


**2019 REGULAR SESSION
ACTUARIAL NOTE SB 107**

<p>Senate Bill 107 SLS 19RS-84 Engrossed REVISED</p> <p>Author: Senator Gatti Date: May 5, 2019 LLA Note SB 107.02</p> <p>Organizations Affected: Louisiana State Police Retirement System (LSPRS) Louisiana Sheriff's Pension and Relief Fund (LSPRF) Municipal Police Employees' Retirement System (MPERS) Firefighters' Retirement System (FRS) Municipal Employees' Retirement System (MERS) Parochial Employees' Retirement System (PERS) Louisiana State Employees' Retirement System (LASERS)</p> <p>EG 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>
--	---

Bill Header: PUBLIC EMPLOYEES: Adds post traumatic stress disorder to the list of injuries which are compensable for injured public employees. (8/1/19)

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:		Net Actuarial Cost
The Retirement Systems		Increase
Other Post-employment Benefits (OPEB)		Increase
Total		Increase
Five Year Net Fiscal Cost Pertaining to:	Expenditures	Revenues
The Retirement Systems	Increase	Increase
Other Post-employment Benefits	Increase	0
Other 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. The actuaries for the retirement system(s) to which this Constitutional requirement applies are expected to calculate costs and liabilities in compliance with this requirement.

Bill Information

Current Law

Current law includes certain presumptions as to certain disabilities for certain job categories as being employment-related and as to timing.

- Current law [R.S. 33:2581] provides that disease or infirmity of the heart or lungs which develops during a period of employment in the classified fire service in the state of Louisiana shall be classified as a disease or infirmity connected with employment. The employee affected, or his survivors, shall be entitled to all rights and benefits as granted by the laws of the state of Louisiana to which one suffering an occupational disease is entitled as service connected in the line of duty, regardless of whether the fireman is on duty at the time he is stricken with the disease or infirmity. Such disease

**2019 REGULAR SESSION
ACTUARIAL NOTE SB 107**

or infirmity shall be presumed, prima facie, to have developed during employment and shall be presumed, prima facie, to have been caused by or to have resulted from the nature of the work performed whenever same is manifested at any time after the first five years of employment.

- Current law [R.S. 33:2581.1(A)] provides that any loss of hearing which is ten percent greater than that of the affected employee's comparable age group in the general population and which develops during employment in the classified fire service in the state of Louisiana shall, for purposes of this Section only, be classified as a disease or infirmity connected with employment. The employee affected shall be entitled to medical benefits including hearing prosthesis as granted by the laws of the state of Louisiana to which one suffering an occupational disease is entitled, regardless of whether the fireman is on duty at the time he is stricken with the loss of hearing. Such loss of hearing shall be presumed to have developed during employment and shall be presumed to have been caused by or to have resulted from the nature of the work performed whenever same is manifested at any time after the first five years of employment in such classified service. This presumption shall be rebuttable by evidence meeting judicial standards and shall be extended to an employee following termination of service for a period of twenty-four months.

Current law provides disability benefits to sheriffs, deputy sheriffs, emergency medical services personnel, employees of a police department, or fire employees who are members in one of the retirement systems of Louisiana and who apply for retirement due to a disability caused solely as the result of injuries sustained in the performance of their official duties. Under current law retirement plans generally require the disability to have occurred (and possibly even the application made) during the period of covered employment.

If the application for disability benefits is not filed while the member is in service, it will be presumed that the disability was not incurred while the member was an active contributing member in active service. That presumption may be overcome only by clear, competent, and convincing evidence that the disability was incurred while the member was an active contributing member in active service.

Current law declares that the services provided by volunteer fire departments are vital for fire prevention and suppression to the safety of the citizens of the state. The state fire marshal is required to obtain workers' compensation coverage for volunteer members who participate in the normal functions of the fire company.

Current law also provides that every employee of the division of state police, except the head thereof, shall be considered an employee of the state within the meaning of the workers' compensation law of this state and entitled to the benefits of all the provisions of that law applicable to state employees.

Proposed Law

This Actuarial Note is prepared with respect to the Original bill together with proposed Amendment No. 1.

SB 107 provides that any benefit payable to a sheriff, deputy sheriff, emergency medical services personnel, employee of a police department, or fire employee for temporary or permanent disability when the employee suffers an injury or disease arising out of and in the course and scope of their employment shall include coverage for post traumatic stress injury.

