FUNDING POLICY

The Board of Trustees of the Houston Firefighters’ Relief and Retirement Fund (“HFRRF”) hereby adopts the statutory funding policy found in Tex. Rev. Civ. Statutes Art. 6243e.2(1), §1, §13 - §13H, and attached hereto as Exhibit A, as HFRRF’s written funding policy solely for the purposes of Tex. Gov’t Code 802.2011.¹

December 17, 2019
Date of Adoption

¹ The Board’s adoption of this funding policy does not, in any way, waive its arguments, objections, or litigation concerning the constitutionality of the Act of May 24, 2017, Texas 85th Leg., R.S., S.B. 2190
EXHIBIT A

Sec. 1. Definitions.

In this article:

(1-a) "Actuarial data" includes:

(A) the census data, assumption tables, disclosure of methods, and financial information that are routinely used by the fund actuary for the fund's valuation studies or an actuarial experience study under Section 13D of this article; and

(B) other data that is reasonably necessary to implement Sections 13A through 13F of this article.

(1-b) "Actuarial experience study" has the meaning assigned by Section 802.1014, Government Code.

(1-c) "Amortization period" means the time period necessary to fully pay a liability layer.

(1-d) "Amortization rate" means the sum of the scheduled amortization payments for a given fiscal year for the current liability layers divided by the projected pensionable payroll for that fiscal year.

(1-e) "Assumed rate of return" means the assumed market rate of return on fund assets, which is seven percent per annum unless adjusted as provided by this article.

(1-f) "Average monthly salary" means, if the member has participated in the fund for:

(A) three or more years, the total salary received by a member as a firefighter over the member's:

(i) highest 78 biweekly pay periods for a member hired before the year 2017 effective date, including a member who was hired before the year 2017 effective date and who involuntarily separated from service but was retroactively reinstated in accordance with an arbitration, civil service, or court ruling; or

(ii) last 78 biweekly pay periods ending before the earlier of the date the member terminates employment with the fire department, divided by 36, or the member began participation in the DROP, divided by 36; or

(B) fewer than three years, the total salary paid to the member for the periods the member participated in the fund divided by the number of months the member has participated in the fund.

If a member is not paid on the basis of biweekly pay periods, "average monthly salary" is determined on the basis of the number of pay periods under the payroll practices of the
municipality sponsoring the fund that most closely correspond to 78 biweekly pay periods.

(1-g) "Beneficiary adult child" means a child of a member by birth or adoption who:
   (A) is not an eligible child; and
   (B) is designated a beneficiary of a member's DROP account by valid designation under Section 5(j-1).

(2) "Board" or "board of trustees" means the board of trustees of a firefighters' relief and retirement fund established under this article.

(3) "Code" means the federal Internal Revenue Code of 1986, as amended.

(3-a) "Confidentiality agreement" means a letter agreement sent from the municipal actuary or an independent actuary in which the municipal actuary or the independent actuary, as applicable, agrees to comply with the confidentiality provisions of this article.

(3-b) "Corridor" means the range of municipal contribution rates that are:
   (A) equal to or greater than the minimum contribution rate; and
   (B) equal to or less than the maximum contribution rate.

(3-c) "Corridor margin" means five percentage points.

(3-d) "Corridor midpoint" means the projected municipal contribution rate specified for each fiscal year for 31 years in the initial risk sharing valuation study under Section 13C of this article, and as may be adjusted under Section 13E or 13F of this article, and in each case rounded to the nearest hundredths decimal place.

(4) "Deferred retiree" means a member who is eligible for a benefit under Section 8(a) of this article.

(5) "Disabled child" means any individual who is the child of a member by birth or adoption and who is totally disabled as a result of a physical or mental illness or injury, including retardation, at the time the member dies or who becomes so disabled before reaching 18 years of age. The term includes a child the board determines is unable to pursue any gainful employment.

(6) "DROP" means the deferred retirement option plan under Section 5 of this article.

(7) "DROP account" means the notional account established to reflect the credits, contributions, and earnings of a member who has made a DROP election in accordance with Section 5 of this article.

(8) "Eligible child" means a child of a member by birth or adoption who is unmarried and under 18 years of age, a disabled child, or under 23 years of age, unmarried, and a full-time student enrolled in an accredited college or university, but only if the member executes an election
permitting the child to be treated as an eligible child in accordance with procedures established by the board or if the member does not have an eligible spouse.

(9) "Eligible parent" means a parent of a member, by birth or by adoption while the member was a minor, who proves to the satisfaction of the board that the parent was a dependent of the member immediately before the member's death.

(10) "Eligible spouse" means:

(A) in the case of a member who dies after June 30, 1998, a spouse to whom the member was married at the time of the member's death; or

(B) in the case of a member who dies before July 1, 1998, a spouse to whom the member was married at the time the member's benefit under this article is scheduled to begin and at the time of the member's death.

(10-a) "Employer normal cost rate" means the normal cost rate minus the member contribution rate.

(10-b) "Estimated municipal contribution rate" means the municipal contribution rate estimated in a final risk sharing valuation study under Section 13B or 13C of this article, as applicable, as required by Section 13B(a)(5) of this article.

(11) "Firefighter" means a full-time, fully paid, active, classified member of a regularly organized fire department of an incorporated municipality with a fund established under this article, including a member who has made a DROP election, but is otherwise described in this definition.

