The spreadsheets in this publication are available in accessible data form (Excel) for the sections below.

Management's Discussion and Analysis, pages 17-30
comptroller.texas.gov/transparency/reports/comprehensive-annual-financial/2018/analysis.xlsx

Basic Financial Statements, pages 31-184
comptroller.texas.gov/transparency/reports/comprehensive-annual-financial/2018/basic.xlsx

Required Supplementary Information other than MD&A, pages 185-204
comptroller.texas.gov/transparency/reports/comprehensive-annual-financial/2018/supplemental.xlsx

Governmental Funds, pages 205-230
comptroller.texas.gov/transparency/reports/comprehensive-annual-financial/2018/governmental.xlsx

Enterprise Funds, pages 231-260
comptroller.texas.gov/transparency/reports/comprehensive-annual-financial/2018/enterprise.xlsx

Fiduciary Funds, pages 261-278
comptroller.texas.gov/transparency/reports/comprehensive-annual-financial/2018/fiduciary.xlsx

Discretely Presented Component Units, pages 279-294
comptroller.texas.gov/transparency/reports/comprehensive-annual-financial/2018/discretely.xlsx

Statistical Section, pages 295-321
comptroller.texas.gov/transparency/reports/comprehensive-annual-financial/2018/statistical.xlsx

Section Two (continued)

Required Supplementary Information Other Than MD&A

STATE OF TEXAS

Budgetary Comparison Schedule
General Fund

For the Fiscal Year Ended August 31, 2018 (Amounts in Thousands)

	Budgetary Amounts		Actual Amounts Budgetary Basis	Final to Actual Variance
	Original	Final		
REVENUES				
Taxes	$ 49,105,735	$ 49,105,735	$ 47,781,082	$ (1,324,653)
Federal	35,463,627	39,811,880	40,749,921	938,041
Licenses, Fees and Permits	2,798,456	2,900,859	3,012,196	111,337
Interest and Other Investment Income	145,938	146,573	363,300	216,727
Land Income	18,176	18,188	219	(17,969)
Settlement of Claims	496,979	497,220	523,988	26,768
Sales of Goods and Services	4,508,105	4,694,888	3,705,615	(989,273)
Other	6,421,388	6,491,271	5,720,597	(770,674)
Total Revenues	98,958,404	103,666,614	101,856,918	(1,809,696)
EXPENDITURES				
General Government	6,021,531	4,486,815	3,095,319	1,391,496
Education	28,883,933	29,669,181	27,678,497	1,990,684
Employee Benefits	2,391,096	59,649	2,466	57,183
Teacher Retirement Benefits	2,610,153	2,610,153	2,629,099	(18,946)
Health and Human Services	42,846,911	53,456,629	55,478,747	(2,022,118)
Public Safety and Corrections	5,172,265	7,553,645	6,688,744	864,901
Transportation	29,813	33,563	27,181	6,382
Natural Resources and Recreation	1,981,424	2,626,587	2,395,177	231,410
Regulatory Services	300,929	391,017	351,224	39,793
Total Expenditures	90,238,055	100,887,239	98,346,454	2,540,785
Excess (Deficiency) of Revenues Over (Under) Expenditures	8,720,349	2,779,375	3,510,464	731,089
OTHER FINANCING SOURCES (USES)				
Transfer In	1,946,082	1,542,770	6,097,458	4,554,688
Transfer Out	(5,286,594)	(5,882,165)	(9,658,839)	(3,776,674)
Sale of Capital Assets	4,548	4,797	9,381	4,584
Insurance Recoveries	3,473	3,519	17,216	13,697
Available Beginning Balances	11,193,399	11,193,399	11,193,399	
Total Other Financing Sources (Uses)	7,860,908	6,862,320	7,658,615	796,295
Excess of Revenues and Other Financing Sources Over Expenditures and Other Financing Uses	$ 16,581,257	$ 9,641,695	$ 11,169,079	$ 1,527,384

STATE OF TEXAS

Budgetary Comparison Schedule
Major Special Revenue Fund – State Highway Fund

For the Fiscal Year Ended August 31, 2018 (Amounts in Thousands)

	Budgetary Amounts		Actual Amounts Budgetary Basis	Final to Actual Variance
	Original	Final		
REVENUES				
Taxes	$ 3,576,054	$ 3,576,054	$ 5,239,705	$ 1,663,651
Federal	4,119,413	4,119,413	3,805,521	(313,892)
Licenses, Fees and Permits	1,676,306	1,676,427	1,643,778	(32,649)
Interest and Other Investment Income	65,144	65,144	74,287	9,143
Land Income	12,310	12,317	23,128	10,811
Settlement of Claims	15,584	15,584	21,133	5,549
Sales of Goods and Services	46,000	50,500	103,666	53,166
Other	70,293	70,297	5,861	(64,436)
Total Revenues	9,581,104	9,585,736	10,917,079	1,331,343
EXPENDITURES				
General Government	15,650	15,878	(1)	15,879
Employee Benefits	108,170			
Public Safety and Corrections			6	(6)
Transportation	11,688,093	12,319,203	9,233,771	3,085,432
Regulatory Services				
Total Expenditures	11,811,913	12,335,081	9,233,776	3,101,305
Excess (Deficiency) of Revenues Over (Under) Expenditures	(2,230,809)	(2,749,345)	1,683,303	4,432,648
OTHER FINANCING SOURCES (USES)				
Transfer In	734,418	734,418	1,709,917	975,499
Transfer Out			(582,127)	(582,127)
Sale of Capital Assets	41,500	41,500	5,454	(36,046)
Insurance Recoveries				
Available Beginning Balances	3,595,554	3,595,554	3,595,554	
Total Other Financing Sources (Uses)	4,371,472	4,371,472	4,728,798	357,326
Excess (Deficiency) of Revenues and Other Financing Sources Over (Under) Expenditures and Other Financing Uses	$ 2,140,663	$ 1,622,127	$ 6,412,101	$ 4,789,974

