2013 REGULAR SESSION
ACTUARIAL NOTE SB 4

Senate Bill 4 SLS 13RS-14 **Original** **Author: Senator Elbert L. Guillory** **Date: March 18, 2013** **LLA Note SB 4.01** **Organizations Affected:** **Louisiana State Employees' Retirement System** **Teachers' Retirement System of Louisiana** **OR NO IMPACT APV**	**The Note was prepared by the Actuarial Services Department of the Office of the Legislative Auditor. The attachment of this Note to SB 4 provides compliance with the requirements of R.S. 24:521.** **Paul T. Richmond, ASA, MAAA, EA** **Manager Actuarial Services**

Bill Header: RETIREMENT SYSTEMS. Provides for use of entry age normal valuation method by Louisiana State Employees' Retirement System and Teachers' Retirement System of Louisiana. (6/30/13).

Cost Summary:

Actuarial Cost/(Savings) to Retirement Systems and OGB	$0
Total Five Year Fiscal Cost	
Expenditures	$ 89,000,000
Revenues	$ 89,000,000

Estimated Actuarial Impact:

The chart below shows the estimated increase/(decrease) in the actuarial value of benefits, if any, attributable to the proposed legislation. Note: it includes the present value cost of fiscal costs associated with benefit changes. It does **not** include present value costs associated with administration or other fiscal concerns.

Actuarial Cost (Savings) to:	**Increase (Decrease) in The Actuarial Present Value**
All Louisiana Public Retirement Systems	$0
Other Post Retirement Benefits	$0
Total	$0

Estimated Fiscal Impact:

The chart below shows the estimated fiscal impact of the proposed legislation. This represents the effect on cash flows for government entities including the retirement systems and the Office of Group Benefits.

EXPENDITURES	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-2018**	**5 Year Total**
State General Fund	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Agy Self Generated	0	(14,000,000)	(13,000,000)	(11,000,000)	(9,000,000)	(47,000,000)
Stat Deds/Other	0	0	0	0	0	0
Federal Funds	0	0	0	0	0	0
Local Funds	0	38,000,000	36,000,000	33,000,000	29,000,000	136,000,000
Annual Total	$ 0	$ 24,000,000	$ 23,000,000	$ 22,000,000	$ 20,000,000	$ 89,000,000

REVENUES	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-2018**	**5 Year Total**
State General Fund	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Agy Self Generated	0	24,000,000	23,000,000	22,000,000	20,000,000	89,000,000
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	$ 24,000,000	$ 23,000,000	$ 22,000,000	$ 20,000,000	$ 89,000,000

Bill Information:

Current Law

Both the Louisiana State Employees' Retirement System (LASERS) and the Teachers' Retirement System of Louisiana (TRSL) use the Projected Unit Credit (PUC) funding method as a way to budget for a member's benefit over the course of his career. The cost assigned under this method to each year of service is roughly equivalent to the present value of the benefit earned that year. This cost generally increases throughout a member's career, both as a dollar amount and as a percentage of pay.

Proposed Law

Under SB 4, LASERS and TRSL will use the Entry Age Normal (EAN) funding method to budget for a member's benefit. The cost assigned to employers each year under the EAN method is designed to maintain costs as a level percentage of pay throughout a member's career. This change will become effective for the calculation of employer contribution requirements for the fiscal year ending June 30, 2015.

Implications of the Proposed Changes

Most of the sub plans of LASERS are frozen to new employees of the state. The only sub plan currently accepting new members is the Hazardous Duty Sub Plan. The Cash Balance Sub Plan will begin accepting new members on July 1, 2013. Employer normal cost rates under the PUC method increase as members become older. Therefore, the normal cost for the frozen sub plans will become increasingly larger as the years go by. Normal cost rates under the EAN method do not change materially from one year to the next. Therefore, the change proposed by SB 4 will help stabilize employer contribution requirements.

The TRSL sub plan for Higher Education employees is also frozen to new entrants. SB 4 will have a similar stabilizing effect on contribution requirements for this sub plan.

Cost Analysis:

Analysis of Actuarial Costs

Retirement Systems

SB 4 has no effect on benefits or on the total actuarial present value of future benefits (APV). Nor does the bill have any effect on the total amount of contributions that must be made in the future. SB 4 merely re-allocates the APV between the portion that is assigned to the past and the portion assigned to the future. For both LASERS and TRSL, the change in funding method will increase the liability that has been assigned to the past and decrease the liability that is assigned to the future.

According to our analysis, the employer contribution rate will be smaller for FYE 2015 under the EAN method for LASERS than it would have been under PUC. For TRSL, the employer contribution rate will be larger.

