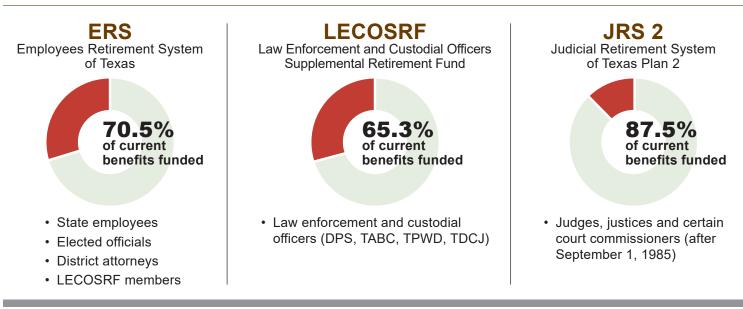


ACTUARIAL VALUATIONS Funding for State of Texas Pension Plans Administered by ERS

As of August 31, 2019



"The current financial outlook for ERS is very poor. It is important to understand that the currently scheduled contributions are not expected to accumulate sufficient assets in order to pay all of the currently scheduled benefits when due."

- GRS Consulting Actuaries

Plan Funding Status

- Based on current contributions and assumptions, all funds are projected to run out of money.
- Despite past reduced benefits for new hires and positive investment returns, the funding status of all three plans is declining. Additional contributions, benefit cost reductions or some combination of the two must occur.
- When pension funds deplete, the plans convert to pay-as-yougo status making annual benefit costs significantly more expensive for the state. At the time the fund runs out of money, the cost to the state for the ERS plan would be 4x more.

Actuarial Valuation Results as of August 31, 2019					
	ERS	LECOSRF	JRS 2		
Actuarial Accrued Liability	\$39.8 B	\$1.5 B	\$534.6 M		
Actuarial Value of Assets	\$28.1 B	\$968.1 M	\$467.8 M		
Unfunded Accrued Liability	\$11.7 B	\$514.5 M	\$66.8 M		
Funded Ratio	70.5%	65.3%	87.5%		
Funding Period (Years)	Never	Never	Never		
Projected Depletion Date	2075	2043	2076		

Road to Actuarial Soundness

- In May 2018, the ERS Board of Trustees approved the Pension Funding Priorities and Guidelines policy. The policy laid out a multi-level funding period goal to gradually achieve funding on sound actuarial principles:
 - 1. Avoid trust fund depletion,
 - 2. Meet current statutory standard to finance cost of benefits over 31 years, and
 - 3. Match funding period to the average years of service at retirement once a 31-year funding period is achieved and closed.
- Delays in addressing the unfunded liabilities will increase the cost of returning to actuarial soundness.

Breakdown of Contribution Funding Gap (% of payroll)				
	ERS	LECOSRF	JRS 2	
Normal Cost Base benefits	13.76%	2.08%	23.14%	
Unfunded Liability Plan Cost Pay off unfunded liability in 31 yrs	9.50%	1.83%	4.70%	
Actuarially Sound Contribution (ASC) Set by Texas Government Code 811.006 / 840.106	23.26%	3.91%	27.84%	
FY2020 Contributions State, agency and member rates	19.50%	1.77%*	25.05%	
Contribution Shortfall	(3.76%)	(2.14%)	(2.79%)	

* Includes court cost fees estimated to be \$17.1 million in FY2020 and to decrease as a percent of payroll moving forward.

Investments

- Investment returns are the largest funding component of retirement benefits and represent almost two-thirds of the ERS Trust's value.
- ERS lowered its assumed rate of return from 8% to 7.5% based on results of an asset allocation and experience study conducted in FY 2017. The Board of Trustees plans to review this assumption in the experience study in FY 2020.

ERS Investment Performance (period ending August 31, 2019)						
Period	30-Year	20-Year	10-Year	5-Year	3-Year	1-Year
Annualized Return (Net)	N/A	5.83%	8.09%	5.99%	8.15%	3.00%
Annualized Return (Gross)	7.76%	5.92%	8.20%	6.03%	8.19%	3.04%

Largest Contributing	
Agencies (% of active membership)	Active Cor
26%	Average Average
Texas Health & Human Services Commission	Average Average
Services Commission	Non-contr
	Non-contri
25%	Retirees a

25% Texas Department of Criminal Justice

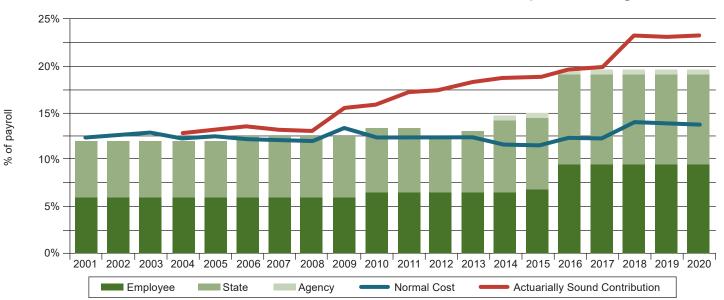
9% Texas Department of Transportation

Retirement Plan Demographics as of August 31, 2019				
Retrement Fian Demographic	ERS	LECOSRF	JRS 2	
Active Contributing Members	141,865	36,296	573	
Average Age	43.5	41.0	56.4	
Average Entry Age	35.1	33.2	47.9	
Average Years of Service	8.4	7.8	8.5	
Average Annual Salary	\$49,220	\$45,305	\$142,600**	
Non-contributing Members – Vested	15,425	111	16	
Non-contributing Members – Non-vested	110,510	22,096	171	
Retirees and Beneficiaries	115,155	13,981	472	
Service Retirements	103,934	13,111	424	
Average Age*	69.1	62.8	69.8	
Average Age at Retirement*	58.3	54.0	63.2	
Average Years of Service*	22.1	23.6	15.2	
Disability Retirements	2,237	91	<10	
Beneficiaries	8,984	779	47	
Average Annual Annuity	\$20,645	\$5,492	\$66,254	

* Based on service retirements only

** Salary does not reflect changes from legislation passed during 86th Legislative Session

State contributions to the ERS pension plan represent less than 1% of the state's total budget.



Contributions have increased over time but have not met plan funding needs