

**2019 REGULAR SESSION
ACTUARIAL NOTE HB 28**

<p>House Bill 28 HLS 19RS-307 Original</p> <p>Author: Representative Ivey Date: April 2, 2019 LLA Note HB 28. 01</p> <p>Organizations Affected: State Retirement Systems</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> <p style="text-align: center;"></p> <p>James J. Rizzo, ASA, MAAA Senior Consultant & Actuary Gabriel, Roeder, Smith & Company, Actuary for the Legislative Auditor</p>
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Bill Header: RETIREMENT/STATE SYSTEMS: Establishes a hybrid retirement benefit structure for members of the state retirement systems first hired on or after July 1, 2020.

Cost Summary:

The estimated net actuarial and fiscal impact of this proposed legislation on the retirement systems and their plan sponsors is summarized below. Net actuarial costs pertain to estimated changes in the *net actuarial present value of future benefit payments and administrative expenses incurred by the retirement system*. Net 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 *net 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 (i.e., contributions, benefit payments, and administrative expenses).

Net Actuarial Costs (Liabilities) Pertaining to:		<u>Net Actuarial Cost</u>
The Retirement Systems		Increase
Other Post-employment Benefits (OPEB)		Decrease
Total		Increase
Five Year Net Fiscal Cost Pertaining to:	<u>Expenditures</u>	<u>Revenues</u>
The Retirement Systems	Increase	Increase
Other Post-employment Benefits	0	0
Other Government Entities	0	0
Total	Increase	Increase

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

Bill Information

Current Law

Under current law, generally speaking, members of the state retirement systems – 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 (LSPRS) – participate in a traditional defined benefit (DB) pension plan.

The benefit payable to a future non-hazardous duty employee will generally be equal to 2.5% x years of service x the member's final average compensation. In addition to the 2.5% accrual rate, judges will receive an additional 1.0% for each year of service as a judge. For hazardous duty personnel, the accrual rate will generally be equal to 3 1/3% per year of service.

The current plan provides disability benefits that are based on the same accrual rates as those that will apply at retirement. Survivor benefits under current law are roughly similar to the benefits a survivor would have received had he participated in Social Security.

Participation in the state retirement systems are generally a condition of employment and require an 8.00% contribution from non-hazardous duty personnel and a 9.50% contribution from employees working in positions classified as hazardous. Under current law, a future non-hazardous duty employee of the state will be a member of the Rank and File sub plan of LASERS, a member of TRSL, or a member of LSERS and will be entitled to benefits based on provisions that apply to members of these systems first employed on or after July 1, 2015. Future hazardous duty personnel will become members of the Hazardous Duty sub plan of LASERS or a member of LSPRS.

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Proposed Law

Under HB 28, new employees of the state will participate in a hybrid retirement plan. Each retirement system, LASERS, TRSL, LSERS, and LSPRS will have a hybrid sub plan for members first employed on or after July 1, 2020. Provisions of the hybrid DB plan will differ depending on whether it applies to non-hazardous duty or to hazardous duty personnel.

The hybrid program consists of a traditional DB plan and a defined contribution (DC) plan. Member contributions toward the hybrid program will be allocated to the normal cost of the hybrid DB plan and toward amortization of unfunded accrued liabilities. Members will also contribute to the hybrid DC plan. Employee contribution toward amortization of the UAL will consist of the following components.

1. Amortization of UALs created by benefit improvements. Members of the hybrid plan will be required to pay for 50% of any such cost increase attributable to Post-2020 members.
2. Amortization of UALs resulting from actuarial gains or losses relative to Post-2020 members. Hybrid plan members will pay for 50% of any such increase.
3. Amortization of UALs resulting from assumption changes and changes in actuarial methods relative to Post-2020 members. Hybrid plan members will pay for 50% of any such increase.
4. Amortization of UALs resulting from investment gains or losses relative to Post-2020 members. Hybrid plan members will be responsible for 50% of any such increase in the UAL.

All system assets relative to Pre and Post 2020 defined benefit structures will be pooled for investment purposes. A notational DB plan account will be established for the Pre-2020 (current) plan and a notational DB plan account will be established for the hybrid DB plan. Notational accounts are needed to determine separate employee and employer contribution requirements for the Pre-2020 sub plans and the hybrid sub plans. The notational accounts will not be treated as separate trusts. Assets in the notational account for the Pre-2020 DB plan will be available to pay benefits to members of the hybrid DB plan and assets in the notational account for the hybrid DB plan will be available to pay benefits for members of the Pre-2020 DB plan.

Key provisions of the hybrid plan are summarized in Table 1.

TABLE 1

Summary of Hybrid Plan for Post-2020 Employees		
Plan Provisions	DB Plan	DC Plan
Participation	Mandatory participation on or after July 1, 2020.	Mandatory participation on or after July 1, 2020.
Contributions for Non-Hazardous Duty Personnel	Shared equally between employer and employee.	5% of pay for the employee 5% of pay for the employer
Contributions for Hazardous Duty Personnel	Shared equally between employer and employee.	6% of pay for the employee 6% of pay for the employer
Individual Accounts	Not Applicable	<ol style="list-style-type: none"> 1. Administered and maintained by third-party provider 2. Three or more DC providers must be selected by each system's board of trustees 3. 10 to 25 funds must be made available 4. Investments are self-directed by the member 5. Member may contribute up to the IRS limit
Borrowing or withdrawing from the Individual Account	Not Applicable	Not Allowed
Final Average Compensation	Average of the highest 60-consecutive months with 15% anti-spiking rule	Not Applicable
Retirement Benefits for Non-Hazardous Duty Personnel	1% x years of credited service x final average compensation	<ol style="list-style-type: none"> 1. 75% or more of the DC account at retirement must be annuitized. 2. No more than 25% of the DC at retirement may be rolled over or paid as a lump sum

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TABLE 1 (Continued)

Summary of Hybrid Plan for Post-2020 Employees		
Plan Provisions	DB Plan	DC Plan
Retirement Benefits for Hazardous Duty Personnel	1 1/3% x years of credited service x final average compensation	<ol style="list-style-type: none"> 75% or more of the DC account at retirement must be annuitized. No more than 25% of the DC at retirement may be rolled over or paid as a lump sum
Retirement Eligibility for Non-Hazardous Duty Personnel	<ol style="list-style-type: none"> 65 and 5 years of service. 55 and 20 years of service with actuarial reduction. 	Upon retirement from the DB plan.
Retirement Eligibility for Hazardous Duty Personnel	<ol style="list-style-type: none"> 57 and 12 years of service. At any age and 20 years of service with actuarially reduced benefits 	Upon retirement from the DB plan.
Payment Form	Same as under Pre-2020 plan.	Annuity contract purchased from third party provider.
DROP or Back-DROP	Not Allowed	Not Applicable
Termination, death or disablement with less than 5 years of service	Return of employee contributions without investment earnings	Return of employee contributions without investment earnings
Termination with 5 years of service.	Benefits payable upon retirement or death, or Return of employee contribution without interest.	<ol style="list-style-type: none"> Employer and employee contributions accumulated with investment earnings are 100% vested. Account balance will always be credited with interest. Benefits are payable only upon retirement or death.
Eligibility for Disability Benefits	Same as Pre-2020 plan: 10 years of service.	Same as Pre-2020 plan: 10 years of service.
Disability Benefits	<ol style="list-style-type: none"> Same as Pre-2020 plan Benefit is based on the accrual rate for the hybrid DB plan without actuarial reduction. 	Distribution of individual account balance in the same manner as under regular retirement.
Eligibility for Death Benefits	Same as Pre-2020 plan: <ol style="list-style-type: none"> 5 years of service for spouse with qualifying children. 5 years of service for minor children and to handicapped children or adults. 10 years of service for spouse without qualifying children. 	Same as Pre-2020 plan: <ol style="list-style-type: none"> 5 years of service for spouse with qualifying children. 5 years of service for minor children and to handicapped children or adults. 10 years of service for spouse without qualifying children.
Death Benefits	<ol style="list-style-type: none"> Same as Pre-2020 plan. Benefit is based on the accrual rate for the hybrid DB plan without actuarial reduction 	Distribution of individual account balance in the same manner as under regular retirement.
Retired Member Is Reemployed	DB plan benefits are suspended while member is reemployed	DC plan benefits continue to be paid
Disability Retiree Returns to Work before Normal Retirement Age.	<ol style="list-style-type: none"> Benefit is suspended Member accrues service under the DB plan If employed 3 or more years after disability ceases, periods on disability is used only for retirement eligibility 	<ol style="list-style-type: none"> Annuity payments from DC plan are discontinued. Annuity is converted to lump sum value and is deposited into the member's DC plan account

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TABLE 1 Continued)

Summary of Hybrid Plan for Post-2020 Employees		
Plan Provisions	DB Plan	DC Plan
COLA Eligibility	<ol style="list-style-type: none"> Regular retiree: Age 65 with at least one year of retirement Beneficiary or survivor: The member would have attained 65 with at least one year of benefit payments had he not died Disability retiree or beneficiary of disability retiree: Benefits have been payable for at least one year. 	Not Applicable
COLA Benefit	<ol style="list-style-type: none"> Automatic adjustment every odd-numbered year after becoming eligible Lesser of 2% and CPI-U for the South over the last 12-month period. COLA applies to first \$50,000 of benefits. 	Not Applicable
Assets	<ol style="list-style-type: none"> Commingled with Pre-2020 plan assets. Nominal accounts for Pre-2020 and Post-2020 plans 	Administered and maintained by third party provider
Determination of Unfunded Accrued Liabilities (UAL)	Nominal accounts for Pre-2020 and Post-2020 plans are maintained to determine UAL associated with the Pre-2020 plan and the UAL for the DB portion of the hybrid plan	Not Applicable
Discount Rate for Valuation Purposes	<ol style="list-style-type: none"> As specified by law: 6.00% Note: the discount rate for the Pre-2020 plan is set by the board of trustees 	Not Applicable

A comparison of the key provisions between the current DB plan and the proposed hybrid DB plan is given in Table 2.

TABLE 2

DB Plan Summary Comparison		
Plan Provisions	Current Law DB Plan for Post-2015 Members	HB 28 Hybrid DB Plan
Employee Contributions	LASERS Non- Hazardous Duty: 8.00% LASERS Hazardous Duty: 9.50% TRSL: 8.00% LSERS: 8.00% LSPRS: 9.50%	<ol style="list-style-type: none"> Actuarially determined percentage of pay based on the normal cost for the hybrid plan and UAL amortization payments allocated to the hybrid plan. Employer and employee contribute equal amounts.
Employer Contributions	<ol style="list-style-type: none"> Total normal cost less employee contributions Payments to amortize the UAL 	Shared equally between employer and employee
Retirement Benefits for Non Hazardous Duty Personnel	<ol style="list-style-type: none"> 2.50% x years of service x final average compensation. Judges receives an additional 1% for each year of service as a judge. 	<ol style="list-style-type: none"> 1.00% x years of service x final average compensation. Judges receives an additional 1% for each year of service as a judge.
Retirement Benefits to Hazardous Duty Personnel	3 1/3% x years of service x final average compensation	1 1/3% x years of service x final average compensation

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TABLE 2 (Continued)

DB Plan Summary Comparison												
COLAs, Gain Sharing and the Experience Account	<p>COLAs are provided under a gain sharing arrangement. A portion of investment gains are deposited into the Experience Account. COLA benefits are funded by amounts in the Experience Account.</p> <p>A COLA grant depends on:</p> <ol style="list-style-type: none"> 1. The increase in the CPI-U. 2. Whether a COLA was granted in prior year. 3. COLA is tied the funded level of each system 4. Investment performance 5. Availability of funds in the Experience Account. 6. Approval of the legislature. <p>Other COLA rules:</p> <ol style="list-style-type: none"> 1. COLAs apply to the first \$60,000 of benefits; the cap is indexed annually by the CPI-U. 2. Must be at least age 62 to be eligible for a COLA. 	<p>A COLA will be automatically paid in every odd-numbered year</p> <p>COLA rules:</p> <ol style="list-style-type: none"> 1. The benefit will be the lesser of 2.0% or the CPI-U applicable to the South region. 2. COLA pertain to the first \$50,000 of benefits. 3. Must be at least age 65 to be eligible for a COLA. 										
Death and Disability	<ol style="list-style-type: none"> 1. Benefit accrual rate is 2.5% for Non-Hazardous Duty Personnel 2. Benefit accrual rate is 3 1/3% for Hazardous Duty Personnel 	<ol style="list-style-type: none"> 1. Benefit accrual rate is 1.0% for Non-Hazardous Duty Personnel 2. Benefit accrual rate is 1 1/3% for Hazardous Duty Personnel 3. Otherwise, benefit provisions are the same as for the Pre-2020 plan. 										
Termination of service after 5 years	Member has the option to a refund of employee contributions without interest, or an annuity beginning at age 62.	An annuity beginning at age 65.										
Discount Rate for Valuation Purposes	<p>The discount rate is set by the board of directors. Rates for the June 30, 2019 valuation will be:</p> <table border="0" style="margin-left: 40px;"> <thead> <tr> <th style="text-align: left;"><u>System</u></th> <th style="text-align: left;"><u>Valuation Rate</u></th> </tr> </thead> <tbody> <tr> <td>LASERS</td> <td>7.600%</td> </tr> <tr> <td>TRSL</td> <td>7.550%</td> </tr> <tr> <td>LSERS</td> <td>7.000%</td> </tr> <tr> <td>LSPRS</td> <td>7.000%</td> </tr> </tbody> </table>	<u>System</u>	<u>Valuation Rate</u>	LASERS	7.600%	TRSL	7.550%	LSERS	7.000%	LSPRS	7.000%	6.00%
<u>System</u>	<u>Valuation Rate</u>											
LASERS	7.600%											
TRSL	7.550%											
LSERS	7.000%											
LSPRS	7.000%											

Implications of the Proposed Changes

HB 28 establishes a hybrid plan for employees of the state first employed on or after July 1, 2020. The hybrid plan consists of a DB plan and a DC plan. The hybrid plan will have no effect on normal costs or the UAL associated with the Pre-2020 plan.

I. ACTUARIAL ANALYSIS SECTION

**A. Analysis of Net Actuarial Costs
(Prepared by LLA)**

This section of the actuarial note pertains to net actuarial costs or savings associated with the retirement systems and with OPEB.

The analysis presented below was originally prepared for House Bill 65 of the 2016 regular session and was used for HB 39 in 2018. This proposed HB 28 is very similar to HB 65. The only difference is HB 28 applies to employees first employed on or after July 1, 2020 rather than on and after July 1, 2018. Since the two bills are very nearly identical, the impact of HB 28 will be very close to the impact of HB 65. The x-axis timelines in Charts C and D were adjusted for the new effective date, while retaining the shape of the data point curves.

1. Retirement Systems

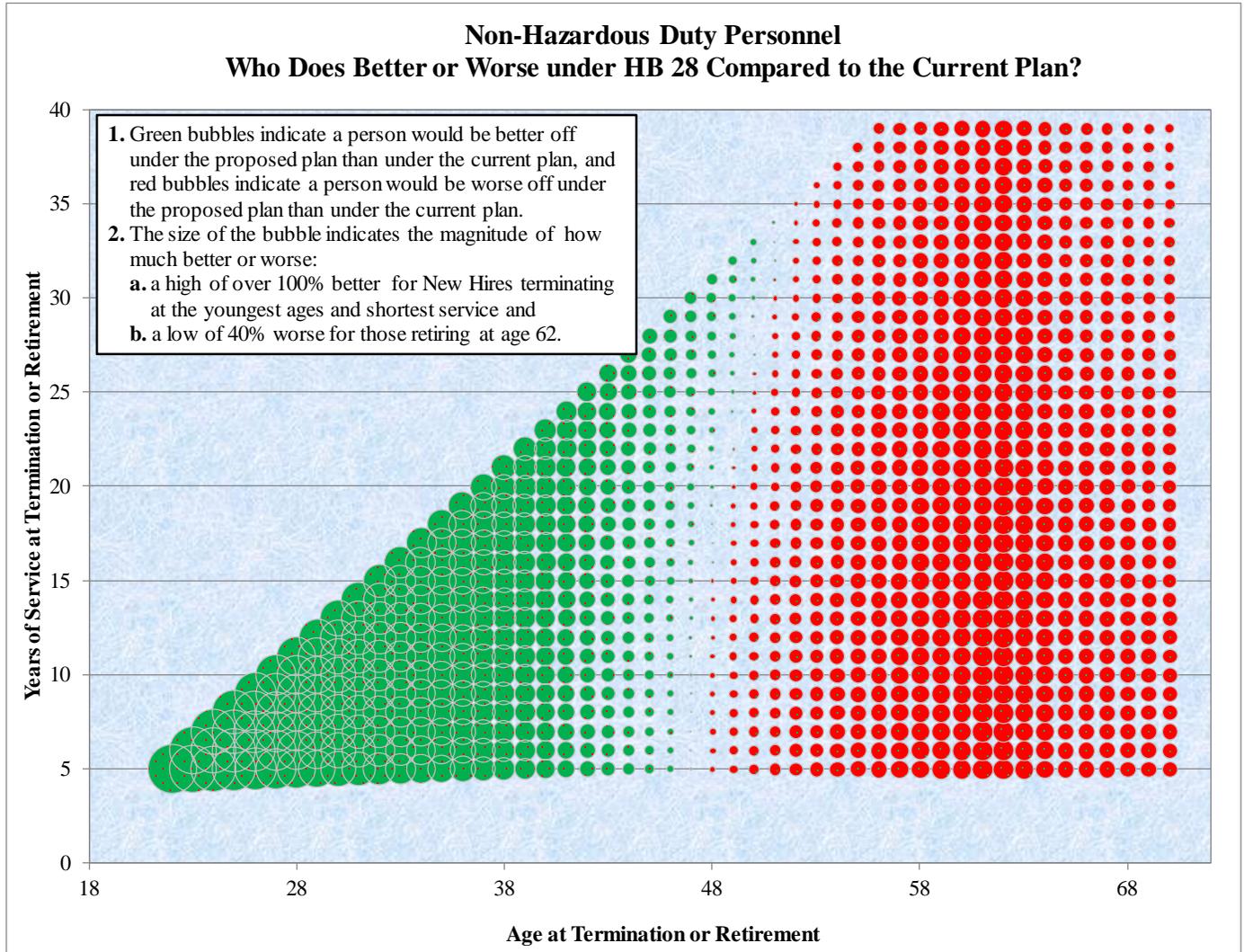
The net actuarial cost or savings of the proposed legislation associated with the retirement systems is estimated to be an increase. The actuary's analysis is summarized below.

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Benefit Comparison

A DB plan tends to favor a participant who has earned a significant amount of service or who joins the plan in the second half of his career. A DC plan tends to favor a participant who joins the plan in the first part of his career or who terminates employment before retirement age. Therefore, it is virtually impossible to replace a traditional DB plan with a hybrid program containing a DC component without shifting benefit delivery from one group of employees to another. This is demonstrated in Charts A and B below relative to the replacement of the current program with the hybrid program proposed under HB 28. Chart A helps determine which program provides a better benefit, the current program or the proposed one. Chart B provides information about how much better one program is than the other.

CHART A

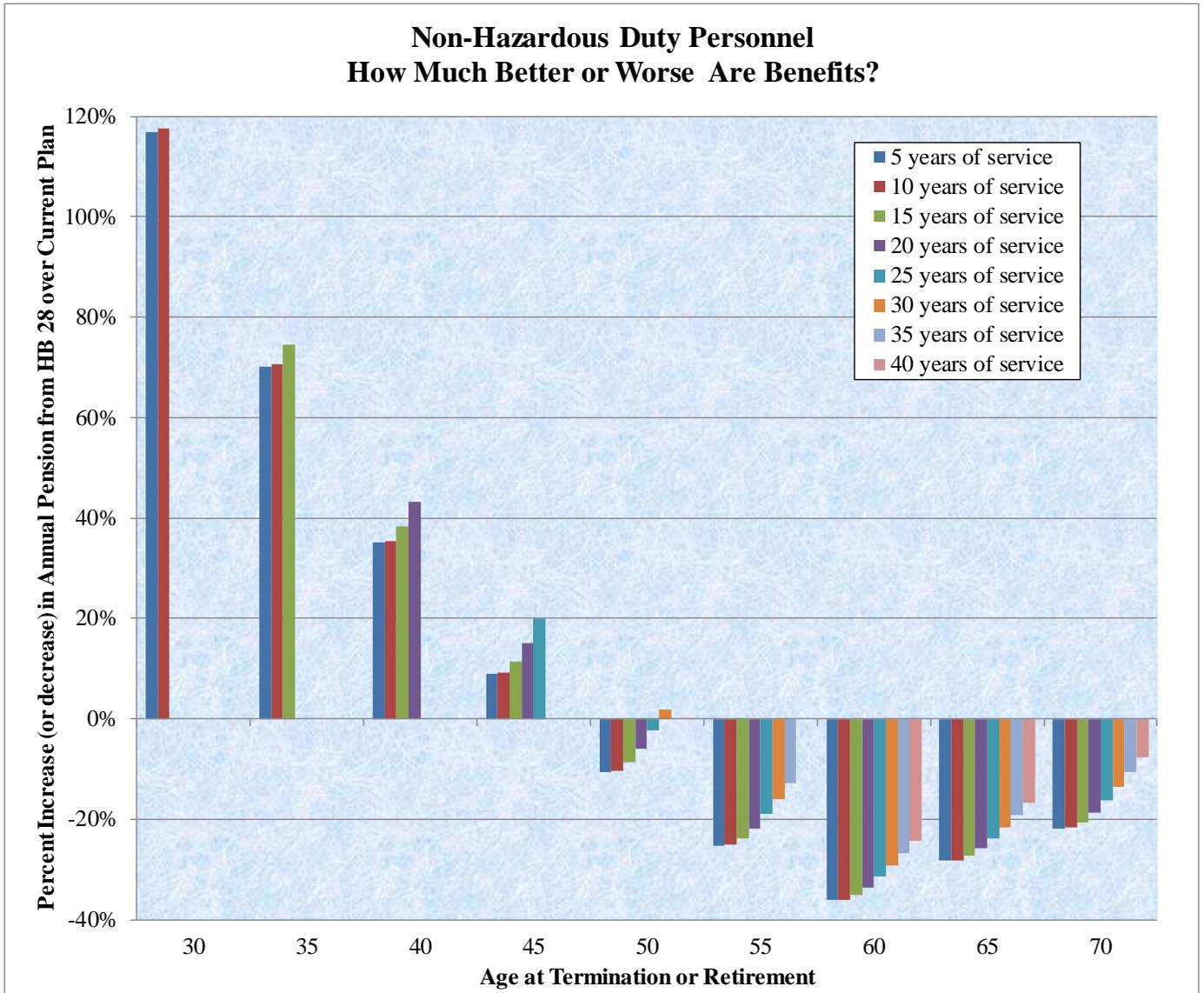


Observations about Chart A:

1. The proposed program will provide a better benefit than the current program for those who are age 48 and younger when they terminate employment.
2. The proposed program tends to favor participants who join at the youngest ages. Note that the largest green dots follow the diagonal, which reflects those who join at age 18.
3. The current program is more favorable to those who retire during the prime retirement ages – ages 58 to 62.
4. Although the current program is more favorable for those who retire at age 65 and later, the benefit difference between the two programs becomes smaller as age and service increase.

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CHART B



Observations about Chart B:

1. The proposed program is significantly better for a participant who terminates employment at age 30 with 5 or 10 years of service. The benefit under the proposed program is more than double the benefit that would be available under current law. In either case however, the value of the benefit is quite small. Under the proposed program, the terminating member will have accumulated retirement wealth that includes his own contributions, his employer's contributions, and investment earnings on all contributions. Under the current program, the terminating participant's wealth accumulation toward retirement will be limited to his own contributions without interest.
2. At age 60, a participant will receive a benefit from the proposed program that is only about 70% of the benefit that he would have received from the current program. Notice that the more service the member has earned, the smaller the differential between the two programs.
3. At age 65, a participant will receive a benefit from the proposed program that is only about 80% of the benefit that he would have received from the current program.

Cost Comparison

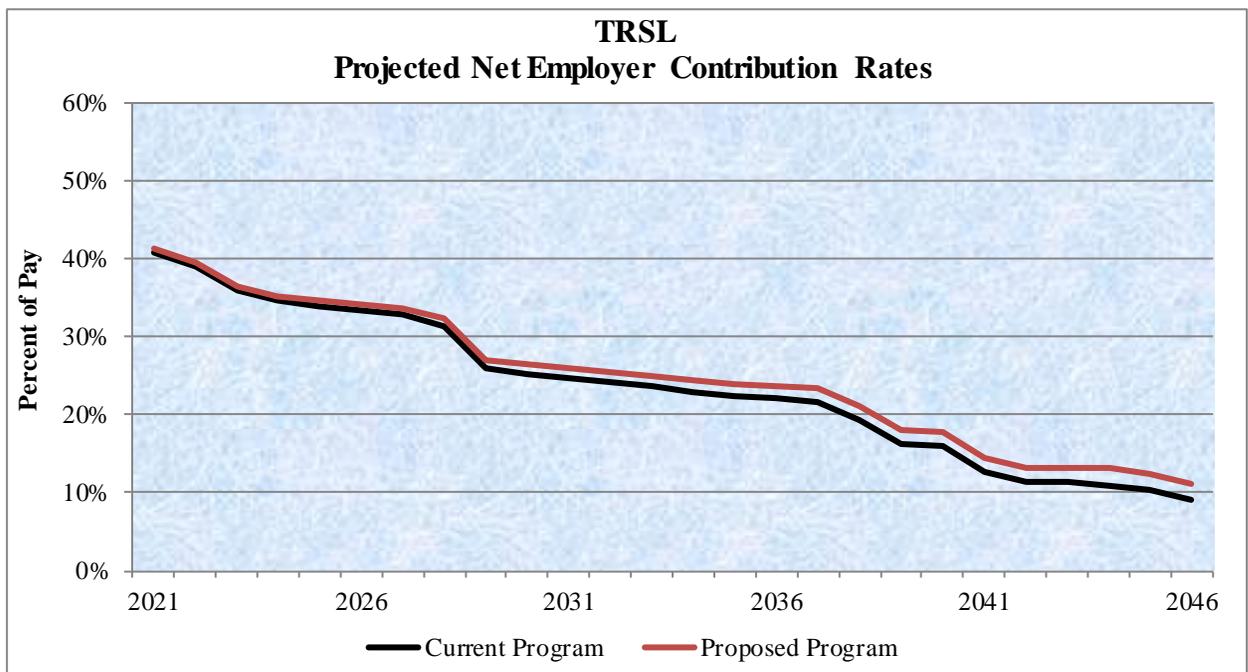
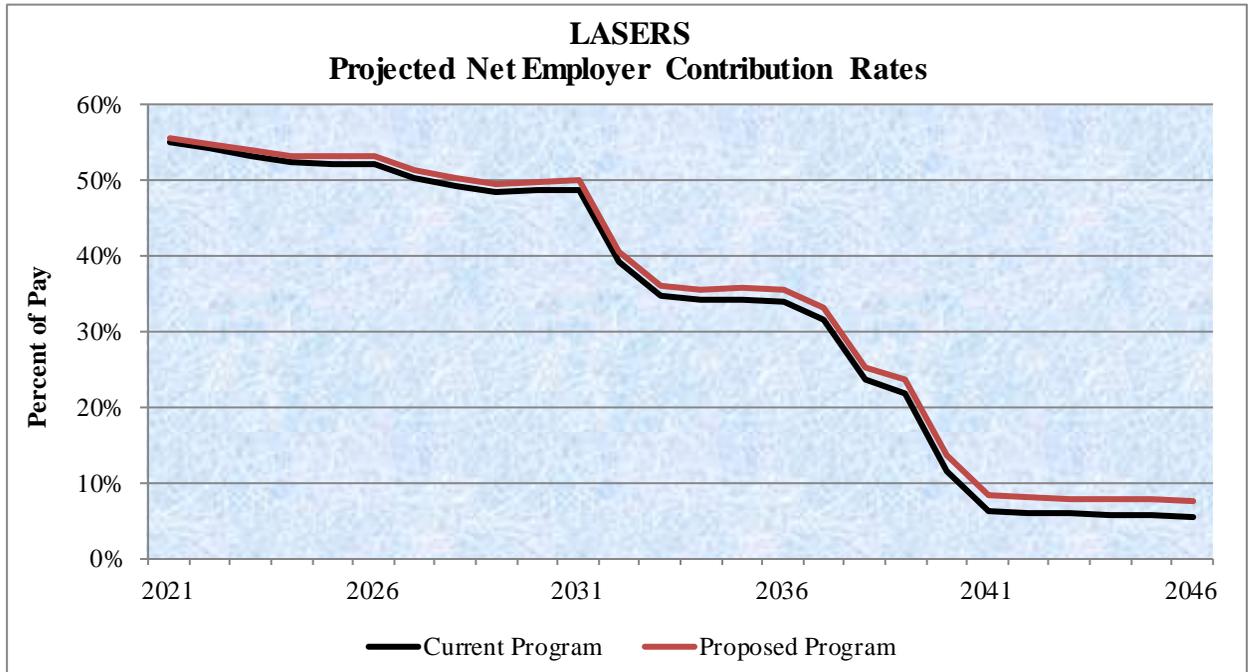
Charts C and D have been prepared only for LASERS and TRSL. Charts for LSERS and LSPRS would look similar.

Charts C and D have been prepared under the assumption that current laws and laws under the proposed HB 28 will continue to exist indefinitely into the future. However, whether projections are based on current law or proposed law, the retirement systems will reach a point in our projection period where the UAL will be paid off and continuation of the constitutional minimum contribution or the legislative minimum will cease to be realistic. Obviously, this will be "good news". However, it is no known how the legislature will respond to the good news. Options that will be available to the legislature at that time are discussed under the observations for the Unfunded Accrued Liability. In our analysis, however, we have continued to recognize constitutional minimum contribution requirements because we cannot predict the decisions the legislature will make at that time.

Projected employer contribution rates with the HB 28 program are compared below with projected employer contribution rates with the current plan.

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CHART C



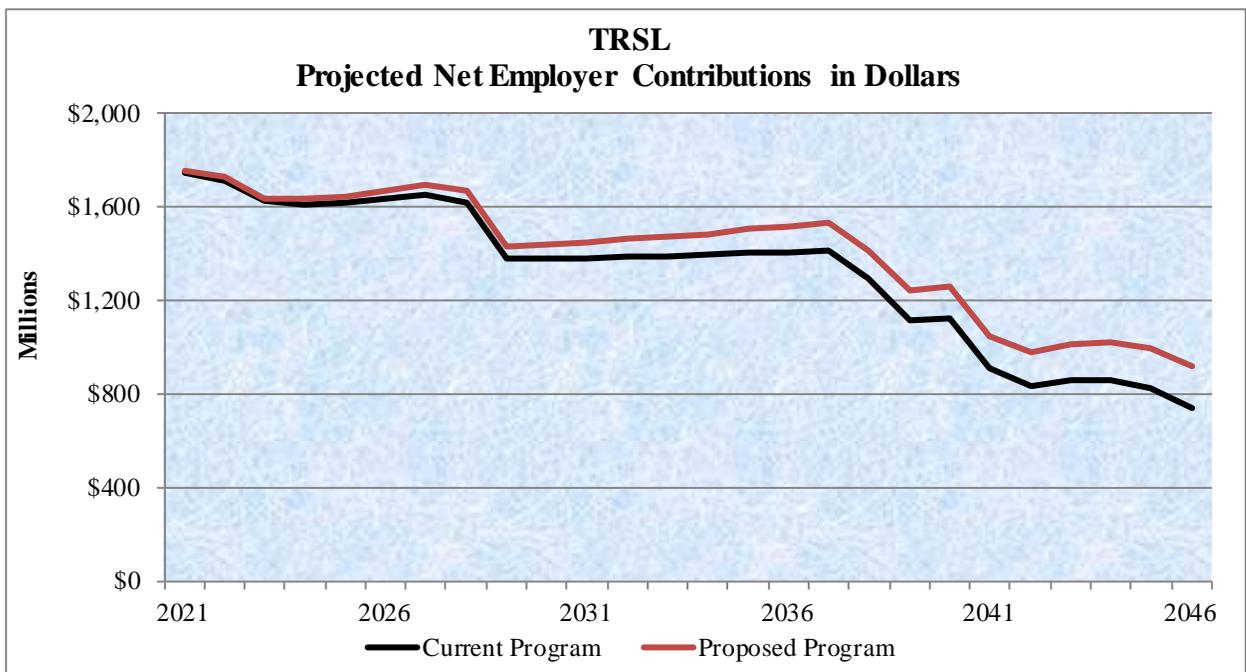
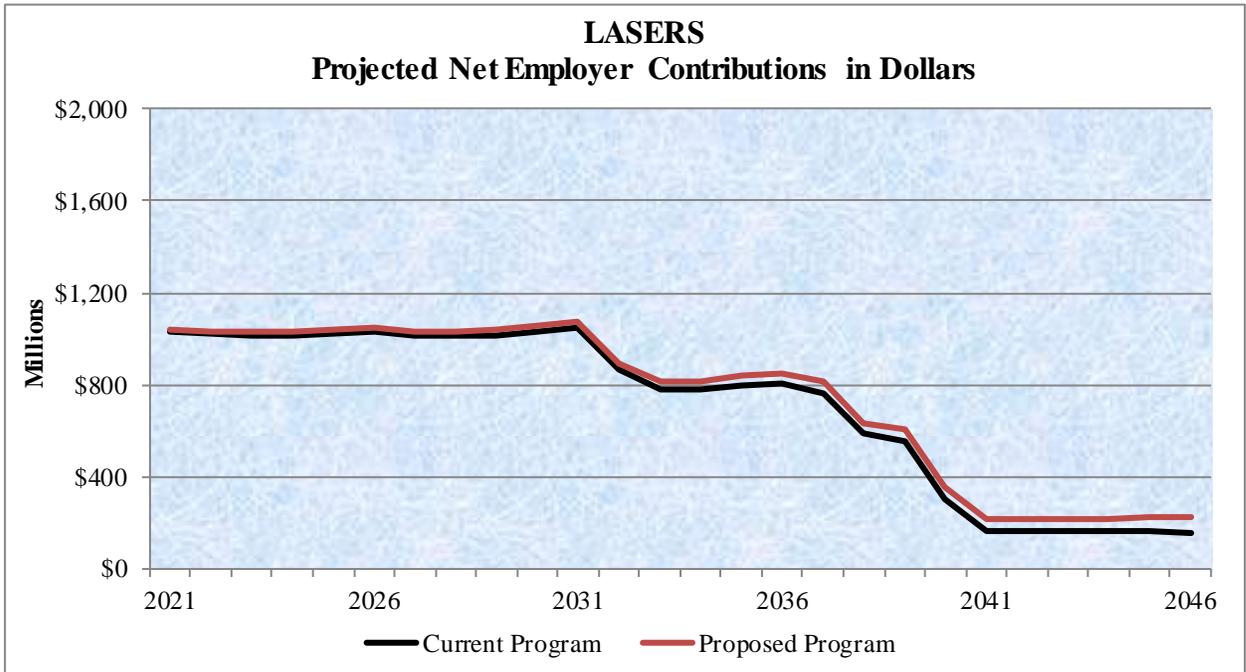
Observations about Chart C:

1. Employer contribution rates with the hybrid program will be slightly larger than with the current program.
2. Employer contribution rates are virtually the same initially. However, the difference between employer contribution rates with the enactment of HB 28 and rates with continuation of the current program increases as participants in the hybrid program replace members in the current program.
3. By 2045, the employer contribution rate is estimated to be about 9% of pay for LASERS with the hybrid program but only 7% with the current plan. The 2% differential remains essentially the same thereafter.
4. By 2045, the employer contribution rate is estimated to be about 12% of pay for TRSL with the hybrid program but only 10% with the current plan. The 2% differential remains essentially the same thereafter.

Employer contributions in dollars are compared below. Chart D shows a similar pattern relative to employer contributions as Chart C.

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CHART D



Observations about Chart D:

1. For LASERS, projected employer contribution requirements in dollars are virtually the same with the two programs until FYE 2030, although requirements with the proposed program are slightly greater. Thereafter, contribution requirements are close to one another but a more distinctive difference begins to occur. Enactment of the proposed program will result in employer contributions being about \$67 million more in 2046 than continuation of the current program. Ultimately, the cost of the proposed program will be about 42% greater than the cost of the current program.
2. For TRSL, projected employer contribution requirements in dollars with the proposed and current programs are close to one another through FYE 2029. Thereafter, requirements begin to diverge. Employer contribution requirement with the proposed program will be about \$54 million more for FYE 2029 than with continuation of the current program. By 2046, the differential increases to about \$181 million. Ultimately, the cost of the proposed program will be about 24% greater than the cost of the current program.

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Observations about the unfunded actuarial accrued liability:

1. The unfunded actuarial accrued liability with the proposed program decreases more rapidly than with the current program.
2. The unfunded accrued liability for LASERS is projected to be paid off by June 30, 2038 with the current program. With the proposed program the UAL is projected to be completely amortized by FYE 2037, one year sooner.
3. Because the UAL will be paid off and an asset surplus will exist, the legislature in the decade of the 2030s will be presented with several policy choices relative to LASERS that will be perceived as “good news.” These choices are identified below:
 - a. Contribution Holiday: Because either of the programs will have more assets than accrued liabilities, the state could take a contribution holiday by using the interest on the surplus to pay for normal costs.
 - b. De-Risking: LASERS could reduce its risk by investing assets in more conservative, less volatile securities. As a result, the assumed rate of return on assets would decrease, the accrued liability would increase, and it may become necessary for the state to annually contribute the normal cost. The end result, however, would be a more secure retirement program that has fulfilled and will continue to fulfill the constitutional mandate to attain and maintain funding on a basis that is actuarial sound.
 - c. COLAs: A systematic COLA program could be implemented for existing retirees. Because they bore the brunt of the state and retirement system’s financial instability during their working career, the legislature may believe they should perhaps be the first to benefit in the good times.
 - d. Other Benefit Improvements: Should it become law, the hybrid DB plan could be improved to help achieve greater equity between the proposed program and the program that would have existed had the law not been changed.
4. The UAL for TRSL is not projected to be paid off until the decade of the 2040s. The system and the legislature will be presented with the same “good news” as LASERS will receive in the 2030s. Its options at that time will be similar.

2. Other Post-employment Benefits (OPEB)

The net actuarial cost or savings of the proposed legislation associated with OPEB, including retiree health insurance premiums, is estimated to be a decrease. The actuary’s analysis is summarized below.

Members of the state retirement systems are likely to delay retirement to accumulate additional retirement income in order to replace the income they would have received under the current program. Delayed retirement produces smaller OPEB costs.

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

This actuarial note was prepared using actuarial assumptions as disclosed in the June 30, 2017 actuarial valuation report adopted by PRSAC subject to the following exceptions.

1. The tables and graphs above were based upon census data used in the June 30, 2015 actuarial valuation report issued by the systems and approved by PRSAC. While the details and shapes of the lines might be slightly different using more current census data, the differences would not be material and the resulting conclusions would be the same.
2. This analysis has been prepared by explicitly recognizing gain sharing features of the current plan. The PRSAC valuations were prepared by implicitly recognizing the gain sharing.
3. The discount rate used in the analysis was based on the average of capital market assumptions for eight leading investment consulting firms. Discount rates used in the PRSAC valuations are based on capital market assumptions developed by LASERS’ investment consultant (NEPC) and by TRSL’s investment consultant (Aon-Hewitt).
4. The discount rates used the analysis for LASERS and TRSL were 6.75% and 6.50% respectively for the Pre 2020 plan and 6.00% for the hybrid DB plan as required by the text of HB 28. The actual emerging investment performance for LASERS and TRSL were projected to be 6.75% and 6.50%. The discount rates used for the PRSAC valuations were 7.7% for both systems.
5. We used a 2.50% inflation assumption in our analysis. LASERS used a 2.75% inflation rate for the PRSAC valuation and TRSL used a 2.50% inflation assumption.
6. We assumed investment earnings on account balances for the hybrid DC plan will be 6.00% during the accumulation period. We assumed that DC account balances will be converted into annuities based on a 3.00% discount rate. Annuity conversion rate in the market place have traditionally ranged from 2.00% to 4.00%.

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Although the TRSL board adopted new demographic assumptions for the June 30, 2018 valuation and the LASERS board is expected to do the same for the June 30, 2019 valuation, these changes are not expected to affect the impact of HB 28. These assumptions and methods are in compliance with actuarial standards of practice.

**C. Actuarial Caveat
(Prepared by LLA)**

There is nothing in the proposed legislation that will compromise the signing actuary’s ability to present an unbiased statement of actuarial opinion.

II. FISCAL ANALYSIS SECTION

This section of the actuarial note pertains to fiscal (annual) costs or savings associated with the retirement systems (Table A), with OPEB (Table B), and with other fiscal costs or savings incurred by other government entities (Table C). Fiscal costs or savings in Table A include benefit-related actuarial costs and administrative costs incurred by the retirement systems. The total effect of HB 28 on fiscal costs, fiscal savings, or cash flows is presented in Table D.

**A. Estimated Fiscal Impact – Retirement Systems
(Prepared by LLA)**

1. Narrative

Table A shows the estimated fiscal impact of the proposed legislation on the retirement systems and the government entities that sponsor them. 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 Cost: Table A

EXPENDITURES	2019-20	2020-2021	2021-2022	2022-2023	2023-24	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	2019-20	2020-2021	2021-2022	2022-2023	2023-24	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 proposed legislation will have the following effects on retirement related fiscal costs and revenues during the five year measurement period.

2. Expenditures:

- a. General Fund Expenditures are expected to increase because employer contribution requirements are expected to be larger.
- b. Local Fund Expenditures are expected to increase because employer contribution requirements are expected to be larger.
- c. The LFO anticipates that there will be indeterminable implementation costs to the four state retirement systems associated with the modification of computer systems, development and dissemination of publications and training materials, legal fees related to reviewing and monitoring the new plan for compliance with federal tax law, and workload increases related to developing, reviewing, and evaluating solicitation for proposals for new defined compensation plan providers. TRSL and LSERS estimate these costs to range from \$179 K to \$243 K during the first year. LASERS and LSPRS were unable to provide an estimate. However, **for illustrative purposes**, to the extent that the implementation costs for LASERS and LSPRS is similar to the costs for TRSL and LSERS, the estimated average cost per system is \$211 K in the first year, for a total implementation cost of \$846 K (\$211 K per system x 4 systems). However, actual implementation cost for LASERS and LSPRS may differ from the average cost provided in this illustration.

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	<u>TRSL</u>	<u>LSERS</u>	<u>Average for TRSL & LSERS</u>	<u>LASERS*</u>	<u>LSPRS*</u>	<u>Total</u>
<i>Programming computer systems</i>	\$55,011	\$96,000	\$75,506	\$75,506	\$75,506	\$302,022
<i>Publications and training materials</i>	\$32,387	\$14,750	\$23,569	\$23,569	\$23,569	\$94,274
<i>Legal fees</i>	\$35,000	\$53,000	\$44,000	\$44,000	\$44,000	\$176,000
<u>Workload increase</u>	<u>\$121,202</u>	<u>\$16,000</u>	<u>\$68,601</u>	<u>\$68,601</u>	<u>\$68,601</u>	<u>\$274,404</u>
<i>Total estimated costs</i>	\$243,600	\$179,750	\$211,675	\$211,675	\$211,675	\$846,700

**Estimate based on average anticipated cost of TRSL and LSERS*

- d. Additionally, TRSL indicates ongoing costs of approximately \$395 K - \$645 K per year associated with employing two new staff accountants (\$105 K), investment fees (\$250 K - \$500 K) and actuarial and external auditor service fees for the new plan (\$40 K).

3. Revenues:

State retirement system revenues (Agy Self-Generated) are expected to increase because employer contributions will increase

**B. Estimated Fiscal Impact – OPEB
(Prepared by LLA)**

1. Narrative

Table B shows the estimated fiscal impact of the proposed legislation on actuarial benefit and administrative costs or savings associated with OPEB and the government entities that sponsor these benefit programs. 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.

OPEB Fiscal Cost: Table B

EXPENDITURES	2019-20	2020-2021	2021-2022	2022-2023	2023-24	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	2019-20	2020-2021	2021-2022	2022-2023	2023-24	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

The proposed legislation will not have measurable effects on OPEB related fiscal costs and revenues during the five year measurement period because members affected by HB 28 are not projected to attain eligibility for retirement during that period.

**C. Estimated Fiscal Impact: Other Government Entities (other than the retirement systems or OPEB)
(Prepared by Bradley Cryer, Director of Local Government Services, LLA)**

1. Narrative

From time to time, legislation is proposed that has an indirect effect on cash flows associated with other government entities (other than the retirement systems or OPEB). Table C shows the estimated fiscal impact of the proposed legislation 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.

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Fiscal Costs for Other Government Entities: Table C

EXPENDITURES	2019-20	2020-2021	2021-2022	2022-2023	2023-24	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	2019-20	2020-2021	2021-2022	2022-2023	2023-24	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

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

2. Expenditures:

Proposed changes may impact the hiring and retention of future employees; however, the related cost increases or savings for employers is unknown and can not be quantified.

3. Revenues:

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

**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 the proposed legislation 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.

Total Fiscal Cost: Table D (Cumulative Costs from Tables A, B, & C)

EXPENDITURES	2019-20	2020-21	2021-22	2022-23	2023-24	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	2019-20	2020-21	2021-22	2022-23	2023-24	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

**Section E: Fiscal Costs Received by the LLA from the LFO (incorporated into Section IIA. above)
(Prepared by Tanesha Morgan, Legislative Fiscal Office)**

1. Narrative

Proposed law establishes a hybrid retirement plan for members of Louisiana State Employee' Retirement System (LASERS), Teachers' Retirement System of Louisiana (TRSL), Louisiana School Employees' Retirement System (LSERS), and Louisiana State Police Retirement System (LSPRS) that are hired on or after July 1, 2020.

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Fiscal Costs for Other Government Entities

EXPENDITURES	2019-20	2020-21	2021-22	2022-23	2023-24	5 Year Total
State General Fund	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
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	0	0	0	0	0
Annual Total	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0

REVENUES	2019-20	2020-21	2021-22	2022-23	2023-24	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

HB28 will have the following effects on fiscal costs and revenues related to other government entities during the five year measurement period.

3. Expenditures:

The LFO anticipates that there will be indeterminable implementation costs to the four state retirement systems associated with the modification of computer systems, development and dissemination of publications and training materials, legal fees related to reviewing and monitoring the new plan for compliance with federal tax law, and workload increases related to developing, reviewing, and evaluating solicitation for proposals for new defined compensation plan providers. TRSL and LSERS estimate these costs to range from \$179 K to \$243 K during the first year. LASERS and LSPRS were unable to provide an estimate. However, for illustrative purposes, to the extent that the implementation costs for LASERS and LSPRS is similar to the costs for TRSL and LSERS, the estimated average cost per system is \$211 K in the first year, for a total implementation cost of \$846 K (\$211 K per system x 4 systems). However, actual implementation cost for LASERS and LSPRS may differ from the average cost provided in this illustration.

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<i>Legal fees</i>	\$35,000	\$53,000	\$44,000	\$44,000	\$44,000	\$176,000
<u>Workload increase</u>	<u>\$121,202</u>	<u>\$16,000</u>	<u>\$68,601</u>	<u>\$68,601</u>	<u>\$68,601</u>	<u>\$274,404</u>
<i>Total estimated costs</i>	\$243,600	\$179,750	\$211,675	\$211,675	\$211,675	\$846,700

*Estimate based on average anticipated cost of TRSL and LSERS

Additionally, TRSL indicates ongoing costs of approximately \$395 K - \$645 K per year associated with employing two new staff accountants (\$105 K), investment fees (\$250 K - \$500 K) and actuarial and external auditor service fees for the new plan (\$40 K).

4. Revenues:

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

Credentials of the Signatory Staff:

James J. Rizzo is a Senior Consultant and Actuary with Gabriel, Roeder, Smith & Company, which is currently serving as the actuary for the Louisiana Legislative Auditor. He is an Enrolled Actuary, a member of the American Academy of Actuaries, an Associate 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.

Actuarial Disclosure: Risks Associated with Measuring Costs

This Actuarial Note is an actuarial communication, and is required to include certain disclosures in compliance with Actuarial Standards of Practice (ASOP) No. 51.

A full actuarial determination of the retirement system's costs, actuarially determined contributions and accrued liability require the use of assumptions regarding future economic and demographic events. The assumptions used to determine the retirement system's contribution requirement and accrued liability are summarized in the system's most recent Actuarial Valuation Report accepted by the respective retirement board and by the Public Retirement Systems' Actuarial Committee (PRSAC).

The actual emerging future experience, such as a retirement fund's future investment returns, may differ from the assumptions. To the extent that emerging future experience differs from the assumptions, the resulting shortfalls (or gains) must be recognized in future years by future taxpayers. Future actuarial measurements may also differ significantly from the current measurements due to other

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factors: changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period; or additional cost or contribution requirements based on the system's funded status); and changes in plan provisions or applicable law.

Examples of risk that may reasonably be anticipated to significantly affect the plan's future financial condition include:

1. Investment risk – actual investment returns may differ from the expected returns (assumptions);
2. Contribution risk – actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the plan's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll, or other relevant contribution base;
3. Salary and Payroll risk – actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and contributions differing from expected;
4. Longevity and life expectancy risk – members may live longer or shorter than expected and receive pensions for a period of time other than assumed;
5. Other demographic risks – members may terminate, retire or become disabled at times or with benefits other than assumed, resulting in actual future accrued liability and contributions differing from expected.

The scope of an Actuarial Note prepared for the Louisiana Legislature does not include an analysis of the potential range of such future measurements or a quantitative measurement of the future risks of not achieving the assumptions. In certain circumstances, detailed or quantitative assessments of one or more of these risks as well as various plan maturity measures and historical actuarial measurements may be requested from the actuary. Additional risk assessments are generally outside the scope of an Actuarial Note. Additional assessments may include stress tests, scenario tests, sensitivity tests, stochastic modeling, and a comparison of the present value of accrued benefits at low-risk discount rates with the actuarial accrued liability.

However, the general cost-effects of emerging experience deviating from assumptions can be known. For example, the investment return since the most recent actuarial valuation may be less (or more) than the assumed rate, or a cost-of-living adjustment may be more (or less) than the assumed rate, or life expectancy may be improving (or worsening) compared to what is assumed. In each of these situations, the cost of the plan can be expected to increase (or decrease).

The use of reasonable assumptions and the timely receipt of the actuarially determined contributions are critical to support the financial health of the plan. However, employer contributions made at the actuarially determined rate do not necessarily guarantee benefit security.

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

HB 28 contains a retirement system benefit provision having an actuarial cost.

Some employees will receive a larger benefit with the enactment of HB 28 than they would receive without HB 28.

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 2019 regular session.

<u>Senate</u>	<u>House</u>
<input checked="" type="checkbox"/> 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	<input type="checkbox"/> 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
<input type="checkbox"/> 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	<input type="checkbox"/> 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