OFFICIAL STATEMENT DATED APRIL 7, 2020

NEW ISSUE - Book-Entry-Only

RATINGS: Moody's: "Aaa" S&P: "AAA" (See "RATINGS" herein)

The Bonds are not obligations described in Section 103(a) of the Internal Revenue Code of 1986. See "TAX MATTERS" herein.



TEXAS PUBLIC FINANCE AUTHORITY

\$472,470,000 State of Texas General Obligation and Refunding Bonds, Taxable Series 2020

Dated Date and Interest Accrual Date: Date of Delivery

Due: October 1, as shown on page ii

The Texas Public Finance Authority State of Texas General Obligation and Refunding Bonds, Taxable Series 2020 (the "Bonds") are general obligations of the State of Texas (the "State") being issued by the Texas Public Finance Authority (the "Authority") under the authority of the Constitution and general laws of the State, including Article III, Section 67 of the Texas Constitution (the "Constitutional Provision"); Chapter 1232, Texas Government Code, as amended (the "Texas Public Finance Authority Act"); Chapters 1207 and 1371, Texas Government Code, as amended, and Chapter 102, Texas Health and Safety Code, as amended (the Constitutional Provision, the Texas Public Finance Authority Act and any rules promulgated by the Authority thereunder, and the other statutes cited above together constituting the "Authorizing Law"), and pursuant to the Bond Resolution (as defined herein).

Proceeds of the Bonds will be used (i) by the Cancer Prevention and Research Institute of Texas ("CPRIT") to make grants for cancer research and prevention and pay for the operation of CPRIT, as authorized by the Constitutional Provision, (ii) to refund certain outstanding general obligation commercial paper notes of the State issued by the Authority (the "Refunded Notes") for CPRIT, as further identified on Schedule I attached hereto, (iii) to refund certain outstanding bonds of the State issued by the Authority (the "Refunded Bonds"), as further identified on Schedule II attached hereto, in order to provide debt service savings and (iv) to pay the costs of issuing the Bonds. See "PLAN OF FINANCE" herein.

Interest on the Bonds will accrue from the Date of Delivery (defined below), will be payable on October 1, 2020, and on each April 1 and October 1 thereafter until maturity or prior redemption, as applicable, and will be calculated on the basis of a 360-day year composed of twelve 30-day months. The Bonds will be issued in principal denominations of \$5,000 or any integral multiple thereof within a maturity. The Bonds are initially issuable only to Cede & Co., as nominee of The Depository Trust Company, New York, New York ("DTC") pursuant to the book-entry-only system described herein. Beneficial ownership of the Bonds may be acquired in denominations of \$5,000 or integral multiples thereof within a maturity. No physical delivery of the Bonds will be made to the initial purchasers named below (the "Underwriters") or the beneficial owners of the Bonds. Interest on and principal of the Bonds will be payable by the Authority (which will act as the initial Paying Agent/Registrar) to Cede & Co., which will make distribution of the amounts so paid to the beneficial owners of the Bonds. See "APPENDIX C — Book-Entry-Only System." The Bonds are subject to redemption prior to maturity as set forth in the section "DESCRIPTION OF THE BONDS — Redemption."

The Bonds are general obligations of, and are secured by the full faith and credit of, the State. See "DESCRIPTION OF THE BONDS — Source of Payment" herein. For general information regarding the State, including information concerning outstanding general obligation debt of the State, see "GENERAL INFORMATION REGARDING THE STATE OF TEXAS" and "APPENDIX A — The State of Texas" hereto.

 $\begin{tabular}{ll} \textbf{Maturity Schedule, Interest Rates, Initial Yields and CUSIP Numbers} \\ & (See \ page \ ii) \end{tabular}$

The Bonds are offered for delivery when, as and if issued and received by the Underwriters, subject to approval of legality by the Attorney General of the State and the approving opinions of Norton Rose Fulbright US LLP, Dallas, Texas and Bates & Coleman, P.C., Houston, Texas, Co-Bond Counsel. Certain legal matters will be passed upon for the Authority by its Disclosure Counsel, McCall, Parkhurst & Horton L.L.P., Austin, Texas. Certain legal matters will be passed upon for the Underwriters by their counsel, Bracewell LLP, Houston, Texas. See "LEGAL MATTERS." The Bonds are expected to be available for initial delivery through the facilities of DTC on or about April 23, 2020 (the "Date of Delivery").

Citigroup
Barclays
Ramirez & Co., Inc.

BofA Securities

Mesirow Financial, Inc.

Siebert Williams Shank & Co., LLC

MATURITY SCHEDULE

\$472,470,000 TEXAS PUBLIC FINANCE AUTHORITY STATE OF TEXAS GENERAL OBLIGATION AND REFUNDING BONDS, TAXABLE SERIES 2020

Maturity	Principal	Interest	Initial	
(October 1)	Amount	Rate	Yield ⁽¹⁾	CUSIP No.(2)
2020	\$16,215,000	1.514%	1.514%	882724QV2
2021	18,700,000	1.564	1.564	882724QW0
2022	18,710,000	1.614	1.614	882724QX8
2023	32,270,000	5.000	1.689	882724QY6
2024	32,440,000	5.000	1.867	882724QZ3
2025	32,600,000	5.000	1.967	882724RA7
2026	32,745,000	5.000	2.082	882724RB5
2027	32,660,000	2.182	2.182	882724RC3
2028	32,340,000	2.276	2.276	882724RD1
2029	32,000,000	2.326	2.326	882724RE9
2030	31,660,000	2.426	2.426	882724RF6
2031	20,315,000	2.526	2.526	882724RG4
2032	17,970,000	2.646	2.646	882724RH2
2033	17,970,000	2.746	2.746	882724RJ8
2034	17,975,000	2.846	2.846	882724RK5
2035	17,975,000	2.896	2.896	882724RL3

\$67,925,000 3.228% Term Bonds due October 1, 2039 at a Price of 100% to Yield 3.228%(1) - 882724RM1(2)

(Interest accrues from Date of Delivery)

OPTIONAL REDEMPTION... The Bonds maturing on and after October 1, 2031, are subject to redemption prior to maturity at the option of the Authority, in whole or in part, from time to time, in principal amounts of \$5,000 or any integral multiple thereof, in such manner as the Authority may select, on October 1, 2030, or on any date thereafter, at a redemption price equal to par plus accrued interest from the most recent interest payment date to the date fixed for redemption. See "DESCRIPTION OF THE BONDS – Redemption."

MANDATORY REDEMPTION... The Term Bonds (as defined herein) are subject to mandatory sinking fund redemption as further described herein. See "DESCRIPTION OF THE BONDS – Redemption."

⁽¹⁾ Yields shown are calculated to the earlier of stated maturity or first available redemption date at par plus accrued interest.

CUSIP is a registered trademark of the American Bankers Association. CUSIP data herein is provided by CUSIP Global Services, managed by S&P Capital IQ on behalf of the American Bankers Association. This data is not intended to create a database and does not serve in any way as a substitute for the CUSIP services. None of the Authority, the Financial Advisor, or the Underwriters shall be responsible for the selection or the correctness of the CUSIP numbers shown herein. The CUSIP number for a specific maturity is subject to being changed after the issuance of the Bonds as a result of various subsequent actions including, but not limited to, a refunding in whole or in part 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 Bonds.

STATE OF TEXAS

Greg Abbott Governor

Dan Patrick Lieutenant Governor

Ken Paxton Attorney General

Glenn Hegar Comptroller of Public Accounts

TEXAS PUBLIC FINANCE AUTHORITY

BOARD OF DIRECTORS

Billy M. Atkinson, Jr. – Chair
Ramon Manning – Member
Rodney K. Moore – Member
Shanda G. Perkins – Member
Brendan Scher – Member
Benjamin E. Streusand – Member
Joseph E. Williams – Member

CERTAIN OFFICERS

Lee Deviney, Executive Director John Hernandez, Deputy Director Pamela Scivicque, Director, Business Administration Kevin Van Oort, General Counsel

CONSULTANTS AND ADVISORS

Financial Advisor	PFM Financial Advisors LLC
Co-Bond Counsel	Norton Rose Fulbright US LLP and Bates & Coleman, P.C.
Disclosure Counsel	McCall Parkhurst & Horton L. L. P.

FOR ADDITIONAL INFORMATION REGARDING THE AUTHORITY, PLEASE CONTACT:

or

Lee Deviney Executive Director 300 W. 15th Street, Suite 411 Austin, Texas 78701 (512) 463-5544 PFM Financial Advisors LLC Dennis Waley 111 Congress Avenue, Suite 2150 Austin, Texas 78701 (512) 614-5323

SALE AND DISTRIBUTION OF THE BONDS

This Official Statement, which includes the cover page, schedules and the appendices attached hereto, does not constitute an offer to sell or the solicitation of an offer to buy in any jurisdiction to any person to whom it is unlawful to make such offer, solicitation or sale.

Use of Official Statement

No dealer, broker, salesman or other person has been authorized by the Authority or the Underwriters to give any information or to make any representation other than those contained in this Official Statement, and, if given or made, such other information or representation must not be relied upon as having been authorized by the Authority or the Underwriters. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the Bonds by any person, in any jurisdiction in which it is unlawful for such person to make such offer, solicitation, or sale. The information and expressions of opinion herein are subject to change without notice, and neither the delivery of this Official Statement, nor any sale made hereunder, shall, under any circumstances, create the implication that there has been no change in the affairs of the Authority or the State of Texas since the date hereof. This Official Statement is submitted in connection with the sale of the Bonds and in no instance may this Official Statement be reproduced or used for any other purpose.

The Underwriters have provided the following sentence for inclusion in this Official Statement. The Underwriters have reviewed the information in this Official Statement pursuant to their respective responsibilities to investors under the federal securities laws, but the Underwriters do not guarantee the accuracy or completeness of such information.

THIS OFFICIAL STATEMENT IS INTENDED TO REFLECT FACTS AND CIRCUMSTANCES ON THE DATE OF THIS OFFICIAL STATEMENT OR ON SUCH OTHER DATE OR AT SUCH OTHER TIME AS IDENTIFIED HEREIN. NO ASSURANCE CAN BE GIVEN THAT SUCH INFORMATION MAY NOT BE MISLEADING AT A LATER DATE. CONSEQUENTLY, RELIANCE ON THIS OFFICIAL STATEMENT AT TIMES SUBSEQUENT TO THE ISSUANCE OF THE BONDS DESCRIBED HEREIN SHOULD NOT BE MADE ON THE ASSUMPTION THAT ANY SUCH FACTS OR CIRCUMSTANCES ARE UNCHANGED.

NONE OF THE AUTHORITY, ITS FINANCIAL ADVISOR OR THE UNDERWRITERS MAKES ANY REPRESENTATION OR WARRANTY WITH RESPECT TO THE INFORMATION CONTAINED IN THIS OFFICIAL STATEMENT REGARDING THE DEPOSITORY TRUST COMPANY ("DTC") OR ITS BOOK-ENTRY-ONLY SYSTEM, AS SUCH INFORMATION HAS BEEN FURNISHED BY DTC.

Marketability

IN CONNECTION WITH THE OFFERING OF THE BONDS, THE UNDERWRITERS MAY OVER-ALLOT OR EFFECT TRANSACTIONS THAT STABILIZE OR MAINTAIN THE MARKET PRICE OF SUCH BONDS AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

Securities Laws

No registration statement relating to the Bonds has been filed with the United States Securities and Exchange Commission ("SEC") under the Securities Act of 1933, as amended, in reliance upon an exemption provided thereunder. The Bonds have not been registered or qualified under the Securities Act of Texas in reliance upon various exemptions contained therein, nor have the Bonds been registered or qualified under the securities laws of any other jurisdiction. The Authority assumes no responsibility for registration or qualification for sale or other disposition of the Bonds under the securities laws of any jurisdiction in which the Bonds may be offered, sold or otherwise transferred. This disclaimer of responsibility for registration or qualification for sale or other disposition of the Bonds shall not be construed as an interpretation of any kind with regard to the availability of any exemption from securities registration or qualification provisions.

NEITHER THE SEC NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THE SECURITIES OR PASSED UPON THE ADEQUACY OR ACCURACY OF THIS DOCUMENT. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

THIS OFFICIAL STATEMENT CONTAINS "FORWARD-LOOKING" STATEMENTS WITHIN THE MEANING OF SECTION 21e OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED. SUCH STATEMENTS MAY INVOLVE KNOWN AND UNKNOWN RISKS, UNCERTAINTIES AND OTHER FACTORS WHICH MAY CAUSE THE ACTUAL

RESULTS, PERFORMANCE AND ACHIEVEMENTS TO BE DIFFERENT FROM THE FUTURE RESULTS, PERFORMANCE AND ACHIEVEMENTS EXPRESSED OR IMPLIED BY SUCH FORWARD-LOOKING STATEMENTS. INVESTORS ARE CAUTIONED THAT THE ACTUAL RESULTS COULD DIFFER MATERIALLY FROM THOSE SET FORTH IN THE FORWARD-LOOKING STATEMENTS. SEE "LEGAL MATTERS — Forward-Looking Statements" HEREIN.

INFORMATION CONCERNING OFFERING RESTRICTIONS IN CERTAIN JURISDICTIONS OUTSIDE THE UNITED STATES

NOTICE TO INVESTORS IN THE EUROPEAN ECONOMIC AREA ("EEA")

THIS OFFICIAL STATEMENT IS NOT A PROSPECTUS FOR THE PURPOSES OF EUROPEAN COMMISSION REGULATION 809/2004 OR EUROPEAN COMMISSION DIRECTIVE 2003/71/EC (AS AMENDED, INCLUDING BY EUROPEAN COMMISSION DIRECTIVE 2010/73/EU, AS APPLICABLE) (THE "PROSPECTUS DIRECTIVE"). IT HAS BEEN PREPARED ON THE BASIS THAT ALL OFFERS OF THE BONDS WILL BE MADE PURSUANT TO AN EXEMPTION UNDER ARTICLE 3 OF THE PROSPECTUS DIRECTIVE, AS IMPLEMENTED IN MEMBER STATES OF THE EEA, FROM THE REQUIREMENT TO PRODUCE A PROSPECTUS FOR SUCH OFFERS. THIS OFFICIAL STATEMENT IS ONLY ADDRESSED TO AND DIRECTED AT PERSONS IN MEMBER STATES OF THE EEA WHO ARE "QUALIFIED INVESTORS" WITHIN THE MEANING OF ARTICLE 2(1)(E) OF THE PROSPECTUS DIRECTIVE AND ANY RELEVANT IMPLEMENTING MEASURE IN EACH MEMBER STATE OF THE EEA ("QUALIFIED INVESTORS"). THIS OFFICIAL STATEMENT MUST NOT BE ACTED ON OR RELIED ON IN ANY SUCH MEMBER STATE OF THE EEA BY PERSONS WHO ARE NOT QUALIFIED INVESTORS. ANY INVESTMENT OR INVESTMENT ACTIVITY TO WHICH THIS OFFICIAL STATEMENT RELATES IS AVAILABLE ONLY TO QUALIFIED INVESTORS IN ANY MEMBER STATE OF THE EEA AND WILL NOT BE ENGAGED IN WITH ANY OTHER PERSONS.

NOTICE TO PROSPECTIVE INVESTORS IN THE UNITED KINGDOM

THIS OFFICIAL STATEMENT HAS NOT BEEN APPROVED FOR THE PURPOSES OF SECTION 21 OF THE FINANCIAL SERVICES AND MARKETS ACT 2000 ("FSMA") AND DOES NOT CONSTITUTE AN OFFER TO THE PUBLIC IN ACCORDANCE WITH THE PROVISIONS OF SECTION 85 OF THE FSMA. THIS OFFICIAL STATEMENT IS FOR DISTRIBUTION ONLY TO, AND IS DIRECTED SOLELY AT, PERSONS IN THE UNITED KINGDOM THAT ARE QUALIFIED INVESTORS WITHIN THE MEANING OF ARTICLE 2(1)(E) OF THE PROSPECTUS DIRECTIVE WHO ARE ALSO (I) INVESTMENT PROFESSIONALS, AS SUCH TERM IS DEFINED IN ARTICLE 19(5) OF THE FINANCIAL SERVICES AND MARKETS ACT 2000 (FINANCIAL PROMOTION) ORDER 2005, AS AMENDED (THE "FINANCIAL PROMOTION ORDER") OR (I) HIGH NET WORTH ENTITIES, AND OTHER PERSONS TO WHOM IT MAY LAWFULLY BE COMMUNICATED, FALLING WITHIN ARTICLE 49(2)(A) TO (D) OF THE FINANCIAL PROMOTION ORDER (ALL SUCH PERSONS TOGETHER BEING REFERRED TO AS "RELEVANT PERSONS"). THIS OFFICIAL STATEMENT IS DIRECTED ONLY AT RELEVANT PERSONS AND MUST NOT BE ACTED ON OR RELIED ON BY PERSONS WHO ARE NOT RELEVANT PERSONS, INCLUDING IN CIRCUMSTANCES IN WHICH SECTION 21(1) OF THE FSMA APPLIES TO THE ISSUER. THIS OFFICIAL STATEMENT AND ITS CONTENTS ARE CONFIDENTIAL AND SHOULD NOT BE DISTRIBUTED, PUBLISHED OR REPRODUCED (IN WHOLE OR IN PART) OR DISCLOSED BY RECIPIENTS TO ANY OTHER PERSONS IN THE UNITED KINGDOM. IN THE UNITED KINGDOM, ANY INVESTMENT OR INVESTMENT ACTIVITY TO WHICH THIS OFFICIAL STATEMENT RELATES IS AVAILABLE ONLY TO RELEVANT PERSONS AND WILL BE ENGAGED IN ONLY WITH RELEVANT PERSONS. ANY PERSON WHO IS NOT A RELEVANT PERSON SHOULD NOT ACT OR RELY ON THIS OFFICIAL STATEMENT OR ANY OF ITS CONTENTS.

NOTICE TO PROSPECTIVE INVESTORS IN HONG KONG

THE BONDS (EXCEPT FOR BONDS WHICH ARE A "STRUCTURED PRODUCT" AS DEFINED IN THE SECURITIES AND FUTURES ORDINANCE (CAP. 571 OF THE LAWS OF HONG KONG) ("SECURITIES AND FUTURES ORDINANCE")) MAY NOT BE OFFERED OR SOLD IN HONG KONG BY MEANS OF ANY DOCUMENT OTHER THAN (I) IN CIRCUMSTANCES WHICH DO NOT CONSTITUTE AN OFFER TO THE PUBLIC WITHIN THE MEANING OF THE COMPANIES (WINDING UP AND MISCELLANEOUS PROVISIONS) ORDINANCE (CAP. 32 OF THE LAWS OF HONG KONG) ("COMPANIES (WINDING UP AND MISCELLANEOUS PROVISIONS) ORDINANCE") OR (II) TO "PROFESSIONAL INVESTORS" AS DEFINED IN THE SECURITIES AND FUTURES ORDINANCE AND ANY RULES MADE THEREUNDER, OR (III) IN OTHER CIRCUMSTANCES WHICH DO NOT RESULT IN THE DOCUMENT BEING A "PROSPECTUS" AS DEFINED IN THE COMPANIES (WINDING UP AND MISCELLANEOUS PROVISIONS) ORDINANCE, AND NO ADVERTISEMENT, INVITATION OR DOCUMENT RELATING TO THE BONDS MAY BE

ISSUED OR MAY BE IN THE POSSESSION OF ANY PERSON FOR THE PURPOSE OF ISSUE (IN EACH CASE WHETHER IN HONG KONG OR ELSEWHERE), WHICH IS DIRECTED AT, OR THE CONTENTS OF WHICH ARE LIKELY TO BE ACCESSED OR READ BY, THE PUBLIC OF HONG KONG (EXCEPT IF PERMITTED TO DO SO UNDER THE SECURITIES LAWS OF HONG KONG) OTHER THAN WITH RESPECT TO BONDS WHICH ARE OR ARE INTENDED TO BE DISPOSED OF ONLY TO PERSONS OUTSIDE HONG KONG OR ONLY TO "PROFESSIONAL INVESTORS" AS DEFINED IN THE SECURITIES AND FUTURES ORDINANCE AND ANY RULES MADE THEREUNDER.

NOTICE TO INVESTORS IN SWITZERLAND

THE BONDS MAY NOT BE PUBLICLY OFFERED IN SWITZERLAND AND WILL NOT BE LISTED ON THE SIX SWISS EXCHANGE ("SIX") OR ON ANY OTHER STOCK EXCHANGE OR REGULATED TRADING FACILITY IN SWITZERLAND. THIS OFFICIAL STATEMENT HAS BEEN PREPARED WITHOUT REGARD TO THE DISCLOSURE STANDARDS FOR ISSUANCE PROSPECTUSES UNDER ART. 652A OR ART. 1156 OF THE SWISS CODE OF OBLIGATIONS OR THE DISCLOSURE STANDARDS FOR LISTING PROSPECTUSES UNDER ART. 27 FF. OF THE SIX LISTING RULES OR THE LISTING RULES OF ANY OTHER STOCK EXCHANGE OR REGULATED TRADING FACILITY IN SWITZERLAND. NEITHER THIS OFFICIAL STATEMENT NOR ANY OTHER OFFERING OR MARKETING MATERIAL RELATING TO THE BONDS OR THE OFFERING MAY BE PUBLICLY DISTRIBUTED OR OTHERWISE MADE PUBLICLY AVAILABLE IN SWITZERLAND.

NONE OF THIS OFFICIAL STATEMENT OR ANY OTHER OFFERING OR MARKETING MATERIAL RELATING TO THE OFFERING, THE ISSUER OR THE BONDS HAVE BEEN OR WILL BE FILED WITH OR APPROVED BY ANY SWISS REGULATORY AUTHORITY. IN PARTICULAR, THIS OFFICIAL STATEMENT WILL NOT BE FILED WITH, AND THE OFFER OF THE BONDS WILL NOT BE SUPERVISED BY, THE SWISS FINANCIAL MARKET SUPERVISORY AUTHORITY ("FINMA"), AND THE OFFER OF BONDS HAS NOT BEEN AND WILL NOT BE AUTHORIZED UNDER THE SWISS FEDERAL ACT ON COLLECTIVE INVESTMENT SCHEMES ("CISA"). ACCORDINGLY, INVESTORS DO NOT HAVE THE BENEFIT OF THE SPECIFIC INVESTOR PROTECTION PROVIDED UNDER THE CISA.

NOTICE TO INVESTORS IN SINGAPORE

THIS OFFICIAL STATEMENT HAS NOT BEEN AND WILL NOT BE REGISTERED AS A PROSPECTUS WITH THE MONETARY AUTHORITY OF SINGAPORE. ACCORDINGLY, THIS OFFICIAL STATEMENT AND ANY OTHER DOCUMENT OR MATERIAL USED IN CONNECTION WITH THE OFFER OR SALE, OR INVITATION FOR SUBSCRIPTION OR PURCHASE, OF THE BONDS MAY NOT BE CIRCULATED OR DISTRIBUTED, NOR MAY THE BONDS BE OFFERED OR SOLD, OR BE MADE THE SUBJECT OF AN INVITATION FOR SUBSCRIPTION OR PURCHASE, WHETHER DIRECTLY OR INDIRECTLY, TO PERSONS IN SINGAPORE OTHER THAN (I) TO AN INSTITUTIONAL INVESTOR AS DEFINED IN SECTION 4A OF THE SECURITIES AND FUTURES ACT (CHAPTER 289) OF SINGAPORE, AS MODIFIED OR AMENDED FROM TIME TO TIME (THE "SFA") PURSUANT TO SECTION 274 OF THE SFA, (II) TO A RELEVANT PERSON PURSUANT (AS DEFINED IN SECTION 275(2) OF THE SFA) TO SECTION 275(1), OR ANY PERSON PURSUANT TO SECTION 275(1A), AND IN ACCORDANCE WITH THE CONDITIONS SPECIFIED IN SECTION 275, OF THE SFA; OR (III) OTHERWISE PURSUANT TO, AND IN ACCORDANCE WITH THE CONDITIONS OF, ANY OTHER APPLICABLE PROVISION OF THE SFA. WHERE THE BONDS ARE SUBSCRIBED OR PURCHASED UNDER SECTION 275 OF THE SFA BY A RELEVANT PERSON THAT IS: (A) A CORPORATION (WHICH IS NOT AN ACCREDITED INVESTOR (AS DEFINED IN SECTION 4A OF THE SFA)) THE SOLE BUSINESS OF WHICH IS TO HOLD INVESTMENTS AND THE ENTIRE SHARE CAPITAL OF WHICH IS OWNED BY ONE OR MORE INDIVIDUALS, EACH OF WHOM IS AN ACCREDITED INVESTOR; OR (B) A TRUST (WHERE THE TRUSTEE IS NOT AN ACCREDITED INVESTOR) WHOSE SOLE PURPOSE IS TO HOLD INVESTMENTS AND EACH BENEFICIARY OF THE TRUST IS AN INDIVIDUAL WHO IS AN ACCREDITED INVESTOR, SECURITIES OR SECURITIES-BASED DERIVATIVES CONTRACTS (EACH AS DEFINED IN SECTION 2(1) OF THE SFA) OF THAT CORPORATION OR THE BENEFICIARIES' RIGHTS AND INTEREST (HOWSOEVER DESCRIBED) IN THAT TRUST SHALL NOT BE TRANSFERRED WITHIN 6 MONTHS AFTER THAT CORPORATION OR THAT TRUST HAS ACQUIRED THE BONDS PURSUANT TO AN OFFER MADE UNDER SECTION 275 OF THE SFA EXCEPT: (I) TO AN INSTITUTIONAL INVESTOR OR TO A RELEVANT PERSON, OR TO ANY PERSON ARISING FROM AN OFFER REFERRED TO IN SECTION 275(1A) OR SECTION 276(4)(I)(B) OF THE SFA; (II) WHERE NO CONSIDERATION IS OR WILL BE GIVEN FOR THE TRANSFER; (III) WHERE THE TRANSFER IS BY OPERATION OF LAW; (IV) AS SPECIFIED IN SECTION 276(7) OF THE SFA; OR (V) AS SPECIFIED IN REGULATION 37A OF THE SECURITIES AND FUTURES (OFFERS OF INVESTMENTS) (SECURITIES AND SECURITIES-BASED DERIVATIVE CONTRACTS) REGULATIONS 2018 OF SINGAPORE.

Notification under Section 309B(1)(C) of the SFA

IN CONNECTION WITH SECTION 309B OF THE SFA AND THE SECURITIES AND FUTURES (CAPITAL MARKETS PRODUCTS) REGULATIONS 2018 OF SINGAPORE (THE "CMP REGULATIONS 2018"), THE ISSUER HAS DETERMINED, AND HEREBY NOTIFIES ALL RELEVANT PERSONS (AS DEFINED IN SECTION 309A(1) OF THE SFA), THAT THE BONDS ARE 'PRESCRIBED CAPITAL MARKETS PRODUCTS'(AS DEFINED IN THE CMP REGULATIONS 2018) AND ARE EXCLUDED INVESTMENT PRODUCTS (AS DEFINED IN MAS NOTICE SFA 04-N12: NOTICE ON THE SALE OF INVESTMENT PRODUCTS AND MAS NOTICE FAA-N16: NOTICE ON RECOMMENDATIONS ON INVESTMENT PRODUCTS).

NOTICE TO PROSPECTIVE INVESTORS IN TAIWAN

THE OFFER OF THE BONDS HAS NOT BEEN AND WILL NOT BE REGISTERED OR FILED WITH, OR APPROVED BY, THE FINANCIAL SUPERVISORY COMMISSION OF TAIWAN AND/OR OTHER REGULATORY AUTHORITY OF TAIWAN PURSUANT TO RELEVANT SECURITIES LAWS AND REGULATIONS, AND THE BONDS MAY NOT BE OFFERED, ISSUED OR SOLD IN TAIWAN THROUGH A PUBLIC OFFERING OR IN CIRCUMSTANCES WHICH CONSTITUTE AN OFFER WITHIN THE MEANING OF THE SECURITIES AND EXCHANGE ACT OF TAIWAN THAT REQUIRES THE REGISTRATION OR FILING WITH OR APPROVAL OF THE FINANCIAL SUPERVISORY COMMISSION OF TAIWAN. THE BONDS MAY BE MADE AVAILABLE OUTSIDE TAIWAN FOR PURCHASE BY INVESTORS RESIDING IN TAIWAN (EITHER DIRECTLY OR THROUGH PROPERLY LICENSED TAIWAN INTERMEDIARIES), BUT MAY NOT BE OFFERED OR SOLD IN TAIWAN EXCEPT TO QUALIFIED INVESTORS VIA A TAIWAN LICENSED INTERMEDIARY. ANY SUBSCRIPTIONS OF BONDS SHALL ONLY BECOME EFFECTIVE UPON ACCEPTANCE BY THE ISSUER OR THE RELEVANT DEALER OUTSIDE TAIWAN AND SHALL BE DEEMED A CONTRACT ENTERED INTO IN THE JURISDICTION OF INCORPORATION OF THE ISSUER OR RELEVANT DEALER, AS THE CASE MAY BE, UNLESS OTHERWISE SPECIFIED IN THE SUBSCRIPTION DOCUMENTS RELATING TO THE BONDS SIGNED BY THE INVESTORS.

NOTICE TO INVESTORS JAPAN

THE BONDS HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE FINANCIAL INSTRUMENTS AND EXCHANGE ACT OF JAPAN (NO. 25 OF 1948, AS AMENDED, THE "FIEA"). NEITHER THE BONDS NOR ANY INTEREST THEREIN MAY BE OFFERED OR SOLD, DIRECTLY OR INDIRECTLY, IN JAPAN OR TO, OR FOR THE BENEFIT OF, ANY "RESIDENT" OF JAPAN (AS DEFINED UNDER ITEM 5, PARAGRAPH 1, ARTICLE G OF THE FOREIGN EXCHANGE AND FOREIGN TRADE ACT (ACT NO. 228 OF 1949, AS AMENDED)), OR TO OTHERS FOR RE-OFFERING OR RESALE, DIRECTLY OR INDIRECTLY, IN JAPAN OR TO, OR FOR THE BENEFIT OF, ANY RESIDENT OF JAPAN, EXCEPT PURSUANT TO AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF, AND OTHERWISE IN COMPLIANCE WITH, THE FIEA AND ANY OTHER APPLICABLE LAWS, REGULATIONS AND MINISTERIAL GUIDELINES OF JAPAN.

THE PRIMARY OFFERING OF THE BONDS AND THE SOLICITATION OF AN OFFER FOR ACQUISITION THEREOF HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER PARAGRAPH 1, ARTICLE 4 OF THE FIEA. AS IT IS A PRIMARY OFFERING, IN JAPAN, THE BONDS MAY ONLY BE OFFERED, SOLD, RESOLD OR OTHERWISE TRANSFERRED, DIRECTLY OR INDIRECTLY TO, OR FOR THE BENEFIT OF CERTAIN QUALIFIED INSTITUTIONAL INVESTORS AS DEFINED IN THE FIEA ("QIIS"). A QII WHO PURCHASED OR OTHERWISE OBTAINED THE BONDS CANNOT RESELL OR OTHERWISE TRANSFER THE BONDS IN JAPAN TO ANY PERSON EXCEPT ANOTHER QII.

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SUMMARY STATEMENT

This Summary Statement is subject in all respects to the more complete information contained in this Official Statement. The offering of the Bonds to potential investors is made only by means of this entire Official Statement, including the Schedules and Appendices hereto. No one is authorized to detach this Summary Statement from this Official Statement or to otherwise use it without this entire Official Statement (including the Schedules and Appendices). Certain defined terms used in this Summary Statement are defined elsewhere in this Official Statement.

Appendices). Certain defined t	cerns used in this Summary Statement are defined elsewhere in this Official Statement.
ISSUER	Texas Public Finance Authority.
OFFERING	State of Texas General Obligation and Refunding Bonds, Taxable Series 2020 (the "Bonds"), in the aggregate principal amount of \$472,470,000.
MATURITY	The Bonds in the aggregate principal amount of \$404,545,000 mature serially in varying amounts on October 1 of each year from 2020 through and including 2035 and as Term Bonds maturing on October 1 in the year 2039, in the aggregate principal amount of \$67,925,000. See "DESCRIPTION OF THE BONDS – Redemption."
INTEREST	Interest on the Bonds will accrue from the Date of Delivery and will be payable on April 1 and October 1 of each year, commencing October 1, 2020, until maturity or prior redemption. See "DESCRIPTION OF THE BONDS."
REDEMPTION	The Bonds maturing on and after October 1, 2031, are subject to redemption at the option of the Authority, in whole or in part, from time to time, in principal amounts of \$5,000 or any integral multiple thereof, in such manner as the Authority may select, on October 1, 2030, or on any date thereafter, at a redemption price equal to par plus accrued interest from the most recent interest payment date to the date fixed for redemption. See "DESCRIPTION OF THE BONDS – Redemption." In addition, the Term Bonds (as defined herein) are subject to mandatory sinking fund redemption as further described herein. See "DESCRIPTION OF THE BONDS – Redemption."
BOOK-ENTRY-ONLY SYSTEM	The Bonds are initially issuable only to Cede & Co., the nominee of The Depository Trust Company, New York, New York ("DTC"), pursuant to a book-entry-only system (as described herein). No physical delivery of the Bonds will be made to the beneficial owners of the Bonds. Interest on and principal of the Bonds will be paid to Cede & Co., which will distribute the payments to the participating members of DTC for remittance to the beneficial owners of the Bonds. See "APPENDIX C – Book-Entry-Only System."
PURPOSE	Proceeds of the Bonds will be used (i) by the Cancer Prevention and Research Institute of Texas ("CPRIT") to make grants for cancer research and prevention and pay for the operation of CPRIT, as authorized by the Constitutional Provision, (ii) to refund certain outstanding general obligation commercial paper notes of the State issued by the Authority (the "Refunded Notes") for CPRIT, as further identified on Schedule I attached hereto, (iii) to refund certain outstanding bonds of the State issued by the Authority (the "Refunded Bonds"), as further identified on Schedule II attached hereto, in order to provide debt service savings and (iv) to pay the costs of issuing the Bonds. See "PLAN OF FINANCE."
SOURCE OF PAYMENT	The Bonds are general obligations of, and are secured by the full faith and credit of, the State of Texas (the "State"), issued under the applicable Authorizing Law and the Bond Resolution. See "DESCRIPTION OF THE BONDS – Source of Payment."
RATINGS	Moody's Investors Service, Inc. and S&P Global Ratings, a division of S&P Global Inc., have assigned ratings of "Aaa" and "AAA," respectively, to the Bonds. See "RATINGS."

LEGALITY	The issuance of the Bonds is subject to the approval of the Attorney General of the
	State and the opinions of Norton Rose Fulbright US LLP, Dallas, Texas and Bates &
	Coleman, P.C., Houston, Texas, Co-Bond Counsel, as to the validity of the issuance
	of the Bonds under the Constitution and laws of the State. See "LEGAL MATTERS."

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OFFICIAL STATEMENT

relating to

TEXAS PUBLIC FINANCE AUTHORITY

\$472,470,000 State of Texas General Obligation and Refunding Bonds, Taxable Series 2020

INTRODUCTION

General

This Official Statement, including the cover page, Schedules and the Appendices hereto, provide certain information regarding the issuance by the Texas Public Finance Authority (the "Authority" or "Issuer") of its \$472,470,000 "Texas Public Finance Authority State of Texas General Obligation and Refunding Bonds, Taxable Series 2020" (the "Bonds"). Capitalized terms used in this Official Statement and not otherwise defined herein shall have the meaning assigned in the Bond Resolution (defined below).

The summaries of documents contained herein do not purport to be complete and are qualified in their entirety by reference to the respective documents. Copies of documents relating to the Authority may be obtained from the Executive Director, Texas Public Finance Authority, 300 W. 15th Street, Suite 411, Austin, Texas 78701, (512) 463-5544.

This Official Statement speaks only as of its date, except the Bond Appendix (defined below), State CAFR (defined below) and any notice incorporated as described under "Appendix A – The State of Texas" which speaks as of the date of their issuance. The information contained herein is subject to change. A copy of this Official Statement will be submitted to the Municipal Securities Rulemaking Board through its Electronic Municipal Market Access ("EMMA") system. See "CONTINUING DISCLOSURE OF INFORMATION" for a description of the Authority's and the Comptroller's respective undertakings to provide certain information on a continuing basis.

Security

The Bonds are general obligations of the State, secured by the full faith and credit of the State and issued pursuant to the Authorizing Law (as defined below), including the Constitutional Provision which provides that, while any of the Bonds or interest on the Bonds is outstanding and unpaid, from the first money coming into the State treasury in each fiscal year not otherwise appropriated by the State Constitution, an amount sufficient to pay the principal of and interest on the Bonds that mature or become due during the fiscal year and to make payments that become due under any Bond Enhancement Agreements (hereinafter defined) during the fiscal year is appropriated, less the amount in the Interest and Sinking Fund at the close of the previous fiscal year. The funds that become available for payment of the Bonds pursuant to the Constitutional Provision are the sole security for the payment of the Bonds.

The Authority has reserved the right to enter into Bond Enhancement Agreements from time to time, subsequent to the issuance of the Bonds. However, the Authority does not currently expect to enter into any Bond Enhancement Agreements in connection with the issuance of the Bonds. See "DESCRIPTION OF THE TRANSACTION DOCUMENTS – The Bond Resolution."

PLAN OF FINANCE

Authority for Issuance

The Bonds are being issued in accordance with the Constitution and general laws of the State, including Article III, Section 67 of the State Constitution (the "Constitutional Provision"); Chapter 1232, Texas Government Code, as amended (the "Texas Public Finance Authority Act"); Chapters 1207 and 1371, Texas Government Code, as amended,

and Chapter 102, Texas Health and Safety Code, as amended (the Constitutional Provision, the Texas Public Finance Authority Act and any rules promulgated by the Authority thereunder, and the other statutes cited above together constituting the "Authorizing Law"), and additionally pursuant to the bond resolution (the "Resolution") adopted by the Board of Directors of the Authority (the "Board") on March 5, 2020. As permitted by Chapters 1207 and 1371, Texas Government Code, as amended, the Board, in the Resolution, delegated to certain designated officials (the "Pricing Committee") the authority to establish and approve the final terms of sale of the Bonds through the execution of a "Pricing Certificate," which Pricing Certificate was finalized and executed in connection with the sale of the Bonds (the Resolution and the Pricing Certificate are jointly referred to herein as the "Bond Resolution"). Additionally, on July 18, 2019, the Texas Bond Review Board (the "Bond Review Board") approved the issuance of general obligation commercial paper notes of the State issued by the Authority for the Cancer Prevention and Research Institute of Texas ("CPRIT") in a maximum aggregate amount of \$250,000,000 during fiscal year 2020 (the "CP Authorization"). The Authority may utilize the CP Authorization from the date of this Official Statement through the Date of Delivery of the Bonds.

Purpose

Proceeds of the Bonds will be used (i) by CPRIT to make grants for cancer research and prevention and pay for the operation of CPRIT, as authorized by the Constitutional Provision, (ii) to refund certain outstanding general obligation commercial paper notes of the State issued by the Authority (the "Refunded Notes") for CPRIT, as further identified on Schedule I attached hereto, (iii) to refund certain outstanding bonds of the State issued by the Authority (the "Refunded Bonds" and together with the Refunded Notes, the "Refunded Obligations"), as further identified on Schedule II attached hereto, in order to provide debt service savings and (iv) to pay the costs of issuing the Bonds.

Payment of Refunded Notes

The principal of and interest due on the Refunded Notes are to be paid on the maturity dates of such Refunded Notes from funds to be deposited with the Texas Treasury Safekeeping Trust Company (the "Escrow Agent") in accordance with the Escrow Agreement for the Refunded Obligations (the "Escrow Agreement") between the Authority and the Escrow Agent. A portion of the proceeds of the sale of the Bonds, together with other lawfully available funds of the Authority, will be deposited with the Escrow Agent in an amount necessary to accomplish the discharge, defeasance and final payment of the Refunded Notes. Such funds will be held by the Escrow Agent in a separate escrow account for the Refunded Notes (the "Refunded Notes Escrow Fund") and used to pay the Refunded Notes at maturity. Under the Escrow Agreement, the Refunded Notes Escrow Fund is irrevocably pledged to the payment of the principal of and interest on the Refunded Notes. All of the Refunded Notes will be paid on their respective maturity dates, as further identified on Schedule I attached hereto.

By the deposit of cash with the Escrow Agent pursuant to the Escrow Agreement, the Authority will have entered into firm banking and financial arrangements for the discharge, defeasance and final payment of the Refunded Notes in accordance with applicable law and the terms of the resolution authorizing their issuance. Co-Bond Counsel will render an opinion to the effect that, in reliance upon the sufficiency certificate of the Authority's financial advisor described below, and as a result of such firm banking and financial arrangements, such Refunded Notes will be deemed to be no longer outstanding except for the purpose of receiving the funds provided therefor by, and are secured solely by and payable solely from, the Refunded Notes Escrow Fund pursuant to the Escrow Agreement and the Authority will have no further responsibility with respect to amounts available in the Refunded Notes Escrow Fund.

The Authority's financial advisor will provide a sufficiency certificate which Co-Bond Counsel will rely upon as to the sufficiency of funds to be deposited with the Escrow Agent for the discharge, defeasance and final payment of the Refunded Notes.

Payment of Refunded Bonds

The principal of and interest due on the Refunded Bonds are to be paid on the scheduled Interest Payment Dates and redemption date of such Refunded Bonds from funds to be deposited in a separate special escrow account for the Refunded Bonds (the "Refunded Bonds Escrow Fund") held with the Escrow Agent in accordance with the Escrow Agreement. A portion of the proceeds of the sale of the Bonds, together with other lawfully available funds of the Authority, if any, will be deposited with the Escrow Agent and invested in Government Obligations (the "Escrowed Securities"). The Escrowed Securities will be sufficient together with uninvested funds to pay, when due, the principal

of and interest on the Refunded Bonds on their redemption date. See "SCHEDULE II – Schedule of Refunded Bonds" for additional information concerning the Refunded Bonds.

The accuracy of the mathematical computations of the adequacy of the maturing principal of and interest on the Escrowed Securities, together with the uninvested funds, to provide for the payment of the Refunded Bonds will be verified by Robert Thomas CPA, LLC (the "Verification Agent"). See "LEGAL MATTERS – Verification of Mathematical Computations" herein. Money or Escrowed Securities on deposit in the Escrow Fund held by the Escrow Agent will not be available to pay debt service on the Bonds.

By the deposit of cash and Escrowed Securities with the Escrow Agent pursuant to the Escrow Agreement, the Authority will have entered into firm banking and financial arrangements for the discharge, defeasance and final payment of the Refunded Bonds in accordance with applicable law and the terms of the resolution authorizing their issuance. Co-Bond Counsel will render an opinion to the effect that, in reliance upon the Verification Agent and as a result of such firm banking and financial arrangements, such Refunded Bonds will be deemed to be no longer outstanding except for the purpose of receiving the funds provided in escrow therefor.

Sources and Uses of Funds

The proceeds from the sale of the Bonds, together with other lawfully available funds of the Authority, will be applied approximately as follows:

Sources of Funds	
Principal Amount of the Bonds	\$472,470,000.00
Original Issue Premium	18,669,407.15
Authority Contribution	2,205,000.00
Authority Contribution – Interest on Refunded Notes	1,334,463.27
Total	\$494,678,870.42
Uses of Funds	
Deposit to Project Fund	\$115,000,000.00
Deposit to Refunded Bonds Escrow Fund	128,107,013.77
Deposit to Refunded Notes Escrow Fund ⁽¹⁾	249,359,463.27
Costs of Issuance ⁽²⁾	2,212,393.38
Total	\$494,678,870.42

⁽¹⁾ Includes interest expense payable on the Refunded Notes from the Authority contribution and the interest component on certain Refunded Notes estimated to mature on various maturity dates after the Date of Delivery of the Bonds at an estimated maximum interest rate of 10%. See "SCHEDULE I – Schedule of Refunded Notes."

DESCRIPTION OF THE BONDS

General

The Bonds are dated the Date of Delivery, and mature on October 1 in each of the years and in the amounts and will bear interest at the per annum rates shown on page ii hereof. Interest on the Bonds will accrue from the Date of Delivery, will be payable on April 1 and October 1 of each year, commencing October 1, 2020, until maturity or prior redemption, and will be calculated on the basis of a 360-day year consisting of twelve 30-day months. The Bonds will be issued only as fully registered bonds, without coupons, in any integral multiple of \$5,000 principal amount within a maturity.

If the specified date for any payment on the Bonds is a Saturday, Sunday, or legal holiday or equivalent (other than a moratorium) for banking institutions in the City of New York, New York or in the City of Austin, Texas, the designated payment office for the Paying Agent/Registrar for the Bonds (the "Designated Payment Office"), such payment may

⁽²⁾ Includes Underwriters' Discount.

be made on the next succeeding day that is not one of the foregoing days without additional interest and with the same force and effect as if made on the specified date for such payment.

Source of Payment

The Bonds are general obligations of the State, secured by the full faith and credit of the State and issued pursuant to the Authorizing Law, including the Constitutional Provision which provides that, while any of the Bonds or interest on the Bonds is outstanding and unpaid, from the first money coming into the State treasury in each fiscal year not otherwise appropriated by the State Constitution, an amount sufficient to pay the principal of and interest on the Bonds that mature or become due during the fiscal year and to make payments that become due under any Bond Enhancement Agreements during the fiscal year is appropriated, less the amount in the Interest and Sinking Fund at the close of the previous fiscal year. The funds that become available for payment of the Bonds pursuant to the Constitutional Provision are the sole security for the payment of the Bonds.

The Authority has reserved the right to enter into Bond Enhancement Agreements (hereinafter defined), from time to time, subsequent to the issuance of the Bonds. However, the Authority does not currently expect to enter into any Bond Enhancement Agreements in connection with the issuance of the Bonds. See "DESCRIPTION OF THE TRANSACTION DOCUMENTS – The Bond Resolution."

Flow of Funds

Under the terms of the Bond Resolution, the Authority will create or confirm the following funds for the Bonds: (i) an Interest and Sinking Fund, (ii) a Project Fund, and (iii) a Costs of Issuance Fund. The Escrow Fund will be created by the Escrow Agent pursuant to the Escrow Agreement.

Pursuant to the Bond Resolution, the Authority will deposit or cause to be deposited into the Interest and Sinking Fund an amount that is sufficient (together with any other funds on deposit therein) to provide for the timely payment of the Bond Obligations, from funds that are available for such purpose under the Constitutional Provision, not later than the second (2nd) Business Day preceding each date on which any such Bond Obligations come due. The Authority may make any such deposit on an earlier date so long as such date is not earlier than the 50th day before the date that the Bond Obligations for which such deposit is made comes due. If, on any date that funds in the Interest and Sinking Fund are required (pursuant to the Bond Resolution) to be withdrawn for the payment of Bond Obligations, the Interest and Sinking Fund does not contain sufficient funds for such purpose, an amount of immediately available funds sufficient (together with the funds then on deposit in such Interest and Sinking Fund) to pay such Bond Obligations will be transmitted to the appropriate payee(s) for such purpose from funds made available under the Constitutional Provision, at such time as will cause such Bond Obligations to be timely paid.

The costs of issuance for the Bonds will be paid from the Costs of Issuance Fund. Any money on deposit in the Costs of Issuance Fund after all Costs of Issuance have been paid will be deposited into the Interest and Sinking Fund.

Money held in the Funds pursuant to the Bond Resolution may be invested and reinvested by the Comptroller in Eligible Investments.

All money required to be deposited into the Escrow Fund will be, on the Date of Delivery of the Bonds, immediately paid to the Escrow Agent for the account of the Authority pursuant to the Escrow Agreement. The Authority anticipates that the money or Escrowed Securities (as defined in the Escrow Agreement) initially deposited into the Escrow Fund will be sufficient to pay the principal of and interest on the respective Refunded Obligations on the redemption dates therefor.

Defaults and Remedies

If the Authority defaults in the payment of the principal of or interest on the Bonds or the redemption price on the Bonds when due, or if it fails to make payments into any Fund or Funds created in the Bond Resolution, or defaults in the observation or performance of any other covenants, conditions, or obligations set forth in the Bond Resolution, the Bond Owners may seek a writ of mandamus to compel Authority officials to carry out their legally imposed duties with respect to the Bonds, if there is no other available remedy at law to compel performance of the Bonds or Bond Resolution and the Authority's obligations are not uncertain or disputed. The issuance of a writ of mandamus is

controlled by equitable principles and such remedy rests with the discretion of the court, but may not be arbitrarily refused. There is no acceleration of maturity of the Bonds in the event of default and, consequently, the remedy of mandamus may have to be relied upon from time to time. The Bond Resolution does not provide for the appointment of a trustee to represent the interest of the Bond Owners upon any failure of the Authority to perform in accordance with the terms of the Bond Resolution or upon any other condition; accordingly, all legal actions to enforce such remedies would have to be undertaken at the initiative of, and be financed by, the Bond Owners. The opinions of Co-Bond Counsel will note that the rights of the Bond Owners are subject to applicable provisions of bankruptcy, reorganization and other similar matters affecting the rights of creditors generally, and may be limited by general principles of equity that permit the exercise of judicial discretion.

Transfer, Exchange, and Registration

Upon surrender for transfer of any Bond at the Designated Payment Office, the Authority will execute, and the Paying Agent/Registrar (initially the Authority) will authenticate and deliver, in the name of the designated transferee, one or more new fully registered Bonds of the same Stated Maturity, of any authorized denominations, and of a like aggregate principal amount. At the option of the Holder, Bonds may be exchanged for other Bonds of the same Stated Maturity, of any authorized denominations, and of like aggregate principal amount, upon surrender of the Bonds to be exchanged at the place of payment for the Bonds. Whenever any Bonds are so surrendered for exchange, the Authority will execute, and the Paying Agent/Registrar will authenticate and deliver the Bonds, which the Holder of Bonds making the exchange is entitled to receive. Every Bond presented or surrendered for transfer or exchange will be duly endorsed or accompanied by a written instrument of transfer in form satisfactory to the Authority and the Paying Agent/Registrar duly executed, by the Holder thereof or his attorney duly authorized in writing. No service charge will be made to the Holder for any registration, transfer, or exchange of Bonds, but the Authority or the Paying Agent/Registrar may require payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in connection with any transfer or exchange of Bonds.

Limitation on Transfer

The Paying Agent/Registrar will not be required to transfer or exchange any Bond: (i) between a Record Date and the related Interest Payment Date; (ii) during the 30-day period preceding the maturity date of such Bond; or (iii) which has been selected for redemption in whole or in part.

Record Date for Interest Payment

The regular record date ("Record Date") for determining the party entitled to the receipt of the interest payable on the Bonds on any interest payment date means the fifteenth day of the month immediately preceding each interest payment date.

The interest payable on, and paid or duly provided for on or within ten days after, any interest payment date will be paid to the person in whose name a Bond (or one or more predecessor Bonds evidencing the same debt) is registered at the close of business on the Record Date for such interest. Any such interest not so paid or duly provided for will cease to be payable to the person in whose name such Bond is registered on such Record Date, and will be paid to the person in whose name such Bond (or one or more predecessor Bonds) is registered at the close of business on a special Record Date for the payment of such defaulted interest to be fixed by the Paying Agent/Registrar, notice whereof being given to the Holders of the Bond not less than 15 days prior to the special Record Date.

Redemption

Optional Redemption

The Bonds scheduled to mature on and after October 1, 2031 are subject to redemption prior to maturity at the option of the Authority on October 1, 2030 or on any date thereafter, in whole or in part from time to time, in principal amounts of \$5,000 or any integral multiple thereof (and, if in part within a maturity, the particular Bonds or portion thereof to be redeemed will be selected by the Paying Agent/Registrar) at a redemption price of par plus accrued interest from the most recent interest payment date to the date fixed for redemption.

Notice of Redemption

Notice of any redemption identifying the Bonds to be redeemed in whole or in part is required to be given by the Paying Agent/Registrar not less than 30 days nor more than 45 days prior to the date fixed for redemption by sending notice to the Depository Trust Company, New York, New York ("DTC") (or any successor securities depository for the Bonds) so long as a book-entry-only registration ("Book-Entry-Only System") is used for the Bonds. If the Bonds subsequently are issued in certificate form, notice of redemption will be sent by United States mail, first class postage prepaid, to the registered owners of the Bonds to be redeemed in whole or in part at the address shown in the registration books kept by the Paying Agent/Registrar. See "APPENDIX C – Book-Entry-Only System" herein.

Each notice of redemption will state the redemption date, the redemption price, the place at which such Bonds are to be surrendered for payment and, if less than all Bonds outstanding are to be redeemed, the number of the Bonds or portions thereof to be redeemed.

Any notice of redemption so mailed as provided in the Bond Resolution will be conclusively presumed to have been duly given, whether or not the Bond Owner receives such notice by the date fixed for redemption, and due provisions shall be made with the Paying Agent/Registrar for payment of the redemption price of the Bonds or portions thereof to be redeemed. When the Bonds have been called for redemption, in whole or in part, and notice of redemption has been given as provided in the Bond Resolution, the Bonds or portions thereof so redeemed shall no longer be regarded as outstanding, except for the purpose of receiving payment solely from the funds so provided for redemption, and interest that would otherwise accrue after the redemption date on any Bond or portion thereof called for redemption shall terminate on the date fixed for redemption.

