees' Retirement System (MERS) and the Connecticut Probate Judges and Employees Retirement System (CPJERS). The State makes no contribution to and has only a fiduciary responsibility for these funds. None of the above-mentioned systems issue stand-alone financial reports. However, financial statements for MERS and CPJERS are presented in Note No. 12.

a. Plan Descriptions and Funding Policy

Membership of each plan consisted of the following to date of the latest actuarial information:

	MERS	CPJERS
Retirees and beneficiaries receiving benefits	7,448	379
Terminated plan members entitled to but not receiving benefits	4,522	130
Active plan members	10,096	329
Total	22,066	838
Number of participating employers	191	1

Connecticut Municipal Employees' Retirement System

Plan Description

MERS is a cost-sharing multiple-employer defined benefit pension plan that covers fire, police, and other personnel (except teachers) of participating municipalities in the State. Pension plan assets are pooled, and the plan assets can be used to pay the pensions of the retirees of any participating employer. Plan benefits, cost-of-living adjustments, contribution requirements of plan members and participating municipalities, and other plan provisions are described in Chapters 7-425 to 7-451 of the General Statutes. The plan provides retirement, disability, and death benefits, and annual cost-of-living adjustments to plan members and their beneficiaries.

Funding Policy

Plan members are required to contribute 2.25 percent to 5.0 percent of their annual salary. Participating municipalities are required to contribute at an actuarial determined rate. The participating municipalities fund administrative costs of the plan.

b. Investments

The State Treasurer employs several outside consulting firms as external money and investment managers, to assist the Chief Investment Officer as they manage the investment programs of the pension plans. Plan assets are managed primarily through asset allocation decisions with the main objective being to maximize investment returns over the long term at an acceptable level of risk. There is no concentration of investments in any one organization that represents 5.0 percent or more of plan net position available for benefits.

	MERS	
Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Large Cap U.S. Equities	20.0%	5.8%
Developed Non-U.S. Equities	11.0%	6.6%
Emerging Markets (Non-U.S.)	9.0%	8.3%
Real Estate	10.0%	5.1%
Private Equity	10.0%	7.6%
Alternative Investment	7.0%	4.1%
Fixed Income (Core)	16.0%	1.3%
High Yield Bonds	5.0%	3.9%
Emerging Market Bond	5.0%	3.7%
Inflation Linked Bonds	5.0%	1.0%
Cash	1.0%	0.4%

The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

c. GASB Statement 68 Employer Reporting

Net Pension Liability of Participating Employers

The components of the net pension liability for MERS at June 30, 2018 were as follows (amounts in millions):

	MERS
Total Pension Liability	$ 3,622
Fiduciary Net Position	2,666
Net Pension Liability	$ 956
Ratio of Fiduciary Net Position to Total Pension Liability	73.60%

Discount Rate

The discount rate used to measure the total pension liability was 7.0 percent for MERS. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at the actuarially determined rates in future years. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. The long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the net pension liability to changes in the discount rate

The following presents the net pension liability of MERS, calculated using the discount rate of 7.0 percent as well as what the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower or 1- percentage-point higher than the current rate (amounts in millions):

	1% Decrease in Rate	Current Discount Rate	1% Increase in Rate
Net Pension Liability	$ 1,411	$ 956	$ 576

Deferred outflows and deferred inflows of resources

The cumulative net amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in future pension expense as follows (amounts in thousands):

	Deferred Outflows of Resources	Deferred Inflows of Resources
Municipal Employees Retirement System		
Difference Between Expected and Actual Experience	$ 64,303	$ -
Changes in actuarial assumptions	351,882	-
Net Difference Between Projected and Actual Investment Earnings on Plan Investments	62,458	-
Employer Contributions Subsequent to Measurement Date	83,370	-
	$ 562,013	$ -

Amounts recognized in subsequent fiscal years:

Year Ending June 30	MERS
2019	$ 154,310
2020	129,577
2021	88,113
2022	106,643

Changes in Net Pension Liability

The following schedule presents changes in the State's pension liability and fiduciary net position for each plan for the measurement date June 30, 2018 (amounts in thousands):

Total Pension Liability MERS	
Service Cost	$ 79,098
Interest on the total pension liability	231,873
Difference between expected and actuary experience	56,149
Changes of assumptions	440,517
Benefit payments	(165,548)
Refunds of contributions	(1,605)
Net change in total pension	640,484
Total pension liability - beginning	2,981,984
Total pension liability - ending (a)	**$ 3,622,468**
Plan net position	
Contributions - employer	177,267
Initial Liability Payments and Transfers	2,103
Contributions - member	24,996
Net investment income	149,740
Benefit payments	(165,548)
Refunds of contributions	(1,605)
Other	(254,712)
Net change in plan net position	(67,759)
Plan net position - beginning	**$ 2,733,784**
Plan net position - ending (b)	**$ 2,666,025**
Net pension liability - ending (a) -(b)	**$ 956,443**

Actuarial Assumptions
The total pension liability was determined by the most recent actuarial information available, using the following actuarial assumptions, applied to all periods included in the measurement date:

Inflation	2.50%
Salary increase	3.5-10.0%, including inflation
Long-Term investment rate of return	7.00%, net of pension plan investment expenses, including inflation

Mortality rates were based on the RP-2014 Combined Mortality Table adjusted to 2006 and projected to 2015 with Scale MP-2017 and projected to 2022 with Scale BB for General Employees and the RP-2014 Blue Collar Mortality Table adjusted to 2006 and projected to 2015 with Scale MP-2017 and projected to 2022 with Scale BB for Police and Fire. For disabled retirees, the RP-2014 Disabled Mortality Table projected with Scale BB to 2020 was used.

d. Connecticut Probate Judges and Employees' Retirement System
Plan Description
CPJERS is an agent multi-employer defined benefit pension plan that covers judges and employees of probate courts. Plan benefits, cost-of-living adjustments, required contributions of plan members and the probate court system, and other plan provisions are described in Chapters 45a-34 to 45a-56 of General Statutes. The plan provides retirement, disability, and death benefits, and annual cost-of-living adjustments to plan members and their beneficiaries.

Pension plan assets are pooled for investment purposes, but separate accounts are maintained for each individual court so that each court's share of the pooled assets is legally available to pay the benefits of only its employees. The plan is administered by the State Employee's Retirement Commission.

Funding
Plan members are required to contribute 1.0 percent to 3.75 percent of their annual salary. The probate court system is required to contribute at an actuarial determined rate. Administrative costs of the plan are funded by the probate court system.

Pension Liability
Information concerning the CPJERS total pension liability and significant assumptions used to measure the plans total pension liability, such as inflation, salary changes, discount rates and mortality are available by contacting the State Comptroller's Retirement Division.

Note 12

Pension Trust Funds Financial Statements

The financial statements of the pension trust funds are prepared using the accrual basis of accounting. Plan member contributions are recognized in the period in which the contributions are due. State contributions are recognized in the period in which the contributions are appropriated. Benefits and refunds are recognized when due and payable in accordance with the terms of each plan. Investment income and related expenses of the Combined Investment Funds are allocated ratably to the pension trust funds based on each fund's equity in the Combined Investment Funds. As of June 30, 2019, the Fiduciary Fund financial statements were as follows (amounts in thousands):

Statement of Fiduciary Net Position (thousands)

	State Employees'	State Teachers'	Judicial	Connecticut Municipal Employees'	Probate Judges'	Other	Total
Assets							
Current:							
Cash and Cash Equivalents	$ 11,002	$ 4,350	$ 6	$ 997	$ 21	$ 401	$ 16,777
Receivables:							
Accounts, Net of Allowances	13,216	13,321	8	20,228	5	-	46,778
From Other Governments	-	456	-	-	-	-	456
From Other Funds	411	67	-	44	-	2	524
Interest	347	634	3	57	3	-	1,044
Investments	13,250,839	18,492,536	235,909	2,709,856	109,625	2,065	34,800,830
Securities Lending Collateral	764,858	1,021,618	15,078	196,509	6,686	133	2,004,882
Noncurrent:							
Due From Employers	-	-	-	17,060	-	-	17,060
Total Assets	$ 14,040,673	$ 19,532,982	$ 251,004	$ 2,944,751	$ 116,340	$ 2,601	$ 36,888,351
Liabilities							
Accounts Payable and Accrued Liabilities	$ 122	$ 15,891	$ -	$ -	$ 11	$ -	$ 16,024
Securities Lending Obligation	764,858	1,021,618	15,078	196,509	6,686	133	2,004,882
Due to Other Funds	-	2,018	-	-	-	-	2,018
Total Liabilities	$ 764,980	$ 1,039,527	$ 15,078	$ 196,509	$ 6,697	$ 133	$ 2,022,924
Net Position							
Held in Trust For Employee							
Pension Benefits	$ 13,275,693	$ 18,493,455	$ 235,926	$ 2,748,242	$ 109,643	$ 2,468	$ 34,865,427
Total Net Position	$ 13,275,693	$ 18,493,455	$ 235,926	$ 2,748,242	$ 109,643	$ 2,468	$ 34,865,427

Statement of Changes in Fiduciary Net Position (thousands)

	State Employees'	State Teachers'	Judicial	Connecticut Municipal Employees'	Probate Judges'	Other	Total
Additions							
Contributions:							
Plan Members	$ 489,099	$ 309,333	$ 1,694	$ 24,613	$ 222	$ 25	$ 824,986
State	1,578,324	1,292,314	27,427	-	-	-	2,898,065
Municipalities	-	358	-	83,370	-	-	83,728
Total Contributions	2,067,423	1,602,005	29,121	107,983	222	25	3,806,779
Investment Income	776,193	1,105,105	14,612	168,155	6,440	118	2,070,623
Less: Investment Expenses	(65,332)	(93,016)	(1,230)	(14,153)	(542)	(10)	(174,283)
Net Investment Income	710,861	1,012,089	13,382	154,002	5,898	108	1,896,340
Other	3,704	598	-	599	9,381	26	14,308
Total Additions	2,781,988	2,614,692	42,503	262,584	15,501	159	5,717,427
Deductions							
Administrative Expense	693	-	-	-	-	-	693
Benefit Payments and Refunds	2,033,144	2,066,641	29,385	180,367	5,742	-	4,315,279
Other	-	1,435	-	-	-	-	1,435
Total Deductions	2,033,837	2,068,076	29,385	180,367	5,742	-	4,317,407
Changes in Net Position	748,151	546,616	13,118	82,217	9,759	159	1,400,020
Net Position Held in Trust For Employee Pension Benefits:							
Beginning of Year	12,527,542	17,946,839	222,808	2,666,025	99,884	2,309	33,465,407
End of Year	$ 13,275,693	$ 18,493,455	$ 235,926	$ 2,748,242	$ 109,643	$ 2,468	$ 34,865,427

Note 13
Other Postemployment Benefits (OPEB)

The State sponsors two defined benefit OPEB plans: the State Employee OPEB Plan (SEOPEBP) and the Retired Teacher Healthcare Plan (RTHP).

The State Comptroller's Healthcare Policy and Benefits Division under the direction of the Connecticut State Employees Retirement Commission administers the State Employee OPEB Plan. The membership of the commission is composed of the State Treasurer or designee, who is a nonvoting ex-officio member; fifteen trustees, including six trustees representing state employees; six trustees representing state management; two trustees who are professional actuaries and one neutral trustee who serves as chairman. Also, the State Comptroller, ex officio, serves as the nonvoting secretary. The Governor makes all appointments except the employee trustees who are selected by employee bargaining agents. Management and employee trustees make the appointments of the chairman and the actuarial trustee positions. The Teachers' Retirement Board administers the Retired Teachers' Healthcare Plan. None of these plans issue stand alone statements, however, financial statements for these plans are presented in Note No. 14.

a. Plan Descriptions and Funding Policy
Membership of each plan consisted of the following to date of the latest actuarial information:

	SEOPEBP	RTHP
Inactive Members or their Beneficiaries receiving benefits	74,579	40,633
Inactive Members Entitled to but not yet Receiving Benefits	256	10,684
Active Members	49,538	50,594

State Employee OPEB Plan
Plan Description
SEOPEBP is a single-employer defined benefit OPEB plan that covers retired employees of the State who are receiving benefits from any State-sponsored retirement system, except the Teachers' Retirement System and the Municipal Employees' Retirement System. The plan provides healthcare and life insurance benefits to eligible retirees and their spouses. Plan benefits required contributions of plan participants and the State, and other plan provisions are described in Sections 5-257 and 5-259 of the General Statutes.

Funding Policy
The contribution requirements of the plan members and the State are established and may be amended by the State legislature, or by agreement between the State and employees' unions, upon approval by the State legislature. The cost of providing plan benefits is financed approximately 100 percent by the State on a pay-as-you-go basis through an annual appropriation in the General fund. Administrative costs of the plan are financed by the State.

Retired Teacher Healthcare Plan
Plan Description
RTHP is a single employer defined benefit OPEB plan that covers retired teachers and administrators of public schools in the State who are receiving benefits from the Teachers' Retirement System. The plan provides healthcare insurance benefits to eligible retirees and their spouses. Plan benefits required contributions of plan participants and the State, and other plan provisions are described in Section 10-183t of the General Statutes.

Funding Policy
The contribution requirements of plan members and the State are established and may be amended by the State legislature. The cost of providing plan benefits is financed on a pay-as-you-go basis as follows: active teachers pay for one third of plan costs through a contribution of 1.25 percent of their annual salaries, retired teachers pay for one third of plan costs through monthly premiums, and the State pays for one third of plan costs through an annual appropriation in the General Fund. Administrative costs of the plan are financed by the State.

b. Investments
The State Treasurer employs several outside consulting firms as external money and investment managers, to assist the Chief Investment Officer, as they manage the investment programs of the State Employee OPEB Plan. Plan assets are managed primarily

through assets allocation decisions with the main objective being to maximize investment returns over the long term at an acceptable level of risk. There is no concentration of investments in any one organization that represents 5.0 percent or more of plan net position available for benefits. The following is the asset allocation policy as of June 30, 2018, the measurement date.

	SEOPEBP		RTHP	
Asset Class	Target Allocation	Long-Term Expected Real Rate of Return	Target Allocation	Expected 10 year Geometric Real Rate of Return
Large Cap U.S. Equities	21.0%	5.8%	0.00%	4.39%
Small/Mid U.S. Equities	0.0%	0.0%	0.00%	4.74%
Non U.S. Equities - Developed	18.0%	6.6%	0.00%	4.86%
Non U.S. - Emerging Markets	9.0%	8.3%	0.00%	6.19%
Real Estate	7.0%	5.1%	0.00%	4.11%
Hedge Funds	0.0%	0.0%	0.00%	3.18%
Commodities	0.0%	0.0%	0.00%	1.78%
Infrastructure	0.0%	0.0%	0.00%	4.34%
Private Equity	11.0%	7.6%	0.00%	6.91%
Alternative Investment	8.0%	4.1%	0.00%	0.00%
Fixed Income (Core)	8.0%	1.3%	0.00%	1.22%
Long Duration Bonds	0.0%	0.0%	0.00%	1.62%
High Yield Bonds	5.0%	3.9%	0.00%	3.66%
Non U.S. Debt - Developed	0.0%	0.0%	0.00%	0.26%
Non U.S. Debt - Emerging	4.0%	3.7%	0.00%	3.53%
TIPS (Inflation Protected)	0.0%	0.0%	0.00%	0.63%
Inflation Linked Bonds	5.0%	1.0%	0.00%	0.00%
U. S. Treasuries (Cash Equivalent	4.0%	0.4%	100.00%	-0.02%

The long-term expected rate of return on RTHP OPEB plan assets was determined by weighting the expected future real rates of return by the target asset allocation percentage and adding expected inflation. The assumption is not expected to change absent a significant change in asset allocation, a change in inflation assumption, or a fundamental change in the market that alters expected returns in future years.

Net OPEB Liability

The components of the net OPEB liability as of June 30, 2018, the measurement date, were as follows (amounts in thousands):

	SEOPEBP	RTHP
Total OPEB Liability	$ 18,114,287	$ 2,671,315
Fiduciary Net Position	849,889	39,736
Net OPEB Liability	$ 17,264,398	$ 2,631,579
Ratio of Fiduciary Net Position to Total OPEB Liability	4.69%	1.49%

Actuarial Assumptions

The total OPEB liability was determined by the most recent actuarial information available, using the following actuarial assumptions, applied to all periods included in the measurement:

	SEOPEBP	RTHP
Payroll growth rate	3.50%	2.75%
Salary increase	3.25% to 19.5% varying by years of service & retirement system	3.25%-6.5%
Discount Rate	3.95%	3.87%
Investment rate of return	6.90%	3.00%, net of OPEB plan investment expense including price inflation
Healthcare cost trend rates	8.0% for drug cost graded to 4.5% over 7 years 6.5% for medical graded to 4.5% over 4 years 4.5% for dental 3.0% for administrative expense	5.95% decreasing to 4.75% by year 2025

Mortality rates for the State Employees OPEB Plan were based on the RP-2014 White Collar Mortality Table projected to 2020 by Scale BB at 100% for males and 95% for females.

Mortality rates for the State Teachers Retirement System were based on RPH-2014 White Collar Morality Table with employee and annuitant rates blended from ages 50 to 80 projected to year 2020 under Scale BB and further adjusted to grade in increases (5% for females and 8% for males) to rates over age 80 for the period after service retirement and for dependent beneficiaries as well as active members. State Employees OPEB disabled participants mortality rates were based on the RP-2014 Disabled Retiree Mortality Table at 65% for males and 85% for females. State Teachers Retirement System disabled participants mortality rates were based on RPH-2014 Disabled Retiree Mortality Table projected to 2020 with Scale BB.

Discount Rate

The discount rate used to measure the total OPEB liability for SEOPEBP and RTHP respectively, was 3.95 and 3.87 percent. The projection of cash flows used to determine the discount was performed in accordance with GASB 74.

