

# Texas Pension Review Board

**House Pensions Committee**  
**October 12, 2018**

# PRB Mission and Current Activities

- PRB mission: to provide the State of Texas with the necessary information and recommendations to help ensure that Texas public retirement systems are properly managed and actuarially sound
- Service population consists of the members, administrators and trustees of **346** individual public retirement plans, state and local government officials, and the public
- Current PRB activities to help improve actuarial soundness of plans:
  - **online pension dashboard** to provide accessible current, historical, and comparative data on Texas defined benefit plans
  - **interim studies** to develop legislative recommendations on two topics: Funding Policies for Fixed-Rate Pension Plans and Asset Pooling for Smaller Pension Plans
  - **intensive actuarial reviews** of certain retirement systems facing potential risks that threaten long-term funding stability

# Intensive Actuarial Review Process

- PRB statutory duty to conduct intensive studies of potential or existing problems threatening the actuarial soundness of public retirement systems (Gov't Code 801.202(2))
- Adopted criteria for selecting systems for review
- Established a review process which includes:
  - drafts sent to the system and its sponsor with invitation for written response
  - written responses included in final report
  - request for system and sponsor to attend committee meeting to discuss review
- Conducted 7 in-depth reviews focusing on assessment of major risks
- Intensive review results (and updates) will be provided to the Legislature in PRB Biennial Report in Nov. 2018

# 2018 Intensive Actuarial Reviews

January	April	October
Galveston Police Greenville Fire	Beaumont Fire Marshall Fire	Longview Fire Orange Fire Irving Fire

## ■ Recommendations:

- ❑ Adopt a funding policy that requires payment of an actuarially determined contribution, or at minimum, that fully funds the plan over a finite period of 30 years or less
- ❑ Adopt a formal risk/cost-sharing framework with “guardrails” or trigger mechanisms that reduce uncertainty and guide stakeholders in how benefit and contribution levels will be modified under different economic conditions
- ❑ Closely monitor investment performance including expenses and evaluate asset allocation decisions
- ❑ Conduct an in-depth asset-liability study of potential risks associated with existing asset mix and liabilities they support. Perform scenario testing of large DROP/PROP withdrawals coupled with potential adverse investment experience
- ❑ Regularly review actuarial assumptions against experience, making necessary changes

# PRB Pension Funding Guidelines

(effective 6/30/17)

1. The funding of a pension plan should reflect all plan obligations and assets.
2. The allocation of the normal cost portion of the contributions should be level or declining as a percentage of payroll over all generations of taxpayers, and should be calculated under applicable actuarial standards.
3. Funding of the unfunded actuarial accrued liability should be level or declining as a percentage of payroll over the amortization period.
4. Actual contributions made to the plan should be sufficient to cover the normal cost and to amortize the unfunded actuarial accrued liability over as brief a period as possible, but **not to exceed 30 years, with 10-25 years being a more preferable target range.**\* For plans that use multiple amortization layers, the weighted average of all amortization period should not exceed 30 years.\* Benefit increases should not be adopted if all plan changes being considered cause a material increase in the amortization period and if the resulting amortization period **exceeds 25 years.**
5. The choice of assumptions should be reasonable, and should comply with applicable actuarial standards.
6. Retirement systems should monitor, review, and report the impact of actual plan experience on actuarial assumptions at least once every five years.

\*Plans with amortization periods that exceed 30 years as of 6/30/2017 should seek to reduce their amortization period to 30 years or less as soon as practicable, but not later than 6/30/2025.

# Assets - Liabilities Trends

In the last seven years, the difference between the AVA and AAL has steadily increased, from \$41 billion in 2011 to \$69.5 billion as of October 2018. The average funded ratio was highest in 2011, and has slowly decreased through 2018.

