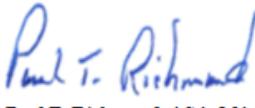


**2018 REGULAR SESSION
ACTUARIAL NOTE SB 530**

<p>Senate Bill 530 SLS 18RS-133 Original</p> <p>Author: Senator Milkovich Date: April 10, 2018 LLA Note SB 530.01</p> <p>Organizations Affected: Teachers' Retirement System of Louisiana</p> <p>OR INCREASE APV</p>	<p>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.</p> <div style="text-align: center;">  Paul T. Richmond, ASA, MAAA, EA Manager Actuarial Services </div>
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Bill Header: TEACHERS RETIREMENT. Provides for reduction of investment fees and allocation of savings. (6/30/18)

Cost Summary:

The estimated actuarial and fiscal impact of SB 530 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		Increase
Other Post-Employment Benefits (OPEB)		0
Other Government Entities		0
Total		Increase
Five Year Fiscal Cost Pertaining to:	Expenses	Revenues
The Retirement Systems	Increase	Increase
Other Post-Employment Benefits	0	0
Other Government Entities	0	0
Total	Increase	Increase

Bill Information

Current Law

Current law gives the board of trustees of the Teachers' Retirement System of Louisiana (TRSL) full power to invest and reinvest the funds of the system.

Further, it imposes the prudent-man rule on each fiduciary and collectively on the board of trustees, requiring the exercise of reasonable care, skill, and caution, and applying them not to investments in isolation, but in the context of the trust portfolio, and as part of an overall investment strategy.

Proposed Law

SB 530 requires the board of trustees to review the contracts for all the investments of TRSL and to reduce the fees paid under the contracts by one-half and no later than June 30, 2025, in accordance with the board's fiduciary duty.

The savings from the reduction in fees from the rates existing on June 30, 2018 will be applied in the following manner:

- 1) One-half will be applied to the oldest outstanding positive amortization base.
- 2) One-half will be applied as a credit to the employers for reduction of the actuarially required employer contributions.

Implications of the Proposed Changes

SB 530 provides for a fifty percent reduction in investment fees by June 30, 2025. This cannot be accomplished without a significant reduction in the investment performance of the system's portfolio; a reduction in the assumed investment return on assets; and a significant increase in the employer contribution rate.

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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

Actuarial costs for SB 530 associated with the TRSL are expected to increase. Our analysis is summarized below.

- a. TRSL will incur at least \$62 million (about \$9 million a year) in transaction costs over the next seven years to move all actively managed assets to passively managed assets.
- b. According to TRSL, the system will also have to do the following in order to comply with HB 530.
 - 1). Acquire indexed funds for a significant portion of the investment portfolio, and
 - 2). Limit its investment in private assets (its best performing asset class) to no more than 21% of the total portfolio.
- c. As a result, the investment performance of the fund is likely to decrease; the board of trustees will probably find it necessary to lower the assumed rate of return on assets; employer contribution requirements will increase.

If it is necessary to reduce the assumed rate of return on investments by 50 basis points (0.50%), the employer contribution rate will increase 150 basis points (1.50% of the estimated payroll), or \$68 million. Adding annual transaction costs of \$9 million a year will cause the employer contribution rate to increase another 20 basis points (0.20% of estimated payroll). The total increase in the employer contribution rate will be 170 basis points (1.70% of estimated payroll). The total cost increase in dollars will be \$77 million. Comparable information is shown below for a 100 basis point decrease in the assumed rate of return on investments.

Decrease in the Assumed Rate of Return on Investments	0.50%	1.00%
Increase in the Employer Contribution Rate	1.70% of estimated payroll	3.20% of estimated payroll
Increase in Required Employer Contributions	\$ 77 million	\$ 145 million

No benefits will change as a result of SB 530. However, the actuarial present value of future benefits will increase because of the lower assumed rate of return on investment.

2. Other Post-Employment Benefits (OPEB)

The actuarial cost or savings of SB 530 associated with OPEB, including retiree health insurance premiums, is estimated to be \$0. Our analysis is summarized below.

The liability for post-retirement medical insurance protection provided to retirees is not affected by changes in TRSL investments or investment expenses.

3. Other Government Entities

The actuarial cost or savings of SB 530 associated with government entities other than those identified in SB 530, is estimated to be \$0.

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

Unless indicated otherwise, the actuarial note for SB 530 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 SB 530 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.

