2020 REGULAR SESSION
ACTUARIAL NOTE HB 32

House Bill 32 HLS 20RS-210 **Original** **Author: Representative Ivey** **Date: March 2, 2020** **LLA Note HB 32. 01** **Organizations Affected:** **Teachers' Retirement System of Louisiana** **OR INCREASE APV**	**This Note has been prepared by the Actuarial Services Department of the Louisiana Legislative Auditor (LLA) with assistance from either the Fiscal Notes staff of the Legislative Auditor or staff of the Legislative Fiscal Office (LFO). 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.** **Lowell P. Good, ASA, EA, MAAA** **Actuarial Services Manager** **James J. Rizzo, ASA, EA, MAAA** **Senior Consultant & Actuary** **Gabriel, Roeder, Smith & Company**

<u>**Bill Header:**</u> RETIREMENT/TEACHERS: Establishes an optional hybrid retirement plan for members of the Teachers' Retirement System of Louisiana.

<u>**Cost Summary:**</u>

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 local and state 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.

<u>**Estimated Actuarial Impact:**</u>

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 (OPEB)	0	0
Local Government Entities	Increase	0
State Government Entities	Increase	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.

<u>**Bill Information**</u>

Current Law

Under current law, generally speaking, members of the Teachers' Retirement System of Louisiana (TRSL) participate in a traditional defined benefit (DB) pension plan, with some of the eligible Higher Education members electing a defined contribution (DC) styled Optional Retirement Plan.

The benefit payable to a future members will generally be equal to 2.5% x years of service x the member's final average compensation.

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.

TRSL participation is generally a condition of employment and requires an 8.00% contribution from active members.

Proposed Law

Under HB 32, new employees working in the TRSL covered positions first employed on or after July 1, 2021 <u>may</u> participate in the hybrid retirement plan of TRSL.

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-7/1/2021 members.

2. Amortization of UALs resulting from actuarial gains or losses relative to Post-7/1/2021 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-7/1/2021 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-7/1/2021 members. Hybrid plan members will be responsible for 50% of any such increase in the UAL.

All system assets relative to Pre and Post-7/1/2021 defined benefit structures will be pooled for investment purposes. A notational DB plan account will be established for the Pre-7/1/2021 (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-7/1/2021 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-7/1/2021 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-7/1/2021 DB plan.

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

TABLE 1

Summary of Hybrid Plan for Post-7/1/2021 Employees		
Plan Provisions	**DB Plan**	**DC Plan**
Participation	Optional participation on or after July 1, 2021.	Optional participation on or after July 1, 2021.
Contributions	Shared equally between employer and employee.	5% of pay for the employee, 5% of pay for the employer.
Individual Accounts	Not Applicable.	1. Administered and maintained by third-party provider, 2. Three or more DC providers must be selected by the Dept. of the Treasury, 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	1% x years of credited service x final average compensation.	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.
Retirement Eligibility	1. 65 and 5 years of service, 2. 55 and 20 years of service with actuarial reduction.	Upon retirement from the DB plan.
Payment Form	Same as under Pre-7/1/2021 plan.	Annuity contract purchased from third party provider.
DROP or Back-DROP	Not Allowed.	Not Applicable.

TABLE 1 (Continued)

Summary of Hybrid Plan for Post-7/1/2021 Employees		
Plan Provisions	**DB Plan**	**DC**
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.	1. Employer and employee contributions accumulated with investment earnings are 100% vested, 2. Account balance will always be credited with interest, 3. Benefits are payable only upon retirement or death.
Eligibility for Disability Benefits	Same as Pre-7/1/2021 plan: 10 years of service.	Same as Pre-7/1/2021 plan: 10 years of service.
Disability Benefits	Same as Pre-7/1/2021 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-7/1/2021 plan: 1. 5 years of service for spouse with qualifying children, 2. 5 years of service for minor children and to handicapped children or adults, 3. 10 years of service for spouse without qualifying children.	Same as Pre-7/1/2021 plan: 1. 5 years of service for spouse with qualifying children, 2. 5 years of service for minor children and to handicapped children or adults, 3. 10 years of service for spouse without qualifying children.
Death Benefits	Same as Pre-7/1/2021 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.	1. Benefit is suspended, 2. Member accrues service under the DB plan, 3. If employed 3 or more years after disability ceases, periods on disability is used only for retirement eligibility.	1. Annuity payments from DC plan are discontinued, 2. Annuity is converted to lump sum value and is deposited into the member's DC plan account.
COLA Eligibility	1. Regular retiree: Age 65 with at least one year of retirement, 2. Beneficiary or survivor: The member would have attained 65 with at least one year of benefit payments had he not died, 3. Disability retiree or beneficiary of disability retiree: Benefits have been payable for at least one year.	Not Applicable.
COLA Benefit	1. Automatic adjustment every odd-numbered year after becoming eligible, 2. Lesser of 2% and CPI-U for the South over the last 12-month period, 3. COLA applies to first $50,000 of benefits.	Not Applicable.
Assets	1. Commingled with Pre-7/1/2021 plan assets, 2. Nominal accounts for Pre-7/1/2021 and Post-7/1/2021 plans.	Administered and maintained by third-party provider.