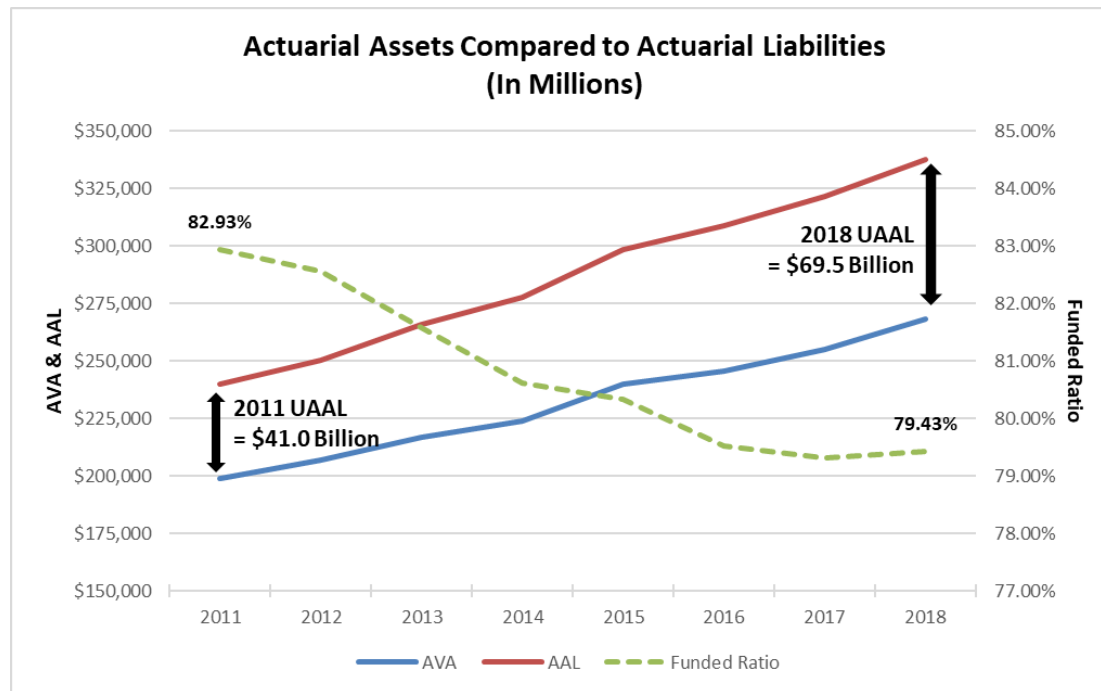
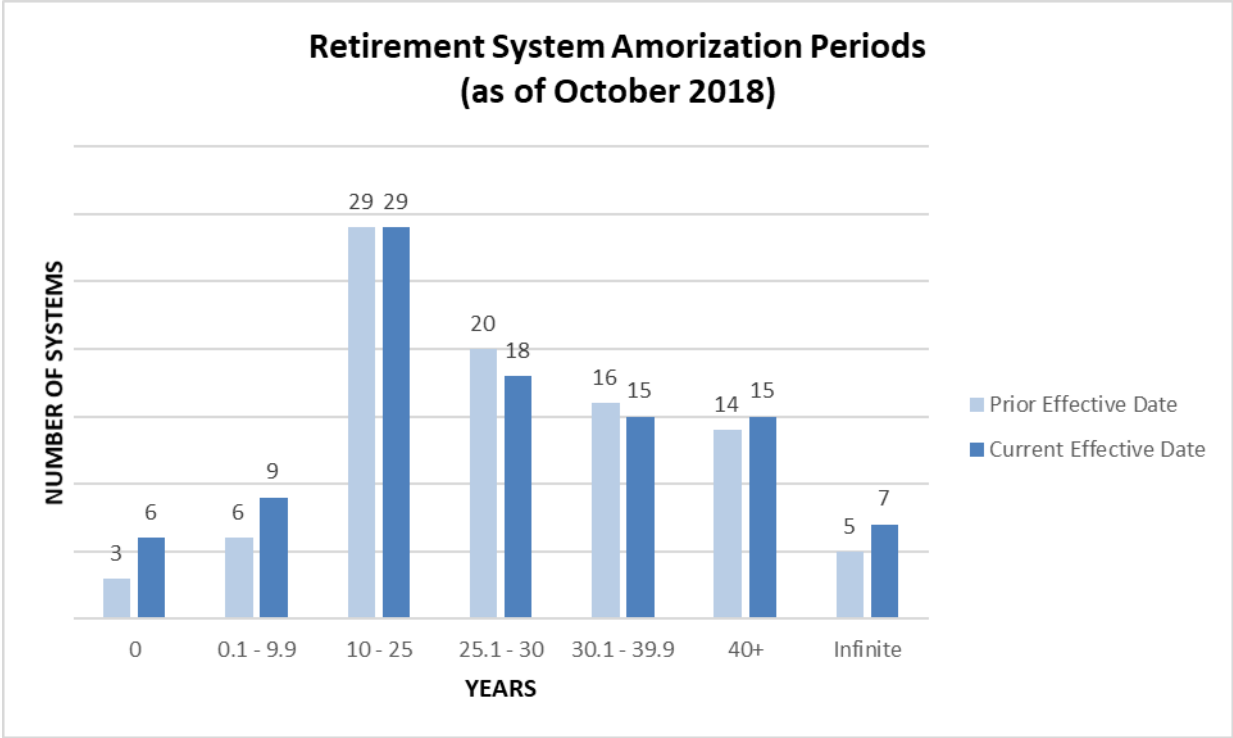