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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 Received by the LLA from 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 Costs: Table A

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

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	Increase	Increase	Increase	Increase	Increase
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	Increase	Increase	Increase	Increase	Increase

SB 530 will have the following effects on retirement related fiscal costs and revenues during the five-year measurement period. For purposes of this Actuarial Note we assumed that the goal established by SB 530 is attainable. For Table A we assumed that transactions implementing the requirements of SB 530 will occur evenly over the next seven years.

2. Expenditures

- a. TRSL expenditures (Agy Self-Generated) will be larger than they are currently, reflecting annual costs for investment transaction fees necessary to accomplish the objectives of SB 530.
- b. TRSL expenditures (Agy Self-Generated) for investment fees will decrease over the next seven years as the portfolio is transitioned from investments with high fees to investments with lower fees.
- c. Expenditures from the General Fund will increase as the assumed rate of return on investments becomes smaller. Passive management of a portfolio produces lower returns than active management. As a result, employer contribution requirements relative to teachers employed in higher education will increase.
- d. Expenditures from Local Funds (applicable to teachers in K-12) will increase for the same reason that expenditures from the General Fund will increase. Employer contributions for school districts will increase.

3. Revenues

- a. TRSL revenues (Agy Self-Generated) will increase because required employer contributions will increase.

**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 SB 530 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.

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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

SB 530 will have no effect on OPEB related fiscal costs and revenues during the five-year measurement period.

**C. Estimated Fiscal Impact: Other Government Entities (unrelated to the retirement systems or OPEB)
(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 SB 530 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

SB 530 will have no effect on fiscal costs and revenues related to government entities other than TRSL during the five-year measurement period.

**D. Estimated Fiscal Impact – All Retirement Systems, OPEB, and All Government Entities
(Prepared by LLA)**

1. Narrative

Table D shows the estimated fiscal impact of SB 530 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.

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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	Increase	Increase	Increase	Increase	Increase
Agy Self Generated	Increase	Increase	Increase	Increase	Increase	Increase
Stat Deds/Other	0	0	0	0	0	0
Federal Funds	0	0	0	0	0	0
Local Funds	0	Increase	Increase	Increase	Increase	Increase
Annual Total	Increase	Increase	Increase	Increase	Increase	Increase

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	Increase	Increase	Increase	Increase	Increase
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	Increase	Increase	Increase	Increase	Increase

Fiscal Costs Received by the LLA from the LFO
(Prepared by Tanesha Morgan, Legislative Fiscal Office)

1. Narrative

Proposed law provides that the Board Trustees for the Teachers' Retirement System of Louisiana (TRSL) shall reduce investment fees paid by 50% no later than June 20, 2025 and provides how the savings shall be applied.

Fiscal Costs for Other Government Entities

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

SB 530 will have the following effects on fiscal costs and revenues related to other government entities during the five year measurement period.

2. Expenditures:

This measure provides that investment fees shall be reduced by 50% and that the savings shall be equally applied to the original amortization base and as a credit to employers' contributions. In the short term, this fiscal note anticipates a reduction in the required employer contribution rate paid by TRSL agencies due to a reduction in investment fees. The amount of this reduction is dependent on the actuarial calculation of the required employer contribution rate. However, in the long term, the LFO anticipates that the employer contribution rate may increase as a result of TRSL earning less investment returns due to having to make investment changes in order to maintain a 50% reduction in fees.

3. Revenues:

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

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.

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

SB 530 contains a retirement system benefit provision having an actuarial cost.

No member of TRSL will receive a larger benefit with the enactment of SB 530 than what he would have received without SB 530.

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

House

13.5.1 Applies to Senate or House Instruments.
If an annual fiscal cost \geq \$100,000, then bill is dual referred to:
Dual Referral: Senate Finance

6.8F Applies to Senate or House Instruments.
If an annual General Fund fiscal cost \geq \$100,000, then the bill is dual referred to:
Dual Referral to Appropriations

13.5.2 Applies to Senate or House Instruments.
If an annual tax or fee change \geq \$500,000, then the bill is dual referred to:
Dual Referral: Revenue and Fiscal Affairs

6.8G Applies to Senate Instruments only.
If a net fee decrease occurs or if an increase in annual fees and taxes \geq \$500,000, then the bill is dual referred to:
Dual Referral: Ways and Means