


**2016 REGULAR SESSION  
ACTUARIAL NOTE SB 18**

<p><b>Senate Bill 18 SLS 16RS-79</b>  <b>Reengrossed F with House Floor</b>  <b>Legislative Bureau Amendment #2307</b>  <b>and House Retirement Committee</b>  <b>Amendment #3537</b></p> <p><b>Author: Senator Barrow Peacock</b>  <b>Date: May 10, 2016</b>  <b>LLA Note SB 18.05</b></p> <p><b>Organizations Affected:</b>  <b>All State Retirement Systems</b></p> <p><b>REF NO IMPACT APV</b></p>	<p>This Note has been prepared by the Actuarial Services Department of the Office of the Legislative Auditor. The attachment of this Note to SB 18 provides compliance with the requirements of R.S. 24:521</p> <div style="text-align: center;">   <b>Paul T. Richmond, ASA, MAAA, EA</b>  <b>Manager Actuarial Services</b> </div>
--	---

**Bill Header:** RETIREMENT SYSTEMS. Provides for actuarial determinations and application of funds. (6/30/16)

**Cost Summary:**

The estimated actuarial and fiscal impact of the proposed legislation is summarized below. Actuarial costs pertain to changes in the *actuarial present value of future benefit payments*. A cost is denoted by "Increase" or a positive number. Savings are denoted by "Decrease" or a negative number.

Actuarial Cost to Retirement Systems	\$0
Total Five Year Fiscal Cost	
Expenditures	Decrease
Revenues	Decrease

**Estimated Actuarial Impact:**

The chart below shows the estimated change in the *actuarial present value of future benefit payments*, if any, attributable to the proposed legislation. A cost is denoted by "Increase" or a positive number. Savings are denoted by "Decrease" or a negative number. Present value costs associated with administration or other fiscal concerns are not included in these values.

<b><u>Actuarial Cost to:</u></b>	<b><u>Change in the Actuarial Present Value</u></b>
All Louisiana Public Retirement Systems	\$0
Other Post Retirement Benefits	\$0
Total	\$0

This bill complies with the Louisiana Constitution which requires unfunded liabilities created by an improvement in benefits to be amortized over a period not to exceed ten years.

**Estimated Fiscal Impact:**

The chart below shows the estimated fiscal impact of the proposed legislation. This represents the effect on cash flows for the retirement systems and other government entities. Fiscal costs include estimated administrative costs and costs associated with other fiscal concerns. A fiscal cost is denoted by "Increase" or a positive number. Actuarial or fiscal savings are denoted by "Decrease" or a negative number.

<b>EXPENDITURES</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-2020</b>	<b>2020-2021</b>	<b>5 Year Total</b>
State General Fund	\$ 0	\$ 0	Decrease	Decrease	Decrease	Decrease
Agy Self Generated	0	0	Decrease	Decrease	Decrease	Decrease
Stat Deds/Other	0	0	0	0	0	0
Federal Funds	0	0	0	0	0	0
Local Funds	0	0	Decrease	Decrease	Decrease	Decrease
Annual Total	\$ 0	\$ 0	Decrease	Decrease	Decrease	Decrease

<b>REVENUES</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-2020</b>	<b>2020-2021</b>	<b>5 Year Total</b>
State General Fund	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Agy Self Generated	0	0	Decrease	Decrease	Decrease	Decrease
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	Decrease	Decrease	Decrease	Decrease

**2016 REGULAR SESSION  
ACTUARIAL NOTE SB 18**

**Bill Information:**

**Current Law**

Current law contains rules for the Louisiana State Employees' Retirement System (LASERS), the Teachers' Retirement System of Louisiana (TRSL), the Louisiana School Employees Retirement System (LSERS), and the Louisiana State Police Retirement System (STPOL) regarding the calculation of employer contribution requirements.

**Proposed Law**

SB 18 will substantially reorganize current law regarding the calculation of employer contribution requirements. The reorganization portion of SB 18 does not change any rules pertaining to the four state systems. It merely relocates provisions of law to make the law more readable and understandable.

Portions of SB 18 that modify or change current law are summarized below.

1. **Twenty-Year Amortization Period** – Under current law, the amortization period for most actuarial changes and gains and losses is 30 years. Under SB 18, the amortization period will be reduced from 30 years to 20 years on the first valuation date for which the funded ratio for LASERS is 70% or more. The applicable thresholds for TRSL, LSERS and STPOL are 70%, 72%, and 70% respectively.
2. **Amortization of Investment Gains Transferred to the Experience Account** – Under current law, a charge base is established whenever an amount is transferred to the Experience Account. The charge base is amortized with level payments over a 30-year period. Beginning with the June 30, 2019 valuation, such a charge base will be amortized with level payments over 10 years. Under SB 18, charge bases attributable to transfers to the Experience Account will be amortized with level payments over a 10-year period beginning with the June 30, 2016 valuation.
3. **Merger of TRSL Sub Plans** – Under current law, there are three sub plans pertaining to primary and secondary education; regular K-12 teachers, Lunch Plan A staff, and Lunch Plan B staff. Separate employer contribution rates are determined for each of these sub plans. Under SB 18, a single employer contribution rate will be determined for the merged sub plans. This will first occur with the June 30, 2016 valuation.
4. **Re-Amortization of the OAB** – Under current law, the OAB receives a portion of investment gains that are then used to reduce the outstanding balance of the OAB. However, the outstanding balance is not re-amortized unless the system has attained a funded ratio of at least 85%. As a result, investment gains are used to reduce the date the OAB is fully liquidated.