TABLE 1 (Continued)

Summary of Hybrid Plan for Post-7/1/2021 Employees		
Plan Provisions	**DB Plan**	**DC Plan**
Determination of Unfunded Accrued Liabilities (UAL)	Nominal accounts for Pre-7/1/2021 and Post-7/1/2021 plans are maintained to determine UAL associated with the Pre-7/1/2021 plan and the UAL for the DB portion of the hybrid plan.	Not Applicable.
Discount Rate for Valuation Purposes	1. As specified by law: 6.00%, 2. Note: the discount rate for the Pre-7/1/2021 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 Pre-7/1/2021 Members**	**HB 32 Hybrid DB Plan**
Employee Contributions	8.00%	1. Actuarially determined percentage of pay based on the normal cost for the hybrid plan and UAL amortization payments allocated to the hybrid plan, 2. Employer and employee contribute equal amounts.
Employer Contributions	1. Total normal cost less employee contributions, 2. Payments to amortize the UAL.	Shared equally between employer and employee.
Retirement Benefits	1. 2.50% x years of service x final average compensation.	1. 1.00% x years of service x final average compensation.
COLAs, Gain Sharing and the Experience Account	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. A COLA grant depends on: 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. Other COLA rules: 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.	A COLA will be automatically paid in every odd-numbered year. COLA rules: 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	1. Benefit accrual rate is 2.5%.	1. Benefit accrual rate is 1.0%, 2. Otherwise, benefit provisions are the same as for the Pre-7/1/2021 plan.

TABLE 2 (Continued)

DB Plan Summary Comparison		
Plan Provisions	**Current Law DB Plan for Pre-7/1/2021 Members**	**HB 32 Hybrid DB 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	The discount rate is set by the board of directors. Rates for the June 30, 2020 valuation will be 7.45%.	6.00%.

Implications of the Proposed Changes

HB 32 establishes an optional hybrid plan for TRSL-eligible employees first employed on or after July 1, 2021.

The hybrid program consists of a pared-down DB component and a new DC component. The hybrid's DB component includes a shared cost provision in which the employer and employee contribution requirements are split equally each year.

The optional feature of the proposed program exposes the system to anti-selection risk as employees are likely to participate in the plan option they expect to benefit them more, such as younger, shorter term employees joining the hybrid plan, and older longer-term employees joining the current Pre-7/1/2021 plan.

The hybrid program will have no effect on normal costs or the UAL or its payment associated with the current Pre-7/1/2021 plan.

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I. ACTUARIAL IMPACT ON RETIREMENT SYSTEMS AND OPEB [Completed by LLA]

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 28 in 2019. This proposed HB 32 is very similar to HB 65. The main difference is HB 32 establishes an optional hybrid plan for employees first eligible for TRSL membership on or after July 1, 2021 rather than a mandatory hybrid plan for employees eligible for membership in any of the state systems on and after July 1, 2018. Since the two bills are otherwise very nearly identical, the maximum impact of HB 32 (if all eligible members elect participation in the hybrid plan) on TRSL will be very close to the impact of HB 65 on TRSL. 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.

