

**2020 REGULAR SESSION
ACTUARIAL NOTE SB 18**

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| <p>Senate Bill 18 SLS 20RS-28 Original</p> <p>Author: Senator Peacock Date: February 28, 2020 LLA Note SB 18.01</p> <p>Organizations Affected: Three State Retirement Systems: LASERS, TRSL, and LSERS</p> <p>OR DECREASE APV</p> | <p>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.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  Lowell P. Good, ASA, EA, MAAA Actuarial Services Manager </div> <div style="text-align: center;">  James J. Rizzo, ASA, EA, MAAA Senior Consultant & Actuary Gabriel, Roeder, Smith & Company </div> </div> |
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Bill Header: RETIREMENT SYSTEMS: Provides relative to retirement eligibility for certain members of state retirement systems. (6/30/20)

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 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.

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

Bill Information

Current Law

Current law relative to the Louisiana State Employees’ Retirement System (LASERS) rank-and-file members, the Teachers’ Retirement System of Louisiana (TRSL) members, and the Louisiana School Employees’ Retirement System (LSERS) members provides the following retirement eligibilities for those whose first employment making them eligible for membership in any state retirement system occurred on or after July 1, 2015:

1. Retirement at age 62 after five years of service.
2. Retirement at any age after 20 years of service; however, the member's benefit will be actuarially reduced from age 62.

Current law also has other provisions that tie into retirement eligibility for members of these systems:

- Members who leave with vested benefits before retirement age are eligible to start benefits at age 62
- Members who become disabled are required to have a physician certify their continued total disability every three years until they attain age 62
- Members who reach age 62 may enter the DROP.

Proposed Law

SB 18 provides that members of these systems first employed on or after July 1, 2020 will be eligible for retirement at:

**2020 REGULAR SESSION
ACTUARIAL NOTE SB 18**

1. Age 67 or the age of retirement set by the Social Security Administration, whichever is greater, after five years of service.
2. Any age after 20 years of service: however, the member's benefit will be actuarially reduced from age 67 or the age of retirement set by the Social Security Administration, whichever is greater.
3. Age 62 with 40 years of service.

SB 18 provides that the "age of retirement set by the Social Security Administration", for a person whose first employment making him eligible for membership in one of the state systems occurred on or after July 1, 2020, means the greater of age 67 or the highest normal retirement age in whole years required for eligibility to receive unreduced retirement benefits from the Social Security Administration on January 2nd of the applicable calendar year as follows:

1. For a person whose first employment date is between January 1st and June 30th, inclusive, the January 2nd of the year immediately preceding the year he is first employed.
2. For a person whose first employment date is between July 1st and December 31st, inclusive, the January 2nd of the year he is first employed.

The other provisions that tie into retirement eligibility for members of these systems would be changed to:

- Members who leave with vested benefits before retirement age are eligible to start benefits at age 67
- Members who become disabled are required to have a physician certify their continued total disability every three years until they attain age 67
- Members who reach age 67 may enter the DROP.

Implications of the Proposed Changes

SB 18 does not change benefit formulas in these systems, but it does change retirement eligibility for new employees, which will affect retirement patterns in the future. Changing retirement dates will alter benefit accruals and the length of time benefits will be received. Increasing the retirement age is expected to decrease the cost of the three systems, but the decrease is expected to be somewhat more or less depending on the following expected:

- Increase in the number of members terminating before retirement with vested benefits
- Decrease in the number of vested terminated members who wait for vested benefits after terminating from employment
- Increase in the number of members who qualify for disability benefits
- Decrease in the number of members entering the DROP, and reduce the number of DROP years for those who do enter it
- Decrease in the number of members who retire at normal retirement age.

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.

1. Retirement Systems

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

These retirement systems will incur administrative expenses to implement this proposed bill, likely for only the first year, to coordinate the development of new educational materials, printing, training and various other administrative expenses, and for additional computer programming to create the software components of the new tier.

SB 18 does not change the amount or timing of benefit payments for the current members of LASERS rank-and-file, TRSL, and LSERS. However, the cost of benefits for future members of these systems will be lower.

Ultimately when the three retirement systems have matured so that there are no active members who were first employed before July 1, 2020, the normal costs will be reduced. It is recognized that the number of years of service and the final average compensation used in the benefit formula are higher when a member is required to wait longer to become eligible for retirement. This, by itself results in a higher monthly benefit. However, for most members, the fact that their benefits commence a few years later, causes the total actuarial present value of the lifetime of benefits to decrease when required to wait longer for commencement. The LSERS actuary has estimated the ultimate normal cost accrual rate for LSERS would be expected to decline by approximately 1.8% over the long term. No such numerical estimate is available for LASERS or TRSL.

Therefore, the effect on the net actuarial present value of all benefits and expenses is estimated to be a decrease.

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.

The liability for post-retirement medical insurance subsidies provided to retirees will be reduced since a later retirement date reduces the number of years for which a retiree will be eligible for post-employment benefits.

**2020 REGULAR SESSION
ACTUARIAL NOTE SB 18**

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

Unless indicated otherwise, the actuarial note for the proposed legislation was prepared using actuarial data, methods, and assumptions as disclosed in the most recent actuarial valuation report adopted by the Public Retirement Systems' Actuarial Committee (PRSAC). The data, methods and assumptions are being used to provide consistency with the actuary for the retirement system who may also be providing testimony to the Senate and House retirement committees. With certain exceptions, the actuary for the LLA finds the assumptions used by the retirement systems and PRSAC to be reasonable.

**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 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 | Increase | Decrease | Decrease | Decrease | Decrease | 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 | Decrease | Decrease | Decrease | Decrease | Decrease |
| Annual Total | Increase | 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 | Decrease | Decrease | Decrease | Decrease | Decrease |
| 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 | Decrease | Decrease | Decrease | Decrease | Decrease |

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. Expenditures from the State General Fund will increase slightly in the first year to coordinate the development of new educational materials, printing, training and various other administrative expenses. This increase will be slightly offset by a decrease in the contributions during the five year fiscal measurement period.
- b. Expenditures from LASERS, TRSL and LSERS (Agy Self Generated) will increase in the first year for the additional computer programming needed and the one-time costs related with SB 18 (to coordinate the development of new educational materials, printing, training and various other administrative expenses). A slight expected increase in the disability applications will also likely increase the expenditure from these systems during the five year fiscal measurement period.
- c. Expenditures from Local Funds will decrease slightly during the five year fiscal measurement period since the employer contributions will be slightly lower, reflecting delayed benefit start dates for new hires. The decrease will initially be very small, but will become increasingly larger each year thereafter.

**2020 REGULAR SESSION
ACTUARIAL NOTE SB 18**

3. Revenues:

- a. LASERS, TRSL and LSERS revenues (Agy Self Generated) will decrease during the five year measurement period since the employer contributions received will be lower. The decrease will initially be very small, but will become increasingly larger each year thereafter.

**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 OPEB related fiscal costs and revenues during the five year measurement period.

2. Expenditures:

No measurable effects during the next five years.

3. Revenues:

No measurable effects.

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.

**2020 REGULAR SESSION
ACTUARIAL NOTE SB 18**

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 |

2020 REGULAR SESSION ACTUARIAL NOTE SB 18

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 SB 18**

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

SB 18 contains a retirement system benefit provision having an actuarial cost.

No member of the Louisiana State Employees' Retirement System, the Teachers' Retirement System of Louisiana, or the Louisiana School Employees' Retirement System would receive a larger benefit with the enactment of SB 18 than what he would have received without SB 18.

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

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

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

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

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