With respect to any redemption of the Bonds, unless certain prerequisites to such redemption required by the Bond Resolution have been met and money sufficient to pay the principal of and premium, if any, and interest on the Bonds to be redeemed will have been received by the Paying Agent/Registrar prior to the giving of such notice of redemption, such notice will state that said redemption may, at the option of the Authority, be conditional upon the satisfaction of such prerequisites and receipt of such money by the Paying Agent/Registrar on or prior to the date fixed for such redemption, or upon any prerequisite set forth in such notice of redemption. If a conditional notice of redemption is given and such prerequisites to the redemption are not fulfilled, such notice will be of no force and effect, the Authority will not redeem such Bonds, and the Paying Agent/Registrar will give notice in the manner in which the notice of redemption was given, to the effect that the Bonds have not been redeemed.

Mandatory Redemption

The Bonds maturing on October 1 in the year 2039 (the "Term Bonds"), are subject to mandatory sinking fund redemption prior to their scheduled maturity, and will be redeemed by the Authority, in part at a redemption price equal to the principal amount thereof, without premium, plus interest accrued to the redemption date, on the dates and in the principal amounts shown in the following schedule:

Term Bonds Waturing	OCIOOCI 1, 2039
Mandatory	Principal
Redemption	<u>Amount</u>
October 1, 2036	\$17,975,000
October 1, 2037	17,975,000
October 1, 2038	17,975,000
October 1, 2039*	14,000,000

Term Bonds Maturing October 1, 2039

Approximately forty-five (45) days prior to each mandatory redemption date for the Term Bonds, the Paying Agent/Registrar shall select by lot or by any other customary method that results in a random selection the specific Term Bonds (or with respect to Term Bonds having a denomination in excess of \$5,000, each \$5,000 portion thereof) within the applicable Stated Maturity to be redeemed on the next following October 1 from moneys set aside for that purpose in the Interest and Sinking Fund with respect thereto. Any Term Bonds not selected for prior redemption shall be paid on the date of their Stated Maturity.

^{*}Stated Maturity.

The principal amount of Term Bonds required to be redeemed on any redemption date pursuant to the foregoing mandatory sinking fund redemption provisions hereof shall be reduced, at the option of the Authority, by the principal amount of any Bonds which, at least 45 days prior to the mandatory sinking fund redemption date (i) shall have been acquired by the Authority at a price not exceeding the principal amount of such Bonds plus accrued interest to the date of purchase thereof, and delivered to the Paying Agent/Registrar for cancellation, or (ii) shall have been redeemed pursuant to the optional redemption provisions hereof and not previously credited to a mandatory sinking fund redemption.

Purchase in Lieu of Redemption

Any money held in the Interest and Sinking Fund for application to the redemption of the Bonds may instead be applied, at the Authority's discretion, to purchase one or more Bonds of the same maturity as those Bonds for the redemption of which such money is held if:

- (1) the total cost to effect such purchase that is to be paid with such money (including brokerage and other charges) is less than the amount of the Bond Obligations owing on the purchased Bonds on the purchase date:
- (2) such purchase is consummated before notice of such redemption is given to the Bond Owners; and
- (3) upon such purchase, the Bond(s) so purchased are surrendered to the Paying Agent/Registrar for cancellation.

An amount of money equal to the principal amount of the Bonds so purchased shall be credited toward the particular redemption of Bonds for which such money was held.

Redemption Through DTC

The Paying Agent/Registrar, so long as a book-entry-only system is used for the Bonds, will send any notice of redemption (with respect to the Bonds), notice of proposed amendment to the Bond Resolution, or other notices with respect to the Bonds only to the DTC. Any failure by DTC to advise any Direct Participant (defined herein), or of any Direct Participant or Indirect Participant (defined herein) to notify the Beneficial Owner (defined herein), will not affect the validity of the redemption of the Bonds called for redemption or any other action premised on any such notice. Redemption of portions of the Bonds by the Authority will reduce the outstanding principal amount of such Bonds held by DTC. In such event, DTC may implement, through its Book-Entry-Only System, a redemption of such Bonds held for the account of Direct Participants in accordance with its rules or other agreements with Direct Participants and then Direct Participants and Indirect Participants may implement a redemption of such Bonds from the Beneficial Owners. Any such selection of Bonds to be redeemed will not be governed by the Bond Resolution and will not be conducted by the Authority as Paying Agent/Registrar. Neither the Authority nor the Paying Agent/Registrar will have any responsibility to Direct Participants, Indirect Participants, or the persons for whom Direct Participants act as nominees, with respect to the payments on the Bonds or the providing of notice to Direct Participants, Indirect Participants, or Beneficial Owners of the selection of portions of the Bonds for redemption. See "DESCRIPTION OF THE BONDS – Book-Entry-Only System" herein.

Book-Entry-Only System

In reading this Official Statement, it should be understood that while the Bonds are in the Book-Entry-Only System, references in other sections of this Official Statement to Registered Owners should be read to include the person for which the Direct Participant or Indirect Participant acquires an interest in the Bonds, but (i) all rights of ownership must be exercised through DTC and the Book-Entry-Only System, and (ii) except as described above, notices that are to be given to Registered Owners under the Bond Resolution will be given only to DTC. See "APPENDIX C – BOOK-ENTRY-ONLY SYSTEM."

THE PAYING AGENT/REGISTRAR, SO LONG AS THE DTC BOOK-ENTRY SYSTEM IS USED FOR THE BONDS, WILL SEND ANY NOTICE OF PROPOSED AMENDMENT TO THE BOND RESOLUTION OR OTHER NOTICES WITH RESPECT TO SUCH BONDS ONLY TO DTC. ANY FAILURE BY DTC TO ADVISE ANY DTC PARTICIPANT OR OF ANY DIRECT PARTICIPANT OR INDIRECT PARTICIPANT TO NOTIFY

THE BENEFICIAL OWNERS, OF ANY NOTICES AND THEIR CONTENTS OR EFFECT WILL NOT AFFECT ANY ACTION PREMISED ON ANY SUCH NOTICE. NEITHER THE AUTHORITY NOR THE PAYING AGENT/REGISTRAR WILL HAVE ANY RESPONSIBILITY OR OBLIGATION TO DIRECT PARTICIPANTS, INDIRECT PARTICIPANTS, OR THE PERSONS FOR WHOM DTC PARTICIPANTS ACT AS NOMINEES, WITH RESPECT TO THE PAYMENTS ON THE BONDS OR THE PROVIDING OF NOTICE TO DIRECT PARTICIPANTS, INDIRECT PARTICIPANTS, OR BENEFICIAL OWNERS.

THE AUTHORITY

General

Under the Texas Public Finance Authority Act, the Authority's power is limited to financing and refinancing project costs for State agencies and institutions and does not affect the power of the relevant State agency or institution to carry out its statutory authority, including the authority of such agency or institution to construct buildings. The Texas Public Finance Authority Act directs State agencies and institutions to carry out their authority regarding projects financed by the Authority as if the projects were financed by legislative appropriation.

Pursuant to the Texas Public Finance Authority Act and other applicable State law, the Authority issues general obligation bonds and revenue bonds for designated State agencies (including certain institutions of higher education). In addition, the Authority currently administers four commercial paper programs, namely: the Master Lease Purchase Program, which is primarily for financing equipment acquisitions and facilities construction; a general obligation commercial paper program for certain State government construction projects; a general obligation commercial paper program for CPRIT; and a revenue commercial paper program for the Texas Facilities Commission. In addition, in 2003, the Authority created a nonprofit corporation to finance projects for eligible charter schools pursuant to Chapter 53, Texas Education Code.

The Authority has issued revenue bonds on behalf of the Texas Parks & Wildlife Department, the Texas Facilities Commission, the Texas State Preservation Board, the Texas Department of Criminal Justice, the Texas Health & Human Services Commission (which includes the Texas Department of State Health Services and the Texas Department of Health), the Texas Workforce Commission, the Texas State Technical College System, the Texas Military Department, the Texas Historical Commission, Midwestern State University, Texas Southern University, Stephen F. Austin State University and the Texas Windstorm Insurance Association. It has also issued general obligation bonds for the Texas Parks & Wildlife Department, the Texas Facilities Commission, the Texas Department of State Health Services, the Texas Department of Criminal Justice, the Texas Department of Aging and Disability Services, the Texas Department of Public Safety, the Texas Juvenile Justice Department (formerly Texas Youth Commission and Texas Juvenile Probation Commission), the Texas National Research Laboratory Commission, the Texas Historical Commission, the Texas School for the Blind and Visually Impaired, the Texas School for the Deaf, the Texas Department of Agriculture, the Texas Military Department (formerly Adjutant General's Department and Texas Military Facilities Commission), the Texas Department of Transportation, the Texas Military Preparedness Commission, and CPRIT.

Before the Authority may issue bonds for the acquisition or construction of a building, the Texas Legislature (the "Legislature") must have authorized the specific project for which the bonds or other obligations are to be issued and the estimated cost of the project or the maximum amount of bonded indebtedness that may be incurred by the issuance of bonds. The Texas Supreme Court, in *Texas Public Building Authority v. Mattox, 686 S. W. 2d 924* (1985), ruled that revenue bonds issued by the Authority do not constitute debt of the State within the meaning of the State Constitution. As set forth in the Texas Public Finance Authority Act, revenue obligations issued thereunder are not a debt of the State or any State agency, political corporation or political subdivision of the State and are not a pledge of the full faith and credit of any of them.

Authority Executives

The Authority is currently governed by a Board, which is composed of seven members appointed by the Governor of the State with the advice and consent of the State Senate. The Governor designates one member to serve as Chair at the will of the Governor. Board members whose terms have expired continue to serve on the Board until a successor therefor has qualified for office. The current members of the Board, the office held by each member and the date on which each member's term expires are as follows:

Name	Position	(February 1)
Billy M. Atkinson, Jr.	Chair	2023
Ramon Manning	Member	2021
Rodney K. Moore	Member	2021
Shanda G. Perkins	Member	2025
Brendan Scher	Member	2025
Benjamin E. Streusand	Member	2025
Joseph E. Williams	Member	2023

The Authority generally employs approximately 14 employees, including an Executive Director, a General Counsel, a Deputy Director, and a Director of Business Administration. The Executive Director is charged with managing the affairs of the Authority, subject to and under the direction of the Board.

Lee Deviney, Executive Director. The Authority Board appointed Mr. Deviney as the Executive Director of the Texas Public Finance Authority on June 5, 2014. Mr. Deviney previously served as the Chief Financial Officer of the Texas Economic Development and Tourism Office within the Office of the Governor since September 1, 2011. He has previously held similar positions at the Texas Lottery Commission and the Texas Education Agency and he previously served as Assistant Commissioner for Finance and Agribusiness Development for the Texas Department of Agriculture ("TDA"). Prior to his appointment as an Assistant Commissioner at TDA, Mr. Deviney served as Interim Executive Director and Director of Operations for the Authority and he was a Budget Examiner for the Texas Legislative Budget Board. Mr. Deviney has a Bachelor's degree in Economics from The University of Texas at Austin and a Master's degree in Business Administration from St. Edwards University.

John Hernandez, Deputy Director. Mr. Hernandez leads the Finance and Accounting Team, which is responsible for debt service budgeting, arbitrage rebate compliance, the State of Texas Master Lease Program, general ledgers, financial reporting, and information technology. Mr. Hernandez and his team also provide support for new debt issuance of fixed rate and variable rate debt. Mr. Hernandez holds a B.A. in finance from St. Edwards University in Austin.

Pamela Scivicque, Director, Business Administration. Ms. Scivicque joined the staff of the Authority in 1990. She is currently responsible for legislative reporting, procurement, accounting, budgeting and risk and property management. Ms. Scivicque attended Texas State University, Texas Tech's Southwest School of Governmental Finance, the Texas Fiscal Officers' Academy ("TFOA") and the Governor's Executive Development Program. She has served on numerous statewide committees, including TFOA's curriculum committee, and is a member of the Texas State Business Administrators' Association where she previously served as President in 2006.

Kevin Van Oort, General Counsel. Mr. Van Oort was hired as the Authority's General Counsel on September 2, 2014. Previously, Mr. Van Oort served as Senior Tax Counsel for the Office of the Texas Attorney General; Deputy General Counsel for the Texas Comptroller of Public Accounts and General Counsel for the Texas Legislative Budget Board. Mr. Van Oort took his bachelor's degree in Economics at the University of Nebraska and his J.D. at The University of Texas.

Sunset Review

In 1977, the Legislature enacted the Texas Sunset Act (Chapter 325, Texas Government Code, as amended), which provides that virtually all agencies of the State, including the Authority, are subject to periodic review of the Legislature and that each agency subject to sunset review will be abolished unless the Legislature specifically determines to continue its existence. The next sunset review of the Authority is scheduled to occur in 2023. The Texas Public Finance Authority Act, as amended by the 82nd Legislature, provides that if the Authority is not continued in existence, the Authority will cease to exist as of September 1, 2023; however, the Texas Sunset Act also provides, unless otherwise provided by law, that the Authority will exist until September 1 of the following year (September 1, 2024) in order to conclude its business.

Pursuant to the Texas Sunset Act, the Legislature specifically recognizes the State's continuing obligation to pay bonded indebtedness and all other obligations incurred by various State agencies, including the Authority. Accordingly, in the event that a future sunset review were to result in the Authority being abolished, the Governor

would be required by law to designate an appropriate State agency to continue to carry out all covenants contained in the Bonds and in all other obligations, including lease, contract and other written obligations of the Authority. The designated State agency would provide payment from the sources of payment of the Bonds in accordance with the terms of the Bonds and would provide payment from the sources of payment of all other obligations in accordance with their terms, whether from a State general obligation pledge, revenues or otherwise, until the principal of and interest on the Bonds are paid in full and all other obligations, including lease, contract and other written obligations, are performed and paid in full.

State Audits

General. The State Auditor's Office ("SAO") is the independent auditor for Texas state government. The SAO operates with oversight from the Legislative Audit Committee, a six-member permanent standing committee of the Legislature, jointly chaired by the Lieutenant Governor and the Speaker of the House of Representatives.

The SAO is authorized, by Chapter 321, Texas Government Code, to perform financial audits, compliance audits, investigations and other special audits of any entity receiving State funds, including State agencies and higher education institutions. Audits are performed in accordance with generally accepted government auditing standards, which include standards issued by the American Institute of Certified Public Accountants, Governmental Accounting Standards Board, United States General Accounting Office or other professionally recognized entities that prescribe auditing standards.

Routine SAO Audit. The SAO performed a routine audit of the Authority's operational procedures and financial management practices in May of 2016 (SAO Report No. 16-029). Nothing in SAO Report No. 16-029 would have an adverse impact on the Bonds, the Authority's outstanding bonds or the operations of the Authority. In February 2018, the SAO published its Report No. 18-021 to provide information regarding the implementation status of recommendations made in prior audit reports, including SAO Report No. 16-029. In February of 2019, the SAO reported the Authority as fully implementing the recommendations from SAO Report No. 16-029. For additional information regarding the SAO and audits published by the SAO, visit http://www.sao.texas.gov/.

Texas Bond Review Board

With certain exceptions, bonds issued by State agencies and institutions, including bonds issued by the Authority, must be approved by the Bond Review Board prior to their issuance. The Bond Review Board is composed of the Governor, the Lieutenant Governor, the Speaker of the House of Representatives, and the Comptroller of Public Accounts. The Governor is the Chairman of the Bond Review Board. Each member of the Bond Review Board may, and frequently does, act through a designee. An application was submitted to the Bond Review Board and approved on March 27, 2020.

Retirement Plan of the Authority

The Authority participates in joint contributory retirement system of the State administered by the Employees Retirement System of Texas ("ERS"), which is operated by the State and which covers State employees and the Law Enforcement and Custodial Officers System. For more detailed information on the ERS and other State administered retirement plans, see the Bond Appendix described in "APPENDIX A — The State of Texas" attached hereto.

DESCRIPTION OF THE TRANSACTION DOCUMENTS

Selected Definitions

The following is a summary of certain defined terms of the Resolution adopted by the Board on March 5, 2020. This summary does not purport to be comprehensive or definitive and is qualified in its entirety by reference to the Bond Resolution. Copies of the Resolution are available for examination at the offices of the Authority. A reference to any of such terms in the singular number shall include the plural and vice versa.

Authority - the Texas Public Finance Authority or any successor thereto.

Authorizing Law - the Constitutional Provision, the Texas Public Finance Authority Act (Chapter 1232, Texas Government Code, as amended) and any regulations promulgated by the Authority thereunder, Chapters 1207 and 1371, Texas Government Code, as amended, and Chapter 102, Texas Health and Safety Code, as amended.

Beneficial Owner - each Person in whose name a Book-Entry Bond is recorded as the owner of a beneficial interest in such Bond by a participant in such book-entry system.

Blanket Letter of Representations - any representation letter of, or agreement delivered by, the Authority pursuant to the Bond Resolution or a prior bond resolution providing for administration of a book-entry system for the Bonds and any successive arrangements under which the Authority provides for the administration of a book-entry system for the Bonds or any other bonds.

Board - the Board of Directors of the Authority.

Bond Counsel - any law firm or firms experienced in matters relating to the issuance of tax-exempt or taxable governmental obligations, which firm or firms are engaged by the Board to render services to the Authority as bond counsel.

Bond Enhancement Agreement - means any loan agreement, revolving credit agreement, agreement establishing a line of credit, letter of credit, reimbursement agreement, insurance contract, commitment to purchase, purchase or sale agreement, interest rate swap agreement, or commitment or other agreement authorized by the Authority in connection with the authorization, issuance, sale, resale, security, exchange, payment, purchase, remarketing, or redemption of the Bonds, interest on the Bonds, or both, or as otherwise authorized by Chapter 1371, Texas Government Code, as amended.

Bond Obligations - the principal, premium, if any, and interest payment obligations of the Authority on any of the Bonds.

Bond Owner - the Person who is the registered owner of any Bond, as such ownership appears in the Register.

Bonds - the "Texas Public Finance Authority State of Texas General Obligation and Refunding Bonds, Taxable Series 2020," as further set forth in the Pricing Certificate and such other series or subseries of Bonds as may be further set forth in the Pricing Certificate as authorized by the Bond Resolution.

Book-Entry Bond - any Bond administered under a book-entry system pursuant to the Bond Resolution and the Blanket Letter of Representations.

Business Day - any day that is a day on which the Comptroller is open for business and:

- (1) while the Authority is the Paying Agent/Registrar, on which the Authority is open for business at its principal business office; or
- (2) while a Person other than the Authority is the Paying Agent/Registrar, on which financial institutions in the city where a principal corporate trust office of the Paying Agent/Registrar is located are not authorized by law or executive order to close.

Chair - the Chair of the Board, or any member of the Board authorized to act as Chair.

Closing - the concurrent delivery of the Bonds to or upon the order of the Purchasers in exchange for payment therefor.

Code - the Internal Revenue Code of 1986, as amended by all legislation, if any, enacted on or before the Date of Delivery of the Bonds.

Comptroller - the Texas Comptroller of Public Accounts or any successor thereto.

Constitutional Provision - Article III. Section 67 of the Texas Constitution.

Continuing Disclosure Agreement - means the Amended and Restated Continuing Disclosure Agreement dated March 12, 2019, between the Comptroller and the BRB, as may be further amended from time to time.

Costs of Issuance - the "costs of issuance," as provided in the Authorizing Law, incurred in connection with the issuance of the Bonds.

Costs of Issuance Fund - means the "Texas Public Finance Authority State of Texas General Obligation and Refunding Bonds Taxable Series 2020 Costs of Issuance Fund" created pursuant to the Bond Resolution.

Eligible Investments - means any securities or obligations in which the Comptroller is authorized by law to invest the money on deposit in the Funds.

Escrow Agent - means the Texas Treasury Safekeeping Trust Company, as escrow agent under the Escrow Agreement or Escrow Instructions, as applicable, and any successor thereto as permitted therein or such other qualified escrow agent as determined by the Pricing Committee in the Pricing Certificate.

Escrow Agreement - means one or more escrow agreements, if any, between the Authority and the Escrow Agent providing for the payment of the Refunded Obligations with money sufficient to pay debt services thereon, in substantially the form approved by the Pricing Certificate.

Escrow Fund - either (a) the escrow fund, created with respect to each series of the Refunded Obligations pursuant to the Escrow Agreement, if any, or (b) the escrow account for each series of the Refunded Obligations created pursuant to the Escrow Instructions, if any; such fund or account in either case to be created and held by the Escrow Agent.

Escrow Instructions - means the letter of instructions, if any, from the Authority to the Escrow Agent or Issuing and Paying Agent providing for the payment for the Refunded Obligations of money sufficient to pay debt service thereon.

Executive Director - the Executive Director of the Authority, or any member of the staff of the Authority authorized by the Board to perform the duties of the Executive Director.

Fund - any of the Funds created or confirmed by the Bond Resolution.

Funds - means collectively, the Costs of Issuance Fund, the Escrow Fund, the Interest and Sinking Fund and the Project Fund.

General Counsel - the general counsel of the Authority or any individual or firm appointed by the Board to serve in such capacity.

Government Obligations - means, unless otherwise provided in the Pricing Certificate, any of the following:

- (1) direct noncallable obligations of the United States, including obligations that are unconditionally guaranteed by the United States;
- (2) noncallable obligations of an agency or instrumentality of the United States, including obligations that are unconditionally guaranteed or insured by the agency or instrumentality and that, on the date the governing body of the Issuer adopts or approves the proceedings authorizing the issuance of refunding bonds, are rated as to investment quality by a nationally recognized investment rating firm not less than "AAA" or its equivalent;
- (3) noncallable obligations of a state or an agency or a county, municipality, or other political subdivision of a state that have been refunded and that, on the date the governing body of the Issuer adopts or approves the proceedings authorizing the issuance of refunding bonds, are rated as to investment quality by a nationally recognized investment rating firm not less than "AAA" or its equivalent; and
- (4) such other investments now or hereafter authorized by Chapter 1207, Texas Government Code, as amended, for the investment of escrow deposits.

Interest and Sinking Fund - means the "Texas Public Finance Authority State of Texas General Obligation and Refunding Bonds Taxable Series 2020 Interest and Sinking Fund" created pursuant to the Bond Resolution.

Paying Agent/Registrar - initially, the Authority, or any financial institution appointed by the Authority in accordance with the Bond Resolution as the paying agent/registrar for the Bonds.

Person - any individual, partnership, corporation, trust, or unincorporated organization or any governmental entity.

Pricing Certificate - means one or more certificates executed by the Pricing Committee that sets forth the final terms of the Bonds.

Pricing Committee - the members of the Board who are authorized to act on behalf of the Board in selling and delivering the Bonds, with any designated alternates as provided in the Bond Resolution.

Project - any costs or expenditures authorized to be financed by the Authority for CPRIT pursuant to the Authorizing Law and the Resolution.

Project Costs - any costs associated with the Projects that are authorized under the Authorizing Law to be paid with the proceeds of the Bonds.

Project Fund - means the "Texas Public Finance Authority - CPRIT Project Fund(s)" the creation of which is confirmed pursuant to the Resolution.

Purchase Contract - means the bond purchase contract between the Authority and the Purchasers pursuant to which the Bonds are sold to the Purchasers in the form approved by the Pricing Committee.

Purchasers - means the Person(s) who initially purchase the Bonds from the Authority pursuant to the Purchase Contract.

Record Date - the 15th day of the month immediately preceding each Interest Payment Date.

Refunded Bonds - means all or any portion of the Refundable Bonds actually refunded with proceeds of the Bonds as set forth in the Pricing Certificate and as further set forth in Schedule II attached to this Official Statement.

Refunded Notes - means all or any portion of the Refundable Notes actually refunded with proceeds of the Bonds as set forth in the Pricing Certificate and as further set forth in Schedule I attached to this Official Statement.

Register - the official registration records for the Bonds maintained by the Paying Agent/Registrar for the Bonds pursuant to the Bond Resolution.

Rule - Rule 15c2-12, as amended, adopted by the Securities and Exchange Commission under the Securities Exchange Act of 1934.

Securities Depository – means any Person acting as a securities depository for the Book-Entry Bonds.

State - the State of Texas.

Sufficient Assets - with respect to the Bond Obligations for any Bond or Bonds, any combination of the following:

- (1) an amount of money sufficient, without investment, to pay such Bond Obligations when due; and
- (2) Government Obligations that (a) are not redeemable prior to maturity; and (b) mature as to principal and interest in such amounts and at such times as will provide, without reinvestment, money sufficient to pay such Bond Obligations when due.

Transaction Documents - means collectively, the Bond Resolution, the Escrow Agreement, if any, the Escrow Instructions, if any, the Purchase Contract, the Pricing Certificate and the Bonds.

The Bond Resolution

The Bonds will be issued pursuant to the Bond Resolution and the following is a summary of certain provisions of the Resolution, adopted by the Board on March 5, 2020, and the Pricing Certificate. This summary does not purport to be comprehensive or definitive and is qualified in its entirety by reference to the Bond Resolution. Copies of the Bond Resolution are available for examination at the offices of the Authority. References to the singular number includes the plural and vice versa.

Security for the Bonds. The Bonds are general obligations of the State, secured by the full faith and credit of the State and issued pursuant to the Authorizing Law, including the Constitutional Provision, which provides that, while any of the Bonds or interest on the Bonds is outstanding and unpaid, from the first money coming into the State treasury in each fiscal year not otherwise appropriated by the State Constitution, an amount sufficient to pay the principal of and interest on the Bonds that mature or become due during the fiscal year and to make payments that become due under any Bond Enhancement Agreements during the fiscal year is appropriated, less the amount in the Interest and Sinking Fund at the close of the previous fiscal year. The funds that become available for payment of the Bonds pursuant to the Constitutional Provision are the sole security for the payment of the Bonds.

Ownership. A Bond Owner is deemed to be the absolute owner of the Bonds registered in the name of such Bond Owner for all purposes of determining the obligations of the Authority with respect to such Bond(s) and the Authority shall not be required to recognize the interest (beneficial or otherwise) of any other Person, notwithstanding any notice to the Authority of such Person's interest.

Transfer, Exchange, and Replacement of Bonds. For so long as the Bonds are Book-Entry Bonds, the Securities Depository will be treated as the Bond Owner for all purposes and any transfer, exchange, or replacement of a Bond will occur on the books and records of the Securities Depository.

In the event the book-entry-only system is discontinued, the transfer of a Bond will be made upon surrender of the Bond by the Bond Owner (or the Bond Owner's duly authorized attorney) to the Paying Agent/Registrar together with an endorsement or other evidence of transfer satisfactory to the Authority and the Paying Agent/Registrar. The Paying Agent/Registrar will authenticate and deliver to the transferee a new Bond of the same tenor and aggregate principal amount of the Bonds and interest rate as the surrendered Bond. A transfer will be made without charge, except that any tax or other governmental charge imposed with respect to the transfer will be paid by the transferring Bond Owner.

A Bond may be exchanged by the Bond Owner for a new Bond (each in an authorized denomination) of the same tenor and aggregate principal amount and interest rate of the Bonds upon surrender to the Paying Agent/Registrar by the Bond Owner (or the Bond Owner's duly authorized attorney) of the Bond as to which the exchange is desired. The Paying Agent/Registrar will authenticate and deliver to the surrendering Bond Owner the new Bond(s) in exchange for the surrendered Bond. The out-of-pocket expenses incurred by the Authority and the Paying Agent/Registrar in connection with making an exchange of Bonds and any tax or other governmental charge imposed with respect to the exchange will be paid by the Bond Owner.

The Paying Agent/Registrar is not required to transfer or exchange any Bond: (1) between a Record Date and the related Interest Payment Date, (2) during the 30-day period preceding the maturity date of the Bond, or (3) which has been selected for redemption in whole or in part.

At the request of the Bond Owner of a mutilated, lost, stolen, or destroyed Bond, the Bond will be replaced if, in the case of a mutilated Bond, the Bond Owner (or its duly authorized representative) surrenders the mutilated Bond to the Paying Agent/Registrar, or in the case of a lost, stolen, or destroyed Bond, the Bond Owner (1) furnishes the Authority and the Paying Agent/Registrar with evidence satisfactory to the Authority and the Paying Agent/Registrar that the loss, theft, or destruction has occurred, (2) provides indemnity or security satisfactory to the Authority and the Paying Agent/Registrar to save the Paying Agent/Registrar and the Authority harmless from any loss or damage with respect thereto, and (3) satisfies such other requirements as may reasonably be imposed by the Authority and the Paying Agent/Registrar. If a mutilated, lost, stolen, or destroyed Bond has matured or will mature within the 30-day period following the Bond Owner's request for a replacement Bond, the Bond (at the Authority's direction) may, if indemnity or security is provided as described above, be paid instead of delivering a replacement Bond. The out-of-pocket expenses incurred by the Authority and the Paying Agent/Registrar in connection with replacement of a Bond and any tax or other governmental charge imposed with respect to the replacement will be paid by the Bond Owner.

Creation of Funds. The Authority will create the following Funds for the Bonds: (i) the Interest and Sinking Fund and (ii) the Costs of Issuance Fund. The Resolution confirmed the previously created Project Fund. The Escrow Fund or Escrow Funds will be created by the Escrow Agent pursuant to the Escrow Agreement or Escrow Instructions, as applicable.

The Funds will be maintained by the Comptroller in the treasury of the State, separate from any other funds, and shall be held in trust for application as provided by the Resolution.

The Authority may also create additional funds and accounts from time to time as may be necessary or convenient to accomplish the purposes of the Resolution including the creation of additional interest and sinking funds, project funds and costs of issuance funds if more than one series of Bonds are issued.

Application of Constitutionally Appropriated Funds. The Authority will cause to be deposited into the Interest and Sinking Fund an amount sufficient (together with any other money on deposit therein) to provide for the timely payment of the Bond Obligations, from money that is available for such purpose under the Constitutional Provision, not later than the second Business Day preceding each date on which any Bond Obligations come due. The Authority may make any such deposit on an earlier date so long as such date is not earlier than the 50th day before the date the Bond Obligations for which such deposit is made come due. If, on any date that money in the Interest and Sinking Fund is required to be withdrawn for the payment of Bond Obligations, the Interest and Sinking Fund does not contain sufficient money for such purpose, an amount of immediately available money sufficient (together with money then on deposit in the Interest and Sinking Fund) to pay such Bond Obligations will be transmitted to the appropriate payee(s) for such purpose from money made available under the Constitutional Provision, at such time as will cause such Bond Obligations to be timely paid.

Application of Interest and Sinking Fund. Amounts on deposit in the Interest and Sinking Fund will be applied at such times and in such amounts as required for the timely payment of Bond Obligations. Any amounts remaining in the Interest and Sinking Fund after the defeasance of all Bond Obligations shall be transferred at the direction of the Authority in accordance with applicable law.

Application of Project Fund. The Project Fund will be applied to pay Project Costs. All interest earned on funds on deposit in the Project Fund will be available at the direction of the Authority to be maintained in the Project Fund to pay Project Costs or to be transferred to the Interest and Sinking Fund for payment of Bond Obligations next coming due, provided that once interest earnings have been transferred and deposited in the Interest and Sinking Fund, such interest earnings shall accrue therein for the benefit of the Bond Owners. If it is determined at any time that the aggregate of all funds on deposit in the Project Fund exceeds the unexpended portion of the Project Costs, then the Authority may transfer any additional interest earned on amounts in the Project Fund to the Interest and Sinking Fund for application to the next payment coming due on the Bonds, provided that the amount so transferred may not exceed the amount of such payment next coming due.

Investment of Funds. The money on deposit in any Fund may be invested and reinvested only in Eligible Investments by the Comptroller. The investments of each Fund will be made under conditions that will timely provide amounts sufficient to satisfy the purpose(s) for which such Fund is intended. The proceeds received from the disposition of any investment acquired with money from any Fund, and any income received from any such investment, are to be deposited into such Fund. Uninvested money (if any) in any Fund is to be secured in the manner and to the extent required by law.

Unclaimed Payments. Any money held for the payment of Bond Obligations due on any Bond, which money is unclaimed by the Bond Owner, will be set aside in an escrow fund, uninvested, and held for the exclusive benefit of the Bond Owner, without liability for any interest thereon. Any such money remaining unclaimed for three years after such Bond Obligations became due (or such other period as specified by applicable law) will be transferred to the Authority, which will dispose of such money pursuant to Title 6 of the Texas Property Code or other applicable law. After such disposal, all liability of the Authority and the Paying Agent/Registrar for the payment of such money will cease. The Authority and the Paying Agent/Registrar will comply with the reporting requirements of Chapter 74 of the Texas Property Code, as amended, or other applicable law with respect to such unclaimed money.

Amendment. Except as provided below, the Bond Resolution may not be amended without the consent of the Bond Owners of at least a majority in aggregate principal amount of the outstanding Bonds affected by such amendment. The consent of the Bond Owners of all outstanding Bonds is required for any proposed amendment to the Bond Resolution that would:

- (1) permit a preference or priority of any Bond over another Bond; or
- (2) reduce the percentage of Bond Owners that is required to consent to an amendment of the Bond Resolution

The consent of the Bond Owner of each affected outstanding Bond is required for any proposed amendment to the Bond Resolution that would:

- (1) change the time of any regularly scheduled payment of Bond Obligations, the principal amount of any Bond, the interest rate on any Bond, the currency in which Bond Obligations are required to be paid, or any of the other terms of the Bond Resolution governing the time, place, or manner of payment of Bond Obligations;
- (2) impair the security for any Bond; or
- (3) result in a reduction of any then existing rating on the Bonds.

Except as provided above, no Bond Owner consent is required for an amendment to the Bond Resolution if the amendment, in the opinion of Bond Counsel, will not adversely affect the rights of any Bond Owner under the Transaction Documents, including without limitation, amendments, changes, or modifications to facilitate the utilization of Bond Enhancement Agreements.

No amendment to the Bond Resolution will take effect until the Executive Director obtains an opinion of Bond Counsel to the effect that such amendment will not violate the Bond Resolution, the Authorizing Law or other applicable law and, upon obtaining the required Bond Owner consent (if any), will comply with the requirements of the Bond Resolution for such amendment.

Discharge of Claim Against Constitutional Provision. The claim of the Bond Resolution against money provided under the Constitutional Provision will be deemed discharged and of no further force and effect when the Bond Obligations on all Bonds have been discharged and all other amounts of money payable under the Bond Resolution have been paid or arrangements satisfactory to the Person to whom any such payment is due for making such payment have been made. The Bond Obligations on any Bond or Bonds will be deemed discharged when (i) such Bond Obligations have been paid pursuant to the terms of such Bonds or become due (whether at stated maturity or otherwise) and money sufficient for the payment thereof has been deposited into the Interest and Sinking Fund or with the Paying Agent/Registrar; (ii) such Bonds have been canceled or surrendered to the Paying Agent/Registrar for cancellation; or (iii) such Bond Obligations have been discharged by a deposit of Sufficient Assets as described below.

Defeasance. The benefits of the Bond Resolution, and the covenants of the Authority contained therein in support of any Bond, will be deemed redeemed and discharged with respect to such Bond when the following requirements have been satisfied:

- (1) the payment of the Bond Obligations with respect thereto has been provided for by irrevocably depositing Sufficient Assets into the Interest and Sinking Fund or with the Paying Agent/Registrar or a financial institution or trust company designated by the Authority, which will be held in trust in a separate escrow account and applied exclusively to the payment of such Bond Obligations;
- (2) the Authority has received an opinion of Bond Counsel to the effect that: (a) such deposit of Sufficient Assets complies with State law; and (b) all conditions precedent to such Bond Obligations being deemed discharged have been satisfied;
- (3) all amounts of money (other than Bond Obligations) due, or reasonably estimated by the Paying Agent/Registrar to become due, under the Bond Resolution with respect to such Bond(s) have been paid, or provision satisfactory to the Person to whom any such payment is or will be due for making such payment has been made; and
- (4) the Paying Agent/Registrar has received such other documentation and assurance as the Paying Agent/Registrar reasonably may request.

If a deposit of Sufficient Assets is to provide for the payment of Bond Obligations on less than all of the outstanding Bonds, the particular maturity or maturities of Bonds (or, if less than all of a particular maturity, the principal amounts), will be as specified by the Authority, and the particular Bonds (or portions thereof) will be selected by the Paying Agent/Registrar by lot in such manner as the Paying Agent/Registrar determines (provided that a portion of a Bond may be redeemed only in an integral multiple of \$5,000 principal amount).

To the extent permitted by law, at the Executive Director's direction, the Paying Agent/Registrar may substitute, for any of the securities or obligations deposited as Sufficient Assets, other securities or obligations constituting Sufficient

Assets if, upon such substitution, the requirements for redemption and discharge described above are satisfied. Any net proceeds realized from such a substitution will be paid to the Authority.

No Individual Liability. No obligation imposed under the Bond Resolution, the Bonds, or any document executed by the Authority or the Comptroller in connection therewith will be deemed to be the obligation, in an individual capacity, of any director, officer, employee, or agent of the Authority or the Comptroller, and no such director, officer, employee, or agent or any individual executing the Bonds or any such other document on behalf of any such entity will be subject to any personal liability with respect thereto.

Bond Enhancement Agreement. Pursuant to the Bond Resolution, to the extent permitted by law, the Pricing Committee may approve the material terms of one or more Bond Enhancement Agreements for the Bonds subsequent to the authorization and issuance of the Bonds. The Board has authorized the Executive Director or other Authority Representative to act on behalf of the Authority from time to time in negotiating and approving the details of any Bond Enhancement Agreements. The execution and delivery of any Bond Enhancement Agreement is subject to the approval of the Attorney General of Texas. Bond Owner consent is not necessary for the Authority to adopt a Bond Enhancement Agreement. Payments due under one or more Bond Enhancement Agreements will be made from funds made available for such purpose pursuant to the Constitutional Provision.

The Escrow Agreement

The following is a summary of certain provisions of the Escrow Agreement. This summary does not purport to be comprehensive or definitive and is qualified in its entirety by reference to the Escrow Agreement. Copies of the Escrow Agreement are available for examination at the offices of the Authority.

The Escrow Agreement is an agreement by and between the Authority and the Texas Treasury Safekeeping Trust Company, as escrow agent, whereby certain proceeds of the Bonds and any beginning cash balance will be deposited in the Refunded Notes Escrow Fund and Refunded Bonds Escrow Fund, as applicable. Such deposit, all proceeds therefrom, and all cash balances from time to time on deposit therein (a) will be the property of the respective Escrow Fund as a special trust and irrevocable escrow fund, (b) will be applied in strict conformity with the terms of the Escrow Agreement, and (c) will be applied to the extent needed to pay the principal and interest requirements on and redemption price of the respective Refunded Obligations.

In the Escrow Agreement, the Authority represents, in reliance on the verification report, that the Escrowed Securities (as defined in the Escrow Agreement) and cash balance on deposit from time to time in the Refunded Bonds Escrow Fund will be at all times sufficient to provide money for transfer to the place of payment for the Refunded Bonds at the times and in the amounts required by such place of payment for the Refunded Bonds. See "PLAN OF FINANCE – Payment of Refunded Bonds."

Furthermore, in the Escrow Agreement, the Authority represents, in reliance on the sufficiency certificate, that the cash balance on deposit from time to time in the Refunded Notes Escrow Fund will be at all times sufficient to provide money for transfer to the place of payment for the Refunded Notes at the times and in the amounts required by such place of payment for the Refunded Notes. See "PLAN OF FINANCE – Payment of Refunded Notes."

GENERAL INFORMATION REGARDING THE STATE OF TEXAS

Available Information

The Comptroller prepares (a) a quarterly appendix (the "Bond Appendix"), which sets forth certain information regarding the State (including its government, finances, economic profile, and other matters) for use by State entities when issuing debt, (b) an annual Comprehensive Annual Financial Report (the "State CAFR"), which includes financial statements audited by the State Auditor, and (c) from time to time notices of certain events as described under "CONTINUING DISCLOSURE OF INFORMATION – Continuing Disclosure Undertaking of the Comptroller – *Event Notices*" as well as supplements to the Bond Appendix. All such documents are provided to the MSRB and are publicly accessible as described in "APPENDIX A – The State of Texas." The most current such documents are described in "APPENDIX A – The State of Texas" and are incorporated herein by reference. No representation is made that such documents contain all facts material to an evaluation of the ability of the State to make timely payment of debt service on the Bonds, or the value of the Bonds, or that any specific information should be accorded any particular significance.

Constitutional Debt Limit

Article III, Section 49-j of the Texas Constitution prohibits the Legislature from authorizing additional State debt payable from the general revenue fund, including authorized but unissued bonds and lease purchase contracts in excess of \$250,000 but excluding debt reasonably expected to be paid from other sources, if the resulting maximum annual debt service in any State fiscal year on such State debt payable from the general revenue fund exceeds 5% of the average amount of general fund revenues for the three immediately preceding fiscal years, excluding revenues constitutionally dedicated for purposes other than payment of State debt. Prior to the Date of Delivery of the Bonds, the Bond Review Board is expected to certify that the maximum annual debt service in any fiscal year on debt payable from the general revenue fund, including the debt service on the Bonds, does not exceed 5% of the average of the amount of general revenue fund revenues, excluding revenues constitutionally dedicated for purposes other than payment of State debt, for the three preceding fiscal years. See "APPENDIX A – The State of Texas" and "INTRODUCTION – Security."

Infectious Disease Outlook (COVID-19)

The World Health Organization has declared a pandemic following the outbreak of COVID-19, a respiratory disease caused by a new strain of coronavirus (the "Pandemic"), which is currently affecting many parts of the world, including the United States and Texas. On March 13, 2020, the President of the United States (the "President") declared the Pandemic a national emergency and the Governor declared COVID-19 an imminent threat of disaster for all counties in Texas. On March 25, 2020, in response to a request from the Governor, the President issued a Major Disaster Declaration for the State.

A continued spread of COVID-19, and measures taken to prevent or reduce it, are anticipated to adversely impact state, national and global economic activities and, accordingly, adversely impact the financial condition and performance of the State, and the extent of impact could be material. The financial and operating data contained herein are as of dates and for periods prior to the economic impact of the Pandemic and measures instituted to slow it. Accordingly, they are not indicative of the economic impact of the Pandemic on the State's financial condition. For additional information regarding the actions taken by the State and the potential impact of COVID-19, see the Fourth Supplement to the February 2020 Bond Appendix referenced in "APPENDIX A – The State of Texas."

LEGAL MATTERS

Legal Opinions

The delivery of the Bonds is subject to the Authority furnishing the Underwriters a complete transcript of proceedings incident to the authorization and issuance of the Bonds and the approval of the Attorney General of Texas to the effect that the Bonds are valid and legally binding obligations of the Authority, and the approving legal opinions of Norton Rose Fulbright US LLP and Bates & Coleman, P.C., Co-Bond Counsel, to the effect that the Bonds, issued in compliance with the provisions of the Bond Resolution, are valid and legally binding obligations of the Authority, subject to applicable provisions of sovereign immunity, bankruptcy, reorganization and other similar matters affecting the rights of creditors or by general principles of equity which permit the exercise of judicial discretion. The forms of opinions that Co-Bond Counsel will render are attached hereto as Appendix B. Co-Bond Counsel was engaged by, and only represents, the Authority. In their capacity as Co-Bond Counsel, such firms have reviewed the statements and information appearing under captions "PLAN OF FINANCE" (except for the information under the subcaption "Sources and Uses of Funds" as to which no opinion will be expressed), "DESCRIPTION OF THE BONDS" (except for the information under the subcaption "Book-Entry-Only System," as to which no opinion will be expressed), "DESCRIPTION OF THE TRANSACTION DOCUMENTS," "LEGAL MATTERS," "TAX MATTERS," and "CONTINUING DISCLOSURE OF INFORMATION" (except for the information under the subcaption "Continuing Disclosure Undertaking of the Comptroller" as to which no opinion will be expressed, and except for any information describing or otherwise pertaining to the continuing disclosure undertaking of the Comptroller, as to which no opinion will be expressed), and such firms are of the opinion that the statements and information contained under such captions and subcaptions provide an accurate and fair description of the Bonds, the Escrow Agreement and the Bond Resolution and are correct as to matters of law. The legal fee to be paid to Co-Bond Counsel for services rendered in connection with the issuance of the Bonds is contingent upon the sale and delivery of the Bonds. The legal opinions of Co-Bond Counsel will accompany the Bonds deposited with DTC or will be printed on the definitive Bonds in the event of the discontinuance of the Book-Entry-Only System.

Certain legal matters will be passed upon for the Authority by McCall, Parkhurst & Horton L.L.P., Austin, Texas, Disclosure Counsel to the Authority, whose legal fee is contingent on the sale and delivery of the Bonds. Certain legal matters will be passed upon for the Underwriters by their counsel, Bracewell LLP, Houston, Texas, whose legal fee is contingent on the sale and delivery of the Bonds. Bond Counsel, Disclosure Counsel, and Underwriters' Counsel periodically serve in other capacities on other separate and unrelated offerings of securities by the Authority.

The various legal opinions to be delivered concurrently with the delivery of the Bonds express the professional judgment of the attorneys rendering the opinions as to the legal issues explicitly addressed therein. In rendering a legal opinion, the attorney does not become an insurer or guarantor of the transaction opined upon, or of the future performance of the parties to the transaction, nor does the rendering of an opinion guarantee the outcome of any legal dispute that may arise out of the transaction.

Legal Investments in Texas

Section 1201.041 of the Public Security Procedures Act (Chapter 1201, Texas Government Code) provides that the Bonds are negotiable instruments, investment securities governed by Chapter 8, Texas Business & Commerce Code, and are legal and authorized investments for insurance companies, fiduciaries, and trustees, and for the sinking fund of municipalities or other political subdivisions or public agencies of the State of Texas. In addition, various provisions of the Texas Finance Code provide that, subject to a prudent investor standard, the Bonds are legal investments for state banks, savings banks, trust companies with at least \$1 million of capital and savings and loan associations. The Bonds are eligible to secure deposits of any public funds of the State, its agencies and political subdivisions, and are legal security for those deposits to the extent of their market value. For political subdivisions in Texas that have adopted investment policies and guidelines in accordance with the Public Funds Investment Act, the Bonds may have to be assigned a rating of at least "A" or its equivalent as to investment quality by a national rating agency before such obligations are eligible investments for sinking funds and other public funds.

The Authority has not made any investigation of other laws, rules, regulations or investment criteria that might apply to such institutions or entities or that might limit the suitability of the Bonds for any of the foregoing purposes or limit the authority of such institutions or entities to purchase or invest in the Bonds for such purposes. The Authority has not made any review of laws in other states to determine whether the Bonds are legal investments for various institutions in those states.

Registration and Qualification of Bonds for Sale

No registration statement relating to the Bonds has been filed with the United States Securities and Exchange Commission under the Securities Act of 1933, as amended, in reliance upon the exemption provided thereunder by Section 3(a)(2). The Bonds have not been approved or disapproved by the United States Securities and Exchange Commission, nor has the United States Securities and Exchange Commission passed upon the accuracy or adequacy of the Official Statement. The Bonds have not been registered or qualified under the Securities Act of Texas in reliance upon various exemptions contained therein; and have not been registered or qualified under the securities acts of any other jurisdiction. The Authority does not assume any responsibility for registration or qualification of the Bonds under the securities laws of any jurisdiction in which the Bonds may be sold, assigned, pledged, hypothecated, or otherwise transferred. This disclaimer of responsibility for registration or qualification for sale or other disposition of the Bonds shall not be construed as an interpretation of any kind with regard to the availability of any exemption from securities registration or qualification provisions.

Forward-Looking Statements

The statements contained or incorporated by reference into this Official Statement, and in any other information provided by the Authority and the Comptroller, that are not purely historical, are forward-looking statements, including statements regarding the Authority's and the Comptroller's expectations, hopes, intentions, or strategies regarding the future.

Readers should not place undue reliance on forward-looking statements. All forward-looking statements included in this Official Statement are based on information available to the Authority and the Comptroller on the date hereof, and the Authority and the Comptroller assume no obligation to update any such forward-looking statements. It is

important to note that the Authority's and the State's actual results could differ materially from those in such forward-looking statements.

The forward-looking statements herein are necessarily based on various assumptions and estimates and are inherently subject to various risks and uncertainties, including risks and uncertainties relating to the possible invalidity of the underlying assumptions and estimates and possible changes or developments in social, economic, business, industry, market, legal and regulatory circumstances and conditions and actions taken or omitted to be taken by third parties, including customers, suppliers, business partners and competitors, and legislative, judicial and other governmental authorities and officials. Assumptions related to the foregoing involve judgments with respect to, among other things, future economic, competitive, and market conditions and future business decisions, all of which are difficult or impossible to predict accurately and many of which are beyond the control of the Authority and the Comptroller. Any of such assumptions could be inaccurate and, therefore, there can be no assurance that the forward-looking statements included in this Official Statement would prove to be accurate.

Verification of Mathematical Computations

Robert Thomas CPA, LLC, a firm of independent public accountants, will deliver to the Authority, on or before the settlement date of the Bonds, its verification report indicating that it has verified, in accordance with attestation standards established by the American Institute of Certified Public Accountants, the mathematical accuracy of the mathematical computations of the adequacy of the cash and the maturing principal of and interest on the Escrowed Securities, to pay, when due, the maturing principal of, interest on and related call premium requirements, if any, of the Refunded Bonds. Such verification will be relied upon by Bond Counsel in rendering its opinions with respect to defeasance of the Refunded Bonds.

The verification performed by Robert Thomas CPA, LLC will be solely based upon data, information and documents provided to Robert Thomas CPA, LLC by the Financial Advisor on behalf of the Authority. Robert Thomas CPA, LLC has restricted its procedures to recalculating the computations provided by the Financial Advisor on behalf of the Authority and has not evaluated or examined the assumptions or information used in the computations.

TAX MATTERS

General

The following is a general summary of certain United States federal income tax consequences of the purchase and ownership of the Bonds. The discussion is based upon laws, Treasury Regulations, rulings and decisions now in effect, all of which are subject to change or possibly differing interpretations. No assurances can be given that future changes in the law will not alter the conclusions reached herein. The discussion below does not purport to deal with United States federal income tax consequences applicable to all categories of investors. Further, this summary does not discuss all aspects of United States federal income taxation that may be relevant to a particular investor in the Bonds in light of the investor's particular personal investment circumstances or to certain types of investors subject to special treatment under United States federal income tax laws (including insurance companies, tax exempt organizations, financial institutions, brokers-dealers, and persons who have hedged the risk of owning the Bonds). The summary is therefore limited to certain issues relating to initial investors who will hold the Bonds as "capital assets" within the meaning of section 1221 of the Internal Revenue Code of 1986, as amended (the "Code"), and acquire such Bonds for investment and not as a dealer or for resale. Prospective investors should note that no rulings have been or will be sought from the Internal Revenue Service (the "IRS") with respect to any of the U.S. federal income tax consequences discussed below, and no assurance can be given that the IRS will not take contrary positions.

As used herein, "U.S. Holder" means a beneficial owner of a Bond that for U.S. federal income tax purposes is an individual citizen or resident of the United States, a corporation or other entity taxable as a corporation created or organized in or under the laws of the United States or any state thereof (including the District of Columbia), an estate the income of which is subject to U.S. federal income taxation regardless of its source or a trust where a court within the United States is able to exercise primary supervision over the administration of the trust and one or more United States persons (as defined in the Code) have the authority to control all substantial decisions of the trust (or a trust that has made a valid election under U.S. Treasury Regulations to be treated as a domestic trust). As used herein, "Non-U.S. Holder" generally means a beneficial owner of a Bond (other than a partnership) that is not a U.S. Holder. If a partnership holds Bonds, the tax treatment of such partnership or a partner in such partnership generally will depend

upon the status of the partner and upon the activities of the partnership. Partnerships holding Bonds, and partners in such partnerships, should consult their own tax advisors regarding the tax consequences of an investment in the Bonds (including their status as U.S. Holders or Non-U.S. Holders).

INVESTORS SHOULD CONSULT THEIR OWN TAX ADVISORS IN DETERMINING THE FEDERAL, STATE, LOCAL, FOREIGN AND ANY OTHER TAX CONSEQUENCES TO THEM FROM THE PURCHASE, OWNERSHIP AND DISPOSITION OF THE BONDS.

U.S. Holders

Payments of Stated Interest on the Bonds. The stated interest paid on the Bonds will be included in the gross income, as defined in section 61 of the Code, of U.S. Holders and be subject to U.S federal income taxation when received or accrued, depending on the tax accounting method applicable to the U.S. Holders.

Original Issue Discount. If a substantial amount of the Bonds of any stated maturity is purchased at original issuance for a purchase price (the "Issue Price") that is less than their face amount by more than one quarter of one percent times the number of complete years to maturity, the Bonds of such maturity will be treated as being issued with "original issue discount." The amount of the original issue discount will equal the excess of the principal amount payable on such Bonds at maturity over its Issue Price, and the amount of the original issue discount on the Bonds will be amortized over the life of the Bonds using the "constant yield method" provided in the Treasury Regulations. As the original issue discount accrues under the constant yield method, U.S. Holders, regardless of their regular method of accounting, will be required to include such accrued amount in their gross income as interest. This can result in taxable income to U.S. Holders that exceeds actual cash distributions to the U.S. Holders in a taxable year.