Note to Budgetary Comparison Schedule

The budgetary comparison schedule presents comparisons of the legally adopted budget with actual data on a budgetary basis. Since accounting principles applied for purposes of developing data on a budgetary basis differ significantly from those used to present financial statements in conformity with generally accepted accounting principles (GAAP), a reconciliation of these differences is presented in Table RSI-1.

Reconciliation of Budgetary Basis to GAAP Basis

Table RSI-1

August 31, 2018 (Amounts in Thousands)

	General Fund	State Highway Fund
Excess of Revenues and Other Financing Sources Over Expenditures and Other Financing Uses – Actual Budgetary Basis	$ 11,169,079	$6,412,101
Basis of Accounting Differences:		
Receivables and Unearned Revenues	1,380,638	119,843
Payables	(570,845)	(94,293)
Perspective Differences:		
Beginning Cash Balances Reported as Other Financing Sources	(11,193,399)	(3,595,554)
Revenues and Other Financing Sources Not Budgeted	475,197	
Expenditures and Other Financing Uses Not Budgeted	(163,767)	(432,317)
Excess of Revenues and Other Financing Sources Over Expenditures and Other Financing Uses – GAAP Basis	$ 1,096,903	$2,409,780

The major reconciling items between the budgetary comparison schedule actual and the GAAP financial statements are:

- ***Basis of Accounting Differences***: Revenues and expenditures are reported on the cash basis of accounting in the budgetary comparison schedule but are reported on the modified accrual basis on the GAAP financial statements. Therefore, unearned revenues, receivables and payables are included as reconciling items.
- ***Perspective Differences:*** Certain revenues and expenditures, including debt service and the disproportionate share portion of the Federal Medical Assistance program are not budgeted by the Texas Legislature (Legislature). The activity for these programs is excluded from the budgetary comparison schedule.
- The beginning cash balances are included as other financing sources in the budgetary comparison schedule. The beginning fund balances are not included as financing sources on the GAAP financial statements.
- ***Entity Differences:*** Budgets are not established for sources from capital leases. These financing sources are not included in the budgetary comparison schedule.

Excess of Actual Budgetary Basis Expenditures over Final Budget

General fund - The $2 billion variance in health and human services is the result of increased expenditures made from the excess of federal revenues received over estimates by agencies in this particular function. The $18.9 million variance in teacher retirement benefits results from prior year contributions/allocations reappropriated in this fiscal year as stipulated by legislation.

Major special revenue fund – state highway fund - The $6,000 variance in public safety and corrections is the result of expenditures made from available beginning cash balance in the fund.

Basis of Budgeting

The state's budget is prepared on a cash basis. The Texas Constitution limits appropriation bills to two years. The Legislative Budget Board (LBB) is required by statute to adopt an estimated rate of growth for the next biennium and calculate a limit on the amount of state tax revenue, not dedicated by the Texas Constitu-

tion that is available for spending in the next biennium. If the Legislature, by adoption of a resolution approved by a record vote of a majority of the members of each house, finds that an emergency exists and identifies the nature of the emergency, the Legislature may provide appropriations in excess of the adopted limit. The Governor's Budget Office and LBB initiate the process by submitting budget requests to the Legislature. At final passage of the General Appropriations Act by the Legislature, it is sent to the Texas Comptroller of Public Accounts (Comptroller) for certification. If the Comptroller certifies that appropriated amounts are available in the affected funds, the bill is sent to the governor. If not certified, the Legislature may pass the bill with a four-fifths majority vote. The governor has the option of vetoing the total bill or specific line-item appropriations, but does not have the authority to reduce an item of appropriation. Upon approval by the governor, the bill becomes law and is the budget authority for state agencies to spend state funds. The Comptroller is responsible for controlling, accounting and reporting expenditures in accordance with the expenditure budgets.

Legal Level of Budgetary Control

The Texas Constitution requires the Comptroller to submit a *Biennial Revenue Estimate* to the Legislature prior to each regular session. This document contains an itemized estimate of beginning cash balances, anticipated revenues based on laws then in effect and estimated expenditures from prior appropriations. The Texas Constitution also requires the Comptroller to submit supplementary revenue estimates at any special session of the Legislature and at other necessary times to show probable changes.

The level of legal control for the budget is established at the strategy (line item) level by agency. For example, "Highway Patrol" and "Vehicle Inspection Program" are two of the strategies for the Texas Department of Public Safety. The legal level of budgetary control is defined as the level at which the governing body must approve any over-expenditure of appropriations or transfers of appropriated amounts. Agencies are authorized limited transfer authority between strategies, not to exceed 20 percent, by the General Appropriations Act. Transfers and expenditures are monitored against the original budget by the Comptroller's office to ensure the agency's authorized budget is not exceeded.