(11-a) "Fiscal year," except as provided by Section 1B of this article, means a fiscal year beginning on July 1 and ending on June 30.

(12) "Fund" means a firefighters' relief and retirement fund established under this article.

(12-a) "Funded ratio" means the ratio of the fund's actuarial value of assets divided by the fund's actuarial accrued liability.

(12-b) "Legacy liability" means the unfunded actuarial accrued liability:

(A) for the fiscal year ending June 30, 2016, reduced to reflect:

(i) changes to benefits or contributions under this article that took effect on the year 2017 effective date; and

(ii) payments by the municipality and earnings at the assumed rate of return allocated to the legacy liability from July 1, 2016, to July 1, 2017, excluding July 1, 2017; and

(B) for each subsequent fiscal year:
(i) reduced by the contributions for that year allocated to the amortization of the legacy liability; and

(ii) adjusted by the assumed rate of return.

(12-c) "Level percent of payroll method" means the amortization method that defines the amount of the liability layer recognized each fiscal year as a level percent of pensionable payroll until the amount of the liability layer remaining is reduced to zero.

(12-d) "Liability gain layer" means a liability layer that decreases the unfunded actuarial accrued liability.

(12-e) "Liability layer" means the legacy liability established in the initial risk sharing valuation study under Section 13C of this article and the unanticipated change as established in each subsequent risk sharing valuation study prepared under Section 13B of this article.

(12-f) "Liability loss layer" means a liability layer that increases the unfunded actuarial accrued liability. For purposes of this article, the legacy liability is a liability loss layer.

(12-g) "Maximum contribution rate" means the rate equal to the corridor midpoint plus the corridor margin.

(13) "Member" means a firefighter or former firefighter who has satisfied the eligibility requirements under Section 13 of this article and who has not yet received a distribution of the entire benefit to which the person is entitled under this article.

(13-a) "Minimum contribution rate" means the rate equal to the corridor midpoint minus the corridor margin.

(13-b) "Municipality" means a municipality in this state having a population of more than 2 million.

(13-c) "Municipal contribution rate" means a percent of pensionable payroll that is the sum of the employer normal cost rate and the amortization rate for liability layers, except as determined otherwise under the express provisions of Sections 13E and 13F of this article.

(13-d) "Normal cost rate" means the salary weighted average of the individual normal cost rates determined for the current active population plus an allowance for projected administrative expenses. The allowance for projected administrative expenses equals the administrative expenses divided by the pensionable payroll for the previous fiscal year, provided the administrative allowance may not exceed 1.25 percent of the pensionable payroll for the current fiscal year unless agreed to by the municipality.

(13-e) "Normal retirement age" means:

(A) for a member, including a member who was hired before the year 2017 effective date and who involuntarily separated from service but has been retroactively reinstated in accordance with an arbitration, civil service, or court ruling, hired before the year 2017 effective date, the age at which the member attains 20 years of service; or
(B) except as provided by Paragraph (A) of this subdivision, for a member hired or rehired on or after the year 2017 effective date, the age at which the sum of the member's age, in years, and the member's years of participation in the fund equals at least 70.

(14) "Off-duty disability" means a physical or mental disability that:

(A) is likely to be permanent; and

(B) results from a cause other than a bodily injury received in, or illness caused by, the performance of a member's duties as a firefighter.

(15) "On-duty disability" means a physical or mental disability that:

(A) is likely to be permanent; and

(B) results from a bodily injury received in, or illness caused by, the performance of the member's duties as a firefighter.

(15-a) "Payoff year" means the year a liability layer is fully amortized under the amortization period. A payoff year may not be extended or accelerated for a period that is less than one month.

(15-b) "Pensionable payroll" means the aggregate salary of all the firefighters on active service, including all firefighters participating in an alternative retirement plan established under Section 1C of this article, in an applicable fiscal year.

(15-c) "Price inflation assumption" means:

(A) the most recent headline consumer price index 10-year forecast published in the Federal Reserve Bank of Philadelphia Survey of Professional Forecasters; or

(B) if the forecast described by Paragraph (A) of this subdivision is not available, another standard as determined by mutual agreement between the municipality and the board.

(15-d) "Projected pensionable payroll" means the estimated pensionable payroll for the fiscal year beginning 12 months after the date of the risk sharing valuation study prepared under Section 13B of this article at the time of calculation by:

(A) projecting the prior fiscal year's pensionable payroll forward two years using the current payroll growth rate assumptions; and

(B) adjusting, if necessary, for changes in population or other known factors, provided those factors would have a material impact on the calculation, as determined by the board.

(15-e) "PROP" means the post-retirement option plan under Section 5A of this article.

(15-f) "PROP account" means the notional account established to reflect the credits and contributions of a member or surviving spouse who made a PROP election in accordance with Section 5A of this article before the year 2017 effective date.
(16) "Salary" means wages as defined by Section 3401(a) of the code, plus any amount not includable in gross income under Section 104(a)(1), Section 125, Section 132(f), Section 402(g)(2), Section 457, or Section 414(h)(2) of the code, except that with respect to amounts earned on or after the year 2017 effective date, salary excludes overtime pay received by a firefighter or the amount by which the salary earned by a firefighter on the basis of the firefighter's appointed position exceeds the salary of the firefighter's highest tested rank.