Under SB 18, the outstanding balance of the OAB will be re-amortized under the following circumstances.

- a. The outstanding balance of the OAB will be re-amortized over the remaining amortization period beginning with the June 30, 2018 valuation and first effecting employer contribution requirements for FYE 2020. No re-amortization will occur for FYEs 2021, 2022, 2023, and 2024, unless the conditions set forth under Item 4b below are met. Re-amortization of the OAB will next occur for FYE 2025 and every year thereafter that is evenly divisible by 5.
  - b. Beginning June 30, 2019, annual payments necessary to amortize the OAB with level payments over the remaining amortization period will be calculated. If the level payment so calculated is less than the payment otherwise payable relative to the OAB, then the level schedule of payments will replace the existing payment schedule. These provisions of SB 18 may first have an effect on employer contribution requirements for FYE 2021 and every year thereafter until the OAB is fully liquidated.
  - c. Once the system attains a funded ratio of at least 80%, the OAB will be re-amortized every year with level payments over the remaining amortization period.
5. **Re-Amortization of the EAAB** – Under current law, the EAAB receives a portion of investment gains that are then used to reduce the outstanding balance of the EAAB. However, the outstanding balance is not re-amortized unless the system has attained a funded ratio of at least 85%. As a result, investment gains are used to reduce the date the EAAB will become fully liquidated.

Under SB 18, the outstanding balance of the EAAB will be re-amortized under the following circumstances.

- a. The outstanding balance of the EAAB will be re-amortized over the remaining amortization period beginning with the June 30, 2018 valuation and first effecting employer contribution requirements for FYE 2020. No re-amortization will occur for FYEs 2021, 2022, 2023, and 2024. Re-amortization of the EAAB will next occur for FYE 2025 and every year thereafter that is evenly divisible by 5.
  - b. Once the system attains a funded ratio of at least 80%, the EAAB will be re-amortized every year with level payments over the remaining amortization period.
6. **Re-amortization of Charge Bases Entitled to a Portion of Investment Gains** – Under current law, the oldest existing charge base, after the OAB and EAAB have been fully liquidated, receives a portion of investment gains that are then used to reduce the outstanding balance of such a base. However, the outstanding balance is not re-amortized unless the system has attained a funded ratio of at least 85%. As a result, investment gains are used to reduce the date the oldest such base will become fully liquidated.

## 2016 REGULAR SESSION ACTUARIAL NOTE SB 18

Under SB 18, the outstanding balance of a charge base entitled to receive an allocation of investment gains, if any, will be re-amortized under the following circumstances.

- a. The outstanding balance of such a charge base will be re-amortized over the remaining amortization period beginning with the June 30, 2018 valuation and first effecting employer contribution requirements for FYE 2020. No re-amortization will occur for FYEs 2021, 2022, 2023, and 2024. Re-amortization of such a charge base will next occur for FYE 2025 and every year thereafter that is evenly divisible by 5.
- b. Once the system attains a funded ratio of at least 80%, charge bases entitled to a portion of investment gains will be re-amortized every year with level payments over the remaining amortization period.

### Implications of the Proposed Changes

SB 18 is essentially a bill that reorganizes sections of current law regarding the calculation of employer contribution requirements. SB 18 also modifies certain amortization rules.

### Cost Analysis:

#### Analysis of Actuarial Costs

SB 18 does not contain benefit provisions having an actuarial cost.

#### Retirement Systems

SB 18 affects the funding policies of the four state retirement systems. The allocation of actuarial costs to future periods will change and future employer contribution requirements will change. The effects of these changes are summarized below.