The level of legal control for all agencies is documented in the *Appropriation Summary Report*, which is available by request from the Comptroller's office. This separate document includes budget and actual data by appropriation line item for each state agency. State agencies cannot exceed approved appropriations. In certain emergency situations, the governor may authorize additional appropriations from deficiency and emergency appropriation reserves. Unexpended appropriations generally lapse 60 days after the fiscal year unless they are encumbered during the 60-day "lapse" period. Other appropriations referred to as "reappropriated unexpended balances" represent the continuation of a prior year's balances for completion of a program.

Schedules of Changes in Net Pension Liability and Related Ratios

For each of the fiscal years presented, the measurement date for the information on the schedules of changes in net pension liability and related ratios was the prior fiscal year-end.

The schedules of changes in net pension liability and related ratios for the state's Employees Retirement System of Texas Plan (ERS Plan), Law Enforcement and Custodial Officer Supplemental Retirement Plan (LECOS Plan) and Judicial Retirement System of Texas Plan Two (JRS2 Plan) are presented in tables RSI-2, RSI-3 and RSI-4, respectively:

Schedule of Changes in Net Pension Liability and Related Ratios***

Employees Retirement System of Texas Plan

Table RSI-2
(Amounts in Thousands)

	2018	2017	2016	2015
Total Pension Liability				
Service Cost	$ 1,457,263	$ 1,146,791	$ 1,231,203	$ 1,139,451
Interest on the Total Pension Liability	2,510,128	2,522,625	2,373,850	2,324,180
Benefit Changes	0	0	(87,835)	0
Difference between Expected and Actual Experience of the Total Pension Liability	115,632	133,557	(284,751)	(252,967)
Assumption Changes*	2,219,672	5,301,965	(3,429,167)	1,199,067
Benefit Payments and Refunds	(2,288,825)	(2,147,307)	(2,049,291)	(1,963,481)
Net Change in Total Pension Liability	4,013,870	6,957,631	(2,245,991)	2,446,250
Total Pension Liability – Beginning	44,222,557	37,264,926	39,510,917	37,064,667
Total Pension Liability – Ending	$ 48,236,427	$ 44,222,557	$ 37,264,926	$ 39,510,917
Plan Fiduciary Net Position				
Contributions – Employer	$ 700,078	$ 686,763	$ 500,395	$ 482,239
Contributions – Member	685,461	674,678	462,160	430,595
Pension Plan Net Investment Income	2,832,628	1,273,413	56,941	3,252,417
Benefit Payments and Refunds	(2,288,825)	(2,147,307)	(2,049,291)	(1,963,481)
Pension Plan Administrative Expense	(23,095)	(20,449)	(21,840)	(20,195)
Net Change in Plan Fiduciary Net Position	1,906,247	467,098	(1,051,635)	2,181,575
Plan Fiduciary Net Position – Beginning	24,465,580	23,998,482	25,050,117	22,868,542
Plan Fiduciary Net Position – Ending	$ 26,371,827	$ 24,465,580	$ 23,998,482	$ 25,050,117
Net Pension Liability – Beginning	19,756,977	13,266,444	14,460,800	14,196,125
Net Pension Liability – Ending	$ 21,864,600	$ 19,756,977	$ 13,266,444	$ 14,460,800
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	54.67%	55.32%	64.40%	63.40%
Covered Payroll**	$ 6,859,707	$ 6,742,143	$ 6,150,195	$ 5,955,461
Net Pension Liability as a Percentage of Covered Payroll	318.74%	293.04%	215.71%	242.82%

Notes to Schedule:

* The change in the total pension liability due to the change in the single discount rate and the impact of new assumption changes adopted by the Board effective Aug. 31, 2017 is included as an assumption change.

** The covered payroll is the payroll on which contributions to pension plan are based for the measurement period.

*** This schedule is intended to present 10 years of information. Currently only four years of information is available. Information for future years will be added when it becomes available.

Schedule of Changes in Net Pension Liability and Related Ratios***

Law Enforcement and Custodial Officer Supplemental Retirement Plan

Table RSI-3
(Amounts in Thousands)

	2018	2017	2016	2015
Total Pension Liability				
Service Cost	$ 99,390	$ 71,429	$ 57,459	$ 54,528
Interest on the Total Pension Liability	82,236	88,410	87,222	88,025
Difference between Expected and Actual Experience of the Total Pension Liability	(17,532)	(21,657)	(9,640)	(76,585)
Assumption Changes*	(144,398)	375,371	148,114	68,228
Benefit Payments and Refunds	(69,756)	(64,540)	(61,344)	(57,147)
Net Change in Total Pension Liability	(50,060)	449,013	221,811	77,049
Total Pension Liability – Beginning	2,213,802	1,764,789	1,542,978	1,465,929
Total Pension Liability – Ending	$ 2,163,742	$ 2,213,802	$ 1,764,789	$ 1,542,978
Plan Fiduciary Net Position				
Contributions – Employer	$ 26,583	$ 27,497	$ 26,728	$ 27,758
Contributions – Member	9,583	9,539	8,376	8,180
Pension Plan Net Investment Income	99,341	44,831	1,918	111,741
Benefit Payments and Refunds	(69,756)	(64,540)	(61,344)	(57,147)
Pension Plan Administrative Expense	(1,811)	(1,421)	(1,412)	(1,324)
Net Change in Plan Fiduciary Net Position	63,940	15,906	(25,734)	89,208
Plan Fiduciary Net Position – Beginning	860,049	844,143	869,877	780,669
Plan Fiduciary Net Position – Ending	$ 923,989	$ 860,049	$ 844,143	$ 869,877
Net Pension Liability – Beginning	1,353,753	920,646	673,101	685,260
Net Pension Liability – Ending	$ 1,239,753	$ 1,353,753	$ 920,646	$ 673,101
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	42.70%	38.85%	47.83%	56.38%
Covered Payroll**	$ 1,746,349	$ 1,725,880	$ 1,506,028	$ 1,496,013
Net Pension Liability as a Percentage of Covered Payroll	70.99%	78.44%	61.13%	44.99%

Notes to Schedule:

* The change in the total pension liability due to the change in the single discount rate and the impact of new assumption changes adopted by the Board effective Aug. 31, 2017 is included as an assumption change.