SB 107 also provides that any workers' compensation policy which provides coverage for a volunteer member of a fire company or for an employee of the division of state police shall include coverage for post traumatic stress injury as presumptively an occupational disease.

SB 107, affecting employees of the division of state police (primarily with respect to workers' compensation policies) [R.S. 40:1374], appears to have two Subsections (C). The second Subsection (C)(2) extends this presumption for employees of the division of state police to be "entitled to all rights and benefits as granted by state law to one suffering an occupational disease and is entitled as service connected in the line of duty." These employees are covered under LASERS as Rank and File employees, which have disability benefits "granted by state law" but not distinguishing between service-connected and non-service-connected or between line-of-duty and non-line-of-duty. Nevertheless, depending on interpretations, the proposed bill requires a presumption of having "developed during employment" and presumed "to have been caused by or resulted from the nature of the work performed." This is expected to have a slight increase in the rate of disabilities granted as compared to the current law.

While it is clear that workers' compensation policies covering volunteer members of fire companies are affected by SB 107, the actuary for the Legislative Auditor does not know whether any retirement systems cover voluntary members of fire companies.

The job categories identified in the proposed bill are, generally, covered by the following retirement systems. The actuary for the Legislative Auditor was not able to confirm coverage with all the retirement systems below.

Job Category	Retirement System Affected
Sheriff and deputy sheriff	LSPRF
Emergency medical services personnel	PERS, MERS
Employee of a police department	MPERS, MERS
Fire Employee	FRS
Volunteer member of a fire company	None?
Employee of the division of state police	LSPRS, LASERS

**2019 REGULAR SESSION
ACTUARIAL NOTE SB 107**

There are two types of presumptions required in the proposed law:

1. Employment-related. A qualifying diagnosis is presumed to be “connected to his employment” and “an occupational disease and . . . service connected in the line of duty”. This presumption specifically affects retirement systems that have two levels of benefits that cover the proposed bill’s identified job categories: one for service-connected disabilities and one for non-service-connected disabilities for a given job category. The proposed bill requires treatment as service-connected if otherwise qualifying.
2. Timing. A qualifying diagnosis is presumed as above, “regardless of whether the employee is employed at the time of diagnosis”, and “shall be presumed, prima facie, to have developed during employment and shall be presumed, prima facie, to have been caused by or have resulted from the nature of the work performed.” This presumption affects all retirement systems covering the identified employee categories, even if only a general disability benefits is provided (without being specifically for service-connected disabilities), because it affects the retroactive presumption of disability as having developed during employment.

The following definitions will apply to the disability benefits payable or to the workers’ compensation policies affected by SB 107:

1. "Post traumatic stress injury" means those injuries which are defined as "posttraumatic stress disorder" (PTSD) by the most recently published edition of the Diagnostic and Statistical Manual of Mental Disorders by the American Psychiatric Association.
2. "Psychiatrist" shall have the same meaning as it is defined pursuant to current law (R.S. 23:1371.1).
3. "Psychologist" shall have the same meaning as it is defined pursuant to current law (R.S. 23:1371.1).
4. "Emergency medical services personnel" shall have the same meaning as it is defined pursuant to current law (R.S. 40:1075.3).
5. "Employee of a police department" shall have the same meaning as it is defined pursuant to current law (R.S. 33:2211).
6. "Fire employee" means any person employed in the fire department of any municipality, parish, or fire protection district that maintains full-time regularly paid fire department employment, regardless of the specific duties of such person within the fire department. "Fire employee" also includes employees of nonprofit corporations under contract with a fire protection district or other political subdivision to provide fire protection services, including operators of the fire-alarm system when such operators are members of the regularly constituted fire department." [as per proposed Amendment No. 1 to SB 107]. In Original SB 107, "Fire employee" was defined to have the same meaning as it is defined pursuant to R.S. 33:2181.
7. "Volunteer member" shall have the same meaning as it is defined pursuant to current law (R.S. 23:1036).
8. "Volunteer service" means that service performed by a volunteer member, for one or more fire companies, who is entitled to worker’ compensation benefits pursuant to R. S. 23:1036.

Any sheriff, deputy sheriff, volunteer member, emergency medical services personnel, employee of a police department, fire employee, or employee of the division of state police who is diagnosed by a psychiatrist or psychologist with post traumatic stress injury, either during employment or thereafter will be presumed to have a disease or infirmity connected with his employment.