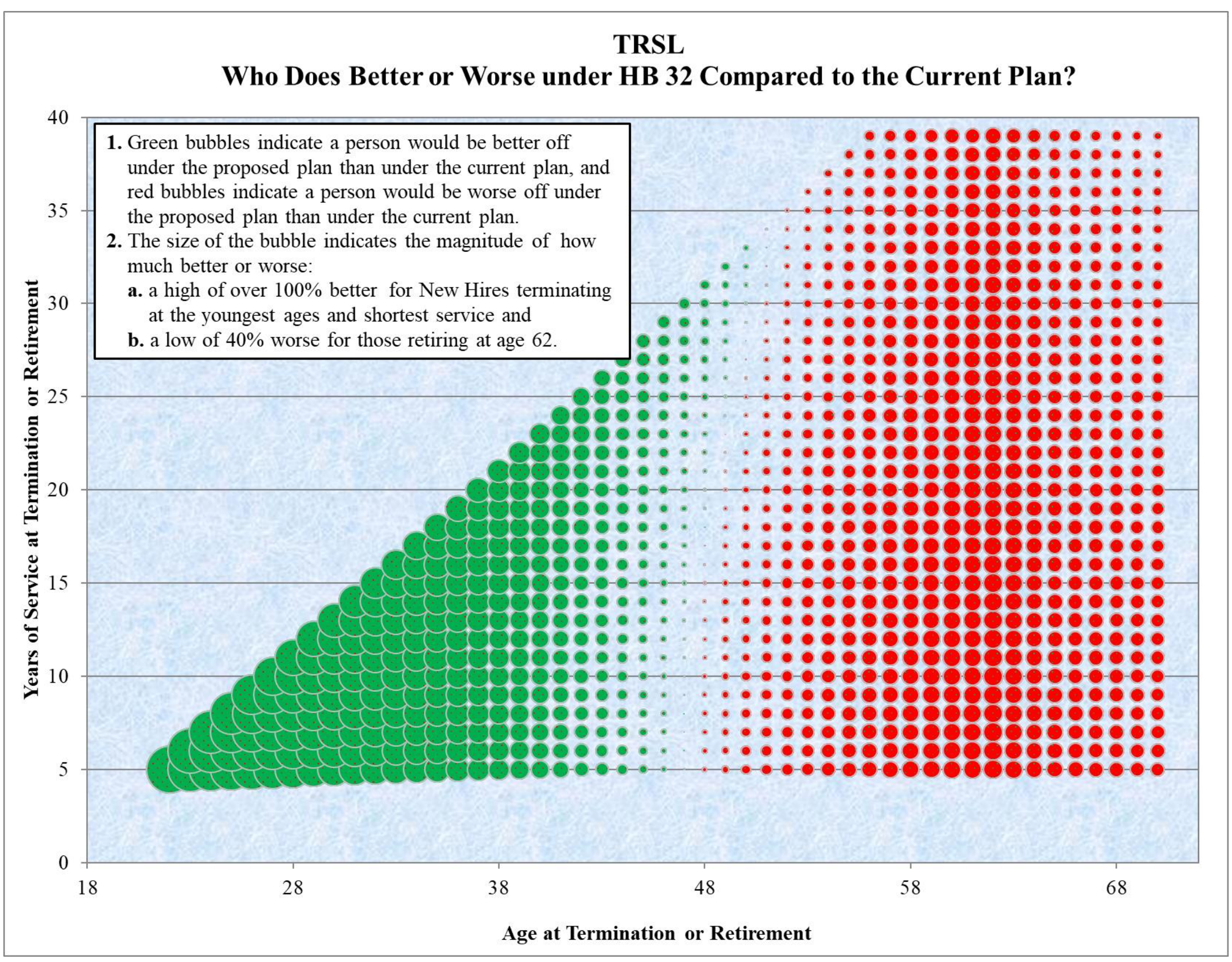
1. Retirement Systems

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

Benefit Comparison

Generally speaking, 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 32. Chart A illustrates which program provides a better benefit at termination or retirement for new hires -- the current program or the proposed hybrid program. Chart B provides information about how much better one program is than the other.

CHART A



Observations about Chart A:

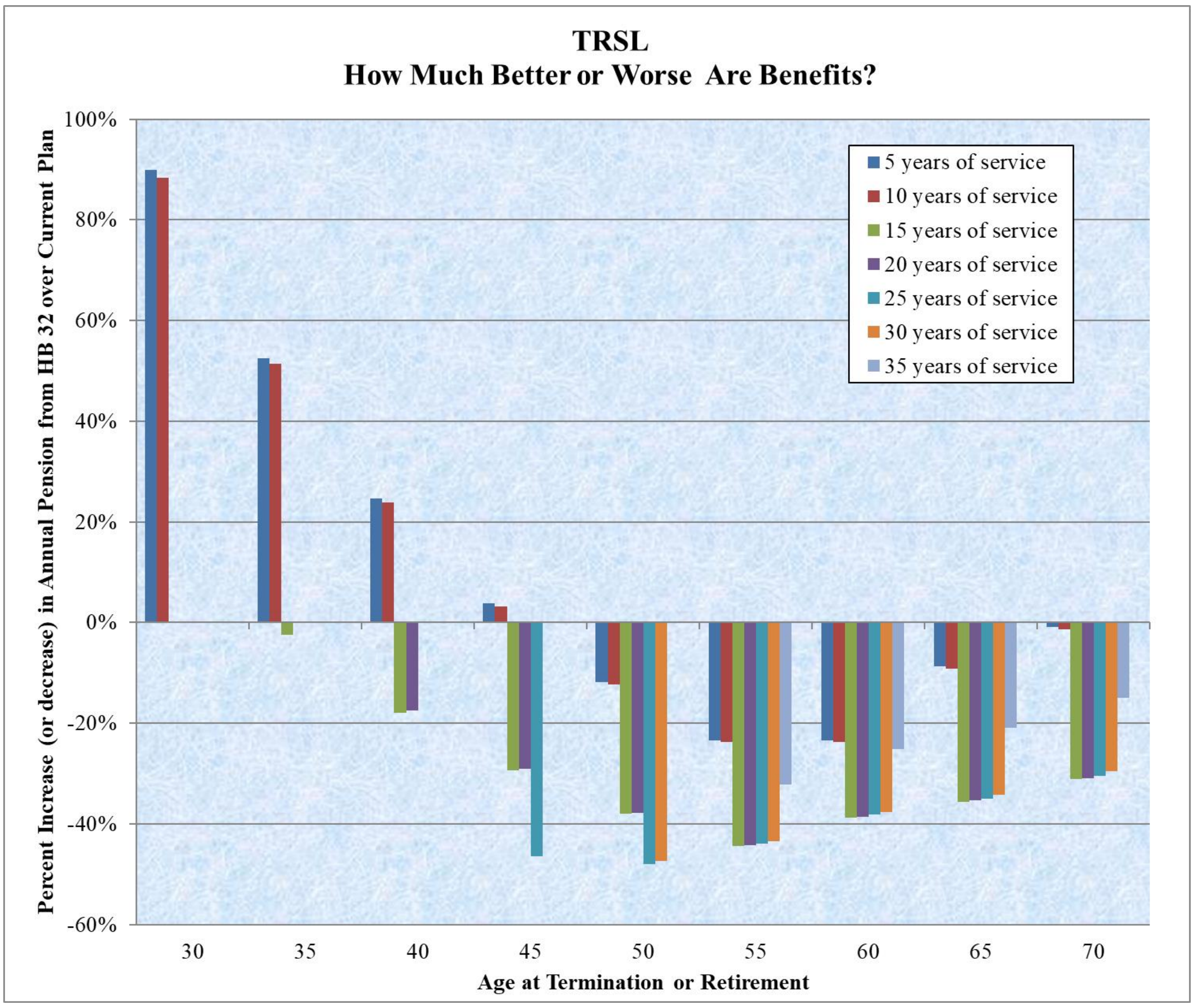
1. The proposed hybrid program will provide a better benefit than the current program for those who are age 48 or younger when they terminate employment.

2. The proposed hybrid program tends to favor participants who join at the younger 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.

CHART B



Observations about Chart B:

1. The proposed hybrid 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 hybrid 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 hybrid 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.

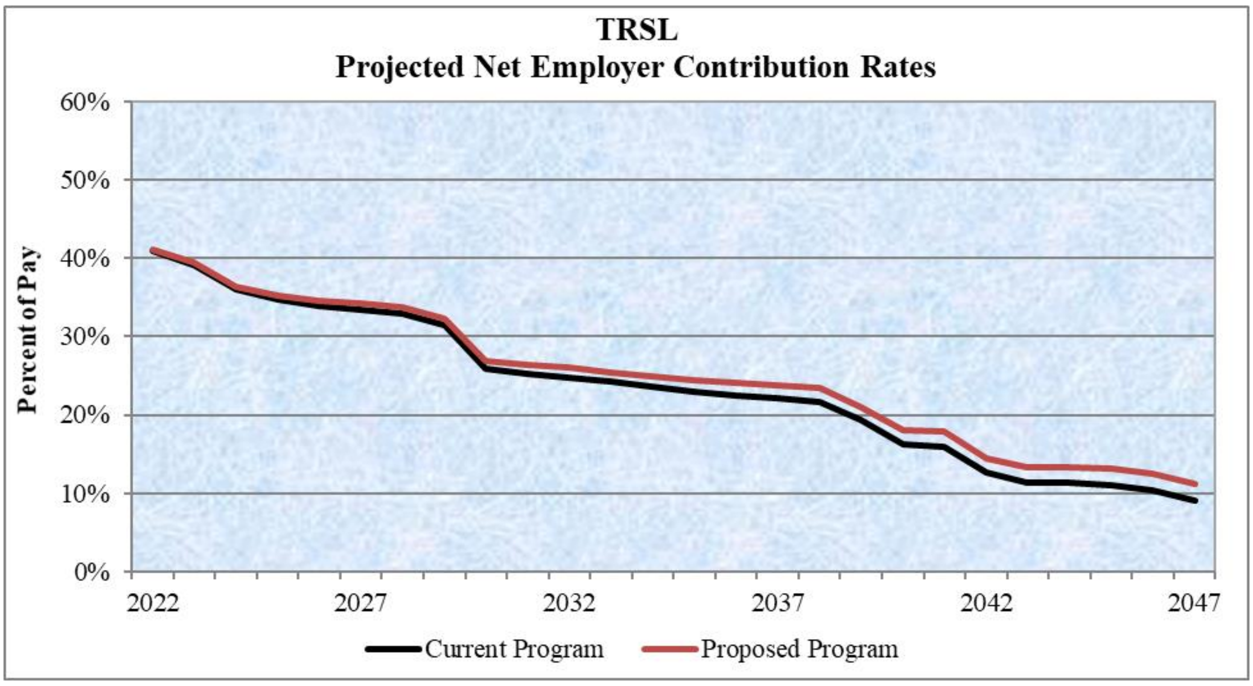
3. At age 65, a participant will receive a benefit from the proposed program that is only about 80% of the benefit that he would have received from the current program.

Cost Comparison

Charts C and D have been prepared under the assumption that current laws and laws under the proposed HB 32 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 not 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 32 program are compared below with projected employer contribution rates with the current plan. For the purpose of this Actuarial Note, these projected employer contribution rates below are based on a presumption that all new hires elect the hybrid program. As described more fully in the Implications of the Proposed Changes section above, the anti-selection factor in the optional nature of this proposed bill is likely to cause costs to increase further.

CHART C



Observations about Chart C:

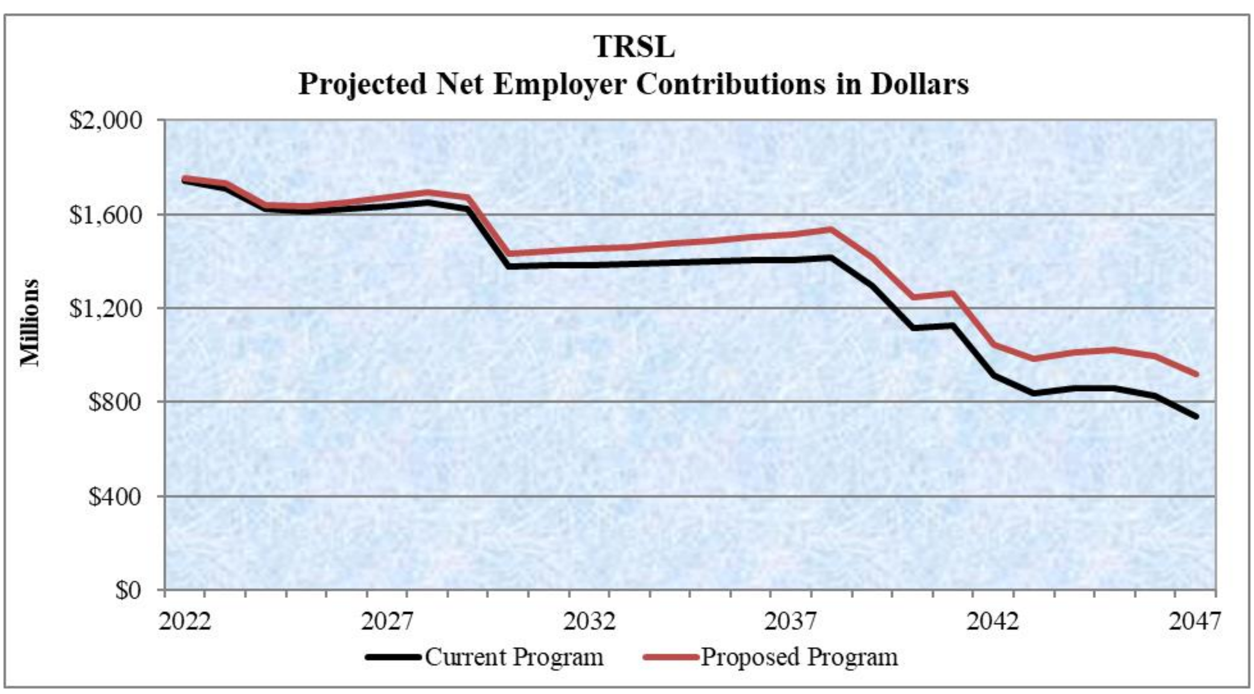
1. Employer contribution rates with the hybrid program will be slightly larger than with the current program.

2. Employer contribution rates are virtually the same initially. However, the difference between employer contribution rates with the enactment of HB 32 and rates with continuation of the current program increases as participants in the hybrid program replace members in the current program.

3. By 2047, the employer contribution rate with the hybrid program is estimated to be about 2% of pay higher than with the current plan.

Employer contributions in dollars are compared below. Chart D shows a similar pattern relative to employer contributions as Chart C. For the purpose of this Actuarial Note, these projected employer contribution rates below are based on a presumption that all new hires elect the hybrid program. As described more fully in the Implications of the Proposed Changes section above, the anti-selection factor in the optional nature of this proposed bill is likely to cause costs to increase further.

CHART D



Observations about Chart D:

Projected employer contribution requirements for the proposed hybrid program in dollars are expected to be slightly greater than expected for the current plan.

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 TRSL 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 TRSL 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: TRSL 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.

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 in cost. The actuary's analysis is summarized below.

> Members of TRSL are likely to delay retirement to accumulate additional retirement income in order to replace the income they would have received under the current program if they elect the hybrid retirement plan. Delayed retirement produces smaller OPEB costs.

B. <u>Actuarial Data, Methods and Assumptions</u>
(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 TRSL 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 TRSL's investment consultant (AON-Hewitt).

4. The discount rate used for the Pre-7/1/2021 plan was 6.50%. 6.00% was used for the DB component of the hybrid plan as required by the text of HB 32. The actual emerging investment performance was projected to be 6.50%. The discount rate used for the PRSAC valuation was 7.70%.

5. We used a 2.50% inflation assumption in our analysis. TRSL used a 2.50% inflation rate for the PRSAC valuation.

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%.

Although the TRSL board adopted new demographic assumptions for the June 30, 2018 valuation, these changes are not expected to affect the impact of HB 32. These assumptions and methods are in compliance with actuarial standards of practice.
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C. <u>Actuarial Caveat</u>
(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 IMPACT ON RETIREMENT SYSTEMS AND OPEB [Completed by LLA]

This section of the actuarial note pertains to fiscal (annual) costs or savings associated with the retirement systems (Table A) and with OPEB (Table B). Fiscal costs or savings in Table A include benefit-related actuarial costs and administrative costs incurred by the retirement systems.

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	2020-21	2021-22	2022-23	2023-24	2024-25	5 Year Total
State General Fund	$ 0	Increase	Increase	Increase	Increase	Increase
Agy Self Generated	175,312	403,236	411,300	419,526	427,916	1,837,290
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	$ 175,312	Increase	Increase	Increase	Increase	Increase

REVENUES	2020-21	2021-22	2022-23	2023-24	2024-25	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

Retirement system expenditures illustrated above were estimated by the System’s staff.

The actual sources of funding for employer contributions (e.g., Federal Funds, State General Fund) may vary by employer and are not differentiated on the table.

The proposed legislation will have the following effects on retirement related fiscal costs and revenues during the five-year measurement period.

2. Expenditures:

   a. State General Fund and Local Fund Expenditures are expected to increase because employer contribution requirements are expected to be larger.
   b. There will be implementation costs to TRSL 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. <u>TRSL staff estimates these costs to be approximately $175 K during the first year.</u>
   c. Additionally, TRSL indicates ongoing costs of approximately $403 K - $428 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:

TRSL 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	2020-21	2021-22	2022-23	2023-24	2024-25	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	2020-21	2021-22	2022-23	2023-24	2024-25	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

All expenditures for employer contributions are reflected on a single line in the table above. The actual sources of funding (e.g., Federal Funds, State General Fund) may vary by employer and are not differentiated on the table.

The proposed legislation will have the following effects on retirement related fiscal costs and revenues during the five year measurement period.

1. Expenditures:

   The proposed legislation will not have measurable effects on OPEB related expenditures during the five year measurement period because members affected by HB 32 are not projected to attain eligibility for retirement during that period.

2. Revenues:

   The proposed legislation will not have measurable effects on OPEB related revenue during the five year measurement period because members affected by HB 32 are not projected to attain eligibility for retirement during that period.

III. FISCAL IMPACT ON LOCAL GOVERNMENT ENTITIES [Completed by LLA]

This section of the actuarial note pertains to annual fiscal costs, cost savings, and revenue impacts incurred by local government entities other than those included in Tables A and B. See Table C.

Estimated Fiscal Impact - Local Government Entities (other than the impact included in Tables A and B)
(Prepared by Bradley Cryer, Director of Local Government Services)

1. Narrative

   From time to time, legislation is proposed that has an indirect effect on expenditures and revenues associated with local government entities (other than the impact included in Tables A and B). Table C shows the estimated fiscal impact of the proposed legislation on such local government entities. 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.

Fiscal Costs for Local Government Entities: Table C

EXPENDITURES	2020-21	2021-22	2022-23	2023-24	2024-25	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	2020-21	2021-22	2022-23	2023-24	2024-25	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 have the following effects on fiscal costs and revenues related to local 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 are unknown and cannot be quantified.

3. Revenues:

No measurable effects.

IV. FISCAL IMPACT ON STATE GOVERNMENT ENTITIES [Completed by LFO]

This section of the actuarial note pertains to annual fiscal costs, cost savings, and revenue impacts incurred by state government entities other than those included in Tables A and B. See Table D.

Estimated Fiscal Impact − State Government Entities (other than the impact included in Tables A and B)
(Prepared by John Carpenter, Legislative Fiscal Officer)

1. Narrative

Legislation may be proposed that has an indirect effect on expenditures and revenues associated with state government entities (other than the impact included in Tables A and B). Table D shows the estimated fiscal impact of the proposed legislation on such state government entities. 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.

Fiscal Costs for State Government Entities: Table D

EXPENDITURES	2020-21	2021-22	2022-23	2023-24	2024-25	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	2020-21	2021-22	2022-23	2023-24	2024-25	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 have the following effects on fiscal costs and revenues related to state government entities during the five year measurement period.

2. Expenditures:

Other than the impact on employer contribution rates which is already reflected in Table A above, there is no anticipated direct material effect on governmental expenditures as a result of this measure.

3. Revenues:

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

Credentials of the Signatory Staff:

Lowell P. Good is 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.

James J. Rizzo is a Senior Consultant and Actuary with Gabriel, Roeder, Smith & Company, which currently serves as staff for the Actuarial Services Department of 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 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.

2020 REGULAR SESSION
ACTUARIAL NOTE HB 32

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

[X] HB 32 contains a retirement system benefit provision having an actuarial cost.

Some members of the Teachers' Retirement System of Louisiana could receive a larger benefit with the enactment of HB 32 than what they would have received without HB 32.

Dual Referral Relative to Total Fiscal Costs or Total Cash Flows:

The information presented below is based on information contained in Tables A, B, C, and D for the first three years following the 2020 regular session.

Senate			House		
[X]	13.5.1	Applies to Senate or House Instruments. If an annual fiscal cost ≥ $100,000, then bill is dual referred to: **Dual Referral: Senate Finance**	[ ]	6.8F	Applies to Senate or House Instruments. If an annual General Fund fiscal cost ≥ $100,000, then the bill is dual referred to: **Dual Referral to Appropriations**
[ ]	13.5.2	Applies to Senate or House Instruments. If an annual tax or fee change ≥ $500,000, then the bill is dual referred to: **Dual Referral: Revenue and Fiscal Affairs**	[ ]	6.8G	Applies to Senate Instruments only. If a net fee decrease occurs or if an increase in annual fees and taxes ≥ $500,000, then the bill is dual referred to: **Dual Referral: Ways and Means**