Sensitivity of the net OPEB liability to changes in the discount rate

The following presents the net OPEB liability of the State, as well as what the State's net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current discount rate (amounts in thousands):

		SEOPEBP	
	1% Decrease in Discount Rate 2.95%	Current Discount Rate 3.95%	1% Increase in Discount Rate 4.95%
SEOPEBP:			
Primary Government Net OPEB Liability	$ 19,755,249	$ 17,031,459	$ 14,819,567
Component Units Net OPEB Liability	270,192	232,939	202,687
		RTHP	
	1% Decrease in Discount Rate 2.87%	Current Discount Rate 3.87%	1% Increase in Discount Rate 4.87%
RTHP Net OPEB Liability	$ 3,124,805	$ 2,631,579	$ 2,237,942

Sensitivity of the net OPEB liability to changes in the healthcare cost trend rates

The following presents the net OPEB liability of the State, as well as what the State's net OPEB liability would be if it were calculated using healthcare cost trend rate that is 1-percentage-point lower or 1-percentage-point higher than the current healthcare cost trend rate (amounts in thousands):

		SEOPEBP	
	1% Decrease in Trend Rates 2%	Current Trend Rate 3%	1% Increase in Trend Rates 4%
SEOPEBP:			
Primary Government Net OPEB Liability	$ 14,506,857	$ 17,031,459	$ 20,230,495
Component Units Net OPEB Liability	198,410	232,939	276,692
		RTHP	
	1% Decrease in Trend Rates	Current Trend Rate	1% Increase in Trend Rates
RTHP Net OPEB Liability	$ 2,205,344	$ 2,631,579	$ 3,197,374

c. GASB Statement 75 Employer Reporting

Employer Contributions

The following table presents the primary government's and component units' contributions recognized by the OPEB plans at the reporting date June 30, 2019 (amounts in thousands):

	SEOPEBP	RTHP	Total
Primary Government	$ 742,122	$ 35,319	$ 777,441
Component Units	10,819	-	10,819
Total Employer Contributions	$ 752,941	$ 35,319	$ 788,260

OPEB Liabilities, OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Other Post Employees Benefits

As of the measurement date June 30, 2018, the primary government and component units reported net OPEB liabilities for the following plans administered by the State as follows (amounts in thousands):

	Primary Government	Component Units
Proportionate Share of the Net OPEB Liability		
State Employees' OPEB Plan	$ 17,031,459	$ 232,939
Net OPEB Liability		
Retired Teachers' Health Plan	2,631,579	-
Total Net OPEB Liability	$ 19,663,038	$ 232,939

The primary government's and component units' proportions of the collective net OPEB liability for the State Employees' OPEB Plan as of the measurement date June 30, 2018 as follows (amounts in thousands):

	Primary Government	Component Units
State Employees' OPEB Plan		
Proportion-June 30, 2018	98.65%	1.35%

For the measurement date June 30, 2018, the primary government and component units' recognized OPEB expense (income) for the following OPEB plan administered by the State as follows (amounts in thousands):

	Primary Government	Component Units
OPEB Expense (Income)		
State Employees' OPEB Plan	$ 1,173,623	$ 13,667
Retired Teachers' Health Plan	(874,209)	-
	$ 299,414	$ 13,667

Deferred Outflows and Inflows of Resources

As of the reporting date June 30, 2019, the State reported deferred outflows of resources and deferred inflows of resources related to the OPEB plans from the following sources:

	Primary Government		Component Units	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
State Employees' OPEB Plan				
Net Difference Between Projected and Actual Investment Earnings on OPEB Plan Investments	$ -	$ 6,834	$ -	$ 104
Change in Assumptions	-	900,285	-	12,551
Employer Contributions Subsequent to Measurement Date	742,122	-	10,819	-
Total	$ 742,122	$ 907,119	$ 10,819	$ 12,655
Retired Teachers' Health Plan				
Difference Between Expected and Actual Experience	$ 190,242	$ -		
Change in Assumptions	-	448,996		
Differences between projected and actual earnings on plan investments	1,535	-		
Employer Contributions Subsequent to Measurement Date	35,319	-		
Total	$ 227,096	$ 448,996		

The amount reported as deferred outflows of resources related to OPEB resulting from the State contributions subsequent to the measurement date will be recognized as a reduction of the net OPEB liability reported in the following fiscal year. The amount reported as deferred inflows of resources related to OPEB will be recognized as OPEB expense as follows (amounts in thousands):

State Employees' OPEB Plan Year Ending June 30	Primary Government	Component Units
2020	$ (225,355)	$ (5,453)
2021	(225,355)	(5,453)
2022	(225,356)	(5,452)
2023	(166,554)	(4,681)
2024	(54,352)	(1,763)
	$ (896,972)	$ (22,802)

Retired Teachers' Health Plan Year Ending June 30	Primary Government
2019	$ (43,155)
2020	(43,154)
2021	(43,154)
2022	(43,458)
2023	(43,614)
Thereafter	(40,684)
	$ (257,219)

Changes in Net OPEB Liability

The following schedule presents changes in the State's OPEB liability and fiduciary net position for each plan for the measurement date June 30, 2018 (amounts in thousands):

Total OPEB Liability	**SEOPEBP**	**RTHP**
Service Cost	$ 901,698	$ 132,392
Interest	680,154	133,597
Benefit Changes	-	(1,044,628)
Difference between expected and actual experience	-	217,853
Changes of assumptions	(724,140)	(196,049)
Benefit payments	(648,347)	(110,622)
Net change in total OPEB liability	209,365	(867,457)
Total OPEB liability - beginning	17,904,922	3,538,772
Total OPEB liability - ending (a)	**$ 18,114,287**	**$ 2,671,315**
Plan fiduciary net position		
Contributions - employer	$ 801,893	$ 35,299
Contributions - member	116,814	51,484
Net investment income	37,001	411
Benefit payments	(648,347)	(110,622)
Administrative expense	-	(264)
Other	186	-
Net change in plan fiduciary net position	307,547	(23,692)
Plan fiduciary net position - beginning	**$ 542,342**	**$ 63,428**
Plan fiduciary net position - ending (b)	**$ 849,889**	**$ 39,736**
Net OPEB liability - ending (a)-(b)	**$ 17,264,398**	**$ 2,631,579**

d. Other OPEB Plan

The State acts solely as the administrator and custodian of the assets of the Policemen and Firemen Survivors' Benefit Fund (PFSBF). The State makes no contribution to and has only a fiduciary responsibility for this fund. The fund does not issue stand-alone financial statements. However, financial statements for this fund are presented in Note No. 14.

Plan Description

PFSBF is a cost-sharing multiple-employer defined benefit OPEB plan that covers policemen and firemen of participating municipalities in the State. As of the most recent actuarial report there were 8 municipalities participating in the plan with a total membership of 634 active members. The plan provides survivor benefits upon the death of an active or retired member of the fund to his spouse and dependent children. Plan benefits, contribution requirements of plan members and participant municipalities, and other plan provisions are described in Sections 7-323a to 7-323i of the General Statutes.

Contributions

Plan members are required to contribute one percent of their annual salary. Participating municipalities are required to contribute at an actuarially determined rate. Administrative costs of the plan are financed by participating municipalities.

Note 14

OPEB Trust Funds Financial Statements

The financial statements of the OPEB trust funds are prepared using the accrual basis of accounting. Plan member and municipality contributions are recognized in the period in which they are due. State contributions are recognized in the period they are appropriated. Benefits are recognized when due and payable in accordance with the terms of each plan. Investment income and related investment expense of the Combined Investment Funds are allocated ratably to the PFSBF trust fund based on the fund's equity in the Combined Investment Funds.

	Statement of Fiduciary Net Position (thousands)			
	State Employees' OPEB Plan	Retired Teachers' Healthcare Plan	Policemen, Firemen, and Survivors' Benefits	Total
Assets				
Cash and Cash Equivalents	$ 72,730	$ 56,956	$ 35	$ 129,721
Receivables:				
Accounts, Net of Allowances	-	-	-	-
From Other Funds	308	2,042	-	2,350
Interest	-	-	1	1
Investments	1,156,975	-	36,665	1,193,640
Securities Lending Collateral	73,208	-	2,314	75,522
Total Assets	$ 1,303,221	$ 58,998	$ 39,015	$ 1,401,234
Liabilities				
Accounts Payable and Accrued Liabiliti	$ 34,005	$ 2,545	$ -	$ 36,550
Securities Lending Obligation	73,208	-	2,314	75,522
Total Liabilities	$ 107,213	$ 2,545	$ 2,314	$ 112,072
Net Position				
Held in Trust For Employee				
Pension and Other Benefits	$ 1,196,008	$ 56,453	$ 36,701	$ 1,289,162
Total Net Position	$ 1,196,008	$ 56,453	$ 36,701	$ 1,289,162

	Statement of Changes in Fiduciary Net Position (thousands)			
	State Employees' OPEB Plan	Retired Teachers' Healthcare Plan	Policemen, Firemen, and Survivors' Benefit	Total
Additions				
Contributions:				
Plan Members	$ 116,539	$ 106,804	$ 644	$ 223,987
State	752,941	35,319	-	788,260
Municipalities	-	-	704	704
Total Contributions	869,480	142,123	1,348	1,012,951
Investment Income	75,175	1,091	2,124	78,390
Less: Investment Expenses	(6,327)	-	(179)	(6,506)
Net Investment Income	68,848	1,091	1,945	71,884
Transfer In	-	16,100	-	16,100
Other	1,194	-	5	1,199
Total Additions	939,522	159,314	3,298	1,102,134
Deductions				
Administrative Expense	-	17,187	-	17,187
Benefit Payments and Refunds	593,403	93,210	1,234	687,847
Other	-	16,100	-	16,100
Total Deductions	593,403	126,497	1,234	721,134
Changes in Net Assets	346,119	32,817	2,064	381,000
Net Position Held in Trust For				
Other Postemployment Benefits:				
Beginning of Year	849,889	23,636	34,637	908,162
End of Year	$ 1,196,008	$ 56,453	$ 36,701	$ 1,289,162

Note 15
Capital and Operating Leases

State as Lessor
The State leases building space, land, and equipment to private individuals. The minimum future lease revenues for the next five years and thereafter are as follows (amounts in thousands):

2020	$ 48,076
2021	34,468
2022	33,301
2023	25,530
2024	21,011
Thereafter	76,948
Total	$ 239,334

Contingent revenues for the year ended June 30, 2019, were $685 thousand. The contingent revenue amount represents rental revenue which was paid in addition to the minimum lease revenues.

State as Lessee
Obligations under capital and operating leases as of June 30, 2019, were as follows (amounts in thousands):

	Noncancelable Operating Leases	Capital Leases
2020	$ 29,999	$ 8,722
2021	24,095	4,838
2022	27,845	4,527
2023	7,982	3,636
2024	29,560	2,273
2025-2029	20,869	6,119
2030-2034	11,277	2,432
2035-2039	854	-
Total minimum lease payments	$ 152,481	32,547
Less: Amount representing interest costs		4,550
Present value of minimum lease payments		$ 27,997

Minimum capital lease payments were discounted using interest rates ranging from 3.84 percent to 6.00 percent.

Rental payments on noncancelable operating leases charged to expenses during the year ended June 30, 2019, were $30.0 million.

Note 16
Long-Term Liabilities

Long-term liabilities of the primary government totaled $85.2 billion decreasing by $402.0 million when compared to the prior year. Of the total amount $2.4 billion is due within one year. A significant decrease included a $928.0 million decrease for Net OPEB Liability which was offset by an increase of $417.1 million in Transportation bonds.

The following is a summary of changes in long-term debt of the primary government for the year ended June 30, 2019 (amounts in thousands):

Governmental Activities	Beginning Balance	Additions	Reductions	Ending Balance	Amounts due within one year
Bonds:					
General Obligation	$ 18,328,363	$ 2,143,755	$ 2,103,405	$ 18,368,713	$ 1,459,451
Direct Borrowings and Direct Placements	434,865	-	60,785	374,080	45,000
Transportation	5,540,495	850,105	432,960	5,957,640	344,975
	24,303,723	2,993,860	2,597,150	24,700,433	1,849,426
Plus (Less) Premiums	1,919,483	296,415	215,528	2,000,370	202,475
Total Bonds	26,223,206	3,290,275	2,812,678	26,700,803	2,051,901
Other L/T Liabilities: [1]					
Net Pension Liability (Note 10)	34,566,488	5,671,889	5,417,872	34,820,505	-
Net OPEB Liability (Note 10)	20,590,998	2,798,605	3,726,564	19,663,039	-
Compensated Absences	498,278	29,920	29,825	498,373	35,800
Workers' Compensation	747,234	122,847	98,328	771,753	98,968
Capital Leases	27,576	6,639	6,218	27,997	8,722
Claims and Judgments	195,543	9,006	141,105	63,444	58,217
Landfill Post Closure Care	35,065	-	1,530	33,535	1,529
Liability on Interest Rate Swaps	440	-	109	331	-
Contracts Payable & Other	705	-	-	705	-
Non-exchange Financial Guarantees	531,560	-	21,285	510,275	22,620
Total Other Liabilities	57,193,887	8,638,906	9,442,836	56,389,957	225,856
Governmental Activities Long-Term Liabilities	$ 83,417,093	$ 11,929,181	$ 12,255,514	$ 83,090,760	$ 2,277,757

1. In prior years, the General and Transportation funds have been used to liquidate other liabilities.

Business-Type Activities	Beginning Balance	Additions	Reductions	Ending Balance	Amounts due within one year
Revenue Bonds	$ 1,494,355	$ 92,105	$ 130,525	$ 1,455,935	$ 98,650
Plus/(Less) Premiums and Discounts	178,191	9,320	13,187	174,324	2,050
Total Revenue Bonds	1,672,546	101,425	143,712	1,630,259	100,700
Compensated Absences	197,574	36,862	58,249	176,187	41,332
Other	354,900	14,574	26,560	342,914	23,098
Total Other Liabilities	552,474	51,436	84,809	519,101	64,430
Business-Type Long-Term Liabilities	$ 2,225,020	$ 152,861	$ 228,521	$ 2,149,360	$ 165,130
Primary Government Long-Term Liabilities	$ 85,642,113	$ 12,082,042	$ 12,484,035	$ 85,240,120	$ 2,442,887

The liability for claims and judgments (Governmental Activities) includes a pollution remediation liability of approximately $38.3 million. This liability represents the State's share of the cost of cleaning up certain polluted sites in the state under federal and state superfund regulations. The liability was estimated using the cash flow technique and could change over time due to changes in costs of goods and services, changes in remediation technology, or changes in laws and regulations governing the remediation effort. In addition, there are other polluted sites in the state that require remedial action by the State that will result in additional cleanup costs. The State did not recognize a liability for these costs at year end because it could not be reasonably estimated.

As of June 30, 2019, long-term debt of component units consisted of the following (amounts in thousands):

Long-Term Debt	Balance June 30, 2019	Amounts due within year
Bonds Payable (includes premiums/discounts)	$ 5,366,406	$ 268,810
Escrow Deposits	187,429	39,680
Annuities Payable	126,882	5,969
Rate Swap Liability	101,180	-
Net Pension Liability	250,456	-
Net Post Employment Liability	232,938	-
Other	265,204	213,968
Total	$ 6,530,495	$ 528,427

Not all component units report net pension liabilities and OPEB liabilities; therefore, the notes show a higher liability for the net pension liability of $6,257 and a higher net OPEB liability of $5,821 than the financial statements.

Landfill Closure and Postclosure Care

Public Act 13-247 and section 99 of Public Act 13-184 required the Materials Innovation and Recycling Authority to transfer all legally required reserves and obligations resulting from the closure of the authority's landfills located in Hartford, Ellington, Waterbury, Wallingford and Shelton to the State Department of Energy and Environmental Protection (DEEP). During the year ended June 30, 2014, the legal transfer of $35.8 million in post closure care obligations and the concurrent transfer of $31.0 million of Authority reserve funds to the State resulting from the closure of landfills was addressed by a memorandum of understanding ("MOU") between the Authority and DEEP.

By the end of the year ended June 30, 2015, all work associated with the closure of the five landfills was completed. Going forward DEEP is required to reimburse the authority for all postclosure care obligations as the five landfills are now certified as closed. All landfill expense reimbursements paid by DEEP totaled $1,529,345 in FY2019.

GASB Statement No.18 *Accounting for Municipal Solid Waste Landfill Closure and Postclosure Care Cost* applies to closure and postclosure care costs that are paid near or after the date a landfill stops accepting waste. The State recognizes landfill expenditures and related General Fund liabilities using the modified accrual basis of accounting. DEEP estimates the State's landfill liability for closure and postclosure costs based on landfill capacity. Increases or decreases in such estimates are reported as additions or reductions in this line item of the State's long-term liabilities. The liability for these estimated costs is reduced when the costs are actually paid. Actual costs may be higher than estimated due to inflation or changes in permitted capacity, technology or regulation. As of June 30, 2013, all five of the landfills had no capacity available since 100 percent of their capacity had been used.

Note 17
Long-Term Notes and Bonded Debt

a. Bond Anticipation Notes

In December 2017, the State issued $400,000,000 of General Obligation 2017 Series A Bond Anticipation Notes that matured on September 14, 2018 at which time General Obligation 2018 Series E Bonds were issued that mature in 2028. The State has elected to disclose these notes with its 2018 long-term debt because the State demonstrated the ability to convert such debt to long-term debt rather than including the debt as fund liabilities. The bans were issued to gain timely access to favorable pricing opportunities.