Once diagnosed with post traumatic stress injury, any sheriff, deputy sheriff, volunteer member, emergency medical services personnel, employee of a police department, fire employee, or employee of the division of state police affected or his survivors will be entitled to all rights and benefits as granted by the current law to one suffering an occupational disease and is entitled as service connected in the line of duty, regardless of whether the employee is employed at the time of the diagnosis.

The presumptions that the post traumatic stress was attributable to employment as a sheriff, deputy sheriff, volunteer member, emergency medical services personnel, employee of a police department, fire employee, or employee of the division of state police may only be rebutted by clear and convincing evidence. In determining whether the evidence presented has successfully rebutted the presumptions in proposed law, the trier of facts may consider any of the following factors:

1. The length of time between the beginning and the end of the period of employment and the date of the diagnosis.
2. Whether there has been any trauma or traumatic events between the beginning and the end of the period of employment as an employee and the date of the diagnosis.
3. Whether the individual diagnosed had been previously diagnosed with post traumatic stress injury prior to his employment.

Implications of the Proposed Changes

SB 107 adds post traumatic stress injury to the injuries which are presumed to be service-connected. Additional disability benefits under different retirement systems in Louisiana are expected to be provided since some retirees will receive disability benefits after being diagnosed by a psychiatrist or psychologist with a post traumatic stress injury attributable to their employment.

**2019 REGULAR SESSION
ACTUARIAL NOTE SB 107**

Additionally, for a post traumatic stress injury, SB 107 removes the condition that an application for disability benefits has to be filed while the member is in active service for the member to receive a service connected disability benefit.

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.

1. Retirement Systems

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

For each of the seven retirement systems likely affected by the proposed bill, the following table presents the benefit level provided for service-connected disability. Non-service-connected benefits are generally less generous than service-connected benefits, but both are more generous than vested benefits payable at a later age for terminations that are not the result of a disability.

Retirement System Potentially Affected by the Proposed Bill	Service-connected Disability Benefit Payable Immediately (Brief Description)
Louisiana Sheriffs' Pension & Relief Fund (LSPRF)	Greater of current benefit accrued to date or 45% of average pay, payable immediately (rather than wait till a later age); partial disabilities receive 3/4 of that amount.
Municipal Police Employees' Retirement System (MPERS)	For members hired pre-2013, benefit is between 40% and 60% of final pay; for Hazardous Duty members, benefit is 33% to 55% of final pay.
Louisiana State Police Retirement System (LSPRS)	For members hired pre-2011, benefit is 50% to 100% of average pay; otherwise, benefit is 75% of average pay.
Firefighters' Retirement System (FRS)	60% of final pay, or his accrued benefit if greater and he is over age 50; after the death of a disabled member, spouse receives \$200 per month for life in addition to whatever survivorship option member might have selected; this amount is reduced for any workers compensation received.
Louisiana State Employees' Retirement System (LASERS)	Current benefit accrued to date.
Municipal Employees' Retirement System (MERS) - Plan A	Greater of 3% of final pay for each year of service or 45% of final pay.
Municipal Employees' Retirement System (MERS) - Plan B	Greater of 2% of final pay for each year of service or 30% of final pay.
Parochial Employees' Retirement System (PERS) - Plan A	Greater of 3% of final pay for each year of service or 45% of final pay.
Parochial Employees' Retirement System (PERS) - Plan B	Greater of 2% of final pay for each year of service or 30% of final pay.

Following are a few areas of actuarial risk to consider under this proposed law that may cause the respective retirement systems to be exposed to a certain level of risk or increased frequency of disability approvals as compared to current law.

- Under the proposed law, the burden of proof and standards for proof shift from member to system. Under the proposed law, the member may select his own psychiatrist or psychologist, rather the retirement system select a physician as typically under the current law. Retirement boards will be less likely to deny service-connectedness for disability claims for this condition under the proposed law as compared to the current law.
- The presumption as to timing (second type presumption described above) may increase the disability approvals because, under current law, boards may be inclined to deny disability approvals for PTSI that are filed regardless of how long after the member left covered employment and may deny them for not have been proved to the satisfaction of the board as having arose or occurred during employment even if allowing applications to be file later. However, under the proposed law, there is a presumption even for conditions diagnosed and claims filed after employment has ceased.

These actuarial risks tend to increase the likelihood of more disabilities being approved within the affected retirement systems.

Other aspects of this proposed law to be considered as mitigation of these risks above may include the following.