(16-a) "Third quarter line rate" means the corridor midpoint plus 2.5 percentage points.

(16-b) "Ultimate entry age normal" means an actuarial cost method under which a calculation is made to determine the average uniform and constant percentage rate of contributions that, if applied to the compensation of each member during the entire period of the member's anticipated covered service, would be required to meet the cost of all benefits payable on the member's behalf based on the benefits provisions for newly hired employees. For purposes of this definition, the actuarial accrued liability for each member is the difference between the member's present value of future benefits based on the tier of benefits that apply to the member and the member's present value of future normal costs determined using the normal cost rate.

(16-c) "Unfunded actuarial accrued liability" means the difference between the actuarial accrued liability and the actuarial value of assets. For purposes of this definition:

(A) "actuarial accrued liability" means the portion of the actuarial present value of projected benefits attributed to past periods of member service based on the cost method used in the risk sharing valuation study prepared under Section 13B or 13C of this article, as applicable; and

(B) "actuarial value of assets" means the value of fund investments as calculated using the asset smoothing method used in the risk sharing valuation study prepared under Section 13B or 13C of this article, as applicable.

(16-d) "Unanticipated change" means, with respect to the unfunded actuarial accrued liability in each subsequent risk sharing valuation study prepared under Section 13B of this article, the difference between:

(A) the remaining balance of all then-existing liability layers as of the date of the risk sharing valuation study; and

(B) the actual unfunded actuarial accrued liability as of the date of the risk sharing valuation study.

(16-e) "Unused leave pay" means the accrued value of unused leave time payable to an employee after separation from service in accordance with applicable law and agreements.

(16-f) "Year 2017 effective date" means the date on which S.B. No. 2190, Acts of the 85th Legislature, Regular Session, 2017, took effect.
(17) "Years of participation" means the number of years that a member has participated in the fund by making the contributions required by this article, as determined under rules established by the board.

Sec. 13. Membership and member contributions.

(a) Each person who becomes a firefighter before age 36 becomes a member of the fund if the person's application for membership is accepted by the board. In accepting employment as a firefighter, and on becoming a member of the fund, a firefighter agrees to make contributions required under this article of members of the fund who are in active service and is entitled to participate in the benefits of membership in the fund as provided by this article.

(b) At the time that physical examinations are administered on behalf of the municipality, each applicant must be provided written notice that a copy of the results of the examination will be forwarded to the board for the purpose of determining whether the applicant has a preexisting condition that would be relevant to any determination under Section 6 of this article. Not later than the 10th day after the date of a physical examination performed on an applicant for a beginning position in the fire department as required by Section 143.022, Local Government Code, the municipality shall provide to the board a copy of all documents resulting from the physical examination. The board may require additional physical examinations if necessary in determining the presence or absence of any preexisting condition. The fund shall pay the cost of any additional physical examination the board requires. The applicant's membership in the fund is effective on acceptance by the board.

(c) Subject to adjustments authorized by Section 13E or 13F of this article, each member in active service shall make contributions to the fund in an amount equal to 10.5 percent of the member's salary at the time of the contribution.

(c-1) In addition to the contribution under Subsection (c) of this section, each DROP participant, as identified by the fund to the municipality for purposes of this subsection, shall contribute to the fund an amount equal to 100 percent of the participant's unused leave pay that would otherwise be payable to the member. The fund shall credit any unused leave pay amount contributed by a DROP participant to the participant's DROP account.

(c-2) The governing body of the municipality shall deduct from the salary of each member the contribution required by this section and shall forward the contributions to the fund as soon as practicable.

(d) [Repealed.]

(e) [Repealed.]

(f) Money deducted from salaries or compensation as provided by this section and the payments and contributions provided by this section become a part of the fund of the municipality in which the contributing member serves at the time of the contribution. In accordance with Section 14(c)
of this article, contributions under any qualified governmental excess benefit arrangement do not
become part of the trust fund assets of the fund.

(g) On action of its governing body, a municipality may pick up members' contributions
prescribed under Subsection (c) of this section for purposes of Section 414(h)(2) of the code. A
member's salary is affected by this subsection only as this subsection relates to the computation
of pension contributions and gross pay for federal tax purposes. The computation of pension
benefits, severance pay, and other benefits is not affected.

(h) [Repealed by Acts 2003, 78th Leg., ch. 333, § 13.]

Sec. 13A. Municipal contributions.

(a) Beginning with the year 2017 effective date, the municipality shall make contributions to the
fund as provided by this section and Section 13B, 13C, 13E, or 13F of this article, as applicable.
The municipality shall contribute:

(1) beginning with the year 2017 effective date and ending with the fiscal year ending
June 30, 2018, an amount equal to the municipal contribution rate, as determined in the
initial risk sharing valuation study conducted under Section 13C of this article and
adjusted under Section 13E or 13F of this article, as applicable, multiplied by the
pensionable payroll for the fiscal year; and

(2) for each fiscal year after the fiscal year ending June 30, 2018, an amount equal to the
municipal contribution rate, as determined in a subsequent risk sharing valuation study
conducted under Section 13B of this article and adjusted under Section 13E or 13F of this
article, as applicable, multiplied by the pensionable payroll for the applicable fiscal year.

(b) Except by written agreement between the municipality and the board providing for an earlier
contribution date, at least biweekly, the municipality shall make the contributions required by
Subsection (a) of this section by depositing with the fund an amount equal to the municipal
contribution rate multiplied by the pensionable payroll for the applicable biweekly period.