The amount of the original issue discount that accrues on the Bonds each taxable year will be reported annually to the IRS and to the U.S. Holders. The portion of the original issue discount included in each beneficial owner's gross income while the U.S. Holder holds the Bonds will increase the adjusted tax basis of the Bonds in the hands of such U.S. Holder.

Premium. If a U.S. Holder purchases a Bond for an amount that is greater than its stated redemption price at maturity, such U.S. Holder will be considered to have purchased the Bond with "amortizable bond premium" equal in amount to such excess. A U.S. Holder may elect to amortize such premium using a constant yield method over the remaining term of the Bond and may offset interest otherwise required to be included in respect of the Bond during any taxable year by the amortized amount of such excess for the taxable year. Bond premium on a Bond held by a U.S. Holder that does not make such an election will decrease the amount of gain or increase the amount of loss otherwise recognized on the sale, exchange, redemption or retirement of a Bond. However, if the Bond may be optionally redeemed after the U.S. Holder acquires it at a price in excess of its stated redemption price at maturity, special rules would apply under the Treasury Regulations which could result in a deferral of the amortization of some bond premium until later in the term of the Bond. Any election to amortize bond premium applies to all taxable debt instruments held by the U.S. Holder on or after the first day of the first taxable year to which such election applies and may be revoked only with the consent of the IRS.

Medicare Contribution Tax. Pursuant to section 1411 of the Code, as enacted by the Health Care and Education Reconciliation Act of 2010, an additional tax is imposed on individuals beginning January 1, 2013. The additional tax is 3.8% of the lesser of (i) net investment income (defined as gross income from interest, dividends, net gain from disposition of property not used in a trade or business, and certain other listed items of gross income), or (ii) the excess of "modified adjusted gross income" of the individual over \$200,000 for unmarried individuals (\$250,000 for married couples filing a joint return and a surviving spouse). U.S. Holders of the Bonds should consult with their tax advisor concerning this additional tax, as it may apply to interest earned on the Bonds as well as gain on the sale of a Bond.

Disposition of Bonds and Market Discount. A U.S. Holder will generally recognize gain or loss on the redemption, sale or exchange of a Bond equal to the difference between the redemption or sales price (exclusive of the amount paid for accrued interest) and the U.S. Holder's adjusted tax basis in the Bonds. Generally, the U.S. Holder's adjusted tax basis in the Bonds will be the U.S. Holder's initial cost, increased by the original issue discount previously included in the U.S. Holder's income to the date of disposition. Any gain or loss generally will be capital gain or loss and will be long-term or short-term, depending on the U.S. Holder's holding period for the Bonds.

Under current law, a purchaser of a Bond who did not purchase the Bonds in the initial public offering (a "subsequent purchaser") generally will be required, on the disposition of the Bonds, to recognize as ordinary income a portion of the gain, if any, to the extent of the accrued "market discount." Market discount is the amount by which the price paid for the Bonds by a subsequent purchaser is less than the sum of Issue Price and the amount of original issue discount previously accrued on the Bonds. The Code also limits the deductibility of interest incurred by a subsequent purchaser on funds borrowed to acquire Bonds with market discount. As an alternative to the inclusion of market discount in income upon disposition, a subsequent purchaser may elect to include market discount in income currently as it accrues on all market discount instruments acquired by the subsequent purchaser in that taxable year or thereafter, in which case the interest deferral rule will not apply. The re-characterization of gain as ordinary income on a subsequent disposition of Bonds could have a material effect on the market value of the Bonds.

Legal Defeasance. If the Board elects to defease the Bonds by depositing in escrow sufficient cash and/or obligations to pay when due outstanding Bonds (a "legal defeasance"), under current tax law, a U.S. Holder may be deemed to have sold or exchanged its Bonds. In the event of such a legal defeasance, a U.S. Holder generally would recognize gain or loss in the manner described above. Ownership of the Bonds after a deemed sale or exchange as a result of a legal defeasance may have tax consequences different from those described above, and each U.S. Holder should consult its own tax advisor regarding the consequences to such beneficial owner of a legal defeasance of the Bonds.

Backup Withholding. Under section 3406 of the Code, a U.S. Holder may, under certain circumstances, be subject to "backup withholding" on payments of current or accrued interest on the Bonds. This withholding applies if such U.S. Holder: (i) fails to furnish to payor such U.S. Holder's social security number or other taxpayer identification number ("TIN"); (ii) furnishes the payor an incorrect TIN; (iii) fails to report properly interest, dividends, or other "reportable payments" as defined in the Code; or (iv) under certain circumstances, fails to provide the payor with a certified statement, signed under penalty of perjury, that the TIN provided to the payor is correct and that such U.S. Holder is not subject to backup withholding.

Backup withholding will not apply, however, with respect to payments made to certain U.S. Holders should consult their own tax advisors regarding their qualification for exemption from backup withholding and the procedures for obtaining such exemption.

Reporting of Interest Payments. Subject to certain exceptions, interest payments made to beneficial owners with respect to the Bonds will be reported to the IRS. Such information will be filed each year with the IRS on Form 1099 which will reflect the name, address, and TIN of the beneficial owner. A copy of Form 1099 will be sent to each U.S. Holder for U.S. federal income tax purposes.

Non U.S. Holders

Effectively Connected Income. If, under the Code, interest on the Bonds is effectively connected with the conduct of a trade or business within the United States by a Non-U.S. Holder, such interest will be subject to U.S. federal income tax in a similar manner as if the Bonds were held by a U.S. Holder, as described above, and in the case of Non-U.S. Holders that are corporations, interest on the Bonds also may be included in the computation of earnings and profits that are subject to a U.S. branch profits tax at a rate of up to 30%, unless an applicable tax treaty provides otherwise. Such Non-U.S. Holder will not be subject to withholding taxes, however, if it provides a properly executed Form W-8ECI to the Corporation or its paying agent, if any.

Withholding on Payments to Non-U.S. Holders. Under sections 1441 and 1442 of the Code, Non-U.S. Holders are generally subject to withholding at the rate of 30% on periodic income items arising from sources within the United States, provided such income is not effectively connected with the conduct of a United States trade or business. Assuming the interest received by the Non-U.S. Holders is not treated as effectively connected income within the meaning of section 864 of the Code, such interest will be subject to 30% withholding, or any lower rate specified in an income tax treaty, unless such income is treated as portfolio interest. Interest will be treated as portfolio interest if: (i) the Non-U.S. Holder provides a statement to the payor certifying, under penalties of perjury, that such Non-U.S. Holder is not a United States person and providing the name and address of such Non-U.S. Holder; (ii) such interest is treated as not effectively connected with the Non-U.S. Holder's United States trade or business; (iii) interest payments are not made to a person within a foreign country which the IRS has included on a list of countries having provisions inadequate to prevent United States tax evasion; (iv) interest payable with respect to the Bonds is not

deemed contingent interest within the meaning of the portfolio debt provision; (v) such Non-U.S. Holder is not a controlled foreign corporation, within the meaning of section 957 of the Code; and (vi) such Non-U.S. Holder is not a bank receiving interest on the Bonds pursuant to a loan agreement entered into in the ordinary course of the bank's trade or business.

Assuming payments on the Bonds are treated as portfolio interest within the meaning of sections 871 and 881 of the Code, then no backup withholding under sections 1441 and 1442 of the Code and no backup withholding under section 3406 of the Code is required with respect to Non-U.S. Holders or intermediaries who have furnished Form W-8BEN, Form W-8EXP or Form W-8IMY, as applicable, provided the payor does not have actual knowledge that such person is a United States person.

Disposition of the Bonds. Generally gain realized by a Non-U.S. Holder upon the sale, exchange, redemption, retirement (including pursuant to an offer by the Board or a deemed retirement due to defeasance of the Bond) or other disposition of a Bond generally will not be subject to U.S. federal income tax, unless (i) such gain is effectively connected with the conduct by such Non-U.S. Holder of a trade or business within the United States; or (ii) in the case of any gain realized by an individual Non-U.S. Holder, such holder is present in the United States for 183 days or more in the taxable year of such sale, exchange, redemption, retirement (including pursuant to an offer by the Board) or other disposition and certain other conditions are met.

Foreign Account Tax Compliance Act – U.S. Holders and Non-U.S. Holders. Sections 1471 through 1474 of the Code impose a 30% withholding tax on certain types of payments made to a foreign financial institution, unless the foreign financial institution enters into an agreement with the U.S. Treasury to, among other things, undertake to identify accounts held by certain United States persons or U.S.-owned entities, annually report certain information about such accounts, and withhold 30% on payments to account holders whose actions prevent it from complying with these and other reporting requirements, or unless the foreign financial institution is otherwise exempt from those requirements. In addition, the Foreign Account Tax Compliance Act ("FATCA") imposes a 30% withholding tax on the same types of payments to a non-financial foreign entity unless the entity certifies that it does not have any substantial U.S. owners or the entity furnishes identifying information regarding each substantial United States owner. Failure to comply with the additional certification, information reporting and other specified requirements imposed under FATCA could result in the 30% withholding tax being imposed on payments of interest and principal under the Bonds and sales proceeds of Bonds held by or through a foreign entity. Prospective investors should consult their own tax advisors regarding FATCA and its effect on them.

RATINGS

Moody's Investors Service, Inc. and S&P Global Ratings, a division of S&P Global Inc., have assigned ratings of "Aaa" and "AAA," respectively, to the Bonds. An explanation of the significance of such ratings may be obtained from the company furnishing the rating. A securities rating is not a recommendation to buy, sell or hold securities and may be subject to revision or withdrawal at any time. The ratings reflect only the respective views of such organizations and the Authority makes no representation as to the appropriateness of the ratings. There is no assurance that the ratings of the Bonds will continue for any given period of time or that they will not be revised downward or withdrawn entirely if, in the judgment of any one or more of these companies, circumstances so warrant. Any such downward revision or withdrawal of such ratings, or either of them, may have an adverse effect on the market price of the Bonds.

CONTINUING DISCLOSURE OF INFORMATION

Each of the Authority and the Comptroller has entered into a separate undertaking for the benefit of the holders and beneficial owners of the Bonds to provide certain updated information and notices to the MSRB through its EMMA system, as described below.

Continuing Disclosure Undertaking of the Authority

General. In the Bond Resolution, the Authority has made the following agreement for the benefit of the Owners and Beneficial Owners of the Bonds. Under the agreement, the Authority will be obligated to provide timely notice of specified events to the MSRB. The information will be available to investors by the MSRB through its EMMA system, free of charge at www.emma.msrb.org.

Annual Reports. The Authority and the legal and beneficial owners of the Bonds are third-party beneficiaries of the Comptroller's Continuing Disclosure Agreement. The Comptroller will provide certain updated financial information and operating data to the MSRB, in an electronic format as prescribed by the MSRB, annually, as set out in the Continuing Disclosure Agreement, and described under "- Continuing Disclosure Undertaking of the Comptroller - Annual Reports."

Event Notices. The Authority will provide to the MSRB, with respect to the Bonds, notice not in excess of ten business days after the occurrence of any of the following events: (1) principal and interest payment delinquencies; (2) non-payment related defaults, if material; (3) unscheduled draws on debt service reserves reflecting financial difficulties; (4) unscheduled draws on credit enhancements reflecting financial difficulties; (5) substitution of credit or liquidity providers, or their failure to perform; (6) adverse tax opinions or 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 Bonds, or other material events affecting the tax status of the Bonds; (7) modifications to rights of bondholders, if material; (8) Bond calls, if material, and tender offers; (9) defeasances; (10) release, substitution, or sale of property securing repayment of the Bonds, if material; (11) rating changes; (12) bankruptcy, insolvency, receivership or similar event of the Authority; (13) the consummation of a merger, consolidation, or acquisition involving the Authority or the sale of all or substantially all of the assets of the Authority, 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; and (14) the appointment of a successor or additional trustee or the change of name of a trustee, if material.

For the purposes of the event numbered 12 in the preceding paragraph, the event is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent, or similar officer for the Authority in a proceeding under the United States Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the Authority, or if such jurisdiction has been assumed by leaving the existing governing body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement, or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the Authority.

Continuing Disclosure Undertaking of the Comptroller

General. The Comptroller has entered into an Amended and Restated Continuing Disclosure Agreement with the Bond Review Board dated March 12, 2019 (the "Agreement"). The Authority and the legal and beneficial owners of the Bonds are third party beneficiaries of the Agreement. The Comptroller is required to observe this Agreement in respect to any issue of Securities, as defined in the Agreement (which includes the Bonds), for so long as the State remains an "obligated person" with respect to the Bonds within the meaning of the Rule. Under the Agreement, the Comptroller will be obligated to provide certain updated financial information and operating data annually, and timely notice of specified events, to the MSRB as described below.

Annual Reports. The Comptroller will provide certain updated financial information and operating data to the MSRB annually, in an electronic format as prescribed by the MSRB. Under the Agreement, the Comptroller is not obligated to provide such financial and operating data more frequently than on an annual basis. The information to be updated includes all quantitative financial information and operating data with respect to the State of the general type referred to in the Bond Appendix. The Comptroller will update and provide this information to the MSRB within 195 days after the end of each fiscal year of the State.

The financial information and operating data to be provided may be set forth in full in one or more documents or may be included by specific reference to any document available to the public on the MSRB's EMMA website or filed with the SEC, as permitted by the Rule. The updated information provided by the Comptroller will be provided on a cash basis and will not be audited, but the Comptroller will provide audited financial statements of the State prepared in accordance with generally accepted accounting principles for governmental entities when the State Auditor completes its statutorily required audit of such financial statements. The accounting principles pursuant to which such financial statements must be prepared may be changed from time to time to comply with State law.

The State's current fiscal year end is August 31. Accordingly, the Comptroller must provide updated information within 195 days thereof in each year unless the State changes its fiscal year. If the State changes its fiscal year, the Comptroller will notify the MSRB of the change prior to the next date by which the Comptroller otherwise would be required to provide financial information and operating data as described above.

Quarterly Reports. Although it is not contractually committed to do so, the Comptroller currently prepares and files with the MSRB a quarterly disclosure appendix (defined herein as the Bond Appendix) which provides a general description of the State and sets forth certain information regarding he State, including its government, finances, economic profile and other matters for use by State entities when issuing debt. Certain tables within the Bond Appendix are updated on a quarterly basis while other tables within the Bond Appendix are updated on a semiannual or annual basis. The Bond Appendix is not audited and provides financial data on a cash basis. The Comptroller generally files an updated Bond Appendix with the MSRB within two weeks after each January 31, April 30, July 31, and October 31, and the Comptroller may file voluntary notices of significant events with the MSRB between the filing dates of Bond Appendices, although there is no assurance that it will continue such voluntary filings at such times or at all in the future.

Event Notices. The Comptroller will also provide notice to the MSRB of any of the following events with respect to the Bonds on a timely basis no later than ten (10) business days after the event: (a) the incurrence of a financial obligation (as defined in the Rule, including certain debt, debt-like, and debt-related obligations) of the State, if material, or an agreement to covenants, events of default, remedies, priority rights, or other similar terms of any such financial obligation, any of which affect security holders, if material; or (b) a default, event of acceleration, termination event, modification of terms, or other similar event under the terms of any such financial obligation of the State, any of which reflect financial difficulties.

The Comptroller will also provide timely notice to the MSRB of its failure to provide information, data, or financial statements in accordance with its Agreement.

Availability of Information

The Authority and the Comptroller have agreed to provide the foregoing financial and operating information and notices only as described above. The Authority and the Comptroller will be required to file their respective continuing disclosure information using the MSRB's EMMA system. Investors will be able to access continuing disclosure information filed with the MSRB free of charge at www.emma.msrb.org.

The quarterly Bond Appendix, if and when filed, the State's CAFR, annual financial and operating information, and event notices, if any, filed by the Comptroller using the MSRB's EMMA system may be obtained by using the EMMA Advanced Search function and entering the term "State of Texas Comptroller" in the Issuer Name field within the Security Information search filter. The most recently prepared Bond Appendix, State CAFR and notices may also be accessed on the Comptroller's website at: http://www.comptroller.texas.gov/programs/systems/treasury-ops/index.php.

Limitations and Amendments

The Authority and the Comptroller have agreed to update information and to provide notices of certain specified events only as described above. Neither is responsible for performance of the other's agreement, and neither has agreed to provide other information that may be relevant or material to a complete presentation of the Authority's or the State's financial results of operations, condition, or prospects or agreed to update any information that is provided, except as described above. Neither makes any representation or warranty concerning such information or concerning its usefulness to a decision to invest in or sell Bonds at any future date. Each disclaims any contractual or tort liability for damages resulting in whole or in part from any breach of its continuing disclosure agreement or from any statement made pursuant to its agreement, although the holders of the Bonds may seek a writ of mandamus to compel the Authority and the Comptroller to comply with their respective agreements.

The Authority may amend its continuing disclosure agreement to adapt to changed circumstances that arise from a change in legal requirements, a change in law, or a change in the identity, nature, status, or type of operations of the Authority, but only if (i) the agreement, as amended, would have permitted an underwriter to purchase or sell Bonds in the primary offering thereof in compliance with the Rule, taking into account any amendments or interpretations of

the Rule since such offering as well as such changed circumstances and (ii) either (a) the holders of a majority in aggregate principal amount (or any greater amount required by any other provision of the Bond Resolution that authorizes such an amendment) of the outstanding Bonds consent to such amendment or (b) a person unaffiliated with the Authority (such as nationally-recognized bond counsel) determines that the amendment will not materially impair the interests of the holders and the beneficial owners of such Bonds. The Authority may also amend or repeal the provisions of its continuing disclosure agreement if the SEC amends or repeals the applicable provisions of the Rule or a court of final jurisdiction enters judgment that such provisions of the Rule are invalid, but only if and to the extent that the provisions of this sentence would not prevent an underwriter from lawfully purchasing or selling Bonds in the primary offering of the Bonds. If the Authority so amends its agreement, the Authority must provide an explanation, in narrative form, of the reasons for the amendment and of the impact of any change in the type of information and data provided. The Authority will provide such information to the MSRB within 195 days after the end of such fiscal year.

The Comptroller may amend the Agreement to adapt to changed circumstances that arise from a change in legal requirements, a change in law, or a change in the identity, nature, status or type of operations of the State if (i) the Agreement, as amended, would have permitted an underwriter to purchase or sell Bonds in the offering described herein in compliance with the Rule, taking into account any amendments or interpretations of the Rule to the date of such amendment, as well as such changed circumstances, and (ii) either (a) the holders of a majority in aggregate principal amount of outstanding Bonds consent to such amendment or (b) a person unaffiliated with the State, the Comptroller, the Bond Review Board and the Authority (such as nationally recognized bond counsel) determines that the amendment will not materially impair the interests of the registered owners of the Bonds. If the Comptroller so amends the Agreement, it has agreed to include with the next financial information and operating data provided in accordance with its agreement described above under "— Continuing Disclosure Undertaking of the Comptroller — Annual Reports" an explanation, in narrative form, of the reasons for the amendment and of the impact of any change in the type of financial information and operating data so provided.

NO LITIGATION

There is no litigation, proceeding, inquiry, or investigation pending by or before any court or other governmental authority or entity (or, to the best knowledge of the Authority, threatened) that affects the obligation of the Authority to deliver the Bonds or the validity of the Bonds. The State is a party to various legal proceedings relating to its operation and government functions, but unrelated to the Bonds. See "APPENDIX A – The State of Texas" of this Official Statement. On the Date of Delivery of the Bonds to the Underwriters, the Authority will execute and deliver to the Underwriters a certificate to the effect that no litigation of any nature has been filed or is pending against the Authority, as of that date, to restrain or enjoin the issuance or delivery of the Bonds or that would affect the provisions made for their payment or security, or in any manner questioning the validity of the Bonds.

UNDERWRITING

Citigroup Global Markets Inc., as the authorized representative of a group of Underwriters, has agreed, subject to certain conditions, to purchase the Bonds at a price equal to the initial offering price of the Bonds shown on page ii of this Official Statement, plus a reoffering premium of \$18,669,407.15 and less an underwriting discount of \$1,785,877.08. The Underwriters will be obligated to purchase all of the Bonds if any Bonds are purchased. The Bonds to be offered to the public may be offered and sold to certain dealers (including the Underwriters and other dealers depositing Bonds into investment trusts) at prices lower than the public offering prices of the Bonds and such public offering prices may be changed, from time to time, by the Underwriters.

The Underwriters have provided the following sentence for inclusion in this Official Statement: The Underwriters have reviewed the information in this Official Statement pursuant to their respective responsibilities to investors under the federal securities laws, but the Underwriters do not guarantee the accuracy or completeness of such information.

The Underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include sales and trading, commercial and investment banking, advisory, investment management, investment research, principal investment, hedging, market making, brokerage and other financial and non-financial activities and services. Certain of the Underwriters and their respective affiliates have provided, and may in the future provide, a variety of these services to the Authority and to persons and entities with relationships with the Authority, for which they received or will receive customary fees and expenses.

Citigroup Global Markets Inc., an underwriter of the Bonds, has entered into a retail distribution agreement with Fidelity Capital Markets, a division of National Financial Services LLC (together with its affiliates, "Fidelity"). Under this distribution agreement, Citigroup Global Markets Inc. may distribute municipal securities to retail investors at the original issue price through Fidelity. As part of this arrangement, Citigroup Global Markets Inc. will compensate Fidelity for its selling efforts.

BofA Securities, Inc., an underwriter of the Bonds, has entered into a distribution agreement with its affiliate Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S"). As part of this arrangement, BofA Securities, Inc. may distribute securities to MLPF&S, which may in turn distribute such securities to investors through the financial advisor network of MLPF&S. As part of this arrangement, BofA Securities, Inc. may compensate MLPF&S as a dealer for their selling efforts with respect to the Bonds.

In the ordinary course of their various business activities, the Underwriters and their respective affiliates, officers, directors and employees may purchase, sell or hold a broad array of investments and actively trade securities, derivatives, loans, commodities, currencies, credit default swaps and other financial instruments for their own account and for the accounts of their customers, and such investment and trading activities may involve or relate to assets, securities and/or instruments of the Issuer (directly, as collateral securing other obligations or otherwise) and/or persons and entities with relationships with the Authority. The Underwriters and their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such assets, securities or instruments and may at any time hold, or recommend to clients that they should acquire, long and/or short positions in such assets, securities and instruments.

FINANCIAL ADVISOR

PFM Financial Advisors LLC is acting as financial advisor to the Authority in connection with the issuance of the Bonds. The financial advisor's fee for services rendered with respect to the sale of the Bonds is contingent upon the issuance and delivery of the Bonds. PFM Financial Advisors LLC, in its capacity as financial advisor, has not verified and does not assume any responsibility for the information, covenants, and representations contained in any of the legal documents with respect to the federal income tax status of the Bonds, or the possible impact of any present, pending, or future actions taken by any legislative or judicial bodies.

The financial advisor has provided the following sentence for inclusion in this Official Statement: The financial advisor has reviewed the information in this Official Statement in accordance with, and as part of, its responsibilities to the Authority and, as applicable, to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the financial advisor does not guarantee the accuracy or completeness of such information.

AUTHENTICITY OF FINANCIAL DATA AND OTHER INFORMATION

The financial data and other information contained herein have been obtained from the Authority's records and other sources that are believed to be reliable. There is no guarantee that any of the assumptions or estimates contained herein will be realized. All of the summaries of the statutes, documents, and Bond Resolution contained in this Official Statement are made subject to all of the provisions of such statutes, documents, and Bond Resolution. These summaries do not purport to be complete statements of such provisions and reference is made to such documents for further information. Reference is made to original documents in all respects.

References to website addresses presented herein are for informational purposes only and may be in the form of a hyperlink solely for the reader's convenience. Unless specified otherwise, such websites and the information or links contained therein are not incorporated into, and are not part of, this Official Statement for purposes of, and as that term is defined in, the Rule.

The Bond Resolution approves the form and content of this Official Statement, and any addenda, supplement or amendment hereto issued on behalf of the Authority, and authorizes its further use in the reoffering of the Bonds by the Underwriters.

This Official Statement has been approved by the Authority for distribution in accordance with the provisions of the Rule.

/s/ Lee Deviney
Lee Deviney Executive Director Texas Public Finance Authority

Schedule I Schedule of Refunded Notes

Original Issue Date	Maturity Date	Par Amount
3/28/2019	4/28/2020	\$77,725,000
7/12/2019	5/1/2020*	54,000,000
9/16/2019	5/2/2020*	64,300,000
1/9/2020	4/29/2020*	52,000,000

^{*}Estimated, subject to change.



Schedule II Schedule of Refunded Bonds

Texas Public Finance Authority State of Texas General Obligation and Refunding Bonds, Taxable Series 2011

<u>Principa</u>	<u>l Amount</u>
Refu	ınded

Maturity Date	Interest Rate	Refunded	Redemption Date	CUSIP No.*
October 1, 2023	4.004%	\$14,750,000	10/01/2021	882722K83
October 1, 2024	4.154	14,750,000	10/01/2021	882722K91
October 1, 2025	4.304	14,750,000	10/01/2021	882722L25
October 1, 2026	4.454	14,750,000	10/01/2021	882722J93
October 1, 2027	4.686	14,750,000	10/01/2021	882722K26
October 1, 2028	4.866	14,750,000	10/01/2021	882722K34
October 1, 2029	4.946	14,745,000	10/01/2021	882722K42
October 1, 2030	5.016	14,745,000	10/01/2021	882722K59
October 1, 2031	5.116	2,535,000	10/01/2021	882722K67
		\$120,525,000		

* CUSIP is a registered trademark of the American Bankers Association. CUSIP data herein is provided by CUSIP Global Services, managed by S&P Capital IQ on behalf of the American Bankers Association. This data is not intended to create a database and does not serve in any way as a substitute for the CUSIP services. None of the Authority, the Financial Advisor, or the Underwriters shall be responsible for the selection or the correctness of the CUSIP numbers shown herein.



APPENDIX A

THE STATE OF TEXAS

As described in this Official Statement under "CONTINUING DISCLOSURE OF INFORMATION – Continuing Disclosure Undertaking of the Comptroller," the Texas Comptroller of Public Accounts (the "Comptroller") is required to file updated annual financial and operating data, audited financial statements of the State when received, and timely notice of certain events with the MSRB, and the Comptroller voluntarily files quarterly Bond Appendices and occasional notices of significant events.

This Official Statement hereby incorporates by reference the previously filed documents listed below, except for any information superseded by information that is included directly in this Official Statement or incorporated by reference in a subsequent document, as well as any future filings that the Comptroller makes with the MSRB through EMMA prior to the termination of the offering of the Bonds under this Official Statement:

- (i) State of Texas Comprehensive Annual Financial Report ("State CAFR") for the fiscal year ended August 31, 2019;
- (ii) Appendix A: The State of Texas (February 2020 and the Fourth Supplement to February 2020); and
- (iii) Each notice, if any, filed with the MSRB by the Comptroller since the end of the fiscal year of the State addressed in the foregoing State CAFR.

These documents and any subsequently filed documents, if any, may be obtained by accessing EMMA at https://emma.msrb.org/, using the EMMA Advanced Search function and entering the term "State of Texas Comptroller" in the Issuer Name field within the Security Information search filter. The documents may also be accessed on the Comptroller's website at https://comptroller.texas.gov/programs/systems/treasury-ops/index.php. For further information, see "CONTINUING DISCLOSURE OF INFORMATION – Continuing Disclosure Undertaking of the Comptroller" in this Official Statement.

Information in the Bond Appendix, State CAFR, and any notice incorporated herein by reference is provided as of the date specified in the document. No representation is made that such documents contain all facts material to an evaluation of the ability of the State to pay principal of and interest on the Bonds when due, or the value of the Bonds, or that any specific information should be accorded any particular significance.



This Fourth Supplement dated April 10, 2020, to the February 2020 Bond Appendix ("Appendix A") replaces all prior supplements to the February 2020 Bond Appendix and updates and replaces the section inserted by the prior supplements after the Information Security section (page A-99) to read as follows (by adding two sentences at the end of the first paragraph under the amended section header "Impact of COVID-19" and by adding a new bullet under "State Action"):

12. INFECTIOUS DISEASE OUTBREAK - COVID-19

A respiratory disease named "coronavirus disease 2019" (COVID-19) has recently spread to many parts of the world, including Texas and elsewhere in the U.S. On March 11, 2020, COVID-19 was declared a pandemic by the World Health Organization. The U.S. Centers for Disease Control and Prevention (CDC) has warned that some areas in the United States are experiencing community spread of COVID-19 and that widespread transmission of COVID-19 in the United States is likely to continue. To slow the spread of COVID-19 in the U.S., the U.S. government has imposed bans on travel from various countries, including China and many countries in Europe, and recommended social distancing measures. Many companies, including in Texas, have imposed restrictions on business travel and employee gatherings, have encouraged or required their employees to telecommute, and/or have transitioned largely or exclusively to providing customer services online only in an effort to minimize person-to-person contact. Many local Texas governments, including the most populous cities and counties, have issued shelter-in-place or stay-at-home orders. Schools and most universities have temporarily closed their campuses and implemented on-line instruction.

IMPACT OF COVID-19

A continued spread of COVID-19, and measures taken to prevent or reduce it, are anticipated to adversely impact state, national and global economic activities and, accordingly, adversely impact the financial condition and performance of the State, and the extent of impact could be material. Businesses and individuals appear to be altering their behaviors in a manner that is having negative impacts on global and local economies. Stock values and crude oil prices, in the U.S. and globally, have seen significant declines attributed to COVID-19 concerns. Texas may be particularly at risk from any global slowdown, given the prevalence of international trade in the state and the risk of contraction in the oil and gas industry and spillover effects into other industries, including manufacturing. The Texas Workforce Commission has reported that more than half a million Texans have filed unemployment claims in the 18 days ended April 3, 2020, that claims are expected to soon outpace the total number received in all of 2019, and that the volume of claims has led to long wait times, overwhelmed call centers and technical issues with the Commission's Unemployment Benefit Services portal. Due to the volume of claims, the Commission has recommended that Texans stagger their calls and access to its online portal to address a possible backlog of claims.

Measures taken to prevent or reduce the spread of COVID-19 are anticipated to limit the growth of or reduce economic activity in the State, which in turn would limit the growth of or reduce State tax collections. While healthcare costs for the uninsured and underinsured in Texas would be

incurred principally by counties and hospital districts, the State could incur increased expenditures for other costs such as Medicaid or State prison patients. In addition, further or extended reductions in the value of stocks and other investments could impact employee retirement plans or other funds and could require actions by the State. Due to the recent and unprecedented nature of the spread of COVID-19, the duration and extent of the impact of COVID-19 on the Texas economy and the State's revenues, expenses, and cash flow are uncertain and cannot be quantified at this time.

FEDERAL ACTIONS

- On March 27, 2020, the President signed the Coronavirus Aid, Relief and Economic Security Act which provides funds for market stabilization efforts, an expansion of unemployment insurance, and recovery rebates.
- On March 25, 2020, the President declared a major disaster exists in Texas and ordered federal assistance to supplement state and local recovery efforts for COVID-19. As a result, federal funding will be made available to state and eligible local governments and certain private nonprofit organizations for emergency protective measures.
- On March 18, 2020, the President signed the Families First Coronavirus Response Act which provides paid leave, establishes free testing, protects public health workers, and provides additional benefits to children and families.
- On March 16, 2020, the President issued Coronavirus Guidelines for America, which, among other things, asked citizens to avoid social gatherings in groups of 10 or more, eating or drinking at bars, restaurants, or food courts, and discretionary travel, shopping trips, and social gatherings.
- On March 13, 2020, the President declared the coronavirus pandemic a national emergency and announced up to \$50 billion for state and local governments to respond to the outbreak.
- On March 6, 2020, the President signed into law the Coronavirus Preparedness and Response Supplemental Appropriations Act, which provides \$8.3 billion in emergency funding for federal agencies to respond to the coronavirus outbreak, including aid in the development of therapies and vaccines.

STATE ACTIONS

The Texas Department of State Health Services (DSHS) is the lead state agency responding to and coordinating the State's response to COVID-19, and it has provided information available at https://www.dshs.texas.gov/coronavirus/

The State has taken various steps intended to safeguard communities and protect public health, including:

- On March 31, 2020, the Governor renewed, expanded, and extended through April 30, 2020, his previous directive to minimize social gatherings and contact with people who are not in the same household, except where necessary to provide or obtain essential services, and extended school closures to at least May 4, 2020.
- On March 20, 2020, the Governor announced that the U.S. Small Business Administration has included the entire state of Texas in its Economic Injury Disaster Declaration and granted access to its Economic Injury Disaster Loan program, which provides long-term, low-interest loans to qualifying businesses.
- On March 19, 2020, the Governor issued a series of executive orders to mitigate the spread of COVID-19. The orders require that:
 - o every person in Texas must avoid social gatherings in groups of more than 10 people,
 - people must avoid eating or drinking at bars, restaurants, and food courts, or visiting gyms or massage parlors, while the use of drive-thru, pickup, or delivery options is allowed and highly encouraged throughout the limited duration of the executive order,
 - o people may not visit nursing homes or retirement or long-term care facilities unless to provide critical assistance, and
 - o schools must temporarily close.

The Texas Education Agency has announced that school closings will not impact State funding of school districts, if they commit to supporting students instructionally while at home, so no savings in State expenses for public education is expected to result from the closings.

- On March 19, 2020, the Texas Education Commissioner provided guidance regarding the temporary statewide closure of schools and noted that school systems will continue to receive funding if they close because of COVID-19 related concerns as long as the school system commits to supporting students instructionally while at home.
- On March 19, 2020, the Commissioner of the Department of State Health Services issued a Public Health Disaster Declaration. The declaration directed the following measures:
 - People, businesses and communities should immediately undertake hygiene, cleanliness and sanitation practices that are accessible, affordable and known to be effective against COVID-19.
 - O People who are known to have, or who are under investigation, or monitoring for, COVID-19 should adhere to the direction provided to them by duly authorized persons, including public health officials. Failure to abide by such direction may result in involuntary quarantine or isolation for the purposes of preventing further community spread of COVID-19.
 - O People who are ill, especially those with symptoms consistent with influenza or COVID-19, should isolate themselves at home until they recover. Such persons should only present for medical evaluation and treatment if their symptoms are such that they cannot continue to be cared for in their home and, when seeking medical

care, should call their doctor or health care facility before arriving to allow them to prepare.

- Limit trips into the public to essential outings. Traveling to work, the grocery store, the pharmacy or to seek medical care would be considered essential trips.
- o Limit as much as possible close contact with other people. Stay six feet away.
- O Do not gather in social groups of more than ten (10) individuals.
- o Employers should allow work at home alternatives to the greatest extent possible.
- Restaurants should not allow dine-in options, either inside or outside. Take-out and curbside options with minimal contact are permitted and highly encouraged.

The executive order does not prohibit people from visiting a variety of places, including grocery stores, gas stations, parks, and banks, so long as the necessary precautions are maintained to reduce the transmission of COVID-19. The executive order does not mandate sheltering in place.

- On March 13, 2020, the Governor certified that COVID-19 posed an imminent threat of disaster and declared a state of disaster for all counties in Texas.
- On March 10, 2020, the Governor and the Texas Department of Insurance announced that health insurers and health maintenance organizations operating in Texas have been asked to waive certain costs associated with COVID-19 for individuals covered by state regulated insurance plans.
- On March 5, 2020, the Governor and DSHS announced that six public health labs within Texas' Laboratory Response Network were equipped to perform COVID-19 testing and that four additional labs in the network were directed to become similarly equipped.
- On March 3, 2020, the Governor announced twice-weekly multi-agency state planning and emergency response meetings with the Texas Emergency Management Council on COVID-19.

STATE CONTINUITY OF OPERATIONS

Since 2007, Texas Labor Code Section 412.054 has required each state agency to develop and submit to the State Office of Risk Management an agency-level continuity of operations plan to keep the agency operational in case of disruptions to production, finance, administration or other essential operations. Such plans may be implemented during the occurrence or imminent threat of events such as extreme weather, natural disasters and infectious disease outbreaks.

The Comptroller's office conducted its most recent continuity of operations exercise on March 10, 2020. Approximately 1,800 employees, representing the majority of the agency's workforce, worked regular hours from home. Critical operations of the agency, including simulated tests of debt service and liquidity processes, functioned normally with the same multi-layered cyber security controls in place. The agency has implemented expanded telework beginning March 16, 2020.

Appendix A

The State of Texas

February 2020

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About this Bond Appendix

This Appendix A (Bond Appendix) provides a general description of the State of Texas (State) and certain information relevant to the financial condition of the State. Information is provided as of the date this Bond Appendix is issued, except as otherwise expressly noted herein.

This Bond Appendix is intended (a) to be attached to or incorporated by reference in offering documents (Official Statements) prepared by state agencies to offer bonds or other securities, when authorized by the Comptroller of Public Accounts (Comptroller), and (b) to be provided to the Municipal Securities Rulemaking Board (MSRB) in satisfaction of contractual annual continuing disclosure obligations of the Comptroller made in connection with prior state agency bond offerings. The Bond Appendix is not intended to be exhaustive.

State financial information is provided by state agencies and officials from official records. Other information has been derived from sources which the Comptroller deems reliable. The State makes no representation regarding the accuracy or completeness of any information in this Bond Appendix, or the absence of changes in such information or adverse events after the date of the

information. Descriptions of general revenue of the State or revenue from any particular source in this Bond Appendix does not imply that any specific securities are payable from such revenues. As a result of rounding, certain tables in this Bond Appendix may contain immaterial inaccuracies.

Historical information in this Bond Appendix is not intended to predict future events or continuing trends, and the State makes no representation that past experience will continue in the future. Statements in this Bond Appendix that do not describe past or present events, conditions, or other facts are forward-looking statements. Forward-looking statements include forecasts, projections, predictions, expectations, anticipation, hopes, beliefs, intentions, and strategies for the future. All forward-looking statements in this Bond Appendix are based on available information, assumptions and estimates as of the date of the forecast or other forward looking statement. They are inherently subject to various known and unknown risks and uncertainties, including the possible invalidity of underlying assumptions and estimates; possible changes or developments in social, economic, business, industry, market, legal, and regulatory circumstances and conditions; force majeure; and actions taken or omitted to be taken by third parties, including consumers, taxpayers, and legislative, judicial, and other governmental authorities and officials. Assumptions may involve judgments about future economic and market conditions and future legislative, executive, and business decisions, all of which are difficult or impossible to predict accurately and many of which are beyond the control of the State. The Comptroller assumes no obligation to update any such forward-looking statements. Actual results could differ from those in forwardlooking statements, and the difference could be material. Accordingly, readers should not place undue reliance on forward-looking statements included in this Bond Appendix.

Bond Appendix references to website addresses are for informational purposes only and may be in the form of a hyperlink solely for the reader's convenience. Unless otherwise stated, such websites and the related information or links are not incorporated into, and are not part of, this Bond Appendix, including for purposes of Rule 15c2-12 of the U.S. Securities and Exchange Commission. The Comptroller does not control or guarantee the accuracy, completeness, or currency of any website not maintained by the Comptroller.

The data represented in this report is available in accessible data form (Excel):

https://comptroller.texas.gov/programs/systems/treasury-ops/docs/bond-appendix.xlsx

Incorporation by Reference

To enable state agencies to issue bonds payable from general revenue of the State in public offerings, the Comptroller has contractually undertaken to provide financial statements, included in the State's Comprehensive Annual Financial Report (CAFR), and certain other annual financial and operating data to the MSRB annually. The Comptroller's undertaking has been amended to include an obligation to provide to the MSRB timely notice of the incurrence or amendment of certain financial obligations of the State, if material, and of certain events under such financial obligations, if they reflect financial difficulties. The Comptroller may voluntarily file other notices with the MSRB from time to time to supplement or modify this Bond Appendix.

This Bond Appendix should be read in conjunction with the most recent CAFR and all committed and voluntary notices, if any, that the Comptroller has provided to the MSRB since the end of the last fiscal year included in the CAFR, all of which are incorporated herein by reference. No

representation is made that such documents contain all facts material to an evaluation of the ability of the State to make timely payment of debt service. Copies of the CAFR and any such notice may be viewed on the MSRB's Electronic Municipal Market Access (EMMA) system at http://www.emma.msrb.org using the EMMA Advanced Search function and entering the term "State of Texas Comptroller" in the Issuer Name field within the Security Information search filter.

1. STATE GOVERNMENT

ORGANIZATION

The State was admitted to the Union as the 28th State on December 29, 1845, approximately nine years after its secession from the Republic of Mexico in 1836. The current Constitution of the State of Texas (the Constitution) was adopted in 1876, succeeding earlier Constitutions of 1845, 1861, 1866 and 1869.

DIVISION OF POWERS

The Constitution divides the powers of the government of the State into three distinct departments: the legislative, the executive and the judicial. Under the terms of the Constitution, no person in any one department may exercise any power attached to another department unless specifically authorized to do so by the Constitution.

THE LEGISLATIVE DEPARTMENT

The legislative power of the State is vested in a House of Representatives and a Senate, which together constitute the Legislature of the State. The House of Representatives consists of 150 members who are elected for terms of two years. The Senate consists of 31 members who are elected for four-year terms. After congressional and legislative redistricting, which occurs every 10 years, each member must run for re-election. At that time, the members must draw lots to determine which half of the Senate serves on a 2-4-4 or 4-4-2 year term rotation until the next redistricting. Proceedings in the House of Representatives are presided over by the Speaker of the House, who is selected by the members of the House of Representatives from among their ranks. Proceedings in the Senate are presided over by the Lieutenant Governor, who is elected by a statewide vote, as described under the caption "The Executive Department," below. In the absence of the Lieutenant Governor, the President pro tempore of the Senate, a position determined by Senate members at the start of each session, presides over the Senate.

Regular sessions of the Legislature are held every two years in odd numbered years and may not exceed 140 days in duration. Special sessions of the Legislature may be convened by the Governor at any time. A special session of the Legislature may not exceed 30 days in duration and may address only those subjects designated by the Governor.

The 86th Regular Legislative Session adjourned sine die on May 27, 2019. The Legislature successfully passed the General Appropriations Act, which established appropriations for the 2020-2021 biennium, as well as a supplemental budget, which increased appropriations for the 2018-2019 biennium.

The Legislature also passed bills related to property tax reform, public education finance reform, and the investment of money in the Economic Stabilization Fund.

THE EXECUTIVE DEPARTMENT

The Executive Department of the State is composed of the Governor, the Lieutenant Governor, the Comptroller of Public Accounts, the Commissioner of the General Land Office, the Attorney General and the Secretary of State, all of whom are elected with the exception of the Secretary of State, who is appointed by the Governor.

There are other elected state officials, including the Commissioner of the Department of Agriculture and the three Commissioners of the Railroad Commission, which has regulatory jurisdiction over certain public utilities, transportation and the oil and gas industry.

The *Governor* is elected for a term of four years and is eligible to seek re-election for an unlimited number of terms. The Constitution requires the Governor to cause the laws of the State to be faithfully executed and to conduct all business of the State with other states and the United States. The Constitution also requires the Governor to present a message on the condition of the State to the Legislature at the commencement of each session of the Legislature and at the end of the term in office, and to recommend to the Legislature measures deemed expedient. The Governor has the power to veto any bill or concurrent resolution passed by the Legislature and to veto specific items in appropriation bills, but the Legislature may override any veto, including a line item veto of an appropriation, by a two-thirds vote within a certain time frame. If the Governor's office becomes vacant, he is succeeded in office by the Lieutenant Governor, who continues as Governor until the next general election. The current Governor is Greg Abbott who was sworn-in for his second term as Governor in January 2019.

The *Lieutenant Governor* is elected for a term of four years and is eligible to seek re-election for an unlimited number of terms. The Governor and the Lieutenant Governor are elected separately and may be members of different political parties. The Lieutenant Governor is the President of the Senate and is empowered to cast the deciding vote in the event the Senate is equally divided on any question. The Lieutenant Governor determines Senate committees, appoints committee chairs and members, and decides the order of bill consideration and parliamentary questions. The Lieutenant Governor also performs the duties of the Governor during any period that the Governor is unable or refuses to do so or is absent from the State. If the office of the Lieutenant Governor becomes vacant, a successor is elected by the members of the Senate from their ranks. Until a successor is elected, or if the Lieutenant Governor is absent or temporarily unable to act, the duties of the Lieutenant Governor are performed by the President pro tempore of the Senate. The current Lieutenant Governor is Dan Patrick who was sworn-in for his second term as Lieutenant Governor in January 2019.

The Comptroller of Public Accounts (Comptroller) is elected for a term of four years and is the chief accounting officer of the State. The Comptroller is generally responsible for maintaining the accounting records of the State and collecting taxes and other revenues due to the State, although other state officials share responsibility for both of these functions. The Comptroller is required by statute to prepare an annual statement of the funds of the State and of the state's revenues and expenditures for the preceding fiscal year. In addition, the Constitution requires the Comptroller to submit to the Governor and the Legislature, at the commencement of each regular session of the Legislature, an itemized estimate of the anticipated revenues that will be received by the State during the succeeding biennium based upon existing laws. The Constitution also requires the

Comptroller to submit supplemental statements at any special session of the Legislature and at such other times as may be necessary to show probable changes. The State Constitution also requires the Comptroller to certify that any appropriations bill passed by the Legislature falls within available revenues before the bill goes to the Governor for his signature. The Comptroller's responsibilities have been expanded by the Legislature and/or the voters to include the following: the Property Value Study and Methods and Assistance Program review of appraisal districts, the administration of the Texas Tuition Promise Fund, Treasury Operations, the State Energy Conservation Office, administration of the Texas ABLE program, and the establishment and oversight of the Texas Bullion Depository. The current Comptroller is Glenn Hegar who was sworn-in for his second term as Comptroller in January 2019.

The Commissioner of the General Land Office is elected for a term of four years. The Commissioner of the General Land Office is generally responsible for administering the public lands owned by the State. The Commissioner of the General Land Office serves as the chairman of the School Land Board, which has authority over the sale and lease of state owned lands, and as chairman of the Veterans' Land Board. The Commissioner of the General Land Office also serves as the chairman of boards that control the exploration for oil, gas and other minerals on State lands. The current Commissioner of the General Land Office is George P. Bush who was sworn-in for his second term as Land Commissioner in January 2019.

The Attorney General is elected for a term of four years and is the chief legal officer of the State. The Attorney General is required to prosecute and defend all actions in the Supreme Court or the Courts of Appeals in which the State may be interested. The Attorney General also is required, upon request, to advise the Governor, the head of any department of the state government and certain other state and county officials upon any question touching the public interest or concerning their official duties. The Attorney General is the exclusive representative of state agencies, and other attorneys may be retained only if the Attorney General is unable to provide the specific service in question. The current Attorney General is Ken Paxton who was sworn-in for his second term as Attorney General in January 2019.

The Secretary of State is appointed by the Governor, with the advice and consent of the Senate, and serves during the term of service of the Governor by whom he or she is appointed. The Secretary of State is required to maintain official records of all laws and all official acts of the Governor and to perform such other duties as are required by law. The Legislature has made the Secretary of State generally responsible for the supervision of elections and for corporate and other similar filings. The governor appointed Ruth R. Hughs as Secretary of State in August 2019.

STATEWIDE BALLOT MEASURES

Information regarding statewide ballot measures can be found at: https://www.votetexas.gov/voting/what.html

THE JUDICIAL DEPARTMENT

The judicial power of the State is vested in a Supreme Court, a Court of Criminal Appeals, 14 courts of appeals, numerous district courts and various lower courts. The Supreme Court is the

appellate court of last resort in all cases except criminal matters and, in addition, has original jurisdiction over actions for mandamus against state officials and certain other matters. The Court of Criminal Appeals has final appellate jurisdiction over all criminal matters. The courts of appeals are intermediate level appellate courts and have jurisdiction over both civil and criminal cases. The justices and judges of all courts in the State are elected. Terms of office are six years in the case of the members of the Supreme Court, the Court of Criminal Appeals and the courts of appeals, and four years for judges of lower courts.

2. FISCAL MATTERS

ACCOUNTING SYSTEM

The State operates on a fiscal year basis, which begins on September 1 and ends on August 31. The State's appropriation period is a biennium covering two fiscal years.

During the 1987 session, the Legislature imposed uniform accounting and financial reporting procedures on all state agencies and provided that accounting for state agencies is reported in accordance with generally accepted accounting principles (GAAP). Sections 2101.012 through 2101.014, Government Code, require the Comptroller, with the review of the State Auditor, to prescribe uniform accounting and financial reporting procedures. The Comptroller is also required by section 403.013, Government Code, to prepare a report to the Governor containing financial information of all state agencies prepared in accordance with GAAP. This report is due annually on the last day of February and is in addition to the cash report also required under this section that is due annually on the first Monday in November. The cash report contains a statement of state funds and accounts, revenues and expenditures during the preceding fiscal year on a cash basis. An audited *Texas Comprehensive Annual Financial Report* was produced for the first time in 1990 and will continually be used for the February report cited. The 1990-2018 reports all received the "Certificate of Achievement for Excellence in Financial Reporting" awarded by the Government Finance Officers Association.

The State is required by law to maintain its accounting and reporting on a cash basis, under which revenues are recorded when received and expenditures are recognized as disbursements when made. However, implementation of the Uniform Statewide Accounting System (USAS) on September 1, 1993 provided the ability for state agencies to maintain the state accounting system on a modified accrual basis in accordance with GAAP, as well as on a cash basis.

The State's central accounting system, USAS, records financial information both on a cash basis and under GAAP. USAS is the primary source of fiscal control and financial information for the State. Some agencies utilize USAS as their internal accounting system, while others are required to reconcile internal accounting records and record the information in the state system via reporting requirements.

APPROPRIATIONS AND BUDGETING

The Constitution requires an appropriation for any funds to be drawn out of the treasury. Certain appropriations are made by the Constitution and do not require further legislative action, although the Legislature frequently makes a parallel appropriation. All other appropriations must be made through a bill passed by the Legislature and approved by the Governor or passed by the Legislature over the Governor's veto. Legislative appropriations are limited by the Constitution to a period of two years. Generally, appropriations are made by the Legislature separately for each fiscal year of the biennium, but an appropriation can be made for the biennium or for a part of the biennium other than a fiscal year. Claims must be filed against an appropriation within two years after the

end of the fiscal year for which the appropriation is made, except for construction appropriations, against which claims may be made for up to four years.

Article III, section 49a of the Constitution, the so-called "pay-as-you-go" provision, provides that an appropriation is not valid if it exceeds the amount of cash and estimated revenues of the fund from which such appropriation is to be paid.

The Constitution requires the Comptroller to submit to the Governor and the Legislature, at the commencement of each regular session of the Legislature, a statement that contains, among other things, an itemized estimate of anticipated revenues, based on laws then in effect, that will be received by the State during the succeeding biennium. The Constitution also requires the Comptroller to submit supplementary statements at any special session of the Legislature and at such other times as may be necessary to show probable changes. No appropriations bill passed by the Legislature may be sent to the Governor for consideration until the Comptroller has certified that the amounts appropriated are within the amounts estimated to be available in the affected funds.

Budgeting for the State is handled through the Governor's Office of Budget, Planning, and Policy (GOBPP) and the Legislative Budget Board (LBB). By statute, the Governor has been made the chief budget officer of the State, which is a function carried out by staff members who constitute the GOBPP. The Legislature has its own budget agency in the LBB. The GOBPP and the LBB generally cooperate with respect to matters pertaining to preparation of budgets and prepare uniform instructions and forms for budget requests. The Governor and the LBB each make separate submissions to the Legislature—the Governor's usually in the form of a budget proposal and the LBB's in the form of a draft appropriations bill to be submitted for consideration by the Legislature. The Governor is authorized by statute to submit a draft appropriations bill, or the bill may be introduced in the Legislature along with the bill prepared by the LBB.

In an effort to improve the budgeting process, a performance-based budget preparation process, which appropriates funds at the strategy level, was implemented and utilized to prepare proposed budgets beginning with the 1994-95 biennium. Agency budgets are tied to goals and objectives that include strategies to meet these goals and objectives with measurable outputs and efficiencies. The system provides the State's decision makers with enhanced knowledge to maximize state funds.

LEGISLATIVE BUDGET BOARD

The Legislative Budget Board is composed of the Lieutenant Governor, the Speaker of the House of Representatives, four members of the House of Representatives (including the chairs of the House Appropriations Committee and the House Ways and Means Committee) and four members of the Senate (including the chairs of the Senate Finance Committee and the Senate State Affairs Committee). The traditional role of the LBB has been to formulate a proposed budget for presentation to the Legislature as discussed under "Appropriations and Budgeting" above. In recent years, however, the role of the LBB has been expanded by statute and by practice. It now frequently carries out quasi-legislative functions relating to state finances when the Legislature is not in session.

NON-LEGISLATIVE POWERS WITH RESPECT TO APPROPRIATIONS

The Governor is authorized by statute to make findings of any fact specified by the Legislature in any appropriations bill as a contingency to the expenditure of funds. Accordingly, the Governor has some minimal discretion to prevent the expenditure of funds, exercisable in situations in which an appropriation made by the Legislature is conditioned upon the occurrence of a given event or the existence of a given fact.

The Legislature has provided a means of dealing with fiscal emergencies under which the Governor is empowered to authorize expenditures from a general appropriation made by the Legislature specifically for emergencies. The Legislature is not obligated to appropriate any amount for such purpose, but customarily does so.

