2011 REGULAR SESSION
ACTUARIAL NOTE SB 10

Senate Bill 10 SLS 11RS-43 **Engrossed** **Author: Senator B. L. Shaw** **Date: May 24, 2011** **LLA Note SB 10.02** **Organizations Affected:** **Teachers' Retirement System of Louisiana** **EG INCREASE APV**	**The Note was prepared by the Actuarial Services Department of the Office of the Legislative Auditor.** Paul T. Richmond **Paul T. Richmond, ASA, MAAA, EA** **Manager Actuarial Services**

Bill Header: TEACHERS RETIREMENT. Provides for permanent benefit increases for retirees payable from the experience account. (2/3 – CA 10s29(F))(8/15/2011)

Cost Summary:

Actuarial Cost/(Savings) to Retirement Systems and OGB	Actuarial Cost Increase
Total Five Year Fiscal Cost	
Expenditures	Expenditure Increase
Revenues	Revenue Increase

Aggregate expenditures are expected to exceed aggregate revenues by more than $100,000 in one or more years in the next five year period.

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 proposed benefit changes. It does **not** include present value costs associated with other fiscal concerns.

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

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 government entities including the retirement systems and the Office of Group Benefits.

EXPENDITURES	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**5 Year Total**
State General Fund	$ 0	Increase	Increase	Increase	Increase	Increase
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	Increase	Increase	Increase	Increase	Increase
Annual Total	$ 0	Increase	Increase	Increase	Increase	Increase

REVENUES	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**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

The specific years in which an increase will occur cannot be predicted. However, it is expected that an increase will occur in one or more years during the fiscal measurement period.

Bill Information:

Current Law

The Experience Account for the Teachers' Retirement System of Louisiana (TRSL) is financed in the following manner under current law:

- If an investment gain for a given fiscal year based on the actuarial value of assets exceeds $200 million, 50% of the investment gain in excess of $200 million will be transferred from the regular pool of retirement system assets to the Experience Account.

Under current practice and existing law, the unfunded accrued liability (UAL) of the system is increased by an amount equal to the amount transferred to the Experience Account. This increase in UAL is then amortized over a period of 30 years in the calculation of annual employer contribution requirements.

Under current law, no permanent benefit increases can be approved if both the following are true (1) the retirement system is less than 80% funded and (2) the investment return based on the actuarial value of assets is less than the approved valuation rate of return, which is currently 8.25%.

If a permanent benefit increase is granted, then retirees age 60 and older and beneficiaries of retirees who would have been age 60 or older had they not died will be eligible for an benefit increase.

Proposed Law

Under proposed law, the Experience Account for TRSL will be financed in the following manner.

- For any fiscal year in which there is an investment gain based on the actuarial value of assets, 50% of the investment gain will be transferred from the regular pool of retirement system assets to the Experience Account.

The unfunded accrued liability of the system will be increased by the amount transferred to the Experience Account. This increase in UAL will be amortized over a ten year period in the calculation of annual contribution requirements.

The prohibition against approving a permanent benefit increase unless both (1) the funded status of the plan is at least 80% and (2) the rate of return on the actuarial value of assets is at least 8.25% will be repealed.

If a permanent benefit increase is granted under proposed law, retirees age 55 and older and beneficiaries of retirees who would have been age 55 or older had they not died will be eligible for a benefit increase.

A transfer of investment gains from the regular pool of assets to the Experience Account will be first permitted under the proposed law based on the result of the June 30, 2012 actuarial valuation for TRSL.

Implications of the Proposed Changes

The proposed law will have the following effects:

1. The number of occurrences of transfers of assets from the regular pool to the Experience Account will increase under the proposed law. Such transfers currently occur whenever investment gains exceed $200 million. Under proposed law, such transfers will happen whenever any investment gain occurs.

2. The number of times that the retirement system will be charged with an increase in its unfunded accrued liability will increase.

3. The size of any increase in the unfunded accrued liability will be larger than under current law.

4. The period over which such increases in the unfunded accrued liability must be amortized will be reduced from 30 years to 10 years. As a result, annual amortization payments included in total employer contribution requirements will be larger.

5. Employer contribution requirements are likely to increase.

6. Permanent benefit increases are more likely to be granted and the number of retirees and beneficiaries eligible for such an increases will be greater.

7. No permanent benefit increases will be permitted before July 1, 2012.

<u>Cost Analysis:</u>

Analysis of Actuarial Costs

Retirement Systems

Although the actuarial cost of SB 10 cannot be determined, there is a cost and the cost may be significant. Chart 1 shows investment gains and losses since 1988, the earliest year such information was readily available. The following observations can be made from this chart.