	Beginning Balance	Issued	Redeemed	Ending Balance
Bond Anticipation Notes	$ 400,000	$ -	$ 400,000	$ -

b. Primary Government – Governmental Activities

General Obligation Bonds

General Obligation bonds are those bonds that are paid out of the revenues of the General Fund and are supported by the full faith and credit of the State. General Obligation bonds outstanding and bonds authorized but unissued at June 30, 2019, were as follows (amounts in thousands):

Purpose of Bonds	Final Dates	Original Rates	Outstanding	Authorized But Unissued
Capital Improvements	2019-2038	2.00-5.632%	$ 4,076,682	$ 585,339
School Construction	2019-2039	1.70-5.632%	4,498,674	3,001
Municipal & Other Grants & Loans	2019-2036	1.30-5.632%	2,463,224	1,413,476
Housing Assistance	2019-2035	2.25-5.350%	527,585	245,063
Elimination of Water Pollution	2019-2035	2.00-5.09%	487,162	34
General Obligation Refunding	2019-2038	2.00-5.25%	3,463,585	-
GAAP Conversion	2019-2027	4.00-5.00%	423,260	-
Pension Obligation	2019-2032	5.69-6.27%	2,197,477	-
Miscellaneous	2019-2034	3.50-5.10%	63,139	75,085
			18,200,788	$ 2,321,998
Accretion-Various Capital Appreciation Bonds			167,925	
		Total	$ 18,368,713	

Future amounts needed to pay principal and interest on as General Obligation bonds outstanding at June 30, 2019, were as follows (amounts in thousands):

Year Ending June 30,	Principal	Interest	Total
2020	$ 1,459,451	$ 828,231	$ 2,287,682
2021	1,466,891	765,453	2,232,344
2022	1,439,434	752,244	2,191,678
2023	1,464,456	700,097	2,164,553
2024	1,359,289	662,326	2,021,615
2025-2029	5,996,957	2,094,094	8,091,051
2030-2034	3,937,310	702,463	4,639,773
2035-2039	1,077,000	93,940	1,170,940
Total	$ 18,200,788	$ 6,598,848	$ 24,799,636

Direct Borrowing and Direct Placements

On June 28, 2017 the State issued direct placement debt raising cash from a non-public offering based on a contractual agreement. The State entered into the agreement to take advantage of various favorable terms and at a substantially lower cost than if the State used a traditional public offering. $300 million was raised as direct placement debt which provided timely resources to continue ongoing capital projects and grants to municipalities in the State. $134.9 million was raised to redeem $90 million of 2005 series A bonds and to redeem $44.9 million of 2012 series D bonds. Direct placement debt outstanding as of June 30, 2019 is as follows:

Type of debt	Final Maturity Dates	Original Interest Rates	Amount Outstanding
Direct Placements	2019-2037	2.45%	$ 284,215
Direct Placements Refundings	2019-2024	3.50%	89,865
		Total	$ 374,080

Future amounts required to pay principal and interest on direct borrowings and direct placements outstanding at June 30, 2019 were as follows:

Year Ending June 30,	Principal	Interest	Total
2020	$ 45,000	$ 13,175	$ 58,175
2021	15,790	11,905	27,695
2022	5,790	11,348	17,138
2023	15,790	11,139	26,929
2024	15,790	10,584	26,374
2025-2029	150,525	35,560	186,085
2030-2034	91,445	14,637	106,082
2035-2039	33,950	2,212	36,162
Total	$ 374,080	$ 110,560	$ 484,640

GO Demand Bonds

The State enters into standby bond purchase and remarketing agreements with brokerage firms and/or banks upon the issuance of demand bonds. The State issued demand bonds as General Obligation Tax Exempt 2016 Series C bonds maturing in 2034.

Under the Standby Bond Purchase Agreement, the Bank would purchase the put bonds and hold them until they were remarketed. The Bank Bonds would bear a base rate for a period up to 270 days and base rate plus 1.0 percent thereafter. The State is required to pay the standby bond purchase provider a quarterly fee of .42 percent of the Principal and Interest commitment.

The State's remarketing agent is responsible for using its best efforts to remarket bonds properly tendered for purchase by bondholders. The State is required to pay the remarketing agent a quarterly fee of .06 percent per annum on the amount of outstanding demand bond principal.

Term out funding would commence on the 271st day following the bank purchase date. The outstanding bank bonds would be amortized on a quarterly basis for a three-year period as shown below. The interest on the bonds would be calculated at a rate determined per the Standby Bond Purchase Agreement (base rate plus 1 percent). For example, at the end of fiscal year 2019, the calculated rate was 7.5 percent, based on the terms of the Agreement. The standby bond purchase agreement expires on June 13, 2022. The agreement could be terminated at an earlier date if certain termination events described in the agreement were to occur. As of June 30, 2019, the amount of demand bonds outstanding was $288,235,000. The table below shows the debt service requirements should the bond holders exercise their option in the full amount of the outstanding demand bonds.

Fiscal Year	Beginning Banked Bonds Outstanding	Principal	Interest	Total Debt Service	Ending Bank Bonds Outstanding
First	$ 288,235,000	$ 96,078,333	$ 18,915,422	$ 114,993,755	$ 192,156,667
Second	192,156,667	96,078,333	11,709,547	107,787,880	96,078,334
Third	96,078,333	96,078,333	4,503,672	100,582,005	-

Transportation Related Bonds

Transportation Related bonds include special tax obligation bonds that are paid out of revenues pledged or earned in the Transportation Fund. The revenue pledged or earned in the Transportation Fund to pay special tax obligation bonds is transferred to the Debt Service Fund for retirement of principal and interest.

Transportation Related bonds outstanding and bonds authorized but unissued at June 30, 2019, were as follows (amounts in thousands):

Purpose of Bonds	Final Maturity Dates	Original Interest Rates	Amount Outstanding	Authorized But Unissued
Infrastructure				
Improvements	2019-2038	3.00-5.740%	$ 5,252,805	$ 3,831,606
STO Refunding	2019-2028	2.00-5.20%	704,835	-
			5,957,640	$ 3,831,606
Accretion-Various Capital Appreciation Bonds			-	
		Total	$ 5,957,640	

Future amounts required to pay principal and interest on transportation related bonds outstanding at June 30, 2019, were as follows (amounts in thousands):

Year Ending June 30,	Principal	Interest	Total
2020	$ 344,975	$ 288,863	$ 633,838
2021	355,335	272,349	627,684
2022	343,980	255,121	599,101
2023	351,575	238,112	589,687
2024	353,375	221,525	574,900
2025-2029	1,802,785	833,742	2,636,527
2030-2034	1,593,965	391,964	1,985,929
2035-2039	811,650	79,743	891,393
	$ 5,957,640	$ 2,581,419	$ 8,539,059

c. Primary Government – Business–Type Activities
Revenue Bonds
Revenue bonds are those bonds that are paid out of resources pledged in the Enterprise funds and Component Units.

Enterprise funds' revenue bonds outstanding at June 30, 2019, were as follows (amounts in thousands):

Funds	Final Maturity Dates	Original Interest Rates	Amount Outstanding (000's)
UConn	2020-2047	1.5-5.25%	$ 233,445
Board of Regents	2020-2037	2.0-5.25%	351,690
Clean Water	2020-2037	1.0-5.0%	744,424
Drinking Water	2020-2037	1.0-5.0.%	104,046
Bradley Parking Garage	2020-2024	6.5-6.6%	22,330
Total Revenue Bonds			1,455,935
Plus/(Less) premiums and discounts:			
UConn			30,885
Board of Regents			24,061
Clean Water			103,802
Drinking Water			15,576
Revenue Bonds, net			$ 1,630,259

The University of Connecticut has issued student fee revenue bonds to finance the costs of buildings, improvements and renovations to certain revenue-generating capital projects. Revenues used for payments on the bonds are derived from various fees charged to students.

The Connecticut State University System has issued revenue bonds that finance the costs of auxiliary enterprise buildings, improvements and renovations to certain student housing related facilities. Revenues used for payments on the bonds are derived from various fees charged to students.

In 2000, Bradley Parking Garage bonds were issued in the amount of $53.8 million to build a parking garage at the airport. As of June 30, 2019, $22.3 million of these bonds are outstanding.

In 1994, the State of Connecticut began issuing Clean Water Fund revenue bonds. The proceeds of these bonds are to be used to provide funds to make loans to Connecticut municipalities for use in connection with the financing or refinancing of wastewater treatment projects. Details on these agreements are disclosed under the separately issued audited financial statements of the fund.

Future amounts needed to pay principal and interest on revenue bonds outstanding at June 30, 2019, were as follows (amounts in thousands):

Year Ending June 30,	Principal	Interest	Total
2020	$ 98,649	$ 66,580	$ 165,229
2021	86,581	62,119	148,700
2022	88,845	58,088	146,933
2023	89,805	53,839	143,644
2024	285,231	128,351	413,582
2025-2029	399,174	139,703	538,877
2030-2034	266,205	59,146	325,351
2035-2039	70,645	23,478	94,123
2040-2044	37,800	13,082	50,882
2044-2048	33,000	3,579	36,579
Total	$ 1,455,935	$ 607,965	$ 2,063,900

d. Component Units

Component Units' revenue bonds outstanding at June 30, 2019, were as follows (amounts in thousands):

Component Unit	Final Maturity Date	Interest Rates	Amount Outstanding (000's)
CT Housing Finance Authority	2019-2056	0.0-6.627%	$ 4,579,533
CT Student Loan Foundation	2020-2046	2.013-4.101%	171,625
CT Higher Education			
Supplemental Loan Authority	2020-2035	1.65-5.25%	171,570
CT Airport Authority	2020-2050	%/1 mth libor	253,205
CT Regional			
Development Authority	2020-2034	1.00-5.75%	74,295
UConn Foundation	2020-2025	2.30-2.92%	13,606
CT Green Bank	2020-2037	2.00%-7.04%	54,714
CT Innovations Inc.	2020	2.37-5.25%	595
Total Revenue Bonds			5,319,143
Plus/(Less) premiums and discounts:			
CHFA			37,574
CSLF			(323)
CHESLA			4,973
CAA			3,303
UConn Foundation			(141)
CT Innovations Inc.			(595)
CRDA			1,735
Revenue Bonds, net			$ 5,365,669

Revenue bonds issued by the Component Units do not constitute a liability or debt of the State. The State is only contingently liable for those bonds as discussed below.

Following the merger of the operations of the Connecticut Development Authority, Connecticut Innovations, Incorporated (CII) assumed responsibility for the former authority's Special Obligation industrial revenue bonds. The bonds were issued to finance such projects as the acquisition of land, the construction of buildings, the purchase and installation of machinery, equipment, and pollution control facilities. These activities are financed under its Self-Sustaining Bond Program which is described in the no-commitment debt section of this note. In addition, CII has $595 thousand in General Obligation bonds outstanding at year-end. These bonds were issued to finance the lease of an entertainment/sports facility and the purchase of a hockey team.

Connecticut Housing Finance Authority's revenue bonds are issued to finance the purchase, development and construction of housing for low and moderate-income families and persons throughout the State. The Authority has issued bonds under a bond resolution dated 9/27/72; a special needs indenture dated 9/25/95, and other bond resolutions dated October 2009. As of December 31, 2018, bonds outstanding under the bond resolution, the indenture, and other bond resolutions were $4,260.0 million, $66.1 million, and $291.0 million respectively. According to the bond resolution, the following assets of the Authority are pledged for the payment of the bond principal and interest (1) the proceeds from the sale of bonds, (2) all mortgage repayments with respect to long-term mortgage and construction loans financed from the Authority's General fund, and (3) all monies and securities of the Authority's General and Capital Reserve funds. The resolution and indenture Capital Reserve funds are required to be maintained at an amount at least equal to the amount of principal, sinking fund installments, and interest maturing and becoming due in any succeeding calendar year on all outstanding bonds. The required reserves are $323.4 million per the resolution and $5.2 million per the indenture at 12/31/18. As of December 31, 2018, the Authority has entered into interest rate swap agreements for $809.7 million of its outstanding variable rate bonds. Details on these agreements are disclosed under the separately issued audited financial statements of the Authority.

Materials Innovation and Recycling Authority's revenue bonds are issued to finance the design, development and construction of resources recovery and recycling facilities and landfills throughout the State. These bonds are paid solely from the revenues generated from the operations of the projects and other receipts, accounts and monies pledged in the bond indentures.

Connecticut Higher Education Supplemental Loan Authority's revenue bonds are issued to provide loans to students, their parents, and institutions of higher education to assist in the financing of the cost of higher education. These loans are issued through the Authority's Bond fund. According to the bond resolutions, the Authority internally accounts for each bond issue in separate funds, and additionally, the Bond fund includes individual funds and accounts as defined by each bond resolution.

Capital Reserves

Each Authority has established special capital reserve funds that secure all the outstanding bonds of the Authority at year-end. These funds are usually maintained at an amount equal to next year's bond debt service requirements. The State may be contingently liable to restore any deficiencies that may exist in the funds in any one year in the event that the Authority is unable to do so.
The Capital Region Development Authority revenue bonds are issued to provide sufficient funds for carrying out its purposes. The bonds are not debt of the State of Connecticut. However, the Authority and the State have entered into a contract for financial assistance, pursuant to which the State will be obligated to pay principal and interest on the bonds in an amount not to exceed $9.0 million in any calendar year. The bonds are secured by energy fees from the central utility plant and by parking fees.

Future amounts needed to pay principal and interest on Component Unit revenue bonds outstanding at June 30, 2019, were as follows (amounts in thousands):

Year Ending June 30,	Principal	Interest	Total
2019	$ 230,076	$ 172,961	$ 403,037
2020	180,305	168,407	348,712
2021	208,476	164,115	372,591
2022	192,668	158,238	350,906
2023	196,870	152,252	349,122
2024-2028	981,928	662,439	1,644,367
2029-2033	1,012,814	482,159	1,494,973
2034-2038	830,819	318,841	1,149,660
2039-2043	684,395	205,794	890,189
2044-2048	703,060	102,219	805,279
2049-2052	71,242	12,648	83,890
2053-2057	26,350	4,649	30,999
	$ 5,319,003	$ 2,604,722	$ 7,923,725

No-commitment debt

Under the Self-Sustaining Bond program, acquired from its combination with the Connecticut Development Authority, Connecticut Innovations, Inc., issues revenue bonds to finance such projects as described previously in the Component Unit section of this note. These bonds are paid solely from payments received from participating companies (or from proceeds of the sale of the specific projects in the event of default) and do not constitute a debt or liability of the Authority or the State. Thus, the balances are not included in the Authority's financial statements. Total bonds outstanding for the year ended June 30, 2019 were $320.0 million.

The Connecticut Health and Educational Facilities Authority has issued Special Obligation bonds for which the principal and interest are payable solely from the revenues of the institutions. Starting in 1999, the Authority elected to remove these bonds and related restricted assets from its financial statements, except for restricted assets for which the Authority has a fiduciary responsibility. Total Special Obligation bonds outstanding at June 30, 2019, were $8,408.4 million, of which $351.7 million was secured by special capital reserve funds.

e. Debt Refundings

During the fiscal year the State issued General Obligation and Special Tax Obligation bonds of $925.9 million at an average coupon interest rate of 4.95 percent to refund $909.3 million of General Obligation and Special Tax Obligation bonds with an average coupon interest rate of 5.02 percent. Although the refunding resulted in a $11.9 million accounting loss, the State in effect reduced its aggregate fund level debt service payments by $16.6 million over the next 5 years. The present value of these savings represents an economic gain (difference between the present values of the debt service payments of the old and the new bonds) of $23.3 million.

Once the refunding bond proceeds were delivered, the State entered into escrow agreements with escrow holders, to provide for the redemption of the refunded bonds. The refunding proceeds were deposited in an escrow holder's account of the State's Short-Term Investment Fund until needed for redemption of the refunded bonds. Thus, the refunded bonds were removed from the State's financial statements as they are considered defeased.

In prior years, the State placed the proceeds of refunding bonds in irrevocable trust accounts to provide for all future debt service payments on defeased bonds. The assets of the trust accounts and the liability for defeased bonds are not included in the State's financial statements. As of June 30, 2019, the outstanding balance of bonds defeased in prior years was approximately $0.

f. Nonexchange Financial Guarantee

In March 2018, the State entered into a Contract for Financial Assistance with the City of Hartford, according to Section 376 of Public Act 17-2 of the June Special Session guaranteeing $540,080,000 of outstanding general obligation bonds of the City of Hartford, with maturity dates ranging from July1, 2028 through July 15, 2035, and semiannual interest payments. The contract assistance is limited to an amount equal to (1) the annual debt service on the outstanding amount of (A) refunding bonds to be issued by the City of Harford pursuant to section 7-370c of the general statues, or (B) any other bonds or notes issued by the City of Hartford, provided such refunding bonds or other bonds or notes are for payment, funding, refunding, redemption, replacement or substitutions of bonds, notes or other obligations previously issued by the City of Hartford, and (2) cost of issuance on any such refunding bonds and any other expenses that result directly from the refunding of debt. The Act also establishes that the City of Hartford must be under the supervision of the Municipal Accountability Review Board of the State and that the City may not issue any new debt without the board's approval. The State Representatives, defined by the contract as the Secretary of the Office of Policy and Management and the State Treasurer, may agree to provide credit support to the City of Hartford, including, but not limited to, assuming all or part of any bonds, notes, or other obligations of the City or issuance of new State obligations in replacement of such bonds, notes, or other obligations, provided such credit support does not exceed the amount of contract assistance that could otherwise be provided by the State to the City.

In April 2018, because of the possibility that the City of Hartford would declare bankruptcy, the State of Connecticut began making contract assistance payments for the City of Hartford's then outstanding $540 million general obligation debt. During fiscal year 2019, the State of Connecticut has paid $21,285,000 in principal and $22,358,404 in interest on the guarantee.

The liability recognized for nonexchange financial guarantees by the State of Connecticut at June 30, 2019 is as follows (amounts in thousands):

Beginning of Year	Increases	Decreases	End of Year
$ 531,560.00	$ -	$ 21,285	$ 510,275

Note 18
Derivative Financial Instruments

The fair value balances and notional amounts of the State's derivative instruments outstanding at June 30, 2019, classified by type, and the changes in fair value of such derivative instruments for the year then ended are as follows (amounts in thousands; debit (credit)):

	Changes in Fair Value		Fair Value at Year End		
	Classification	Amount	Classification	Amount	Notional
Governmental activities					
Cash flow hedges: Pay-fixed interest rate swap	Deferred outflow of Resources	$ 109	Deferred outflow of Resources	$ (331)	$ 20,000

Objective and Terms of Hedging Derivative Instruments

The following table displays the objective and the terms of the States' governmental activities hedging derivative instruments outstanding at June 30, 2019, along with the credit rating of the associated counterparty (amounts in thousands).

Type	Objective	Notional Amounts (000's)	Effective Date	Maturity Date	Terms	Counterparty Credit Rating
Pay-fixed interest rate swap	Hedge of changes in cash flows of the 2005 GO bonds	$ 20,000	4/27/2005	6/1/2020	Pay 5.2% receive CPI plus 1.79%	A+
	Total Notional Amount	$ 20,000				

The fair values of interest rate swaps were estimated using the zero-coupon method. This method calculates the future net settlement payment required under the swaps, assuming the current forward rates implied by the yield curve correctly anticipate future spot interest rates. These payments are then discounted using the spot rates implied by the current yield curve for hypothetical zero-coupon bonds due on the date each future net settlement on the swaps.

Credit Risk

As of June 30, 2019, the State had no credit risk exposure on any of the swaps because the swaps had negative fair value. However, should interest rates change and the fair values of the swaps become positive, the State would be exposed to credit risk in the amount of the swaps' fair value.