(c) With respect to each fiscal year:

(1) the first contribution by the municipality under this section for the fiscal year shall be
made not later than the date payment is made to firefighters for their first full biweekly
pay period beginning on or after the first day of the fiscal year; and

(2) the final contribution by the municipality under this section for the fiscal year shall be
made not later than the date payment is made to firefighters for the final biweekly pay
period of the fiscal year.

(d) In addition to the amounts required under this section, the municipality may at any time
contribute additional amounts for deposit in the fund by entering into a written agreement with
the board.

(e) Notwithstanding any other law, the municipality may not issue a pension obligation bond to
fund the municipal contribution rate under this section.
Sec. 13B. Risk sharing valuation studies.

(a) The fund and the municipality shall separately cause their respective actuaries to prepare a risk sharing valuation study in accordance with this section and actuarial standards of practice. A risk sharing valuation study must:

(1) be dated as of the first day of the fiscal year in which the study is required to be prepared;

(2) be included in the fund's standard valuation study prepared annually for the fund;

(3) calculate the unfunded actuarial accrued liability of the fund;

(4) be based on actuarial data provided by the fund actuary or, if actuarial data is not provided, on estimates of actuarial data;

(5) estimate the municipal contribution rate, taking into account any adjustments required under Section 13E or 13F of this article for all applicable prior fiscal years;

(6) subject to Subsection (g) of this section, be based on the following assumptions and methods that are consistent with actuarial standards of practice:

(A) an ultimate entry age normal actuarial method;

(B) for purposes of determining the actuarial value of assets:

   (i) except as provided by Subparagraph (ii) of this paragraph and Section 13E(c)(1) or 13F(c)(2) of this article, an asset smoothing method recognizing actuarial losses and gains over a five-year period applied prospectively beginning on the year 2017 effective date; and

   (ii) for the initial risk sharing valuation study prepared under Section 13C of this article, a marked-to-market method applied as of June 30, 2016;

(C) closed layered amortization of liability layers to ensure that the amortization period for each layer begins 12 months after the date of the risk sharing valuation study in which the liability layer is first recognized;

(D) each liability layer is assigned an amortization period;

(E) each liability loss layer amortized over a period of 30 years from the first day of the fiscal year beginning 12 months after the date of the risk sharing valuation study in which the liability loss layer is first recognized, except that the legacy liability must be amortized from July 1, 2016, for a 30-year period beginning July 1, 2017;

(F) the amortization period for each liability gain layer being:

   (i) equal to the remaining amortization period on the largest remaining liability loss layer and the two layers must be treated as one layer such that
if the payoff year of the liability loss layer is accelerated or extended, the payoff year of the liability gain layer is also accelerated or extended; or

(ii) if there is no liability loss layer, a period of 30 years from the first day of the fiscal year beginning 12 months after the date of the risk sharing valuation study in which the liability gain layer is first recognized;

(G) liability layers, including the legacy liability, funded according to the level percent of payroll method;

(H) the assumed rate of return, subject to adjustment under Section 13E(c)(2) of this article or, if Section 13C(g) of this article applies, adjustment in accordance with a written agreement, except the assumed rate of return may not exceed seven percent per annum;

(I) the price inflation assumption as of the most recent actuarial experience study, which may be reset by the board by plus or minus 50 basis points based on that actuarial experience study;

(J) projected salary increases and payroll growth rate set in consultation with the municipality's finance director; and

(K) payroll for purposes of determining the corridor midpoint and municipal contribution rate must be projected using the annual payroll growth rate assumption, which for purposes of preparing any amortization schedule may not exceed three percent; and

(7) be revised and restated, if appropriate, not later than:

(A) the date required by a written agreement entered into between the municipality and the board; or

(B) the 30th day after the date required action is taken by the board under Section 13E or 13F of this article to reflect any changes required by either section.

(b) As soon as practicable after the end of a fiscal year, the fund actuary at the direction of the fund and the municipal actuary at the direction of the municipality shall separately prepare a proposed risk sharing valuation study based on the fiscal year that just ended.

(c) Not later than September 30 following the end of the fiscal year, the fund shall provide to the municipal actuary, under a confidentiality agreement in which the municipal actuary agrees to comply with the confidentiality provisions of Section 17 of this article, the actuarial data described by Subsection (a)(4) of this section.

(d) Not later than the 150th day after the last day of the fiscal year:

(1) the fund actuary, at the direction of the fund, shall provide the proposed risk sharing valuation study prepared by the fund actuary under Subsection (b) of this section to the municipal actuary; and
(2) the municipal actuary, at the direction of the municipality, shall provide the proposed risk sharing valuation study prepared by the municipal actuary under Subsection (b) of this section to the fund actuary.

(e) Each actuary described by Subsection (d) of this section may provide copies of the proposed risk sharing valuation studies to the municipality or to the fund, as appropriate.