1. Investment gains exceeding $200 million occurred in 6 of the past 23 years. If current law had always applied, a transfer from the regular pool of assets to the Experience Account would have occurred only six times.

2. Investment gains occurred in 15 of the 23 years. If the proposed law had always been applied, a transfer from the regular pool to the Experience Account would have occurred in 15 years, two and a half times more frequently than under current law.

Chart 1

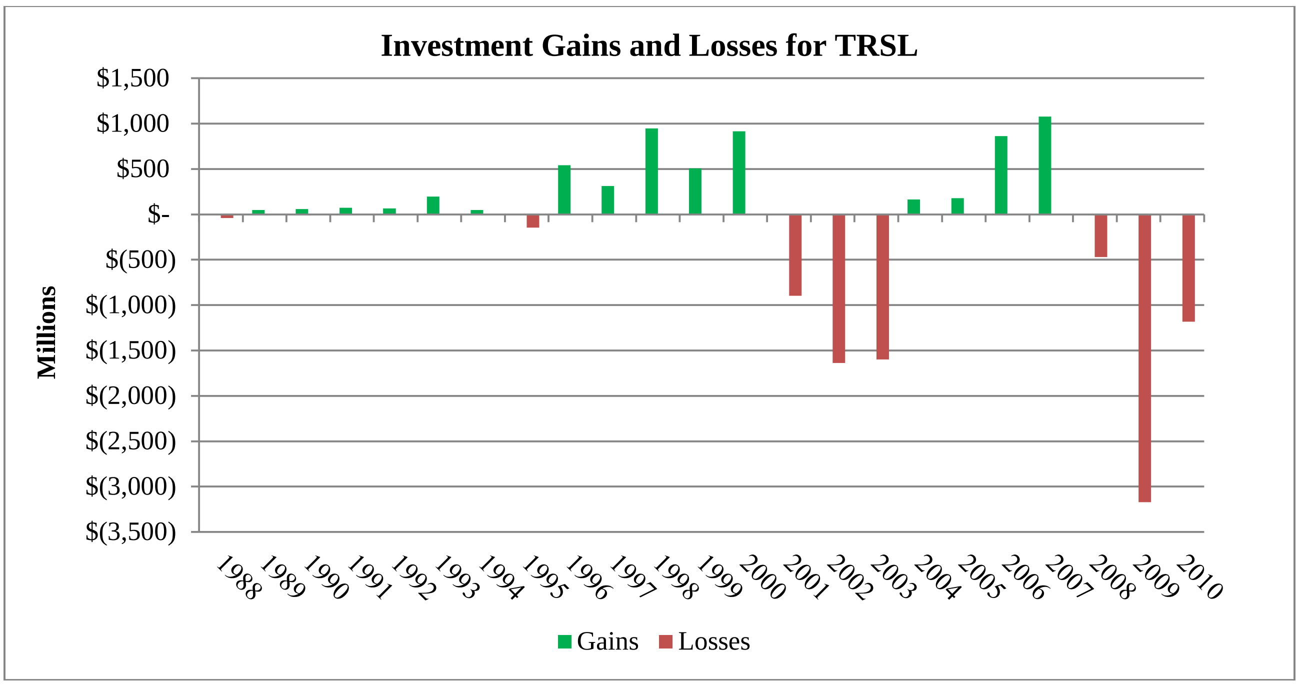
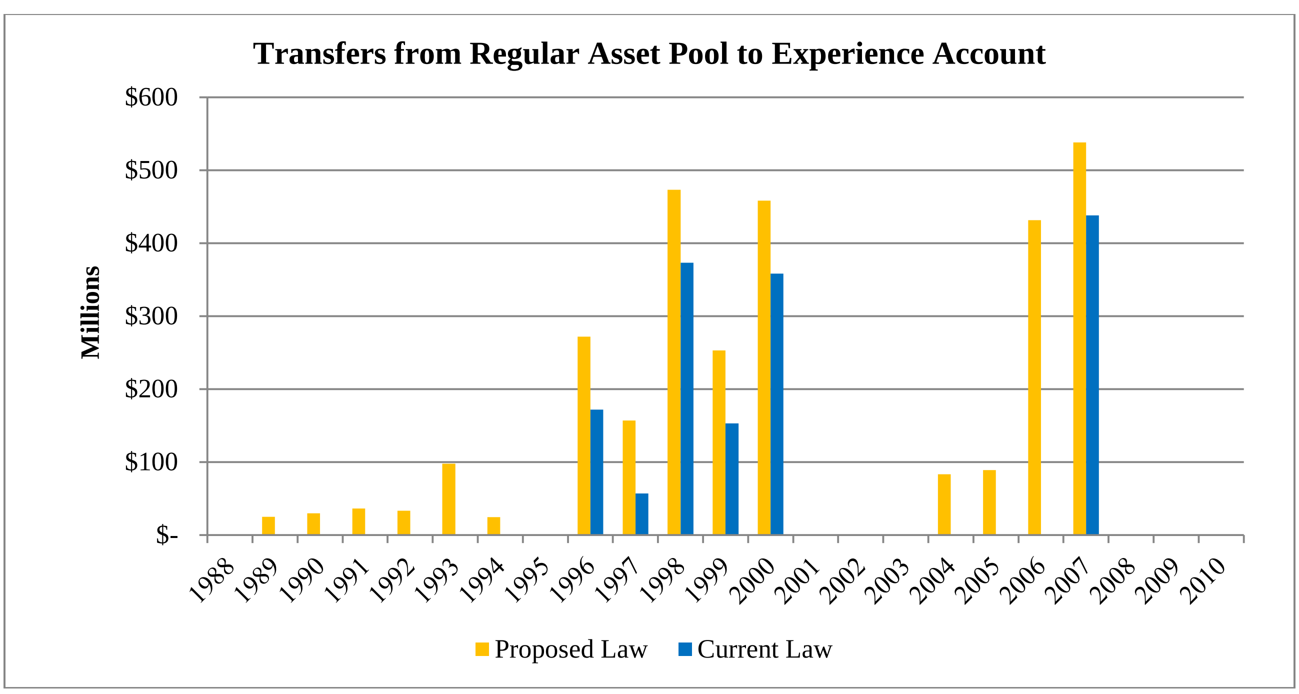


Chart 2 compares the amounts that would have been transferred each year under current law with amounts that would have been transferred each year under proposed law.

Chart 2



Over the past 23 years, $1.552 billion would have been transferred had current law applied. Over the same period, $3.003 billion would have been transferred if proposed law had applied.

It is unlikely that the pattern of investment gains and losses over the next quarter century will be similar to the pattern that has occurred over the past 25 years. Nevertheless, regardless of the pattern of future investment gains and losses, it is clear that the proposed law will be more costly than the current law and perhaps significantly so.

Other Post Retirement Benefits

There is no actuarial cost for SB 10 associated with post-retirement benefits other than pensions.

Analysis of Fiscal Costs

Over the past 23 years, the longest that TRSL has gone without experiencing an investment gain has been 3 years. The first occurrence of a three year period of losses occurred from 2001 to 2003. The retirement system is currently in a streak of three consecutive years of losses. It is very unlikely that the current losing streak will continue for another five years, the duration of the fiscal cost measurement period.

The average investment gain over the past 23 years has been about $400 million. The median gain has been just under $200 million.

Based on this analysis, it is quite likely that an investment gain of $100 million or more will occur sometime in the next five years. If such a gain should occur, then the proposed law would have the following financial implications on the retirement system.

1. $50 million would be transferred from the regular pool of assets to the Experience Account.
2. A new $50 million unfunded accrued liability (UAL) would be established.
3. Employer contributions would have to be increased by about $7.2 million to amortize the new UAL.

The effect on Expenditure and Revenues are summarized below:

1. Expenditures from the General Fund will increase to the extent that the increase in employer contributions affects the cost of state run colleges and universities. SB 10 does not provide for an increase in the MFP for primary and secondary education systems. Therefore retirement system contributions will be paid by school districts out of revenues they collect from all sources.
2. Expenditures from TRSL (Agy/Self Generated) will increase once sufficient funds had been accumulated in the Experience Account to permit a permanent benefit increase to be granted.
3. Expenditures by school districts (Local Funds) will increase to accommodate additional employee contributions to TRSL.
4. TRSL revenues (Agy/Self Generated) will increase as employer contributions are increased.
5. General Fund revenues and Local Fund revenues will not change as a result of SB 10.

The Teachers' Retirement System of Louisiana has stated that administrative costs will not increase as a result of SB 10.

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 to render the actuarial opinion contained herein.

Dual Referral:

Senate	**House**
[x] 13.5.1 ≥ $100,000 Annual Fiscal Cost	[x] 6.8(F)(1) ≥ $500,000 Annual Fiscal Cost
[ ] 13.5.2 ≥ $500,000 Annual Tax or Fee Change	[x] 6.8(F)(2) ≥ $100,000 Annual SGF Fiscal Cost
	[ ] 6.8(G) ≥ $500,000 Annual Tax or Fee Change

Although the fiscal cost for any one of the three fiscal years following the 2011 legislative session cannot be measured and an amount is not specified, it is almost certain that such cost will exceed $500,000 in one or more years during the measurement period. The expected increase in fiscal costs pertains to all expenditures including expenditures from the state general fund.