Basis Risk

The State's variable-rate bond interest payments are based on the CPI floating rate. As of June 30, 2015, the State receives variable-rate payments from the counterparty based on the same CPI floating rate.

Termination Risk

The State or the counterparty may terminate any of the swaps if the other party fails to perform under the terms of the contract. If any swap is terminated, the associated variable-rate bonds would no longer carry synthetic interest rates. Also, if at the time of termination, the swap has a negative fair value, the State would be liable to the counterparty for a payment equal to the swap's fair value. Under the 2005 swap agreements, the State has up to 270 days to fund any required termination payment.

Rollover Risk

Because all the swap agreements terminate when the associated debt is fully paid, the State is only exposed to rollover risk if an early termination occurs. Upon an early termination, the State will not realize the synthetic rate offered by the swaps on the underlying debt issues.

Hedging Derivative Instrument Payments and Hedged Debt

As rates vary, variable-rate bond interest payments and net swap payments will vary. Using rates as of June 30, 2019, debt service requirements of the State's outstanding variable-rate bonds and net swap payments are as follows
(amounts in thousands):

Fiscal Year	Variable-Rate Bonds		Interest Rate	
Ending June 30,	Principal	Interest	SWAP, Net	Total
2020	$ 20,000	$ 815	$ 225	$ 21,040
	$ 20,000	$ 815	$ 225	$ 21,040

Note 19
Risk Management

The risk financing and insurance program of the State is managed by the State Insurance and Risk Management Board. The Board is responsible mainly for determining the method by which the State shall insure itself against losses by the purchase of insurance to obtain the broadest coverage at the most reasonable cost, determining whether deductible provisions should be included in the insurance contract, and whenever appropriate determining whether the State shall act as self-insurer. The schedule lists the risks of loss to which the State is exposed and the ways in which the State finances those risks.

	Risk Financed by	
Risk of Loss	Purchase of Commercial Insurance	Self-Insurance
Liability (Torts):		
-General (State buildings, parks, or grounds)		X
-Other	X	
Theft of, damage to, or destruction of assets	X	
Business interruptions	X	
Errors or omissions:		
-Professional liability	X	
-Medical malpractice (John Dempsey Hospital)		X
Injuries to employees		X
Natural disasters	X	

For the general liability risk, the State is self-insured because it has sovereign immunity. This means that the State cannot be sued for liability without its permission. For other liability risks, the State purchases commercial insurance only if the State can be held liable under a statute (e.g. per Statute the State can be held liable for injuries suffered by a person on a defective State highway), or if it is required by a contract.

For the risk of theft, of damage to, or destruction of assets (particularly in the automobile fleet), the State insures only leased cars and vehicles valued at more than $100 thousand. When purchasing commercial insurance, the State may retain some of the risk by assuming a deductible or self-insured retention amount in the insurance policy. This amount varies greatly because the State carries many insurance policies covering various risks. The highest deductible or self-insured retention amount assumed by the State is $25 million, which is carried in a railroad liability policy.

The State records its risk management activities related to the medical malpractice risk in the University of Connecticut and Health Center fund, an Enterprise fund. At year-end, liabilities for unpaid claims are recorded in the statement of net position (government-wide and proprietary fund statements) when it is probable that a loss has occurred, and the amount of the loss can be reasonably estimated. The liabilities are determined based on the ultimate cost of settling the claims, including an amount for claims that have been incurred but not reported and claim adjustment expenses. The liabilities are actuarially determined and the unpaid liability for medical malpractice is reported at its present value, using a discount rate of 5 percent. In the General Fund, the liability for unpaid claims is only recorded if the liability is due for payment at year-end. Settlements have not exceeded coverages for each of the past three fiscal years.

Changes in the claim's liabilities during the last two fiscal years were as follows (amounts in thousands):

	Governmental Activities Workers' Compensation	Business-Type Activities Medical Malpractice
Balance 6-30-17	$ 718,016	$ 24,857
Incurred claims	127,630	-
Paid claims	(98,412)	(9,876)
Balance 6-30-18	747,234	14,981
Incurred claims	122,847	2,936
Paid claims	(98,328)	(5,759)
Balance 6-30-19	$ 771,753	$ 12,158

Note 20
Interfund Receivables and Payables

Interfund receivable and payable balances at June 30, 2019, were as follows (amounts in thousands):

	Balance due to fund(s)											
	General	Transportation	Restricted Grants & Accounts	Grant & Loan Programs	Other Governmental	UConn	Board of Regents	Employment Security	Internal Services	Fiduciary	Component Units	Total
Balance due from fund(s)												
General	$ -	$ -	$ 790	$ 4	$ 2,025	$ 34,483	$ 31,142	$ 501	$ 4,850	$ 856	$ -	$ 74,651
Debt Service	-	2,563	-	-	-	-	-	-	-	-	-	2,563
Restricted Grants & Accounts	3,827	-	-	-	-	-	-	-	-	-	5,731	9,558
Grant & Loan Programs	35	-	-	-	-	-	-	-	-	-	-	35
Other Governmental	2,408	-	-	-	11,026	11,388	47,541	-	-	-	-	72,363
UConn	25,963	-	-	-	-	-	-	-	-	-	-	25,963
Board of Regents	4,825	-	-	-	-	-	-	-	-	-	-	4,825
Employment Security	-	-	-	-	297	-	-	-	-	-	-	297
Internal Services	10,679	-	-	-	-	-	-	-	-	-	-	10,679
Fiduciary	-	-	-	-	379	-	-	-	-	2,018	-	2,397
Component Units	43,735	-	132	-	202	-	-	-	-	-	-	44,069
Total	$ 91,472	$ 2,563	$ 922	$ 4	$ 13,929	$ 45,871	$ 78,683	$ 501	$ 4,850	$ 2,874	$ 5,731	$ 247,400

Interfund receivables and payables arose because of interfund loans and other interfund balances outstanding at year end.

Note 21
Interfund Transfers

Interfund transfers for the fiscal year ended June 30, 2019, consisted of the following (amounts in thousands):

	Amount transferred to fund(s)									
	General	Debt Service	Transportation	Restricted Grants & Accounts	Other Governmental	UConn	Board of Regents	Clean Water & Drinking Water	Fiduciary	Total
Amount transferred from fund(s)										
General	$ 949,681	$ -	$ -	$ -	$ 241,732	$ 794,623	$ 550,087	$ 720	$ 16,100	$ 2,552,943
Debt Service	-	-	21,810	-	34,258	-	-	-	-	56,068
Transportation	-	641,668	-	-	5,500	-	-	-	-	647,168
Restricted Grants & Accounts	25,600	64	-	-	408	-	-	-	-	26,072
Grants and Loans	-	-	-	-	71,464	-	-	-	-	71,464
Other Governmental	120,379	43,705	-	145,591	94,471	13,000	117,306	-	-	534,452
Employment Security	-	-	-	-	5,415	-	-	-	-	5,415
Total	$1,095,660	$ 685,437	$ 21,810	$ 145,591	$ 453,248	$ 807,623	$ 667,393	$ 720	$ 16,100	$ 3,893,582

Transfers were made to (1) move revenues from the fund that budget or statute requires to collect them to the fund that budget or statute requires to expend them and (2) move receipts restricted to debt service from the funds collecting the receipts to the debt service fund as debt service payments become due.

Note 22

Restatement of Net Position, Fund Balance Classifications, and Restricted Net Position

Restatement of Net Position

For fiscal year 2019, Component Units beginning net position was $2.3 billion. As a result of implementing GASB 75, Connecticut Housing Finance Authority, (major Component Unit) beginning net position was reduced by $66.8 million on the Statement of Activities resulting in a restated beginning net position of $2.2 billion. This reduction is reported on the Combining Statement of Activities – Component Units as well. Also, the Connecticut Green Bank, (Component Unit) restated their beginning net position as a result of an error consisting of warranty management costs previously expensed. These amounts should have been amortized as a prepaid expense over the life of the contracted warranty management period which is 20 years. The effect of this error was an increase in their beginning net position of $1,955 million.

The University of Connecticut and the University of Connecticut Health Center (major Proprietary Funds) made reclassifications to their 2018 Capital and Intangible Assets as well as Long-Term Liabilities. As a result of these reclassifications the beginning net position decreased by $45.1 million, the Statement of Activities beginning net position was restated to $7.0 billion. This decrease is reported on the Statement of Revenues, Expenses, and Changes in Fund Net Position – Proprietary Funds as well.

Fund Balance – Restricted and Assigned

As of June 30, 2019, restricted and assigned fund balances of nonmajor governmental funds were comprised as follows (amounts in thousands):

	Restricted Purposes	Assigned Purposes
Capital Projects	$ 485,640	$ -
Environmental Programs	118,402	-
Housing Programs	435,486	-
Employment Security Administration	20,297	-
Banking	2,140	-
Other	445,686	22,834
Total	$ 1,507,651	$ 22,834

Restricted Net Position

As of June 30, 2019, the government-wide statement of net position reported $4,777 million of restricted net position, of which $431.1 million was restricted by enabling legislation.

Note 23

Tax Abatements

For financial purposes, a tax abatement is defined as an agreement between the government and an individual or entity through which the government promises to forgo tax revenues and the individual or entity promises to subsequently take a specific action that contributes to the economic development or otherwise benefit the government or its citizens.

Film, Television, and Digital Media Tax Program

This program assists film, television and digital media companies with direct financial assistance programs. Including but not limited to loans, grants, and job expansion tax credits structured to incentivize relocation to Connecticut and the growth and development of current Connecticut-based companies.

Beginning after January 1, 2010, (a) an eligible production company that incurs production expenses of not less than $100 thousand, but not more than $500 thousand, will be eligible for a credit against the tax imposed equal to ten percent of such production expenses, (b) a production company incurring expenses of more than $500 thousand, but not more than $1 million, will be eligible for a credit against the tax imposed equal to fifteen percent of production expenses, and (c) a production company incurring expenses of more than $1 million will be eligible for a credit against the tax imposed (chapter 207, section 12-217jj) equal to thirty percent of production expenses.

No eligible company incurring an amount of production expenses that qualifies for a tax credit shall be eligible unless on or after January 1, 2010, the company conducts (1) not less than fifty percent of principal filming days within the state, or (2) expends not less than fifty percent of postproduction costs within the state, or (3) expends not less than $1 million of postproduction costs within the state.

An eligible production company shall apply to the Department of Economic and Community Development (DECD) for a tax credit voucher on an annual basis, but not later than ninety days after the first production expenses are incurred in the production of a qualified production, and will provide with the application information that DECD may require to determine if the company is eligible to claim a credit.

Urban and Industrial Sites Reinvestment Tax Program

This tax program is designed to encourage development and redevelopment activities in eligible communities and to encourage private investment in contaminated properties.

In accordance with Chapter 578 section 32-9t of the General Statutes taxpayers who make investments in eligible urban reinvestment projects or eligible industrial site investment projects may be allowed a tax credit against the tax imposed under chapter 207 and 212a or section 38a-743 in the General Statutes, an amount equal to the following percentage of approved investments made by or on behalf of a taxpayer with respect to the following income years of the taxpayer: (a) the income year in which the investment in the project was made and the next two succeeding income years, zero percent; (b) in the third full income year succeeding the year in which the investment was made and the three succeeding years, ten percent; (c) in the seventh full income year succeeding the year in which the investment in the eligible project was made and the next two succeeding years, twenty percent. The sum of all tax credits shall not exceed $100 million to a single eligible urban reinvestment project or a single eligible industrial site investment project approved by the commissioner at DECD. The sum of all tax credits under the provisions of this section should not exceed $950 million.

Tax credits allowed may be claimed by a taxpayer who has made an investment (1) directly only if the investment has a total asset value, either alone or combined with other investors in an eligible project, of not less than $5 million or, in the case of an investment in an eligible project for the preservation of a historic facility and redevelopment of the facility for combined uses which includes at least four housing units, the total asset value should not be less than $2 million; (2) an investment managed through a fund manager only if such fund: (a) has a total asset value of not less than $60 million for the income year for which the initial credit is taken; and (b) has not less than three investors who are not related persons with respect to each other or to any person in which any investment is made other than through the fund at the date the investment is made; or (3) through a community development entity or a contractually bound community development entity. A tax credit made through a fund, should only be available for investments in funds that are not open to additional investments beyond the amount set forth at the formation of the fund.

Insurance Reinvestment Fund Program

The purpose of the Insurance Reinvestment Fund Program is to capitalize on the base of local insurance expertise and help people laid off after the massive restructuring of the insurance industry. The program was also intended to encourage small insurance startups and specialty insurance businesses in Connecticut companies engaged in the insurance business or providing services to insurance companies.

In accordance with Chapter 698 section 38a-88 a tax credit is allowed against the tax imposed under chapter 207, 208, or 229 or section 38a-343 an amount equal to the following percentage of the moneys the taxpayer invested through a fund manager in an insurance business with respect to the following income years of the taxpayer: (a) in the initial income year in which the investment in the insurance business was made and two succeeding income years, zero percent; (b) with respect to the third full income year in which the investment in the insurance business was made and the next three succeeding income years, ten percent: (c) in the seventh full income year succeeding the year in which the investment in the insurance business was made and the next two succeeding income years, twenty percent. The sum of all tax credits shall not exceed $15 million with respect to investment made by a fund or funds in any single insurance business, and with respect to all investments made by a fund shall not exceed the total amount originally invested in the fund. A fund manager may apply to the Commissioner of DECD for a credit that is greater than the limitations established by law.

The tax credit allowed may be claimed by a taxpayer who has invested in an insurance business through a fund (a) which has total assets of not less than $30 million for the income year for which the initial credit is taken; (b) has not less than three investors who are not related persons with respect to each other or to any insurance business in which any investment is made other than through the fund at the date the investment is made; and (c) which invests only in insurance businesses that are not related persons to each other.

The credit allowed may only be claimed with respect to an insurance business which (a) occupies the new facility for which an eligibility certificate has been issued by the Commissioner of DECD, or the certificate has been issued as its home office, and (b) employs not less than twenty-five percent of its total work force in new jobs.

The maximum allowed credit shall be $350 million in total and $40 million per year.

The Connecticut Neighborhood Assistance Act Credit Program (Conn. Gen. Stat. §§12-631 through 12-638)

The Neighborhood Assistance Act tax credit may be earned by businesses that make cash investments of at least $250 to certain community programs. The cash investments must be made in a community program that is proposed and conducted by a tax exempt or municipal agency and must be approved both by the municipality in which the program is conducted and the Department of Revenue Services.

This tax credit may be applied against the taxes imposed under:
Chapter 207 (Insurance Companies and Health Care Centers Taxes);
Chapter 208 (Corporation Business Tax);
Chapter 209 (Air Carriers Tax);
Chapter 210 (Railroad Companies Tax);
Chapter 211 (Community Antenna Television Systems and One-Way Satellite Transmission Business Tax); and
Chapter 212 (Utility Companies Tax).

A tax credit equal to one hundred percent of the cash invested is available to businesses that invest in energy conservation projects and comprehensive college access loan forgiveness programs. A tax credit equal to sixty percent of the cash invested is available to businesses that invest in programs that provide: community-based alcoholism prevention or treatment programs; neighborhood assistance; job training; education; community services; crime prevention; construction or rehabilitation of dwelling units for families of low and moderate income in the state; funding for open space acquisitions; investment in child day care facilities; child care services; and any other program which serves persons at least seventy five percent of whom are at an income level not exceeding one hundred fifty percent of the poverty level for the preceding year.

Under the Connecticut Neighborhood Assistance Act there are several statutory limits which must be observed, including the following: (1) the total tax credits under the Neighborhood Assistance Act tax credit program are limited to $150,000 annually for each business. The tax credit for investments in child day care facilities may not exceed $50,000 per income year for each business; (2) the minimum contribution on which a tax credit can be granted is $250; (3) any organization conducting a program or programs eligible to receive contributions under the Neighborhood Assistance Act tax credit program is limited to receiving a total of $150,000 of funding for any program or programs for any fiscal year; (4) the cap on the total amount of credits that may be allowed annually is $5 million. If the proposals submitted to the Department of Revenue Services claim credits in excess of the cap, such credits will be prorated among the approved organizations; (5) no business shall receive both the Neighborhood Assistance tax credit and the Housing Program Contribution tax credit for the same cash contribution; (6) no business can claim the tax credit for investments in child care facilities in an income year that the business claims the Human Capital Investment tax credit; (7) carryforward and carryback limitations, no carryforward is allowed any tax credit that is not taken in the income year in which the investment was made may be carried back to the two immediately preceding income years.

Research and Development Expenditures

This credit is based on the incremental increase in expenditures for research and experiments conducted in Connecticut. "Research and development expenses" refers to research or experimental expenditures deductible under Section 174 of the Internal Revenue Code of 1986, as of May 28, 1993, determined without regard to Section 280C(c) elections made by a taxpayer to amortize such expenses on its federal income tax return that were otherwise deductible, and basic research payments as defined under Section 41 of the Internal Revenue Code to the extent not deducted under said Section 174, provided: such expenditures and payments are paid or incurred for such research and experimentation and basic research conducted in the State of Connecticut; and such expenditures and payments are not funded, within the meaning of Section 41(d)(4)(H) of the Internal Revenue Code, by any grant, contract, or otherwise by a person or governmental entity other than the taxpayer unless such other person is included in a combined return with the person paying or incurring such expenses.

In accordance with Sec. 12-217n a tax credit may be applied against the Corporation Business Tax for research and development expenses conducted in Connecticut. A small business qualifies for the credit if it has gross income for the previous income year that does not exceed $100 million, and has not, in the determination of the Commissioner of Economic and Community Development, met the gross income test through transactions with a related person. The amount of the credit increases ratably from one percent of the annual research and development expenses paid or incurred, where these expenses equal $50 million or less, to six percent when expense exceed $200 million.

Qualified small business may exchange unused amounts of this credit with the state for a cash payment of sixty-five percent of the value of the credit or carry forward the full value until fully taken. Credits are limited to $1.5 million in any one income year.

Historic Structures Rehabilitation (Conn. Gen. Stat. §10-416a)
Beginning, July 1, 2014, no applications have been accepted for this program, no credits will be reserved under this program. Projects that previously would have been eligible for a credit under this program may be eligible for a credit under the Historic Rehabilitation Tax Credit program.

A tax credit administered by the Connecticut Department of Economic and Community Development is available to an owner rehabilitating a certified historic structure for residential use or to a taxpayer named by the owner as contributing to the rehabilitation. No credit may be claimed before the Department of Economic and Community Development issues a tax credit voucher.

The tax credit may be applied against the taxes imposed under:
Chapter 207 (Insurance Companies and Health Care Centers Taxes)
Chapter 208 (Corporation Business Tax)
Chapter 209 (Air Carriers Tax)
Chapter 210 (Railroad Companies Tax)
Chapter 211 (Community Antenna Television Systems and One-Way Satellite Transmission Business Tax); and
Chapter 212 (Utility Companies Tax).

This tax credit is equal to the lesser of the tax credit reserved upon certification of the rehabilitation plan or 25% of the actual qualified rehabilitation expenditures not exceeding $2.7 million. The amount of the tax credit that may be claimed will be entered on the tax credit voucher issued by the Department of Economic and Community Development.

The tax credit may be carried forward for five years following the year in which the rehabilitated structure was placed in service. No carryback is allowed.

Historic Preservation (Conn. Gen. Stat. §10-416b)
Beginning, July 1, 2014, no applications have been accepted for this program, no credits will be reserved under this program. Projects that previously would have been eligible for a credit under this program may be eligible for a credit under the Historic Rehabilitation Tax Credit program.

A tax credit administered by the Connecticut Department of Economic and Community Development is available to an owner rehabilitating a qualified historic structure for nonresidential use or mixed residential and nonresidential use or a taxpayer named by the owner as contributing to the rehabilitation. No credit may be claimed before the Department of Economic and Community Development issues a tax credit voucher.

This tax credit may be applied against the taxes imposed under:
Chapter 207 (Insurance Companies and Health Care Centers Taxes)
Chapter 208 (Corporation Business Tax)
Chapter 209 (Air Carriers Tax)
Chapter 210 (Railroad Companies Tax)
Chapter 211 (Community Antenna Television Systems and One-Way Satellite Transmission Business Tax); and
Chapter 212 (Utility Companies Tax)

This tax credit is equal to the lesser of twenty-five percent of the projected certified rehabilitation expenditures or twenty-five percent of the actual certified rehabilitation expenditures. If the project creates affordable housing units and the owner provides the Department of Economic and Community Development and the Department of Housing information to show that the owner is compliant with the affordable housing certificate, then the tax credit is equal to the lesser of thirty percent of the projected certified rehabilitation expenditures of thirty percent of the actual qualified rehabilitation expenditures.

The maximum tax credit allowed for any project shall not exceed $5 million for any fiscal three-year period.

Historic Rehabilitation (Conn. Gen. Stat. §10-416c)
A tax credit administered by the Connecticut Department of Economic and Community Development is available for the qualified rehabilitation expenditures associated with the certified rehabilitation of a certified historic structure. No credit may be claimed until the Department of Economic and Community Development issues a tax credit voucher.

This tax credit can be used to offset the taxes imposed under Chapters 207, 208, 209, 210, 211, or 212 of the Connecticut General Statutes.

The tax credit is equal to twenty-five percent of the total qualified rehabilitation expenditures. The tax credit increases to thirty percent of the total qualified rehabilitation expenditures if the project includes a component with at least twenty percent of the rental units or ten percent of for-sale units qualify as affordable housing under Conn. Gen. Stat. §8-39a. The tax credit allowed for any project shall not exceed $4.5 million.

The tax credit may be carried forward for five succeeding income years following the year in which the substantially rehabilitated structure was placed in service. No carryback is allowed.

Enterprise Zone Property Tax Reimbursement Program

The enterprise zone program offers various tax incentives and other benefits to businesses that start up or improve real property in areas designated as enterprise zones. This designation is one of several geographic designations the state uses to target economic development assistance (e.g., distressed municipalities).

In 1981, Connecticut became the first state to establish an enterprise zone program when the legislature authorized the DECD commissioner to designate six zones based on statutory criteria (PA 81-445). Over the past several decades, the legislature has made many changes to the program, including expanding the number of zones, changing the eligibility criteria for zone designation, and adding to the types of businesses eligible for benefits under the program.

In most instances, the legislature authorized the DECD commissioner to approve a specified number of zones according to broad eligibility criteria. For example, the initial two designation rounds authorized a total of 10 zones—four in municipalities with a population of 80,000 or more and six in municipalities with a population of fewer than 80,000. The proposed zones also had to meet specific poverty criteria (e.g., 25 percent of the proposed zone's population had to be below the federal poverty level or unemployed).

However, the legislature has shifted from this practice, authorizing additional zones based on narrower designation criteria. For example, in 1993 it authorized two additional enterprise zones in municipalities with a population of 80,000 or less that are affected by plant or military base closings (PA 93-331). In 2014, it required the commissioner to approve two additional zones based on population criteria tailored for two specific towns (Thomaston and Wallingford) (PA 14-217). It has also authorized the DECD commissioner to designate zones, under narrow criteria, in addition to those authorized in statute.

There are eighteen enterprise zones currently designated, and one (Wallingford) which has been authorized by the legislature but not yet designated by DECD. The designated enterprise zones are in the following towns: Bridgeport, Bristol, East Hartford, Groton, Hamden, Hartford, Meriden, Middletown, New Britain, New Haven, New London, Norwalk, Norwich, Southington, Stamford, Thomaston, Waterbury, and Windham.

The zones' benefits are generally available to businesses that start up in the zone or that improve property or relocate there. The benefits include: (1) a five-year, state-reimbursed, 80 percent property tax exemption for improving or acquiring manufacturing facilities (see below) and acquiring machinery and equipment. The state generally reimburses the municipality for half the forgone property tax revenue (CGS 12-81 (59); (2) a 10-year, 25 percent corporate business tax credit attributed to facility improvements. The credit increases to 50 percent for certain businesses that meet resident employment criteria (CGS 12-217e); (3) a seven-year property tax exemption (100 percent in first two years, 50 percent in third, and a decrease to 10 percent in each of the remaining four years), with no state reimbursement, for commercial and residential real property improvements that do not qualify for the 5-year, 80 percent exemption (other than improvements to manufacturing facilities, as defined below) (CGS 32-71); (4) a 10-year corporate business tax credit (100 percent for first three years, 50 percent for next seven years) for starting a new business in an enterprise zone (business must employ a certain number of residents to qualify) (CGS 12-217v).

Many enterprise zone benefits are available only to manufacturing facilities, but the statutory definition of this term includes certain facilities used for non-manufacturing purposes (CGS 32-9p(d)). For the purpose of the enterprise zone program, manufacturing facilities refers to any plant, building, or other real property improvement that is located in an enterprise zone and used as follows: (1) for manufacturing, processing, or assembling raw materials, parts, or manufactured products; (2) for manufacturing-related research and development; (3) for servicing industrial machinery and equipment; (4) by a business that the commissioner determines (a) will materially contribute to the economy, or (b) is part of a group of industries linked by customer, supplier, or other relationships (CGS 32-222); or (5) by a business engaged in any of a number of specified industries, including fishing, hunting, and trapping; other types of manufacturing ; transportation and warehousing; certain financial and insurance services; certain educational services; child day care services; computer hardware, software, or networking; and telecommunications or communications.

The law designates municipalities that contain enterprise zones as "targeted investment communities" (TICs), and businesses located in these municipalities, but outside the enterprise zone, are eligible for certain benefits, including: (1) a five-year, state-reimbursed property tax exemption for improving manufacturing facilities. The exemption varies depending on the value of improvements, up to a maximum of 80 percent for improvements valued over $90 million (CGS 12-81(60); (2) a 10-year corporate business tax credit attributed to improving manufacturing facilities in TICs. The credit varies from 15 percent to 50 percent depending on the number of new employees (CGS 12-217e).

Information relevant to the disclosure of these programs is as follows:

Tax Abatement Program	Amount of Taxes Abated
The Film, Television, and Digital Media Tax Program	
Corporate Income Tax (as of 6/30/2019)	$ 88,720,509
The Urban and Industrial Sites Reinvestment Tax Program	
Corporate Income Tax (as of 6/30/19)	32,359,751
The Insurance Reinvestment Fund Program	
Corporate Income Tax (as of 6/30/2019)	23,342,944
The Connecticut Neighborhood Assistance Act Credit Program	
Corporate Income Tax (as of 6/30/2019)	3,775,893
Historic Structures Rehabilitation	
Corporate Income Tax (as of 6/30/2019)	5,866,653
Historic Preservation	
Corporate Income Tax (as of 6/30/2019)	1,024,308
Historic Rehabilitation	
Corporate Income Tax (as of 6/30/2019)	-
Research and Development Expenditures	
Corporate Income Tax (as of 6/30/2019)	6,330,719
Manufacturing Facility Credit	
Corporate Income Tax (as of 6/30/2019)	869,420
Enterprise Zone Property Tax Reimbursement Program	
Property Tax (6/30/2019)	-

In addition, the State has other various tax credit incentives that are not defined as tax abatements under generally accepted accounting principles and therefore are not described and included here.

Note 24
Asset Retirement Obligations

Asset retirement obligations generally apply to legal obligations associated with the retirement of a tangible long-lived asset that result from the acquisition, construction, or development and the normal operation of a long-lived asset. The State assesses asset retirement obligations on an annual basis. If a reasonable estimate of fair value can be made, the fair value of a liability for an asset retirement obligation is recognized in the period in which it is incurred or a change in estimate occurs.

During the year, the Department of Veterans Affairs reported that when their power plant is retired there will be a cost associated with the mitigation of hazardous materials. The State cannot estimate the cost associated with the removal of the hazardous materials, therefore, has not recorded an asset retirement obligation for this matter.

Note 25
Related Organizations

The Community Economic Development Fund and Connecticut Health Insurance Exchange are legally separate organizations that are related to the State because the State appoints a voting majority of the organizations governing board. However, the State's accountability for these organizations does not extend beyond making the appointments.

Note 26
New Accounting Pronouncements

In 2019, The State implemented the following statements issued by the Governmental Accounting Standards Board ("GASB"). During the fiscal year 2019, the State adopted the following new accounting standard issued by the Governmental Accounting Standards Board (GASB).

GASB Statement 83, *Certain Asset Retirement Obligations*

GASB Statement 83 – This Statement establishes standards of accounting and financial reporting requirements, for legally enforceable liabilities associated with the retirement of certain tangible capital assets. State and local governments that have legal obligations to perform future asset retirement activities related to tangible capital assets should recognize a liability based on the regulation of the statement. Statement No. 83, had no material impact on the State's financial statements.

GASB Statement 88, *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements*

GASB Statement 88 - This Statement improves the information that is disclosed in notes to government financial statements related to debt, including direct borrowings and direct placements. It also clarifies which liabilities governments should include when disclosing information related to debt. This Statement defines debt for purposes of disclosure in notes to financial statements as a liability that arises from a contractual obligation to pay cash (or other assets that may be used in lieu of cash) in one or more payments to settle an amount that is fixed at the date the contractual obligation is established. Additional information associated with this statement is included Note 17-Long-Term Debt.

Note 27
Commitments and Contingencies

a. Commitments

Primary Government

Commitments are defined as "existing arrangements to enter into future transactions or events, such as long-term contractual obligations with suppliers for future purchases at specified prices and sometimes at specified quantities."

As of June 30, 2019, the State had contractual commitments as follows (amounts in millions):

Infrastructure & Other Transportation Programs	$1,227
Construction Programs	120
School Construction and Alteration Grant Program	2,200
Clean and Drinking Water Loan Programs	768
Various Programs and Services	4,005

All commitments are expected to be funded by federal grants, bond proceeds, and other resources.

Component Units

As of December 31, 2018, the Connecticut Housing Finance Authority had mortgage loan commitments of approximately $209.8 million.

b. Contingent Liabilities

The State entered into a contractual agreement with H.N.S. Management Company, Inc. and ATE Management and Service Company, Inc. to manage and operate the bus transportation system for the State. The State shall pay all expenses of the system including all past, present and future pension plan liabilities of the personnel employed by the system and any other fees as agreed upon. When the agreement is terminated the State shall assume or plan for the assumption of all the existing obligations of the management companies including but not limited to all past, present and future pension plan liabilities and obligations.

As of June 30, 2019, the State reported an escheat liability of 375.8 million in the General fund. This liability represents an estimate of the amount of escheat property likely to be refunded to claimants in the future. However, there is a reasonable possibility that the State could be liable for an additional amount of escheat refunds of $282.5 million in the future.

Grant amounts received or receivable by the State from federal agencies are subject to audit and adjustment by these agencies. Any disallowed claims, including amounts already collected, may constitute a liability of the applicable funds. The amount, if any, of expenditures that may be disallowed by the federal government cannot be determined at this time, although the State expects such amounts, if any, to be immaterial.

c. Litigation

The State, its units and employees are parties to numerous legal proceedings, many of which normally occur in government operations. Most of these legal proceedings are not, in the opinion of the Attorney General, likely to have a material adverse impact on the State's financial position.

There are, however, several legal proceedings which, if decided adversely against the State, may require the State to make material future expenditures for expanded services or capital facilities or may impair future revenue sources. It is neither possible to determine the outcome of these proceedings nor to estimate the possible effects adverse decisions may have on the future expenditures nor revenue sources of the State.

Note 28
Subsequent Events

In preparing these financial statements, the State has evaluated events and transactions for potential recognition or disclosure in its financial statement footnotes. The effect of this evaluation led the State to report the following events which took place after the date of the State's fiscal year end through to the date these financial statements were issued. The subsequent information regarding the Connecticut Housing Finance Authority includes events which took place after their fiscal year end of December 31, 2018.

In July 2019, the State issued $250.0 million of Green general revenue bonds. The bonds were issued to fund Clean water and drinking water projects in the State. The bonds mature in 2039 and bear interest rates ranging from 2.375 to 5.0 percent. Also, in July 2019, the State issued $29.8 million of 2019 series B General revenue refunding bonds maturing in 2022 and bearing interest rates between 4.0 and 5.0 percent.

In August 2019, the State issued $239.9 million of 2019 series B General Obligation refunding bonds maturing in 2029 and bearing interest rates of 5.0 percent. The par value together with the premiums received were used to redeem $270 million of general obligation bonds series 2009A & B.

In December 2019, the State issued $894.6 million of 2020 series A & B General Obligation bonds. Series A for $700. 0 million matures in 2040. Series B for $194.6 million General Obligation refunding bonds mature in 2026. Both series A & B bear interest rates ranging from three to five percent.

In July 2019 the Connecticut Health and Educational Facilities Authority published a remarketing memorandum pertaining to Yale university revenue bonds series 2013a and 2016a-1. The memorandum is generally intended to provide disclosure to purchasers of the remarketing bonds only with respect to the applicable term rate periods. The bonds carry an interest rate of 1.45 percent and a term rate period of July 2019 through June 2022.

In August 2019 the Connecticut Health and Educational Facilities Authority issued $340.1 million of series 2019A Nuvance Health revenue bonds carrying interest rates ranging from 1.1 to 5.0 percent which mature on July 1, 2039. The proceeds will be loaned by the authority to Nuvance/Health Quest systems, Inc. These bonds were issued in a joint offering with the Dutchess County Local Development Corporation which issued $99.9 series 2019B Nuvance Health revenue bonds. The proceeds were loaned by the corporation to Nuvance/Western Ct health network, Inc.

In addition to the above the Connecticut Health and Educational Facilities Authority issued $133.7 million of Series N University of Hartford bonds and $63.6 million of series G Griffin hospital bonds in December. The authority also issued $45.7 million of Series A Mary Wade Home bonds in September. The Authority also issued $183.6 million Series 2020A and $110.2 million Series 2020B Hartford Health Care revenue bonds in January 2020. Also, CHEFA issued $93.6 million of Series T-2 and $250 million Series 2014A remarketed bonds in February 2020. More information concerning these transactions can be obtained from CHEFA offices located at 10 Columbus Blvd., 7th. Floor Hartford, CT 06106-1978

The Connecticut Housing Finance Authority (CHFA), whose financial statements are published as of December 31st of the calendar year prior to Connecticut's fiscal year-end, demonstrated numerous financial events between January 1 and the State's fiscal year-end of June 30, 2019 including the following;

$377.9 million of various unscheduled principal payments on outstanding debt were made including $169.4 million for purposes of remarketing debt obligations having demand features.

In March 2019 the Authority issued $122.8 million of its 2019 Series A revenue bonds. On the same date, CHFA entered into a Stand-by Bond Purchase Agreement with U.S. Bank National Association. and a Remarketing Agreement with U.S. Bancorp Investments, Inc. and U.S. Bank Municipal Products Group to secure liquidity for $35.0 million of Series A bonds having demand features.

In May 2019 the Authority issued $122.0 million of its series 2019 B revenue bonds. On the same date, CHFA entered into a Stand-by Bond Purchase Agreement and a Remarketing Agreement with Bank of America, N.A., to secure liquidity for $35.0 million of Series B bonds having demand features. Also, in May 2019 the authority privately placed $100 million of 2019 series C debt with a securities firm.

In June 2019 the authority remarketed $108.7 million of its Housing Mortgage Finance Program bonds consisting of series 2012 &2014 D-3, 2013 B-6 and 2014 C-2. Each subseries of reoffered bonds currently bears interest, and upon their remarketing on the remarketing date will continue to bear interest, in a weekly mode period. The due date for the term bonds ranges between 2033 and 2034. Also, in June 2019 the Authority contracted for a Stand By line of credit (LOC) with Sumitomo Mitsui Banking Corporation. The available LOC balance is $116.6 million.

In August the Authority issued $120.9 million of its 2019 Series D Housing Mortgage Finance program bonds. On the same date, CHFA entered into a Stand-by Bond Purchase Agreement with U.S. Bank National Association. and a Remarketing Agreement with Raymond James and Associates, Inc. and U.S. Bank National Association to secure liquidity for $35.0 million of Series A bonds having demand features.

In September 2019 the Authority issued conduit debt on behalf of CIL realty, Inc. in the amount of $25.1 million. The bonds were sold in a direct purchase transaction to Key Government Finance, Inc. The proceeds of which were used to refund $21.4 million in existing conduit debt plus Interest.

In October the Authority issued $128.1 million of its 2019 Series E Housing Mortgage Finance program bonds consisting of Series E, subseries E-1, E-2 and E-3. Subseries E-3 having a par value of $29.4 million do not have a credit facility to pay the purchase price on the tender date. As a result, all bondholders may be required to hold their subseries E-3 bonds until maturity or prior redemption. Also, in October 2019, the Authority issued $158.3 million of its 2019 Series F revenue bonds. On the same date, CHFA entered into a Stand-by Bond Purchase Agreement with State Street bank and Trust company to secure liquidity for $35.0 million of Series A bonds having demand features.

In February 2020 the Authority issued $145.4 million of its 2020 Series A Housing Mortgage Finance program bonds consisting of subseries A-1, A-2, A-3 and A-4. CHFA expects to enter into a three-year Stand-by Bond Purchase Agreement with Barclays Bank PLC for its subseries A-3 variable rate bonds to secure liquidity for $31.3 million of Sub-series A-3 bonds having demand features. After February 2023 bondholders may not have the right to tender their 2020 subseries A-3 unless the agreement is extended. More information concerning these transactions can be obtained from CHFA offices located at 999 West Street Rocky Hill, CT 06067-4005.

THIS PAGE INTENTIONALLY LEFT BLANK

REQUIRED SUPPLEMENTARY INFORMATION

THIS PAGE INTENTIONALLY LEFT BLANK

REQUIRED SUPPLEMENTARY INFORMATION
BUDGET

Required supplementary information for budget provides information on budget versus actual revenues, expenditures and changes in fund balance and related note disclosure for statutory reporting.

The following schedules are included in the Required Supplementary Information for Budget:

Schedule of Revenues, Expenditures and Changes in Fund Balance: Budget and Actual (Budgetary Basis—Non-GAAP):

General Fund and Transportation Fund

Notes to Required Supplementary Information: Statutory Reporting

REQUIRED SUPPLEMENTAL INFORMATION
SCHEDULE OF REVENUES, EXPENDITURES, & CHANGES IN FUND BALANCE
BUDGET AND ACTUAL (BUDGETARY BASIS — NON-GAAP)
GENERAL AND TRANSPORTATION FUNDS

For the Fiscal Year Ended June 30, 2019

(Expressed in Thousands)

	General Fund			
	Budget			Variance with Final Budget positive
Revenues	Original	Final	Actual	(negative)
Budgeted:				
Taxes, Net of Refunds	$ 15,862,300	$ 17,069,500	$ 17,199,401	$ 129,901
Casino Gaming Payments	203,600	255,200	255,239	39
Licenses, Permits, and Fees	322,600	297,100	291,171	(5,929)
Other	388,500	457,100	456,629	(471)
Federal Grants	2,112,400	2,083,800	2,083,774	(26)
Refunds of Payments	(58,800)	(59,100)	(59,139)	(39)
Operating Transfers In	462,900	474,300	474,282	(18)
Operating Transfers Out	-	-	-	-
Transfer to BRF - Volatility Adjustment	(363,100)	(940,500)	(949,681)	(9,181)
Transfer to/from the Resources of the General Fund	78,300	(101,700)	(101,814)	(114)
Total Revenues	19,008,700	19,535,700	19,649,862	114,162
Expenditures				
Budgeted:				
Legislative	66,734	66,484	64,595	1,889
General Government	708,190	678,366	653,271	25,095
Regulation and Protection	289,772	291,053	272,421	18,632
Conservation and Development	174,249	175,636	170,167	5,469
Health and Hospitals	1,190,737	1,211,586	1,194,174	17,412
Transportation	-	-	-	-
Human Services	4,353,584	4,342,825	4,311,722	31,103
Education, Libraries, and Museums	5,220,536	5,254,787	5,208,400	46,387
Corrections	1,344,537	1,423,540	1,410,967	12,573
Judicial	565,122	566,660	557,067	9,593
Non Functional	5,240,524	5,588,969	5,405,867	183,102
Total Expenditures	19,153,985	19,599,906	19,248,651	351,255
Appropriations Lapsed	21,500	126,285	-	(126,285)
Excess (Deficiency) of Revenues Over Expenditures	(123,785)	62,079	401,211	(363,378)
Other Financing Sources (Uses)				
Prior Year Appropriations Carried Forward	134,315	134,315	134,315	-
Appropriations Continued to Fiscal Year 2019	-	-	(164,550)	(164,550)
Miscellaneous Adjustments	-	(379)	(379)	-
Total Other Financing Sources (Uses)	134,315	133,936	(30,614)	(164,550)
Net Change in Fund Balance	$ 10,530	$ 196,015	370,597	$ (527,928)
Budgetary Fund Balances - July 1			(228,241)	
Changes in Reserves			673,096	
Budgetary Fund Balances - June 30			$ 815,452	

The information about budgetary reporting is an integral part of this schedule.

Transportation Fund

Budget: Original	Budget: Final	Actual	Variance with Final Budget positive (negative)
$ 1,212,700	$ 1,244,500	$ 1,248,446	$ 3,946
-	-	-	-
393,400	401,999	400,505	(1,494)
12,400	36,200	37,375	1,175
12,100	12,300	12,259	(41)
(4,600)	(4,900)	(4,941)	(41)
-	-	-	-
(5,500)	(5,500)	(5,500)	-
-	-	-	-
-	-	-	-
1,620,500	1,684,599	1,688,144	3,545
-	-	-	-
8,509	10,309	9,608	701
71,296	72,341	63,704	8,637
2,762	2,821	2,796	25
-	-	-	-
705,873	708,929	693,012	15,917
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
869,485	863,526	839,973	23,553
1,657,925	1,657,926	1,609,093	48,833
12,000	12,176	-	(12,176)
	-		
(25,425)	38,849	79,051	40,202
28,643	28,643	28,643	-
-	-	(33,300)	(33,300)
-	2	2	-
28,643	28,645	(4,655)	(33,300)
$ 3,218	$ 67,494	74,396	$ 6,902
		274,364	
		4,657	
		$ 353,417	

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

STATUTORY REPORTING

A. Budgeting Process

By statute, the Governor must submit the State budget to the General Assembly in February of every other year. Prior to June 30, the General Assembly enacts the budget through the passage of appropriation acts for the next two fiscal years and sets forth revenue estimates for the same period for the following funds: the General Fund, the Transportation Fund, the Mashantucket Pequot Fund, the Workers' Compensation Administration Fund, the Banking Fund, the Consumer Counsel and Public Utility Control Fund, the Insurance Fund, the Criminal Injuries Fund, the Soldiers, Sailors, and Marines Fund, and the Regional Market Operations Fund, and the Tourism Fund. Under the State Constitution, the Governor has the power to veto any part of the itemized appropriations bill and to accept the remainder of the bill. However, the General Assembly may separately reconsider and repass the disapproved items by a two-thirds majority vote of both the Senate and the House.

Budgetary control is maintained at the individual appropriation account level by agency as established in authorized appropriation bills and is reported in the Annual Report of the State Comptroller. A separate document is necessary because the level of legal control is more detailed than reflected in the CAFR. Before an agency can utilize funds appropriated for a particular purpose, such funds must be allotted for the specific purpose by the Governor and encumbered by the Comptroller upon request by the agency. Such funds can then be expended by the Treasurer only upon a warrant, draft or order of the Comptroller drawn at the request of the responsible agency. The allotment process maintains expenditure control over special revenue, enterprise, and internal service funds that are not budgeted as part of the annual appropriation act.

The Governor has the power under Connecticut statute to modify budgetary allotment requests for the administration, operation and maintenance of a budgeted agency. However, the modification cannot exceed 3 percent of the fund or 5 percent of the appropriation amount. Modifications beyond those limits, but not in excess of 5 percent of the total funds require the approval of the Finance Advisory Committee. The Finance Advisory Committee is comprised of the Governor, the Lieutenant Governor, the Treasurer, the Comptroller, two senate members, not of the same political party, and three house members, not more than two of the same political party. Additional reductions of appropriations of more than 5 percent of the total appropriated fund can be made only with the approval of the General Assembly.

All funds, except fiduciary funds, use encumbrance accounting. Under this method of accounting, purchase orders, contracts, and other commitments for the expenditures of the fund are recorded in order to reserve that portion of the applicable appropriation. All encumbrances lapse at year-end and, generally, all appropriations lapse at year-end except for certain continuing appropriations (continuing appropriations are defined as carryforwards of spending authority from one fiscal budget into a subsequent budget). The continuing appropriations include: appropriations continued for a one-month period after year-end which are part of a program that was not renewed the succeeding year; appropriations continued the entire succeeding year, as in the case of highway and other capital construction projects; and appropriations continued for specified amounts for certain special programs. Carryforward appropriations are reported as reservations of the fund balance in the financial statements.

The budget is prepared on a "statutory" basis of accounting that utilizes the accounting standards that were applied in the budget act and related legislation. Commencing in Fiscal Year 2014, appropriations were made to legislatively budgeted funds to account for expense accruals. Beginning in Fiscal Year 2016, based on changes enacted in the biennial budget (Public Act 15-244) the GAAP expense accrual appropriations were consolidated into a single appropriation at the fund-level for the General Fund, Transportation Fund and all other budgeted special revenue funds The actual expense accruals were posted using the same methodology described above for the governmental fund financial statements. Revenues were recognized when received except in the General Fund and Transportation Fund. In those two funds certain taxes and Indian gaming payments are recognized within a statutory accrual period as approved by the State Comptroller. The state's three major tax categories (the personal income tax, the sales and use tax, and the corporation tax), among other taxes, are subject to statutory accrual. A comparison of actual results of operations recorded on this basis and the adopted budget is presented in the Required Supplemental Information section of this report. During the 2019 fiscal year, the original adopted budget was adjusted by the General Assembly and the Finance Advisory Committee.

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

B. Reconciliation of Budget/GAAP Reporting Differences

The *Schedule of Revenues, Expenditures and Changes in Fund Balance – Budget and Actual (Budgetary Basis – Non-GAAP) – General Fund and Transportation Fund*, presents comparisons of the legally adopted budget (which is more fully described in section A, above) with actual data on a budgetary basis. Accounting principles applied to develop data on a budgetary basis differ significantly from those principles used to present financial statements in conformity with generally accepted accounting principles (GAAP). The following describes the major differences between statutory financial data and GAAP financial data.

- Revenues are recorded when received in cash except for certain year-end accruals statutory basis) as opposed to revenues being recorded when they are susceptible to accrual (GAAP basis).

- Certain expenditures are not subject to accrual for budgeting purposes and are recorded when paid in cash (statutory basis) as opposed to expenditures being recorded when the related fund liability is incurred (GAAP basis).

- For statutory reporting purposes, continuing appropriations are reported with other financing sources and uses in the determination of the budgetary surplus or deficit to more fully demonstrate compliance with authorized spending for the year. For GAAP purposes, continuing appropriations are excluded from operations and reported as committed fund balance.

The following table presents a reconciliation of differences between the statutory change in fund balance and the GAAP change in fund balance at June 30, 2019. Amounts are expressed in thousands.

	General Fund	Transportation Fund
Net change in fund balances (statutory basis)	$ 370,597	$ 74,395
Volatility Deposit Budget Reserve Fund	949,681	-
Transfer Out from BRF to Teachers Retirement Fund	(16,100)	
Statutory Surplus Reserve FY 2020-2021	160,000	-
Adjustments:		
Increases (decreases) in revenue accruals:		
Receivables and Other Assets	(348,485)	19,667
(Increases) decreases in expenditure accruals:		
Accounts Payable and Other Liabilities	(151,707)	(18,516)
Salaries and Fringe Benefits Payable	(26,593)	(3,372)
Increase (Decrease) in Continuing Appropriations	30,235	4,657
Fund Reclassification-Bus Operations	-	(1,017)
Net change in fund balances (GAAP basis)	$ 967,628	$ 75,814

C. Budget Reserve Fund ("Rainy Day Fund")

In accordance with Section 4-30a of the Connecticut State Statutes, the State maintains a Budget Reserve ("Rainy Day") Fund. Per section 4-30a after the accounts for the General Fund have been closed for each fiscal year and the Comptroller has determined the amount of unappropriated surplus, and after any required transfers have been made, the surplus shall be transferred by the State Treasurer to the Budget Reserve Fund. Moneys shall be expended only when in any fiscal year the Comptroller has determined the amount of a deficit applicable with respect to the immediately preceding fiscal year, to the extent necessary.

Historically, resources from the Rainy Day Fund have only been expended during recessionary periods to cover overall budget shortfalls after other budgetary measures have been exhausted. During fiscal year 2020 a deposit of $370.6 million will be made to the Budget Reserve Fund from the budgetary surplus in fiscal year 2019.

In fiscal year 2019, as in the prior fiscal year, significant progress was made toward building the balance of the Budget Reserve Fund. This was primarily due to the revenue volatility cap, first implemented in fiscal year 2018. This statutory provision requires revenues above a certain threshold to be transferred to the Budget Reserve Fund. For fiscal year 2019, the cap was $3,196.8 million for estimated and final income tax payments and revenue from the Pass-through Entity tax. At year-end, a volatility transfer of $949.7 million was made to the Budget Reserve Fund.

Prior to the close of fiscal year 2019, the balance in the Budget Reserve Fund was $1,185.3 billion, which represented approximately 6.2 percent of net General Fund appropriations. Adding the $949.7 million volatility transfer and the surplus transfer of $370.67 million would bring the year-end balance of the Budget Reserve Fund to just over $2.5 billion or approximately 13 percent of net General Fund appropriations for fiscal year 2020. Therefore, the Budget Reserve Fund balance more than doubled based on fiscal year 2019 results. This represents a major step forward, but there is still more work to do. In order to help protect against future economic downturns, Connecticut must maintain financial discipline and continue building the Budget Reserve Fund balance to the statutory target of 15 percent.

THIS PAGE INTENTIONALLY LEFT BLANK

REQUIRED SUPPLEMENTARY INFORMATION
PENSION PLANS

Required supplementary information for pension plans provides information on the sources of changes in net pension liabilities, information about the components of net pension liabilities, employer contributions, and investment returns.

The Required Supplementary Information for Pension Plans includes the following schedules:

Schedule of Changes in the Net Pension Liability and Plan Net Position
Schedule of Employer Contributions
Schedule of Investment Returns

REQUIRED SUPPLEMENTAL INFORMATION
PENSION PLANS
SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND PLAN NET POSITION

Last Five Fiscal Years*

(Expressed in Thousands)

SERS	2018	2017	2016	2015	2014
Total Pension Liability					
Service Cost	$ 429,321	$ 480,350	$ 322,114	$ 310,472	$ 287,473
Interest	2,212,890	2,255,533	2,105,947	2,052,651	1,998,736
Benefit Changes	-	(1,444,220)	-	-	-
Difference between expected and actual experience	482,904	-	772,762	-	-
Changes of assumptions	-	-	4,959,705	-	-
Benefit payments	(1,955,985)	(1,847,715)	(1,729,181)	(1,650,465)	(1,563,029)
Refunds of contributions	(7,659)	(7,972)	(7,098)	(7,124)	(3,935)
Net change in total pension liability	1,161,471	(564,024)	6,424,249	705,534	719,245
Total pension liability - beginning	33,052,692	33,616,716	27,192,467	26,486,933	25,767,688
Total pension liability - ending (a)	**$ 34,214,163**	**$ 33,052,692**	**$ 33,616,716**	**$ 27,192,467**	**$ 26,486,933**
Plan net position					
Contributions - employer	$ 1,443,053	$ 1,542,298	$ 1,501,805	$ 1,371,651	$ 1,268,890
Contributions - member	193,942	132,557	135,029	187,339	144,807
Net investment income	875,944	1,509,862	(100)	294,412	1,443,391
Benefit payments	(1,955,985)	(1,847,715)	(1,729,181)	(1,650,465)	(1,563,029)
Administrative expense	(391)	(674)	(651)	-	-
Refunds of contributions	(7,659)	(7,972)	(7,098)	(7,124)	(3,935)
Other	(3,139)	(371)	85,608	-	-
Net change in plan net position	545,765	1,327,985	(14,588)	195,813	1,290,124
Plan net position - beginning	11,981,777	10,653,792	10,668,380	10,472,567	9,182,443
Plan net position - ending (b)	**$ 12,527,542**	**$ 11,981,777**	**$ 10,653,792**	**$ 10,668,380**	**$ 10,472,567**
Ratio of plan net position to total pension liability	36.62%	36.25%	31.69%	39.23%	39.54%
Net pension liability - ending (a) -(b)	**$ 21,686,621**	**$ 21,070,915**	**$ 22,962,924**	**$ 16,524,087**	**$ 16,014,366**
Covered-employee payroll	$ 3,428,068	$ 3,850,978	$ 3,720,751	$ 3,618,361	$ 3,487,577
Net pension liability as a percentage of covered-employee payroll	632.62%	547.16%	617.16%	456.67%	459.18%

TRS	2018	2017	2016	2015	2014
Total Pension Liability					
Service Cost	$ 465,207	$ 450,563	$ 419,616	$ 404,449	$ 347,198
Interest	2,371,168	2,308,693	2,228,958	2,162,174	2,090,483
Benefit Changes	28,036	-	-	-	-
Difference between expected and actual experience	(396,067)	-	(375,805)	-	-
Changes of assumptions	-	-	2,213,190	-	-
Benefit payments	(1,994,092)	(1,962,533)	(1,738,131)	(1,773,408)	(1,737,144)
Refunds of contributions	-	-	-	(50,329)	-
Net change in total pension liability	474,252	796,723	2,747,828	742,886	700,537
Total pension liability - beginning	30,636,646	29,839,923	27,092,095	26,349,209	25,648,672
Total pension liability - ending (a)	**$ 31,110,898**	**$ 30,636,646**	**$ 29,839,923**	**$ 27,092,095**	**$ 26,349,209**
Plan net position					
Contributions - employer	$ 1,272,277	$ 1,012,162	$ 975,578	$ 984,110	$ 948,540
Contributions - member	312,150	288,251	293,493	228,100	261,213
Net investment income	1,224,931	2,199,895	(18,473)	452,942	2,277,550
Benefit payments	(1,994,092)	(1,962,533)	(1,738,131)	(1,773,408)	(1,737,144)
Refunds of contributions	-	-	-	(50,329)	-
Other	(2,753)	1,679	(37,648)	57,749	(5,307)
Net change in plan net position	812,513	1,539,454	(525,181)	(100,836)	1,744,852
Plan net position - beginning	17,134,326	15,594,872	16,120,053	16,220,889	14,462,903
Plan net position - ending (b)	**$ 17,946,839**	**$ 17,134,326**	**$ 15,594,872**	**$ 16,120,053**	**$ 16,207,755**
Ratio of plan net position to total pension liability	57.69%	55.93%	52.26%	59.50%	61.51%
Net pension liability - ending (a) -(b)	**$ 13,164,059**	**$ 13,502,320**	**$ 14,245,051**	**$ 10,972,042**	**$ 10,141,454**
Covered-employee payroll	$ 4,321,593	$ 4,279,755	$ 4,125,066	$ 4,078,367	$ 3,831,624
Net pension liability as a percentage of covered-employee payroll	304.61%	315.49%	345.33%	269.03%	264.68%