- The first type of presumption described above is not a presumption of "disability", nor a presumption of "total" disability, nor a presumption of "permanent" disability. Certain retirement systems require the member to be totally and permanently disabled. Subject to legal opinions and interpretations, the proposed law may only affect the presumption of service-connectedness, not whether the disability is total or permanent disability. However, there may be an increased likelihood of granting a total disability or a permanent disability if the diagnosis qualifies under the proposed law and is presumed to be service-connected. According to data from the National Comorbidity

**2019 REGULAR SESSION
ACTUARIAL NOTE SB 107**

Survey Replications (NCS-R)¹, the past year severity of PTSD among U.S. adults showed: 36.6% serious, 33.1% moderate and 30.2% mild. Boards may still need to determine if the condition is total or permanent.

- The proposed bill’s presumption for any given case is subject to denial and rebuttal by the retirement board “by clear and convincing evidence”.

The following table puts this proposed bill in perspective. Observations about the data in the following table:

- Notice the Average Annual Number of Disabilities that occurred during the time frame indicated.
- Notice the actuarial present value of all expected future disability benefits expected to be paid to currently active members and their normal costs.
- These numbers include both Service-connected and non-Service-connected disabilities.
- It is not known how many additional disabilities will be approved as a result of this proposed bill.

This is provided just for context and is not to be understood as a measure of the cost of this proposed bill.

Retirement System Potentially Affected by the Proposed Bill	Most Recent Actuarial Experience Study		From the June 30, 2018 Actuarial Valuation (December 31, 2017 for PERS)		
	Date Range	Average Annual Number of Disabilities (SC and non-SC, Current Law)	Number of Active Members as of June 30, 2018 (December 31, 2017 for PERS)	Present Value of Future SC and non-SC Disability Benefits Among Actives (Current Law)	Normal Cost for Disabilities (SC and non-SC, Current Law)
Louisiana Sheriffs' Pension & Relief Fund (LSPRF)	7/09-6/14	10.4	14,350	\$15,445,449	NA
Municipal Police Employees' Retirement System (MPERS)	7/10-6/14	4.8	5,685	\$78,788,139	\$3,732,555
Louisiana State Police Retirement System (LSPRS)	7/12-6/17	1.8	1,129	\$30,353,863	\$1,554,556
Firefighters' Retirement System (FRS)	7/09-6/14	5.0	4,424	\$19,821,972	\$1,398,060
Louisiana State Employees' Retirement System (LASERS)	7/13-6/18	41.4	39,293	NA	\$5,075,789
Municipal Employees' Retirement System (MERS) - Plan A	7/09-6/14	8.0	4,888	\$11,754,314	NA
Municipal Employees' Retirement System (MERS) - Plan B	7/09-6/14	5.4	2,128	\$7,748,349	NA
Parochial Employees' Retirement System (PERS) - Plan A	1/10-12/14	25.6	14,201	\$123,096,834	NA
Parochial Employees' Retirement System (PERS) - Plan B	1/10-12/14	5.0	2,459	\$12,385,155	NA

The proposed bill has an effective date of August 1, 2019. It does not say it is effective to disabilities that occur after August 1, 2019. Presumably, it may apply to any disability applications filed on or after August 1, 2019.

The proposed bill will likely also increase the administrative expenses for the retirement systems, in addition to the increase expected in benefits payable. One estimate provided, for the cost of the physicians only, is that each disability application costs approximately \$5,000 to \$7,000 to adjudicate. Legal fees would also likely be incurred and could easily be significantly higher.

SB 107 will provide disability benefits payable when certain members the retirement systems of Louisiana become disabled after suffering a post traumatic stress injury sustained in the line of duty. Few retirees are expected to receive a disability benefit resulting from a post traumatic stress injury and the increase in net actuarial cost, while not insignificant, is not expected to be substantial.

2. Other Post-employment Benefits (OPEB)

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

The liability for post-retirement medical insurance protection provided to retirees will increase to the extent that disability retirements are covered for retiree medical insurance beyond merely the COBRA period and price, because of the likely increase in frequency of disability approvals.

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

¹ https://www.nimh.nih.gov/health/statistics/post-traumatic-stress-disorder-ptsd.shtml#part_155471

**2019 REGULAR SESSION
ACTUARIAL NOTE SB 107**

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 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 SB 107 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	2020-21	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

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 affected retirement systems of Louisiana (Agy Self-Generated) will increase because additional disability benefits will likely be paid.
- b. Expenditures from the Local Funds and the State General Fund will increase because employer contribution requirements to the affected retirement systems will increase to cover the expected and actual crease in benefit costs.

3. