2015 REGULAR SESSION
ACTUARIAL NOTE HB 42

House Bill 42 HLS 15RS-172 Reengrossed 2 with SRC Amendment #2803 and SFC Amendment #3492 **Author: Representative Sam Jones** **Date: June 7, 2015** **LLA Note HB 42.05** **Organizations Affected:** **State Retirement Systems** **RE2 INCREASE APV**	**The Note was prepared by the Actuarial Services Department of the Office of the Legislative Auditor. The attachment of the Note to HB 42 provides compliance with the requirements of R.S. 24:521.** Paul T. Richmond **Paul T. Richmond, ASA, MAAA, EA** **Manager Actuarial Services**

Bill Header: RETIREMENT/COLAS: Authorizes payments funded by state retirement system experience accounts to certain retirees and beneficiaries of such systems

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/(Savings) to Retirement Systems and OGB	Increase
Total Five Year Fiscal Cost	
Expenditures	See Analysis
Revenues	See Analysis

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.

Actuarial Cost (Savings) to:	**Increase (Decrease) in The Actuarial Present Value**
All Louisiana Public Retirement Systems	Increase
Other Post Retirement Benefits	$0
Total	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. Fiscal costs include estimated administrative costs and costs associated with other fiscal concerns. A fiscal cost is denoted by "Increase" or a positive number. Fiscal savings are denoted by "Decrease" or a negative number.

EXPENDITURES	**2015-16**	**2016-17**	**2017-18**	**2018-2019**	**2019-2020**	**5 Year Total**
State General Fund	$ 0	See Analysis	See Analysis	See Analysis	See Analysis	See Analysis
Agy Self Generated	0	Increase	See Analysis	See Analysis	See Analysis	See Analysis
Stat Deds/Other	0	0	0	0	0	0
Federal Funds	0	0	0	0	0	0
Local Funds	0	See Analysis	See Analysis	See Analysis	See Analysis	See Analysis
Annual Total	$ 0	See Analysis	See Analysis	See Analysis	See Analysis	See Analysis

REVENUES	**2015-16**	**2016-17**	**2017-18**	**2018-2019**	**2019-2020**	**5 Year Total**
State General Fund	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Agy Self Generated	0	See Analysis	See Analysis	See Analysis	See Analysis	See Analysis
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	See Analysis	See Analysis	See Analysis	See Analysis	See Analysis

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<u>Bill Information:</u>

Comparison of HB 42 with Current Law

Current law provides a template set of provisions setting forth the conditions under which the boards of trustees 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) can grant a permanent benefit increase (PBI) or cost-of-living-adjustment (COLA). Templates for each system are nearly identical to one another.

Table 1
Comparison of HB 42 with Current Law

	Current Law	HB 42
1.	Current law prohibits any system from granting a PBI that becomes effective July 1, 2015	Current law is retained. No PBIs may be granted effective July 1, 2015. The provisions of HB 42 regarding PBIs will allow the state systems to grant a PBI effective July 1, 2016. The maximum amount that may be granted by each system on this date is shown below: a. LASERS – PBI not to exceed 1.5%. b. TRSL – PBI not to exceed 1.5%. c. LSERS – PBI not to exceed 2.0%. d. STPOL – PBI not to exceed 2.0%. STPOL may also grant the 2.0% special PBI for retirees, beneficiaries, and survivors who are age 65 or older on July 1, 2016. A PBI granted July 1, 2016 may be based only on the first $60,000 of benefit. The systems may grant a PBI effective July 1, 2016 regardless of the increase in the CPI-U from June 2014 to June 2015. This is an over-ride of current law. The systems may grant a PBI effective July 1, 2016 that can be supported by the balances in the respective Experience Accounts rounded down to the next lower 1/10 of 1%, but no more than the percentages shown above. PBI rules under current law will once again be applicable for FYE 2017 and later years.
2.	Investment gains for FYE 2015 that exceed the hurdles imposed under current law may be deposited into the Experience Account on July 1, 2015. The Experience Accounts will receive debits and credits effective June 30/July 1, 2016	The Experience Account for each system will not receive any credits on June 30 or July 1, 2015. a. The July 1, 2014 balance in the Experience Account will be debited if the return on the actuarial value of assets is negative for FYE 2015. b. No investment credits will be granted if the actuarial return on the actuarial value of assets is positive. c. No investment gains will be transferred from the regular benefit pool of assets to the Experience Account on June 30 or July 1, 2015. The Experience Account will receive debits and credits effective June 30/July 1, 2016
3.	New gains or losses will be amortized with level payments over a 30-year period. Once a system becomes 85% funded, new gains or losses will be amortized with level payments over a 20-year period.	New gains or losses will be amortized with level payments in accordance with the schedule shown below: a. For gains or losses in FYE 2015 – 28 year amortization b. For gains or losses in FYE 2016 – 26 year amortization c. For gains or losses in FYE 2017 – 24 year amortization d. For gains or losses in FYE 2018 – 22 year amortization e. For gains or losses in FYE 2019 – 20 year amortization f. For gains or losses in FYE 2020 or later – 20 year amortization

<table>
<tr><th></th><th>Current Law</th><th>HB 42</th></tr>
<tr><td>4.</td><td>For LASERS and TRSL

• When either the OAB or EAAB are fully liquidated, investment gains that otherwise would have applied to the OAB or EAAB will next be applied to the remaining OAB or EAAB. Gains that remain after the OAB and EAAB have been fully liquidated will then be allocated to the next oldest charge base. The amortization schedule for each such base will not be re-amortized unless the system is 85% funded.

For LSERS and STPOL

• The same rules apply as for LASERS and TRSL except that gains will initially be allocated to the oldest charge base. LSERS and STPOL do not have either an OAB or EAAB.</td><td>Rules under current law continue to apply with the following exceptions applicable to all systems:

a. The outstanding balance of the OAB and EAAB for LASERS and TRSL on June 30, 2015 will be re-amortized. The amortization period will not be changed. Amortization payments will increase in accordance with the rules established by Act 497 of the 2009 session.

b. For the next 3 valuations, no re-amortization will occur for any bases being reduced by investment gains.

c. Re-amortization will next occur with the June 30, 2019 valuation. Re-amortization will then occur every 5th year thereafter.

d. This five year process will continue until the system's UAL is $0 or the funded ratio attains 85%.</td></tr>
<tr><td>5.</td><td>A charge base will be established whenever an amount is transferred to the Experience Account. The base will be amortized with level payments over a 30 year period. Beginning with the June 30, 2019 valuation, new charge bases will be amortized over a 10 year period.</td><td>A charge base will be established whenever an amount is transferred to the Experience Account. Beginning with the June 30, 2016 valuation, any new base will be amortized with level payments over a 10 year period.</td></tr>
</table>

Implications of the Proposed Changes

In general, HB 42 will accomplish the following:

1. No PBIs will be granted effective July 1, 2015. The Experience Accounts may be debited for FYE 2015, but will receive no credits.

2. A 1.0%/2.0% PBI will be granted effective July 1, 2016 even if the increase in the CPI-U from June 2014 to June 30 2015 would not otherwise permit a PBI grant.

3. HB 42 moves Louisiana law closer to the requirements of Actuarial Standards of Practice. The actuaries performing valuations for the state systems will be reporting fewer exceptions to actuarial standards and the actuarial integrity of the retirement systems will increase.

4. The effect of HB 42 on employer contribution requirements will first occur for FYE 2018. The impact may be an increase or a decrease depending upon future events. Some provisions of HB 42 will lead to an increase in contributions; others will lead to a decrease.