Chart utilizes information received by the PRB current through the dates listed.

# Amortization Periods

The PRB *Pension Funding Guidelines* establish a maximum amortization period of not more than **30 years** with a preferred target range of **10 to 25** years.

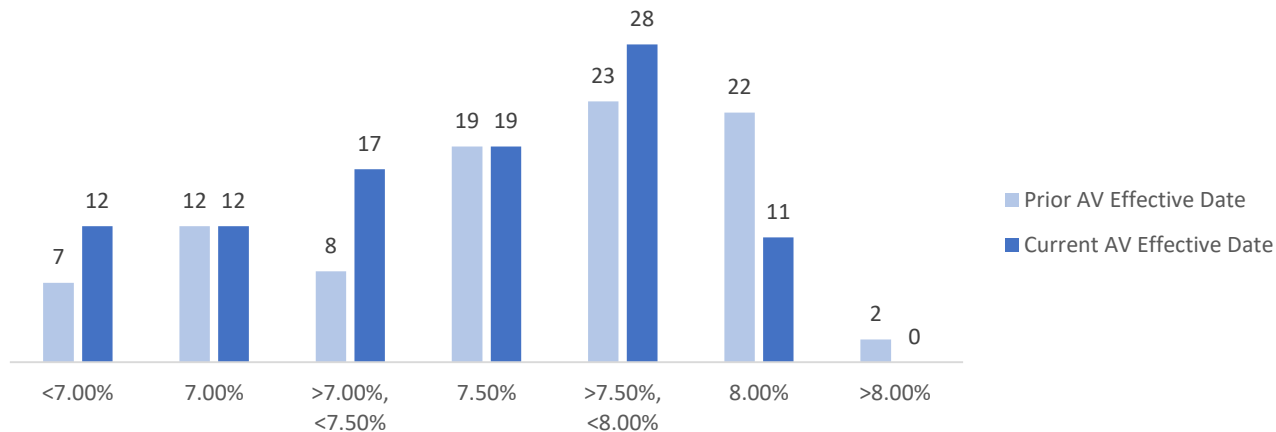


# Actuarial Assumptions

## Investment Return Assumption Trends

- The average investment return assumption for Texas systems is currently **7.40%**. The national average is **7.36%** (NASRA, February 2018).
- In response to projected market conditions and actual plan experience, retirement systems across the country, including Texas, have reduced return assumptions in recent years. This trend is expected to continue.

Texas Plans' Investment Return Assumptions  
as of October 2018





# Actuarial Assumptions

## Impact of Investment Return Assumption

- Has an **inverse correlation** with the liability and expected contribution requirements of a plan
- A higher return assumption leads to a lower liability calculation and vice versa. Therefore, reducing the return assumption leads to an increase in the unfunded liability of a plan
- **Lowering the return assumption** results in a **higher contribution requirement**
- If a retirement plan receives the increased contribution, its actuarial soundness should not be affected in the long term



# Average Actual Investment Returns

Average Returns by Plan Type				
Plan Type	1-Year Net	3-Year Net	10-Year Net	Long-Term Net*
Statewide	12.61%	5.94%	5.74%	8.18%
Municipal	12.76%	5.34%	4.78%	8.14%
Local Fire Fighter	13.16%	5.24%	4.71%	6.56%
Special District/Supplemental	12.31%	6.13%	5.41%	6.70%
All	12.80%	5.57%	5.00%	7.06%

*According to the most recent fiscal year-end Investment Returns and Assumptions Report.*

*\*Long-term return is 30 years or longest term available between 11-30 years that plans reported to the PRB.*

# Funding Soundness Restoration Plan

- **15 systems have submitted FSRPs.** Of those, two systems have achieved their goal and are below 40 years
- **Three of the 15** systems with submitted FSRPs are in the process of developing a **revised** FSRP as these systems did not meet their initial FSRP. The remaining 10 are currently working towards 40 years
- One system is subject to the requirement but has not yet submitted its FSRP
- **Six systems will be subject** to the FSRP requirement if their next valuation shows an amortization period greater than 40 years

## H.B. 3310 by Paul/Taylor (84<sup>th</sup>R)

- If a retirement system receives several consecutive valuations showing its **amortization period exceeds 40 years**, the system's board and sponsoring entity must jointly formulate an FSRP and submit the plan to the PRB within 6 months following the trigger of the requirement.
- The FSRP must reduce the amortization period to 40 within **10 years**. Systems must report **updates** to PRB at least **every two years**.



# Minimum Educational Training Program

- **PRB Online Courses:** Actuarial Matters, Benefits Administration, Investments, Governance, Fiduciary Matters, Ethics, Risk Management
- Available at: <http://www.prb.state.tx.us/resource-center/trustees-administrators/educational-training-program/>
- Login: enter office and name. No password required

[www.prb.state.tx.us](http://www.prb.state.tx.us)

512-463-1736

# Houston Systems (SB 2190) – Highlights

Houston Firefighters'	Houston Police Officers	Houston Municipal Employees
<ul style="list-style-type: none"> <li>▪ Increased employee contributions from 9% to 10.5% and introduced a <b>corridor</b> mechanism to determine employer contributions.</li> <li>▪ Made prospective changes to benefit formula for current members, created a second tier for new hires that modified the following: final average salary calculation, retirement eligibility, benefit calculation, and termination benefit.</li> <li>▪ Three-year COLA freeze for members under 70 years of age, then COLA modified to be based on 5 year smoothed return minus 4.75%, min 0% max 4%, beginning at 55.</li> <li>▪ Modified DROP. Interest credit modified, no COLAs or member contributions credited to DROP. No DROP for new hires.</li> <li>▪ No new funds may be added to PROP accounts.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increased employee contributions from 9% and 10.2% to 10.5% for all members and introduced a <b>corridor</b> mechanism to determine employer contributions.</li> <li>▪ Changed retirement eligibility to Rule of 70 for members sworn in after 10/9/04.</li> <li>▪ COLA modified to be the 5 year smoothed return minus 5%, min 0% max 4%. Also, three-year COLA freeze for members under 70 years of age.</li> <li>▪ Modified DROP. No DROP entry after June 30, 2027. No COLAs credited to accounts after 7/1/2017, interest credit is 65% of the 5-year compounded average investment return, min 2.5%. DROP participation limited to 20 years, no recalculation of annuity at DROP exit.</li> <li>▪ No new funds may be added to PROP accounts.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increased employee contributions (below) and introduced a <b>corridor</b> mechanism to determine employer contributions .</li> <li>▪ Group A: From 5% to 7% for FYE 2018; 8% thereafter</li> <li>□ Group B: From 0% to 2% for FYE 2018; 4% thereafter</li> <li>□ Group D: From 0% to 3% (2% service benefit; 1% for cash balance benefit</li> <li>▪ Created cash balance benefit for Group D participants equal to 1% employee contributions credited with DROP interest crediting rate.</li> <li>▪ COLA equal to 50% of the rolling 5 year net investment return minus 2.00% less than the assumed rate of return (currently 5.00%), not less than 0.00% or greater than 2.00%.</li> <li>▪ Modified DROP (Groups A and B). Interest is based on rolling 5 year net investment return; COLAs credited on or after 62 years of age.</li> </ul>