(f) If, after exchanging proposed risk sharing valuation studies under Subsection (d) of this section, it is found that the difference between the estimated municipal contribution rate recommended in the proposed risk sharing valuation study prepared by the fund actuary and the estimated municipal contribution rate recommended in the proposed risk sharing valuation study prepared by the municipal actuary for the corresponding fiscal year is:

(1) less than or equal to two percentage points, the estimated municipal contribution rate recommended by the fund actuary will be the estimated municipal contribution rate for purposes of Subsection (a)(5) of this section, and the proposed risk sharing valuation study prepared for the fund is considered to be the final risk sharing valuation study for the fiscal year for the purposes of this article; or

(2) greater than two percentage points, the municipal actuary and the fund actuary shall have 20 business days to reconcile the difference, provided that, without the mutual agreement of both actuaries, the difference in the estimated municipal contribution rate recommended by the municipal actuary and the estimated municipal contribution rate recommended by the fund actuary may not be further increased and:

(A) if, as a result of reconciliation efforts under this subdivision, the difference is reduced to less than or equal to two percentage points:

   (i) subject to any adjustments under Section 13E or 13F of this article, as applicable, the estimated municipal contribution rate proposed under the reconciliation by the fund actuary will be the estimated municipal contribution rate for purposes of Subsection (a)(5) of this section; and

   (ii) the fund's risk sharing valuation study is considered to be the final risk sharing valuation study for the fiscal year for the purposes of this article; or

(B) if, after 20 business days, the fund actuary and the municipal actuary are not able to reach a reconciliation that reduces the difference to an amount less than or equal to two percentage points, subject to any adjustments under Section 13E or 13F of this article, as applicable:

   (i) the municipal actuary at the direction of the municipality and the fund actuary at the direction of the fund each shall deliver to the finance director of the municipality and the executive director of the fund a final risk sharing valuation study with any agreed-to changes, marked as the final risk sharing valuation study for each actuary; and
(ii) not later than the 90th day before the first day of the next fiscal year, the finance director and the executive director shall execute a joint addendum to the final risk sharing valuation study received under Subparagraph (i) of this paragraph that is a part of the final risk sharing valuation study for the fiscal year for all purposes and reflects the arithmetic average of the estimated municipal contribution rates for the fiscal year stated by the municipal actuary and the fund actuary in the final risk sharing valuation study for purposes of Subsection (a)(5) of this section.

(g) The assumptions and methods used and the types of actuarial data and financial information used to prepare the initial risk sharing valuation study under Section 13C of this article shall be used to prepare each subsequent risk sharing valuation study under this section, unless changed based on the actuarial experience study conducted under Section 13D of this article.

(h) The actuarial data provided under Subsection (a)(4) of this section may not include the identifying information of individual members.

**Sec. 13C. Initial Risk Sharing Valuation Studies; Corridor Midpoint.**

(a) The fund and the municipality shall separately cause their respective actuaries to prepare an initial risk sharing valuation study that is dated as of July 1, 2016, in accordance with this section. An initial risk sharing valuation study must:

1. except as otherwise provided by this section, be prepared in accordance with Section 13B of this article and, for purposes of Section 13B(a)(4) of this article, be based on actuarial data as of June 30, 2016, or, if actuarial data is not provided, on estimates of actuarial data; and

2. project the corridor midpoint for 31 fiscal years beginning with the fiscal year beginning July 1, 2017.

(b) If the initial risk sharing valuation study has not been prepared consistent with this section before the year 2017 effective date, as soon as practicable after the year 2017 effective date:

1. the fund shall provide to the municipal actuary, under a confidentiality agreement, the necessary actuarial data used by the fund actuary to prepare the proposed initial risk sharing valuation study; and

2. not later than the 30th day after the date the municipal actuary receives the actuarial data:

   A the municipal actuary, at the direction of the municipality, shall provide a proposed initial risk sharing valuation study to the fund actuary; and

   B the fund actuary, at the direction of the fund, shall provide a proposed initial risk sharing valuation study to the municipal actuary.
(c) If, after exchanging proposed initial risk sharing valuation studies under Subsection (b)(2) of this section, it is determined that the difference between the estimated municipal contribution rate for any fiscal year recommended in the proposed initial risk sharing valuation study prepared by the fund actuary and the estimated municipal contribution rate for any fiscal year recommended in the proposed initial risk sharing valuation study prepared by the municipal actuary is:

(1) less than or equal to two percentage points, the estimated municipal contribution rate for that fiscal year recommended by the fund actuary will be the estimated municipal contribution rate for purposes of Section 13B(a)(5) of this article; or

(2) greater than two percentage points, the municipal actuary and the fund actuary shall have 20 business days to reconcile the difference and:

(A) if, as a result of reconciliation efforts under this subdivision, the difference in any fiscal year is reduced to less than or equal to two percentage points, the estimated municipal contribution rate recommended by the fund actuary for that fiscal year will be the estimated municipal contribution rate for purposes of Section 13B(a)(5) of this article; or

(B) if, after 20 business days, the municipal actuary and the fund actuary are not able to reach a reconciliation that reduces the difference to an amount less than or equal to two percentage points for any fiscal year:

(i) the municipal actuary at the direction of the municipality and the fund actuary at the direction of the fund each shall deliver to the finance director of the municipality and the executive director of the fund a final initial risk sharing valuation study with any agreed-to changes, marked as the final initial risk sharing valuation study for each actuary; and

(ii) the finance director and the executive director shall execute a joint addendum to the final initial risk sharing valuation study that is a part of each final initial risk sharing valuation study for all purposes and that reflects the arithmetic average of the estimated municipal contribution rate for each fiscal year in which the difference was greater than two percentage points for purposes of Section 13B(a)(5) of this article.