LASERS

	PUC at 8.00%	**EAN at 8.00%**	**Increase/(Decrease)**
Accrued Liability	$ 16,700,000,000	$ 17,700,000,000	$ 1,000,000,000
Total Normal Cost	346,000,000	256,000,000	(95,000,000)
Employer Normal Cost	$ 151,000,000	$ 56,000,000	$ (95,000,000)
Amortization of Accrued Liability	634,000,000	715,000,000	81,000,000
Employer Contribution Requirements	785,000,000	771,000,000	(14,000,000)
Payroll for Normal Costs	$ 2,478,000,000	$ 2,478,000,000	$ 0
Payroll for Amortization Costs	2,478,000,000	2,478,000,000	0
Employer Normal Cost Rate	6.0954%	2.2613%	- 3.8341%
Employer Amortization Rate	25.5623%	28.8441%	3.2818%
Total Employer Rate	31.6577%	31.1054%	- 0.5523%

TRSL

	PUC At 8.00%	**EAN at 8.00%**	**Increase/(Decrease)**
Accrued Liability	$ 26,500,000,000	$ 28,200,000,000	$ 1,700,000,000
Total Normal Cost	551,000,000	445,000,000	(106,000,000)
Employer Normal Cost	$ 231,000,000	$ 125,000,000	$ (106,000,000)
Amortization of Accrued Liability	980,000,000	1,124,000,000	144,000,000
Employer Contribution Requirements	1,211,000,000	1,249,000,000	38,000,000
Payroll for Normal Costs	$ 4,018,000,000	$ 4,018,000,000	$ 0
Payroll for Amortization Costs	4,594,000,000	4,594,000,000	0
Employer Normal Cost Rate	5.7420%	3.1021%	- 2.6399%
Employer Amortization Rate	21.3390%	24.4672%	3.1280%
Total Employer Rate	27.0810%	27.5693%	0.4883%

The total amount of change in key cost components, based on our analysis is summarized below:

1. The accrued liability in total will increase $2.7 billion.
2. Employer normal costs will decrease $201 million.
3. Amortization costs will increase $225 million.
4. Employer contribution requirements will increase $24 million.

The total amount of contributions that must be made in the future will be the same regardless of which funding method – PUC or EAN – is used. The only change is the allocation of contribution requirements to normal costs and amortization costs. Initially, for LASERS, the reallocation associated with the change in methods will cause contribution requirements to be slightly smaller. Eventually, however, employer contribution rates under EAN will be larger than what they would have been had the change not been made. The opposite is true for TRSL. The change to EAN will result is slightly larger contribution requirements, but eventually, they will be smaller.

Currently, the difference is employer contributions are small and offset one another. However, as years go by, a change in methods may be more disruptive to consistent and orderly funding of the retirement systems.

Estimates of the changes in contribution requirements for during the 5 year fiscal measurement period are given below.

Fiscal Year	LASERS	TRSL	Total
2013-14	$ 0	$ 0	$ 0
2014-15	(14,000,000)	38,000,000	24,000,000
2015-16	(13,000,000)	36,000,000	23,000,000
2016-17	(11,000,000)	33,000,000	22,000,000
2017-18	(9,000,000)	29,000,000	20,000,000

The estimate of fiscal cost for FYE 2015 is quite reliable. Estimates for later years are increasingly less reliable.

Other Post Retirement Benefits

There are no actuarial costs associated with SB 4 for post-employment benefits other than pensions.

Analysis of Fiscal Costs

SB 4 will have the following effect on fiscal costs.

Expenditures:

1. Expenditures from the General Fund will decrease because contribution requirements for employers participating in LASERS will decrease.

2. Expenditures from the General Fund will increase to the extent that contribution requirements for employers in higher education will increase. However, this amount is included in expenditures from Local Funds.

3. Expenditures from Local Funds will increase to the extent that contribution requirements for employers for pre K-12 will be larger under the EAN method than under the PUC method.

Revenues:

1. Revenues to LASERS and TRSL (Agy Self-Generated) will increase because contribution requirements for employers participating in LASERS and TRSL will increase.

<u>Actuarial Credentials:</u>

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 to render the actuarial opinion contained herein.

<u>Dual Referral:</u>

Senate	**House**
[x] 13.5.1 ≥ $100,000 Annual Fiscal Cost	[x] 6.8(F) ≥ $500,000 Annual Fiscal Cost
[ ] 13.5.2 ≥ $500,000 Annual Tax or Fee Change	[ ] 6.8(G) ≥ $500,000 Annual Tax or Fee Change