Cost Analysis:

Analysis of Actuarial Costs

HB 42 contains benefit provisions having an actuarial cost if actuarial costs are measured by comparing HB 42 with current law. As a general rule, a board of trustees may grant a PBI only if there is an increase in the CPI-U for the period extending from June of the second prior year to June of the prior year. Under HB 42, a PBI may be granted effective July 1, 2016 regardless of the increase or decrease in the CPI-U from June 2014 to June 2015. However under current law, it is quite likely that the CPI-U for this period will be negative and no PBI will be allowed effective July 1, 2016. For FYE 2017 and later years, current law rules will apply. This is a change in benefit provisions having an actuarial cost. A reliable estimate of this cost cannot be determined within the time available to prepare this actuarial note.

HB 42 does not have an actuarial cost if actuarial costs are measured by comparing HB 42 with historical experience. Except for one year, the legislature has granted a PBI whenever there have been sufficient funds in the Experience Account to do so, regardless of the PBI rules that otherwise applied under the law prevailing at the time. The legislature decided not to grant a PBI in one year when the PBI would have been only 0.1%. It is likely that if the legislature breaks its pattern this year under HB 42, it will be under even more pressure to grant a significant PBI next year regardless of a minimal or non-existent increase in the CPI-U from June 2014 to June 2015.

Retirement Systems

PBIs for 2015, 2016, and 2017

The provisions of HB 42 that pertain to PBI grants (Table 1, Items 1 and 2) are the only provisions of HB 42 that result in an actuarial cost. The other provisions of HB 42 (Table 1, Items 3, 4, and 5) neither increase or decrease actuarial costs, but rather, effect the timing and amounts of employer contributions to the retirement systems.

These provisions of HB 42 have an actuarial cost because PBIs, granted every other year, will essentially be granted one year earlier than under current law. The first PBI grant under HB 42 will be effective July 1, 2016. The first PBI grant under current law is likely to be made July 1, 2017. Consider the following.

1. PBI grants for July 1, 2015:

   - No PBI grants may be given effective July 1, 2015 under current law (skip year rule) or under HB 42.

2. PBI grants for July 1, 2016

   a. A PBI will be granted effective July 1, 2016 under HB 42.

   b. It is unlikely that a PBI will be granted effective July 1, 2016 under current law (no increase in the CPI-U).

3. PBI grants for July 1, 2017

   a. It is unlikely that a PBI will be granted effective July 1, 2017 under HB 42 (skip year rule).

   b. It is very likely that a PBI will be granted effective July 1, 2017 under current law.

Regardless of whether the first PBI grant becomes effective July 1, 2016 (under HB 42) or July 1, 2017 (under current law), the grant of the first PBI in 2016 or 2017 will have no effect on employer contribution requirements. A charge base has already been established to amortize the loss that occurred to the regular pool of assets when investment gains were transferred to the Experience Account. This amortization payment is already included in the determination of employer contribution requirements.

HB 42 essentially creates a swap of PBI grants. The first PBI that can be granted under HB 42 will become effective July 1, 2016. The first PBI that can be granted under current law is likely to become effective July 1, 2017. Additional actuarial costs incurred by the 2016 grant under HB 42 will be offset by actuarial savings associated with the skip year for 2017.

The actuarial present value cost of the PBI grants is shown in Table 2. These costs are based on the following:

1. LASERS and TRSL will grant a PBI not to exceed 1.5%.

2. LSERS will grant a PBI not to exceed 2.0%.

3. STPOL will grant a PBI not to exceed 2.0%. In addition, STPOL will grant a special 2.0% PBI to retirees who are at least age 65. The special PBI is in addition to the regular PBI.

Table 2
PBIs Effective July 1, 2016 for the State Retirement Systems under HB 42

	LASERS	TRSL	LSERS	STPOL	Total
Number Eligible for a PBI					
Estimated Eligible Regular Retirees	32,472	57,216	10,146	672	100,506
Estimated Eligible Survivors	5,751	6,541	1,662	295	14,249
Estimate Eligible Disabled Retirees	2,506	4,089	331	61	6,987
Total	40,729	67,846	12,139	1,028	121,742
Actuarial Present Value of PBI					
Benefits Increase − Regular Retirees	$ 101,164,238	$ 193,159,879	$ 20,433,791	$ 6,789,714	$ 321,547,622
Benefits Increase − Survivors	10,211,614	13,972,223	2,146,116	1,498,949	27,828,902
Benefits Increase − Disabled Retirees	4,228,693	5,961,764	437,433	361,416	10,989,306
Total	$ 115,604,545	$ 213,093,866	$ 23,017,340	$ 8,650,079	$ 360,098,395
Balance in the Experience Account					
Balance on June 30, 2014	$ 117,093,356	$ 218,148,161	$ 20,787,326	$ 12,069,552	$ 368,098,395

Based on information currently available, PBI grants by LASERS and TRSL could be less than 1.5%. The LSERS PBI grant is very likely to be less than 2.0%. The STPOL PBI grant is likely to be the full 2.0% regular PBI plus the special 2.0% PBI for those who are age 65 and older.

PBIs for 2018 and Later Years

PBI grants for 2018 and later years will be made on average one year sooner under HB 42 than under current law. There is an actuarial cost associated with earlier benefit payments. However, a reliable estimate of this cost cannot be determined given the time available to prepare this actuarial note and given the propensity of the legislature to grant PBIs whenever there are funds in the Experience Account.

Other Post Retirement Benefits

There are no actuarial costs associated with HB 42 for post-employment benefits other than pensions.

Analysis of Fiscal Costs

1. Analysis of PBI provisions

Each of the four state systems achieved significant investment gains for FYE 2014. As a result, a portion of those gains were transferred from the regular pool of assets to the Experience Account and a new charge base was established on June 30, 2014, equal to the amount so transferred. Employer amortization costs for the next 30 years are now larger than they would have been otherwise. Allocations to the Experience Accounts and 30-year amortization of those allocations are shown below.

Table 3
Experience Account Allocations on June 30, 2014 and Additional Amortization Costs Incurred

	LASERS	TRSL	LSERS	STPOL	Total
Allocations to the Experience Account for FYE 2014	$ 4,590,124	$ 170,334,888	$ 20,787,326	$ 16,675,834	$ 212,388,172
New Amortization Costs for the Next 30 Years until FYE 2043	383,565	14,733,703	1,658,377	1,229,144	18,004,789

However, please note the following:

a. Employers still have 29 years of amortization payments left in order to restore the regular benefit pool of assets to its original position. The Experience Account is funded only because plan sponsors "borrowed" from the regular benefit pool of assets to fund the Experience Account.

b. The average duration of the PBIs to be granted on July 1, 2016, is about 15.5 years. However, employers will be paying for these grants for the next 28 years.

c. Because a charge base was established effective June 30, 2014 to reflect the cost of the anticipated PBI grant to be made either July 1, 2016 or July 1, 2017, a new charge base will not be needed when the PBI grant is actually made.

d. The 2016/2017 PBI swap provisions of HB 42 will have minimum effect on fiscal costs during the five year measurement period.

The retirement systems will begin to make PBI payments for FYE 2017 under HB 42. Under current law, PBI payment would not have begun until 2018. The estimated benefit payment stream for the first five years following a PBI grant is given below.

Table 4
Expenditures Associated with a Single PBI Grant

Year	Increase in LASERS Expenditures	Increase in TRSL Expenditures	Increase in LSERS Expenditures	Increase in STPOL Expenditures	Total Increase in Expenditures
1	$ 11,557,915	$ 22,259,748	$ 2,581,222	$ 833,398	$ 37,232,283
2	11,398,106	21,933,364	2,506,602	811,833	36,649,915
3	11,230,352	21,531,398	2,430,206	789,513	35,981,469
4	11,044,832	21,137,415	2,352,234	766,051	33,300,532
5	10,855,240	20,719,923	2,272,859	741,818	34,589,840
Total	$ 56,086,444	$ 107,581,849	$ 12,143,124	$ 3,942,612	$ 179,754,029

A new benefit stream will be added every other year under current law and under HB 42. The effect on expenditures payable by the retirement systems is compared in Table 5.

Table 5
Benefit Expenditures

Fiscal Year	Current Law	HB 42	Increase/(Decrease)
2015-16	0	0	0
2016-17	0	37,232,000	37,232,000
2017-18	37,232,000	36,650,000	(582,000)
2018-19	36,650,000	73,213,000	36,563,000
2019-20	73,213,000	69,950,000	(3,263,000)
Total	147,095,000	217,060,000	69,965,000

The provisions of HB 42 leading to earlier payment of PBIs beginning in 2018 will eventually require higher employer contribution requirements. The timing and the size of such an increase cannot be determined because the actuarial present value cost of the PBI program is not regularly measured as part of the annual valuation process for each retirement system.

2. Analysis of Reduced Periods for Amortizing Gains and Losses

Periods over which actuarial gains and losses will be amortized are being reduced from 30 years to 20 years. This reduction will be phased in over the next five years. These provisions of HB 42 will effect employer contribution requirements beginning with FYE 2017.

This change in the amortization period may result in larger or smaller employer contribution requirements. If assumptions used to prepare the valuations are correct, then gains will occur in some years and losses in others. These gains and losses will offset one another and in the long run the stream of employer contributions with or without HB 42 will be similar.

However, if actuarial losses exceed actuarial gains, then systematic increases in employer contribution requirements will occur and these increases will be larger than they would have been without HB 42.

3. Re-amortization of the OAB and EAAB

   Employer contribution requirements will be reduced as a result of these provisions of HB 42. Currently, investment gains are used to pay off the outstanding balance of the OAB and EAAB sooner than otherwise provided for. Re-amortization under HB 42 will restore the original amortization period, but will reduce amortization payments.

   The effect of HB 42 relative to these provisions cannot be measured because they depend on the occurrence of future investment gains. This provision of HB 42 will begin to affect employer contribution requirements in FYE 2017

4. Ten-Year Amortization of Experience Account Transfers

   Currently, losses due to transfers from the regular pool of assets to the Experience Account are amortized over 30 years. The amortization period for transfers based on the June 30, 2019 and later valuations will be 10 years. Under HB 42, ten year amortization of transfers will begin with the June 30, 2016 valuation.

   This provision of HB 42 will lead to an increase in employer contribution requirements if a transfer occurs between now and June 30, 2019. The first employer contribution that potentially could be affected by this change is the requirement for FYE 2018.

5. The net effect of all provisions of HB 42 on fiscal costs over the five year measurement period are summarized below:

   Expenditures:

   1. Expenditures from the General Fund in the form of larger employer contribution requirements may increase or decrease.

   2. Expenditures from retirement systems (Agy Self Generated) in the form of larger benefit payments will increase for FYE 2016. Expenditures for FYE 2017 and later years may increase or decrease.

   3. Expenditures from Local Funds in the form of larger employer contribution requirements may increase or decrease.

   Revenues:

   - Revenues of the retirement systems (Agy Self-Generated) in the form of larger employer contribution requirements may increase or 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.

Actuarial Caveat

There is nothing in HB 42 that will compromise the signing actuary's ability to present an unbiased statement of actuarial opinion.

Actuarial Credentials:

Paul T. Richmond is the actuary 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	**House**
[x] 13.5.1: Annual Fiscal Cost ≥ $100,000	[ ] 6.8(F)(1): Annual State Fiscal Cost ≥ $100,000
[ ] 13.5.2: Annual Tax or Fee Change ≥ $500,000	[ ] 6.8(F)(2): Annual State Revenue Reduction ≥ $500,000
	[ ] 6.8(G): Annual Tax or Fee Change ≥ $500,000