** The covered payroll is the payroll on which contributions to pension plan are based for the measurement period.

*** This schedule is intended to present 10 years of information. Currently only four years of information is available. Information for future years will be added when it becomes available.

Schedule of Changes in Net Pension Liability and Related Ratios***

Judicial Retirement System of Texas, Plan Two

Table RSI-4
(Amounts in Thousands)

	2018	2017	2016	2015
Total Pension Liability				
Service Cost	$ 20,420	$ 19,429	$ 16,244	$ 17,805
Interest on the Total Pension Liability	31,671	30,980	30,786	28,004
Difference between Expected and Actual Experience of the Total Pension Liability	5,091	(5,833)	(10,067)	(640)
Assumption Changes*	(56,699)	23,396	35,653	(25,924)
Benefit Payments and Refunds	(23,361)	(21,154)	(19,238)	(16,420)
Net Change in Total Pension Liability	(22,878)	46,818	53,378	2,825
Total Pension Liability – Beginning	486,482	439,664	386,286	383,461
Total Pension Liability – Ending	$ 463,604	$ 486,482	$ 439,664	$ 386,286
Plan Fiduciary Net Position				
Contributions – Employer	$ 12,495	$ 12,374	$ 12,457	$ 12,211
Contributions – Member	6,017	5,754	5,465	5,195
Pension Plan Net Investment Income	44,875	19,862	820	46,186
Benefit Payments and Refunds	(23,361)	(21,155)	(19,238)	(16,420)
Pension Plan Administrative Expense	(295)	(225)	(284)	(267)
Net Change in Plan Fiduciary Net Position	39,731	16,610	(780)	46,905
Plan Fiduciary Net Position – Beginning	381,120	364,510	365,290	318,385
Plan Fiduciary Net Position – Ending	$ 420,851	$ 381,120	$ 364,510	$ 365,290
Net Pension Liability – Beginning	105,362	75,154	20,996	65,076
Net Pension Liability – Ending	$ 42,753	$ 105,362	$ 75,154	$ 20,996
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	90.78%	78.34%	82.91%	94.56%
Covered Payroll**	$ 78,190	$ 78,261	$ 77,501	$ 77,441
Net Pension Liability as a Percentage of Covered Payroll	54.68%	134.63%	96.97%	27.11%

Notes to Schedule:

* The change in the total pension liability due to the change in the single discount rate and the impact of new assumption changes adopted by the Board effective Aug. 31, 2017 is included as an assumption change.

* The covered payroll is the payroll on which contributions to pension plan are based for the measurement period.

*** This schedule is intended to present 10 years of information. Currently only four years of information is available. Information for future years will be added when it becomes available.

Schedule of Changes in Total Pension Liability and Related Ratios

The measurement date for the information on the schedule of changes in total pension liability and related ratios was the prior fiscal year-end.

The schedule of changes in total pension liability and related ratios for the state's Judicial Retirement System Plan One (JRS1 Plan) is presented in table RSI-5.

Schedule of Changes in Total Pension Liability and Related Ratios***, ****

Judicial Retirement System of Texas, Plan One

Table RSI-5
(Amounts in Thousands)

	2018	2017
Total Pension Liability		
Service Cost	$ 378	$ 357
Interest on the Total Pension Liability	8,977	11,265
Difference between Expected and Actual Experience of the Total Pension Liability	(718)	5,488
Assumption Changes**	(35,858)	26,760
Benefit Payments and Refunds	(24,281)	(25,536)
Net Change in Total Pension Liability	(51,502)	18,334
Total Pension Liability – Beginning	328,044	309,710
Total Pension Liability – Ending	$ 276,542	$ 328,044
Covered Payroll*	$ 591	$ 577
Total Pension Liability as a Percentage of Covered Payroll	46,820.01%	56,891.02%

Notes to Schedule:

* The covered payroll is the actual annual payroll for the fiscal year as reported by ERS.

** The change in the total pension liability due to the change in the single discount rate is included as an assumption change. Assumption changes for FY 2017 include the impact of new assumptions adopted by the board effective Aug. 31, 2017.

*** There are no assets accumulated in a trust that meets the criteria in Paragraph 4 of GASB Statement No. 73 to pay related benefits.

**** This schedule is intended to present 10 years of information. Currently only two years of information is available. Information for future years will be added when it becomes available.

Schedules of Proportionate Share of Net Pension Liability

For each of the fiscal years presented, the measurement date for the information on the schedules of proportionate share of net pension liability was the prior fiscal year-end.

The schedules of proportionate share of the net pension liability for the state's Teacher Retirement System of Texas Plan (TRS Plan) for the state as an employer and as a non-employer contributing entity are presented in tables RSI-6 and RSI-7, respectively.

