2018 REGULAR SESSION
ACTUARIAL NOTE HB 22

House Bill 22 HLS 18RS-381 **Original** **Author: Representative Ivey** **Date: March 3, 2018** **LLA Note HB 22.01** **Organizations Affected:** **State Retirement Systems** **OR NO IMPACT APV**	**This Note has been prepared by the Actuarial Services Department of the Legislative Auditor with assistance from either the Fiscal Notes staff of the Legislative Auditor or staff of the Legislative Fiscal Office. The attachment of this Note provides compliance with the requirements of R.S. 24:521 as amended by Act 353 of the 2016 Regular Session.** Paul T. Richmond Paul T. Richmond, ASA, MAAA, EA Manager Actuarial Services

Bill Header: RETIREMENT/STATE SYSTEMS: Sets minimum employer contributions and provides for funding deposit accounts for each state retirement system.

Cost Summary:

The estimated actuarial and fiscal impact of HB 22 on the retirement systems and their plan sponsors is summarized below. Actuarial costs pertain to estimated changes in the ***actuarial present value of future benefit payments***. Fiscal costs or savings pertain to changes to all cash flows over the next five year period including retirement system cash flows, OPEB cash flows, or cash flows related to other government entities.

An increase in actuarial costs is denoted throughout the actuarial note by "Increase" or a positive number. Actuarial savings are denoted by "Decrease" or a negative number. An increase in expenditures or revenues (fiscal impact) is denoted by "Increase" or a positive number. A decrease in expenditures or revenues is denoted by "decrease" or a negative number.

Estimated Actuarial Impact:

The top part of the following chart shows the estimated change in the ***actuarial present value of future benefit payments and expenses***, if any, attributable to the proposed legislation. The bottom part shows the effect on cash flows.

Actuarial Costs Pertaining to:		**Actuarial Cost**
The Retirement Systems		$0
Other Post Employment Benefits (OPEB)		0
Other Government Entities		0
Total		$0
Five Year Fiscal Cost Pertaining to:	**Expenses**	**Revenues**
The Retirement Systems	$0	$0
Other Post Employment Benefits	0	0
Other Government Entities	0	0
Total	$0	$0

Bill Information

Current Law

Current law defines the actuarially required employer contribution for each of the four state retirement systems – Louisiana State Employees' Retirement System (LASERS), Teachers' Retirement System of Louisiana (TRSL), Louisiana School Employees' Retirement System (LSERS), and Louisiana State Police Retirement System (LSPRS) − as the sum of the following:

1. The employer normal cost;
2. The annual amortization payment necessary to amortize changes in unfunded accrued liabilities (UAL) that occurred in prior years;
3. The annual amortization payment necessary to amortize the most recent year's over- or under-payment of employer contributions; and
4. The annual amortization payment necessary to amortize changes in UAL resulting from gains/losses, asset valuation method changes, changes in actuarial assumptions or funding methods, and benefit changes occurring over the most recent year.

Employer contribution requirements summarized above are set forth in R.S. 11:102 of current law.

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Proposed Law

HB 22 retains current law and adds a minimum employer contribution requirement for every system if either of the following two conditions apply:

1. The funded ratio of the system is not and has never been one hundred percent.

2. The funded ratio of the system, after July 1, 2018, has been one hundred percent but has fallen below ninety percent.

The minimum employer contribution requirement is 20% of total projected payroll for all active members.

HB 22 goes on to supply specific guidance on how the contribution is to be applied, based on whether the funded ratio is above or below 80%, including instructions about setting up and maintaining a system Funding Deposit Account which will first be used when the funded ratio is above 80%.

The purpose of this arrangement is to ensure consistent progress toward a 100% funded ratio and restoration to a 100% funded ratio should a system's funded ratio fall below 90%. Rules, which will be set forth in R.S. 11:102.7, are summarized below.

Definitions

1. The *Excess Employer Contribution Rate* is equal to 20.00% minus the employer contribution rate determined in accordance with R.S. 11:102, but not less than 0.00%.

2. *Excess Employer Contributions* will be equal to the Excess Employer Contribution Rate multiplied by the projected payroll for all active and contributing members of the system.

3. The *Funded Ratio* is the ratio of the actuarial value of assets to the actuarial accrued liability.

Employer Contribution Rate

1. The preliminary employer contribution rate shall be calculated in accordance with R.S. 11:102.

2. If the preliminary employer contribution rate is less than 20.00%, the funded ratio on the valuation date is less than 100%, and the funded ratios on all prior valuation dates have all been less than 100%, then the employer contribution rate will be equal to 20.00%.

3. If the preliminary employer contribution rate is less than 20.00%, the system had attained a funded ratio of 100% or more after July 1, 2018, and the funded ratio on the valuation date is less than 90%, then the employer contribution rate will be equal to 20.00%.

4. Otherwise the employer contribution rate will be equal to the preliminary employer contribution rate.

Allocation of Excess Employer Contributions

1. If the funded ratio on the valuation date is 80% or less, then 100% of excess employer contributions will be applied to reduce the outstanding balance of the oldest UAL charge base.

2. If the funded ratio on the valuation date is greater than 80%, then 50% of excess employer contributions will be used to reduce the outstanding balance of the oldest UAL charge base and 50% of excess employer contributions will be deposited into the Funding Deposit Account.

Funding Deposit Account

1. Each state retirement system will establish a Funding Deposit Account that will be funded by excess employer contributions.

2. The balance in the Funding Deposit Account will earn interest at the board approved valuation interest rate.

3. The board of trustees for each system may use the balance in the Funding Deposit Account to:

    a. Reduce the UAL, or

    b. Pay all or a portion of any net direct employer contribution amount.

4. If funds in the Funding Deposit Account are used to pay all or a portion of net direct employer contributions, then the employer contribution rate otherwise applicable will be reduced by the ratio of payments from the Funding Deposit Account to the projected payroll.

5. Any asset value used in the calculation of the actuarial value of assets shall exclude the balance in the Funding Deposit Account.

6. Funds in the Funding Deposit Account shall be considered as assets of the system for all purposes other than funding.

Implications of the Proposed Changes

HB 22 establishes a Funding Deposit Account for each state retirement system. A system's Funding Deposit Account will not be funded unless.

1. The employer contribution rate is less than 20%, and the funded ratio is and always has been less than 100%, or

2. The employer contribution rate is less than 20% and the system had attained a funded ratio after July 1, 2018 of 100% or more, but on the valuation date is greater than 80%.

There will not be any immediate impact from this change because the current required contributions for the four systems (LASERS, TRSL, LSERS, and POLICE) are all above 25% of payroll, and are not expected to drop below 20% of payroll in the foreseeable future.

The longer term impact would be to dampen volatility in contributions by maintaining contributions at 20% even if the required employer contribution is less than that, and by putting fifty percent of the "excess" contribution (the difference between the required contribution and the 20% minimum) into a system Funding Deposit Account when the funded ratio is above 80%, and use it as another funding source.

I. ACTUARIAL ANALYSIS SECTION

A. Analysis of Actuarial Costs
(Prepared by the LLA)

This section of the actuarial note pertains to actuarial costs or savings associated with the retirement systems, with OPEB, and with other government entities.

1. Retirement Systems

The actuarial cost or savings of HB 22 associated with the retirement systems is estimated to be $0. The actuary's analysis is summarized below.

There is no actuarial cost associated with HB 22. Employer contribution requirements under HB 22 may be larger in future years than what they would have been under current law. However, this is a change in funding policy; it is not a change in the actuarial cost of the system.

The current contribution requirements for the four systems are greater than 20%, and the funded ratios are all below 75%. Required contributions are expected to remain above 20% for the foreseeable future, so the minimum will not come into play.

	LASERS	TRSL	LSERS	LSPRS
Employer Contribution Rate				
Fiscal 2018	38.1%	26.4%	27.6%	47.4%
Fiscal 2019	37.9%	26.5%	28.0%	43.1%
Actuarial Accrued Liability	$18,792,105,561	$29,762,623,913	$2,562,633,003	$1,062,446,959
Actuarial Value of Assets	$11,976,792,982	$19,210,425,004	$1,900,329,127	$774,664,801
Funded Ratio 2017	63.7%	64.5%	74.2%	72.9%
Funded Ratio 2016	62.6%	62.4%	72.5%	69.5%

2. Other Post-Employment Benefits (OPEB)

The actuarial cost or savings of HB 22 associated with OPEB, including retiree health insurance premiums, is estimated to be $0. The actuary's analysis is summarized below.

The liability for other post-employment benefits other than pensions provided to retirees is not affected by adding a minimum contribution rate for employers.

3. Other Government Entities

The actuarial cost or savings of HB 22 associated with government entities other than those identified in HB 22, is estimated to be $0.

B. Actuarial Data, Methods and Assumptions
(Prepared by the LLA)

Unless indicated otherwise, the actuarial note for HB 22 was prepared using actuarial data, methods, and assumptions as disclosed in the most recent actuarial valuation report adopted by PRSAC. The data, methods and assumptions are being used to provide consistency with the actuary for the retirement system who may also be providing testimony to the Senate and House retirement committees.

C. Actuarial Caveat
(Prepared by the LLA)

There is nothing in HB 22 that will compromise the signing actuary's ability to present an unbiased statement of actuarial opinion.

II. FISCAL ANALYSIS SECTION

Tables A, B, C, and D have been prepared by the LLA. These tables include information developed by the LLA from its own sources as well as information supplied by Tanesha Morgan of the Legislative Fiscal Office (LFO). Table D includes all costs and savings pertaining to Louisiana government.

The LFO has requested that the information supplied by Tanesha Morgan be included in the actuarial note verbatim and without any changes. This information is shown below under Fiscal Costs Developed by the LFO. The reader should note that complete fiscal cost information is contained within Table D. Fiscal costs developed by the LFO only reflect the portion of Table D that was supplied by the LFO.

Table A pertains to fiscal costs or savings associated with the retirement systems; Table B pertains to OPEB; Table C pertains to fiscal costs associated with government entities other than the retirement systems and sponsors. Table D is the cumulative sum of Tables A, B, and C.

A. Estimated Fiscal Impact – Retirement Systems
(Prepared by the LLA using information supplied by the LFO)

1. Narrative

Table A shows the estimated fiscal impact of the proposed legislation on the retirement systems and the government entities that sponsor them. Fiscal costs and savings include both administrative and actuarial costs and savings. A fiscal cost is denoted by "Increase" or a positive number. Fiscal savings are denoted by "Decrease" or a negative number. A revenue increase is denoted by "Increase" or a positive number. A revenue decrease is denoted by "Decrease" or a negative number.

Retirement System Fiscal Cost: Table A

EXPENDITURES	2018-19	2019-2020	2020-2021	2021-2022	2022-23	5 Year Total
State General Fund	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Agy Self Generated	0	0	0	0	0	0
Stat Deds/Other	0	0	0	0	0	0
Federal Funds	0	0	0	0	0	0
Local Funds	0	0	0	0	0	0
Annual Total	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0

REVENUES	2018-19	2019-2020	2020-2021	2021-2022	2022-23	5 Year Total
State General Fund	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Agy Self Generated	0	0	0	0	0	0
Stat Deds/Other	0	0	0	0	0	0
Federal Funds	0	0	0	0	0	0
Local Funds	0	0	0	0	0	0
Annual Total	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0

HB 22 will have no effect on administrative fiscal costs and revenues associated with the state retirement systems and their sponsors during the five year measurement period. HB 22 will have no effect on actuarial fiscal costs and revenues during the five year measurement period. However, eventually, actuarial fiscal costs under HB 22 may exceed such costs as determined under current law.

B. Estimated Fiscal Impact – OPEB
(Prepared by the LLA using information supplied by the LFO)

1. Narrative

Table B shows the estimated fiscal impact of HB 22 on actuarial costs or savings associated with OPEB and the government entities that sponsor these benefit programs. Fiscal costs or savings in Table B include administrative costs associated with the government entity sponsoring the OPEB program. A fiscal cost is denoted by "Increase" or a positive number. Fiscal savings are denoted by "Decrease" or a negative number. A revenue increase is denoted by "Increase" or a positive number. A revenue decrease is denoted by "Decrease" or a negative number.

OPEB Fiscal Cost: Table B

EXPENDITURES	2018-19	2019-2020	2020-2021	2021-2022	2022-23	5 Year Total
State General Fund	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Agy Self Generated	0	0	0	0	0	0
Stat Deds/Other	0	0	0	0	0	0
Federal Funds	0	0	0	0	0	0
Local Funds	0	0	0	0	0	0
Annual Total	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0

REVENUES	2018-19	2019-2020	2020-2021	2021-2022	2022-23	5 Year Total
State General Fund	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Agy Self Generated	0	0	0	0	0	0
Stat Deds/Other	0	0	0	0	0	0
Federal Funds	0	0	0	0	0	0
Local Funds	0	0	0	0	0	0
Annual Total	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0

HB 22 will have no effect on OPEB related fiscal costs and revenues during the five year measurement period.

C. <u>Estimated Fiscal Impact: Other Government Entities (unrelated to the retirement systems or OPEB)</u>
(Prepared by the LLA using information supplied by the LFO)

1. Narrative

From time to time, legislation is proposed that has an indirect effect on cash flows associated with other government entities, unrelated to the retirement systems or OPEB. Table C shows the estimated fiscal impact (administrative and actuarial) of HB 22 on such government entities. A fiscal cost is denoted by "Increase" or a positive number. Fiscal savings are denoted by "Decrease" or a negative number.

Fiscal Costs for Other Government Entities: Table C

EXPENDITURES	2018-19	2019-2020	2020-2021	2021-2022	2022-23	5 Year Total
State General Fund	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Agy Self Generated	0	0	0	0	0	0
Stat Deds/Other	0	0	0	0	0	0
Federal Funds	0	0	0	0	0	0
Local Funds	0	0	0	0	0	0
Annual Total	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0

REVENUES	2018-19	2019-2020	2020-2021	2021-2022	2022-23	5 Year Total
State General Fund	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Agy Self Generated	0	0	0	0	0	0
Stat Deds/Other	0	0	0	0	0	0
Federal Funds	0	0	0	0	0	0
Local Funds	0	0	0	0	0	0
Annual Total	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0

HB 22 will have the following effects on fiscal costs and revenues related to other government entities during the five year measurement period.

2. Expenditures:

   a. HB 22 has no impact on expenditures for any Louisiana entity other than the state retirement systems and their sponsors.

3. Revenues:

   b. HB 22 has no impact on revenues for any Louisiana entity other than the state retirement systems and their sponsors.

D. <u>Estimated Fiscal Impact − All Retirement Systems, OPEB, and All Government Entities</u>
(Prepared by the LLA with information supplied by the LFO)

1. Narrative

Table D shows the estimated fiscal impact of HB 22 on all government entities within the state of Louisiana. Cell values in Table D are the sum of the respective cell values in Table A, Table B, and Table C. A fiscal cost is denoted by "Increase" or a positive number. Fiscal savings are denoted by “Decrease” or a negative number. A revenue increase is denoted by “Increase” or a positive number. A revenue decrease is denoted by “Decrease” or a negative number.

Total Fiscal Cost: Table D (Cumulative Costs from Tables A, B, & C)

EXPENDITURES	**2018-19**	**2019-2020**	**2020-2021**	**2021-2022**	**2022-23**	**5 Year Total**
State General Fund	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Agy Self Generated	0	0	0	0	0	0
Stat Deds/Other	0	0	0	0	0	0
Federal Funds	0	0	0	0	0	0
Local Funds	0	0	0	0	0	0
Annual Total	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0

REVENUES	**2018-19**	**2019-2020**	**2020-2021**	**2021-2022**	**2022-23**	**5 Year Total**
State General Fund	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Agy Self Generated	0	0	0	0	0	0
Stat Deds/Other	0	0	0	0	0	0
Federal Funds	0	0	0	0	0	0
Local Funds	0	0	0	0	0	0
Annual Total	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0

Fiscal Costs Received by the LLA from the LFO

1. Narrative

   Proposed law provides a set minimum employer contribution rate of 20% to a state retirement system if certain funded ratio triggers are met and provides for the use of those additional funds.

Fiscal Costs for Other Government Entities

EXPENDITURES	**2018-19**	**2019-2020**	**2020-2021**	**2021-2022**	**2022-23**	**5 Year Total**
State General Fund	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Agy Self Generated	See below	See below	See below	See below	See below	See below
Stat Deds/Other	0	0	0	0	0	0
Federal Funds	0	0	0	0	0	0
Local Funds	0	0	0	0	0	0
Annual Total	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0

REVENUES	**2018-19**	**2019-2020**	**2020-2021**	**2021-2022**	**2022-23**	**5 Year Total**
State General Fund	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Agy Self Generated	0	0	0	0	0	0
Stat Deds/Other	0	0	0	0	0	0
Federal Funds	0	0	0	0	0	0
Local Funds	0	0	0	0	0	0
Annual Total	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0

HB 22 will have the following effects on fiscal costs and revenues related to other government entities during the five year measurement period.

2. Expenditures:

   There is no anticipated direct material effect on governmental expenditures as a result of this measure. Proposed law provides that if a state retirement system’s funded ratio either (1) is not or has never been 100% or (2) has a funded ratio of 100% after July 2018 but has fallen below 90%, then the employer contribution rate shall not be set lower than 20%. This measure has no present impact to employers given that current employer contribution rates to the state retirement systems, which range from 26.4% to 47.4%, are higher than the proposed 20% minimum. Based on conversations with the Legislative Auditor’s Office and the retirement systems, the LFO does not anticipate employer contribution rates to fall below 20% in the next 5 year given that this would require a substantial reduction in the unfunded accrued liability (UAL) of the retirement systems during this timeframe. It is unlikely that a substantial reduction in UAL will occur, as it would require the state to make payments that are above the payments scheduled in the existing UAL amortization table. However, to the extent that the calculation of employer contribution were to result in the rate of less than 20%, the cost to employers would be the difference between the contribution rate that would have had to be paid under the present law and the 20% minimum as provided in the proposed law.

3. Revenues:

   There is no anticipated direct material effect on governmental revenues as a result of this measure.

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Credentials of the Signatory Staff:

Paul T. Richmond is the Manager of Actuarial Services for the Louisiana Legislative Auditor. He is an Enrolled Actuary, a member of the American Academy of Actuaries, a member of the Society of Actuaries and has met the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinion contained herein.

John D. Carpenter, Legislative Fiscal Officer, has supervised the preparation of the fiscal analyses contained herein.

Information Pertaining to Article (10)(29(F) of the Louisiana Constitution

☐ HB 22 contains a retirement system benefit provision having an actuarial cost.

No member of any Louisiana state retirement system will receive a larger benefit with the enactment of HB 22 than what he would have received without HB 22.

Dual Referral Relative to Total Fiscal Costs or Total Cash Flows:

The information presented below is based on information contained in Table D for the first three years following the 2018 regular session.

Senate

☐ 13.5.1 Applies to Senate or House Instruments.

If an annual fiscal cost ≥ \$100,000, then bill is dual referred to:

Dual Referral: Senate Finance

☐ 13.5.2 Applies to Senate or House Instruments.

If an annual tax or fee change ≥ \$500,000, then the bill is dual referred to:

Dual Referral: Revenue and Fiscal Affairs

House

☐ 6.8F Applies to Senate or House Instruments.

If an annual General Fund fiscal cost ≥ \$100,000, then the bill is dual referred to:

Dual Referral to Appropriations

☐ 6.8G Applies to Senate Instruments only.

If a net fee decrease occurs or if an increase in annual fees and taxes ≥ \$500,000, then the bill is dual referred to:

Dual Referral: Ways and Means