The Governor may not authorize the expenditure of the emergency funds unless a certification is made to the Comptroller that an emergency and imperative public necessity requiring the use of such funds exists and the Comptroller determines that no other funds are available for such purpose. Any expenditure so authorized by the Governor may only be used in those instances in which no other funds are available due to exhaustion of appropriations and for specific purposes previously appropriated by the Legislature.

The Legislature, in the second called session held during the summer of 1987, enacted a budget execution law which gave the Governor, subject to the review of the LBB the ability to make changes in legislative appropriations during periods when the Legislature is not in session. The statute was amended in 1991, giving both the Governor and the LBB the authority to make proposals which require that a state agency be prohibited from spending an appropriation, which require that an agency be obligated to expend an appropriation, or which affect the manner in which part or all of an appropriation made by the Legislature to an agency may be distributed or redistributed. In addition, the Governor or LBB, upon making a determination that an emergency exists, may propose that an appropriation made to a state agency be transferred to another agency, that an appropriation be retained by the agency but used for a different purpose or that the time when an appropriation be made available to a state agency be changed. Funds that are dedicated by the Constitution may be withheld upon the Governor's or LBB's proposal, but may not be transferred to other state agencies except an agency which is entitled to receive appropriations from those funds under the terms of the Constitution. Federal funds appropriated by the Legislature may be transferred only as permitted by federal law.

The Governor's or LBB's use of the budget execution provision is subject to publication and, in certain instances, public hearing requirements. In addition, before the Governor's proposal may be executed, it must be ratified by action of the LBB or if proposed by the LBB, by action of the Governor. During the LBB's ratification process, the proposal may be changed and ratified or rejected, or recommendations for changes in the proposal may be made. The affirmative vote of a majority of the members of the LBB from each house of the Legislature is necessary for the adoption of any budget execution order.

Except under the circumstances described in preceding paragraphs, appropriations or adjustments of appropriations may be authorized only by the Legislature.

ECONOMIC STABILIZATION FUND

The Economic Stabilization Fund (ESF), also known as the state Rainy Day Fund, was established in September 1989 under Article III, Section 49-g of the Texas Constitution as a special reserve fund in the state treasury. The constitutional provision directs the Comptroller to transfer certain revenues to the ESF after each fiscal year (FY); establishes a fund cap; allows temporary transfers from the ESF to address any general revenue fund cash deficiency; and allows the legislature to appropriate amounts from the ESF for any purpose at any time.

TRANSFERS TO THE ESF

The Comptroller's office is required to make transfers to the ESF within 90 days after the end of each fiscal year. These transfers are typically performed in late November. The Comptroller is required to transfer the following amounts to the ESF after each fiscal year up to the fund cap:

- 37.5 percent of the amount by which net oil and gas production (severance) tax collections in the fiscal year exceeded fiscal 1987 collections; and
- After the last fiscal year in a biennium, 50 percent of any unencumbered General Revenue surplus at the end of the biennium; and
- The Legislature may also appropriate additional funds to the ESF.

Prior to FY 2015, 75 percent of net oil and gas production taxes in excess of fiscal 1987 collections were required to be transferred to the ESF after each fiscal year. Effective with FY 2015, a constitutional amendment authorized one half of that amount (37.5 percent) to be transferred to the State Highway Fund unless otherwise limited by the legislature. The requirement to transfer a portion of the net oil and gas production taxes to the State Highway Fund will expire December 31, 2034, unless the legislature extends the requirement.

Under Government Code Section 316.092, prior to each legislative session, a joint legislative committee determines the balance of the ESF it anticipates to be sufficient in the next biennium. The legislature may enact an adjustment to the committee's determination. If at the time of the net transfer, the balance of the fund is below the established sufficient balance, the Comptroller is required to increase the net oil and gas production tax collections transferred to the ESF as necessary to produce a sufficient balance. Note: The 86th Texas Legislature amended Section 316.092 and altered the sufficient balance calculation to 7 percent of the certified General Revenue-related appropriations made for that fiscal biennium. However, the new methodology will not be effective until the 2022-23 biennium beginning September 1, 2021.

The Select Joint Committee on the Economic Stabilization Fund Balance adopted a sufficient balance of \$7.5 billion for FY 2020-2021, unchanged from the FY 2018-2019 biennium. There is no assurance the amount determined to be a sufficient balance for the ESF will be funded, will be sufficient to offset shortfalls in revenue in any biennium, or will not be appropriated and expended for other purposes.

FUND CAP

The ESF is capped each biennium at an amount equal to 10 percent of General Revenue (excluding interest, other investment income and borrowings from special funds) deposited during the previous biennium. The State has never reached the cap. The cap for the 2020-21 biennium is \$18.8 billion.

TEMPORARY TRANSFERS TO THE GENERAL REVENUE FUND

The Comptroller is authorized to transfer funds from the ESF to the General Revenue Fund to prevent or eliminate a temporary cash deficiency, but must return the transferred amount as soon as practicable, no later than the end of the biennium in which the transfer occurred. The ESF receives the investment earnings on the balance as if the funds were not transferred. See Table A-15 for historical information related to cash flow management and the use of intrafund and interfund transfers.

APPROPRIATION OF ESF

The legislature may appropriate money from the ESF by a two-thirds vote of the members present in each house for any purpose at any time.

The legislature may appropriate money from the fund by a three-fifths vote to (a) address a deficit that develops after the adoption of a budget, but only for purposes previously appropriated, or (b) to make appropriations for a biennium in which the Comptroller forecasts a decline in revenues from the prior biennium (but not more than the actual decline), determined without regard to enacted changes in any tax base or rate.

Since 1989, the Legislature has appropriated ESF funds for a variety of state funding purposes, including health and human services, disaster assistance, healthcare for state retirees, economic development, the foundation school program, state parks, state water plan, and transportation. The 85th Legislature appropriated \$988.9 million consisting of \$280.3 million in one-time grants to local entities, \$640.3 million for health and safety repairs and \$68.3 million for other state facilities construction needs.

In 2017, the 85th Legislature passed Senate Bill 1 appropriating \$988.9 million for the FY 2018-2019 biennium. In 2019, the 86th Legislature passed Senate Bill 500 appropriating \$6.2 billion in ESF funds to state agencies including \$1.8 billion for disaster relief, \$1.1 billion for teacher retirement contributions and \$211.0 million to fund the Texas Tomorrow Fund. As of December 31, 2019, \$3.9 billion remains in outstanding appropriation authority. Out of the remaining \$3.9 billion, \$261 million is appropriated beginning in FY 2021.

INVESTMENT OF THE ESF

The Comptroller is required to invest the ESF in the same manner as other state funds. Interest and other income earned on ESF fund balances is retained in the ESF up to the cap. In addition, Texas Government Code Section 404.0241 directs the Comptroller to invest a portion of the ESF balance

that exceeds the legislatively determined sufficient balance in accordance with the general prudent investment standard. The Comptroller reviews and adjusts the investment portfolio periodically to ensure the balance is adequate to meet the cash flow requirements of the ESF. As of December 31, 2019, the ESF balance was \$11.4 billion, of which \$3.9 billion was invested under the prudent investment standard.

Effective September 1, 2019, SB 69, adopted by the 86th Legislature, amends Section 404.0241 to provide that the ESF be invested by the Comptroller in accordance with a prudent investor standard; provided that at least one-quarter of the ESF is invested in a manner to ensure the liquidity of that amount, and that the balance of the fund is sufficient to meet its cash flow requirements.

INTRAFUND AND INTERFUND BORROWING

The Comptroller has authority under Texas Government Code Section 403.092 to transfer available cash, excluding constitutionally dedicated revenues, as needed through intrafund and interfund transfers. The balances available for intrafund and interfund transfers may be used to meet the required disbursements of the General Revenue Fund. These transfers effectively allow the Comptroller to borrow cash balances held in special accounts or funds to manage the cash flow requirements of the General Revenue Fund caused by timing differences between cash expenditures and cash receipts.

Intrafund transfers occur when the Comptroller makes available cash accessible from any account to any other account in the General Revenue Fund. Interfund transfers occur when the Comptroller transfers available cash, excluding constitutionally dedicated revenues, from any fund managed by or in the custody of the Comptroller. If the Comptroller transfers available cash, the Comptroller is required to return the available cash to the account or fund from which it was transferred as soon as practicable with interest earnings allocated as if the transfer had not occurred.

See Temporary Transfers to the General Revenue Fund under the Economic Stabilization Fund section for additional information regarding temporary transfers from the Economic Stabilization Fund to the General Revenue Fund.

See Table A-15 for historical information related to cash flow management and the use of interfund transfers.

TAX AND REVENUE ANTICIPATION NOTES

The Comptroller is authorized to issue Tax and Revenue Anticipation Notes on behalf of the State under legislation, which became effective in October 1986. Under Texas Government Code Subchapter H (§404.121 et. seq), notes may be issued solely to coordinate the State's cash flow within a fiscal year and must mature and be paid in full during the biennium in which the notes are issued.

Before issuing any notes, the Comptroller must prepare a forecast of the cash flow shortfall for the State's General Revenue Fund based on the most recent estimate of revenues prepared by the Comptroller and must submit the forecast to the State's Cash Management Committee.

The Cash Management Committee is composed of the Governor, Lieutenant Governor, and the Comptroller of Public Accounts as voting members, and the Speaker of the House of Representatives as a non-voting member. The amount of notes issued by the Comptroller may not exceed the amount approved by the Cash Management Committee, which, in turn, may not approve the issuance of notes in an amount in excess of the temporary cash shortfall projections. Data on Tax and Revenue Anticipation Notes issued may be found in Table A-15.

AUDITS

The State Auditor is appointed by the Legislative Audit Committee, composed of the Lieutenant Governor, the Speaker of the House of Representatives, the chairmen of the House Appropriations Committee and the House Ways and Means Committee, the chairman of the Senate Finance Committee and one member of the Senate appointed by the Lieutenant Governor. The State Auditor serves at the will of the Legislative Audit Committee. The State Auditor is charged with the responsibility of devising and recommending the audit plan for the State for each fiscal year to the Audit Committee for approval. The Auditor may conduct financial audits, compliance audits, economy and efficiency audits, effectiveness audits, special audits and investigations of state agencies and institutions of higher education. The State Auditor shall prepare a written report for each audit conducted and file a copy with the Governor, Lieutenant Governor, Speaker of the House of Representatives, Secretary of State, Legislative Reference Library, each member of the governing body and administrative head of the audited entity and members of the Legislature on a committee with oversight responsibility for the entity or program that is the subject of the report. If improprieties are found, the State Auditor, after consulting with the agency head, shall immediately report to the Governor, the committee and the appropriate legal authority. The State Auditor does not audit the constitutionally required "cash basis" report prepared by the Comptroller. However, since fiscal 1987, the Comptroller is required by law to issue a statewide annual financial report that conforms to generally accepted accounting principles (GAAP) for state governments. The Texas Comprehensive Annual Financial Report is required to be audited by the State Auditor. The audited version of the 2018 report was issued on February 28, 2019. Copies of the audited annual financial report are available to the public by writing to the Fiscal Integrity Division, Comptroller of Public Accounts, P.O. Box 13528, Austin, TX 78711 or by visiting the State Comptroller's website at: https://comptroller.texas.gov/transparency/reports/comprehensiveannual-financial/.

GENERAL INVESTMENT AUTHORITY AND PORTFOLIO

The Comptroller is responsible for holding and investing state funds and other funds as required by law. The Comptroller invests funds in investments authorized by statute and consistent with the Texas State Comptroller Investment Policy, dated October 2015. The size of the Treasury investment pool ranges, on average, between \$26 billion and \$39 billion depending on seasonal variations in revenues and expenditures and Tax and Revenue Anticipation Note size; issued under Texas Government Code Subchapter H (§404.121 et. seq).

AUTHORIZED INVESTMENTS

- a) The Comptroller may determine and designate the amount of state funds to be deposited in time deposits in State depositories. The percentage of state funds to be deposited in state depositories shall be based on the interest rates available in competing investments, the demand for funds from Texas banks, and the state's liquidity requirements.
- b) State funds not deposited in state depositories shall be invested by the Comptroller in: (1) direct security repurchase agreements; (2) reverse security repurchase agreements; (3) direct obligations of or obligations the principal and interest of which are guaranteed by the United States; (4) direct obligations of or obligations guaranteed by agencies or instrumentalities of the United States government; (5) bankers' acceptances that: (A) are eligible for purchase by the Federal Reserve System; (B) do not exceed 270 days to maturity; and (C) are issued by a bank whose other comparable short-term obligations are rated in the highest short-term rating category, within which there may be subcategories or gradations indicating relative standing including such subcategories or gradations as "rating category" or "rated" by a nationally recognized statistical rating organization, as defined by Rule 2a-7 (17 C.F.R. Section 270.2a-7), promulgated under the Investment Company Act of 1940 by the Securities and Exchange Commission; (6) commercial paper that: (A) does not exceed 270 days to maturity; and (B) except as provided by Subsection (i), is issued by an entity whose other comparable short-term obligations are rated in the highest short-term rating category by a nationally recognized statistical rating organization; (7) contracts written by the Treasury in which the Treasury grants the purchaser the right to purchase securities in the Treasury's marketable securities portfolio at a specified price over a specified period and for which the treasury is paid a fee and specifically prohibits naked-option or uncovered option trading; (8) direct obligations of or obligations guaranteed by the Inter-American Development Bank, the International Bank for Reconstruction and Development (the World Bank), the African Development Bank, the Asian Development Bank, and the International Finance Corporation that have received the highest long-term rating categories for debt obligations by a nationally recognized statistical rating organization; (9) bonds issued, assumed, or guaranteed by the State of Israel; (10) obligations of a state or an agency, county, city, or other political subdivision of a state; (11) mutual funds secured by obligations that are described by Subdivisions (1) through (6) or by obligations consistent with Rule 2(a)-7 (17 C.F.R. Section 270.2(a)-7, promulgated by the Securities and Exchange Commission, including pooled funds: (A) established by the Texas Treasury Safekeeping Trust Company; (B) operated like a mutual fund; (C) with portfolios consisting only of dollar-denominated securities; (12) foreign currency for the sole purpose of facilitating investment by state agencies that have the authority to invest in foreign securities; (13) asset-backed securities, as defined by the Securities and Exchange Commission in Rule 2a-7 (17 C.F.R. Section 270.2a-7), that are rated at least A or its equivalent by a nationally recognized statistical rating organization and that have a weighted-average maturity of five years or less; and (14) corporate debt obligations that are rated at least A or its equivalent by a nationally recognized statistical rating organization and mature in five years or less from the date on which the obligations were "acquired," as defined by the Securities and Exchange Commission in Rule 2a-7 (17 C.F.R. Section 270.2a-7).

- c) Investments in direct security repurchase agreements and reverse security repurchase agreements may be made with state or national banks doing business in this state or with primary dealers as approved by the Federal Reserve System. Notwithstanding any other law, the term of any reverse security repurchase agreement may not exceed 90 days after the date the reverse security repurchase agreement is delivered. Money received under the terms of a reverse security repurchase agreement may be used to acquire additional authorized investments, but the term of the authorized investments acquired must mature not later than the expiration date stated in the reverse security repurchase agreement.
- d) The Comptroller may contract with a depository for the payment of interest on time or demand deposits at a rate not to exceed a rate that is lawful under an Act of Congress and rules and regulations of the board of governors of the Federal Reserve System, the board of directors of the Federal Deposit Insurance Corporation, the National Credit Union Administration Board, and the Federal Home Loan Banking Board.
- e) The Treasury may not purchase any of the following types of investments: (1) obligations the payment of which represents the coupon payments on the outstanding principal balance of the underlying mortgage-backed security collateral and pays no principal; (2) obligations the payment of which represents the principal stream of cash flow from the underlying mortgage-backed security collateral and bears no interest; (3) collateralized mortgage obligations that have a stated final maturity date of greater than 10 years; and (4) collateralized mortgage obligations the interest rate of which is determined by an index that adjusts opposite to the changes in a market index.
- f) The Comptroller by rule may define derivative investments other than those described by Subsection (e). The Treasury may not purchase investments defined by rule adopted under this subsection in an amount that at the time of purchase will cause the aggregate value of the investments to exceed five percent of the Treasury's total investments.
- g) To the extent practicable, the Comptroller shall give first consideration to Texas banks when investing in direct security repurchase agreements.
- h) The Comptroller may not use state funds to invest in or purchase obligations of a private corporation or other private business entity doing business in Northern Ireland unless the corporation or other entity: (1) adheres to fair employment practices; and (2) does not discriminate on the basis of race, color, religion, sex, national origin, or disability.
- i) Notwithstanding Subsection (b)(6)(B), the Comptroller may purchase commercial paper with a rating lower than the rating required by that paragraph to provide liquidity for commercial paper issued by the Comptroller or an agency of the State.
- j) If the Comptroller is required by law to invest funds other than as provided by this section, and if other law does not establish a conflicting standard governing that investment, the Comptroller shall invest those funds under the restrictions and procedures for making the investments that persons of ordinary prudence, discretion, and intelligence, exercising the judgment and care under the prevailing circumstances, would follow in the management of their own affairs, not in regard to speculation but in regard to the permanent disposition of their funds, considering the probable income as well as the probable safety of their capital.

- k) The Comptroller may contract with private professional investment managers to assist the Comptroller in investing funds under the care, custody, and control of the Comptroller.
- 1) The Comptroller may lend securities under procedures established by the Comptroller. The procedures must be consistent with industry practice and must include a requirement to fully secure the loan with cash, obligations described by Subsections (b) (1)-(6), or a combination of cash and the described obligations. Notwithstanding any law to the contrary, cash may be reinvested in the items permitted under Subsection (b) or mutual funds, as defined by the Securities and Exchange Commission in Rule 2a-7 (17 C.F.R. Section 270.2a-7).
- m) In entering into a direct security repurchase agreement or a reverse security repurchase agreement, the Comptroller may agree to accept cash on an overnight basis in lieu of the securities, obligations, or participation certificates identified in Section 404.001 (3). Cash held by the State under this subsection is not a deposit of state or public funds for purposes of any statute, including this subchapter or Subchapter D, that requires a deposit of state or public funds to be collateralized by eligible securities.
- n) Notwithstanding any other law to the contrary, any government investment pool created to function as a money market mutual fund and managed by the Comptroller or the Texas Treasury Safekeeping Trust Company may invest the funds it receives in investments that are "eligible securities," as defined by the Securities and Exchange Commission in Rule 2a-7 (17 C.F.R. Section 270.2a-7), if it maintains a dollar-weighted average portfolio maturity of 90 days or less, with the maturity of each portfolio security calculated in accordance with Rule 2a-7 (17 C.F.R. Section 270.2a-7), and meets the diversification requirements of Rule 2a-7.

INVESTMENT POLICIES

The Comptroller's principal investment and management objectives are as follows: (1) preservation of capital and protection of principal, first; (2) maintenance of sufficient liquidity to meet operating needs, second; and (3) maximization of return, third. The Comptroller will preserve capital and protect principal by investing in a diversified pool of assets of high credit quality. Interest rate risk will be managed by maintaining a weighted-average maturity of no more than two (2) years.

Whenever practicable, the Comptroller and the Texas Treasury Safekeeping Trust Company will award investment transactions on a competitive basis by soliciting at least two bids and then placing purchase and sale orders with brokers to achieve best execution. All transactions will be fully documented by the individual executing the trade and confirmed by a second investment staff member.

The Comptroller enters into only fully collateralized repurchase agreements. The Comptroller's Master Repurchase Agreement governs all transactions. Repurchase agreement collateral is limited to those securities authorized for outright purchase by the Comptroller. All such collateral is held for safekeeping at the Federal Reserve Bank of Dallas, San Antonio Branch, in the name of the Comptroller of Public Accounts or at an approved third party institution with which the Comptroller has executed a custodial undertaking agreement in connection with a master

repurchase agreement. Collateral is monitored daily to ensure that margin requirements are maintained. Margin excesses or deficits will be corrected on a timely basis, generally no later than the next business day. Repurchase agreement transactions must be placed only with primary government securities dealers approved by the Federal Reserve System or state or national banks doing business in the State of Texas.

TEXAS TREASURY SAFEKEEPING TRUST COMPANY

In addition, the Comptroller of Public Accounts is the sole director, officer and shareholder of the Texas Treasury Safekeeping Trust Company (the "Trust Company"). The Trust Company was established to provide direct access to the services of the Federal Reserve System and to enable the Comptroller to manage and invest public funds and securities more efficiently and economically. The Trust Company also enters into contracts to provide funds management services to state agencies and local governments. In accordance with section 404.115 of the Texas Government Code, the Comptroller has appointed Mike Reissig as Chief Executive Officer of the Trust Company. His appointment became effective October 1, 2019.

The Comptroller currently manages numerous separate portfolios by and through the Trust Company which is authorized to operate the TexPool portfolios, the local government investment pools comprised of TexPool, the largest, and TexPool Prime. The State Treasurer organized TexPool in 1989, and its balances have ranged from \$11 billion to \$27.6 billion in the last few years. Since May 12, 1997, the day-to-day administration of TexPool has been outsourced. These activities are currently managed for the Comptroller by Federated Investors Inc. The types of authorized investments within TexPool are U.S. Government Securities, Agencies and Instrumentalities, Repurchase Agreements and Money Market Mutual Funds. The types of authorized investments within TexPool Prime are U.S. Government Securities, Agencies and Instrumentalities, Repurchase Agreements, Reverse Repurchase Agreements, Certificates of Deposit, Commercial Paper and Money Market Mutual Funds. As of February 1, 2020, TexPool had 2,599 members and a fund balance of \$27.6 billion; TexPool Prime had 411 members and a fund balance of \$7.8 billion. TexPool and TexPool Prime are AAAm money market funds rated by Standard and Poor's. TexPool's average maturity is 30 days and TexPool Prime is 35 days as of February 1, 2020.

3. STATE REVENUES AND EXPENDITURES

CURRENT TREASURY INVESTMENTS

As of February 1, 2020, the beginning balance in the Treasury was \$38.9 billion, of which \$5.0 billion is invested by the Comptroller at the discretion of the State Permanent School Fund, Permanent University Fund, and employee pension funds. As of such date, the fair value of Treasury investments by category was as follows:

Table A-1 Current Treasury Investments

	Fair Value (in	Percent of
Investment Type	millions)	Total
Bank Deposits	579	1.49%
Treasury Bills	5,233	13.46%
Treasury Notes	2,754	7.08%
Treasury TIPS	0	0.00%
Treasury FRNs	501	1.29%
Corporate Bonds	2,896	7.45%
Covered Bonds	0	0.00%
Asset Backed Securities	3,546	9.12%
Money Market Funds	1,845	4.75%
Agency Notes	526	1.35%
Agency Discount Notes	699	1.80%
Supranational	2,955	7.60%
Supranational Discount Notes	99	0.26%
Repurchase Agreements	2,700	6.95%
Lottery Award Annuities	461	1.19%
Mortgage Backed Securities	2,932	7.54%
SBA Securities	9	0.02%
Commercial Paper	11,096	28.54%
Israel Bond	60	0.15%
Cash	0	0.00%
Trust Stock	1	0.00%
Reverse Repurchase Agreements	-18	-0.05%
Totals (1)	38,875	100.00

⁽¹⁾ Totals may not sum due to rounding

Source: Texas Treasury Safekeeping Trust Company

These securities do not include any prohibited securities. The average remaining term of these securities (excluding securities matched to state lottery prize liabilities) is 360 days. Information on the Trust Company Investment Policies and Investments may be found on the Trust Company's website at www.ttstc.com.

LIQUIDITY

Under Texas Government Code Section 404.027, the Comptroller has entered into agreements to provide liquidity for certain state agency debt obligations issued for governmental purposes, so long as they do not conflict with the liquidity needs of the state treasury. The agreements commit the State of Texas to purchase commercial paper securities to refund maturing commercial paper securities, if they cannot be rolled, and demand securities tendered for purchase, if they cannot be remarketed. Such securities, if purchased, would be held as investments in the state treasury, as authorized under Government Code Section 404.024 until such time as they may be refinanced or remarketed. The liquidity agreements do not guarantee the payment of state agency debt obligation principal or interest.

As of January 31, 2020, the Comptroller provided liquidity for the obligations in the table below.

	Total Commitment	
Obligations	(Principal and Interest)	Final Date
Texas Department of Housing and Community Affairs Taxable Junior Lien Single Family Variable Rate Mortgage Revenue Bonds, Series 2004A (weekly demand)	\$4,153,605	August 31, 2021
Texas Department of Housing and Community Affairs Single Family Variable Rate Mortgage Revenue Refunding Bonds, Series 2004B (weekly demand)	\$19,819,859	August 31, 2021
Texas Department of Housing and Community Affairs Single Family Variable Rate Mortgage Revenue Bonds, Series 2004D (weekly demand)	\$13,387,428	August 31, 2021
Texas Department of Housing and Community Affairs Single Family Variable Rate Mortgage Revenue Refunding Bonds, Series 2005A (weekly demand)	\$19,054,863	August 31, 2021
Texas Department of Housing and Community Affairs Single Family Mortgage Revenue Bonds, Series 2007A (weekly demand)	\$19,286,516	August 31, 2021
Texas Public Finance Authority State of Texas General Obligation Commercial Paper Notes (Cancer Prevention and Research Institute of Texas Project) Series A and Series B	\$268,442,623	August 31, 2021
Texas Public Finance Authority State of Texas General Obligation Commercial Paper Notes, Series 2008	\$85,901,639	August 31, 2021
Texas Public Finance Authority Revenue Commercial Paper Note Program (Texas Facilities Commission Projects), Series 2016A (Taxable) and Series 2016B (Tax-Exempt)	\$214,754,098	August 31, 2021
Texas Public Finance Authority Commercial Paper Revenue Notes, Series 2019A and Taxable Series 2019B	\$214,754,098	August 31, 2021
Texas Transportation Commission State of Texas General Obligation Mobility Fund Bonds, Series 2006-B (Multi-Modal Bonds)	\$151,721,311	August 31, 2021
TOTAL PROGRAM COMMITMENT	\$1,011,276,041	

IDENTITY OF FUNDS

An understanding of the relative importance of each of the state's revenue sources requires a brief explanation of the state's fund accounting process. As stated above, there are several hundred different funds within the Treasury. The General Revenue Fund, due to its character and the large number of programs financed through it, provides an indication of the state's financial condition. In fiscal 2019, Consolidated General Revenue accounted for most of the state's total net revenue (see Table A-4). The category of state funds that provides a broader understanding of the state's financial condition consists of non-trust funds, which includes the General Revenue Fund, other operating and disbursing funds, constitutionally created funds, federal funds, pledged and bond funds and other special funds. The remaining funds consist of trust funds and accounts that are held in trust for specific state programs, such as sales tax revenues that must be distributed to local governments in the State and suspense accounts to hold money pending identification of where the actual deposit should be made. Trust and suspense accounts are generally excluded from the discussion of revenues and expenditures.

To provide the maximum use of state funds, the 72nd Legislature Regular Session, 1991 (72nd Legislature) enacted legislation mandating state fund consolidation. The Comptroller of Public Accounts, with the concurrence of the Treasurer, was directed to abolish or merge eligible funds into the General Revenue Fund on or before August 31, 1993. Under § 403.094, Government Code, numerous state funds, excluding constitutionally dedicated, bond related and trust funds, were consolidated into accounts within the General Revenue Fund on August 31, 1993. The consolidated funds maintained their identity through account numbers. Although the merged funds became referred to as "accounts," they experienced no substantive changes from consolidation. Merging the funds provided a one-time gain of approximately \$1.2 billion for the General Revenue Fund.

In addition, the 72nd Legislature, by law, required that the consolidated accounts retain their statutory dedications for specific purposes until August 31, 1995, at which time they would be abolished. This allowed revenues that were removed from statutory dedication to become available for spending through the Legislative general appropriation process. In 1995, the 74th Legislature, Regular Session, enacted HB 3050, which rededicated certain funds, accounts and revenues that were scheduled for abolishment at the end of fiscal 1995. Subsequent Legislatures have enacted bills providing for the abolishment or dedication of newly created or rededicated funds and accounts in an effort to limit the creation of excessive dedications of revenue and allow the Legislature the maximum use of state revenues.

REVENUE SOURCES

Federal receipts totaling \$41.9 billion provided the state's primary source of income in fiscal 2019 (see Table A-5). The sales tax (which accounted for 57.3% of total tax revenue and totaled \$34.0 billion) came in second, while State Health Service Fees and Rebates totaling \$7.1 billion provided a distant third largest revenue source to the State. Licenses, Fees, Fines and Penalties, Motor Vehicle Sales/Rental Taxes, and Franchise Tax came in as the fourth, fifth and sixth largest respectively. The remainder of the state's revenue was derived primarily from Motor Fuel Taxes, Oil Production Tax, Insurance Taxes, Net Lottery Proceeds, Land Income, Interest and Investment

Income, Natural Gas Production Tax, Cigarette and Tobacco taxes, Alcoholic Beverages Taxes, and Other Revenue sources. The State has no personal or corporate income tax, although the State does impose a franchise tax based on taxable margin, defined as gross receipts less either cost of goods sold or compensation.

Table A-2 shows the rates and tax bases for major state taxes collected in the State of Texas for the fiscal year beginning September 1, 2019.

Table A-2

Major State Taxes

Tax Rate and Base

Sales Taxes

Limited Sales and Use: 6.25 percent of the retail sale price of taxable tangible personal property and selected services.

Boat and Boat Motor: 6.25 percent of the total consideration paid for a boat or boat motor; \$15 tax for each boat or boat motor brought into the State by a new resident.

Texas Emissions Reduction Plan Surcharge: 1.5 percent of the sale or lease price of all offroad, heavy-duty diesel equipment (other than some implements of husbandry).

Natural Gas Production Tax

7.5 percent of the market value of natural gas produced in the State;

4.6 percent of the market value of condensate produced in the State

Oil Production Tax

4.6 percent of the market value of oil produced in the State.

Motor Fuel Taxes

Motor Fuel: $20 \normalfont{\cancel{\phi}}$ per gallon of gasoline or diesel fuel (eligible transit companies qualify for a refund of $1 \normalfont{\cancel{\phi}}$ per gallon on gasoline and $1/2 \normalfont{\cancel{\phi}}$ per gallon on diesel fuel).

Compressed Natural Gas and Liquefied Natural Gas: 15¢ per gallon.

Motor Vehicle Sales and Use, Rental, and Manufactured Housing Sales Taxes **Sales and Use:** 6.25 percent of vehicle sales price, less any trade-in; \$90 tax for each motor vehicle brought into the State by a new resident; \$10 tax paid by donee for each gift of a motor vehicle; \$5 tax paid by each party in an even exchange of two motor vehicles; 1.0 percent or 2.5 percent Texas Emissions Reduction Plan surcharge on certain diesel truck purchases.

Rental: 10 percent of gross receipts on rentals of 30 days or less; 6.25 percent on rentals of 31 to 180 days.

Manufactured Housing Sales: 5 percent of 65 percent of the sales price on the initial sale or use of a new manufactured home.

Cigarette, Cigar and Tobacco Products Taxes

Cigarettes:

\$70.50 per 1,000 cigarettes weighing 3 pounds or less per 1,000 (\$1.41 per pack of 20).

Cigars and Tobacco Products:

- (1) Cigar rates vary with weight per 1,000 cigars, constituents, and price: From 1¢ per 10 cigars weighing 3 pounds or less per 1,000 to \$15 per 1,000 cigars weighing over 3 pounds per 1,000.
- (2) Snuff, chewing tobacco, pipe tobacco, and roll-your-own tobacco: \$1.22 per ounce based on the manufacturer's list weight.

Tax Rate and Base

Franchise Tax

Rates applicable to reports due on or after January 1, 2016: 0.75 percent of taxable margin (for taxable entities not primarily engaged in wholesale or retail trade), or 0.375 percent of taxable margin (for taxable entities primarily engaged in wholesale or retail trade). Taxpayers with total revenue of \$20 million or less may elect to pay tax on revenue apportioned to Texas at a rate of 0.331 percent.

Alcoholic Beverage Taxes

Beer: \$6.00 per 31 gallon barrel.

Liquor: \$2.40 per gallon.

Wine:

Alcohol volume 14 percent or less -20.4ϕ per gallon. More than 14 percent -40.8ϕ per gallon. Sparkling wine -51.6ϕ per gallon.

Malt Liquor (Ale): 19.8¢ per gallon.

Mixed Beverage: 6.7 percent of the permitees gross receipts and a retail sales tax of 8.25 percent.

Insurance Premium Taxes

Life Insurance and Health Maintenance Organizations: 0.875 percent of the first \$450,000 in taxable gross life premiums or HMO taxable gross receipts, and 1.75 percent of taxable gross life premiums or HMO taxable gross receipts in excess of \$450,000.

Property and Casualty Insurance: 1.6 percent of gross premiums written in Texas.

Accident and Health Insurance: 1.75 percent of gross premiums written in Texas.

Unauthorized, Independently Procured, and Surplus Lines Insurance: 4.85 percent of gross premiums written for insurees whose home state is Texas.

Licensed Captive Insurance Companies: 0.5 percent of gross premiums written to insure the operational risks of affiliates and controller unaffiliated businesses. The minimum amount due is \$7,500 per tax report year. The maximum amount due is \$200,000 per tax report year.

Inheritance Taxes

Title Insurance: 1.35 percent of gross premiums written in Texas.

None: Federal Law incrementally phased out the State's share of the federal tax until it was fully eliminated for deaths occurring in calendar 2005 and beyond.

Utility Taxes

Public Utility Gross Receipts Assessment: One sixth of 1.0 percent of gross receipts

Gas, Electric and Water Utility:

- (1) Cities 1,000 2,499 population 0.581 percent of gross receipts;
- (2) Cities 2,500 9,999 population 1.070 percent of gross receipts;
- (3) Cities 10,000 population or more 1.997 percent of gross receipts.

Gas Utility Pipeline: 0.5 percent of gross income (gross receipts less the cost of natural gas sold) of gas utilities.

Hotel Occupancy Tax 6 percent of room rate paid by occupant.

Source: Texas Comptroller of Public Accounts.

LIMITATIONS ON TAXING POWERS

The Constitution prohibits the State from levying ad valorem taxes on property.

The Constitution also limits the rate of growth of appropriations from tax revenues not dedicated by the Constitution during any biennium to the estimated rate of growth for the State's economy. The Legislature may avoid the constitutional limitation if it finds, by a majority vote of both houses, an emergency exists.

The Constitution authorizes the Legislature to provide by law for the implementation of this restriction, and the Legislature, pursuant to such authorization, has defined the estimated rate of growth in the State's economy to mean the estimated increase in state personal income.

CONSTITUTIONAL AND LEGISLATIVE CHANGES IMPACTING FUTURE FISCAL YEARS

Information regarding statewide ballot measures, including constitutional amendments, passed on November 5, 2019 can be found at: https://www.votetexas.gov/voting/what.html. Constitutional amendments of note include Proposition 2 which authorizes the Texas Water Development Board to issue an additional \$200 million in general obligation bonds, outstanding at any time, to provide financial assistance for the development of certain projects in economically distressed areas. Proposition 4 prohibits the Legislature from imposing an individual income tax, including a tax on an individual's share of partnership and unincorporated association income. Proposition 5 dedicates and appropriates state sales and use taxes on sporting goods to the Texas Parks and Wildlife Department and the Texas Historical Commission. Proposition 6 authorizes the Legislature to increase the maximum amount of general obligation bonds from \$3 billion to \$6 billion issued for the Cancer Prevention and Research Institution of Texas.

On November 3, 2015 voters approved a constitutional amendment which, beginning in fiscal year 2018, directs the Comptroller to deposit to the credit of the State Highway Fund \$2.5 billion of the net revenue derived from the state sales and use tax in excess of \$28 billion. This amendment also directs the Comptroller, beginning in fiscal year 2020, to deposit to the credit of the State Highway Fund thirty-five percent (35%) of the revenues collected from the tax imposed on the sale, use or rental of a motor vehicle that exceeds \$5 billion. These provisions expire August 31, 2032 and August 31, 2029 respectively, however, the legislature may extend the allocations in ten-year increments by adopting a resolution approved by a majority of each house.

The 2020-21 Certification Revenue Estimate projects that in both fiscal 2020 and 2021, \$2.5 billion is expected to be transferred to the SHF from sales and use taxes. In fiscal 2020, the transfer from motor vehicle sales and use taxes is projected to be \$5.7 million, with a transfer of \$29.2 million expected in fiscal 2021.

HISTORICAL REVENUES, EXPENDITURES, AND CASH CONDITION

Table A-3 contains information concerning the cash position for the Consolidated General Revenue Fund for the State's five latest fiscal years.

Table A-3 Statement of Cash Position for the Consolidated General Revenue Fund ⁽¹⁾ Years Ended August 31

	2015	2016	2017	2018	2019
CASH BALANCE –					
September 1					
Cash in State Treasury	\$ 10,969,399,328	\$ 11,119,548,910	\$ 6,102,230,596	\$ 3,509,363,665	\$ 4,472,895,460
Cash in Petty Cash Accounts	9,225,505	9,907,225	9,892,868	9,858,800	10,179,338
	10,978,624,834	11,129,456,136	6,112,123,464	3,519,222,466	4,483,074,799
NET REVENUE					
Tax Collections	48,910,385,502	46,546,681,772	48,167,550,073	53,902,862,875	57,240,897,493
Federal Income	33,485,449,644	35,445,562,721	34,023,584,092	35,664,624,991	37,774,034,609
Licenses, Fees, Fines and					
Penalties	7,640,263,095	9,492,111,901	8,037,514,489	4,080,047,021	3,998,273,079
State Health Service Fees and					
Rebates	-	-	-	7,598,885,950	7,087,931,884
Net Lottery Proceeds	1,893,534,374	2,219,964,919	2,053,243,707	2,228,779,118	2,510,143,199
Land Income	43,444,568	18,187,457	26,767,852	3,089,058	16,165,441
Interest and Investment Income	86,454,292	69,895,550	22,907,046	32,826,062	171,572,376
Settlements of Claims	523,923,121	597,125,634	505,913,917	519,895,748	619,295,671
Escheated Estates	-	-	-	636,257,302	693,354,839
Sales of Goods and Services	192,450,242	179,866,335	179,703,950	188,911,201	191,012,665
Other Revenue	5,130,936,719	5,415,294,833	6,060,090,981	2,841,128,678	3,460,199,939
TOTAL NET REVENUE	97,906,841,557	99,984,691,121	99,077,276,108	107,697,308,004	113,762,881,194
OTHER SOURCES					
Bond and Note Proceeds	5,000,000	-	-	-	-
Sale/Redemption of Investments	14,137,500	1,500,000	-	-	-
Deposits to Trust and Suspense	9,941,537	9,109,735	15,874,751	6,075,292	5,022,593
Departmental Transfers	930,410,898	1,094,453,914	1,114,488,970	883,487,240	1,020,210,289
Operating Fund Transfers	37,658,886,639	39,911,599,686	34,704,097,483	37,643,512,455	33,628,993,342
Residual Equity Transfers	5,368	-	-	-	-
Other Sources	13,480	32,000	273,680	305,587	16,576
TOTAL OTHER SOURCES	38,618,395,423	41,016,695,335	35,834,734,884	38,533,380,575	34,654,242,801
TOTAL NET REVENUE AND	 	, , ,	, ,	, , ,	<u> </u>
OTHER SOURCES	\$ 136,525,236,980	\$ 141,001,386,456	\$ 134,912,010,992	\$ 146,230,688,578	\$ 148,417,123,995

⁽¹⁾ Consolidated General Revenue contains activity and balances for the General Revenue Fund and dedicated accounts in General Revenue. Totals may not sum due to rounding.

Table A-3

Statement of Cash Position for the Consolidated General Revenue Fund (1) (concluded)

Years Ended August 31

	2015	2016	2017	2018	2019
NET EXPENDITURES					_
General Government	\$ 2,792,569,096	\$ 2,951,241,935	\$ 3,161,487,177	\$ 3,182,988,153	\$ 3,384,180,169
Education	32,614,156,305	33,755,752,153	32,641,685,601	34,712,554,804	32,474,685,190
Employee Benefits	3,558,029,086	4,111,415,789	4,328,416,808	4,315,636,834	4,499,076,492
Health and Human Services	46,205,690,550	50,597,763,208	48,937,600,085	50,299,421,301	51,620,783,581
Public Safety and Corrections	4,129,026,730	4,772,232,611	4,922,009,609	5,358,084,194	5,081,955,235
Transportation	78,401,973	98,756,700	42,519,396	25,720,965	18,051,304
Natural Resources/					
Recreational Services	1,897,895,250	1,834,636,958	1,680,961,193	1,903,344,243	1,753,794,760
Regulatory Agencies	421,476,662	553,275,730	289,437,950	251,764,955	274,433,802
Lottery Winnings Paid ⁽²⁾	554,014,258	672,822,128	557,026,044	627,932,600	684,278,393
Debt Service - Interest	240,504,933	244,891,511	332,922,322	197,553,200	203,652,258
Capital Outlay	254,072,795	381,817,555	380,306,831	414,770,378	402,963,016
TOTAL NET EXPENDITURES	92,745,837,638	99,974,606,277	97,274,373,016	101,289,771,627	100,397,854,201
General Government	\$ 2,792,569,096	\$ 2,951,241,935	\$ 3,161,487,177	\$ 3,182,988,153	\$ 3,384,180,169
Education	32,614,156,305	33,755,752,153	32,641,685,601	34,712,554,804	32,474,685,190
Employee Benefits	3,558,029,086	4,111,415,789	4,328,416,808	4,315,636,834	4,499,076,492
Health and Human Services	46,205,690,550	50,597,763,208	48,937,600,085	50,299,421,301	51,620,783,581
Public Safety and Corrections	4,129,026,730	4,772,232,611	4,922,009,609	5,358,084,194	5,081,955,235
Transportation	78,401,973	98,756,700	42,519,396	25,720,965	18,051,304
Natural Resources/					
Recreational Services	1,897,895,250	1,834,636,958	1,680,961,193	1,903,344,243	1,753,794,760
Regulatory Agencies	421,476,662	553,275,730	289,437,950	251,764,955	274,433,802
Lottery Winnings Paid ⁽²⁾	554,014,258	672,822,128	557,026,044	627,932,600	684,278,393
Debt Service - Interest	240,504,933	244,891,511	332,922,322	197,553,200	203,652,258
Capital Outlay	254,072,795	381,817,555	380,306,831	414,770,378	402,963,016
TOTAL NET EXPENDITURES	92,745,837,638	99,974,606,277	97,274,373,016	101,289,771,627	100,397,854,201
CASH BALANCE –	\$ 11,129,456,136	\$ 6,112,123,464	\$ 3,519,222,466	\$ 4,483,074,799	\$ 8,423,321,479
CASH IN STATE TREASURY CASH IN PETTY CASH	11,119,548,910	6,102,230,596	3,509,363,665	4,472,895,460	8,412,774,932
ACCOUNTS	9,907,225	9,892,868	9,858,800	10,179,338	10,546,547

⁽¹⁾ Consolidated General Revenue contains activity and balances for the General Revenue Fund and dedicated accounts in General Revenue.

Totals may not sum due to rounding.

Source: Comptroller of Public Accounts Annual Cash Report, Table 1

Table A-4 provides information concerning the cash condition of the State's Consolidated General Revenue Fund, special revenue funds and trust and suspense funds for the State's latest fiscal year ending August 31, and for the total of all of the State's funds and accounts as of such date. The information in the table does not include cash held in certain funds maintained by state-operated institutions of higher education (see "Education—Higher Education") or certain other funds that are not accounted for through the Comptroller of Public Accounts.

 $^{(2) \ \} Does \ not \ include \ payments \ made \ by \ retailers.$

Table A-4 Statement of Cash Position Year Ended August 31, 2019

	Total Consolidated General Revenue ⁽¹⁾	Special Revenue	All Other Funds	Total All Funds
	General Revenue	Special Revenue	All Other Funds	Total All Fullus
CASH BALANCE – SEPTEMBER 1, 2018				
Cash in State Treasury	\$ 4,472,895,460 \$	21,438,597,941	\$ 5,856,586,164	\$ 31,768,079,565
Cash in Petty Cash Accounts	10,179,338	1,227,355	79,000	11,485,693
	4,483,074,799	21,439,825,296	5,856,665,164	31,779,565,258
NET REVENUE				
Tax Collections	57,240,897,493	2,139,824,604	2,355,823,523	61,736,545,620
Federal Income	37,774,034,609	4,130,439,743	396,585,400	42,301,059,752
Licenses, Fees, Fines and Penalties	3,998,273,079	2,543,813,614	142,917,692	6,685,004,385
State Health Service Fees and				
Rebates	7,087,931,884	0	412,016,904	7,499,948,788
Net Lottery Proceeds	2,510,143,199	0	0	2,510,143,199
Land Income	16,165,441	2,235,060,140	6,467,775	2,257,693,356
Interest and Investment Income	171,572,376	2,332,836,471	280,196,676	2,784,605,523
Settlements of Claims	619,295,671	27,239,249	6,504,479	653,039,400
Escheated Estates	693,354,839	0	0	693,354,839
Sales of Goods and Services	191,012,665	87,852,500	212,844,758	491,709,924
Other Revenue	3,460,199,939	681,454,686	15,355,099,028	19,496,753,653
TOTAL NET REVENUE	113,762,881,194	14,178,521,008	19,168,456,235	147,109,858,437
OTHER SOURCES				
Bond and Note Proceeds	0	8,290,020,577	0	8,290,020,577
Sale/Redemption of Investments	0	2,970,637,094	7,186,000,000	10,156,637,094
Deposits to Trust and Suspense	5,022,593	129,032,912	13,683,972,286	13,818,027,792
Departmental Transfers	1,020,210,289	19,256,016	4,629,442	1,044,095,748
Operating Fund Transfers	33,628,993,342	46,794,531,741	12,378,682,225	92,802,207,308
Other Sources	16,576	(1,000)	0	15,576
TOTAL OTHER SOURCES	34,654,242,801	58,203,477,341	33,253,283,953	126,111,004,094
TOTAL NET REVENUE AND	· · · · · ·			· · · · · ·
OTHER SOURCES	\$ 148,417,123,995 \$	72,381,998,348	\$ 52,421,740,188	\$ 273,220,862,531

⁽¹⁾ Consolidated General Revenue contains activity and balances for the General Revenue Fund and dedicated accounts in General Revenue.

Totals may not sum due to rounding.

Table A-4 Statement of Cash Position Year Ended August 31, 2019 (concluded)

Consolidated General

		Revenue ⁽¹⁾	Special Revenue	All Other Funds		Total All Funds
NET EXPENDITURES						_
General Government	\$	3,384,180,169	138,261,720	\$ 5,322,414,30	5 \$	8,844,856,194
Education		32,474,685,190	5,178,701,412	222,388,48	2	37,875,775,085
Employee Benefits		4,499,076,492	462,099,537	5,169,041,78	5	10,130,217,814
Health and Human Services		51,620,783,581	251,798,533	2,032,763,91	6	53,905,346,030
Public Safety and Corrections		5,081,955,235	110,967,536	31,53	7	5,192,954,308
Transportation		18,051,304	10,476,358,360	240,395,00	7	10,734,804,671
Natural Resources/Recreational						
Services		1,753,794,760	1,058,049,696	6,947,73	4	2,818,792,190
Regulatory Agencies		274,433,802	61,518,091	1,637,13	2	337,589,025
Lottery Winnings Paid ⁽²⁾		684,278,393	0		0	684,278,393
Debt Service – Interest		203,652,258	1,441,527,145	818,45	1	1,645,997,854
Capital Outlay		402,963,016	447,829,296	14,712,73	2	865,505,044
TOTAL NET EXPENDITURES		100,397,854,201	19,627,111,326	13,011,151,08	1	133,036,116,608
OTHER USES						
Purchase of Investments		95,212	3,992,449,985	4,881,544,47	9	8,874,089,676
Trust and Suspense Payments		24,397	0	9,709,351,19	C	9,709,375,587
Teacher and Employee Retirement						
Payments		3,822,219	0	13,263,176,71	C	13,266,998,929
Direct Deposit Transfers		0	0		0	0
Departmental Transfers		865,415,569	109,884,870	(2,663,44	7)	972,636,993
Operating Fund Transfers		42,828,161,277	38,316,160,683	9,550,322,26	8	90,694,644,228
Other Uses		15,752,113	21,375		0	15,773,488
Debt Service - Principal		366,119,535	8,706,661,801	2,880,00	0	9,075,661,336
TOTAL OTHER USES		44,079,390,323	51,125,178,714	37,404,611,20	1	132,609,180,237
TOTAL NET EXPENDITURES						
AND OTHER USES		144,477,244,524	70,752,290,040	50,415,762,28	1	265,645,296,845
	-					
Net Increase/(Decrease)						
To Petty Cash Accounts		367,209	22,375		0	389,584
						_
CASH BALANCE –						
AUGUST 31, 2019	\$	8,423,321,479 \$	3 23,069,555,979	\$ 7,862,643,07	0 \$	39,355,520,529
CASH IN STATE TREASURY		8,412,774,932	23,068,306,249	7,862,564,07	0	39,343,645,251
		-,, , , , , , , , , , , , , , , ,	20,000,000,219	,,002,001,07	-	->,0 .0,0 .0,201
CASH IN PETTY CASH		10 546 547	1 240 720	70.00	0	11 075 277
ACCOUNTS		10,546,547	1,249,730	79,00	J	11,875,277

⁽¹⁾ Consolidated General Revenue contains activity and balances for the General Revenue Fund and dedicated accounts in General Revenue.

Totals may not sum due to rounding.

⁽²⁾ Does not include payments made by retailers.

Table A-5 provides information concerning net revenues and opening balances for state funds, other than trust or suspense funds, for each of the State's five latest fiscal years. The information in the table does not include certain revenues collected by state-operated institutions of higher education (see "Education—Higher Education") and certain other revenues that are not accounted for through the Comptroller.

Table A-5
NET REVENUE BY SOURCE
All Funds Excluding Trust
Years Ended August 31

	2015	% Change	2016	% Change	2017	% Change
TAX COLLECTIONS BY MAJOR TAX						
Sales Tax	\$ 28,910,857,486	5.6% \$	28,245,800,650	-2.3%	\$ 28,900,035,304	2.3%
Motor Vehicle Sales / Rental Taxes	4,514,186,360	7.2	4,616,081,586	2.3	4,532,348,585	(1.8)
Motor Fuel Taxes	3,446,156,816	3.9	3,513,716,269	2.0	3,583,733,917	2.0
Franchise Tax	4,656,286,107	(1.6)	3,881,176,449	(16.6)	3,242,218,796	(16.5)
Oil Production Tax	2,879,054,654	(25.7)	1,704,282,653	(40.8)	2,107,335,182	23.6
Insurance Taxes	2,049,417,265	5.2	2,226,724,848	8.7	2,376,091,985	6.7
Cigarette and Tobacco Taxes	1,532,414,267	14.2	1,388,362,823	(9.4)	1,522,827,788	9.7
Natural Gas Production Tax	1,280,409,939	(32.6)	578,798,864	(54.8)	982,762,914	69.8
Alcoholic Beverages Taxes	1,138,775,576	8.1	1,182,548,508	3.8	1,217,710,832	3.0
Hotel Occupancy Tax	525,819,090	8.3	521,152,526	(0.9)	530,715,704	1.8
Utility Taxes	480,765,529	0.5	434,964,944	(9.5)	439,065,387	0.9
Other Taxes	268,916,802	0.4	182,616,105	(32.1)	208,575,245	14.2
TOTAL TAX COLLECTIONS	\$ 51,683,059,891	1.4% \$	48,476,226,223	-6.2%	\$ 49,643,421,639	2.4%
REVENUE BY SOURCE						
Total Tax Collections	\$ 51,683,059,891	1.4% \$	48,476,226,223	-6.2%	\$ 49,643,421,639	2.4%
Federal Income	36,700,990,373	7.1	39,473,835,181	7.6	38,365,630,033	(2.8)
Licenses, Fees, Fines and Penalties	6,038,855,530	2.1	6,127,553,790	1.5	6,258,444,935	2.1
State Health Service Fees and Rebates	6,075,284,560	32.6	8,070,559,148	32.8	6,701,556,588	201.9
Net Lottery Proceeds	1,893,534,374	0.8	2,219,964,919	17.2	2,053,243,707	80.2
Land Income	1,547,830,695	(16.9)	1,139,536,193	(26.4)	1,694,312,814	48.7
Interest and Investment Income	1,393,600,949	(4.8)	1,362,295,721	(2.2)	1,691,191,616	24.1
Settlements of Claims	541,070,879	(5.9)	651,974,029	20.5	527,518,330	(19.1)
Escheated Estates	548,476,603	19.2	548,297,622	(0.0)	978,910,669	78.5
Sales of Goods and Services	428,665,103	63.4	293,046,923	(31.6)	308,230,150	5.2
Other Revenue	2,576,889,344	(4.1)	2,917,581,403	13.2	2,973,011,857	1.9
TOTAL NET REVENUE	\$ 109,428,258,302	4.3% \$	111,280,871,155	1.7%	\$111,195,472,338	-0.1%

Totals may not sum due to rounding.

Table A-5
NET REVENUE BY SOURCE
All Funds Excluding Trust
Years Ended August 31
(concluded)

	2018	% Change	2019	% Change
TAX COLLECTIONS BY MAJOR TAX				
Sales Tax	\$ 31,937,235,078	10.5% \$	34,023,916,225	6.5%
Motor Vehicle Sales / Rental Taxes	4,973,441,058	9.7	5,010,592,018	0.7
Motor Fuel Taxes	3,674,996,627	2.5	3,743,004,327	1.9
Franchise Tax	3,685,940,398	13.7	4,217,868,701	14.4
Oil Production Tax	3,391,517,599	60.9	3,886,823,879	14.6
Insurance Taxes	2,508,434,134	5.6	2,599,024,669	3.6
Cigarette and Tobacco Taxes	1,320,539,530	(13.3)	1,410,390,955	6.8
Natural Gas Production Tax	1,431,106,198	45.6	1,685,680,675	17.8
Alcoholic Beverages Taxes	1,291,988,533	6.1	1,369,402,271	6.0
Hotel Occupany Tax	601,244,170	13.3	636,110,128	5.8
Utility Taxes	452,391,102	3.0	471,361,566	4.2
Other Taxes	315,940,833	51.5	326,546,683	3.4
TOTAL TAX COLLECTIONS	\$ 55,584,775,261	12.0% \$	59,380,722,097	6.8%
REVENUE BY SOURCE				
Total Tax Collections	\$ 55,584,775,261	12.0% \$	59,380,722,097	6.8%
Federal Income	39,618,568,311	3.3	41,904,474,352	5.8
Licenses, Fees, Fines and Penalties	6,477,380,162	3.5	6,542,086,693	1.0
State Health Service Fees and Rebates	7,598,885,950	13.4	7,087,931,884	(6.7)
Net Lottery Proceeds	2,228,779,118	8.5	2,510,143,199	12.6
Land Income	2,061,066,964	21.6	2,251,225,581	9.2
Interest and Investment Income	1,849,033,498	9.3	2,504,408,847	35.4
Settlements of Claims	544,138,355	3.2	646,534,920	18.8
Escheated Estates	636,257,302	(35.0)	693,354,839	9.0
Sales of Goods and Services	285,145,913	(7.5)	278,865,166	(2.2)
Other Revenue	3,281,588,448	10.4	4,141,654,625	26.2
TOTAL NET REVENUE	\$ 120,165,619,281	8.1% \$	127,941,402,202	6.5%

Totals may not sum due to rounding.

Table A-6 sets forth information concerning per capita tax collections from all sources for all funds, other than trust or suspense funds, the percentage change in tax collections from year to year, and the relationship between tax collections and personal income.

Table A-6 TEXAS PER CAPITA STATE TAX COLLECTIONS All Funds Excluding Trust Years Ended August 31

							Taxes as a
				Per	r Capita		Percent of
Fiscal	,	Total State Tax	Average State	St	ate Tax	Percent	Personal
Year		Collections	Population	Co	llections	Change	Income
2015	\$	51,683,059,891	27,419,000	\$	1,885	(0.5)%	4.0%
2016		48,476,226,223	27,877,000		1,739	(7.8)	3.8
2017		49,643,421,639	28,274,000		1,756	1.0	3.7
2018		55,584,775,261	28,655,000		1,940	10.5	4.0
2019		59,380,722,097	29,041,000		2,045	5.4	4.1

Sources

Tax collection data were compiled by the Texas Comptroller of Public Accounts from the Annual Cash Reports.

Population estimates and personal income figures are from the Comptroller's Fall 2019 state economic forecast data bank.

Table A-7 sets forth information concerning expenditures by the State, categorized by function, for each of the State's five latest fiscal years. The information in the table refers to state funds other than trust or suspense funds. It does not include certain expenditures of state-operated institutions of higher education (see "Education—Higher Education") or certain other expenditures that are not accounted for through the Comptroller.

Table A-7
NET EXPENDITURES BY FUNCTION
All Funds Excluding Trust
Years Ended August 31

	2015	% Change	2016	% Change	2017	% Change
General Government						
Executive	\$ 2,463,422,823	3.2% \$	2,599,457,941	5.5% \$	2,783,421,232	7.1%
Legislative	142,174,259	10.1	138,688,336	(2.5)	150,078,904	8.2
Judicial	317,728,982	0.8	333,665,741	5.0	345,837,980	3.6
Total	\$ 2,923,326,065	3.3%	3,071,812,018	5.1% \$	3,279,338,116	6.8%
Education	34,790,149,681	6.2	35,964,598,270	3.4	35,504,880,963	(1.3)
Employee Benefits	4,049,746,382	6.1	4,502,581,973	11.2	4,755,179,125	5.6
Health and Human Services	46,299,828,040	11.0	50,734,954,783	9.6	49,075,263,713	(3.3)
Public Safety and Corrections	4,564,634,568	4.7	4,829,107,098	5.8	4,927,729,972	2.0
Transportation	8,507,819,726	(3.8)	9,608,738,448	12.9	10,260,658,371	6.8
Natural Resources/Recreational Services	2,600,573,157	11.0	2,847,678,223	9.5	2,045,995,022	(28.2)
Regulatory Services	483,942,587	(21.2)	611,487,218	26.4	349,818,908	(42.8)
Lottery Winnings Paid (1)	554,014,258	(8.1)	672,822,128	21.4	557,026,044	(17.2)
Debt Service - Interest	1,177,619,065	(8.9)	1,127,606,740	(4.2)	1,255,690,046	11.4
Capital Outlay	413,934,894	(16.3)	599,101,507	44.7	613,540,131	2.4
TOTAL NET EXPENDITURES	\$ 106,365,588,423	6.7% \$	114,570,488,406	7.7% \$	112,625,120,411	-1.7%

⁽¹⁾ Does not include payments made by retailers.

Totals may not sum due to rounding.

Table A-7
NET EXPENDITURES BY FUNCTION
All Funds Excluding Trust
Years Ended August 31
(concluded)

	2018		% Change	2019	% Change
General Government					
Executive	\$	2,882,725,331	3.6% \$	3,037,755,515	5.4%
Legislative		139,159,263	(7.3)	150,782,198	8.4
Judicial		362,454,252	4.8	333,904,175	(7.9)
Total	\$	3,384,338,847	3.2% \$	3,522,441,889	4.1%
Education		36,783,411,379	3.6	37,653,386,603	2.4
Employee Benefits		4,760,439,498	0.1	4,961,176,028	4.2
Health and Human Services		50,421,211,926	2.7	51,872,582,114	2.9
Public Safety and Corrections		5,374,569,067	9.1	5,192,922,771	(3.4)
Transportation		9,951,962,725	(3.0)	10,494,409,664	5.5
Natural Resources/Recreational Services		2,746,428,813	34.2	2,811,844,456	2.4
Regulatory Services		312,409,589	(10.7)	335,951,893	7.5
Lottery Winnings Paid (1)		627,932,600	12.7	684,278,393	9.0
Debt Service – Interest		1,592,837,164	26.8	1,645,179,403	3.3
Capital Outlay		598,534,083	(2.4)	850,792,312	42.1
TOTAL NET EXPENDITURES	\$	116,554,075,690	3.5% \$	120,024,965,527	3.0%

⁽¹⁾ Does not include payments made by retailers.

Totals may not sum due to rounding.

Table A-8 sets forth information concerning state expenditures, for all funds, other than trust or suspense funds, categorized by category, for each of the State's five latest fiscal years. The information in the table does not include certain expenditures of state-operated institutions of higher education (see "Education—Higher Education") or certain other expenditures not accounted for through the Comptroller.

Table A-8
NET EXPENDITURES BY EXPENDITURE CATEGORY
All Funds Excluding Trust
Years Ended August 31

EXPENDITURE CATEGORY	2015	% Change	2016	% Change	2017	% Change
Public Assistance Payments	\$ 42,772,072,519	11.4% 5	\$ 47,199,171,876	10.4% 5	45,101,893,643	(4.4)%
Intergovernmental Payments						
Foundation School Program Grants	20,258,100,591	4.2	21,226,715,279	4.8	20,918,603,832	(1.5)
Other Public Education Grants	5,130,637,183	(1.2)	5,560,238,970	8.4	5,243,470,300	(5.7)
Grants to Higher Education	1,153,105,767	1.0	1,179,636,083	2.3	1,153,742,009	(2.2)
Other Grants	2,735,090,158	(4.5)	2,595,439,367	(5.1)	2,449,980,511	(5.6)
Highway Construction and Maintenance	5,192,846,124	(2.1)	6,159,245,504	18.6	6,748,220,204	9.6
Capital Outlay	413,934,894	(16.3)	599,101,507	44.7	613,540,131	2.4
Cost of Goods Sold	611,143,018	(6.8)	934,425,952	52.9	342,104,315	(63.4)
Salaries and Wages	11,284,217,829	4.3	11,883,608,742	5.3	12,180,564,842	2.5
Employee Benefits						
Employee Benefit Payments	3,381,567,162	44.0	3,017,059,450	(10.8)	3,019,117,873	0.1
Payroll Related Costs	3,342,986,842	7.1	3,605,166,400	7.8	3,834,150,400	6.4
Professional Service and Fees	2,839,037,528	12.1	2,883,550,745	1.6	3,161,716,354	9.6
Travel	185,255,823	13.7	185,670,997	0.2	197,620,191	6.4
Supplies and Materials	1,086,329,750	(0.2)	1,052,401,921	(3.1)	1,023,588,521	(2.7)
Communication and Utilities	499,651,115	(1.3)	506,577,734	1.4	510,482,092	0.8
Repairs and Maintenance	941,783,948	4.8	1,111,411,681	18.0	1,126,214,630	1.3
Rentals and Leases	296,465,337	6.3	316,728,047	6.8	324,464,385	2.4
Printing and Reproduction	48,935,446	(1.9)	53,698,330	9.7	68,687,758	27.9
Debt Service - Interest	1,177,619,065	(8.9)	1,127,606,740	(4.2)	1,255,690,046	11.4
Lottery Winnings Paid (1)	554,014,258	(8.1)	672,822,128	21.4	557,026,044	(17.2)
Claims and Judgments	86,345,467	(14.0)	75,536,418	(12.5)	93,997,836	24.4
Other Expenditures	2,374,448,598	0.8	2,624,674,533	10.5	2,700,244,494	2.9
TOTAL NET EXPENDITURES	\$ 106,365,588,422	6.7%	\$ 114,570,488,406	7.7% \$	3 112,625,120,411	(1.7)%

⁽¹⁾ Does not include payments made by retailers.

Totals may not sum due to rounding.

Table A-8
NET EXPENDITURES BY EXPENDITURE CATEGORY
All Funds Excluding Trust
Years Ended August 31
(concluded)

EXPENDITURE CATEGORY	2018	% Change	2019	% Change
Public Assistance Payments	\$ 46,774,001,868	3.7% \$	48,333,647,270	3.3%
Intergovernmental Payments				
Foundation School Program Grants	21,342,442,405	2.0	20,786,139,846	(2.6)
Other Public Education Grants	5,472,209,321	4.4	6,566,086,044	20.0
Grants to Higher Education	1,138,881,896	(1.3)	1,136,002,301	(0.3)
Other Grants	2,633,515,070	7.5	2,569,885,778	(2.4)
Highway Construction and Maintenance	6,381,670,144	(5.4)	6,654,605,181	4.3
Capital Outlay	598,534,083	(2.4)	850,792,312	42.1
Cost of Goods Sold	793,876,186	132.1	973,610,910	22.6
Salaries and Wages	12,169,242,734	(0.1)	12,443,728,758	2.3
Employee Benefits				
Employee Benefit Payments	3,657,082,600	21.1	3,854,218,157	5.4
Payroll Related Costs	3,834,696,335	0.0	3,973,225,295	3.6
Professional Service and Fees	3,506,741,648	10.9	3,507,969,077	0.0
Travel	187,248,289	(5.2)	202,017,040	7.9
Supplies and Materials	1,004,352,137	(1.9)	973,040,560	(3.1)
Communication and Utilities	502,806,552	(1.5)	500,753,988	(0.4)
Repairs and Maintenance	1,171,786,434	4.0	1,207,380,074	3.0
Rentals and Leases	332,179,575	2.4	344,479,457	3.7
Printing and Reproduction	61,472,594	(10.5)	74,305,186	20.9
Debt Service – Interest	1,592,837,164	26.8	1,645,179,403	3.3
Lottery Winnings Paid (1)	627,932,600	12.7	684,278,393	9.0
Claims and Judgments	109,823,874	16.8	104,785,409	(4.6)
Other Expenditures	2,660,742,184	(1.5)	2,638,835,088	(0.8)
TOTAL NET EXPENDITURES	\$ 116,554,075,690	3% \$	120,024,965,527	3.0%

⁽¹⁾ Does not include payments made by retailers.

Totals may not sum due to rounding.

STATE BUDGET INFORMATION

2020-21 BUDGET

In January 2019, the State Legislature began its 86th Regular Session. During the Regular Session, the 86th Legislature adopted a budget totaling \$248.3 billion in all-funds appropriations for the 2020-21 biennium, resulting in an \$8.5 billion, or 3.6 percent, overall budget increase.

Table A-9 compares the budget for the 2020-2021 biennium to the actual budgeted expenditures for the 2018-2019 biennium. Totals include the net effect of HB 1 (General Appropriations Act), SB 500 (supplemental appropriations), and HB 4071 (miscellaneous claims). These amounts have been adjusted to reflect updated estimated expenditures in fiscal year 2019 and technical adjustments. These estimates are preliminary and are subject to change based on the future actions of the 86th Legislature and final reconciliations by the staff of the Legislative Budget Board.

Table A-9
The Budget for Texas State Government for the 2020-2021 Biennium
Compared to Actual Budgeted Expenditures for the 2018-2019 Biennium
All Funds (In Millions)

	Expended/			
	Budgeted	Appropriated	Biennial	Percentage
All Functions	2018-19	2020-21	Change	Change
Article I – General Government	\$7,778.2	\$7,452.7	(\$325.5)	-4.2%
Article II – Health and Human Services	\$83,816.3	\$84,303.8	\$487.5	0.6%
Article III – Agencies of Education	\$82,214.8	\$95,901.9	\$13,687.1	16.6%
Public Education	\$61,315.5	\$70,415.8	\$9,100.4	14.8%
Higher Education	\$20,899.3	\$25,486.1	\$4,586.8	21.9%
Article IV – The Judiciary	\$858.0	\$933.8	\$75.8	8.8%
Article V – Public Safety and Criminal Justice	\$18,854.5	\$12,548.9	(\$6,305.6)	-33.4%
Article VI – Natural Resources	\$8,474.6	\$9,012.4	\$537.7	6.3%
Article VII – Business and Economic Development	\$36,730.4	\$37,061.1	\$330.7	0.9%
Article VIII – Regulatory	\$677.8	\$707.0	\$29.3	4.3%
Article IX – General Provisions	\$0.0	\$0.0	\$0.0	N/A
Article X – The Legislature	\$392.8	\$392.2	(\$0.6)	-0.2%
TOTAL, ALL FUNCTIONS	\$239,797.5	\$248,313.8	\$8,516.3	3.6%

Notes:

- (1) Totals include the net effect of House Bill 1 (General Appropriations Act), Senate Bill 500 (supplemental appropriations), and House Bill 4071 (miscellaneous claims). These amounts have been adjusted to reflect updated estimated expenditures in fiscal year 2019 and technical adjustments. These estimates are preliminary and subject to change based on the future actions of the 86th Legislature and final reconciliations by the staff of the Legislative Budget Board.
- (2) Article totals exclude Interagency Contracts.
- (3) Biennial change and percentage change are calculated on actual amounts before rounding. Therefore, figure totals may not sum due to rounding.

Source: Legislative Budget Board, Comptroller of Public Accounts.

REVENUE FORECASTS: FISCAL YEARS 2016-2020

Table A-10 sets forth information concerning estimated revenues for the State's 2020 fiscal year, along with actual collections for comparable revenues for the State's 2016 - 2019 years. The information is for all funds, excluding trust and local funds.

Table A-10
Actual and Forecasted Revenue, All Funds Excluding Trust and Local Funds (1)
Fiscal Year Ending August 31
(Amounts in Thousands)

Tax Collection by Major Tax	2016 Actual	2017 Actual	2018 Actual	2019 Actual (2)	2020 Estimated
Tax Collections					
Sales Taxes	28,245,801	28,900,035	31,937,235	34,023,916	35,650,870
Motor Vehicle Sales and Rental Taxes	4,616,082	4,532,349	4,973,441	5,010,592	5,062,666
Motor Fuel Taxes	3,513,716	3,583,734	3,674,997	3,743,004	3,804,597
Franchise Tax	3,881,176	3,242,219	3,685,940	4,217,869	4,344,400
Oil Production Tax	1,704,283	2,107,335	3,391,518	3,886,824	3,887,273
Insurance Taxes	2,226,725	2,376,092	2,508,434	2,599,025	2,674,794
Cigarette and Tobacco Taxes	1,388,363	1,522,828	1,320,540	1,410,391	1,226,099
Natural Gas Production Tax	578,799	982,763	1,431,106	1,685,681	1,482,832
Alcoholic Beverages Taxes	1,182,549	1,217,711	1,291,989	1,369,402	1,423,800
Hotel Occupancy Tax	521,153	530,716	601,244	636,110	661,481
Utility Taxes	434,965	439,065	452,391	471,362	476,100
Other Taxes	182,616	208,575	315,941	326,547	316,942
Total Tax Collections	\$48,476,226	\$49,643,422	\$55,584,775	\$59,380,722	\$61,011,854
Revenue By Source					
Tax Collections	48,476,226	49,643,422	55,584,775	59,380,722	61,011,854
Federal Income	39,473,835	38,365,630	39,618,568	41,904,474	44,123,392
Licenses, Fees, Fines, and Penalties	6,127,554	6,258,440	6,477,380	6,542,087	6,598,265
State Health Service Fees and Rebates	8,070,559	6,701,557	7,598,886	7,087,932	5,653,201
Net Lottery Proceeds	2,219,965	2,053,244	2,228,779	2,510,143	2,285,700
Land Income	1,139,536	1,694,066	2,061,067	2,251,226	2,227,123
Interest and Investment Income	1,362,296	1,691,192	1,849,033	2,504,409	2,207,878
Settlements of Claims	651,974	527,518	544,138	646,535	559,542
Escheated Estates	548,298	978,911	636,257	693,355	785,219
Sales of Goods and Services	293,047	308,230	285,146	278,865	320,075
Other Revenue	2,917,581	2,973,012	3,281,588	4,141,655	3,041,946
Total Net Revenue	\$111,280,871	\$111,195,221	\$120,165,619	\$127,941,402	\$128,814,195

Note: Excludes local funds and deposits by certain semi-independent agencies. Includes certain state revenues that are deposited in the State Treasury but not appropriated.

Totals may not sum due to rounding.

Sources:

 $(1) Texas\ Comptroller\ of\ Public\ Accounts, 2020-2021\ Certification\ Revenue\ Estimate, October\ 10, 2019:$

https://comptroller.texas.gov/transparency/reports/certification-revenue-estimate/2020-21/

(2) Monthly State Revenue Watch, Historical Data: https://www.comptroller.texas.gov/transparency/revenue/watch/

The revenue estimate for the 2020-21 biennium, released in October 2019, includes the revised estimate for the upcoming 2020-21 biennium and was prepared by the Comptroller in accordance with Texas Government Code Section 403.0131. This revised estimate is available on the Comptroller's website at:

https://comptroller.texas.gov/transparency/reports/certification-revenue-estimate/2020-21/

The revenue estimate is based on an econometric model of the Texas economy created by the Comptroller, using extensive databases relating to state and local economic conditions and demographic statistics. These models are supplemented by economic services such as IHS Global Insight, which provide the national economic data used in the state forecast. Similar models have been used in preparing prior revenue estimates.

The State of Texas finished fiscal 2019 with an \$8.4 billion positive cash balance in the Consolidated General Revenue Fund. Since fiscal year 1993, Texas has ended each fiscal year with a positive balance in its Consolidated General Revenue Fund.

Table A-11 sets forth information concerning cash balances for the five latest fiscal years.

Table A-11
ENDING CASH BALANCE
All Funds
Years Ended August 31 (Amounts in Thousands)

		2015	2016	2017	2018	2019
General Revenue Fund 0001	\$	5,607,950	\$ 524,858	\$ (2,080,165)	\$ (1,378,284)	\$ 2,212,500
General Revenue Dedicated		5,511,599	5,577,372	5,589,529	5,851,180	6,200,275
Consolidated General Revenue		11,119,549	6,102,231	3,509,364	4,472,895	8,412,775
Non-Consolidated Funds and Petty Cash Accounts		26,043,506	23,711,508	24,717,195	27,306,670	30,942,746
All Funds	\$	37,163,054	\$ 29,813,739	\$ 28,226,558	\$ 31,779,565	\$ 39,355,521
General Revenue Fund 0001		9.6%	(90.6)%	(496.3)%	33.7%	260.5%
General Revenue Dedicated		(5.8)	1.2	0.2	4.7	6.0
Consolidated General Revenue		1.4	(45.1)	(42.5)	27.5	88.1
Non-Consolidated Funds and Petty Cash Accounts		26.5	(9.0)	4.2	10.5	13.3
All Funds		17.8%	(19.8)%	(5.3)%	12.6%	23.8%
	_	-,,,,	(-,,-,,,	(0.0)/0	12.070	20.070

Totals may not sum due to rounding.

4. STATE DEBT

INTRODUCTION

Except as specifically authorized, the Constitution generally prohibits the creation of debt by or on behalf of the State, with certain exceptions: (i) debt created to supply casual deficiencies in revenues which do not total more than \$200,000 at any time, (ii) debt to repel invasion, suppress insurrection, defend the State in war, and (iii) as authorized by the Constitution. In addition, the Constitution prohibits the Legislature from lending the credit of the State to any person, including municipalities, or pledging the credit of the State in any manner for the payment of the liabilities of any individual, association of individuals, corporation or municipality. The limitations of the Constitution do not prohibit the issuance of revenue bonds, since the Texas courts (like the courts of most states) have held that certain obligations do not create a "debt" within the meaning of the Constitution. State agencies have issued revenue bonds payable from the revenues produced by various facilities or from lease payments appropriated by the Legislature. Furthermore, obligations which are payable from funds expected to be available during the current budget period do not constitute "debt" within the meaning of the Constitution. Short-term obligations, like the Tax and Revenue Anticipation Notes issued by the Comptroller which mature within the biennial budget period in which they were issued, are not deemed to be debt within the meaning of the State constitutional prohibition.

By constitutional amendment, from time to time the voters of the State may authorize the issuance of general obligation (G.O.) indebtedness for which the full faith, credit and taxing power of the State are pledged. For self-supporting G.O. debt, no further legislative action is required after the legislature and voters authorize the debt issuance. For not self-supporting G.O. debt, the legislature must appropriate funds for debt service before the debt can be issued.

Various state agencies have the authority to issue G.O. debt. The Texas Veterans' Land Board (VLB) is authorized to issue G.O. bonds to finance the purchase of land and housing by veterans. The Texas Water Development Board (TWDB) is authorized to issue G.O. bonds to make funds available to municipalities and certain other governmental units for the conservation and development of water resources; the acquisition and development of water storage facilities for the filtration, treatment and transportation of water; water quality enhancement purposes; flood control purposes and water-efficient irrigation systems. Additionally, TWDB is authorized to incur unlimited contractual obligations to the United States (U.S.) for the acquisition and development of water storage facilities in reservoirs constructed by the U.S. These contractual obligations are declared by the Constitution to be general obligations of the State.

The Texas Agricultural Finance Authority (TAFA) is authorized to issue G.O. bonds to provide financial assistance for the expansion, development and diversification of production, processing and marketing of Texas agricultural products. Additionally, TAFA is authorized to issue G.O. bonds for a farm and ranch land acquisition program. The 81st Legislature transferred the TAFA issuance authority to the Texas Public Finance Authority (TPFA). The Texas Parks and Wildlife Department (TPWD) is authorized to issue G.O. bonds to finance the acquisition and development of state parks. The Texas Higher Education Coordinating Board (THECB) is authorized to issue G.O. bonds to finance student loans.

The TPFA is authorized to issue G.O. bonds to finance the acquisition, construction and equipping of new facilities as well as major repair or renovation of existing facilities, for certain state agencies.

TPFA is also authorized to issue G.O. bonds on behalf of the Texas Parks and Wildlife Department, the Texas Military Preparedness Commission and the Cancer Prevention Research Institute of Texas.

The Texas Economic Development and Tourism Office, within the Office of the Governor, is authorized to issue G.O. bonds to provide loans to finance the commercialization of new or improved products or processes developed in Texas and to stimulate the development of small businesses in Texas.

The Texas Transportation Commission (TTC) is authorized to issue G.O. bonds on behalf of the Texas Department of Transportation (TXDOT) to finance the acquisition, construction, maintenance, reconstruction and expansion of state highways, and the participation by the State in the costs of constructing publicly owned toll roads.

STATE GENERAL OBLIGATION DEBT-ANNUAL DEBT SERVICE REQUIREMENTS

Much of the State's outstanding general obligation bonded indebtedness is designed to be self-supporting, even though the full faith and credit of the State is pledged for its repayment. Revenues from land and housing programs are expected to be sufficient to repay principal and interest on all outstanding VLB bonds.

Although they are G.O. bonds, revenues from student loans are pledged to repay the principal and interest on outstanding THECB bonds. Debt service requirements for the Texas Economic Development bonds will be paid from revenues received from the program's loans and debt service requirements for the Texas Military Preparedness Commission's Texas Military Value Revolving Loan Fund will be paid from revenues received from the program's loans. The TXDOT G.O. bonds (Mobility Fund) will be paid from dedicated revenue; however, if revenues are insufficient, the debt will be paid from the State's general revenues.

Most G.O. bonds issued by TPFA are not self-supporting. The debt service on the not self-supporting bonds is paid from the State's general revenue fund.

Certain public colleges and universities are authorized to issue Constitutional Appropriation Bonds, the debt service for which is payable from the Higher Education Fund appropriations as required by the Constitution, without limitation as to principal amount, except that the debt service on the bonds may not exceed 50 percent of the amount appropriated each year. Although Constitutional Appropriation Bonds are not explicitly a general obligation or full faith and credit bond, the stated pledge has the same effect. Debt service for these bonds is paid from an annual constitutional appropriation to qualified institutions of higher education from the first monies coming into the State Treasury not otherwise dedicated by the Constitution.

STATE REVENUE BONDS

The TPFA is authorized to issue revenue bonds payable from general revenue including both lease-revenue bonds to finance the construction, acquisition or renovation of state office buildings as well as equipment revenue bonds. Additionally, the TPFA is authorized to issue revenue bonds payable from general revenue on behalf of the TPWD and the Military Facilities Commission. The 81st Legislature authorized the TPFA to issue up to \$2.5 billion to finance excess losses of the Texas Wind Insurance Association (TWIA) resulting from a catastrophic event. The 84th Legislature reduced the total amount TPFA could issue for TWIA to \$1 billion.

In addition to the foregoing revenue obligations issued by state agencies, other state programs may be financed with revenue bonds or similar obligations payable from revenues generated by the specific authorized programs rather than from the general revenues of the State or its taxing power. Among the state entities authorized to issue such revenue bonds are the TWDB, the Texas Agricultural Finance Authority, the Texas Department of Housing and Community Affairs, the Texas Department of Economic Development – Office of the Governor, the TPFA, VLB and Texas colleges and universities (described below). The TXDOT is also authorized to issue revenue bonds for the Texas Turnpike Authority and the State Highway Fund.

Texas colleges and universities are authorized to issue tuition revenue bonds (TRBs) payable from certain revenues of the applicable college or university; however, historically the State has appropriated funds to the schools in an amount equal to all, or a portion of, the debt service on revenue bonds issued.

In addition to authorized tuition revenue bonds, The University of Texas System and The Texas A&M University System are authorized to issue Permanent University Fund (PUF) bonds payable from the interest in the Available University Fund.

RECENT DEVELOPMENTS AFFECTING STATE DEBT

The 86th Legislature authorized additional G.O. debt that was approved by the voters at the November 5, 2019 general election. This includes HJR 12 for an additional \$3 billion in bonding authority to finance cancer research up to a maximum of \$6 billion and SJR 79 for \$200 million in evergreen bonding authority to provide financial assistance for the development of certain water projects in economically distressed areas.

Additionally, the 86th Legislature passed HB 1052 authorizing the TWDB to use the state participation account of the water development fund to provide financial assistance for the development of certain facilities in an amount not to exceed \$200 million.

HJR 4, passed by the 86th Legislature and approved by the voters on November 5, 2019, amended Article III of the Texas Constitution creating the Flood Infrastructure Fund as a special fund in the State Treasury outside the general revenue fund to be used to provide financing for drainage, flood mitigation, or flood control projects. The Texas Legislature passed two related bills, SB 7 and SB 8, which address flood control and mitigation.

In the General Appropriations Act, the 86th Legislature authorized the issuance of \$475.2 million of additional revenue bonds and appropriated those bond proceeds to the Texas Facilities Commission for phase two of the North Austin and Capitol Complex projects. The bonds are anticipated to be repaid with lease payments and are subject to biennial appropriation by the Legislature of funds available for payment. Lease payments were appropriated to the Texas Facilities Commission for the 2020-2021 biennium (Rider 16, I-46).

The 86th Legislature appropriated \$208.8 million to the Health and Human Services Commission for deferred maintenance at state hospitals and state supported living centers, to be financed through the Texas Public Finance Authority (Rider 2, II-48). Also, the Department of Transportation was authorized to issue revenue bonds, not to exceed \$326 million, to construct and equip the Austin Campus Consolidation project on land owned by the agency in southeast Austin. The bonds are to be issued by the Texas Public Finance Authority (Rider 42, VII-29).

No new state debt authorizations were approved during the 85th Legislative Session.

While the 77th Legislature authorized the TTC to issue debt for the Texas Mobility Fund, the 84th Legislature passed HB 122 which limits future issuance of debt secured by the Texas Mobility Fund solely to refundings or issuances that replace outstanding variable rate debt.

Additionally, the 84th Legislature passed HB 100 which authorized \$3.1 billion in TRBs; historically the State has appropriated funds to the schools in an amount equal to all or a portion of the debt service on revenue bonds issued.

In the General Appropriations Act, the 84th Legislature authorized the issuance of \$767.7 million of revenue bonds and appropriated those bond proceeds to the Texas Facilities Commission for phase one of the North Austin and Capitol Complex projects. The bonds are anticipated to be repaid with lease payments and are subject to biennial appropriation by the Legislature of funds available for payment. Lease payments were appropriated to the Texas Facilities Commission for the 2018-2019 biennium.

The 83rd Legislature authorized, and voters approved, the creation of the State Water Implementation Fund for Texas and the State Water Implementation Revenue Fund for Texas to assist in the financing of priority projects in the state water plan to ensure the availability of adequate water resources.

In September 2013, Standard & Poor's (S&P) raised its credit rating on Texas to AAA based primarily on its budgetary and cash management discipline, which allowed the State to preserve a strong level of reserves throughout the recession.

The 82nd Legislature authorized additional G.O. debt that was approved by the voters at the November 2011 general election. These include SJR 4 for \$6 billion in evergreen bonding authority for water projects; and SJR 50 for \$1.86 billion in evergreen bonding authority to finance educational loans to students.

In April 2010, Moody's and Fitch recalibrated their municipal rating scales to align with their global rating scales. These recalibrations were not rating upgrades. Moody's rating for the State's G.O. debt was recalibrated from Aa1 to Aaa, and Fitch's rating was recalibrated from AA+ to

AAA. Moody's recalibration was designed "to enhance the comparability of ratings across the Moody's rated universe," and Fitch's "intent of the recalibration is to ensure a greater degree of comparability across Fitch's global portfolio of credit ratings." S&P announced that its municipal ratings were comparable, and recalibration was not necessary.

The 81st Legislature authorized additional G.O. debt (HJR 116) that was approved by the voters at the November 2009 general election permitting VLB to issue \$4 billion in evergreen bonding authority for its Veterans' Housing Assistance Program.

The 80th Legislature authorized additional G.O. debt that was approved by the voters at the November 2007 general election. These include HJR 90 for \$3 billion to finance cancer research; SJR 65 for \$1 billion to finance capital projects for certain state agencies; SJR 57 for \$500 million to finance student loans; SJR 64 to finance \$5 billion for transportation projects and SJR 20 for \$250 million for water projects.

During the 78th Legislature, SJR 55 and SB 652 were passed along with a constitutional amendment authorizing TPFA to issue up to \$250 million in G.O. bonds or notes for the benefit of the Texas Military Preparedness Commission, in conjunction with the Office of Defense Affairs to fund loans for economic development programs that enhance the military value of military facilities in the State. HB 3324 authorized TPFA, at the request of the Texas Workforce Commission to issue up to \$2 billion in revenue bonds secured by an assessment of certain businesses, if the cost of issuing bonds is less than the cost of borrowing from the federal government.

The 77th Legislature also authorized TTC to issue debt for the State Highway Fund in an amount not to exceed \$3 billion with no more than \$1 billion to be issued per year. This authority was amended by SB 792, Acts, 80th Legislature authorizing the program in an amount not to exceed \$6 billion with no more than \$1.5 billion to be issued per year.

Article III, Section 49-j of the Texas Constitution prohibits the State Legislature from authorizing additional state debt payable from the general revenue fund, including authorized but unissued bonds and lease purchase contracts in excess of \$250,000 but excluding debt reasonably expected to be paid from other sources, if the resulting maximum annual debt service in any state fiscal year on such state debt payable from the general revenue fund exceeds five percent of an amount equal to the average amount of general revenue fund revenues for the three immediately preceding fiscal years, excluding revenues constitutionally dedicated for purposes other than payment of state debt. The Constitutional Debt Limit (CDL) for outstanding debt was 1.29% as of August 31, 2019. With the inclusion of authorized but unissued debt, the CDL ratio was 2.07%. Although backed by the full faith and credit of the State, debt service for self-supporting G.O. bonds are reasonably expected to be paid from other revenue sources and is therefore not expected to create a draw on general revenue.

SELECTED DATA CONCERNING STATE DEBT

Table A-12 sets forth certain information concerning the debt service requirements of general obligation and other constitutionally authorized indebtedness of the State as well as revenue bonds payable from the State's General Revenue Fund for fiscal years 2020 and beyond.

General Obligation Bond Debt Service and Revenue Bond Debt Service Payable from General Revenue (1) Reported as of August 31, 2019 (2) Table A-12 (in thousands)

	General Obliga Self Suppor		General Obligat Payable from Ger		Total G.O.	Revenue Bone from General I		Total Revenue	
Fiscal Year	Principal Principal	Interest	Principal	Interest	Bonds (4)	Principal	Interest	Bonds	Total
2020	429,925	464,130	373,560	298,940	1,566,556	14,970	11,666	26,636	1,593,191
2021	460,525	447,796	372,110	283,431	1,563,862	12,505	11,000	23,505	1,587,367
2022	476,575	430,350	374,705	267,479	1,549,109	14,970	10,325	25,295	1,574,403
2023	479,615	412,695	374,441	252,610	1,519,361	14,020	9,613	23,633	1,542,994
2024	492,735	393,930	371,876	236,275	1,494,816	14,055	8,925	22,980	1,517,796
2025	510,855	374,321	346,026	220,375	1,451,578	13,155	8,236	21,391	1,472,969
2026	542,050	352,827	340,336	205,127	1,440,341	13,150	7,583	20,733	1,461,074
2027	491,925	331,136	333,766	190,103	1,346,930	12,730	6,938	19,668	1,366,598
2028	484,930	311,073	333,141	175,064	1,304,209	12,730	6,301	19,031	1,323,240
2029	485,210	291,416	316,996	160,237	1,253,859	12,730	5,665	18,395	1,272,254
2030	471,205	271,934	308,876	146,142	1,198,157	12,730	5,028	17,758	1,215,915
2031	485,255	251,723	297,931	132,282	1,167,191	12,730	4,392	17,122	1,184,313
2032	473,805	231,204	270,086	119,368	1,094,463	12,730	3,819	16,549	1,111,012
2033	487,320	211,073	257,771	107,772	1,063,936	12,730	3,310	16,040	1,079,976
2034	545,845	189,220	253,336	96,573	1,084,974	12,730	2,800	15,530	1,100,504
2035	484,020	167,184	241,766	85,643	978,613	12,730	2,291	15,021	993,634
2036	497,105	147,917	240,856	74,397	960,275	12,730	1,782	14,512	974,787
2037	512,085	127,429	218,541	63,664	921,719	12,730	1,273	14,003	935,722
2038	582,285	112,839	203,401	53,651	952,177	12,730	764	13,494	965,670
2039	612,155	83,330	188,976	44,142	928,603	12,725	255	12,980	941,583
2040	259,825	48,775	184,060	34,846	527,506	-	-	-	527,506
2041	255,000	38,709	137,115	25,801	456,626	-	-	-	456,626
2042	215,470	32,077	139,830	18,946	406,322	-	-	-	406,322
2043	202,160	25,435	82,800	11,954	322,349	-	-	-	322,349
2044	203,370	16,678	82,800	7,814	310,662	-	-	-	310,662
2045	250,165	7,481	40,800	3,674	302,120	-	-	-	302,120
2046	8,355	328	40,800	1,837	51,320	-	-	-	51,320
2047	5,355	200	-	-	5,555	-	-	-	5,555
2048	3,635	113	-	-	3,748	-	-	-	3,748
2049	2,525	48	-	-	2,573	-	-	-	2,573
2050	735	8	-	-	743	-	-	-	743
2051_	-	-	-	-	-	-	-	-	_
	11,412,020	5,773,378	\$ 6,726,707 \$	3,318,148	\$ 27,230,252	\$ 262,310	\$ 111,963	\$ 374,273 \$	27,604,526

 $^{1\ \} There \ are \ no \ outstanding \ capital \ appreciation \ bonds \ payable \ from \ general \ revenue.$

Source: Texas Bond Review Board

² Pursuant to Texas Adminstrative Code, Title 34, Part IX, Chapter 181, Subchapter A, Rule 181.5 issuers are required to submit a final report within 60 days after the delivery of state securities and receipt of state security proceeds. As a result, reported data may not include certain issues due to timing.

³ Debt service figures for the Veterans Land and Housing Assistance Bonds include the estimated payments on \$2.90 billion of variable-rate debt outstanding as of August 31, 2019.

⁴ As of August 31, 2019, \$10.15 billion of general obligation bonds were authorized but unissued, \$8.67 billion of which are designed to be self-supporting. Debt service in any year for Higher Education Constitutional Appropriation bonds may not exceed 50% of the amount appropriated to the Higher Education Fund by the legislature.

⁵ On August 31, 2019, the Texas Public Finance Authority had \$24.4 million in revenue commercial paper outstanding not included in the numbers above that is payable from general revenue.

Table A-13 sets forth information concerning the principal amount of G.O. bonds and revenue bonds payable from the State's General Revenue Fund for selected years and the amount of debt service paid from the General Revenue Fund on such bonds. The table includes debt service information (data) on outstanding G.O. or revenue bonds paid from state general revenue as well as sources other than state general revenue. The information contained in the table does not reflect outstanding PUF bonds or bonds guaranteed by the Texas Permanent School Fund or the debt service on such bonds. The State's Tax and Revenue Anticipation Notes do not constitute debt within the meaning of the State Constitution and are therefore not shown in the Table.

Table A-13
General Obligation Bonds and Revenue Bonds
Payable from General Revenue
Fiscal Year Ending August 31, 2019

	2015	2016	2017	2018	2019
Principal Amount Outstanding (Millions) (1) (3)	\$17,444	\$18,373	\$18,695	\$18,707	\$18,425
Principal Amount Per Capita (1)	\$636	\$659	\$662	\$650	\$631
Principal Amount as a Percentage of Personal Income (1)	1.42%	1.40%	1.41%	1.34%	1.24%
Annual Debt Service Paid from General Revenue (Millions) (2)	\$525	\$547	\$850	\$589	\$570
Debt Service Paid from General Revenue as a Percentage of Available General Revenue Fund Revenues ⁽²⁾	1.06%	1.08%	1.63%	1.04%	1.03%
Annual Debt Service Paid from General	1.00%	1.08%	1.03%	1.04%	1.05%
Revenue Per Capita (2)	\$19.15	\$19.60	\$30.10	\$20.47	\$19.51
Debt Service Paid from General Revenue as a					
Percentage of Personal Income (2)	0.043%	0.042%	0.064%	0.042%	0.038%

⁽¹⁾ Includes general obligation bonds which, although legally secured by the State's taxing authority, are expected to be repaid with sources outside of the State's general fund. Due to statutory or contractual restrictions, these amounts are dedicated for specific purposes and are not considered available.

Source: Texas Bond Review Board, Texas Comptroller of Public Accounts, Bureau of Economic Analysis

⁽²⁾ Includes debt service which is paid out of the State's general revenue fund.

⁽³⁾ The amount of \$18,695 stated above for fiscal year 2017 does not include \$81.2 million of revenue debt expected to be paid from the State's general revenue fund.

Table A-14 shows the amount of General Revenue that is available after constitutional allocations and other restrictions. The Total Unrestricted Revenues Available supports bond debt service payments and general revenue appropriations.

All allocations and transfers are shown in the year in which the actual allocation or transfer occurred. Restrictions for transfers to the Economic Stabilization Fund and State Highway Fund are classified as constitutional in a separate line item.

Table A-14
General Revenue Fund Revenues Available After
Constitutional Allocations and Other Restrictions
Year Ended August 31, 2019

Sales Tax \$ 33,899,344,983 \$ - \$ \$ 138,139,305 \$ 33,761,205,678 Motor Vchicle Sales / Rental Taxes 4,966,892,139 4,966,892,139 4,966,892,139 Motor Fuel Taxes 3,743,004,327 3,681,179,508 19,766,406 42,058,413 Franchise Tax 2,962,146,000 2,962,146,000 2,962,146,000 2,962,146,000 Oil Production Tax 3,886,823,879 975,877,490 52,910,946,389 Insurance Taxes 2,597,819,353 613,684,652 152,344,893 1,831,789,808 Natural Gas Production Tax 1,685,680,675 426,765,180 594,145,403 594,145,403 Natural Gas Production Tax 1,685,680,675 426,765,180 53,471,367 582,638,761 Hotel Occupancy Tax 636,110,128 53,471,367 582,638,761 Utility Taxes 471,361,566 95,991,406 53,471,367 582,638,761 TOTAL TAX COLLECTIONS 57,026,124,942 \$5,846,775,812 \$363,721,971 \$50,815,627,159 Federal Income \$28,504,440,908 \$28,142,404,133 \$92,036,775 Licenses, Fines and Penalties <td< th=""><th>REVENUE SOURCE</th><th></th><th>General Revenue Fund 0001 ⁽¹⁾</th><th>Restrictions From Constitutional Allocations</th><th>Other Restrictions ⁽²⁾</th><th>Unrestricted Revenues Available</th></td<>	REVENUE SOURCE		General Revenue Fund 0001 ⁽¹⁾	Restrictions From Constitutional Allocations	Other Restrictions ⁽²⁾	Unrestricted Revenues Available
Motor Vehicle Sales / Rental Taxes 4,966,892,139 motor Fuel Taxes 3,743,004,327 motor Fuel Taxes 3,743,004,327 motor Fuel Taxes 19,766,406 motor Fuel Taxes 4,966,892,139 motor Fuel Taxes 19,766,406 motor Fuel Taxes 42,058,413 motor Fuel Taxes 19,766,406 motor Fuel Taxes 42,058,413 motor Fuel Taxes 19,766,406 motor Fuel Taxes 42,058,413 motor Fuel Taxes 19,766,406 motor Fuel Taxes 2,962,146,000 motor Fuel Taxes 2,962,146,000 motor Fuel Taxes 19,766,406 motor Fuel Taxes 2,962,146,000 motor Fuel Taxes 1,258,915,495 motor Fuel Taxes 1,369,402,271 motor Fuel Taxes						
Motor Fuel Taxes 3,743,004,327 3,681,179,508 19,766,406 42,058,413 Franchise Tax 2,962,146,000 - 2,962,146,000 Oil Production Tax 3,886,823,879 975,877,490 - 2,910,946,388 Insurance Taxes 2,597,819,353 613,684,652 152,344,893 1,831,789,808 Cigarette and Tobacco Taxes 594,145,403 - 594,145,403 Natural Gas Production Tax 1,685,680,675 426,765,180 - 1,258,915,495 Alcoholic Beverages Taxes 1,369,402,271 - - 1,369,402,271 Hotel Occupancy Tax 636,110,128 53,277,576 - 582,638,761 Utility Taxes 471,361,566 95,991,406 - 375,370,160 Other Taxes 213,394,218 53,277,576 - 160,116,642 TOTAL TAX COLLECTIONS \$7,026,124,942 \$,846,775,812 \$363,721,971 \$50,815,627,159 Federal Income \$28,504,440,908 \$2,812,404,133 \$92,036,775 Licenses, Fees, Fines and Penalties 1,642,145,995 71,979 50	Sales Tax	\$		\$ -	\$ 138,139,305	\$
Franchise Tax 2,962,146,000 975,877,490 2,962,146,000 Oil Production Tax 3,886,823,879 975,877,490 - 2,910,946,389 Insurance Taxes 2,597,819,353 613,684,652 152,344,893 1,831,789,808 Cigarette and Tobacco Taxes 594,145,403 - 594,145,403 Natural Gas Production Tax 1,685,680,675 426,765,180 - 1,258,915,495 Alcoholic Beverages Taxes 1,369,402,271 - - 1,369,402,271 Hotel Occupancy Tax 636,110,128 53,471,367 582,638,761 Utility Taxes 471,361,566 95,991,406 375,370,160 Other Taxe 5,7026,124,942 5,846,775,812 363,721,971 50,815,627,159 Total Tax Collections (above) \$7,026,124,942 \$5,846,775,812 \$363,721,971 \$50,815,627,159 Federal Income \$28,504,440,908 \$28,412,404,133 \$92,036,775 Licenses, Fines and Penalties 1,642,145,995 71,979 501,940 1,641,572,076 State Health Service Fees and Rebates 7,087,931,884 - <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td></td<>						
Oil Production Tax 3,886,823,879 975,877,490 - 2,910,944,389 Insurance Taxes 2,597,819,353 613,684,652 152,344,893 1,831,789,808 Cigarette and Tobacco Taxes 594,145,403 3594,145,403 1,258,915,495 Alcoholic Beverages Taxes 1,369,402,271 - 1,369,402,271 Hotel Occupancy Tax 636,110,128 53,471,367 582,638,761 Utility Taxes 471,361,566 95,991,406 375,370,160 Other Taxes 213,394,218 53,277,576 - 160,116,642 TOTAL TAX COLLECTIONS \$57,026,124,942 \$5,846,775,812 \$363,721,971 \$50,815,627,159 Federal Income \$28,504,440,908 \$28,412,404,133 \$92,036,775 Licenses, Fees, Fines and Penalties 1,642,145,995 71,979 501,940 1,641,572,076 State Health Service Fees and Rebates 7,087,931,884 \$7,087,931,884 \$7,087,931,884 \$7,087,931,884 \$7,087,931,884 \$7,087,931,884 \$7,087,931,884 \$7,087,931,884 \$7,087,931,884 \$7,087,931,884 \$7,087,931,884 \$7,087,931,884 \$7,08				3,681,179,508	19,766,406	, ,
Insurance Taxes						
Cigarette and Tobacco Taxes 594,145,403 3 594,145,403 594,145,403 594,145,403 594,145,403 594,145,403 594,145,405 1,258,915,495 1,258,915,495 Alcoholic Beverages Taxes 1,369,402,271 - 1,369,402,271 - 1,369,402,271 - 1,369,402,271 - 53,471,367 582,638,761 582,638,761 Utility Taxes 471,361,566 95,991,406 - 375,370,160 375,370,160 - 160,116,642 - 160,116,642 - 160,116,642 - 160,116,642 - 160,116,642 - - 160,116,642 - - 160,116,642 - - - 160,116,642 - <				, ,	-	
Natural Gas Production Tax 1,685,680,675 426,765,180 1,258,915,495 Alcoholic Beverages Taxes 1,369,402,271 - 1,369,402,271 Hotel Occupancy Tax 636,110,128 53,471,367 582,638,761 Utility Taxes 471,361,566 95,991,406 3375,370,160 Other Taxes 213,394,218 53,277,576 - 160,116,642 TOTAL TAX COLLECTIONS \$57,026,124,942 \$5,846,775,812 \$363,721,971 \$50,815,627,159 Federal Income \$28,504,440,908 \$28,412,404,133 \$92,036,775 Licenses, Fees, Fines and Penalties 1,642,145,995 71,979 501,940 1,641,572,076 State Health Service Fees and Rebates 7,851,597 - 7,087,931,884 Land Income 7,851,597 - 126,248,529 Interest and Investment Income 126,248,529 - - 126,248,529 Settlements of Claims 617,691,755 - 603,354,839 - 603,354,839 Sales of Goods and Services 184,613,713 - - 654,811,436 <td< td=""><td></td><td></td><td></td><td>613,684,652</td><td>152,344,893</td><td></td></td<>				613,684,652	152,344,893	
Alcoholic Beverages Taxes						
Hotel Occupancy Tax				426,765,180		
Utility Taxes 471,361,566 95,991,406 375,370,160 Other Taxes 213,394,218 53,277,576 - 160,116,642 TOTAL TAX COLLECTIONS \$ 57,026,124,942 \$ 5,846,775,812 \$ 363,721,971 \$ 50,815,627,159 Total Tax Collections (above) \$ 57,026,124,942 \$ 5,846,775,812 \$ 363,721,971 \$ 50,815,627,159 Federal Income \$ 28,504,440,908 \$ 28,412,404,133 \$ 92,036,775 Licenses, Fees, Fines and Penalties 1,642,145,995 71,979 501,940 1,641,572,076 State Health Service Fees and Rebates 7,087,931,884 7,087,931,884 7,087,931,884 7,087,931,884 Land Income 126,248,529 126,248,529 126,248,529 126,248,529 Settlements of Claims 617,691,755 617,691,755 617,691,755 Escheated Estates 693,354,839 693,354,839 693,354,839 Sales of Goods and Services 184,613,713 184,613,713 184,613,713 Other Revenue 654,811,436 2,768,229,490 (2,768,229,490) Highway Fund / ESF Transfer (4) 2,768,229,490 4,060,808				-		
Other Taxes 213,394,218 53,277,576 - 160,116,642 TOTAL TAX COLLECTIONS \$ 57,026,124,942 \$ 5,846,775,812 \$ 363,721,971 \$ 50,815,627,159 Total Tax Collections (above) \$ 57,026,124,942 \$ 5,846,775,812 \$ 363,721,971 \$ 50,815,627,159 Federal Income \$ 28,504,440,908 \$ 28,412,404,133 \$ 92,036,775 Licenses, Fees, Fines and Penalties 1,642,145,995 71,979 501,940 1,641,572,076 State Health Service Fees and Rebates 7,087,931,884 7,087,931,884 7,087,931,884 7,087,931,884 Land Income 7,851,597 \$ 28,412,404,133 \$ 7,087,931,884 Land Income 7,851,597 \$ 2,768,229,490 126,248,529 Interest and Investment Income 126,248,529 \$ 25,2768,229,490 617,691,755 Escheated Estates 693,354,839 \$ 2,768,229,490 693,354,839 Sales of Goods and Services 184,613,713 \$ 2,768,229,490 (2,768,229,490) Highway Fund / ESF Transfer (4) 2,768,229,490 2,768,229,490 (2,768,229,490) Highway Fund Sales Tax Transfer (4)					53,471,367	
TOTAL TAX COLLECTIONS \$ 57,026,124,942 \$ 5,846,775,812 \$ 363,721,971 \$ 50,815,627,159 Total Tax Collections (above) \$ 57,026,124,942 \$ 5,846,775,812 \$ 363,721,971 \$ 50,815,627,159 Federal Income Licenses, Fines and Penalties Licenses, Fines and Penalties Licenses, Fines and Penalties State Health Service Fees and Rebates Land Income Interest and Investment Income Interest and Investment Income Interest and Investment Income Settlements of Claims Federal Income Interest and Investment Inc	•					
Total Tax Collections (above) \$ 57,026,124,942 \$ 5,846,775,812 \$ 363,721,971 \$ 50,815,627,159 Federal Income \$ 28,504,440,908 \$ 28,412,404,133 \$ 92,036,775 Licenses, Fees, Fines and Penalties 1,642,145,995 71,979 501,940 1,641,572,076 State Health Service Fees and Rebates 7,087,931,884 Land Income 7,851,597 7,851,597 Interest and Investment Income 126,248,529 126,248,529 Settlements of Claims 617,691,755 Escheated Estates 693,354,839 693,354,839 Sales of Goods and Services 184,613,713 Other Revenue 654,811,436 Highway Fund / ESF Transfer (3) 2,768,229,490 Highway Fund Sales Tax Transfer (4) 4,060,808,861 TOTAL NET REVENUE, ALLOCATIONS					-	
Federal Income \$ 28,504,440,908 \$ 28,412,404,133 \$ 92,036,775 Licenses, Fees, Fines and Penalties 1,642,145,995 71,979 501,940 1,641,572,076 State Health Service Fees and Rebates 7,087,931,884 Tand Income 7,851,597 7,951,597 7	TOTAL TAX COLLECTIONS	\$	57,026,124,942	\$ 5,846,775,812	\$ 363,721,971	\$ 50,815,627,159
Licenses, Fees, Fines and Penalties 1,642,145,995 71,979 501,940 1,641,572,076 State Health Service Fees and Rebates 7,087,931,884 7,087,931,884 Land Income 7,851,597 7,851,597 Interest and Investment Income 126,248,529 126,248,529 Settlements of Claims 617,691,755 617,691,755 Escheated Estates 693,354,839 693,354,839 Sales of Goods and Services 184,613,713 184,613,713 Other Revenue 654,811,436 654,811,436 Highway Fund / ESF Transfer (3) 2,768,229,490 (2,768,229,490) Highway Fund Sales Tax Transfer (4) 4,060,808,861 (4,060,808,861)	Total Tax Collections (above)	\$	57,026,124,942	\$ 5,846,775,812	\$ 363,721,971	\$ 50,815,627,159
State Health Service Fees and Rebates 7,087,931,884 7,087,931,884 Land Income 7,851,597 7,851,597 Interest and Investment Income 126,248,529 126,248,529 Settlements of Claims 617,691,755 617,691,755 Escheated Estates 693,354,839 693,354,839 Sales of Goods and Services 184,613,713 184,613,713 Other Revenue 654,811,436 654,811,436 Highway Fund / ESF Transfer (3) 2,768,229,490 (2,768,229,490) Highway Fund Sales Tax Transfer (4) 4,060,808,861 (4,060,808,861) TOTAL NET REVENUE, ALLOCATIONS		\$			\$ 	\$, ,
Land Income 7,851,597 7,851,597 Interest and Investment Income 126,248,529 126,248,529 Settlements of Claims 617,691,755 617,691,755 Escheated Estates 693,354,839 693,354,839 Sales of Goods and Services 184,613,713 184,613,713 Other Revenue 654,811,436 654,811,436 Highway Fund / ESF Transfer (3) 2,768,229,490 (2,768,229,490) Highway Fund Sales Tax Transfer (4) 4,060,808,861 (4,060,808,861) TOTAL NET REVENUE, ALLOCATIONS				71,979	501,940	
Interest and Investment Income 126,248,529 126,248,529 Settlements of Claims 617,691,755 617,691,755 Escheated Estates 693,354,839 693,354,839 Sales of Goods and Services 184,613,713 184,613,713 Other Revenue 654,811,436 654,811,436 Highway Fund / ESF Transfer (3) 2,768,229,490 (2,768,229,490) Highway Fund Sales Tax Transfer (4) 4,060,808,861 (4,060,808,861) TOTAL NET REVENUE, ALLOCATIONS						
Settlements of Claims 617,691,755 617,691,755 Escheated Estates 693,354,839 693,354,839 Sales of Goods and Services 184,613,713 184,613,713 Other Revenue 654,811,436 654,811,436 Highway Fund / ESF Transfer (3) 2,768,229,490 (2,768,229,490) Highway Fund Sales Tax Transfer (4) 4,060,808,861 (4,060,808,861) TOTAL NET REVENUE, ALLOCATIONS	Land Income		7,851,597			7,851,597
Escheated Estates 693,354,839 693,354,839 Sales of Goods and Services 184,613,713 184,613,713 Other Revenue 654,811,436 654,811,436 Highway Fund / ESF Transfer (3) 2,768,229,490 (2,768,229,490) Highway Fund Sales Tax Transfer (4) 4,060,808,861 (4,060,808,861) TOTAL NET REVENUE, ALLOCATIONS	Interest and Investment Income		126,248,529			126,248,529
Sales of Goods and Services 184,613,713 184,613,713 Other Revenue 654,811,436 654,811,436 Highway Fund / ESF Transfer (3) 2,768,229,490 (2,768,229,490) Highway Fund Sales Tax Transfer (4) 4,060,808,861 (4,060,808,861) TOTAL NET REVENUE, ALLOCATIONS	Settlements of Claims		617,691,755			617,691,755
Other Revenue 654,811,436 654,811,436 Highway Fund / ESF Transfer (3) 2,768,229,490 (2,768,229,490) Highway Fund Sales Tax Transfer (4) 4,060,808,861 (4,060,808,861) TOTAL NET REVENUE, ALLOCATIONS	Escheated Estates		693,354,839			693,354,839
Highway Fund / ESF Transfer (3) 2,768,229,490 (2,768,229,490) Highway Fund Sales Tax Transfer (4) 4,060,808,861 (4,060,808,861) TOTAL NET REVENUE, ALLOCATIONS	Sales of Goods and Services		184,613,713			184,613,713
Highway Fund Sales Tax Transfer ⁽⁴⁾ 4,060,808,861 (4,060,808,861) TOTAL NET REVENUE, ALLOCATIONS	Other Revenue		654,811,436			654,811,436
TOTAL NET REVENUE, ALLOCATIONS	Highway Fund / ESF Transfer (3)			2,768,229,490		(2,768,229,490)
·	Highway Fund Sales Tax Transfer (4)			4,060,808,861		(4,060,808,861)
	TOTAL NET DEVENUE ALLOCATION	c				
			96.545.215.597	\$ 12.675.886.142	\$ 28.776.628.044	\$ 55.092.701.411

⁽¹⁾ Tobacco suit settlement receipts and other revenues received in General Revenue Account 5040 are included in the General Revenue Fund 0001 totals. Account 5040 was created to receive settlement money resulting from the final judgment in the State of Texas v. the American Tobacco Company et. al. All monies received are considered unrestricted.

Totals may not sum due to rounding.

⁽²⁾ Due to statutory or contractual restrictions, these amounts are dedicated for specific purposes and are not considered available.

⁽³⁾ As required by Article III, Section 49-g of the Texas Constitution, transfers to the State Highway Fund 0006 and to the Economic Stabilization Fund 0599 totaling \$2,768,229,489.80 were made in fiscal 2019.

⁽⁴⁾ As required by Article VIII, Section 7-c of the Texas Constitutition, transfers to the State Highway Fund 0006 totaling \$4,060,808,861 were made in fiscal 2019.

Table A-15 contains information concerning the amount of short term obligation for cash management purposes issued by the Comptroller, and the amount of interfund borrowing utilized for the last eight fiscal years, including the current fiscal year. Tax and Revenue Anticipation Notes and commercial paper issued by the Comptroller, which mature within the biennial budget period in which they were issued, do not constitute "debt" within the meaning of the Constitution.

Table A-15 Cash Management

		Tax and			
		Revenue	Commercial	M aximum	
		Anticipation	Paper Notes	Interfund	
		Notes Issued	Issued	Borrowing ⁽¹⁾	Total
Fiscal Year	Series	(in millions)	(in millions)	(in millions)	(in millions)
2011	2010	7,800	-	-	7,800
2012	2011A/2011B	9,800	500	-	10,300
2013	2012	9,800	-	-	9,800
2014	2013	7,200	-	-	7,200
2015	2014	5,400	-	-	5,400
2016	n/a	-	-	1,900	1,900
2017	n/a	-	-	6,200	6,200
2018	2017	5,400	-	3,100	8,500
2019	2018	7,200	-	-	7,200
$2020^{(2)}$	2019	8,000	-	-	8,000

⁽¹⁾ Numerous funds were consolidated into General Revenue Fund 0001 on August 31, 1993. Intrafund and interfund borrowing are options to address daily cash flow deficits as needed. See "State Revenues and Expenditures-Identity of Funds" for a description of funds consolidation.

Source: Texas Comptroller of Public Accounts, Treasury Operations

⁽²⁾ The State issued Tax and Revenue Anticipation Notes (TRAN), Series 2019 on September 4, 2019. The State anticipates using TRAN proceeds, intrafund and interfund borrowing to manage the State's cash flow needs in fiscal 2020. Total interfund borrowing from the Economic Stabilization Fund 0599 as of January 31, 2020 was zero.

5. ECONOMIC INFORMATION

Within the Economic Information section, references to "the past year" and "the last 12 months" refer to the 12-month period ending November 30, 2019.

BUSINESS ACTIVITIES

The State of Texas was identified in its early history with agriculture and ranching, and with the oil and gas industry through much of the last century. The growth of service-providing industries and exports has left a diversified Texas economy more similar to the national economy.

With diverse economic engines and a comparatively stable housing market, Texas has remained ahead of the nation in economic performance. However, even with diversification, Texas' mix of industries retains substantial concentration in energy.

From November 2018 to November 2019 the Texas economy added 336,700 nonfarm jobs, an increase of 2.7 percent, to reach 12,951,400. Texas added more new jobs than any other state during this period. Private-sector employment rose by 3.0 percent, while government employment (federal, state and local) grew by 0.8 percent.

GEOGRAPHIC VARIATIONS

The vast size of the State, together with cultural, climatic, and geological differences within its borders, has produced great variations in the economies of different regions of Texas. East Texas is a largely non-metropolitan region, in which the primary economy is based on agricultural activities and the production and processing of coal, petroleum and wood. The Dallas-Fort Worth Metroplex is mostly metropolitan, with diversified manufacturing, financial, communications, and commercial sectors. The Panhandle, Permian Basin and Concho Valley are relatively sparsely populated areas of the State, with economies still drawing heavily from agriculture and petroleum production. The border area stretching from El Paso to Brownsville is characterized by agriculture, tourism, and its economic ties to Mexico. The Gulf Coast is the most populous region of the State and has an economy centered on energy and health services, petrochemical industries, and commercial activities resulting from maritime trade, manufacturing, and agriculture. The economy of central Texas is grounded in the public and private service sectors, technology, communications, and recreation/tourism.

Because the economic bases differ from region to region, economic developments, such as the strength of the U.S. economy, international politics and export markets, or changes in oil prices or defense spending, affect the economy of each region differently.

Table A-16
Texas Economic History and Outlook for Calendar Years
Fall 2019 Economic Forecast

TEXAS ECONOMY	2015	2016	2017	2018	2019*	2020*	2021*
Real Gross State Product (Billion 2009\$)	1,590.0	1,593.1	1,624.9	1,676.7	1,745.7	1,789.3	1,833.0
Annual % Change	5.2	0.3	1.3	3.5	3.6	2.7	2.2
Gross Domestic Product (Billion Current \$)	1,568.1	1,564.4	1,654.5	1,775.8	1,857.0	1,959.2	2,064.5
Annual % Change	0.2	-0.2	5.1	7.4	5.4	6.2	5.4
Personal Income (Billion Current \$)	1,282.4	1,287.7	1,340.6	1,409.5	1,480.9	1,554.6	1,630.9
Annual % Change	2.5	0.4	4.1	5.1	5.1	5.0	4.9
Nonfarm Employment (Thousands)	11,864.8	12,013.6	12,227.9	12,504.1	12,775.8	13,009.9	13,179.9
Annual % Change	2.3	1.2	1.8	2.8	2.3	1.8	1.2
Resident Population (Thousands)	27,508.0	27,951.7	28,356.7	28,775.0	29,212.4	29,654.8	30,097.5
Annual % Change	1.8	1.6	1.4	1.5	1.5	1.5	1.5
Unemployment Rate (%)	4.4	4.6	4.3	3.9	3.5	3.6	3.8
U. S. ECONOMY	2015	2016	2017	2018	2019*	2020*	2021*
Gross Domestic Product (Billion 2009\$)	17.403.8	17,688.9	18.108.1	18,638.2	19,070.5	19,512.9	19,916.7
	2.9	17,000.9	2.4	2.9	2.3	2.3	2.1
Annual % Change							
Consumer Price Index (1982-84=100)	237.0	240.0	245.1	251.1	255.9	261.1	266.6
Annual % Change	0.1	1.3	2.1	2.4	1.9	2.1	2.1
Prime Interest Rate (%)	3.3	3.5	4.1	4.9	5.4	5.3	5.5

^{*}Projected, based on actual or historical periods and growth rates from the Texas Comptroller's Fall 2019 Economic Forecast. Source: Texas Comptroller of Public Accounts and IHS Global Insight, Inc.

EMPLOYMENT AND UNEMPLOYMENT—HISTORICAL REVIEW

Since the end of the recession, Texas has generally added jobs at a faster rate than the other large states and, over the 12-month period ending November 2019, Texas employment growth was the highest among the ten largest states. (See Table A-17).

Table A-17 shows the 10 most populous states. Among all states, Texas ranked sixth in the rate of job creation over the past year.

Table A-17
Nonfarm Employment Change in the
Ten Most Populous States
Thousands of Jobs

	Number of No	onfarm Jobs	Job Change			
				Annual		
State	Nov-18	Nov-19	Jobs Added	Change (%)		
Texas	12,614.7	12,951.4	336.7	2.7%		
Florida	8,872.5	9,089.9	217.4	2.5%		
North Carolina	4,500.7	4,592.0	91.3	2.0%		
California	17,282.5	17,604.3	321.8	1.9%		
Georgia	4,576.3	4,645.3	69.0	1.5%		
New York	9,709.8	9,826.2	116.4	1.2%		
Pennsy lvania	6,022.1	6,070.5	48.4	0.8%		
Illinois	6,140.9	6,181.5	40.6	0.7%		
M ichigan	4,428.9	4,447.1	18.2	0.4%		
Ohio	5,577.4	5,598.0	20.6	0.4%		

Source: U.S. Bureau of Labor Statistics

Table A-18 sets forth information concerning civilian employment in the State, as well as comparable information for the United States as a whole.

Table A-18 Historical Review of State and U.S. Unemployment Rates

			Texas			U.S
	Texas Civilian	Texas Total	Unemployment	U.S Civilian	U.S. Total	Unemployment
Year	Labor Force (1)	Employment (1)	Rate (%)	Labor Force (1)	Employment (1)	Rate (%)
2000	10,374,053	9,929,387	4.3	142,583,000	136,891,000	4.0
2001	10,532,732	10,011,046	5.0	143,734,000	136,933,000	4.7
2002	10,748,810	10,065,870	6.4	144,863,000	136,485,000	5.8
2003	10,914,664	10,185,312	6.7	146,510,000	137,736,000	6.0
2004	10,992,359	10,338,484	5.9	147,401,000	139,252,000	5.5
2005	11,124,240	10,523,257	5.4	149,320,000	141,730,000	5.1
2006	11,327,995	10,774,490	4.9	151,428,000	144,427,000	4.6
2007	11,431,631	10,941,413	4.3	153,124,000	146,047,000	4.6
2008	11,664,390	11,104,115	4.8	154,287,000	145,362,000	5.8
2009	11,910,799	11,008,903	7.6	154,142,000	139,877,000	9.3
2010	12,241,970	11,244,632	8.1	153,889,000	139,064,000	9.6
2011	12,504,498	11,535,095	7.8	153,617,000	139,869,000	8.9
2012	12,670,455	11,818,675	6.7	154,975,000	142,469,000	8.1
2013	12,857,595	12,052,646	6.3	155,389,000	143,929,000	7.4
2014	13,039,452	12,374,172	5.1	155,922,000	146,305,000	6.2
2015	13,095,837	12,513,692	4.4	157,130,000	148,834,000	5.3
2016	13,347,311	12,731,137	4.6	159,187,000	151,436,000	4.9
2017	13,589,208	13,002,828	4.3	160,320,000	153,337,000	4.4
2018	13,848,080	13,314,203	3.9	162,075,000	155,761,000	3.9
	- ,,	- ,,-	- **	- ,-,-,	, ,	

(1) In thousands.

Source: U.S. Bureau of Labor Statistics

Texas avoided three of the nation's six recessions since the early 1970s, though the State had its own recession in 1986. In 2018, Texas' nominal gross domestic product (GDP) was \$1.78 trillion according to estimates from the U.S. Bureau of Economic Analysis (BEA). Texas, if it were a nation, would be the tenth largest economy in the world.

Largely because of the state's comparatively youthful workforce and an international border region with particularly high unemployment rates, Texas' statewide jobless rate exceeded the national average in most years from 1985 through 2006. However, the state's unemployment rate fell below that of the nation in early 2007 and remained below the national rate until November 2016. Since that time, the Texas unemployment rate has, on average, not differed significantly from that of the nation as a whole.

Table A-19 shows monthly Texas non-agricultural employment by industry and the Texas unemployment rate since January 2015. In November 2019, the Texas unemployment rate was 3.4 percent, down from 3.7 percent in November 2018.

The U.S. unemployment rate fell from 3.7 percent to 3.5 percent over that period. Twenty-two of the State's 25 metropolitan areas had unemployment rates at or below 5 percent (not seasonally adjusted) in November 2019. Midland (2.1 percent) had the lowest urban unemployment rate in the State, while McAllen-Edinburg-Mission, at 6.1 percent, had the highest.

Table A-19 Nonfarm Employment by Month (In Thousands)

Y Call	Month	Mining and Logging	Manuction	Tacuming.	Trade, Unities	Finalion	Protes Remittes	Figure 12.0	cation and Health Services	Cover and Hospitality	Total		Comployment Rate	\
						ALL		Sines	S. A. Service		and			
	\	\							enices \	§ /	Other			
	2015	January	316.1	676.2	900.0	2,351.3	177.1	/12.0	1,594.6	1,550.9	1,627.2	1,871.9	11,799.9	4.5
		February	303.4	679.4	895.7	2,356.8	199.2	713.3	1,595.9 1,593.7	1,555.2 1,558.4	1,635.2	1,872.4	11,806.5 11,795.8	4.4
		March April	293.8 281.3	676.4 673.5	892.1 888.2	2,362.7 2,366.9	198.8 199.9	714.1 715.9	1,595.1	1,558.4	1,633.8 1,645.3	1,872.0 1,874.0	11,795.8	4.4 4.4
		May	274.6	678.6	884.4	2,377.1	200.5	717.5	1,600.3	1,573.0	1,652.9	1,876.4	11,835.3	4.4
		June	271.0	682.5	880.6	2,382.6	200.4	719.1	1,601.9	1,574.6	1,661.4	1,882.5	11,856.6	4.4
		July	265.5 261.9	685.8 689.2	876.7 873.8	2,384.7 2,388.4	200.9 201.1	719.5 721.0	1,608.8 1,612.3	1,580.4 1,584.4	1,670.6 1,675.2	1,890.2 1,890.1	11,883.1	4.4 4.4
		August September	257.2	688.4	870.6	2,394.0	200.8	721.0	1,612.5	1,584.4	1,678.4	1,890.1	11,897.4 11,906.6	4.4
		October	252.3	691.2	866.4	2,394.0	201.0	722.7	1,622.0	1,592.6	1,685.3	1,893.0	11,920.5	4.5
		November	247.5	691.5	863.7	2,391.9	201.3	724.2	1,624.7	1,597.4	1,686.5	1,896.5	11,925.2	4.5
	2016	December	245.4	693.6	859.9	2,397.9	201.7	724.7	1,630.7 1,628.7	1,600.6	1,689.0	1,899.3	11,942.8	4.5 4.4
	2010	January February	236.5 230.2	698.0 697.5	860.3 857.4	2,398.3 2,403.3	201.7 201.8	727.9 728.9	1,630.1	1,603.1 1,607.2	1,697.2 1,703.3	1,905.5 1,904.4	11,957.2 11,964.1	4.4
		March	224.2	693.8	853.8	2,405.4	200.6	728.2	1,627.0	1,609.2	1,699.6	1,906.2	11,948.0	4.5
		April	216.6	699.8	850.7	2,407.2	202.6	731.8	1,634.9	1,613.6	1,707.4	1,912.4	11,977.0	4.5
		M ay June	212.0 208.5	699.1 696.6	847.8 844.1	2,407.2 2,408.7	202.7 202.6	733.8 732.8	1,634.9 1,630.4	1,617.6 1,614.8	1,713.0 1,710.4	1,916.3 1,921.1	11,984.4	4.6 4.6
		July	206.0	703.9	844.5	2,408.7	203.0	737.4	1,630.4	1,627.5	1,710.4	1,921.1	11,970.0 12,022.0	4.0
		August	204.9	701.9	843.0	2,418.6	202.9	739.0	1,644.7	1,633.6	1,716.5	1,928.3	12,033.4	4.7
		September	204.4	704.9	842.5	2,423.0	202.9	740.4	1,649.4	1,639.8	1,720.8	1,932.4	12,060.5	4.8
		October	205.1	705.3	840.9	2,425.2	202.3	742.7	1,649.7	1,642.3 1,645.9	1,723.5	1,927.3 1,929.8	12,064.3	4.8
		November December	205.0 206.3	702.9 701.6	840.6 841.1	2,430.5 2,432.3	202.1 202.2	745.4 747.1	1,652.6 1,653.2	1,649.9	1,726.9 1,729.8	1,929.8	12,081.7 12,100.2	4.8 4.8
	2017	January	210.6	704.0	842.4	2,433.9	202.9	750.2	1,659.7	1,656.8	1,731.9	1,938.1	12,130.5	4.8
		February	213.2	705.2	843.6	2,432.4	203.1	752.0	1,661.5	1,659.0	1,732.2	1,938.5	12,140.7	4.7
		March	215.3	709.6	846.4	2,433.8	204.5	754.1	1,667.9	1,663.6	1,736.9	1,940.1	12,172.2	4.6
		April May	217.6 220.4	707.7 711.6	847.5 849.2	2,437.1 2,439.0	203.2 202.4	756.7 758.7	1,666.4 1,671.7	1,665.2 1,668.8	1,741.0 1,743.8	1,944.3 1,941.7	12,186.7 12,207.3	4.5 4.4
		June	222.0	713.1	852.5	2,445.4	202.4	760.8	1,675.8	1,671.5	1,744.4	1,940.9	12,228.8	4.3
		July	223.5	710.8	854.1	2,445.2	202.4	762.2	1,676.2	1,662.0	1,746.9	1,936.6	12,219.9	4.2
		August	224.8	709.7	856.1	2,450.6	202.5	763.2	1,677.1	1,666.1	1,750.9	1,935.8	12,236.8	4.1
		Sep tember October	226.7 228.0	710.5 717.3	856.8 859.8	2,449.0 2,457.6	202.0 203.8	766.9 769.4	1,688.5 1,695.8	1,665.9 1,669.7	1,742.7 1,757.3	1,935.8 1,940.4	12,244.8 12,299.1	4.1 4.1
		November	229.9	722.1	861.6	2,465.6	203.5	768.5	1,696.6	1,672.1	1,761.6	1,941.7	12,323.2	4.1
		December	232.1	725.3	864.3	2,467.5	203.9	770.0	1,698.1	1,676.2	1,765.8	1,941.8	12,345.0	4.1
	2018	January	233.5	724.1	864.7	2,464.4	203.9	769.8	1,706.4	1,679.0	1,768.3	1,943.2	12,357.3 12,393.6	4.1
		February March	236.5 239.9	728.6 731.2	867.9 871.1	2,469.5 2,473.0	204.2 203.9	772.3 773.2	1,714.4 1,718.9	1,682.6 1,685.8	1,771.4 1,775.5	1,946.2 1,950.2	12,393.6	4.1 4.0
		April	241.1	734.0	872.9	2,475.8	203.4	772.5	1,721.0	1,687.6	1,777.6	1,947.5	12,433.4	4.0
		May	243.5	735.3	876.5	2,480.8	204.2	774.2	1,728.5	1,690.9	1,780.9	1,950.3	12,465.1	3.9
		June	245.3	737.6	879.9	2,483.3	204.5	776.8	1,735.5	1,694.9	1,783.0	1,952.0	12,492.8	3.8
		July August	247.6 249.5	738.1 743.5	882.8 884.6	2,486.4 2,488.3	204.1 203.4	778.3 780.1	1,741.7 1,746.2	1,699.2 1,702.8	1,788.7 1,796.2	1,955.7 1,958.0	12,522.6 12,552.6	3.8 3.7
		September	252.0	743.6	886.9	2,495.0	204.4	780.8	1,746.7	1,704.7	1,790.6	1,955.3	12,560.0	3.7
		October	254.6	744.9	888.4	2,499.3	202.9	782.1	1,751.6	1,709.2	1,810.9	1,956.4	12,600.3	3.7
		November	254.8	748.0	895.5	2,511.2	205.2	781.7	1,748.1	1,710.7	1,803.6	1,955.9	12,614.7	3.7
	2019	December January	256.5 257.5	753.6 750.8	899.6 898.6	2,509.7 2,511.6	204.3 201.9	781.5 785.1	1,745.4 1,750.4	1,714.8 1,719.0	1,811.5 1,813.4	1,957.0 1,956.4	12,633.9 12,644.7	3.7 3.8
	2017	February	255.9	754.4	901.2	2,510.8	201.8	787.9	1,760.1	1,718.7	1,823.4	1,956.9	12,671.1	3.8
		March	254.8	760.7	904.2	2,510.0	202.1	790.0	1,758.5	1,725.6	1,834.3	1,958.5	12,698.7	3.8
		April	259.1	767.2	903.2	2,512.4	202.0	794.8	1,769.5	1,728.5	1,836.6	1,958.5	12,731.8	3.7
		M ay June	259.6 259.5	771.0 780.2	903.6 906.5	2,519.1 2,528.5	201.3 202.5	797.5 800.2	1,775.2 1,773.5	1,735.1 1,740.1	1,841.4 1,859.1	1,959.6 1,960.6	12,763.4 12,810.7	3.5 3.4
		July	256.0	785.2	910.6	2,533.6	202.3	805.1	1,778.5	1,744.2	1,860.0	1,962.3	12,810.7	3.4
		August	254.8	788.4	912.4	2,531.9	201.9	807.9	1,775.4	1,751.7	1,862.1	1,965.9	12,852.4	3.4
		September	255.4	794.8	911.9	2,525.4	201.3	809.0	1,787.3	1,757.5	1,859.7	1,965.0	12,867.3	3.4
		October November	255.5 254.9	798.2 804.0	910.9 917.2	2,536.9 2,544.9	202.8 202.1	809.4 811.2	1,795.4 1,795.0	1,765.7 1,775.9	1,869.9 1,874.7	1,969.2 1,971.5	12,913.9 12,951.4	3.4 3.4

Notes:

All figures are seaonally adjusted.

Totals may not sum due to rounding.

Information concerning historical average annual Texas non-agricultural employment by industry and unemployment rates is contained in Table A-20 and Table A-21.

Table A-20
Total Non-Agricultural Employment and Unemployment
(In Thousands)

Your Names Resources	Construction	Manufactume	Transportation.	Information	Financial Activities	Professional & F	Education & A.	Leisine, Hospites	Government	Total	Unemployment Race	
	& /			ak,	/ 3		Siness	2 / 2	, & /			6 /
1990	163.9	345.9	946.3	1,568.7	177.1	458.5	644.9	676.1	858.4	1,285.7	7,125.5	6.3
1991	170.7	348.2	935.4	1,568.7	177.7	450.1	659.1	711.5	872.9	1,310.0	7,123.3	6.9
1992	160.4	345.7	927.5	1,576.1	175.6	447.4	669.5	744.4	896.5	1,357.9	7,301.0	7.6
1993	157.8	355.2	941.3	1,616.2	178.0	456.8	703.8	779.6	925.6	1,401.0	7,515.3	7.2
1994	155.9	379.3	965.3	1,668.2	183.4	469.4	755.8	811.7	957.4	1,440.0	7,786.4	6.5
1995	151.8	409.5	994.7	1,715.6	195.1	472.1	799.3	851.8	996.3	1,472.7	8,058.9	6.1
1996	152.1	437.2	1,016.5	1,752.9	205.9	483.7	847.2	887.9	1,024.3	1,483.8	8,291.5	5.7
1997	161.6	468.1	1,045.3	1,796.5	227.1	505.7	926.9	934.3	1,067.7	1,509.8	8,643.0	5.3
1998	162.4	505.3	1,078.8	1,858.2	239.8	536.9	1,000.6	961.2	1,100.5	1,530.3	8,974.0	4.9
1999	143.3	537.0	1,066.9	1,908.2	251.6	557.8	1,051.9	977.1	1,134.8	1,561.5	9,190.1	4.7
2000	146.2	566.9	1,072.1	1,964.4	272.1	567.5	1,112.7	1,002.7	1,168.3	1,588.8	9,461.7	4.3
2001	156.1	580.4	1,029.9	1,974.3	269.8	577.5	1,109.4	1,041.1	1,192.6	1,613.4	9,544.5	5.0
2002	148.4	567.8	952.2	1,936.6	249.2	579.7	1,071.2	1,082.7	1,205.6	1,653.7	9,447.1	6.4
2003	149.1	551.7	903.7	1,904.1	233.6	585.5	1,063.8	1,119.3	1,216.9	1,673.8	9,401.5	6.7
2004	155.0	544.6	894.3	1,933.3	224.8	595.4	1,107.0	1,150.3	1,240.9	1,683.0	9,528.6	5.9
2005	167.8	567.2	901.2	1,981.3	222.9	609.6	1,168.7	1,184.6	1,257.4	1,712.2	9,772.9	5.4
2006	187.3	605.7	928.4	2,036.4	221.4	628.2	1,248.7	1,216.7	1,290.9	1,735.4	10,099.1	4.9
2007	208.7	648.2	939.2	2,100.3	220.6	644.0	1,310.8	1,255.5	1,338.3	1,763.7	10,429.3	4.3
2008	230.4	673.4	929.1	2,129.9	216.8	647.0	1,346.3	1,289.6	1,372.3	1,808.7	10,643.5	4.8
2009	202.3	598.0	843.0	2,047.1	203.8	628.1	1,262.8	1,336.5	1,369.4	1,851.5	10,342.5	7.6
2010	206.4	564.7	817.1	2,036.9	195.2	625.5	1,286.8	1,381.1	1,371.2	1,890.8	10,375.7	8.1
2011	237.4	564.1	841.5	2,094.1	195.2	641.0	1,352.5	1,413.8	1,411.8	1,854.1	10,605.5	7.8
2012	270.8	584.5	870.3	2,161.2	196.8	661.8	1,423.4	1,446.8	1,472.2	1,827.1	10,914.9	6.7
2013	289.0	613.3	876.0	2,227.3	200.6	684.1	1,483.1	1,486.2	1,539.8	1,841.9	11,241.3	6.3
2014	311.2	651.8	887.8	2,301.8	201.5	700.5	1,555.7	1,521.5	1,601.2	1,860.8	11,593.8	5.1
2015	272.4	684.1	879.3	2,379.4	200.4	718.9	1,608.1	1,577.0	1,661.8	1,884.7	11,866.1	4.4
2016	213.3	700.6	847.1	2,414.7	202.3	736.4	1,639.9	1,625.3	1,713.2	1,920.8	12,013.6	4.6
2017	222.0	712.2	852.8	2,446.2	203.1	761.1	1,678.0	1,666.4	1,746.3	1,939.5	12,227.6	4.3
2018	246.5	739.1	881.1	2,485.3	204.1	776.9	1,732.9	1,696.8	1,789.1	1,951.8	12,503.6	3.9

Notes:

Totals may not sum due to rounding. Source: Texas Workforce Commission

Table A-21
Distribution of Non-Agricultural Employment
(In Percent)

Year Names Res	Construction	Manufacuting	Transportation.	Information Trade,	Financial Activities	Professional & L	Education & He	Leisure, Hospites	Covernment	Total	
1990	2.30	4.85	13.28	22.02	2.49	6.43	9.05	9.49	12.05	18.04	100.00
1991	2.37	4.83	12.98	21.77	2.47	6.25	9.15	9.88	12.12	18.18	100.00
1992	2.20	4.73	12.70	21.59	2.41	6.13	9.17	10.20	12.28	18.60	100.00
1993	2.10	4.73	12.53	21.51	2.37	6.08	9.36	10.37	12.32	18.64	100.00
1994	2.00	4.87	12.40	21.42	2.36	6.03	9.71	10.42	12.30	18.49	100.00
1995	1.88	5.08	12.34	21.29	2.42	5.86	9.92	10.57	12.36	18.27	100.00
1996	1.83	5.27	12.26	21.14	2.48	5.83	10.22	10.71	12.35	17.90	100.00
1997	1.87	5.42	12.09	20.79	2.63	5.85	10.72	10.81	12.35	17.47	100.00
1998	1.81	5.63	12.02	20.71	2.67	5.98	11.15	10.71	12.26	17.05	100.00
1999	1.56	5.84	11.61	20.76	2.74	6.07	11.45	10.63	12.35	16.99	100.00
2000	1.55	5.99	11.33	20.76	2.88	6.00	11.76	10.60	12.35	16.79	100.00
2001	1.64	6.08	10.79	20.69	2.83	6.05	11.62	10.91	12.50	16.90	100.00
2002	1.57	6.01	10.08	20.50	2.64	6.14	11.34	11.46	12.76	17.50	100.00
2003	1.59	5.87	9.61	20.25	2.48	6.23	11.32	11.91	12.94	17.80	100.00
2004	1.63	5.72	9.39	20.29	2.36	6.25	11.62	12.07	13.02	17.66	100.00
2005	1.72	5.80	9.22	20.27	2.28	6.24	11.96	12.12	12.87	17.52	100.00
2006	1.85	6.00	9.19	20.16	2.19	6.22	12.36	12.05	12.78	17.18	100.00
2007	2.00	6.22	9.01	20.14	2.12	6.17	12.57	12.04	12.83	16.91	100.00
2008	2.16	6.33	8.73	20.01	2.04	6.08	12.65	12.12	12.89	16.99	100.00
2009	1.96	5.78	8.15	19.79	1.97	6.07	12.21	12.92	13.24	17.90	100.00
2010	1.99	5.44	7.88	19.63	1.88	6.03	12.40	13.31	13.22	18.22	100.00
2011	2.24	5.32	7.93	19.75	1.84	6.04	12.75	13.33	13.31	17.48	100.00
2012	2.48	5.36	7.97	19.80	1.80	6.06	13.04	13.26	13.49	16.74	100.00
2013	2.57	5.46	7.79	19.81	1.78	6.09	13.19	13.22	13.70	16.39	100.00
2014	2.68	5.62	7.66	19.85	1.74	6.04	13.42	13.12	13.81	16.05	100.00
2015	2.30	5.77	7.41	20.05	1.69	6.06	13.55	13.29	14.00	15.88	100.00
2016	1.78	5.83	7.05	20.10	1.68	6.13	13.65	13.53	14.26	15.99	100.00
2017	1.82	5.82	6.97	20.01	1.66	6.22	13.72	13.63	14.28	15.86	100.00
2018	1.97	5.91	7.05	19.88	1.63	6.21	13.86	13.57	14.31	15.61	100.00

Notes:

Totals may not sum due to rounding. Source: Texas Workforce Commission

PERSONAL INCOME

After increasing by 2.5 percent in 2015, Texas personal income declined by 0.5 percent in 2016. Income growth accelerated in 2017 and 2018, however, to 6.5 percent in both years. Underlying the personal income gains is population growth that has been fueled by net migration and a relatively high birth rate. According to the U.S. Census Bureau, from July 2018 to July 2019 Texas' population increased by 367,000, more than that of any other state, with approximately 50 percent of the growth from natural change (births minus deaths) and 50 percent from net migration. Seven of the nation's 15 most rapidly growing large cities are in Texas, as well as five of the 15 cities that had the largest absolute increase in population between 2017 and 2018. Texas' population is estimated to have grown by 1.3 percent in 2019 to 29.9 million as of July 1, 2019.

Information concerning total personal income for residents of the State is set forth in Table A-22.

Table A-22
Personal Income of Texas Residents

	Personal	Percent	
	Income	Change From	
Year	(Millions)	Prior Year	
1991	311,370	4.7%	
1992	336,646	8.2%	
1993	356,399	5.8%	
1994	376,614	5.7%	
1995	402,805	7.0%	
1996	433,165	7.5%	
1997	472,178	9.0%	
1998	514,064	8.9%	
1999	541,440	5.3%	
2000	589,275	8.8%	
2001	625,493	6.1%	
2002	633,036	1.2%	
2003	655,908	3.6%	
2004	687,220	4.8%	
2005	745,859	8.5%	
2006	820,950	10.1%	
2007	873,354	6.4%	
2008	954,650	9.3%	
2009	910,499	-4.6%	
2010	966,150	6.1%	
2011	1,057,758	9.5%	
2012	1,132,222	7.0%	
2013	1,159,746	2.4%	
2014	1,248,733	7.7%	
2015	1,280,251	2.5%	
2016	1,274,395	-0.5%	
2017	1,357,466	6.5%	
2018	1,445,270	6.5%	

Source: U.S. Bureau of Economic Analysis

Information on per capita personal income for residents of Texas and the United States follows in Table A-23.

Table A-23 Per Capita Personal Income

	Texas Per		U.S. Per		
	Capita	Texas Percent	Capita	U.S. Percent	Texas as a
	Personal	Change From	Personal	Change From	Percentage of
Year	Income	Prior Year	Income	Prior Year	U.S.
1990	\$17,455	6.4%	\$19,621	5.1%	88.6%
1991	\$17,897	2.5%	\$20,030	2.1%	89.4%
1992	\$18,956	5.9%	\$21,090	5.3%	89.9%
1993	\$19,624	3.5%	\$21,733	3.0%	90.3%
1994	\$20,287	3.4%	\$22,575	3.9%	89.9%
1995	\$21,246	4.7%	\$23,607	4.6%	90.0%
1996	\$22,397	5.4%	\$24,771	4.9%	90.4%
1997	\$23,919	6.8%	\$25,993	4.9%	92.0%
1998	\$25,502	6.6%	\$27,557	6.0%	92.5%
1999	\$26,337	3.3%	\$28,675	4.1%	91.8%
2000	\$28,135	6.8%	\$30,657	6.9%	91.8%
2001	\$29,339	4.3%	\$31,589	3.0%	92.9%
2002	\$29,185	-0.5%	\$31,832	0.8%	91.7%
2003	\$29,772	2.0%	\$32,681	2.7%	91.1%
2004	\$30,688	3.1%	\$34,251	4.8%	89.6%
2005	\$32,745	6.7%	\$35,849	4.7%	91.3%
2006	\$35,144	7.3%	\$38,114	6.3%	92.2%
2007	\$36,646	4.3%	\$39,844	4.5%	92.0%
2008	\$39,271	7.2%	\$40,904	2.7%	96.0%
2009	\$36,711	-6.5%	\$39,284	-4.0%	93.5%
2010	\$38,274	4.3%	\$40,546	3.2%	94.4%
2011	\$41,244	7.8%	\$42,735	5.4%	96.5%
2012	\$43,397	5.2%	\$44,599	4.4%	97.3%
2013	\$43,781	0.9%	\$44,851	0.6%	97.6%
2014	\$46,289	5.7%	\$47,058	4.9%	98.4%
2015	\$46,577	0.6%	\$48,978	4.1%	95.1%
2016	\$45,616	-2.1%	\$49,870	1.8%	91.5%
2017	\$47,929	5.1%	\$51,885	4.0%	92.4%
2018	\$50,355	5.1%	\$54,446	4.9%	92.5%

Source: U.S. Bureau of Economic Analysis

Table A-24 Sources of Personal Income Quarter III of 2019

	Sources of Personal	Sources of Personal	Sources of Personal	
	Income (Texas) Total	Income (Texas)	Income (U.S.) Total	Sources of Personal
Source Wages and Salaries:	(Billion \$)	Percent	(Billion \$)	Income (U.S.) Percent
Agricultural Services and Farm	5.4	0.4	132.3	0.7
Mining	84.9	5.6	165.7	0.9
Utilities	10.5	0.7	101.8	0.5
Construction	90.9	5.9	805.8	4.3
Manufacturing	98.5	6.4	1,203.3	6.4
Trade	123.7	8.1	1,347.7	7.2
Transportation and Warehousing	62.9	4.1	517.0	2.8
Information	24.1	1.6	472.7	2.5
Finance and Insurance	76.8	5.0	930.9	5.0
Real estate	27.7	1.8	324.6	1.7
Professional and technical services	115.3	7.5	1,389.8	7.4
Management Services	22.0	1.4	362.4	1.9
Administrative and Waste Services	52.0	3.4	570.1	3.0
Educational Services	11.6	0.8	221.5	1.2
Health Care and Social Assistance	105.4	6.9	1,462.3	7.8
Arts, Entertainment, and Recreation	9.4	0.6	166.4	0.9
Accommodation and food services	37.8	2.5	457.8	2.4
Other Services	39.7	2.6	474.8	2.5
Government				
Federal Civilian	24.8	1.6	363.9	1.9
M ilitary	13.9	0.9	144.0	0.8
State and Local	119.5	7.8	1,555.8	8.3
Property and Interest Income	257.4	16.8	3,777.2	20.2
Transfer Payments	231.3	15.1	3,197.3	17.1
Contributions for Social Insurance	(114.0)	(7.5)	(1,424.8)	(7.6)
Residence Adjustment	(2.3)	(0.2)	3.1	0.0
Total Personal Income	1,529.2	100.0	18,723.4	100.0

Notes:

Totals may not sum due to rounding. Data presented as annual averages.

Source: U.S. Bureau of Economic Analysis

OIL AND GAS

Table A-25 sets forth historical information concerning oil and natural gas production within the State and average taxable prices paid for oil and gas produced within the State.

Table A-25
Oil and Natural Gas Production

Texas (Miss	Texas O	States O	Average Parks of United 24.8	Production (Trillion	Texas Cas Production	Markeled Production	North Case Co.	
(Millian Ball)	Percentage to duction of	States Oil Produce in a	Versee But Vinited	THE PIECE POR	Texas Cas Production Texas Cas Production Anthony Cas 497	Markeyed Production	OF CR	me price per
1993	019	(4.6)			7.77	3.3		
1994	591	(4.6)	24.3	15.08	5.05	1.5	25.6	1.61
1995	560	(5.3)	23.4	16.45	5.05	0.0	25.9	1.45
1996	543	(2.9)	23.0	20.41	5.13	1.7	25.9	2.07
1997	537	(1.2)	22.8	18.76	5.17	0.7	26.0	2.17
1998	505	(5.9)	22.1	12.36	5.23	1.2	26.2	1.83
1999	449	(11.0)	20.9	17.39	5.05	(3.3)	25.5	2.08
2000	443	(1.3)	20.8	28.72	5.28	4.5	26.2	3.75
2001	424	(4.3)	20.0	23.74	5.28	0.0	25.7	3.85
2002	406	(4.4)	19.4	24.36	5.14	(2.7)	25.9	2.89
2003	401	(1.3)	19.4	29.38	5.24	2.0	26.3	4.71
2004	393	(2.0)	19.7	38.95	5.07	(3.4)	26.0	5.44
2005	393	(0.0)	20.7	52.77	5.28	4.1	27.9	7.27
2006	392	(0.0)	21.1	61.52	5.55	5.1	28.6	6.17
2007	391	(0.3)	21.1	68.53	6.12	10.4	30.3	6.30
2008	406	3.8	22.2	96.57	6.96	13.7	33.0	7.85
2009	399	(1.6)	20.4	57.48	6.82	(2.0)	31.5	3.32
2010	427	6.8	21.4	76.10	6.72	(1.5)	30.0	4.12
2011	529	24.0	25.7	91.72	7.11	5.9	29.6	4.27
2012	724	36.8	30.4	92.49	7.48	5.1	29.6	2.95
2013	927	27.7	34.0	95.86	7.63	2.1	29.9	3.67
2014	1,158	24.9	36.2	87.59	7.99	4.6	29.0	4.39
2015	1,257	8.6	36.5	44.88	7.89	(1.2)	27.4	2.01
2016	1,163	(7.5)	36.0	39.5	7.23	(8.4)	25.4	1.89
2017	1,273	9.4	37.3	48.68	7.14	(1.2)	24.4	2.80
2018	1,618	27.2	40.4	60.39	7.87	10.2	24.0	2.84

Notes:

Oil Production includes condensates.

(1) Historical figures updated to reflect Texas on shore and offshore marketed natural gas production.

MCF = 1,000 cubic feet

SCF = standard cubic feet

Sources

Texas Comptroller of Public Accounts and U.S. Energy Information Administration

Two frequently used barometers of oil and gas exploration activity are rotary drilling rig usage and the number of wells drilled. The following table sets forth historical information concerning these two statistics. In 1990, drilling activity showed a significant increase in Texas for the first time since 1984. This increase reflected the success of horizontal drilling in South Texas, but the level of rig activity declined again in 1991, to 315 operating rigs. In 1992, the Texas rig count dropped to historical lows bottoming out in June with 209 rigs. By December 1992, the rig count had risen to 328 because of a rush to drill before the yearend expiration of a federal tax break for certain natural gas wells. During January 1994, the Texas rig count fell to 253 before rising to 281 by December. In March 1995, the Texas rig count fell to a low of 233; the rig count peaked for the year in August with 265 rigs operating. The Texas rig count increased during the 1996-1997 time period, and in 1997 peaked in October at 386 after a minimum of 306 in January 1997.

The 1998 rig count topped out in February at 382 and dropped to a low of 218 in December as the taxable crude oil price dropped below \$10 per barrel. The average Texas rig count for 1999 was 227 (see Table A-26). The rig count bottomed out in April 1999 at 180 and rebounded to a high of 293 in December 1999. The catalyst for the rebound was attributable to the taxable crude oil price that surpassed \$24 per barrel by the end of the year. In 2000, the average rig count was 343 with a low of 285 in January and a high of 413 in December as the oil price continued to ascend toward the low \$30 per barrel range. According to Baker Hughes, the rig count continued to climb each month in 2001 starting with an average of 429 in January and peaking with an average of 509 in July, even though oil prices had already begun to soften since the beginning of the year to the mid \$20s. However, the September 11 event exerted downward pressure on the price, and it dropped below \$20 by November 2001 before rebounding to the low \$20s by March 2002 staying above \$25 for the last half of 2002. Consequently, rig counts dropped to an average of 306 by April 2002 before rising again to an average of 369 in December 2002.

The prolonged Venezuelan crude oil supply disruption and the supply uncertainty before and during the war in Iraq primarily pushed the price of crude oil past \$30 per barrel during the first quarter of 2003.

The crude oil price temporarily dropped back to the \$26 range after the war in Iraq in April and May. However, prices quickly advanced and averaged more than \$28 per barrel for the rest of 2003 when restoration of the Iraqi oil production to the pre-war level in the short term was out of reach. In the meantime, the rig count continued to climb and averaged 449 in 2003.

In 2004, continuing threats of oil supply disruption from Iraq, Saudi Arabia, Russia, Nigeria, and Norway, damages to the oil and gas infrastructure in the Gulf of Mexico from the Hurricane Ivan, and questionable availability of OPEC spare capacity to meet the stronger world oil demand led by China and United States largely pushed the average oil price above \$49 per barrel in October before dropping back below \$40 per barrel in December 2004.

In 2005, the growing belief of oil production peaking in the near future along with tight inventory, stronger demand, and losses of production from the Gulf of Mexico caused by Hurricanes Katrina and Rita, helped move Texas average oil price above \$60 per barrel by August and the average for the year to \$52.69. High oil prices also helped increase Texas rig count by 21 percent over 2004.

In 2006, steady demand growth and fear of losses of supplies from the Persian Gulf over the fighting in Lebanon and Iran's pursuit of nuclear-arms inherently pushed oil prices to an all-time

high of \$69.82 per barrel by July. However, prices began to soften and averaged \$61.53 for the year as risk premium diminished while inventory levels continued to build and remain above the historical norm. Contrary to the downward price movement since the all-time high, monthly rig counts steadily climbed higher to 780 by December and averaged 746 for the year, a 21 percent increase over 2005.

In 2007, the decline of the oil price that began in 2006 eventually bottomed in January and reversed its course aiming for the all-time high. Rising oil demand in spite of record prices since 2006, geopolitical pressure, declining inventory, and the precipitous drop of the dollar helped pushed prices closer to the century mark by the end of the year. At the same time, drilling activities continued the upward trend averaging 834 for the year, a 12 percent increase over 2006.

In 2008, NYMEX crude oil futures continued to set records after surpassing the psychological century-mark in February 2008. Unabated rising oil consumption from India, China, Russia, Middle East and other emerging markets, geopolitical tension over Iran's nuclear weapon program, and ongoing supply disruption in Nigeria working in concert with the decline of the U.S. dollar have been major contributors to record oil prices. However, after topping \$145 in July, prices began a precipitous decline to a \$33 range, a level last seen in 2004, by the end of the year in equally dramatic fashion because of a strengthening dollar, deepening credit crisis, looming recession, slowing demand, and growing excess supply. Texas rig counts also rose and fell in similar fashion after peaking in September at 946, a level last seen in December 1983, and closed out the year at 826 in December.

In 2009, NYMEX crude oil futures again dropped to the \$33 level in February creating another steep contango since December 2008 with storage reaching capacity in the midst of a once in a lifetime credit crisis. The futures eventually recovered to the \$70 range by the fourth quarter with the help of the OPEC production cuts, easing credit crisis, expected recovering demand with improving global economy led by the fast-resurging China and other emerging markets, and the much anticipated further decline of the U.S. dollar. Since September 2008, Texas active rig counts dropped by almost two third to average 329 by June 2009 but has since rebounded to 470 by December 2009.

In 2010, NYMEX crude oil futures managed to reach the \$90 range by the end of the year drawing on the persistent weakness of the dollar and acknowledging the insatiable energy consumption of China who has taken the lead from the U.S. as the number one energy consumer. Because of the huge disparity in prices between oil and gas, oil rig counts continued to rise and reached parity with gas rigs by the year end. In turn, total Texas rig counts rose 52 percent from the 2009 level to 656 rigs.

In 2011, the disruption of Libya oil production along with rising demand that has tighten the global spare capacity, the unabated geopolitical turmoil in the Middle East and North Africa, diminishing excess storage levels, the narrowing differentials between the Brent and the West Texas Intermediate (WTI) pricing benchmarks on NYMEX crude oil futures, and the weakness of the dollar elevated NYMEX crude oil futures above \$110 level by April. However, as the European financial crisis continues to deepen, fear of its contagion along with the possible slowing of China's economy brought oil prices down to the mid \$70s by October. By this time, the threat of crude

supply disruption through Strait of Hormuz intensified and caused prices to rise to \$100 level by year's end.

In 2012, NYMEX crude oil futures continued to rise through spring 2012 to \$110 level. As fear of supply disruption gave way to the on-going European financial crisis, prices subsequently declined and retested mid \$70 level by June 2012 and remained below \$100 through the first half of 2013. However, the continuing growth of global demand, tightening spare capacity, and the additional market access transporting crude oil in storage at Cushing, Oklahoma to the Gulf Coast refineries largely pushed prices beyond the \$110 level for most of the third quarter of 2013. By the fourth quarter, concerns with the potential economic impact of the U.S. government shut-down in conjunction with the surging domestic oil production from unconventional oil plays brought prices back to the \$90 level.

In 2014, while concerns of the Iranian nuclear threat had abated, the potential Middle East supply disruption associated with the civil war in Syria helped push oil prices above \$100 by the end of the first quarter. In the second half of the year, the weakened global demand growth, the return of the production from certain geopolitical conflict countries, and the surging North American production, driven largely by the shale plays, helped create a supply imbalance that drove oil prices to the \$50 levels by the year's end.

In 2015, prices continued to drop further to the \$40 levels in the first quarter before rebounding to the \$60 levels during the summer. However, with China's weakening economy, unrelenting U.S. crude oil production, continuing OPEC high output levels, and the imminent return of Iran's production, oil prices resumed the downward path and declined to the \$30 levels by end of the year. On a positive note, the lifting of the U.S. crude oil export ban by the year's end helped reduce the WTI crude's price discount to Brent, a major international benchmark crude.

In 2016, prices temporarily dipped below the key psychological mark of \$30 per barrel in the first quarter for the first time since 2003 before embarking on a recovery that brought prices above the \$50 levels by the end of the year. The price recovery was in large fueled by the reduction in drilling activities in the Bakken and the Eagle Ford shale plays in addition to the OPEC's temporary agreement to cut their production output in 2017.

In 2017, prices tested the \$40 levels during the first six months before surging toward the \$60 mark by the end of the year with the cohesive effort led by Saudi Arabia and Russia to extend the production cut through 2018.

By the end of the first half of 2018, oil prices rose to \$70 levels as global oil inventories returned to normalcy sparking interest from OPEC to Russia to end the production cut agreement and began to raise output to replace the expected short fall of Iran's exports. However, as the re-imposed sanction on Iran weakened by temporary oil purchase waivers to certain countries and the expected short fall greatly diminished, prices quickly dropped to the low \$40 levels by the end of the year anticipating another global production glut.

In 2019, oil prices fluctuated between \$50 and \$60 levels depending on bullish or bearish events related to OPEC production cuts, the Persian Gulf conflicts, or the ongoing trade negotiations with China.

Regarding Texas rig count activities, average rig counts dropped from the prior high of 904 in November 2014 to 324 in December 2015 as prices began a steep decline starting in 2014. However, Texas production remained resilient and did not decline until it climbed to a monthly average of 3.2 million barrels per day in March 2015, a production level not seen since 1976. Texas production had since dropped to an average of 2.8 million barrels per day by the end of 2016. The rig count declined as low as 179 in 2016 as the availability of cheap credit to fund costly shale developments disappeared while prices remained below break-even levels. However, with prices firmly anchored above the \$50 mark in 2017, drilling activities increased as the rig count climbed to 456 and production began to rise and surpassed the 1972 peak with an average of 3.5 million barrels per day by the end of 2017. In 2018, average rig counts continued to increase to 534 by June and remained steady thereafter while production surged to 4.3 million barrels by the end of the year. In 2019, rig counts continued to decline, primarily in the Permian Basin, as producers reduced their capital expenditures. Nevertheless, oil production in the basin continued to rise.

With regard to Texas crude oil production trend, after decades of declining output, production began to grow in fiscal 2009 and accelerated in 2011 confirming the reversal of a nearly four-decade production decline that began when Texas oil production peaked in 1972. The production surge at this point, driven largely by the unconventional oil plays of the Eagle Ford Shale and, to a lesser extent, the Permian Basin, helped triple Texas crude output by the end of 2015. Thereafter, despite lower oil prices, the Permian Basin became the biggest play with superior economics in the country for drillers to continue the fracking revolution. As such, Texas production surged again to an average of 4.6 million barrels of oil per day as of October 2019, an all-time high.

The recent discovery of new oil reserves in the Permian Basin has re-established the basin as the premier producing region with tremendous growth for the foreseeable future. With market prices above the \$50 mark, Texas production is expected to continue to grow with producers shifting from the production growth-at-all costs strategy to the model of profitability.

The natural gas rig count and prices followed oil on the downward path that began in 2008 and remained in check. The number of operating natural gas drilling rigs in Texas swung from a high of 756 during September 2008 to a low of 243 during July 2009. With the accelerated development of the Barnett Shale, Texas natural gas production has been on an upward path since 2006 and exceeded 7 trillion cubic feet of gas from 2008 forward, production levels not seen since the 70s. With production increases, (largely from technological advances), industrial consumption decline, and gas storage reaching capacity, NYMEX natural gas prices eventually declined from over \$13 in July 2008 to less than \$4 by the end of March 2009 and eventually touching the \$2 level by the end of August 2009. Prices subsequently rebounded to the \$5 level by December 2009 as fear of a price collapse due to overflowing supply subsided along with reductions in storage levels helped by the much needed colder-than-normal weather. In 2010, NYMEX natural gas prices averaged \$4.40 riding on the strong rebound of the industrial consumption and the electric power generation partly caused by a summer heat wave in certain populated areas of the U.S. and countered by a mild hurricane season with storage levels remaining above their 5-year average.

For 2011, NYMEX natural gas prices averaged near the \$4.00 level. Although much of the US experienced record breaking temperatures during the summer, particularly in Texas, increased consumption was not enough to compensate for the increase in production nationwide. The production increase in combination with a mild winter ultimately led to record storage levels and

suppressed prices to the just above the \$3 level by the end of the year. Because of the steep discount relative to oil, natural gas rig counts remained in the low 300s, while rig counts for crude oil rose to just under 600. The relatively higher crude oil prices increased drilling for natural gas liquids and condensates, contributing to higher overall volumes of liquids production and associated tax revenues.

In 2012, NYMEX natural gas prices continued their downward trend averaging \$2.82 for the year. While the rig count for natural gas had rebounded somewhat from the low seen in 2009, it subsequently fell to an average count of 222 for 2012. However, due primarily to shale play activity (inclusive of casinghead gas), production remained stable.

Throughout 2013 and 2014 natural gas rig counts continued their slide with average counts of 132 and 85 for these years, respectively. While rig counts fell, NYMEX prices trended upwards averaging \$3.73 for 2013, and \$4.26 for 2014. Because of a late start to the 2014-2015 Winter Season with an excess inventory and a weak demand, prices fell to an average of \$2.63 for 2015. In turn, average rig counts fell to 54 for the year.

The 2015-2016 winter was again a record warm year for the lower 48 states. With warm temperatures, natural gas in storage has remained above the normal range since the storage injection season (April through October). Consequently, prices declined to the \$1.60 levels in March 2016. Lower than expected injections followed by larger than expected winter natural gas storage draws drove natural gas prices to an average of \$3.58 in December 2016 while the U.S. natural gas production output declined along with the rig counts throughout the year. The average price of natural gas in 2017 was \$3.02 as the working gas in storage returned to the proximity of the 5-year average level.

With oil prices still commanding a premium, although a much lower one, over natural gas, the development of high-volume natural gas plays and rich in liquids such as the Eagle Ford shale in Texas are expected to continue, although at a much slower pace in a low-price environment. While production from the Barnett Shale had reached a plateau and started a gradual decline, production from the Eagle Ford Shale still has great potential. With abundant resources, natural gas has asserted itself as an ideal bridge fuel for power generation, transportation, petrochemical and agricultural feed stocks, as well as residential and commercial heating. U.S. LNG exports have grown by 280% in 2017 over 2016 averaging 1.90 Bcf/d and are expected to provide a relief and possibly bring prices closer to the international market. As such, production from shale formations such as Eagle Ford, Barnett, Haynesville, Marcellus and Utica is expected to remain a significant portion of overall U.S. production.

Although Hurricane Harvey temporarily halted some oil and natural gas drilling and production activity in the South Texas Eagle Ford Shale region, coastal bays and the Gulf of Mexico, oil and natural gas infrastructure was left largely unscathed and these activities resumed after minimal production losses.

Natural gas prices remained relatively stable in 2018 averaging \$2.88 through October. However, prices quickly surged to a high of \$4.84 on November 14, 2018 due to colder than expected weather forecasts and concerns about natural gas storage levels being well below the five-year average. This trend did not last very long as prices quickly receded back to the \$3.00 level and averaged \$3.07 for the year. Sustained growth in natural gas production since 2017 continued to outpace

demand and put downward pressure on prices, which declined for most of 2019 to an average of \$2.53.

Table A-26 sets forth historical information concerning annual rotary rig activity and total wells drilled with the State.

Table A-26
Petroleum Drilling Activity

Texas Average Rig Activity Wells Wells Annual Rotary Rig Percent Total Wells Completed Completed Change Drilled Year Activity Oil Gas 1998 303 (15.4)11,057 4,509 4,907 1999 227 (25.1)6,662 2,049 3,566 2000 343 8,854 3,111 4,580 51.1 2001 462 34.7 9,995 3,082 5,787 2002 338 (26.8)9,877 3,268 5,474 2003 449 32.8 10,420 3,111 6,336 2004 506 12.7 11,587 3,446 7,118 2005 614 7,197 21.3 11,154 3,454 21.5 2006 746 13,339 4,761 8,534 2007 834 11.8 13,778 5,084 8,643 2008 898 7.7 16,615 6,208 10,361 2009 432 (51.9)14,585 5,860 8,706 2010 659 52.5 9,477 5,392 4,071 838 27.2 3,008 2011 8,391 5,380 2012 899 7.3 14,535 10,936 3,580 2013 835 (7.1)24,166 19,249 4,917 2014 882 5.6 28,585 24,999 3,585 2015 430 (51.2)18,383 15,578 2,787 2016 9,967 2,129 236 (45.1)7,813 2017 82.2 1,022 430 6,439 5,394 2018 514 19.5 10,414 8,588 1,813 2019 462 10.1 8,817 7,046 1,753

Sources: Texas Railroad Commission and Baker Hughes Incorporated

Table A-27 sets forth information concerning the number of producing wells and the estimated proven reserves of oil and natural gas within the State.

Table A-27
Texas Natural Gas and Oil-Producing Wells
And Estimated Proven Reserves

		Estimated Oil Proved		Estimated Dry Gas Proved
	Producing Oil	Reserves	Producing Gas	Reserves
Year	Wells	(Million Bbl)	Wells	(Trillion CF)
1988	196,580	7,043	49,577	38.167
1989	190,821	6,966	50,017	38.381
1990	194,962	7,106	49,989	38.192
1991	196,292	6,797	49,825	36.174
1992	193,310	6,441	49,839	35.093
1993	186,342	6,171	50,794	34.718
1994	179,955	5,847	52,614	35.974
1995	177,397	5,743	53,612	36.542
1996	175,277	5,736	55,052	38.270
1997	175,475	5,687	56,736	37.761
1998	170,288	4,927	58,436	37.584
1999	162,620	5,339	59,088	40.157
2000	161,097	5,273	60,486	42.082
2001	159,357	4,944	63,598	43.527
2002	155,865	5,015	65,686	44.297
2003	153,461	4,583	68,488	45.730
2004	151,205	4,613	72,237	49.955
2005	151,286	4,919	76,510	56.507
2006	151,832	4,871	83,218	61.836
2007	153,223	5,122	88,311	72.091
2008	156,588	4,555	96,502	77.546
2009	157,807	5,006	101,097	80.424
2010	158,451	5,674	101,653	88.997
2011	161,402	7,014	101,831	98.165
2012	167,864	9,614	102,218	86.924
2013	179,797	10,468	103,445	90.349
2014	190,331	12,272	104,074	97.154
2015	193,807	11,759	103,526	78.866
2016	178,927	12,859	101,339	81.224
2017	187,139	15,936	99,471	105.618
2018	187,401	n/a*	98,709	n/a*

Notes:

*Not available

Reserves are as of December 31 of each year.

Sources: Texas Railroad Commission and U.S. Energy Information Administration

AN OVERVIEW OF TEXAS INDUSTRIES BY NAICS SECTOR

Ten of the 11 major nonfarm industries in the Texas economy experienced net job growth from November 2018 to November 2019. Employment in the goods-producing industries increased by 4.1 percent, while employment in the service-providing industries grew by 2.4 percent. Employment increased in all three of the goods-producing industries (mining and logging, manufacturing, and construction), led by a 56,000 increase in construction employment, which had the highest rate of growth (7.5 percent) among all industries. Employment growth in the service-providing industries was led by education and health services (up 65,200) and leisure and hospitality (up 50,700). Among the service-providing industries, other services (4.7 percent), financial activities (3.8 percent), and education and health services (3.8 percent) had the largest percentage increases in employment. The information industry was the only industry to experience an employment decline (1.5 percent) over the year.

MINING AND LOGGING

The monthly average NYMEX price for oil fell from \$102.39 per barrel in July 2014 to \$44.80 in August 2016, a decrease of 56 percent. As a result, the Texas mining and logging industry lost 53,500 jobs in fiscal 2015 and another 57,000 jobs in fiscal 2016. Industry employment peaked in December 2014 at 321,900 and then declined steadily, reaching a low of 204,400 in September 2016. Since then, industry employment has grown significantly, reaching 254,900 in November 2019, an increase of 100 from November 2018, but still 21 percent below the 2014 peak.

In addition to substantial exploration activities within the state and in the Gulf of Mexico, Texas is headquarters for many of the nation's largest oil and natural gas refining and distribution companies and has a large number of energy-related jobs in other industries. As in the mining industry, employment in those industries and sectors has recovered from recent lows.

CONSTRUCTION

Construction employment increased by 56,000 (7.5 percent) over the year to reach 804,000 in November 2019. Employment in the heavy and civil engineering construction sector increased at the highest rate of any construction sector, growing by 13.5 percent (22,600).

Total housing construction activity in 2019 was up from 2018. Single-family building permits issued in the year ending in November 2019, at 120,143, were up only slightly (0.5 percent) from the same period one year earlier, but building permits for multi-family units rose by 28.5 percent. According to Multiple Listing Service data from the Texas A&M Real Estate Center, the median sales price for an existing Texas single-family home rose by 4.3 percent over the year, from \$230,000 in November 2018 to \$240,000 in November 2019. The inventory of existing homes for sale in November 2019 was 3.5 months, down slightly from 3.6 a year ago, and a substantial improvement from the post-recession high of 8.5 months in mid-2011. The Real Estate Center considers inventory levels of about 6.5 months "balanced," with stable prices influenced more by inflation than demand. Relatively low inventories place upward pressure on housing prices.

TRADE, TRANSPORTATION, AND UTILITIES

The trade, transportation and utilities industry, the state's largest employer with 20 percent of total nonfarm jobs in November 2019, added 33,700 jobs (1.3 percent) over the year. Employment in all three industry sectors (retail trade, wholesale trade and transportation, warehousing and utilities) increased over that period. Wholesale trade employment was up by 3.1 percent (18,600), transportation, warehousing and utilities employment increased by 12,900 (2.3 percent), and employment in the retail trade sector increased by 2,200 (0.2 percent). In all, the trade, transportation and utilities industry provided 2,544,900 Texas jobs in November 2019.

As evidence of the importance of trade to the State economy, the Port of Houston had total shipment volume of 260.1 million tons in the most recently reported year (2017). Houston's port nearly matched the Port of South Louisiana (275.1 million tons), the nation's busiest port. The Port of Houston is the nation's largest port for foreign trade, handling 28 percent more tonnage than the second largest port. Among the ten busiest U.S. ports in 2017, three were in Texas. After Houston, the other two were Beaumont at fifth and Corpus Christi at sixth.

The Dallas/Fort Worth area is a major regional distribution center for Texas and surrounding states and has the fourth busiest airport in the nation and fifteenth busiest in the world, with 32.8 million passenger enplanements during 2018. Houston's IAH is the fourteenth busiest airport in the U.S., with passenger enplanements of 21.2 million in 2018.

Sales tax collections, of which more than 50 percent come from households, are an indicator of retail sales activity in the State. Calendar 2015 sales tax revenue was \$28.7 billion, a 1.9 percent increase over 2014 collections. However, in 2016 sales tax collections declined by 1.8 percent on a year-over-year basis, largely due to spending reductions in oil and gas related sectors. Sales tax revenues recovered in 2017, increasing by 4.2 percent in that year and by 12.5 percent in 2018. Sales tax collections in 2019 increased by a further 5.3 percent to reach \$34.6 billion.

Table A-28 shows annual historical retail sales data for 1995 through the second quarter of 2019. As the Census Bureau no longer publishes retail sales numbers for states, the Texas numbers are from the Texas Comptroller's office and are based on gross retail sales, including hotel/motel accommodation and food services.

Table A-28 Retail Sales

	Texas Gross	
	Retail Sales Total	Percent Change
Year	(Millions)	from Prior Year
1995	198,835	5.4
1996	216,302	8.8
1997	232,711	7.6
1998	244,911	5.2
1999	265,074	8.2
2000	298,614	12.7
2001	307,070	2.8
2002	290,719	-5.3
2003	306,342	5.4
2004	340,363	11.1
2005	364,788	7.2
2006	380,303	4.3
2007	394,884	3.8
2008	435,256	10.2
2009	389,524	-10.5
2010	399,398	2.5
2011	432,915	8.4
2012	460,846	6.5
2013	487,031	5.7
2014	522,842	7.4
2015	522,679	0.0
2016	533,686	2.1
2017	534,533	0.2
2018	568,358	6.5
2019*	274,570	1.5

Notes:

*2019 retail sales are through the second quarter; the percentage change is from the first two quarters of 2018. Amounts and growth rates for 1995 through 2002 are based on the SIC-based definition of gross retail sales. Amounts and growth rates from 2003 onward are based on the NAICS-based definition.

Source: Texas Comptroller of Public Accounts

MANUFACTURING

The Texas manufacturing industry gained 21,700 jobs over the past year, an increase of 2.4 percent. Durable goods employment was up 13,600, led by gains in transportation equipment manufacturing (up 3,400, 3.6 percent) and machinery manufacturing (up 3,000, 3.0 percent). Overall, durable goods employment increased by 2.4 percent. Nondurable-goods manufacturing employment grew by 8,100 (2.5 percent). Total manufacturing employment in November 2019 was 917,200.

Table A-29 shows Texas manufacturing employment by industry in November 2019.

Table A-29
Manufacturing Employment by Industry

		Percentage of
	Employ ment	Manufacturing
Manufacturing Sector	(Thousands)	Employment
Durable Goods		
Wood Products	26.4	2.9
Minerals (nonmetallic) and Concrete	38.2	4.2
Primary Metals	19.8	2.2
Fabricated Metals	131.9	14.4
Machinery, except Computers	102.1	11.1
Computers and Electronics	93.6	10.2
Electrical Equipment & Appliances	22.6	2.5
Transportation Equipment	99.0	10.8
Furniture	24.2	2.6
Miscellaneous Durables	33.2	3.6
Total Durable Goods	591.0	64.4
Nondurable Goods		
Food Manufacturing	100.1	10.9
Beverages	18.6	2.0
Printing	23.8	2.6
Petroleum and Coal Products	24.6	2.7
Chemicals	85.4	9.3
Plastics and Rubber	40.8	4.4
Other Nondurables, incl. Apparel	33.8	3.7
Total Nondurable Goods	327.1	35.6
Total	918.1	100.0

Notes:

Data in this table not seasonally adjusted.

Totals may not sum due to rounding.

Source: Texas Workforce Commission

INFORMATION

The information industry is a collection of diverse sectors, representing established sectors of the economy (newspaper publishing, data processing, television broadcasting, and wired telephone services) as well as some newer sectors (cell phone service providers, Internet providers, and software). The information industry was the only one of the 11 major industries to experience a decline in employment over the year. Employment fell 1.5 percent (3,100) to reach 202,100 in November 2019.

PROFESSIONAL AND BUSINESS SERVICES

The professional and business services industry added 46,900 jobs (up 2.7 percent) over the past twelve months. Employment changes varied considerably among industry sectors, with the largest increases in management, scientific, and technical consulting services (7.0 percent) and computer systems design and related services (8.0 percent). The employment services sector, which includes temporary help agencies with many of its jobs in temporary and/or part-time positions, had the largest absolute decrease in employment of 10,000. Total professional and business services employment was 1,795,000 in November 2019.

EDUCATION AND HEALTH SERVICES

The education and health services industry, composed of the educational services and health care and social assistance sectors, added 65,200 jobs over the year, a growth rate of 3.8 percent. The relatively small educational services sector saw an increase of 11,500 jobs (5.4 percent). The much larger health care and social assistance sector grew at a 3.6 percent rate (53,700 jobs). In all, Texas education and health services employment reached 1,775,900 in November 2019.

FINANCIAL ACTIVITIES

Over the past twelve months overall employment in the financial activities industry grew by 3.8 percent (29,500 jobs). The finance and insurance sector grew by 23,300 (4.2 percent) while the real estate and rental and leasing sector grew by 6,200 (2.8 percent). Credit intermediation (which includes financial institutions such as banks) is the industry's largest sector, employing 272,700 as of November 2019. Total Texas financial activities industry employment reached 808,300 in November 2019.

LEISURE AND HOSPITALITY SERVICES

Employment in the leisure and hospitality industry increased by 50,700 (3.7 percent) over the year. The majority of the industry's job gains occurred in the food services and drinking places sector, which added 29,900 jobs (2.7 percent). The largest percentage increase was in the amusement, gambling and recreation sector, which grew by 10.4 percent (10,200). Total leisure and hospitality employment in November 2019 was 1,416,900, representing about 11 percent of total Texas employment.

OTHER SERVICES

The other services industry is a varied mix of business activities including repair and maintenance services; laundry services; religious; political and civic organizations; funeral services; parking garages; beauty salons; and a wide range of personal services. Religious, grantmaking, and similar organizations employment increased by 6.0 percent, the highest rate among other services sectors. In all, other services industry employment rose by 20,100 to reach 456,700 in November 2019.

GOVERNMENT

Government employment increased by 0.8 percent (15,600) over the year. Federal government employment increased by 4,500, local government employment increased by 8,800, and state government employment increased by 2,300. Total government employment in Texas was 1,971,500 in November 2019.

REGIONAL METROPOLITAN VARIATIONS

The economic mix of industries is distributed unevenly across the State, and consequently, the State's metropolitan areas are affected differently by economic changes in the nation and the world. Almost all of the employment gains over the past year (78 percent) occurred in just four metropolitan statistical areas (MSAs): Dallas-Fort Worth, Houston, Austin, and San Antonio. Combined net employment growth in those four MSAs was 3.0 percent, while employment growth in the balance of the state was only 2.0 percent.

Houston area employment increased by 85,500 (2.7 percent) over the past year. Employment increased in all three of the goods-producing industries; construction employment was up 2.0 percent, manufacturing employment was up 2.8 percent, and mining and logging employment increased by 7.7 percent. Service-providing industries saw employment gains over the past year of 2.6 percent, with other services (6.5 percent, 7,400 jobs) and professional and business services (5.3 percent, 26,400 jobs) having the highest rates of increase.

The Dallas/Fort Worth area grew at a faster rate than the State as a whole over the past year (3.2 percent). Employment in the Fort Worth metro grew at a rate of 2.1 percent while Dallas area employment grew at 3.7 percent. Dallas growth was led by particularly strong percentage gains in mining, logging, and construction (10.4 percent) and financial activities employment (5.1 percent). The Fort Worth area had its best job growth rates in financial activities (4.9 percent) and leisure and hospitality (5.1 percent).

The Austin economy grew at a 2.7 percent rate over the past year, led by a 9.9 percent increase in the combined mining, logging, and construction industry. Other services employment was also up sharply over the past year (by 7.1 percent, 3,200 jobs). The Austin area was the State's fastest-growing metropolitan area over the past decade, according to the U.S. Census Bureau.

San Antonio's employment increased by 3.2 percent over the past year. Job growth was led by the construction (12.3 percent) and leisure and hospitality (6.0 percent) industries. No industry saw a net decline in employment over the year.

Among all the State's metropolitan areas, Midland (2.1 percent), Amarillo (2.5 percent), and Austin (2.5 percent) had the State's lowest unemployment rates in November 2019. Of the State's six largest metropolitan areas, Austin had the lowest rate, followed by San Antonio at 2.9 percent and Dallas-Fort Worth at 3.0 percent. El Paso had the highest unemployment rate of the largest metro areas, at 3.7 percent. The metropolitan areas with the highest unemployment rates were Beaumont-Port Arthur (5.2 percent), Brownsville-Harlingen (5.4 percent), and McAllen-Edinburg-Mission (6.1 percent).

PROPERTY VALUES

State-wide property values in Texas increased in 2018. Taxable values increased 12.04 percent from 2018 to 2019. The total taxable property value in Texas on January 1, 2019, was \$2.906 trillion according to records maintained by the Comptroller's Property Tax Assistance Division.

Property value changes from 2018 to 2019 were varied from property category to property category. The total market value of single-family homes increased by 8.14 percent, to \$1.66 trillion. Multi-family residential property values increased by 10.4 percent from 2018, to \$220.2 billion. The value of residential inventory – new, unsold homes held for sale – increased 13.62 percent from 2018 to 2019 reflecting an increase in construction of these residential properties to meet increased demand.

The value of commercial and industrial real property was \$676.8 billion, an increase of 7.76 percent. Commercial and industrial personal property increased 7.68 percent to \$309.4 billion. The value of oil and gas reserves increased from \$96.2 billion in 2018 to \$138.7 billion in 2019, a 30.64 percent increase.

These values are based on the preliminary certification of the 2019 Property Value Study that occurred on January 31, 2020.

Table A-30 Taxable Value of Property in Texas School Districts

		Percent
Year	Billions	Change
1999	779.01	5.78%
2000	847.82	8.83%
2001	943.29	11.26%
2002	1,000.72	6.09%
2003	1,043.82	4.31%
2004	1,109.85	6.32%
2005	1,204.54	8.53%
2006	1,355.22	12.51%
2007	1,505.45	11.09%
2008	1,668.89	10.86%
2009	1,686.05	1.03%
2010	1,654.84	-1.85%
2011	1,689.00	2.06%
2012	1,769.85	4.79%
2013	1,877.05	6.06%
2014	2,039.59	8.66%
2015	2,128.66	4.37%
2016	2,239.42	5.20%
2017	2,408.03	7.52%
2018	2,593.89	7.73%
2019	2,906.22	12.04%

Source: Texas Comptroller of Public Accounts, Property Tax Assistance Division

AGRICULTURE

Texas is among the nation's top producers of agricultural products and the business of agricultural production is a big part of the Texas economy. In Texas, the food and fiber system comprises all economic activities linked to the production of agriculture including manufacturing, retail sales, transportation and wholesale distribution. According to the United States Department of Agriculture, Texas had more farms (12.2 percent of U.S. total) and acres of farmland (14.1 percent of U.S. total) than any other state in 2018.

AGRICULTURAL CASH RECEIPTS

In 2018, the top 10 agricultural producing States, in terms of cash receipts were (in descending order): California, Iowa, Texas (#3), Nebraska, Minnesota, Illinois, Kansas, North Carolina, Wisconsin and Indiana.

Texas' total cash receipts for all agricultural commodities in Texas were an estimated \$21.8 billion in 2018, according to the USDA. The State's top five agricultural commodities and their estimated cash receipts were:

- 1. Cattle and calves (\$8.6 billion)
- 2. Cotton lint, upland (\$2.8 billion)
- 3. Broilers (\$2.4 billion)
- 4. Dairy products, milk (\$2.2 billion)
- 5. Miscellaneous crops (\$1.2 billion)

Of those, Texas' ranking among the States is:

- #2 in cattle and calves (39.5 percent of Texas receipts for all commodities; 12.9 percent of U.S. receipts for cattle and calves)
- #1 in cotton lint, upland (12.9 percent of Texas receipts for all commodities; 42.3 percent of U.S. receipts for cotton lint)
- #6 in broilers (10.9 percent of Texas receipts for all commodities; 7.5 percent of U.S. receipts for broilers)
- #5 in dairy products, milk (9.9 percent of Texas receipts for all commodities; 6.1 percent of U.S. receipts for dairy products, milk)
- #4 in miscellaneous crops (5.4 percent of Texas receipts for all commodities; 5.6 percent of U.S. receipts for miscellaneous crops)

AGRICULTURE DEMOGRAPHICS

According to the USDA 2017 Census of Agriculture, the following are the most current farm demographics and characteristics for Texas.

- Number of farms: 248,416
- Total agriculture producers: 408,506
 - Male: 252,273 (61.76 percent)Female: 156,233 (38.24 percent)

- Amount of farmland: 127.04 million acres
 - o Cropland: 29.36 million acres (23.11 percent)
 - o Pastureland: 87.91 million acres (69.19 percent)
 - o Woodland: 7.28 million acres (5.73 percent)
 - Other: 2.49 million acres (1.96 percent)
- Average farm size: 511 acres

TOP AGRICULTURAL EXPORTS

The USDA valued Texas agricultural exports at \$7.19 billion in 2017, the 4th highest total in the U.S. Texas' top five agricultural exports were:

- 1. Cotton (\$2.6 billion; ranked #1 among all states)
- 2. Other plant products (\$1.1 billion; ranked #3)
- 3. Beef (\$952.0 million; ranked #2)
- 4. Dairy products (\$314.0 million; ranked #5)
- 5. Feeds (\$294.7 million; ranked #8)

TOP AGRICULTURAL EXPORT MARKETS

According to a 2019 study by the Center for North American Studies at Texas A&M University, Canada and Mexico were the most important foreign markets for Texas agricultural products in 2018. Total economic activity for Texas agricultural exports to Canada and Mexico was more than \$3.7 billion in exports, supporting 22,972 jobs.

In 2018, Texas exports to Mexico totaled \$863.3 million of which \$344.1 million were animal products and \$519.2 million were plant products. The top three agricultural exports from Texas to Mexico were:

- Cotton (\$139.4 million)
- Beef and veal (\$138.7 million)
- Other horticultural products (\$82.8 million)

Texas agricultural exports to Canada totaled \$903.3 million, including \$234.0 million in animal products and \$669.3 million in plant products. The top three agricultural exports from Texas to Canada were:

- Other horticultural products (\$266.6 million)
- Beef and veal (\$97.7 million)
- Food preparations (\$69.0 million)

6. DEMOGRAPHIC INFORMATION

Within the Demographic Information section, United States and Texas population figures are from the U.S. Census Bureau (except where noted) as reported at the time of this publication. Texas' 25 Metropolitan Statistical Areas are based on U.S. Office of Management and Budget definitions as of August 2017.

GEOGRAPHY AND CITIES

The State of Texas is located in the West South Central United States and is bordered on the south by Mexico and the Gulf of Mexico and on the east, north, and west by the States of Louisiana, Arkansas, Oklahoma, and New Mexico. The State is the second largest by size among the States of the United States, covering approximately 268,596 square miles (including both land and water area).

The capital of Texas is Austin (with a population of 964,000 as of July 2018), and the largest city is Houston (2,326,000). Other major cities include Arlington (398,000), Corpus Christi (327,000), Dallas (1,345,000), El Paso (683,000), Fort Worth (895,000), Laredo (262,000), Plano (288,000), and San Antonio (1,532,000). Houston, San Antonio, Dallas, and Austin are respectively the fourth, seventh, ninth, and eleventh most populous cities in the United States.

Almost two-thirds of Texas' population (67 percent) in July 2018 resided in the four largest Metropolitan Statistical Areas: Dallas-Fort Worth-Arlington (population 7,540,000), Houston-The Woodlands-Sugar Land (6,997,000), San Antonio-New Braunfels (2,518,000) and Austin-Round Rock (2,168,000).

STATE POPULATION

Texas' population grew by 2.8 million between the April 1980 census and April 1990 census, an average annual growth rate of 1.8 percent, twice the national rate of 0.9 percent. Estimates prepared by the Texas State Data Center (TxSDC) at the University of Texas at San Antonio show that migration accounted for 34 percent of Texas' population growth during the 1980s, while in the preceding 1970-1980 decade migration accounted for 58 percent of the growth.

Between April 1990 and April 2000, Texas' population grew by 3.9 million, an average of 2.1 percent per year, compared to United States growth of 1.2 percent. Migration was a more important growth factor for Texas in the 1990s, accounting for 50 percent of the decade's population gains.

Between April 2000 and April 2010, Texas' population grew by 4.3 million to reach 25.1 million, an average annual increase of 1.9 percent, compared to the United States' population in April 2010 of 308.7 million and its average annual growth rate of 0.9 percent. Migration accounted for 46 percent of Texas' population gains during the decade.

As of July 2019, Texas' population was estimated at 28,995,881, an average annual increase of 1.7 percent from April 2010. The United States' population was estimated at 328,239,523 as of July 2019, an average annual increase of 0.7 percent from April 2010. According to the latest

estimates from the U.S. Census Bureau, migration accounted for 51 percent of Texas' population gains between April 2010 and July 2019.

Over twenty-three years ago, in July 1994, Texas surpassed New York to become the nation's second most populous state, a ranking that became official with the release of the April 2000 census figures. As of July 2019, Texas had 9.5 million more residents than New York State. Table A-31 provides an historical review of the total Texas population since 1970.

The median age of Texas' population was 34.8 years in July 2018, 3.4 years younger than the national median of 38.2 years. Only Utah (31 years), the District of Columbia (34 years), and Alaska (34.6 years) had a younger median age than Texas. Table A-32 sets forth information concerning the composition of Texas' population by age group, along with comparable information for the United States.

Texas' population of persons less than 18 years of age in July 2018 was 7,398,000, the second largest population in this age group among the states. This rank applied as well for the college-age population (18 to 24), which stood at 2,796,000; the young adult population (25 to 44) at 8,118,000; and the older adult population (45 to 64) at 6,787,000. Texas' population of persons age 65 and older, at 3,602,000, ranked 3rd among the states.

Texas' population has become increasingly urban. In the year 1900, the Census Bureau categorized 17 percent of Texas' residents as urban, compared to a national average of 40 percent. By 2010, 85 percent of Texas' residents lived in urban areas, while a smaller share of the nation's population, (81 percent) was categorized as urban. As of July 2018, close to 90 percent of Texas' population lived in its 25 metropolitan statistical areas.

The US Census Bureau estimated that the racial and ethnic population shares for Texas as of July 1, 2018 were as follows: 42 percent non-Hispanic White, 39 percent Hispanic, 13 percent non-Hispanic Black, and 6 percent non-Hispanic "Other." Between April 2000 and July 2018, the number of non-Hispanic "Other" Texans (primarily Asian and Pacific Islanders and Native Americans) increased by 45 percent (an average of 5.6 percent per year), and the number of Hispanic Texans increased by 21 percent (2.6 percent per year).

Table A-31 sets forth information concerning the changes in Texas' total population since the 1970 census.

Table A-31 Historical Review of Texas Population

		Average	
	Texas	Annual	Population
	Resident	Percent	Rank Among
Year	Population	Change	States
1970	11,196,730	1.6	4
1980	14,229,191	2.4	3
1990	16,986,510	1.8	3
2000	20,851,820	2.1	2
2010	25,145,561	1.9	2
2010	25,242,000	1.5	2
2011	25,646,000	1.6	2
2012	26,084,000	1.7	2
2013	26,480,000	1.5	2
2014	26,964,000	1.8	2
2015	27,470,000	1.9	2
2016	27,914,000	1.6	2
2017	28,295,000	1.4	2
2018	28,629,000	1.2	2
2019	28,996,000	1.3	2
	1970 1980 1990 2000 2010 2010 2011 2012 2013 2014 2015 2016 2017 2018	Resident Year Population 1970 11,196,730 1980 14,229,191 1990 16,986,510 2000 20,851,820 2010 25,145,561 2010 25,242,000 2011 25,646,000 2012 26,084,000 2013 26,480,000 2014 26,964,000 2015 27,470,000 2016 27,914,000 2017 28,295,000 2018 28,629,000	Texas Annual Resident Percent 1970 11,196,730 1.6 1980 14,229,191 2.4 1990 16,986,510 1.8 2000 20,851,820 2.1 2010 25,145,561 1.9 2010 25,242,000 1.5 2011 25,646,000 1.6 2012 26,084,000 1.7 2013 26,480,000 1.5 2014 26,964,000 1.8 2015 27,470,000 1.9 2016 27,914,000 1.6 2017 28,295,000 1.4 2018 28,629,000 1.2

Table A-32 sets forth historical age group statistics for Texas and the United States.

Table A-32 Share of Texas and United States Populations by Age Group

	Texas	Texas	Texas	Texas	U.S.	U.S.	U.S.	U.S.
	Share	Share	Share	Share	Share	Share	Share	Share
Age Group	April 1990	April 2000	April 2010	July 2018	April 1990	April 2000	April 2010	July 2018
0-4	8.4%	7.8%	7.7%	7.1%	7.5%	6.8%	6.6%	6.1%
5-17	20.2%	20.4%	19.6%	18.7%	18.2%	18.9%	17.5%	16.4%
18-24	11.2%	10.6%	10.2%	9.7%	10.8%	9.7%	9.9%	9.3%
25-44	33.1%	31.1%	28.1%	28.3%	32.4%	30.2%	26.6%	26.6%
45-54	9.5%	12.5%	13.7%	12.4%	10.1%	13.4%	14.6%	12.7%
55-64	7.6%	7.7%	10.3%	11.3%	8.5%	8.6%	11.8%	12.9%
Over 64	10.1%	9.9%	10.4%	12.6%	12.5%	12.4%	13.0%	16.0%

7. EDUCATION

PRIMARY AND SECONDARY EDUCATION

Texas public schools are administered locally by elected school boards and on the state level by the State Board of Education, the State Commissioner of Education and the Texas Education Agency (TEA). The State Board of Education is the state's policy-making and planning body for the public school system. Members of the State Board of Education are elected for staggered four-year terms. The State Commissioner of Education is appointed by the Governor, and confirmed by the Senate and is the executive head of the Texas Education Agency.

All children between the ages of 6 and 18 are required to attend school. School districts are required to offer pre-kindergarten programs only for three-year olds and four-year olds that meet eligibility requirements under state law. School districts are required to offer full- or half-day kindergarten programs for all five-year-olds.

Texas Students: School Year 2018-19

- 5,416,400 total Texas student enrollment
- 52.6 percent Hispanic
- 27.4 percent White
- 12.6 percent African American
- 4.5 percent Asian
- 2.4 percent two or more Races
- 0.4 percent American Indian
- 0.2 percent Pacific Islander

Texas Educators: School Year 2018-19

- 358,450 full-time equivalent teachers
- 72,848 professional support staff
- 21,812 campus administrators
- 8,268 central administrators
- 74,292 educational aides in the public schools
- 183,830 auxiliary staff
- \$54,122 average teacher salary

Texas Primary and Secondary Public Education: School Year 2017-18

- 1,023 school districts and 177 charter districts
- 8,766 campuses
- 4,706 elementary schools
- 1,506 high schools
- 1.418 middle schools
- 888 combined elementary and secondary schools
- 248 junior high schools

Note: These numbers do not include private schools

The State shares the cost of public primary and secondary education with local districts. State funding for primary and secondary education is provided through the Permanent School Fund, the Available School Fund and the Foundation School Program (FSP). The Permanent School Fund is an endowment fund consisting of state lands, the sale of lands, and royalty earnings. The fund is available for investment only; the investment income is deposited along with one-quarter of the motor fuels tax in the Available School Fund for distribution to school districts. Under the terms of the State Constitution, the Permanent School Fund may not be used for appropriation, but it may be used to guarantee bonds issued by school districts.

The bulk of funding for Texas's public schools comes from the Foundation School Program (FSP), a guaranteed yield school finance system comprised of state revenues and local property tax funds. The FSP allocates state funds to public schools according to a system of formulas based on various district and student characteristics. A series of allotments ensure that each school district can provide an adequate instructional program to meet the needs of its students, regardless of its local property tax base.

The FSP is not only the largest appropriation item for TEA, accounting for 77 percent of the agency's All Funds appropriation, it is also the largest single appropriation item in the state budget.

Texas has two debt tax rate equalization programs, the Instructional Facilities Allotment program, started in 1997, to assist low property wealth districts with new debt, and the Existing Debt Allotment Program, started in 1999, to help districts service existing debt. Both programs distribute state aid to equalize local interest and sinking tax efforts up to \$35.00 per penny per student in average daily attendance. The Instructional Facilities Allotment program is a sumcertain appropriation, with the Legislature making appropriation decisions regarding new grant awards each biennium. For Existing Debt Allotment, debt service is automatically eligible for support if a district makes a payment during the previous biennium. Existing Debt Allotment support is restricted to 29 cents of interest and sinking tax effort.

TOTAL ACTUAL EDUCATION REVENUES

The Texas Education Agency's report, 2017-2018 Actual Financial Data, shows actual public school district revenues from local, state, and federal sources totaling more than \$63 billion for school year 2017-2018.

That total represents:

- \$32.9 billion from local tax revenues
- \$23.7 billion from state sources
- \$6.4 billion from federal sources

BUDGETED STATE EDUCATION FUNDING 2020–21 BIENNIUM

FSP funding for the 2020–21 biennium includes:

- \$45.2 billion in General Revenue Funds and
- \$67.5 billion in All Funds

The majority of public education funding consists of state aid for school districts and charter schools through the Foundation School Program (FSP); state funding for the 2020-21 biennium is budgeted at \$45.2 billion in General Revenue Funds and \$11.5 billion in Other Funds; and \$67.5 billion in All Funds appropriations.

Major changes to the FSP in the 2020-21 biennial budget include a total of \$11.5 billion in General Revenue Funds above current law funding:

- \$6.5 billion for increased school funding, as a result of major structural reforms to the school finance system, which include an increase to the Basic Allotment to \$6,160.
- Districts and open-enrollment charter schools are required to spend at least 30 percent of their increased funding gain on changes to the Basic Allotment on salary increases for teachers and other educators.
- \$5.0 billion for property tax relief through the compression of school district property tax rates.
- School district recapture payments are projected to decrease by \$3.5 billion during the 2020–21 biennium from what they otherwise would have been under current law.

The legislature provided additional funding for items outside of the FSP including \$100.0 million for school safety infrastructure enhancements, \$10.9 million for school districts that experienced mass shootings and \$636.0 million in 2020–21 biennial costs for school districts affected by Hurricane Harvey.

EDUCATIONAL ACHIEVEMENT

According to the U.S. Census Bureau 2016 American Community Survey, 87.5 percent of the state's population, age 25 and older, were high school graduates, as compared to an 82.9 percent share for the nation. In addition, 28.9 percent of the state's population age 25 and older had received a bachelor's degree, as compared to a national share of 31.3 percent.

HIGHER EDUCATION

The State of Texas has 148 public and independent institutions of higher education:

- 50 public community college districts (with multiple campuses),
- 37 public four-year universities and upper division centers,
- 6 campuses in the Texas State Technical College System (including three extension centers).
- 10 public health-related institutions,
- 3 public two-year, lower-division Lamar state colleges,
- 38 independent four-year colleges and universities,
- 1 independent medical school,
- 1 independent junior college, and
- 2 independent chiropractic institutions.

In addition, there are ten multi-institution teaching centers that offer courses at one central location or at several sites. Multi-institution teaching centers are partnerships between institutions of higher education and may include public community and technical colleges, public universities, and independent colleges and universities.

During the 83rd regular session of the Texas Legislature, lawmakers granted authorization to the University of Texas System (UT System) to make changes to its institutional structure. The UT System elected to merge two institutions in South Texas (UT-Brownsville and UT-Pan American) into UT-Rio Grande Valley. The UT System established new medical school as part of the UT-Rio Grande Valley institution and the Dell Medical School at UT-Austin—both welcoming their first classes in June 2016. Lawmakers in the 85th Legislature included both schools in health-related institutions (HRI) formula appropriations.

Certified statewide enrollment in all colleges and universities in the fall of 2018, the most recent semester for which data is available, was 1,709,494. Higher education in the State at public and, to a lesser extent, private institutions is supervised by the Texas Higher Education Coordinating Board, which has authority over program offerings and the use of certain funds appropriated by the Legislature for higher education. The higher education institutions are under the control of separate boards of regents.

Public higher education in the State is funded through a combination of tuition, student fees and other local funds (including gifts from benefactors), income from constitutional funds (the Permanent University Fund via the Available University Fund, the Higher Education Fund, and the National Research University Fund), appropriations made by the Legislature, and tuition revenue bonds.

There are two types of tuition at public institutions: statutory (set and regulated by the Legislature, currently \$50 per semester credit hour) and designated. In 2003, the State ended legislative control over designated tuition rates at public universities effective with the 2003 fall semester.

In the past, governing boards of institutions of higher education could set a designated tuition rate within statutory limits set by the Legislature. Effective with the 2003 fall semester, Section 54.0513, Education Code, allows the governing boards to charge any amount for designated tuition and vary amounts by program and course level, and to set different rates "to increase graduation rates, encourage efficient use of facilities, or enhance employer performance." Designated tuition levels vary widely by institution.

In addition to tuition, the boards of regents of the various colleges and universities set many student fees. An additional nonresident tuition is set annually by the Texas Higher Education Coordinating Board and is calculated to result in a total nonresident rate that is equal to the average nonresident tuition charged by the five most populous states, excluding Texas.

The 85th Legislature appropriated \$20.5 billion to support higher education for the 2018-2019 biennium, according to the Legislative Budget Board. Including benefits, the Legislature appropriated \$20.5 billion in All Funds, with \$17.8 billion in General Revenue Funds and General Revenue-Dedicated Funds. These funding levels reflect a net increase of \$235.4 million in All Funds, as well as an increase of \$239.1 million in General Revenue from the 2016-2017 biennium.

Funding levels for 2018-2019 include:

- TEXAS Grant Program, \$786.5 million
- Tuition Equalization Grant Program, \$171.8 million
- Professional Nursing Shortage Reduction Program, \$20.0 million
- B-On-Time Program (public institutions), \$18.2 million
- Texas Educational Opportunity Grant Program, \$96.0 million
- Graduate Medical Education expansion, \$97.1 million
- Joint Admission Medical Program, \$10.2 million
- Developmental Education Program, \$2.7 million
- Teach for Texas Loan Repayment Program, \$2.7 million
- Baylor College of Medicine Undergraduate Medical Education formula allocation, \$76.1 million

The 85th Legislature appropriated \$3.2 million for Top Ten Percent Scholarships in the 2018-2019 biennium, a decrease of \$15 million from the 2016-2017 biennium. Higher education formula funding for the 2016-2017 biennium included funding for enrollment growth. As was the case in the 2016-2017 biennium, the Legislature did not allocate funding for new community college campuses or alternative teaching certification programs at community colleges for the 2018-2019 biennium.

During the 84th Legislature, and for the first time since 2006, Texas lawmakers approved the use of tuition revenue bonds for specific campus construction projects at public institutions, health science centers, and university systems throughout the State, in the total amount of \$3.1 billion.

The 82nd Legislature enacted HB 9, which requires the Texas Higher Education Coordinating Board to incorporate student success measures into the agency's funding recommendations for higher education institutions to the Legislature. Under the legislation, no more than 10 percent of general revenue appropriated to undergraduate institutions from base funds will be distributed based on student success measures.

Beginning in 2003, in conjunction with the deregulation of designated tuition through HB 3015, the State enacted several changes to the Education Code relating to tuition set-asides, which are intended to lessen the financial burden of higher education costs on students demonstrating need. One prominent set-asides provision requires governing boards to set aside 20 percent of designated tuition charged above \$46 per semester credit hour for resident undergraduate and graduate financial assistance. Financial assistance funded through tuition set-asides may include grants, scholarships, work-study programs, student loans, and student loan repayment assistance. The following is a list of set-aside programs and their corresponding statutory authority in the Texas Education Code:

- B-On-Time Loan, 56.465(a)
- Dental School Tuition, 61.910(a)
- Doctoral Incentive Loan Repayment, 56.095(b)
- HB 3015 (Designated Tuition) Graduate, 56.012(a)
- HB 3015 (Designated Tuition) Undergraduate, 56.011(a)
- Medical School Tuition, 61.539(a)
- TPEG (Statutory Tuition) Graduate, 56.033
- TPEG (Statutory Tuition) Undergraduate, 56.033

In 2003, the State also enacted Subchapter Q, Chapter 56, Education Code, creating the Texas B-On-Time Loan program, referenced as a recipient of set-asides funds above. Under this program, students at public and private institutions of higher education have received no-interest student loans, provided that they complete the recommended or advanced high school program; the 80th Legislature through HB 1250 extended the eligibility to include students that complete an equivalent program. If a student who received a loan graduates from an institution of higher education in the customary amount of time allotted for the degree (i.e. four years for most bachelor degree programs) and has a cumulative grade point average of 3.0 on a four-point scale, the loan will be forgiven.

During the 84th session of the Texas Legislature, lawmakers passed H.B. 700, which phases out the B-On-Time Loan program by 2020 and eliminates the 5 percent set-aside requirement for designated tuition that has funded that particular program, beginning Fall 2015.

The 80th Legislature passed HB 3900 adding Subchapter H to Chapter 54, Texas Education Code, establishing the Texas Tuition Promise Fund, also known as the Texas Tomorrow Fund II. The plan opened for enrollment in 2008 and is a prepaid tuition undergraduate education program financed by fund assets. The plan is not guaranteed by the State of Texas. Contract purchasers may buy "units" worth one percent of one year's tuition and required fees at today's rates that are redeemable at the time the student enrolls in the institution for an equivalent percentage of costs. As of August 31, 2019, the Texas Tuition Promise Fund (Plan) had 37,323 active contracts and had a surplus of Assets over Liabilities of \$145,528,782 with a funded ratio of 116.3% (audited). As of August 31, 2018, the surplus was \$137,166,878.

Authorized by voters on November 4, 1997, Article VII, Section 19 was added to the Texas Constitution creating the Texas Tomorrow Fund, also known as the Texas Guaranteed Tuition Plan. The Texas Guaranteed Tuition Plan opened for enrollment in 1996 and plan benefits are guaranteed by the full faith and credit of the State of Texas. The plan closed for new enrollment in 2003 when tuition was deregulated. There were 40,316 active contracts as of August 31, 2019. The fund's unfunded liability (audited) as of August 31, 2019 was \$416,095,145 compared to \$626,065,794 as of August 31, 2018. The Texas Guaranteed Tuition Plan's funded ratio is 53.4 percent. The above balances include a transfer of \$211.0 million from the Economic Stabilization Fund to the Texas Tomorrow Fund authorized by the 86th Legislature pursuant to SB 500.

The Permanent University Fund (PUF) is a permanent endowment fund with a market value of \$23,799,763,174.31 (unaudited) as of December 31, 2019, according to the UT System, which administers the PUF. Income from the PUF is dedicated first to payment of debt service of PUF bonds, which may be used for capital improvement at certain institutions in the UT and Texas A&M University (TAMU) systems. The amount of PUF bonds that may be issued is limited to 30 percent of the book value of the PUF, which was \$20,075,799,425.19 (unaudited) as of December 31, 2019. The residual amount of income of the PUF, after debt service, is dedicated to excellence programs for The University of Texas at Austin, Texas A&M University (College Station) and Prairie View A&M University.

Under Section 66.08, Texas Education Code, the UT System Board of Regents may delegate investment authority and contract with a nonprofit corporation, allowing them to invest funds

under the control and management of the board, including the PUF. The corporation may not engage in any business other than investing funds designated by the board under the contract. In March 1996, the University of Texas Investment Management Company (UTIMCO) was created as a 501(c) (3) investment-management corporation whose sole purpose is the management of investment assets under the fiduciary care of the UT System Board of Regents. UTIMCO, the first external investment corporation formed by a public university system, oversees investments of approximately \$50.49 billion (unaudited) as of December 31, 2019, including the PUF. UTIMCO is governed by a nine-member Board of Directors appointed by the UT System Board of Regents.

In November 1999, voters approved a constitutional amendment that allows the UT System Board of Regents to transfer the income from the PUF into the Available University Fund, including the gains from the sale of securities. The amendment includes safeguards designed to ensure that this change in policy does not affect the long-term ability of the PUF to support the two university systems as well as authorizes the UT System Board of Regents to manage any kind of investment of the PUF in accordance with the standards of a "prudent investor." This change allows the UT System Board of Regents to take into consideration the investment of all the assets of the Fund, rather than a single investment, when making investment decisions. This allows the Fund to increase its earnings over time without risking the Fund's principal.

The Higher Education Fund was established to provide support to institutions that are ineligible for PUF monies. Proceeds from the Higher Education Fund may be used for construction, land acquisition and to acquire capital equipment, and library books and library equipment. The 2020-2021 General Revenue appropriation for the HEF is \$787.5 million.

In 2003, the State enacted Subchapter E, Chapter 62, Texas Education Code, which merged the Texas Excellence Fund and the University Research Fund into a new Research Development Fund (RDF) beginning with the 2005 fiscal year. The RDF was intended to promote increased research capacity at universities other than the University of Texas at Austin, Texas A&M University (College Station) and Prairie View A&M University; the RDF, however, was never created as a stand-alone fund. Instead, the Legislature has previously appropriated general revenue to each affected institution in a line item named "Research Development Fund."

The 84th Legislature abolished the Research Development Fund, effective fiscal year 2016, and created two distinct funds in its stead: the Core Research Support Fund for emerging research universities, as well as the Texas Comprehensive Research Fund for public four-year institutions other than research or emerging research universities. 2018-2019 appropriations for the Core Research Support Fund total \$105.4 million, and biennial appropriations for the Texas Comprehensive Research Fund total \$12.8 million.

In a constitutional amendment election held in November 2009, Proposition 4 created the National Research University Fund. This change was designed to assist the State in developing more public universities into national research universities. The balance of the National Research University Fund was \$748,668,818.73 (unaudited) as of December 31, 2019.

8. RETIREMENT SYSTEMS

The State administers three defined-benefit retirement systems: the Teacher Retirement System of Texas (TRS), the Employees Retirement System of Texas (ERS) and the Judicial Retirement System of Texas (JRS). The State also administers three other defined-benefit plans and contributes to one defined-contribution plan. Further information on these plans may be found in Note 9 of the State's fiscal year 2018 Comprehensive Annual Financial Report (CAFR). In addition, state employees, except those compensated on a fee basis, are covered under the federal Social Security System. Political subdivisions of the State may voluntarily provide coverage for their employees under the State's agreement with the federal Social Security Administration.

TRS is the largest of the three retirement systems, with 1,171,497 current members and 420,458 retirement recipients as of August 31, 2018. TRS provides benefits to all employees of the public school system within the State as well as faculty and staff members of state-supported institutions of higher education. In addition, TRS administers the Texas Public School Retired Employees Group Insurance Program, which was established by legislation enacted in June 1985. This program provides healthcare benefits to Texas public school retirees. On September 1, 2002, TRS began administering the Texas Active School Employees Uniform Group Benefits Program, which provides healthcare benefits to active employees of school districts participating in the program.

ERS covers State employees and Law Enforcement and Custodial Officers System (LECOS) and, as of August 31, 2018 had 141,535 active contributing members for ERS and 37,167 for LECOS. ERS had 111,361 annuitants and LECOS had 13,080 annuitants. ERS also administers the Texas Employees Group Benefits Program, which provides insurance coverage to active and retired state employees and their families and employees of certain Texas higher education institutions. JRS provides benefits to judicial officers of the State and has 570 active contributing members and 748 annuitants for JRS Plan One and Two. JRS is administered by ERS although, technically, it is a separate legal entity.

TRS and ERS are maintained on an actuarial basis. As of August 31, 2018, the unfunded actuarial accrued liability (UAAL) of the TRS plan as a whole was \$46.2 billion. During the measurement period of fiscal 2018, TRS' board reduced the discount rate from 8% to 6.91% and the expected rate of return on investments from 8% to 7.25%. This is expected to increase the plan's net pension liability by \$23.1 billion for fiscal year 2019 of which the state's proportionate share is estimated to increase \$3.6 billion and \$12 billion for its role as an employer and non-employer contributing entity respectively. ERS had an UAAL of \$11.6 billion for funding purposes for the plan. The State's liability for both plans is reported using GASB Statement No. 68, which defines the requirements for the financial reporting of the employer. The TRS fair value of investments, as of August 31, 2018, was \$154.1 billion. The ERS fair value of pooled investments as of August 31, 2018 was \$29 billion.

GASB Statement No. 68 sets the rules for the financial reporting for the State. The State's portion of the net pension liability under the TRS plan as of the measurement date of August 31, 2017 reported in Fiscal 2018 State of Texas CAFR was 67.4% or \$21.6 billion. The net pension liability for the State under the ERS plan, as reported in the 2018 ERS CAFR, was \$21.4 billion.

Prior to 1985, JRS was maintained on a pay-as-you-go basis. However, legislation enacted in 1985 divided JRS into two plans by changing the name of the existing plan and establishing a second, separate plan. The new plan, known as JRS Plan Two, is maintained on an actuarially sound basis and covers individuals who become judicial officers after August 31, 1985. The unfunded actuarial liability of JRS Plan Two as of August 31, 2018, was \$40.7 million for funding purposes with a net pension liability of \$34.4 million. The old plan, known as JRS Plan One, is maintained on a pay-as-you-go basis and covers judicial officers who were active on August 31, 1985, or had retired on or before that date.

Contributions to the retirement systems are made by both the State and covered employees. The Constitution mandates a state contribution rate of not less than 6% or more than 10% of payroll for ERS and TRS; member contributions may not be less than 6% of payroll. The state contribution rate may, and has in the past, result in total contributions insufficient to cover the determined actuarial accrued liability. However, the Legislature may appropriate additional funds as are actuarially determined to be needed to fund benefits authorized by law.

The State's fiscal 2018 contribution rates to the retirement systems were: ERS at 10.0%, TRS at 6.8%, and JRS Plan Two at 15.663% of payroll. Member fiscal 2018 contribution rates were: 9.5% and 7.5%, respectively, for ERS and JRS Plan Two and 7.7% for TRS. Contributions require legislative appropriations.

State laws prohibit by statute, benefit improvements in the ERS, JRS and TRS systems that would cause the period required to amortize the UAAL of the plans to exceed 31 years or more. As of the August 31, 2018 TRS actuarial valuation, the amortization of the TRS UAAL was 87 years. As of August 31, 2018, the ERS actuarial valuation noted that the ERS UAAL has an infinite amortization period and that the plan will not be fully funded based on the current assumptions and contribution rates. In order to fully fund these plans within the required amortization periods, the State may increase investment performance, amend current state laws by increasing contributions into the plans, or implement plan design changes.

SB 12 of the 86th Legislature, effective June 10, 2019, increased the annual base employer contribution, supplemental contribution for public education employers and member contribution rates for TRS incrementally over the 2020-2025 fiscal years. The Legislative Budget Board's Actuarial Impact Statement for SB 12 projects that, as of August 31, 2019, the contribution rate increases required would improve the TRS expected amortization period from 87 to 29 years as long as assumptions do not change and are met. The Legislative Budget Board's Actuarial Impact Statement was based on estimates of the HB 3 Conference Committee Report, which provide a salary increase for certain members, and the SB 12 Conference Committee Report.

Table A-33 sets forth selected financial information concerning each of the three state-operated retirement systems for the fiscal year ended August 31, 2018.

Table A-33
Selected Financial Information Regarding State-Operated Retirement Systems
(Amounts in Thousands)

	Teacher Retirement	Employees	Judicial Retirement
	System	Retirement System	System Plan II
Contributions, Investment			
Income & Other Revenue	\$18,067,946	\$3,908,733	\$57,691
Benefits and Refunds Paid	\$10,765,423	\$2,503,093	\$24,866
Plan Net Position Available for Benefits	\$154,568,902	\$27,753,335	\$453,380
Plan Net Position Available for Benefits to Benefits and			
Refunds Paid Ratio	14.36:1	11.09:1	18.23:1
Payout to Revenue Ratio	0.60:1	0.64:1	0.43:1

Sources: Comprehensive Annual Financial Report for Fiscal Year ended August 31, 2018, Employees Retirement System of Texas; Comprehensive Annual Financial Report for Fiscal Year ended August 31, 2018 and Actuarial Valuation report for Fiscal Year ended August 31, 2018, Teacher Retirement System of Texas

The State's retirement systems were created and are operated pursuant to statutes enacted by the Legislature. The Legislature has the authority to modify these statutes and, accordingly, contribution rates, benefits, benefit levels of each system, as it deems appropriate, including the provisions limiting changes that increase the amortization period for unfunded actuarial liability of any plan. The State's retirement systems are not subject to the funding and vesting requirements of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), although Congress has from time to time considered legislation that would regulate pension funds of public bodies.

The allocation percentages and/or amounts for the State's pension plans for the August 31, 2018 measurement period will be released, upon audit completion, as part of the State's FY 2019 CAFR.

POSTEMPLOYMENT HEALTH CARE AND LIFE INSURANCE BENEFITS

In addition to providing pension benefits, the state administers four defined benefit other postemployment benefit (OPEB) plans, which provide health care and life insurance benefits for retired employees, their spouses, and beneficiaries. Benefits are authorized by statute and contributions are determined by the General Appropriations Act. The OPEB plan administrators are: Employees Retirement System of Texas (ERS), Teacher Retirement System of Texas (TRS), Texas A&M University System (A&M), and the University of Texas System (UT). Further information on these plans including methods and assumptions used by the actuary to project benefit payments may be found in Note 11 of the State's fiscal year 2018 Comprehensive Annual Financial Report (CAFR) or the respective OPEB plan administrators' financial reports.

ERS administers the State Retiree Health Plan that provides OPEB benefits for state retirees with at least 10 years of combined state service under any of the programs in the Proportionate Retirement Program, including TRS employees. Retirees from institutions of higher education who

elected to participate in the Texas Higher Education Coordinating Board's defined contribution plan, the Optional Retirement Program, are also eligible for these benefits, providing that their contributions have not been withdrawn. Public school district retirees that are members of TRS are also eligible for such benefits.

TRS administers a program that provides OPEB benefits to public school district retirees with at least 10 years of service. The Texas Public School Retired Employees Group Insurance Program provides a free basic level of coverage for eligible retirees and optional coverage for eligible retirees and their dependents. Basic coverage includes participation in a major medical group health insurance plan with deductibles based upon enrollment in Part A or Part B of Medicare or non-Medicare participants may pay premiums to participate in one of the two standard plans with more comprehensive benefits. Funding for free basic coverage is provided based on public school district payroll. As of the measurement date, the State of Texas, active school employee and participating employer contribution rates are 1.25%, 0.65%, and 0.75% of school district payroll, respectively.

A&M and UT provide separate OPEB benefits to their retirees, surviving spouses, and beneficiaries. Substantially all of the employees under these university systems that reach normal retirement age while working for the State may become eligible for the health and life insurance benefits.

The State made monthly contributions for OPEB benefits. Contribution rates are shown below in Table A-34 for the ERS, A&M, and UT plans. Costs are estimated by an actuary for claims expected to be paid during the year. The retiree contributes any premium over and above state contributions.

Table A-34
State Contribution Rates - Retiree Health and Basic Life Premium

		Texas A&M	University of
Level of Coverage	ERS ¹	University	Texas
Retiree Only	\$622	\$594	\$598
Retiree/Spouse	\$1,335	\$1,156	\$912
Retiree/Children	\$1,099	\$984	\$799
Retiree/Family	\$1,812	\$1,385	\$1,114

^{1.} TRS employees are plan members of the ERS OPEB plan.

Sources: Comprehensive Annual Financial Report for Fiscal Year ended August 31, 2018, Employees Retirement System of Texas; Comprehensive Annual Financial Report for Fiscal Year ended August 31, 2018, State of Texas

In fiscal 2018, the State implemented GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, which amended previous OPEB reporting disclosures. GASB Statement No. 75 improved accounting and financial reporting by identifying the methods and assumptions that are required to be used to project benefit payments, discount projected benefit payments to their actuarial present value and attribute that present value to periods of employee service. Obtaining this additional information will require actuarial

valuations and a calculation of an amount in excess of the annual contributions based on current funding methods. The inclusion of these disclosure requirements to the financial statements does not signify any plans by the State to change its current funding of OPEB, which is on a pay-asyou-go basis and determined as of a measurement date.

The cost of the state's health care and life insurance benefits is financed on a pay-as-you-go-basis. The expenditures are recognized when reimbursements are made for claims paid by non-state entities or when premiums are paid.

Table A-35 includes the OPEB liability and expenditures recognized for each of the OPEB plans that the State participates as of their most recent respective measurement dates. The allocation percentages and amounts for the State's OPEB plans for the August 31, 2018 measurement period will be released, upon audit completion, as part of the State's FY 2019 CAFR; therefore, the Collective Net OPEB liabilities regarding both the ERS and TRS OPEB plans are presented in Table A-35.

Table A-35
Postemployment Health Care and Life Insurance

Callagtirea

		Collective		
		Net OPEB Liability		
Benefits Provided Through	Measurement Date	(Thousands) ¹	Number of Retirees:	Cost (Thousands)
Employees Retirement System	8/31/2018	\$29,637,742	122,350	\$325,032
Teacher Retirement System ²	8/31/2018	49,930,915	216,810	1,085,967
Total		\$79,568,657	339,160	\$1,410,999
		State's Proportion of		
		OPEB Liability		
Benefits Provided Through	Measurement Date	(Thousands)	Number of Retirees:	Cost (Thousands)
University of Texas System	12/31/2017	\$13,888,295	27,597	\$177,700
Texas A&M University System	9/1/2017	4,522,674	10,299	74,000

^{1.} The amounts reported for ERS and TRS are the collective liability amounts, not the State's proportionate share. The allocation percentages and amounts for the State for the August 31, 2018 measurement period will be released, upon audit completion, as part of the State's FY 2019 CAFR.

\$18,410,969

37,896

2. Public School District Employees

Sources: Comprehensive Annual Financial Report for Fiscal Year ended August 31, 2018, Employees Retirement System of Texas; Comprehensive Annual Financial Report for Fiscal Year ended August 31, 2018, Teacher Retirement System of Texas; Comprehensive Annual Financial Report for Fiscal Year ended August 31, 2018, State of Texas

9. TEXAS TRADE

Texas' location, geography and diverse economy offer unique trade opportunities with other states and countries. The State of Texas plays a significant role in the nation's international commerce. Mexico is by far the largest trading partner for Texas for both goods produced in Texas destined for export and products imported for use within the state. Besides Mexico, both Canada and China are also major trading partners for Texas businesses.

Table A- State of Texas International		018)
Exports of Goods Produced in Te	exas (Top Ten Cou	ntries)
	alue of Exported ods (billions)	Percent of Texas Total
M exico	\$109.75	34.8%
Canada	\$27.44	8.7%
China	\$16.59	5.3%
Korea, South	\$13.18	4.2%
Jap an	\$11.87	3.8%
Brazil	\$10.34	3.3%
Netherlands	\$9.72	3.1%
United Kingdom	\$8.42	2.7%
Taiwan	\$7.26	2.3%
Singapore	\$6.21	2.0%
Top 10 Export Countries Total	\$220.77	70.0%
		Percent of Nation
T T-4-1 F4-	\$315.45	19.0%
Texas Total Exports		
U.S. Total Exports Imports of Goods Destined for Texas Co	\$1,664.06 onsumption (Top Talue of Imported	•
U.S. Total Exports Imports of Goods Destined for Texas Co Total Vi	onsumption (Top Talue of Imported	en Countries) Percent of Texas Total
U.S. Total Exports Imports of Goods Destined for Texas Co Total Vi	onsumption (Top T	•
U.S. Total Exports Imports of Goods Destined for Texas Co Total Vi Goods	onsumption (Top T alue of Imported ods (billions)	Percent of Texas Total
U.S. Total Exports Imports of Goods Destined for Texas Co Total Vi Good Mexico	onsumption (Top T alue of Imported ods (billions) \$107.01	Percent of Texas Total
U.S. Total Exports Imports of Goods Destined for Texas Co Total Vi Goo M exico China	onsumption (Top T alue of Imported ods (billions) \$107.01 \$44.49	Percent of Texas Total 35.1% 14.6%
U.S. Total Exports Imports of Goods Destined for Texas Co Total V: Goo M exico China Canada	onsumption (Top T alue of Imported ods (billions) \$107.01 \$44.49 \$20.21	Percent of Texas Total 35.1% 14.6% 6.6%
U.S. Total Exports Imports of Goods Destined for Texas Co Total Vi Goo Mexico China Canada Japan	onsumption (Top T alue of Imported ods (billions) \$107.01 \$44.49 \$20.21 \$16.73	Percent of Texas Total 35.1% 14.6% 6.6% 5.5%
U.S. Total Exports Imports of Goods Destined for Texas Co Total V. Goo M exico China Canada Japan Korea, South	onsumption (Top T alue of Imported ods (billions) \$107.01 \$44.49 \$20.21 \$16.73 \$8.89	Percent of Texas Total 35.1% 14.6% 6.6% 5.5% 2.9%
U.S. Total Exports Imports of Goods Destined for Texas Co Total Vi Goo M exico China Canada Japan Korea, South Saudi Arabia	onsumption (Top T alue of Imported ods (billions) \$107.01 \$44.49 \$20.21 \$16.73 \$8.89 \$8.16	Percent of Texas Total 35.1% 14.6% 6.6% 5.5% 2.9% 2.7%
U.S. Total Exports Imports of Goods Destined for Texas Co Total Vi Goo Mexico China Canada Japan Korea, South Saudi Arabia Germany	onsumption (Top T alue of Imported ods (billions) \$107.01 \$44.49 \$20.21 \$16.73 \$8.89 \$8.16	Percent of Texas Total 35.1% 14.6% 6.6% 5.5% 2.9% 2.7% 2.5%
Imports of Goods Destined for Texas Co Total Vi Goo M exico China Canada Japan Korea, South Saudi Arabia Germany M alay sia	onsumption (Top T alue of Imported ods (billions) \$107.01 \$44.49 \$20.21 \$16.73 \$8.89 \$8.16 \$7.58 \$6.84	Percent of Texas Total 35.1% 14.6% 6.6% 5.5% 2.9% 2.7% 2.5% 2.2%
Imports of Goods Destined for Texas Co Total Vi Goo M exico China Canada Japan Korea, South Saudi Arabia Germany M alay sia Vietnam	sonsumption (Top T alue of Imported ods (billions) \$107.01 \$44.49 \$20.21 \$16.73 \$8.89 \$8.16 \$7.58 \$6.84 \$6.01	Percent of Texas Total 35.1% 14.6% 6.6% 5.5% 2.9% 2.7% 2.5% 2.2% 2.0%
Imports of Goods Destined for Texas Co Total Vi Goo Mexico China Canada Japan Korea, South Saudi Arabia Germany M alaysia Vietnam United Kingdom	sonsumption (Top T alue of Imported ods (billions) \$107.01 \$44.49 \$20.21 \$16.73 \$8.89 \$8.16 \$7.58 \$6.84 \$6.01 \$5.37	Percent of Texas Total 35.1% 14.6% 6.6% 5.5% 2.9% 2.7% 2.5% 2.2% 2.0% 1.8%
Imports of Goods Destined for Texas Co Total Vi Goo Mexico China Canada Japan Korea, South Saudi Arabia Germany M alaysia Vietnam United Kingdom	sonsumption (Top T alue of Imported ods (billions) \$107.01 \$44.49 \$20.21 \$16.73 \$8.89 \$8.16 \$7.58 \$6.84 \$6.01 \$5.37	Percent of Texas Total 35.1% 14.6% 6.6% 5.5% 2.9% 2.7% 2.5% 2.2% 2.0% 1.8% 75.9%
Imports of Goods Destined for Texas Co Total Vi Goo Mexico China Canada Japan Korea, South Saudi Arabia Germany Malaysia Vietnam United Kingdom Top 10 Import Countries Total	sonsumption (Top T alue of Imported ods (billions) \$107.01 \$44.49 \$20.21 \$16.73 \$8.89 \$8.16 \$7.58 \$6.84 \$6.01 \$5.37	Percent of Texas Total 35.1% 14.6% 6.6% 5.5% 2.9% 2.7% 2.5% 2.2% 2.0% 1.8% 75.9%
Imports of Goods Destined for Texas Co Total Vi Goo Mexico China Canada Japan Korea, South Saudi Arabia Germany Malaysia Vietnam United Kingdom Top 10 Import Countries Total Texas Total Imports	sumption (Top T alue of Imported olds (billions) \$107.01 \$44.49 \$20.21 \$16.73 \$8.89 \$8.16 \$7.58 \$6.84 \$6.01 \$5.37 \$231.31	Percent of Texas Total 35.1% 14.6% 6.6% 5.5% 2.9% 2.7% 2.5% 2.2% 2.0% 1.8% 75.9%

The variety of goods produced in Texas for export is extensive. Using the North American Industry Classification System (NAICS) 4-digit commodity code, the U.S. Census Bureau lists 107 commodities with measurable value that were produced in Texas for export in 2018. The top 15 of these commodities represent about 77 percent of Texas' international exports.

Table A-37 Exports of Products Originating in Texas 2018 Top 15 Commodities based on 4-digit NAICS Codes* (billions)								
Rank	4-digit NAICS	NAICS Commodity Name	2014	2015	2016	2017	2018	% of 2018
	Code		4	4	4	4	4	
1	2111	Oil & Gas	\$18.67	\$13.47	\$13.80	\$32.36	\$57.22	
2	3241	Petroleum & Coal Products	\$58.72	\$43.25	\$35.65	\$44.06	\$55.71	17.7%
3	3251	Basic Chemicals	\$24.96	\$20.00	\$17.99	\$20.71	\$23.81	7.5%
4	3341	Computer Equipment	\$16.07	\$15.67	\$16.61	\$15.53	\$17.23	5.5%
5	3252	Resin, Syn Rubber, Artf & Syn Fibers/fil	\$14.72	\$13.55	\$12.85	\$13.65	\$15.68	5.0%
6	3344	Semiconductors & Other Electronic Components	\$12.19	\$12.48	\$13.52	\$13.34	\$13.81	4.4%
7	3363	Motor Vehicle Parts	\$8.44	\$9.82	\$9.37	\$9.38	\$9.78	3.1%
8	3364	Aerospace Products & Parts	\$6.70	\$6.65	\$8.39	\$8.47	\$9.64	3.1%
9	3342	Communications Equipment	\$8.42	\$7.71	\$8.30	\$8.93	\$7.55	2.4%
10	3359	Electrical Equipment & Components, Nesoi	\$6.15	\$6.28	\$6.00	\$6.30	\$6.71	2.1%
11	3329	Other Fabricated Metal Products	\$7.62	\$6.98	\$5.33	\$5.27	\$5.76	1.8%
12	3336	Engines, Turbines & Power Transmsn Equip	\$5.86	\$4.73	\$4.51	\$5.36	\$5.59	1.8%
13	3345	Navigational / measuring / medical / control Instrument	\$6.81	\$5.91	\$5.25	\$5.21	\$5.48	1.7%
14	3332	Industrial Machinery	\$3.62	\$3.44	\$3.95	\$4.95	\$4.84	1.5%
15	3339	Other General Purpose Machinery	\$7.37	\$6.24	\$4.37	\$4.16	\$4.70	1.5%
		TOTAL Texas Exports	\$285.56	\$248.78	\$231.31	\$264.54	\$315.45	

^{*}NAICS is the standard used by federal government statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy.

Source: U.S. Census Bureau, USA Trade Online, State Export Data for 2018 - Texas Origin of Movement by 4-digit NAICS Code

All international trade enters or leaves the U.S. through an official port of entry. Texas has more than 25 official ports of entry, including seaports, airports and border crossings. These ports offer customs operations and facilitate the movement of imports and exports to and from locations across the state and the nation. Products produced in Texas for international consumption may or may not leave the country through a Texas port and products shipped into the U.S. through a Texas port may be destined for another state. Texas' ports, whether accessible via air, land or sea, contribute to the state and local economies each in a distinctive way and across multiple industries.

Table A-38 Texas Ports All International Trade Through Texas Ports Total Imports and Exports for 2018

	Total Exports Value	Total Imports Value	Total Trade Value
Total Trade through Texas Ports	\$380,918	\$357,816	\$738,734
Total U.S. Trade	\$1,664,056	\$2,542,733	\$4,206,789
Texas Ports as a Percent of U.S. Trade	22.9%	14.1%	17.6%

Port of Entry	Total Exports Value	Total Imports Value	Total Trade Value
Laredo, TX	\$134,265,688,674	\$100,397,832,399	\$234,663,521,073
Houston, TX	\$69,576,980,896	\$90,211,727,290	\$159,788,708,186
El Paso, TX	\$49,552,097,526	\$32,331,981,738	\$81,884,079,264
Dallas-Fort Worth, TX	\$31,369,893,985	\$23,656,781,133	\$55,026,675,118
Hildago, TX	\$22,972,469,479	\$12,411,962,566	\$35,384,432,045
Eagle Pass, TX	\$21,957,237,198	\$8,346,331,448	\$30,303,568,646
Corpus Christi, TX	\$7,173,866,540	\$22,338,475,289	\$29,512,341,829
Port Arthur, TX	\$13,359,885,950	\$9,545,125,915	\$22,905,011,865
Brownsville, TX	\$8,444,740,349	\$10,402,699,836	\$18,847,440,185
Beaumont, TX	\$2,728,225,958	\$16,049,111,869	\$18,777,337,827
Houston Intercontinental Airport, TX	\$5,595,433,061	\$8,536,949,422	\$14,132,382,483
Freeport, TX	\$3,667,411,070	\$7,703,401,459	\$11,370,812,529
Texas City, TX	\$1,893,832,030	\$7,941,968,893	\$9,835,800,923
Galveston, TX	\$3,677,356,545	\$2,679,263,432	\$6,356,619,977
Del Rio, TX	\$3,233,058,575	\$2,142,136,857	\$5,375,195,432
Port Lavaca, TX	\$466,994,827	\$1,125,785,160	\$1,592,779,987
Austin, TX	\$342,220,602	\$360,241,628	\$702,462,230
Sabine, TX	\$571,509	\$632,751,072	\$633,322,581
Rio Grande City, TX	\$330,273,545	\$72,529,710	\$402,803,255
Progreso, TX	\$141,638,891	\$183,194,736	\$324,833,627
San Antonio, TX	\$12,777,270	\$294,386,982	\$307,164,252
Presidio, TX	\$140,816,936	\$109,937,289	\$250,754,225
Fabens, TX	\$97,524	\$106,351,300	\$106,448,824
Orange, TX	\$870,260	\$59,170,272	\$60,040,532
Roma, TX	\$9,730,352	\$50,089,921	\$59,820,273
Fort Worth Alliance Airport, TX	\$421,292	\$51,999,435	\$52,420,727
Dallas Love Field, Dallas, TX	\$1,009,541	\$30,997,276	\$32,006,817
Valley International Airport, Harlingen, TX	\$531,289	\$23,870,052	\$24,401,341
Addison Airport, Dallas, TX	\$787,169	\$8,271,033	\$9,058,202
Sugar Land Regional Airport, TX	\$4,775	\$5,696,255	\$5,701,030
Midland International Airport, TX	\$211,037	\$4,027,576	\$4,238,613
Lubbock, TX	\$994,145	\$16,533	\$1,010,678
Amarillo, TX	\$193,313	\$444,232	\$637,545
Edinburg Airport, TX	\$0	\$0	\$0

Source: U.S. Census Bureau, USA Trade Online, Port Level Data for 2018

10. LITIGATION

The State of Texas is a party to various cases concerning its governmental functions and operations but unrelated to the security for bonds or other securities offered by the State of Texas or its agencies pursuant to Official Statements to which the Comptroller has authorized this Bond Appendix to be attached or incorporated by reference. In the opinion of the Texas Comptroller, based on case information provided by the Texas Attorney General, none of the cases, if finally decided adversely to the State, could possibly have a materially adverse effect on the long-term financial condition of the State, except for the briefly described following cases:

- Steward, et al. v. Perry, et al. [U. S. District Court, Western District, San Antonio Division; No. 5:10-cv-1025.] This is an institutional reform class action on behalf of the class of "all Medicaid-eligible persons over twenty-one years of age with intellectual or developmental disabilities or a related condition in Texas who currently or will in the future reside in nursing facilities, or who are being, will be, or should be screened for admission to nursing facilities." Plaintiffs and the U.S. Department of Justice seek declaratory and permanent injunctive relief regarding the provision of services to the Class. Plaintiffs allege that Defendants fail to properly assess and serve the Plaintiff class in violation of various federal laws including the Americans with Disabilities Act, the Rehabilitation Act, the Social Security Act, and the Nursing Home Reform Amendments. A bench trial occurred from October 15, 2018, through November 15, 2018. Post-trial briefing was completed in February of 2019. The court has not yet issued an order in this case.
- M.D., by her next friend, Sarah R. Stukenberg, et al. v. Greg Abbott, in his official capacity as Governor of the State of Texas, et al. [U.S. District Court, Southern District of Texas, Corpus Christi Division; Cause No. 2:11-CV-00084.] This is an institutional reform class action on behalf of foster children in Texas's permanent managing conservatorship ("PMC"). Plaintiffs allege the State's foster care system fails to adequately care for foster children in violation of their constitutional and federal statutory rights. The U.S. District Court certified a class of foster children and issued a Memorandum Opinion and Verdict on December 17, 2015, finding the State had violated Plaintiffs' Fourteenth Amendment substantive due process rights. The decision contained an injunction prohibiting the State from placing PMC children in unsafe placements, including foster group homes without 24-hour awake-night supervision. The Court appointed two Special Masters and an Implementation Plan was filed on December 4, 2017, to reform Texas' foster care program based on the Court's findings. The District Court issued a Final Order adopting most of the Implementation Plan's recommendations. The order was modified in multiple appeals to the 5th Circuit Court of Appeals. On July 8, 2019, a panel of the Fifth Circuit Court of Appeals issued a Judgment that affirmed in part, affirmed with modification in part, and vacated in part, the District Court's injunction. The panel affirmed the 24-hour awake night supervision of all PMC placements of more than six children in licensed foster care, as well as workload study provisions to establish case workers' maximum caseload ranges. The panel affirmed allowing Court Monitors remote access to Department of Family and Protective Services ("DFPS") computer data, and vacated the order to create an integrated

computer system containing the complete records of children in PMC and a requirement that DFPS turn over data relevant to all previous third-party studies. The panel remanded the case to the District Court, issued its July 8, 2019 Judgment as a final mandate, instructed the District Court to implement its terms, and lifted its stay of the District Court injunction. Following the panel decision, Plaintiffs filed a contempt motion alleging failure to comply with the Court's Order requiring 24/7 supervision. The District Court held the State in contempt for failure to comply with the 24/7 supervision requirement and imposing a \$150,000 fine. The State filed a Notice of Appeal on December 5, 2019 with the Fifth Circuit, appealing the portion of the District Court's contempt order that requires prior Court approval for all placement moves to comply with the 24/7 requirement. On October 11, 2019, Plaintiffs filed an Application for Fees and Expenses, but filed supplemental briefing on December 9, 2019, requesting reimbursement of lesser amounts and requesting allocation of new funding. On December 17, 2019, the District Court approved an agreed motion filed by the State and Plaintiffs terminating certain workload study obligations, and the Court ordered the State to establish guidelines related to generally applicable internal caseload and investigation standards.

In addition, the Texas Comptroller of Public Accounts is a party to various state tax cases that are unrelated to the security for bonds or other securities offered by the State of Texas or its agencies pursuant to Official Statements to which the Comptroller has authorized this Bond Appendix to be attached or incorporated by reference. None of the individual state tax cases, if finally decided against the State, would have a materially adverse effect on the long-term financial condition of the State. However, if a negative precedent were applied to all similarly situated taxpayers, then there could possibly be an adverse effect on the financial condition of the State. The following state tax cases are examples:

American Multi-Cinema, Inc. v. Hegar et al. [Texas Supreme Court, No. 17-0464.] In this case, the Plaintiff filed suit in District Court, seeking a refund of franchise taxes paid under protest for two reporting years, based upon the Comptroller's disallowance of AMC's costs of goods sold ("COGS") deduction for the cost of acquiring and using motion picture films under §171.1012, Tax Code. The District Court ruled the Plaintiff could use this COGS deduction but limited the recovery to the Comptroller's interpretation of exhibition costs amount. The Comptroller appealed the District Court's inclusion of exhibition costs in the COGS deduction to the Third Court of Appeals, and AMC appealed the limited deduction allowed by the District Court. On April 30, 2015, the Third Court of Appeals held the Plaintiff could deduct the COGS for exhibition of films to moviegoers to determine its taxable margin for franchise tax purposes. The Comptroller filed a Motion for Rehearing and Reconsideration on June 5, 2015. On January 6, 2017, the Third Court of Appeals issued a substituted opinion that maintains the same result as the prior opinion, but on different, narrower grounds, omitting its broader construction of the term "tangible personal property" found in the original opinion. On May 2, 2017, the Third Court of Appeals denied the Comptroller's second Motion for Rehearing. The Comptroller filed its Petition for Review with the Texas Supreme Court on August 16, 2017. On June 28, 2019, the Supreme Court granted the Comptroller's Petition and oral argument took place on October 9, 2019.

• Trican Well Services, L.P. v. Hegar, et al. [98th District Court, Travis County; Case No. D-1-GN-16-000111.] In this case, the Plaintiff requested a refund of sales and use tax for hydraulic fracturing materials under the sale-for-resale exemption in §§151.006 and 151.302, Tax Code. Trican Well Services, L.P. provides hydraulic fracturing services to the oil and gas industry. The Comptroller denied the refund request and the Plaintiff filed suit in District Court. The Plaintiff contends it qualifies for the sale-for-resale exemption because the fracturing materials are tangible personal property transferred to the well owners for consideration in the normal course of the Plaintiff's business, and in the form or condition in which they were acquired. The Comptroller filed its answer denying the claims on February 4, 2016. On September 18, 2019, the Court entered an Agreed Scheduling Order and trial is scheduled for August 10, 2020. On January 3, 2020, the Comptroller filed an amended answer and counterclaim in which it contends that if Plaintiff is entitled to the sale-for-resale exemption on its purchases of fracturing materials, as it claims, then Plaintiff should have collected sales and use tax from its customers when it resold or transferred those materials. Discovery is ongoing.

11. INFORMATION SECURITY

OVERVIEW - OFFICE OF THE CHIEF INFORMATION SECURITY OFFICER

The State's first Chief Information Security Officer (CISO) was hired in 2004, and since then the state CISO has evolved into the Office of the Chief Information Security Officer (OCISO) team. The OCISO provides statewide information security program guidance to state agencies, institutions of higher education and other governmental entities. Led by the state of Texas Chief Information Security Officer, the team works to set state information security policies and standards, publish guidance on best practices, improve incident response preparedness, monitor and analyze incidents, coordinate security services and promote information sharing throughout the public sector cybersecurity community.

LAWS RELATING TO CYBERSECURITY

Texas Government Code Chapters 2054 and 2059 dictate the statutory requirements relating to cybersecurity.

• Texas Government Code Chapter 2059 specifically addresses the State's Network Security Operations and created the Department of Information Resources (DIR) Network Security Operations Center (NSOC). The NSOC has responsibility for identifying internal and external threats, reporting, and general security in a state of disaster, as well as many other responsibilities.

Texas Business and Commerce Code Chapter 521 provides a definition of Personally Identifying Information and outlines the requirements for notifying individuals in the event of a breach of such information.

Texas Penal Code Chapter 33 defines computer crimes and offenses.

Texas Administrative Code (TAC) Chapter 202

- Texas Government Code authorizes DIR to create administrative rules to further specify information security requirements. TAC Chapter 202 outlines these requirements and is a baseline of security standards, controls and related responsibilities for state agencies and institutions of higher education.
- TAC Chapter 202 is regularly revised to ensure the information security standards align with modern best practices. TAC 202 is currently under revision and has a planned update in calendar year 2020.

FEDERATED IT

Texas is established as a non-cabinet government and accordingly each independent agency and institution of higher education within the state of Texas functions autonomously regarding IT and security operations. While DIR provides certain oversight, guidance and enterprise reporting, each entity is ultimately responsible for their own IT operations.

SECURITY SERVICES PROVIDED TO AGENCIES AND INSTITUTIONS OF HIGHER EDUCATION

NETWORK SECURITY OPERATIONS CENTER (NSOC)

The DIR Network Security Operations Center monitors the internet traffic of entities that utilize the state's network for suspicious activity and alerts organizations when potential security incidents are identified.

- Network Security Monitoring, Alerting, and Analysis Services. These services provide early warning for attempted intrusions, distributed denial-of-service, and cyber-attacks, as well as alerts to authorities that facilitate appropriate countermeasures.
- Network Intrusion Prevention Service (IPS). This service proactively identifies, and blocks
 known threats to network security. The IPS not only watches network traffic, but also takes
 immediate action based on the network administrator's set of rules.

MANAGED SECURITY SERVICES PROGRAM (MSS)

- Network Penetration Testing. A pen test identifies and evaluates network and system vulnerabilities that are susceptible to attack from possibly malicious sources and analyzes system configurations, web applications and technical weaknesses. DIR funds pen tests for state agencies to ensure that a significant portion of all agencies are tested annually.
- Web and Mobile Application Penetration Testing. Texas Government Code Section 2054.516 requires agencies and public institutions of higher education to obtain a penetration test and remediate any discovered vulnerabilities prior to launching a web or mobile application that processes sensitive personal information. DIR has dedicated funds to cover approximately 19 of these penetration tests for eligible customers. These tests use a defined methodology that includes both automated and manual processes to identify application vulnerabilities such as SQL injection susceptibility, buffer overflow, session hijacking, information leakage and more.
- Texas Cybersecurity Framework Security Assessments. Texas Government Code Section 2054.515 requires each state agency to conduct an information security assessment at least once every two years and report the results to DIR and state leadership, as requested. DIR offers security assessments to state agencies and public institutions of higher education via the MSS program at no cost to the customer. Security Assessments are also available, for a fee, to other eligible customers including local governments and public-school districts. The Texas Cybersecurity Framework consists of 40 security objectives within 5 functional areas (Identify, Detect, Protect, Respond, Recover). These assessments evaluate the maturity level of each security objective and provide recommendations for improving the security maturity and posture of the organization.

- Security Monitoring and Device Management (SMDM). SMDM Services manage and monitor security devices, which includes managed firewalls (including web application firewalls), host-based intrusion prevention systems, endpoint device management, intrusion detection/prevention systems and malware detection/prevention systems. SMDM also includes Security Information and Event Management, threat research and analysis and Security Operations Center (SOC) services. SMDM includes the installation, configuration and management of associated equipment.
- Incident Response. Incident Response Services assist Customers in the event of a security incident. Services include response to and resolution of security incidents (e.g., damaging events, computer intrusions, service disruption, security compromises and inadvertent data disclosure or loss) and digital forensics, (e.g., performing recovery and investigation of material or artifacts found in Customer's digital device). Incident Response Services also include proactive security response preparedness through development of security response plans.
- Risk and Compliance. Risk and Compliance Services help the Customer identify, remediate, monitor and manage enterprise risks through Services such as controlled penetration testing and security vulnerability assessments. Risk and Compliance Services also assist Customers in validating and meeting compliance requirements of state, federal or industry regulations.

TEXAS INFOSEC ACADEMY

The Texas InfoSec Academy is a DIR-funded program to help state agency and institutions of higher education prepare their IT and security staff to meet today's challenges by providing industry-standard cybersecurity certification examination preparation courses and exam vouchers.

STATEWIDE PORTAL FOR ENTERPRISE CYBERSECURITY THREAT, RISK AND INCIDENT MANAGEMENT (SPECTRIM)

To help tie together the overall state security program, DIR has implemented a governance, risk and compliance software tool available to all state agencies and institutions of higher education. The SPECTRIM portal provides tools for managing and reporting security incidents, conducting risk assessments, managing organizational policies, inventorying infrastructure, templates for agency security planning activities and more.

LEGISLATIVE REPORTING

As the state technology agency, DIR serves as a representative to state leadership concerning state agencies information security challenges. DIR is specifically charged with producing several information security related reports including the:

- Biennial Report on Information Security: Texas Government Code Section 2054.133(f) requires DIR to submit a biennial report evaluating agencies' information security programs to state leadership.
- Cybersecurity Report: Texas Government Code Section 2054.0591 requires DIR to submit a report to state leadership that evaluates the resources available to address the operational and financial impacts of a cybersecurity event, a review of existing cybersecurity legislation, and provide recommendations for improving cybersecurity within the state.
- IT Infrastructure Report: Texas Government Code Section 2054.068 requires DIR to collect an inventory of agencies' servers, cloud services, mainframes, and other IT infrastructure information and to produce a report that identifies the high security and operational risk agencies, as well as the resources needed to remediate their associated risks.
- Prioritization of Cybersecurity and Legacy Modernization (PCLS) projects: Texas Government Code Section 2054.069 requires DIR to provide the Legislative Budget Board with a prioritized list of agency projects to modernize legacy systems or improve cybersecurity.
- Texas Cybersecurity Strategic Plan: DIR developed a long-term strategic vision for enterprise-wide cybersecurity to assist agencies in their own planning efforts. The highlevel plan outlines five strategic goals that agencies can use to align their long-term security program initiatives.

COMMUNICATIONS

DIR provides regular communications to public sector security staff regarding threat intelligence, alerts and best practices in a variety of formats including:

- Texas Cybersecurity Weekly Newsletter: a weekly newsletter that provides an overview of the most relevant recent cybersecurity topics including vulnerabilities, breaches and other news.
- Security Officer and Security mailing lists: DIR hosts mailing lists with which agency security staff can pose questions to the public sector security community.
- Cybersecurity Awareness Month: October is the designated Cybersecurity Awareness
 Month, during which time best practices and general security awareness activities are
 promoted throughout the state via contests and other venues.
- Annual Information Security Forum (ISF): Each year, DIR hosts an annual Information Security Forum for public sector security staff. The forum brings together security staff from across Texas to listen to relevant presentations and network with colleagues.

- Monthly Security Meetings: DIR hosts a monthly interagency security workgroup meeting
 every month to provide statewide updates to public sector staff. Tabletop security scenarios
 are presented at each meeting.
- MS-ISAC & EI-ISAC Participation: DIR and other state agencies participate in the Multi-State (and Elections Infrastructure) Information Sharing and Analysis Center programs to assist with cybersecurity information sharing and intelligence. The state receives information from MS-ISAC relating to vulnerabilities discovered through the vulnerability management program and alerts from the MS-ISAC Security Operations Center.

TEXAS CYBERSECURITY COUNCIL

The Texas Cybersecurity Council was created by Texas Government Code Section 2054.512 develop enduring partnerships between private industry and public sector organizations to ensure that critical infrastructure and sensitive information are protected, to develop an exemplary cybersecurity workforce to protect technology resources from increasing threats, and develop strategies and solutions that ensure that Texas continues to lead in areas of cybersecurity at a national level.

INCIDENT RESPONSE & REPORTING

Texas Administrative Code Section 202 requires each state agency and institution of higher education to provide timely reporting of certain types of security incidents to DIR which, depending on the threat or level of risk to the State, could mean emergency reporting. Timely reporting is required (48 hours by statute but preferably within 24 hours) for incidents that may:

- Propagate to other state systems (emergency reporting);
- Result in criminal violations that shall be reported to law enforcement; or
- Involve the unauthorized disclosure or modification of confidential information, e.g., sensitive personal information.

DIR has developed a comprehensive Incident Response Redbook to assist public sector entities with developing their own incident response plans. Additionally, DIR has collaborated with the state's emergency management organizations to develop a statewide incident response plan to be leveraged in the event a cybersecurity incident reaches a certain threshold of potential impact.

As of September 1, 2019, agencies that experience a breach of sensitive or confidential information are required to submit a follow up assessment of the incident no later than 10 days after the closure of the incident. The post-incident reporting includes a root cause analysis and impact assessment.

END-USER AWARENESS TRAINING

DIR offers an end-user training program that is designed to educate end-users throughout any organization about security awareness and compliance. This is a resource that bolsters Texas public sector information security awareness programs.

The 86th Legislative Session made changes to Texas Government Code Chapter 2054 regarding end-user security awareness training. DIR is required to certify a minimum of five security training programs and post those programs on its website. State and local government organizations are required to utilize one of the certified security training programs to annually train staff who use a computer for 25% or more for their duties. Requirements around contractor training and reporting were also included. The new law also included provisions making training and reporting mandatory for contractors who have access to state systems and data.

DIR has defined and established specific requirements for certification of security training programs. In addition, DIR developed and established an application process for vendors and organizations to submit their security training programs for certification. This application process opened in September 2019. DIR posted the initial list of certified programs on October 31, 2019. DIR has certified well over the minimum of five programs and continues to certify programs the initial year of this legislation. Vendors and organizations that have certified training programs will be required to re-certify their content on an annual basis. Organizations that develop their own training program and certify that program can opt to share that program with other organizations. This allows both vendor-provided and no-cost options to state and local government organizations.

APPENDIX B

FORMS OF CO-BOND COUNSEL OPINIONS



NORTON ROSE FULBRIGHT

[CLOSING DATE]

Norton Rose Fulbright US LLP 2200 Ross Avenue, Suite 3600 Dallas, Texas 75201-7932 United States

Tel +1 214 855 8000 Fax +1 214 855 8200 nortonrosefulbright.com

TEXAS PUBLIC FINANCE AUTHORITY

\$472,470,000 State of Texas General Obligation and Refunding Bonds, Taxable Series 2020

IN REGARD to the authorization and issuance of the captioned bonds, dated April 23, 2020 (the "Bonds"), we have examined into their issuance by the Texas Public Finance Authority (the "Authority"), solely to express legal opinions as to the validity of the Bonds, the defeasance and discharge of the Authority's outstanding obligations being refunded by the Bonds, and for no other purpose. We have not been requested to investigate or verify, and we neither expressly nor by implication render herein any opinion concerning, the financial condition or capabilities of the Authority, the disclosure of any financial or statistical information or data pertaining to the Authority and used in the sale of the Bonds, or the sufficiency of the security for or the value or marketability of the Bonds.

THE BONDS are issued in fully registered form only, and are in denominations of \$5,000 or any integral multiple thereof (within a maturity). The Bonds mature on October 1 in each of the years specified in the Pricing Committee's pricing certificate (the "Pricing Certificate") executed pursuant to a resolution adopted by the Authority authorizing the issuance of the Bonds (the "Resolution" and, jointly with the Pricing Certificate, the "Bond Resolution"), unless redeemed prior to maturity in accordance with the terms stated on the Bonds. The Bonds accrue interest from the date, at the rates, and in the manner and interest is payable on the dates, all as provided in the Bond Resolution. Terms used herein and not otherwise defined shall have the meaning given in the Bond Resolution.

IN RENDERING THE OPINIONS herein we have examined and rely upon (i) original or certified copies of the proceedings of the Authority in connection with the issuance of the Bonds, including (a) the Bond Resolution, (b) the Escrow Agreement (the "Escrow Agreement") between the Authority and Texas Treasury Safekeeping Trust Company (the "Escrow Agent"), (c) a sufficiency certificate (the "Sufficiency Certificate") of PFM Financial Advisors LLC, the Authority's financial advisor, and (d) a special report (the "Verification Report") of Robert Thomas CPA, (ii) certifications and opinions of officers of the Authority relating to the expected use and investment of proceeds of the sale of the Bonds and certain other funds of the Authority and to certain other facts within the knowledge and control of the Authority, and (iii) such other documentation, including an examination of the Bond executed and delivered initially by the Authority (which we found to be in due form and properly executed), and such matters of law as we deem relevant to the matters discussed below. In such examinations, we have assumed the authenticity of all documents submitted to us as originals, the conformity to original copies of all

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Re: "Texas Public Finance Authority State of Texas General Obligation and Refunding Bonds, Taxable Series 2020"

documents submitted to us as certified copies and the accuracy of the statements and information contained in such certificates.

BASED ON OUR EXAMINATIONS, IT IS OUR OPINION that, under the applicable laws of the United States of America and the State of Texas, in force and effect on the date hereof:

- 1. The Bonds constitute valid, legally binding and enforceable general obligations of the State.
- 2. The Bonds have been authorized and issued in accordance with the Constitution and laws of the State and are payable from funds made available for such purpose pursuant to the Constitutional Provision (as such term is defined in the Bond Resolution). The Constitutional Provision provides for a continuing appropriation for such purpose from the first money coming into the State Treasury in each fiscal year, not otherwise appropriated by the Constitution of the State, in an amount that is sufficient to pay the principal of and interest on Bonds that mature or become due during that fiscal year, less the amount in the sinking fund at the close of the previous fiscal year.
- 3. The Escrow Agreement has been duly authorized, executed and delivered and is a binding and enforceable agreement in accordance with its terms and the Refunded Obligations have been defeased and are regarded as being outstanding only for the purpose of receiving payment from the funds held by the Escrow Agent for such purposes, pursuant to the Escrow Agreement and in accordance with the provisions of Texas Government Code, Chapter 1207, as amended. In rendering this opinion, we have relied upon the Sufficiency Certificate and the Verification Report as to the sufficiency of cash and investments deposited with the Escrow Agent pursuant to the Escrow Agreement for the purposes of paying the Refunded Obligations and the interest thereon.

THE RIGHTS OF THE OWNERS of the Bonds and the enforceability of the Escrow Agreement are subject to the applicable provisions of the federal bankruptcy laws and any other similar laws affecting the rights of creditors of political subdivisions generally, and may be limited by general principles of equity which permit the exercise of judicial discretion.

OUR OPINIONS ARE BASED on existing law, which is subject to change. Such opinions are further based on our knowledge of facts as of the date hereof. We assume no duty to update or supplement our opinions to reflect any facts or circumstances that may thereafter come to our attention or to reflect any changes in any law that may thereafter occur or become effective. Moreover, our opinions are not a guarantee of result; rather, such opinions represent our legal judgment based upon our review of existing law that we deem relevant to such opinions and in reliance upon the representations and covenants referenced above.

BATES & COLEMAN, P.C.

ATTORNEYS AND COUNSELORS AT LAW 1402 ALABAMA STREET HOUSTON, TEXAS 77004

FAX: 713-630-1055

TEL: 713-759-1500

W. RANDOLPH BATES, JR., Partner WILLIE HIGH COLEMAN, JR., Partner

TEXAS PUBLIC FINANCE AUTHORITY

\$472,470,000 State of Texas General Obligation and Refunding Bonds, Taxable Series 2020

IN REGARD to the authorization and issuance of the captioned bonds, dated April 23, 2020 (the "Bonds"), we have examined into their issuance by the Texas Public Finance Authority (the "Authority"), solely to express legal opinions as to the validity of the Bonds, the defeasance and discharge of the Authority's outstanding obligations being refunded by the Bonds, and for no other purpose. We have not been requested to investigate or verify, and we neither expressly nor by implication render herein any opinion concerning, the financial condition or capabilities of the Authority, the disclosure of any financial or statistical information or data pertaining to the Authority and used in the sale of the Bonds, or the sufficiency of the security for or the value or marketability of the Bonds.

THE BONDS are issued in fully registered form only, and are in denominations of \$5,000 or any integral multiple thereof (within a maturity). The Bonds mature on October 1 in each of the years specified in the Pricing Committee's pricing certificate (the "Pricing Certificate") executed pursuant to a resolution adopted by the Authority authorizing the issuance of the Bonds (the "Resolution" and, jointly with the Pricing Certificate, the "Bond Resolution"), unless redeemed prior to maturity in accordance with the terms stated on the Bonds. The Bonds accrue interest from the date, at the rates, and in the manner and interest is payable on the dates, all as provided in the Bond Resolution. Terms used herein and not otherwise defined shall have the meaning given in the Bond Resolution.

IN RENDERING THE OPINIONS herein we have examined and rely upon (i) original or certified copies of the proceedings of the Authority in connection with the issuance of the Bonds, including (a) the Bond Resolution, (b) the Escrow Agreement (the "Escrow Agreement") between the Authority and Texas Treasury Safekeeping Trust Company (the "Escrow Agent"), (c) a sufficiency certificate (the "Sufficiency Certificate") of PFM Financial Advisors LLC, the Authority's financial advisor, and (d) a special report (the "Verification Report") of Robert Thomas CPA, (ii) certifications and opinions of officers of the Authority relating to the expected use and investment of proceeds of the sale of the Bonds and certain other funds of the Authority and to certain other facts within the knowledge and control of the Authority, and (iii) such other documentation, including an examination of the Bond executed and delivered initially by the Authority (which we found to be in due form and properly executed), and such matters of law as we deem relevant to the matters discussed below. In such examinations, we have assumed the authenticity of all documents submitted to us as originals, the conformity to original copies of all documents submitted to us as certified copies and the accuracy of the statements and information contained in such certificates.

BASED ON OUR EXAMINATIONS, IT IS OUR OPINION that, under the applicable laws of the United States of America and the State of Texas, in force and effect on the date hereof:

- 1. The Bonds constitute valid, legally binding and enforceable general obligations of the State.
- 2. The Bonds have been authorized and issued in accordance with the Constitution and laws of the State and are payable from funds made available for such purpose pursuant to the Constitutional Provision (as such term is defined in the Bond Resolution). The Constitutional Provision provides for a continuing appropriation for such purpose from the first money coming into the State Treasury in each fiscal year, not otherwise appropriated by the Constitution of the State, in an amount that is sufficient to pay the principal of and interest on Bonds that mature or become due during that fiscal year, less the amount in the sinking fund at the close of the previous fiscal year.
- 3. The Escrow Agreement has been duly authorized, executed and delivered and is a binding and enforceable agreement in accordance with its terms and the Refunded Obligations have been defeased and are regarded as being outstanding only for the purpose of receiving payment from the funds held by the Escrow Agent for such purposes, pursuant to the Escrow Agreement and in accordance with the provisions of Texas Government Code, Chapter 1207, as amended. In rendering this opinion, we have relied upon the Sufficiency Certificate and the Verification Report as to the sufficiency of cash and investments deposited with the Escrow Agent pursuant to the Escrow Agreement for the purposes of paying the Refunded Obligations and the interest thereon.

THE RIGHTS OF THE OWNERS of the Bonds and the enforceability of the Escrow Agreement are subject to the applicable provisions of the federal bankruptcy laws and any other similar laws affecting the rights of creditors of political subdivisions generally, and may be limited by general principles of equity which permit the exercise of judicial discretion.

OUR OPINIONS ARE BASED on existing law, which is subject to change. Such opinions are further based on our knowledge of facts as of the date hereof. We assume no duty to update or supplement our opinions to reflect any facts or circumstances that may thereafter come to our attention or to reflect any changes in any law that may thereafter occur or become effective. Moreover, our opinions are not a guarantee of result; rather, such opinions represent our legal judgment based upon our review of existing law that we deem relevant to such opinions and in reliance upon the representations and covenants referenced above.

APPENDIX C

BOOK-ENTRY-ONLY SYSTEM

This Appendix C describes how ownership of the Bonds is to be transferred and how the principal of, premium, if any, and interest on the Bonds are to be paid to and credited by DTC while the Bonds are registered in its nominee name. The information in this section concerning DTC and the Book-Entry-Only System has been provided by DTC for use in disclosure documents such as this Official Statement. The Authority, the Financial Advisor and the Underwriters believe the source of such information to be reliable, but take no responsibility for the accuracy or completeness thereof and such information is not to be construed as a representation by any of the Authority, the Financial Advisor or the Underwriters.

The Authority and the Underwriters cannot and do not give any assurance that (1) DTC will distribute payments of debt service on the Bonds, or redemption or other notices, to DTC Participants, (2) DTC Participants or others will distribute debt service payments paid to DTC or its nominee (as the registered owner of the Bonds), or redemption or other notices, to the Beneficial Owners, or that they will do so on a timely basis, or (3) DTC will serve and act in the manner described in this Official Statement. The current rules applicable to DTC are on file with the United States Securities and Exchange Commission, and the current procedures of DTC to be followed in dealing with DTC Participants are on file with DTC.

DTC will act as securities depository for the Bonds. The Bonds will be issued as fully-registered securities 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 will be issued for each maturity of the Bonds, as set forth on the inside of the cover page hereof, in the aggregate principal amount of such maturity and will be deposited with DTC.

DTC, the world's largest securities depository, 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. 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 certificates. 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"). DTC has a Standard & Poor's rating of "AA+". The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com.

Purchases of Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Bonds on DTC's records. The ownership interest of each actual purchaser of each Bond ("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. Beneficial Owners are, however, expected to receive written confirmations 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 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 Bonds, except in the event that use of the book-entry system for the Bonds is discontinued.

To facilitate subsequent transfers, all 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 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 Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such 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 the Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Bonds, such as redemptions, tenders, defaults, and proposed amendments to the Bond documents. For example, Beneficial Owners of the Bonds may wish to ascertain that the nominee holding the 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 Paying Agent/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 Bonds are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such issue to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to the Bonds unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the Authority 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 the Bonds are credited on the Record Date (identified in a listing attached to the Omnibus Proxy).

All payments on the 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 detail information from the Paying Agent/Registrar on 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 nor its nominee, the Paying Agent/Registrar, or the Authority, subject to any statutory or regulatory requirements as may be in effect from time to time. All payments to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) are the responsibility of the Commission or the Paying Agent/Registrar, 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 Bonds at any time by giving reasonable notice to the Authority or the Paying Agent/Registrar. Under such circumstances, in the event that a successor depository is not obtained, Bond certificates are required to be printed and delivered.

The Authority may decide to discontinue use of the system of book-entry-only transfers through DTC (or a successor securities depository). In that event, Bond certificates will be printed and delivered to DTC.

Use of Certain Terms in the Official Statement. In reading the Official Statement it should be understood that while the Bonds are in the Book-Entry-Only System, references in the Official Statement to registered owners should be read to include the person for which the Participant acquires an interest in the Bonds, but (i) all rights of ownership must be exercised through DTC and the Book-Entry-Only System, and (ii) except as described above, notices that are to be given to registered owners under the Bond Resolution will be given only to DTC.