1. **Twenty Year Amortization Period** – This provision affects the funding policies of the retirement systems. It has no effect on benefits or the present value of future benefits. Employer contribution requirements are likely to increase because 100% of any losses are amortized as a charge base with level payments over 20 years. Only a portion of gains are so amortized. This upward pressure on employer contribution requirements will be strongest during the immediate future than in later years. This provision may affect fiscal costs for LSERS and STPOL as early as FYE 2019.
2. **Amortization of the Investment Gains Transferred to the Experience Account** – This provision affects the funding policies of the retirement system. It has no effect on benefits or on the present value of future benefits. Employer contribution requirements for FYE 2018, 2019, and 2020 may potentially increase as a result of this portion of SB 18. However, it is not likely that this provision will affect fiscal costs for FYE 2018 because investment losses are expected for FYE 2016. The earliest that investment gains may occur is likely to be FYE 2017. Therefore, this provision is likely to affect fiscal costs for FYE 2019 at the earliest. This upward pressure on employer contribution requirements will be strongest during the immediate future than in later years.
3. **Merger of TRSL Sub Plans** – The merger of the K-12 sub plan, the Lunch Plan A sub plan and the Lunch Plan B sub plan into a single sub plan has no effect on employer contribution requirements in the aggregate. However, employers of personnel participating in Lunch Plan A and Lunch Plan B will experience lower contribution requirements. Contribution requirements for all other personnel participating in TRSL will be larger.
4. **Re-amortization of the OAB** – This provision affects the funding policies of the retirement systems. It has no effect on benefits or on the present value of future benefits. Employer contribution requirements will initially decrease as a result of this portion of SB 18. In later years, employer contribution requirements will be larger under SB 18 than under current law. This provision may affect fiscal costs as early as FYE 2021.
5. **Re-amortization of the EAAB** – This provision affects the funding policies of the retirement systems. It has no effect on benefits or on the present value of future benefits. Employer contribution requirements will initially decrease as a result of this portion of SB 18. In later years, employer contributions under SB 18 will be larger than under current law. This provision may affect fiscal costs as early as FYE 2020.
6. **Re-Amortization of Charge Bases Entitled to a Portion of Investment Gains** – This provision affects the funding policies of the retirement systems. It has no effect on benefits or on the present value of future benefits. Employer contribution requirements will decrease initially as a result of this portion of SB 18. In later years, employer contributions under SB 18 will be larger than under current law. This provision may affect fiscal costs as early as FYE 2020.

#### Other Post-Employment Benefits

There is no actuarial cost associated with SB 18 for post-retirement benefits other than pensions.

**2016 REGULAR SESSION  
ACTUARIAL NOTE SB 18**

**Analysis of Fiscal Costs**

Changes in fiscal costs are summarized below:

Expenditures:

1. Expenditures from the General Fund may increase or decrease as a result of the 20-year amortization provisions of SB 18. However, it is more likely that a gain will occur than a loss. An increase or decrease will occur depending on whether the new base is a charge base or credit base. An increase or decrease in employer contribution requirements will not occur until FYE 2019 at the earliest. These provisions of SB 18 are not likely to apply to LASERS and TRSL for several years, because there is a considerable gap between the current funded ratios for these systems and the applicable thresholds. These provisions are likely to apply to LSERS and STPOL within a couple of years because both systems have funded ratios that are close to the applicable thresholds.
2. Expenditures from the General Fund may potentially increase for FYE 2018, 2019, and 2020 because the implementation date for 10-year amortization of transfers to the Experience Account has been moved from the June 30, 2019 valuation back to the June 30, 2016 valuation. However, it is likely that the systems will experience investment losses for FYE 2016. Therefore, it is likely that the first transfer to the Experience Account will occur no earlier than June 30, 2017. The first employer contribution that would likely be affected by these provisions is the contribution for FYE 2019.
3. Expenditures from the General Fund will increase as a result of the provisions of SB 18 pertaining to the merger of the TRSL sub plans. The reduction of employer contribution requirements for Lunch Plan A and Lunch Plan B will cause requirements for all other participants in TRSL to increase.
4. Expenditures from the General Fund will decrease as a result of the re-amortization of the OAB provisions of SB 18. The earliest that such a decrease could occur is for FYE 2020.
5. Expenditures from the General Fund will decrease as a result of the re-amortization of the EAAB provisions of SB 18. The earliest that such a decrease could occur is for FYE 2020.
6. Expenditures from the General Fund will decrease as a result of the re-amortization of charge bases entitled to a portion of investment gains. The earliest that such a decrease could occur is for FYE 2020.
7. Expenditures from Local Funds will increase or decrease in the same manner and for the same reasons as summarized above for expenditures for the General Fund.
8. The net effect of all changes made by SB 18 will be a decrease in fiscal cost expenditures from the General Fund. Similarly, the net effect of all changes will be a decrease in fiscal cost expenditures from Local Funds.

Revenues:

1. Retirement System revenues (Agy Self-Generated) will decrease under SB 18 because employer contribution requirements will decrease.

**Actuarial Data, Methods and Assumptions**

This actuarial note was prepared using actuarial data, methods, and assumptions as disclosed in the most recent actuarial valuation report approved by PRSAC. These assumptions and methods are in compliance with actuarial standards of practice. This 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.

**Actuarial Caveat**

There is nothing in SB 18 that will compromise the signing actuary's ability to present an unbiased statement of actuarial opinion.

**Actuarial Credentials:**

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.

**Dual Referral:**

**Senate**

- 13.5.1: Annual Fiscal Cost  $\geq$  \$100,000
- 13.5.2: Annual Tax or Fee Change  $\geq$  \$500,000

**House**

- 6.8(F)(1): Annual Fiscal Cost  $\geq$  \$100,000
- 6.8(F)(2): Annual Revenue Reduction  $\geq$  \$100,000
- 6.8(G): Annual Tax or Fee Change  $\geq$  \$500,000