Schedule of Proportionate Share of Net Pension Liability**

Teacher Retirement System of Texas Plan

State as Employer
Table RSI-6
(Amounts in Thousands)

	2018	2017	2016	2015
State's proportion of the net pension liability	15.55%	14.86%	14.11%	16.97%
State's proportionate share of the net pension liability*	$ 4,974,134	$ 5,615,188	$ 4,989,195	$ 4,534,735
State's covered payroll	$ 6,551,021	$ 6,054,185	$ 5,426,660	$ 6,221,452
State's proportionate share of the net pension liability as a percentage of its covered payroll	75.93%	92.75%	91.94%	72.89%
Plan fiduciary net position as a percentage of the total pension liability	82.17%	78.00%	78.43%	83.25%

* The state's proportionate share of the net pension liability for the state as an employer consists of $1,255,734 reported in governmental activity and $3,718,400 reported in business-type activity.

** This schedule is intended to present 10 years of information. Currently only four years of information is available. Information for future years will be added when it becomes available.

Schedule of Proportionate Share of Net Pension Liability*

Teacher Retirement System of Texas Plan

State as Non-Employer Contributing Entity

Table RSI-7
(Amounts in Thousands)

	2018	2017	2016	2015
State's proportion of the net pension liability	51.82%	52.74%	53.75%	60.37%
State's proportionate share of the net pension liability	$ 16,568,177	$ 19,929,042	$ 18,998,983	$ 16,129,760
Plan fiduciary net position as a percentage of the total pension liability	82.17%	78.00%	78.43%	83.25%

* This schedule is intended to present 10 years of information. Currently only four years of information is available. Information for future years will be added when it becomes available.

The schedule of proportionate share of the net pension liability for the Texas Emergency Services Retirement System Plan (TESRS Plan) for the state as a non-employer contributing entity is presented in table RSI-8.

Schedule of Proportionate Share of Net Pension Liability*

Texas Emergency Services Retirement System Plan

State as Non-Employer Contributing Entity

Table RSI-8
(Amounts in Thousands)

	2018	2017	2016	2015
State's proportion of the net pension liability	32.75%	34.57%	34.66%	33.79%
State's proportionate share of the net pension liability	$ 7,860	$ 10,070	$ 9,252	$ 6,140
Plan fiduciary net position as a percentage of the total pension liability	81.4%	76.3%	76.9%	83.5%

* This schedule is intended to present 10 years of information. Currently only four years of information is available. Information for future years will be added when it becomes available.

Schedules of Employer Contributions Related to Pension

The information on the schedules of employer contributions was determined as of the end of the fiscal years presented.

The schedules of employer contributions comparing the actuarially determined contributions and the contributions recognized by the pension plan in relation to the actuarially determined contributions for the state's ERS, LECOS and JRS2 Plans are presented in tables RSI-9, RSI-10 and RSI-11, respectively.

Schedule of Employer Contributions[4]
Employees Retirement System of Texas Plan

Table RSI-9
(Amounts in Thousands)

	2018	2017	2016	2015	2014
Actuarially determined contributions	$ 933,915	$ 713,528	$ 679,806	$ 737,111	$ 727,892
Contributions in relation to the acturially determined contributions	697,189	700,078	686,763	500,395	482,239
Contribution deficiency (excess)	236,726	13,450	(6,957)	236,716	245,653
Covered payroll	6,811,926	6,859,707	6,742,143	6,150,195	5,955,461
Contributions as a percentage of covered payroll	10.23%	10.21%	10.19%	8.14%	8.10%

Notes to Schedule of Contributions

Valuation Date

Actuarially determined contribution rates are calculated as of Aug. 31 of the fiscal year.

A new set of assumptions were adopted for the Aug. 31, 2017 actuarial valuation and will be first reflected for the actuarially determined employer contribution (ADEC) determined for the fiscal year ending 2018.

Methods and Assumptions Used to Determine Contribution Rates

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percentage of Payroll, Open
Remaining Amortization Period	31 years
Asset Valuation Method	Marked to market as of Aug. 31, 2017. Future gains and losses each recognized over closed five-year period, with allowance of direct offsetting of deferrals by subsequent gains or losses.
Inflation	2.5%
Salary Increases	0% to 9.5%
Investment Rate of Return	7.50%
Retirement Age	Experience-based table of rates that are specific to the class of employee. Updated for the 2017 valuation pursuant to an experience study of the five-year period from Sept. 1, 2011 through Aug. 31, 2016.
Mortality	2017 State Retirees of Texas (SRT) mortality table. Generational mortality improvements in accordance with the ultimate rates from the scale most recently published by Retirement Plans Experience Committee of the Society of Actuaries ("Scale U-MP") and projected from the year 2017. Rates for male LECO members are set forward one year.

Other Information:

1. Actuarially determined contributions are adjusted for actual payroll and administrative expenses.
2. Members and employers contribute based on statutorily fixed rates.
3. The covered payroll is the payroll on which contributions to pension plan are based for the fiscal year being reported.
4. This schedule is intended to present 10 years of information. Currently only five years of information is available. Information for future years will be added when it becomes available.

Schedule of Employer Contributions[4]
Law Enforcement and Custodial Officer Supplemental Retirement Plan

Table RSI-10
(Amounts in Thousands)

	2018	2017	2016	2015	2014
Actuarially determined contributions	$ 53,560	$ 45,332	$ 43,167	$ 38,131	$ 40,205
Contributions in relation to the actuarially determined contributions	26,110	26,583	27,497	26,728	27,758
Contribution deficiency	27,450	18,749	15,670	11,403	12,447
Covered payroll	1,689,590	1,746,349	1,725,880	1,506,028	1,496,013
Contributions as a percentage of covered payroll	1.55%	1.52%	1.59%	1.77%	1.86%

Notes to Schedule of Contributions

Valuation Date

Actuarially determined contribution rates are calculated based on the actuarial valuation at the beginning of the fiscal year.