(d) In preparing the initial risk sharing valuation study, the municipal actuary and fund actuary shall:

(1) adjust the actuarial value of assets to be equal to the market value of assets as of July 1, 2016; and

(2) assume benefit and contribution changes under this article as of the year 2017 effective date.

(e) If the municipal actuary does not prepare an initial risk sharing valuation study for purposes of this section, the fund actuary's initial risk sharing valuation study will be used as the final risk
sharing valuation study for purposes of this article unless the municipality did not prepare a proposed initial risk sharing valuation study because the fund actuary did not provide the necessary actuarial data in a timely manner. If the municipality did not prepare a proposed initial risk sharing valuation study because the fund actuary did not provide the necessary actuarial data in a timely manner, the municipal actuary shall have 60 days to prepare the proposed initial risk sharing valuation study on receipt of the necessary information.

(f) If the fund actuary does not prepare a proposed initial risk sharing valuation study for purposes of this section, the proposed initial risk sharing valuation study prepared by the municipal actuary will be the final risk sharing valuation study for purposes of this article.

(g) The municipality and the board may agree on a written transition plan for resetting the corridor midpoint:

1. if at any time the funded ratio is equal to or greater than 100 percent; or
2. for any fiscal year after the payoff year of the legacy liability.

(h) If the municipality and the board have not entered into an agreement described by Subsection (g) of this section in a given fiscal year, the corridor midpoint will be the corridor midpoint determined for the 31st fiscal year in the initial risk sharing valuation study prepared in accordance with this section.

(i) If the municipality makes a contribution to the fund of at least $5 million more than the amount that would be required by Section 13A(a) of this article, a liability gain layer with the same remaining amortization period as the legacy liability is created and the corridor midpoint shall be decreased by the amortized amount in each fiscal year covered by the liability gain layer produced divided by the projected pensionable payroll.

**Sec. 13D. Actuarial experience studies.**

(a) At least once every four years, the fund actuary at the direction of the fund shall conduct an actuarial experience study in accordance with actuarial standards of practice. The actuarial experience study required by this subsection must be completed not later than September 30 of the year in which the study is required to be conducted.

(b) Except as otherwise expressly provided by Sections 13B(a)(6)(A)-(I) of this article, actuarial assumptions and methods used in the preparation of a risk sharing valuation study, other than the initial risk sharing valuation study, shall be based on the results of the most recent actuarial experience study.

(c) Not later than the 180th day before the date the board may consider adopting any assumptions and methods for purposes of Section 13B of this article, the fund shall provide the municipal actuary with a substantially final draft of the fund's actuarial experience study, including:

1. all assumptions and methods recommended by the fund actuary; and
2. summaries of the reconciled actuarial data used in creation of the actuarial experience study.
(d) Not later than the 60th day after the date the municipality receives the final draft of the fund's actuarial experience study under Subsection (c) of this section, the municipal actuary and fund actuary shall confer and cooperate on reconciling and producing a final actuarial experience study. During the period prescribed by this subsection, the fund actuary may modify the recommended assumptions in the draft actuarial experience study to reflect any changes to assumptions and methods to which the fund actuary and the municipal actuary agree.

(e) At the municipal actuary's written request, the fund shall provide additional actuarial data used by the fund actuary to prepare the draft actuarial experience study, provided that confidential data may only be provided subject to a confidentiality agreement in which the municipal actuary agrees to comply with the confidentiality provisions of Section 17 of this article.

(f) The municipal actuary at the direction of the municipality shall provide in writing to the fund actuary and the fund:

(1) any assumptions and methods recommended by the municipal actuary that differ from the assumptions and methods recommended by the fund actuary; and

(2) the municipal actuary's rationale for each method or assumption the actuary recommends and determines to be consistent with standards adopted by the Actuarial Standards Board.

(g) Not later than the 30th day after the date the fund actuary receives the municipal actuary's written recommended assumptions and methods and rationale under Subsection (f) of this section, the fund shall provide a written response to the municipality identifying any assumption or method recommended by the municipal actuary that the fund does not accept. If any assumption or method is not accepted, the fund shall recommend to the municipality the names of three independent actuaries for purposes of this section.

(h) An actuary may only be recommended, selected, or engaged by the fund as an independent actuary under this section if the person:

(1) is not already engaged by the municipality, the fund, or any other pension system authorized under Article 6243g-4, Revised Statutes, or Chapter 88 (H.B. 1573), Acts of the 77th Legislature, Regular Session, 2001 (Article 6243h, Vernon's Texas Civil Statutes), to provide actuarial services to the municipality, the fund, or another pension system referenced in this subdivision;

(2) is a member of the American Academy of Actuaries; and

(3) has at least five years of experience as an actuary working with one or more public retirement systems with assets in excess of $1 billion.

(i) Not later than the 20th day after the date the municipality receives the list of three independent actuaries under Subsection (g) of this section, the municipality shall identify and the fund shall hire one of the listed independent actuaries on terms acceptable to the municipality and the fund to perform a scope of work acceptable to the municipality and the fund. The
municipality and the fund each shall pay 50 percent of the cost of the independent actuary engaged under this subsection. The municipality shall be provided the opportunity to participate in any communications between the independent actuary and the fund concerning the engagement, engagement terms, or performance of the terms of the engagement.