# Houston Systems (SB 2190) – Corridor

- The bill established a unique funding policy that establishes a "target" contribution rate (or corridor midpoint) for the City, developed a minimum and maximum corridor around the City's target contribution rate (equal to +/- 5% of the projected midpoint), and defined steps to be taken should the annual calculated contribution move outside the corridor.
- The corridor was established in the initial **risk sharing valuation study (RSVS)**, and will not change.
- Separate annual RSVSs are prepared by the systems and City to establish the contribution rates.
- If the City and the systems' estimated contribution rates differ by more than 2%, their actuaries must reconcile the rates until the difference falls below 2%. If it cannot be reconciled, the arithmetic average will be used. If there is no difference, the systems' contribution rates will be used.

## PRB Review of RSVS

- After completion of the annual RSVS, the system and City jointly submit a copy to the PRB for a determination that the RSVSs comply with statute. If not, the PRB shall notify the governor, lieutenant governor, the speaker of the house of representatives, and legislative committees with principal jurisdiction over pension issues.

# Houston Systems (SB 2190) – Additional Items

## Additional Reporting Requirements

- The bill requires the three systems to conduct actuarial experience studies at least every 4 years, with the first study adopted as follows:
  - ❑ HFRRF by September 30, 2020
  - ❑ HPOPS by September 30, 2022
  - ❑ HMEPS by September 30, 2021.
- The systems must perform an audit of investments at least once every 3 years.

## Alternative Retirement Plans

- The three retirement systems' boards and the City **may** enter into a written agreement to offer an alternative retirement plan or plans, including a cash balance retirement plan, if both parties consider it appropriate.
- The respective boards **are required to** close the existing plan to new entrants and establish a separate cash balance plan for new hires under the following circumstances:
  - ❑ For HFRRF and HPOPS, if the plan's funded ratio falls below 65% at any time after June 30, 2021
  - ❑ For HMEPS, if the plan's funded ratio falls below 60% at any time after June 30, 2027

# Houston Systems (SB 2190) – Impact Houston Firefighters’

<b>HFRRF</b>	<b>Prior to SB 2190*</b>	<b>After SB 2190*</b>	<b>2017 RSVS</b>
Discount Rate	7.00%	7.00%	7.00%
Accrued Actuarial Liability (AAL)	\$5,189,396,000	\$4,551,412,000	\$4,827,721,000
Actuarial Value of Assets (AVA)	\$4,089,047,000	\$3,729,670,000	\$3,883,807,000
Unfunded Accrued Actuarial Liability (UAAL) (AAL - AVA)	\$1,100,349,000	\$821,742,000	\$943,914,000
Funded Ratio	78.80%	81.95%	80.45%
Total Employer Contribution	52.20%	30.60%	32.99%

\*Prepared by Conduent at the Request of HFRRF



# Houston Systems (SB 2190) – Impact

## Houston Police Officers

HPOPS	Prior to SB 2190	After SB 2190	2017 RSVS
Discount Rate	7.00%	7.00%	7.00%
Accrued Actuarial Liability (AAL)	\$6,894,274,000	\$6,081,391,000	\$6,218,293,000
Actuarial Value of Assets (AVA)	\$4,758,079,000	\$4,758,079,000	\$4,868,614,000
Unfunded Accrued Actuarial Liability (UAAL) (AAL - AVA)	\$2,136,195,000	\$1,323,312,000	\$1,349,679,000
Funded Ratio	69.01%	78.24%	78.30%
Total Employer Contribution	52.96%	31.77%	31.85%

# Houston Systems (SB 2190) – Impact Houston Municipal Employees

HMEPS	Prior to SB 2190	After SB 2190	2017 RSVS
Discount Rate	7.00%	7.00%	7.00%
Accrued Actuarial Liability (AAL)	\$5,509,951,000	\$4,734,999,000	\$4,866,031,000
Actuarial Value of Assets (AVA)	\$2,400,023,000	\$2,625,896,000	\$2,742,539,000
Unfunded Accrued Actuarial Liability (UAAL) (AAL-AVA)	\$3,109,928,000	\$2,109,103,000	\$2,123,492,000
Funded Ratio	43.56%	55.46%	56.36%
Total Employer Contribution	39.22%	27.84%	29.00%