A new set of assumptions were adopted for the Aug. 31, 2017 actuarial valuation and will be first reflected for the ADEC determined for the fiscal year ending 2018.

Methods and Assumptions Used to Determine Contribution Rates

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percentage of Payroll, Open
Remaining Amortization Period	31 years
Asset Valuation Method	Marked to market as of Aug. 31, 2017. Future gains and losses each recognized over closed five-year period, with allowance of direct offsetting of deferrals by subsequent gains or losses.
Inflation	2.50%
Salary Increases	4.50% to 9.50%
Investment Rate of Return	7.50%
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition. Updated for the 2017 valuation pursuant to an experience study of the five-year period from Sept. 1, 2011 through Aug. 31, 2016.
Mortality	2017 State Retirees of Texas (SRT) mortality table. Generational mortality improvements in accordance with the ultimate rates from the scale most recently published by Retirement Plans Experience Committee of the Society of Actuaries ("Scale U-MP") and projected from the year 2017. Rates for male LECO members are set forward one year.

Other Information:

1. Actuarially determined contributions are adjusted for actual payroll and administrative expenses.
2. Members and employers contribute based on statutorily fixed rates.
3. The covered payroll is the payroll on which contributions to pension plan are based for the fiscal year being reported.
4. This schedule is intended to present 10 years of information. Currently only five years of information is available. Information for future years will be added when it becomes available.

Schedule of Employer Contributions[4]
Judicial Retirement System of Texas Plan Two

Table RSI-11
(Amounts in Thousands)

	2018	2017	2016	2015	2014
Actuarially determined contributions	$ 12,934	$ 12,444	$ 12,896	$ 13,107	$ 13,449
Contributions in relation to the actuarially determined contributions	12,560	12,494	12,374	12,457	12,211
Contribution deficiency	374	(50)	522	650	1,238
Covered payroll	78,772	78,190	78,261	77,501	77,441
Contributions as a percentage of covered payroll	15.94%	15.98%	15.81%	16.07%	15.77%

Notes to Schedule of Contributions

Valuation Date

Actuarially determined contribution rates are calculated based on the actuarial valuation at the beginning of the fiscal year.

A new set of assumptions were adopted for the Aug. 31, 2017 actuarial valuation and will be first reflected for the ADEC determined for the fiscal year ending 2018.

Methods and Assumptions Used to Determine Contribution Rates

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percentage of Payroll, Open
Remaining Amortization Period	31 years
Asset Valuation Method	Marked to market as of Aug. 31, 2017. Future gains and losses each recognized over closed five-year period, with allowance of direct offsetting of deferrals by subsequent gains or losses.
Inflation	2.50%
Salary Increases	3.00%
Investment Rate of Return	7.50%
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the 2017 valuation pursuant to an experience study of the five-year period from Sept. 1, 2011 through Aug. 31, 2016.
Mortality	2017 State Retirees of Texas (SRT) mortality table. Generational mortality improvements in accordance with the ultimate rates from the scale most recently published by Retirement Plans Experience Committee of the Society of Actuaries ("Scale U-MP") and projected from the year 2017.

Other Information:

1. Actuarially determined contributions are adjusted for actual payroll and administrative expenses.
2. Members and employers contribute based on statutorily fixed rates.
3. The covered payroll is the payroll on which contributions to pension plan are based for the fiscal year being reported.
4. This schedule is intended to present 10 years of information. Currently only five years of information is available. Information for future years will be added when it becomes available.

The schedules of employer contributions comparing the statutorily required contributions and the contributions recognized by the pension plan in relation to the statutorily required contributions for the state's TRS Plan for the state as an employer and as a non-employer contributing entity are presented in tables RSI-12 and RSI-13, respectively.

Schedule of Employer Contributions*

Teacher Retirement System of Texas Plan

State as Employer

Table RSI-12

(Amounts in Thousands)

	2018	2017	2016	2015	2014
Statutorily required contributions	$ 516,850	$ 495,500	$ 466,216	$ 417,698	$ 430,321
Contributions in relation to the statutorily required contributions	516,850	495,500	466,216	417,698	430,321
Contribution deficiency (excess)	0	0	0	0	0
Covered payroll	6,789,858	6,257,506	5,750,539	5,408,293	6,221,452
Contributions as a percentage of covered payroll	7.61%	7.92%	8.11%	7.72%	6.92%

* This schedule is intended to present 10 years of information. Currently only five years of information is available. Information for future years will be added when it becomes available.

Schedule of Employer Contributions*

Teacher Retirement System of Texas Plan

State as Non-Employer Contributing Entity

Table RSI-13

(Amounts in Thousands)

	2018	2017	2016	2015	2014
Statutorily required contributions	$ 1,715,785	$ 1,697,963	$ 1,675,631	$ 1,591,483	$ 1,530,624
Contributions in relation to the statutorily required contributions	1,715,785	1,697,963	1,675,631	1,591,483	1,530,624
Contribution deficiency (excess)	0	0	0	0	0

* This schedule is intended to present 10 years of information. Currently only five years of information is available. Information for future years will be added when it becomes available.

The schedule of contributions comparing the statutorily required contributions and the contributions recognized by the pension plan in relation to the statutorily required contributions for TESRS plan for the state as a non-employer contributing entity is presented in table RSI-14.

Schedule of Employer Contributions**

Texas Emergency Services Retirement System Plan

State as Non-Employer Contributing Entity

Table RSI-14

(Amounts in Thousands)

	2018*	2017	2016	2015	2014
Statutorily required contributions	$ 1,329	$ 1,584	$ 1,584	$ 1,637	$ 1,530
Contributions in relation to the statutorily required contributions	1,329	1,584	1,584	1,637	1,530
Contribution deficiency (excess)	0	0	0	0	0

* Texas Emergency Services Retirement System was appropriated $1,329 in each fiscal year of the 2018-19 biennium.

** This schedule is intended to present 10 years of information. Currently only five years of information is available. Information for future years will be added when it becomes available.

Schedules of Proportionate Share of Net OPEB Liability

For each of the fiscal years presented, the measurement date for the information on the schedules of proportionate share of net OPEB liability was the prior fiscal year-end.

The schedules of proportionate share of the net OPEB liability for the state's Employees Retirement System of Texas State Retiree Health Plan (SRHP) for the state as an employer and as a non-employer contributing entity is presented in table RSI-15.

Schedule of Proportionate Share of Net OPEB Liability*

Employees Retirement System of Texas, SRHP Plan

Table RSI-15
(Amounts in Thousands)

	2018
State as employer proportion of the net OPEB liability	89.45%
Proportionate Shares of the net OPEB liability	
State as employer	$ 30,477,926
State as non-employer contributing entity	1,637,246
Total net OPEB liability recognized by the state	$ 32,115,172
State's covered-employee payroll	$ 10,506,048
State's proportionate share of the net OPEB liability as a percentage of its covered-employee payroll	290.10%
Plan fiduciary net position as a percentage of the total OPEB liability	2.00%

Notes to Schedule

Actuarial Cost Method	Entry Age
Amortization Method	Level Percent of Payroll, Open
Remaining Amortization Period	30 Years
Actuarial Assumptions:	
Discount Rate	3.51%
Projected Salary Increase	2.5% to 9.5%, including inflation
Inflation Rate	2.50%
Healthcare Cost and Trend Rate	8.50% for FY 2019, decreasing 0.5% per year to 4.50% for FY 2027 and later years

* This schedule is intended to present 10 years of information. Currently only one year of information is available. Information for future years will be added when it becomes available.

The schedules of proportionate share of the net OPEB liability for the state's Teacher Retirement System of Texas Public School Retired Employees Group Insurance Program (TRS-Care) for the state as a non-employer contributing entity is presented in table RSI-16.

Schedule of Proportionate Share of Net OPEB Liability**

Teacher Retirement System of Texas, TRS-Care Plan

State as Non-Employer Contributing Entity

Table RSI-16
(Amounts in Thousands)

	2018
State's proportion of the net OPEB liability	58.44%
State's proportionate share of the net OPEB liability*	$ 25,413,891
Plan fiduciary net position as a percentage of the total OPEB liability	0.91%

Notes to Schedule

* Significant plan changes were adopted during FY 2017. Effective Jan. 1, 2018, only one health plan option will be offered and all retirees will be required to contribute monthly premiums for coverage. Assumption changes made for the Aug. 31, 2017 valuation include a change to the assumption regarding the phase-out of the Medicare Part D subsidies and a change to the discount rate from 2.98% as of Aug. 31, 2016 to 3.42% as of Aug. 31, 2017.

** This schedule is intended to present 10 years of information. Currently only one year of information is available. Information for future years will be added when it becomes available.

Schedule of Changes in Total OPEB Liability and Related Ratios

The measurement date for the information on the schedule of changes in total OPEB liability and related ratios is presented in each of the following tables for both plans.

The schedule of changes in total OPEB liability and related ratios for the state's Texas A&M University System Retiree Group Insurance Program (A&M Plan) and University of Texas System Employee Group Insurance Program (UT Plan) are presented in tables RSI-17 and RSI-18, respectively.

Schedule of Changes in Total OPEB Liability and Related Ratios*,***

Texas A&M University System, A&M Plan

Table RSI-17
(Amounts in Thousands)

	2018
Measurement Date	Sept. 1, 2017
Total OPEB Liability	
Service Cost	$ 248,902
Interest on the Total OPEB Liability	159,723
Changes of benefit terms	0
Difference between Expected and Actual Experience in the measurement of the Total OPEB Liability	(95,295)
Changes of assumptions or other inputs**	(1,128,792)
Benefit Payments (employer)	(73,981)
Other Changes	0
Net Change in Total OPEB Liability	(889,443)
Total OPEB Liability – Beginning	5,412,117
Total OPEB Liability – Ending	$ 4,522,674
Covered-Employee Payroll	$ 1,607,611
Total OPEB Liability as a Percentage of Covered-Employee Payroll	281.33%

Notes to Schedule:

* There are no assets accumulated in a trust that meets the criteria in Paragraph 4 of GASB Statement No. 75 to pay related benefits.

** Included Changes in Assumptions or Other Inputs: Changes of assumptions and other inputs reflect the changes in the discount rate each period. The following are the discount rates used in each period:
2018 - 3.51%
2017 - 2.84%
In fiscal year 2018, amounts reflect a 1-percentage-point decrease in the assumed rate of general inflation and adjustments to assumptions for expenses, assumed per capita health benefit costs and assumed trend for health benefit costs, retiree contributions and expenses.

*** This schedule is intended to present 10 years of information. Currently only one year of information is available. Information for future years will be added when it becomes available.

Schedule of Changes in Total OPEB Liability and Related Ratios*,***

University of Texas System, UT Plan

Table RSI-18
(Amounts in Thousands)

	2018
Measurement Date	Dec. 31, 2017
Total OPEB Liability	
Service Cost	$ 737,751
Interest on the Total OPEB Liability	552,440
Changes of benefit terms	
Difference between Expected and Actual Experience in the measurement of the Total OPEB Liability	(177,101)
Changes of assumptions or other inputs**	(1,012,995)
Benefit Payments (employer)	(177,742)
Other Changes	
Net Change in Total OPEB Liability	(77,647)
Total OPEB Liability – Beginning	13,965,942
Total OPEB Liability – Ending	$ 13,888,295
Covered-Employee Payroll	$ 5,820,998
Total OPEB Liability as a Percentage of Covered-Employee Payroll	238.59%

Notes to Schedule:

* There are no assets accumulated in a trust that meets the criteria in Paragraph 4 of GASB Statement No. 75 to pay related benefits.

** Included Changes in Assumptions or Other Inputs: Changes of assumptions and other inputs reflect the changes in the discount rate each period. The following are the discount rates used in each period:
FY 2018 - 3.44%
FY 2017 - 3.78%
In fiscal year 2018, amounts reflect a 1-percentage-point decrease in the assumed rate of general inflation and adjustments to assumptions for expenses, assumed per capita health benefit costs and assumed trend for health benefit costs, retiree contributions and expenses.

*** This schedule is intended to present 10 years of information. Currently only one year of information is available. Information for future years will be added when it becomes available.

Schedules of Employer Contributions Related to OPEB

The information on the schedules of employer contributions was determined as of the end of the fiscal years presented.

The schedule of employer contributions comparing the statutorily required contributions and the contributions recognized by the OPEB plan in relation to the statutorily required contributions for the SRHP plan for the state as an employer is presented in table RSI-19.

Schedule of Employer Contributions*

Employees Retirement System of Texas, SRHP Plan

State as Employer

Table RSI-19

(Amounts in Thousands)

	2018	2017
Statutorily required contributions	$ 288,822	$ 837,982
Contributions in relation to the statutorily required contributions	288,822	837,982
Contribution deficiency (excess)	0	0
Covered-employer payroll	10,776,055	10,506,048
Contributions as a percentage of covered-employer payroll	2.70%	7.98%

* This schedule is intended to present 10 years of information. Currently only two years of information is available. Information for future years will be added when it becomes available.

The schedule of employer contributions comparing the state as a non-employer contributing entity's proportionate share of the net OPEB liability and contributions recognized in the SRHP plan is presented in table RSI-20.

Schedule of Employer Contributions*

Employees Retirement System of Texas, SRHP Plan

State as Non-Employer Contributing Entity

Table RSI-20

(Amounts in Thousands)

	2018
State's proportionate share of the net OPEB liability	$1,637,246
Contributions recognized by the OPEB plan during the fiscal year	$ 45,016

* This schedule is intended to present 10 years of information. Currently only one year of information is available. Information for future years will be added when it becomes available.

The schedule of contributions comparing the statutorily required contributions and the contributions recognized by the OPEB plan in relation to the statutorily required contributions for TRS-Care plan for the state as a non-employer contributing entity is presented in table RSI-21.

Schedule of Employer Contributions*

Teacher Retirement System of Texas, TRS-Care Plan

State as Non-Employer Contributing Entity

Table RSI-21

(Amounts in Thousands)

	2018	2017
Statutorily required contributions	$ 790,189	$ 319,320
Contributions in relation to the statutorily required contributions	790,189	319,320
Contribution deficiency (excess)	0	0

* This schedule is intended to present 10 years of information. Currently only two years of information is available. Information for future years will be added when it becomes available.

Significant Factors Affecting the Comparability of Amounts Reported

Pension Plans

The state implemented GASB Statement No. 68, *Accounting and Financial Reporting for Pensions, an amendment of GASB Statement No. 27*, in fiscal 2015. The state implemented GASB Statement No. 82, *Pension Issues—an amendment of GASB Statements No. 67, No. 68, and No. 73* in fiscal 2017. Paragraph 7 of GASB Statement No. 82 is not applicable to the state. All pension schedules related to ERS, LECOS, JRS2, TRS, and TESRS Plans present information in accordance with the GASB Statement No. 68 and 82 standards. The state implemented GASB Statement No. 73, *Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68* in fiscal 2017. Pension schedule for JRS1 Plan presents information in accordance with GASB Statement No. 73.

A new set of assumptions were adopted for Aug. 31, 2017 actuarial valuations used to determine contributions rates; these changes include asset valuation methods, inflation, salary increase, investment rate of return, and tables related to retirement age and mortality which are included in RSI tables RSI-9 through RSI-11 related to ERS, LECOS, and JRS2 plans, respectively.

There have been no changes in the actuarial assumptions and methods since the prior valuation for TRS Plan. For the JRS1 Plan, membership continues to decrease as a result of new judicial officers participating in JRS2 Plan.

OPEB Plans

The state implemented GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* in fiscal 2018. The schedules of proportionate share of net OPEB liability, changes in total OPEB liability and employer contributions under GASB Statement No. 75 in this section are presented for implementation year only. Therefore, the state does not have any factors affecting the trend of amounts reported in these schedules. More detailed information on each OPEB plans' actuarial methods, assumptions, and benefit revisions adopted in implementation year may be obtained from Note 11.