(j) The independent actuary engaged under Subsection (i) of this section shall receive on request from the municipality or the fund:

1. the fund's draft actuarial experience study, including all assumptions and methods recommended by the fund actuary;

2. summaries of the reconciled actuarial data used to prepare the draft actuarial experience study;

3. the municipal actuary's specific recommended assumptions and methods together with the municipal actuary's written rationale for each recommendation;

4. the fund actuary's written rationale for its recommendations; and

5. if requested by the independent actuary and subject to a confidentiality agreement in which the independent actuary agrees to comply with the confidentiality provisions of Section 17 of this article, additional confidential actuarial data.

(k) Not later than the 30th day after the date the independent actuary receives all the requested information under Subsection (j) of this section, the independent actuary shall advise the fund and the municipality whether it agrees with the assumption or method recommended by the municipal actuary or the corresponding method or assumption recommended by the fund actuary, together with the independent actuary's rationale for making the determination. During the period prescribed by this subsection, the independent actuary may discuss recommendations in simultaneous consultation with the fund actuary and the municipal actuary.

(l) The fund and the municipality may not seek any information from any prospective independent actuary about possible outcomes of the independent actuary's review.

(m) If an independent actuary has questions or concerns regarding an engagement entered into under this section, the independent actuary shall simultaneously consult with both the municipal actuary and the fund actuary regarding the questions or concerns. This subsection does not limit the fund's authorization to take appropriate steps to complete the engagement of the independent actuary on terms acceptable to both the fund and the municipality or to enter into a confidentiality agreement with the independent actuary, if needed.

(n) If the board does not adopt an assumption or method recommended by the municipal actuary to which the independent actuary agrees, or recommended by the fund actuary, the municipal actuary is authorized to use that recommended assumption or method in connection with preparation of a subsequent risk sharing valuation study under Section 13B of this article until the next actuarial experience study is conducted.
Sec. 13E. Municipal contribution rate when estimated municipal contribution rate lower than corridor midpoint; authorization for certain adjustments.

(a) This section governs the determination of the municipal contribution rate applicable in a fiscal year if the estimated municipal contribution rate is lower than the corridor midpoint.

(b) If the funded ratio is:

(1) less than 90 percent, the municipal contribution rate for the fiscal year equals the corridor midpoint; or

(2) equal to or greater than 90 percent and the municipal contribution rate is:

(A) equal to or greater than the minimum contribution rate, the estimated municipal contribution rate is the municipal contribution rate for the fiscal year; or

(B) except as provided by Subsection (e) of this section, less than the minimum contribution rate for the corresponding fiscal year, the municipal contribution rate for the fiscal year equals the minimum contribution rate achieved in accordance with Subsection (c) of this section.

(c) For purposes of Subsection (b)(2)(B) of this section, the following adjustments shall be applied sequentially to the extent required to increase the estimated municipal contribution rate to equal the minimum contribution rate:

(1) first, adjust the actuarial value of assets equal to the current market value of assets, if making the adjustment causes the municipal contribution rate to increase;

(2) second, under a written agreement between the municipality and the board entered into not later than April 30 before the first day of the next fiscal year, reduce the assumed rate of return;

(3) third, under a written agreement between the municipality and the board entered into not later than April 30 before the first day of the next fiscal year, prospectively restore all or part of any benefit reductions or reduce increased employee contributions, in each case made after the year 2017 effective date; and

(4) fourth, accelerate the payoff year of the existing liability loss layers, including the legacy liability, by accelerating the oldest liability loss layers first, to an amortization period that is not less than 10 years from the first day of the fiscal year beginning 12 months after the date of the risk sharing valuation study in which the liability loss layer is first recognized.

(d) If the funded ratio is:

(1) equal to or greater than 100 percent:

(A) all existing liability layers, including the legacy liability, are considered fully amortized and paid;
(B) the applicable fiscal year is the payoff year for the legacy liability; and

(C) for each fiscal year subsequent to the fiscal year described by Paragraph (B) of this subdivision, the corridor midpoint shall be determined as provided by Section 13C(g) of this article; and

(2) greater than 100 percent in a written agreement between the municipality and the fund, the fund may reduce member contributions or increase pension benefits if, as a result of the action:

(A) the funded ratio is not less than 100 percent; and

(B) the municipal contribution rate is not more than the minimum contribution rate.

(e) Except as provided by Subsection (f) of this section, if an agreement under Subsection (d) of this section is not reached on or before April 30 before the first day of the next fiscal year, before the first day of the next fiscal year the board shall reduce member contributions and implement or increase cost-of-living adjustments, but only to the extent that the municipal contribution rate is set at or below the minimum contribution rate and the funded ratio is not less than 100 percent.

(f) If any member contribution reduction or benefit increase under Subsection (e) of this section has occurred within the previous three fiscal years, the board may not make additional adjustments to benefits, and the municipal contribution rate must be set to equal the minimum contribution rate.

Sec. 13F. Municipal contribution rate when estimated municipal contribution rate equal to or greater than corridor midpoint; authorization for certain adjustments.

(a) This section governs the determination of the municipal contribution rate in a fiscal year when the estimated municipal contribution rate is equal to or greater than the corridor midpoint.