REQUIRED SUPPLEMENTAL INFORMATION
PENSION PLANS
SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND PLAN NET POSITION

Last Five Fiscal Years*

(Expressed in Thousands)

JRS	2018	2017	2016	2015	2014
Total Pension Liability					
Service Cost	$ 11,352	$ 10,159	$ 8,508	$ 8,142	$ 7,539
Interest	29,954	29,062	28,251	27,240	26,301
Difference between expected and actual experience	(18,528)	-	(9,380)	-	-
Changes of assumptions	-	-	64,604	-	-
Benefit payments	(27,616)	(24,899)	(22,994)	(22,541)	(21,668)
Net change in total pension liability	(4,838)	14,322	68,989	12,841	12,172
Total pension liability - beginning	447,925	433,603	364,614	351,773	339,601
Total pension liability - ending (a)	**$ 443,087**	**$ 447,925**	**$ 433,603**	**$ 364,614**	**$ 351,773**
Plan net position					
Contributions - employer	$ 25,458	$ 19,164	$ 18,259	$ 17,731	$ 16,298
Contributions - member	1,663	1,689	1,831	1,791	1,641
Net investment income	13,178	24,452	1,440	4,781	23,156
Benefit payments	(27,616)	(24,899)	(22,994)	(22,541)	(21,668)
Other	-	(39)	1,680	-	-
Net change in plan net position	12,683	20,367	216	1,762	19,427
Plan net position - beginning	210,125	189,758	189,542	187,780	168,353
Plan net position - ending (b)	**$ 222,808**	**$ 210,125**	**$ 189,758**	**$ 189,542**	**$ 187,780**
Ratio of plan net position to total pension liability	50.29%	46.91%	43.76%	51.98%	53.38%
Net pension liability - ending (a) -(b)	**$ 220,279**	**$ 237,800**	**$ 243,845**	**$ 175,072**	**$ 163,993**
Covered-employee payroll	$ 34,970	$ 36,467	$ 34,897	$ 34,972	$ 33,386
Net pension liability as a percentage of covered-employee payroll	629.91%	652.10%	698.76%	500.61%	491.20%

* Governmental Accounting Standards Board Statement No. 68, Accounting and Financial Reporting for Pensions, requires the presentation of supplementary information for each of the 10 most recent years. However, until a full 10-year trend is complied, the State will present information for the years for which the information is available. Information presented in the schedule has been determined as of the measurement date (one year before the most recent fiscal year end).

REQUIRED SUPPLEMENTARY INFORMATION
PENSION PLANS
SCHEDULE OF EMPLOYER CONTRIBUTIONS

Last Ten Fiscal Years

(Expressed in Thousands)

SERS	2018	2017	2016	2015
Actuarially determined employer contribution	$ 1,443,110	$ 1,569,142	$ 1,514,467	$ 1,379,189
Actual employer contributions	1,443,053	1,542,298	1,501,805	1,371,651
Annual contributions deficiency excess	$ 57	$ 26,844	$ 12,662	$ 7,538
Covered Payroll	$ 3,428,068	$ 3,850,978	$ 3,720,751	$ 3,618,361
Actual contributions as a percentage of covered-employee payroll	42.10%	40.05%	40.36%	37.91%
TRS				
Actuarially determined employer contribution	$ 1,272,277	$ 1,012,162	$ 975,578	$ 984,110
Actual employer contributions	1,272,277	1,012,162	975,578	984,110
Annual contributions deficiency excess	$ -	$ -	$ -	$ -
Covered Payroll	$ 4,321,593	$ 4,279,755	$ 4,125,066	$ 4,078,367
Actual contributions as a percentage of covered-employee payroll	29.44%	23.65%	23.65%	24.13%
JRS				
Actuarially determined employer contribution	$ 25,458	$ 19,164	$ 18,259	$ 17,731
Actual employer contributions	25,458	19,164	18,259	17,731
Annual contributions deficiency excess	$ -	$ -	$ -	$ -
Covered Payroll	$ 34,970	$ 36,467	$ 34,897	$ 34,972
Actual contributions as a percentage of covered-employee payroll	72.80%	52.55%	52.32%	50.70%

Valuation Date:

Actuarially determined contribution amounts are calculated as of June 30, 2018.

Methods and Assumptions Used to Determine Contribution Rates:

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percentage of Payroll
Remaining Amortization Period	SERS 25.1 years
	TRS 17.6 years
	JRS 15 years
Asset Valuation Method	SERS & JRS 5 year smoothed actuarial value
	TRS 4 year smoothed market value
Investment Rate of Return	SERS & JRS 6.90%
	TRS 8%
Salary Increases	3.25%-19.5%
Cost-of-Living Adjustments	1.0%-7.5%
Inflation	2.5%-2.75%
Social Security Wage Base	SERS 3.5%

2014	2013	2012	2011	2010	2009
$ 1,268,935	$ 1,059,652	$ 926,372	$ 944,077	$ 897,428	$ 753,698
1,268,890	1,058,113	926,343	825,801	720,527	699,770
$ 45	$ 1,539	$ 29	$ 118,276	$ 176,901	$ 53,928
$ 3,355,077	$ 3,304,538	$ 3,209,782	$ 3,308,498	$ 2,920,661	$ 3,497,400
37.82%	32.02%	28.86%	24.96%	24.67%	20.01%
$ 948,540	$ 787,536	$ 757,246	$ 581,593	$ 559,224	$ 539,303
948,540	787,536	757,246	581,593	559,224	539,303
$ -	$ -	$ -	$ -	$ -	$ -
$ 3,930,957	$ 4,101,750	$ 3,943,990	$ 3,823,754	$ 3,676,686	$ 3,529,470
24.13%	19.20%	19.20%	15.21%	15.21%	15.28%
$ 16,298	$ 16,006	$ 15,095	$ 16,208	$ 15,399	$ 14,172
16,298	16,006	15,095	-	-	14,173
$ -	$ -	$ -	$ 16,208	$ 15,399	$ (1)
$ 33,386	$ 31,748	$ 30,308	$ 33,102	$ 31,602	$ 34,000
48.82%	50.42%	49.81%	0.00%	0.00%	41.69%

REQUIRED SUPPLEMENTARY INFORMATION
PENSION PLANS
SCHEDULE OF INVESTMENT RETURNS

Last Six Fiscal Years*

Annual money-weighted rates of return net of investment expense	2019	2018	2017	2016	2015	2014
State Employees' Retirement Fund	5.88%	7.30%	14.32%	0.23%	2.83%	15.62%
Teachers' Retirement Fund	5.85%	7.04%	14.37%	0.17%	2.82%	15.67%
State Judges' Retirement Fund	6.12%	6.24%	13.04%	1.11%	2.57%	13.66%

* Governmental Accounting Standards Board Statement No. 68, Accounting and Financial Reporting for Pensions, requires the presentation of supplementary information for each of the 10 most recent years. However, until a full 10-year trend is compiled, the State will present information for the years for which the information is available.

REQUIRED SUPPLEMENTARY INFORMATION
OTHER POSTEMPLOYMENT BENEFITS

Required supplementary information for other postemployment benefits provides information on funding progress and employer contributions.

The following schedules are included in the Required Supplementary Information for Other Postemployment Benefits:

- Schedule of Changes in Net OPEB Liability and Plan Net Position
- Schedule of Employer Contributions
- Schedule of Investment Returns

THIS PAGE INTENTIONALLY LEFT BLANK

REQUIRED SUPPLEMENTAL INFORMATION
OTHER POSTEMPLOYMENT BENEFIT PLANS
SCHEDULE OF CHANGES IN NET OPEB LIABILITY AND PLAN NET POSITION

Last Two Fiscal Year

(Expressed in Thousands)

SEOPEBP

Total OPEB Liability	**2018**	**2017**
Service Cost	$ 901,698	$ 960,992
Interest	680,154	511,133
Changes of assumptions	(724,140)	(510,781)
Benefit payments	(648,347)	(639,467)
Net change in total OPEB liability	209,365	321,877
Total OPEB liability - beginning	17,904,922	17,583,045
Total OPEB liability - ending (a)	**$ 18,114,287**	**$ 17,904,922**
Plan fiduciary net position		
Contributions - employer	$ 801,893	$ 667,401
Contributions - member	116,814	120,783
Net investment income	37,001	53,194
Benefit payments	(648,347)	(639,467)
Other	186	(187)
Net change in plan fiduciary net position	307,547	201,724
Plan fiduciary net position - beginning	542,342	340,618
Plan fiduciary net position - ending (b)	**$ 849,889**	**$ 542,342**
Plan fiduciary net position as a percentage of the total OPEB liability	4.69%	3.03%
Net OPEB liability - ending (a) -(b)	**$ 17,264,398**	**$ 17,362,580**
Covered-employee payroll	$ 3,875,035	$ 3,743,995
Net OPEB liability as a percentage of covered-employee payroll	445.53%	463.74%

RTHP

Total OPEB Liability	**2018**	**2017**
Service Cost	$ 132,392	$ 148,220
Interest	133,597	111,129
Benefit Changes	(1,044,628)	-
Difference between expected and actual experience	217,853	-
Changes of assumptions	(196,049)	(370,549)
Benefit payments	(110,622)	(84,071)
Net change in total OPEB liability	(867,457)	(195,271)
Total OPEB liability - beginning	3,538,772	3,734,043
Total OPEB liability - ending (a)	**$ 2,671,315**	**$ 3,538,772**
Plan fiduciary net position		
Contributions - employer	$ 35,299	$ 19,922
Contributions - member	51,484	50,436
Net investment income	411	369
Benefit payments	(110,622)	(84,071)
Administrative expense	(264)	(150)
Other	-	42
Net change in plan fiduciary net position	(23,692)	(13,452)
Plan fiduciary net position - beginning	63,428	76,880
Plan fiduciary net position - ending (b)	**$ 39,736**	**$ 63,428**
Plan fiduciary net position as a percentage of the total OPEB liability	1.49%	1.79%
Net OPEB liability - ending (a) -(b)	**$ 2,631,579**	**$ 3,475,344**
Covered-employee payroll	$ 4,075,939	$ 4,279,755
Net OPEB liability as a percentage of covered-employee payroll	64.56%	81.20%

* Governmental Accounting Standards Board Statement No. 75, Accounting and Financial Reporting for Other Postemployment Benefits, requires the presentation of supplementary information for each of the 10 most recent years. However, until a full 10-year trend is complied, the State will present information for the years for which the information is available. Information presented in the schedule has been determined as of the measurement date (one year before the most recent fiscal year end).

REQUIRED SUPPLEMENTARY INFORMATION
OTHER POSTEMPLOYMENT BENEFIT PLANS
SCHEDULE OF EMPLOYER CONTRIBUTIONS

Last Eight and Ten Fiscal Years

(Expressed in Thousands)

SEOPEBP	**2018**	**2017**	**2016**	**2015**
Actuarially determined employer contribution	$ 1,157,121	$ 1,043,143	$ 1,443,716	$ 1,513,336
Actual employer contributions	801,893	667,401	608,593	546,284
Annual contributions deficiency excess	$ 355,228	$ 375,742	$ 835,123	$ 967,052
Covered Payroll	$ 3,875,035	$ 3,743,995	$ 3,895,100	$ 3,539,800
Actual contributions as a percentage of covered-employee payroll	20.69%	17.83%	15.62%	15.43%

RTHP				
Actuarially determined employer contribution	$ 172,223	$ 166,802	$ 130,331	$ 125,620
Actual employer contributions	35,299	19,922	19,960	25,145
Annual contributions deficiency excess	$ 136,924	$ 146,880	$ 110,371	$ 100,475
Covered Payroll	$ 4,075,939	$ 4,279,755	$ 3,949,900	$ 3,831,600
Actual contributions as a percentage of covered-employee payroll	0.87%	0.47%	0.51%	0.66%

Note:

June 30, 2011 was the first year an actuarial valuation for State Employees Other Postemployment Benefit Plan was performed.

Valuation Date:
Actuarially determined contribution amounts are calculated as of June 30, 2018.

Methods and Assumptions Used to Determine Contribution Rates:

Actuarial Cost Method	SEOPEBP- Entry Age Normal RTHP-Entry Age
Amortization Method	Level Percent of Payroll
Remaining Amortization Period	SEOPEBP- 20 years RTHP-30 years
Asset Valuation Method	Market Value
Investment Rate of Return	SEOPEBP-6.9% RTHP-3.0%
Salary Increases	SEOPEBP-3.25% to 19.5% RTHP-3.25%-6.5%
Inflation	RTHP-2.75%
Claims Trend Assumption	5.00-10.00%

2014	2013	2012	2011	2010	2009
$ 1,525,371	$ 1,271,279	$ 1,354,738	$ 1,276,099	N/A	N/A
514,696	542,615	541,262	544,767	N/A	N/A
$ 1,010,675	$ 728,664	$ 813,476	$ 731,332	N/A	N/A
$ 3,539,728	$ 3,539,728	$ 3,902,248	$ 3,902,248	N/A	N/A
14.54%	15.33%	13.87%	13.96%	N/A	N/A

$ 187,227	$ 180,460	$ 184,145	$ 177,063	$ 121,333	$ 116,667
25,955	27,040	49,486	5,312	12,108	22,433
$ 161,272	$ 153,420	$ 134,659	$ 171,751	$ 109,225	$ 94,234
$ 3,831,600	$ 3,652,500	$ 3,652,500	$ 3,646,000	$ 3,646,000	$ 3,399,300
0.68%	0.74%	1.35%	0.15%	0.33%	0.66%

REQUIRED SUPPLEMENTARY INFORMATION
OPEB PLAN
SCHEDULE OF INVESTMENT RETURNS

Last Six Fiscal Years*

Annual money-weighted rates of return net of investment expense	2019	2018	2017	2016	2015	2014
OPEB Fund	6.62%	5.85%	11.83%	2.44%	3.44%	11.80%

* Governmental Accounting Standards Board Statement No. 75, Accounting and Financial Reporting for Other Postemployment Benefits requires the presentation of supplementary information for each of the 10 most recent years. However, until a full 10-year trend is complied, the State will present information for the years for which the information is available. Information presented in the schedule has been determined as of this measurement date (one year before the most recent fiscal year end).

APPENDIX II-D

KEVIN LEMBO
STATE COMPTROLLER

MARTHA CARLSON
DEPUTY COMPTROLLER

STATE OF CONNECTICUT
OFFICE *of the* STATE COMPTROLLER
55 Elm Street
Hartford, CT 06106

December 4, 2019

The Honorable Shawn T. Wooden
State Treasurer
55 Elm Street
Hartford, CT 06106

Dear Mr. Wooden:

I have reviewed the accompanying balance sheets of the General Fund of the State of Connecticut for the fiscal years ending June 30, 2015-2019. This review also covered the accompanying statements of unappropriated surplus, revenues and expenditures for the years ended on those dates. The statements are based on the annual report of the Office of the State Comptroller, which is prepared in compliance with Section 3-115 of the General Statutes, as well as reports of the Auditors of Public Accounts with respect to the balance sheets and related statements for the fiscal years ending June 30, 2015-2019.

The statements have been prepared on a statutory basis of accounting for appropriated funds and on a cash basis of accounting for all other funds. These methods of accounting have been applied in accordance with the governing statutory requirements for all periods shown. In Fiscal Year 2019, statutory provisions provided appropriations of projected expenditure accrual within the budgeted funds.

Sincerely,

Kevin Lembo
State Comptroller

STATE OF CONNECTICUT

AUDITORS OF PUBLIC ACCOUNTS
State Capitol
210 Capitol Avenue
Hartford, Connecticut 06106-1559

JOHN C. GERAGOSIAN

ROBERT J. KANE

INDEPENDENT AUDITORS' REPORT
CERTIFICATE OF AUDIT

Report on the Financial Statements

We have audited the accompanying balance sheet of the General Fund of the State of Connecticut as of June 30, 2015, 2016, 2017, 2018 and 2019 and the related statements of revenues, expenditures, and changes in unappropriated surplus for the years ended on those dates as shown in Appendices II-D-4, II-D-5, II-D-6 and II-D-7.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. In making those risk assessments, the auditor considers internal control relevant to the organization's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Basis for Adverse Opinion on U.S. Generally Accepted Accounting Principles

As discussed in Note (a) to Appendix II-D-4, the State of Connecticut prepared its financial statements for the fiscal years ended June 30, 2015, 2016, 2017, 2018 and 2019, using accounting practices that follow the financial reporting provisions of Sections 3-115, 3-115b and Sections 3-114b through 3-114r of the Connecticut General Statutes, which is a basis of accounting other than accounting principles generally accepted in the United States of America. The effects on the financial statements of the variances between this statutory basis of accounting and accounting principles generally accepted in the United States of America, although not reasonably determinable, are presumed to be material.

The financial statements referred to above present only the General Fund and do not purport to, and do not, present fairly the financial position of the State of Connecticut as of June 30, 2015, 2016, 2017, 2018 and 2019, and the results of its operations for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Adverse Opinion on U.S. Generally Accepted Accounting Principles

In our opinion, because of the significance of the matters discussed in the Basis for Adverse Opinion on U.S. Generally Accepted Accounting Principles paragraph, the financial statements referred to above do not present fairly, in accordance with accounting principles generally accepted in the United States of America, the financial position of the State of Connecticut, as of June 30, 2015, 2016, 2017, 2018 and 2019.

Opinion on Statutory Basis of Accounting

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position – statutory basis of the General Fund of the State of Connecticut as of June 30, 2015, 2016, 2017, 2018 and 2019, and the results of its operations – statutory basis for the years then ended, in conformity with the basis of accounting described in Note (a) to Appendix II-D-4.