(b) If the estimated municipal contribution rate is:

(1) less than or equal to the maximum contribution rate for the corresponding fiscal year, the estimated municipal contribution rate is the municipal contribution rate; or

(2) except as provided by Subsection (d) or (e) of this section, greater than the maximum contribution rate for the corresponding fiscal year, the municipal contribution rate equals the corridor midpoint achieved in accordance with Subsection (c) of this section.

(c) For purposes of Subsection (b)(2) of this section, the following adjustments shall be applied sequentially to the extent required to decrease the estimated municipal contribution rate to equal the corridor midpoint:

(1) first, if the payoff year of the legacy liability was accelerated under Section 13E(c) of this article, extend the payoff year of existing liability loss layers, by extending the most recent loss layers first, to a payoff year not later than 30 years from the first day of the
fiscal year beginning 12 months after the date of the risk sharing valuation study in which the liability loss layer is first recognized; and

(2) second, adjust the actuarial value of assets to the current market value of assets, if making the adjustment causes the municipal contribution rate to decrease.

(d) If the municipal contribution rate after adjustment under Subsection (c) of this section is greater than the third quarter line rate:

(1) the municipal contribution rate equals the third quarter line rate; and

(2) to the extent necessary to comply with Subdivision (1) of this subsection, the municipality and the board shall enter into a written agreement to increase member contributions and make other benefit or plan changes not otherwise prohibited by applicable federal law or regulations.

(e) If an agreement under Subsection (d)(2) of this section is not reached on or before April 30 before the first day of the next fiscal year, before the start of the next fiscal year to which the municipal contribution rate would apply, the board, to the extent necessary to set the municipal contribution rate equal to the third quarter line rate, shall:

(1) increase member contributions and decrease cost-of-living adjustments;

(2) increase the normal retirement age; or

(3) take any combination of actions authorized under Subdivisions (1) and (2) of this subsection.

(f) If the municipal contribution rate remains greater than the corridor midpoint in the third fiscal year after adjustments are made in accordance with Subsection (d)(2) of this section, in that fiscal year the municipal contribution rate equals the corridor midpoint achieved in accordance with Subsection (g) of this section.

(g) The municipal contribution rate must be set at the corridor midpoint under Subsection (f) of this section by:

(1) in the risk sharing valuation study for the third fiscal year described by Subsection (f) of this section, adjusting the actuarial value of assets to equal the current market value of assets, if making the adjustment causes the municipal contribution rate to decrease; and

(2) under a written agreement entered into between the municipality and the board:

(A) increasing member contributions; and

(B) making any other benefit or plan changes not otherwise prohibited by applicable federal law or regulations.

(h) If an agreement under Subsection (g)(2) of this section is not reached on or before April 30 before the first day of the next fiscal year, before the start of the next fiscal year, the board, to the extent necessary to set the municipal contribution rate equal to the corridor midpoint, shall:
(1) increase member contributions and decrease cost-of-living adjustments;

(2) increase the normal retirement age; or

(3) take any combination of actions authorized under Subdivisions (1) and (2) of this subsection.

Sec. 13G. Interpretation of certain risk sharing provisions; unilateral decisions and actions prohibited.

(a) Nothing in this article, including Section 2(p) or (p-1) of this article and any authority of the board to construe and interpret this article, to determine any fact, to take any action, or to interpret any terms used in Sections 13A through 13F of this article, may alter or change Sections 13A through 13F of this article.

(b) No unilateral decision or action by the board is binding on the municipality and no unilateral decision or action by the municipality is binding on the fund with respect to the application of Sections 13A through 13F of this article unless expressly provided by a provision of those sections. Nothing in this subsection is intended to limit the powers or authority of the board.

(c) Section 10 of this article does not apply to a benefit increase under Section 13E of this article, and Section 10 of this article is suspended while Sections 13A through 13F of this article are in effect.

Sec. 13H. State pension review board; report

(a) After preparing a final risk sharing valuation study under Section 13B or 13C of this article, the fund and the municipality shall jointly submit a copy of the study or studies, as appropriate, to the State Pension Review Board for a determination that the fund and municipality are in compliance with this article.

(b) Not later than the 30th day after the date an action is taken under Section 13E or 13F of this article, the fund shall submit a report to the State Pension Review Board regarding any actions taken under those sections.

(c) The State Pension Review Board shall notify the governor, the lieutenant governor, the speaker of the house of representatives, and the legislative committees having principal jurisdiction over legislation governing public retirement systems if the State Pension Review Board determines the fund or the municipality is not in compliance with Sections 13A through 13G of this article.
Sec. 802.2011. FUNDING POLICY. (a) In this section:
(1) "Funded ratio" means the ratio of a public retirement system's actuarial value of assets divided by the system's actuarial accrued liability.
(2) "Governmental entity" has the meaning assigned by Section 802.1012.

(b) The governing body of a public retirement system shall:
(1) adopt a written funding policy that details the governing body's plan for achieving a funded ratio of the system that is equal to or greater than 100 percent;
(2) maintain for public review at its main office a copy of the policy;
(3) file a copy of the policy and each change to the policy with the board not later than the 31st day after the date the policy or change, as applicable, is adopted; and
(4) submit a copy of the policy and each change to the policy to the system's associated governmental entity not later than the 31st day after the date the policy or change is adopted.

Added by Acts 2019, 86th Leg., R.S., Ch. 453 (S.B. 2224), Sec. 1, eff. September 1, 2019.