John C. Geragosian
State Auditor

Robert J. Kane
State Auditor

November 25, 2019
State Capitol
Hartford, Connecticut

GENERAL FUND[(a)]

Balance Sheet
As of June 30
(In Thousands)

	2015	2016	2017	2018	2019
Assets					
Cash and Short-Term Investments	$ --	$ --	$ --	$ --	$ --
Accrued Taxes Receivable	1,371,458	1,348,096	1,307,027	1,689,255	1,662,280
Accrued Accounts Receivable	21,852	20,348	22,269	22,394	20,733
Loans Receivable	3,419	3,419	3,419	3,419	3,419
Total Assets	$ 1,396,729	$ 1,371,863	$ 1,332,715	$ 1,715,068	$ 1,686,432
Liabilities, Reserves and Surplus					
Liabilities					
Deficiency in Cash and Short-Term Investments	$ 797,930	$ 765,570	$ 544,287	$ 1,271,699	$ 253,198
Accounts Payable Nonfunctional Change to Accruals	561,217	558,835	627,905	666,339	609,367
Due to Other Funds	336	999	2,667	5,271	8,415
Total Liabilities	$ 1,359,483	$ 1,325,404	$ 1,174,859	$ 1,943,309	$ 870,980
Reserves					
Petty Cash Funds	$ 810	$ 798	$ 795	$ 785	$ 785
Statutory Surplus Reserves	(31,947)	(54,316)	93,405	(366,760)	646,698
Appropriations Continued to Following Year	64,964	96,559	60,237	134,315	164,550
Reserve for Receivables	3,419	3,418	3,419	3,419	3,419
Total Reserves	$ 37,246	$ 46,459	$ 157,856	$ (228,241)	$ 815,452
Unappropriated Surplus (Deficit)	$ 0	$ 0	$ 0	$ 0	$ 0
Total Liabilities, Reserves and Surplus	$ 1,396,729	$ 1,371,863	$ 1,332,715	$ 1,715,068	$ 1,686,432

(a) For Fiscal Years 2015-2019, the financial statements are prepared on a statutory basis using accounting practices that follow the financial reporting provisions of CGS Sections 3-115, 3-115b and 3-114b through 3-114r.

GENERAL FUND

Statement of Revenues, Expenditures and Changes in Unappropriated Surplus
Fiscal Year Ended June 30
(In Thousands)

	2015	2016	2017	2018	2019
Unappropriated Surplus (Deficit), July 1	$ -0-	$ -0-	$ -0-	$ -0-	$ -0-
Total Revenues (per Appendix II-D-6)	17,282,038	17,780,822	17,702,968	18,198,551	19,649,862
Total Expenditures (per Appendix II-D-7)	17,419,689[(a)]	17,921,258[(b)]	17,763,040[(c)]	18,610,709[(d)]	19,248,650[(e)]
Operating Balance	(137,651)	(140,436)	(60,072)	(412,158)	401,212
Reserved for Prior Year Appropriations Less Appropriations Carried Forward	20,956	(31,595)	36,322	(74,078)	(30,235)
Other Adjustments	3,527	1,612	1,054	3,375	(379)
Reserved from Prior Year	-0-	-0-	-0-	-0-	-0-
Subtotal	$ (113,168)	$ (170,419)	$ (22,696)	$ (482,861)	$ 370,598
Transferred from / (to) Budget Reserve Fund	113,168	170,419	22,696	482,861	(370,598)
Unappropriated Surplus (Deficit), June 30	$ -0-	$ -0-	$ -0-	$ -0-	$ -0-

(a) Total Expenditures include prior year appropriations less appropriations carried forward to the next year in the amount of $20.956 million.

(b) Total Expenditures include prior year appropriations less appropriations carried forward to the next year in the amount of $(31.595) million.

(c) Total Expenditures include prior year appropriations less appropriations carried forward to the next year in the amount of $36.322 million.

(d) Total Expenditures include prior year appropriations less appropriations carried forward to the next fiscal year in the amount of $(74.078) million.

(e) Total Expenditures include prior year appropriations less appropriations carried forward to the next fiscal year in the amount of $(30.235) million.

GENERAL FUND

Statement of Revenues
Fiscal Year Ended June 30
(In Thousands)

	2015	2016	2017	2018	2019
Taxes:					
Personal Income	$ 9,151,037	$ 9,181,649	$ 8,988,667	$10,770,150	$ 9,640,164[(a)]
Sales and Use	4,205,051	4,181,852	4,192,203	4,202,246	4,338,061
Corporations	814,805	880,449	1,037,565	920,746	1,060,877
Insurance Companies	220,629	238,843	222,804	230,605	193,803
Inheritance and Estate	176,750	221,821	218,660	223,839	225,230
Alcoholic Beverages	61,651	63,113	63,155	63,211	64,145
Cigarettes	358,703	373,518	381,455	376,448	357,494
Admissions, Dues, Cabaret	38,436	39,331	39,509	40,272	42,834
Oil Companies	0	170	0	0	0
Electric Generation	7	0	0	0	0
Public Service Corporations	276,833	289,894	271,504	250,632	262,141
Real Estate Conveyance	185,955	196,498	209,982	202,526	213,224
Miscellaneous / Health Provider	474,009	718,850	699,331	1,059,928	1,100,087
Pass-Through Entity Tax	--	--	--	--	1,172,080
Refunds of Taxes	(1,163,639)	(1,223,198)	(1,263,824)	(1,269,667)	(1,465,368)
R&D Credit Exchange	(7,878)	(7,623)	(5,485)	(5,664)	(5,370)
Other Revenue:					
Licenses, Permits, Fees	257,444	296,502	275,386	306,165	291,171
Sales of Commodities and Services	35,813	43,454	39,143	33,238	27,105
Transfer – Special Revenue	323,315	339,961	328,716	339,512	364,082
Investment Income	943	909	2,371	15,911	48,950
Transfers — To Other Funds[(b)]	(61,780)	(61,688)	(58,100)	(57,650)	(101,814)
Fines, Escheats and Rents	168,679	141,741	151,402	189,428	165,875
Miscellaneous	185,014	179,820	330,388	177,307	214,700
Refunds of Payments	(64,281)	(60,336)	(44,199)	(61,058)	(59,139)
Federal Grants	1,241,243	1,301,532	1,325,237	1,143,075	2,083,774
Indian Gaming Payments	267,986	265,906	269,906	272,957	255,239
Statutory Transfer to Budget Reserve Fund for Volatility Adjustment	--	--	--	(1,471,333)	(949,681)
Statutory Transfers From Other Funds	135,313	177,854	27,192	245,726	110,200
Total Revenues[(c)]	$ 17,282,038	$ 17,780,822	$ 17,702,968	$18,198,550	$19,649,862

(a) Personal Income includes withholding of $6,665,752,429 and Estimates and Finals of $2,974,411,405.

(b) Transfer to Pequot/Mohegan Fund.

(c) See Operating Balance on **Appendix II-D-5** for surplus or deficit for each fiscal year.

GENERAL FUND

Statement of Expenditures
Fiscal Year Ended June 30
(In Thousands)

	2015	2016	2017	2018	2019
Legislative	$ 73,563	$ 74,089	$ 66,545	$ 64,433	$ 64,595
General Government					
Executive	12,701	12,731	11,964	10,931	11,168
Financial Administration	563,830	530,539	492,358	560,927	564,793
Legal	84,469	83,765	80,385	75,650	77,309
Total General Government	661,000	627,035	584,707	647,508	653,270
Regulation and Protection of Persons and Property					
Public Safety	193,996	191,125	181,452	178,481	184,210
Regulative	93,256	97,429	92,962	81,354	88,211
Total Regulation and Protection	287,252	288,554	274,414	259,835	272,421
Conservation and Development					
Agriculture	12,723	12,306	11,372	10,940	12,550
Environment	71,018	67,900	60,836	56,279	52,898
Historical Sites, Commerce and Industry	122,070	114,672	108,853	113,928	104,722
Total Conservation and Development	205,811	194,878	181,060	181,147	170,170
Health and Hospitals					
Public Health	83,853	69,875	63,572	64,087	65,650
Developmental Services	1,097,586	1,059,216	522,175	505,027	520,040
Mental Health	603,897	636,852	604,040	594,337	608,483
Total Health and Hospitals	1,785,336	1,765,943	1,189,787[b]	1,163,451	1,194,173
Human Services	3,095,928	3,102,021	3,624,957[b]	4,291,893	4,311,722
Education, Libraries and Museums					
Department of Education	3,277,044	3,331,589	3,247,743	3,083,629	3,232,087
University of Connecticut	354,433	383,538	349,506	308,922	317,363
Higher Education and the Arts	46,103	47,113	39,080	36,904	35,815
Libraries	12,205	11,519	8,797	8,399	8,435
Teachers' Retirement	1,004,973	997,604	1,034,143	1,292,213	1,313,515
Community—Technical Colleges	177,968	164,626	159,786	146,025	143,053
State University	152,665	186,039	164,867	148,450	158,131
Total Education, Libraries and Museums	5,025,391	5,122,028	5,003,922	5,024,542	5,208,399
Corrections	1,476,753	1,463,065	1,397,113	1,382,304	1,410,967
Judicial	593,314	597,584	552,369	528,902	557,067
Non-Functional					
Debt Service	1,691,526	1,967,729	2,058,197	2,284,706	2,554,610
Miscellaneous	2,523,815	2,718,331	2,829,967	2,781,988	2,851,256
Total Non-Functional	4,215,341	4,686,060	4,888,164	5,066,694	5,405,866
Totals	17,419,689	17,921,257	17,763,040	18,610,709	19,248,650
Total Expenditures[a]	$17,419,689	$17,921,257	$17,763,040	$18,610,709	$19,248,650

(a) See Operating Balance on **Appendix II-D-5** for surplus or deficit for each fiscal year.

(b) The Community Residential Services program, which expended $522.4 million in Fiscal Year 2017, was transferred from the Health and Hospital function to Human Services in Fiscal Year 2017.

NOTE: Totals may not add due to rounding.

SUPPLEMENTARY INFORMATION AS OF JULY 15, 2020

APPENDIX *II-E is replaced and updated as follows:*

APPENDIX II-E

GENERAL FUND REVENUES AND EXPENDITURES
ADOPTED AND FINAL FINANCIAL RESULTS FOR FISCAL YEAR 2019
ADOPTED AND ESTIMATED BUDGET FOR FISCAL YEAR 2020 AND
ADOPTED BUDGET FOR FISCAL YEAR 2021

(In Millions)

	Revised Adopted Budget Fiscal Year 2019[f]	Financial Results Fiscal Year 2019[g]	Revised Adopted Budget Fiscal Year 2020[h]	Estimated Budget Fiscal Year 2020[i]	Revised Adopted Budget Fiscal Year 2021[h]
Revenues					
Taxes					
Personal Income Tax	$ 9,107.6	$ 9,640.2	$ 9,673.0	$9,182.7	$ 10,005.4
Sales & Use	4,153.6	4,338.1	4,444.1	4,187.0	4,588.4
Corporation	1,520.2	1,060.9	1,099.8	973.8	1,082.5
Pass-Through Entity Tax[a]	--	1,172.1	850.0	1,150.0	850.0
Public Service	243.8	262.1	237.7	237.7	244.7
Inheritance & Estate	176.2	225.2	165.8	210.8	146.3
Insurance Companies	234.3	193.8	203.3	218.3	205.8
Cigarettes	381.0	357.5	344.7	344.7	326.9
Real Estate Conveyance	209.4	212.2	217.4	217.4	230.6
Alcoholic Beverages	63.0	64.1	68.9	68.9	69.7
Admissions and Dues	41.8	42.8	41.9	36.9	41.5
Health Provider Tax	1,049.2	1,082.2	1,040.1	1,040.1	1,033.6
Miscellaneous	22.0	17.9	48.4	19.7	48.0
Total Taxes	$17,202.1	$18,670.1	$18,435.1	$17,888.0	$18,873.4
Less Refunds of Taxes	(1,215.1)	(1,465.4)	(1,379.3)	(1,544.3)	(1,378.9)
Less Earned Income Tax	(118.3)	--	(97.3)	(97.3)	(100.6)
Less R&D Credit Exchange	(6.4)	(5.4)	(5.1)	(8.6)	(5.2)
Net Taxes	$15,862.3	$17,199.4	$16,953.4	$16,237.8	$17,388.7
Other Revenues					
Transfers- Special Revenues	$ 352.7	$ 364.1	$ 368.0	$ 342.2	$ 376.6
Indian Gaming Payments	203.6	255.2	226.0	180.0	225.4
Licenses, Permits, Fees	322.6	291.2	341.2	329.4	384.3
Sales of Commodities & Services	37.7	27.1	30.2	26.2	31.0
Rents, Fines & Escheats	147.2	165.9	158.5	154.0	160.9
Investment Income	14.5	49.0	52.6	52.6	52.9
Miscellaneous	189.1	214.7	178.1	226.6	181.7
Less Refunds of Payments	(58.8)	(59.1)	(66.4)	(71.4)	(67.7)
Total Other Revenue	$ 1,208.6	$ 1,308.0	$ 1,288.2	$ 1,239.6	$ 1,345.1
Other Sources					
Federal Grants	$ 2,112.4	$ 2,083.8	$ 1,588.9	$ 1,322.3	$ 1,571.5
Transfers from Tobacco Settlement Funds	110.2	110.2	136.0	136.0	114.5
Transfers to/from Other Funds[b]	78.3	(101.8)	(104.5)	(132.3)	134.2
Transfers to BRF – Volatility Adjustment[c]	(363.1)	(949.7)	(318.3)	(318.3)	(301.5)
Total Other Sources	$ 1,937.8	$ 1,142.5	$ 1,302.1	$ 1,007.7	$ 1,518.7
Total Budgeted Revenue[d]	$19,008.7	$19,649.9	$19,543.7	$18,485.1	$20,252.5
Revenue Cap Deduction	--	--	(97.7)	--	(151.9)
Total Available Revenue	$19,008.7	$19,649.9	$19,446.0	$18,485.1	$20,100.6[j]

	Revised Adopted Budget Fiscal Year 2019[(f)]	Financial Results Fiscal Year 2019[(g)]	Revised Adopted Budget Fiscal Year 2020[(h)]	Estimated Budget Fiscal Year 2020[(i)]	Revised Adopted Budget Fiscal Year 2021[(h)]
Appropriations/ Expenditures					
Legislative	$ 66.7	$ 65.0	$ 78.8	$ 74.3	$ 83.3
General Government	694.5	653.6	665.2	654.4	686.1
Regulation & Protection	276.1	272.1	281.4	286.8	287.1
Conservation & Development	174.2	170.1	178.6	179.3	187.0
Health & Hospitals	1,190.7	1,194.2	1,245.8	1,239.2	1,289.4
Human Services	4,332.6	4,308.5	4,547.3	4,475.9	4,695.3
Education, Libraries & Museums	5,209.0	5,225.9	5,181.3	5,169.2	5,318.6
Corrections	1,344.1	1,421.6	1,410.0	1,421.6	1,471.9
Judicial	565.1	557.1	597.6	585.3	618.4
Non- Functional					
Debt Service	2,213.6	2,575.8	2,278.7	2,264.7	2,368.8
Miscellaneous	2,952.9	2,835.0	3,167.8	3,068.4	3,389.8
Subtotal	$19,019.7	$19,278.9	$19,632.5	$19,419.1	$20,395.7
Other Reductions and Lapses	(21.5)	--	(209.2)	--	(309.4)
Net Appropriations/ Expenditures	$18,998.2	$19,278.9	$19,423.2	$19,419.1	$20,086.3
Surplus (or Deficit) from Operations	10.5	371.0	22.8	(934.0)	14.3
Miscellaneous Adjustments	--	(0.4)	--	--	--
Balance[(e)]	$ 10.5	$ 370.6	$ 22.8	$ (934.0)	$ 14.3[(j)]

NOTE: Columns may not add due to rounding.

(a) Public Act No. 18-81 created a new Pass-Through Entity Tax starting in Fiscal Year 2019. As a result of the new tax, a new credit on Estimates and Finals taxes was included to offset the cost to the taxpayer.

(b) Includes transfers to the Mashantucket Pequot Fund for grants to towns. The amount for Fiscal Year 2018 includes a transfer of $57.6 million to the Mashantucket Pequot Fund for grants to towns and in Fiscal Year 2019 $49.9 million for such purpose.

(c) CGS Section 4-30a requires that any amount in Estimates and Finals revenue above $3,150.0 million in Fiscal Year 2019, $3,292.5 million in Fiscal Year 2020 and $3,382.7 million in Fiscal Year 2021 shall be transferred to the Budget Reserve Fund.

(d) Does not include revenues or expenditures with respect to Restricted Accounts and Federal & Other Grants, which are not included in this Appendix. The amount of such expenditures is generally the same as the amount of grants received.

(e) Per CGS Section 4-30a, after the accounts for the General Fund have been closed for each fiscal year and the Comptroller has determined the amount of unappropriated surplus or deficit in said fund, after any amounts required by provision of law to be transferred for other purposes have been deducted, the amount of such surplus or deficit shall be transferred by the State Treasurer to/from the Budget Reserve Fund.

(f) Per Public Act No. 18-81 as amended by Public Act No. 18-49.

(g) Per the Comptroller's audited statutory basis financial results dated October 31, 2019 and adjusted by the Office of Policy and Management to exclude expenditures of appropriation carried over from the prior fiscal year and to include expenditures of appropriations carried into the next fiscal year.

(h) Per Public Act No. 19-117 as amended by Public Act No. 19-1 of the December Special Session. For a description of highlighted proposed revenue and expenditure changes **see STATE GENERAL FUND – Budget for Fiscal Years 2020 and 2021**.

(i) Estimates reflect the Office of Policy & Management's April 20, 2020 (revised as of April 30, 2020) monthly forecast letter to the State Comptroller as of the period ending March 31, 2020. Estimates ***do not*** reflect OPM's June 19, 2020 forecast. **See STATE GENERAL FUND – Fiscal Year 2020 Operations** for such forecast.

(j) Revenues reflect adopted revenues pursuant to Public Act No. 19-117 and do not reflect the April 30, 2020 Consensus Revenue Estimates of OPM and OFA which estimates Fiscal Year 2021 General Fund revenues of $18,088.4 million. **See STATE GENERAL FUND – Forecasted Operation – *Consensus Revenue Estimates.***

NOTE: The information in **Appendix II-E** of this **Information Statement** contains projections and no assurances can be given that subsequent projections or adjustments will not result in changes in the items of revenue and expenditure and in the final result of the operations of the General Fund. Changes may also occur as the result of legislative action adjusting the budget or taking other actions which impact revenues or expenditures.

CONNECTICUT
GREEN BANK℠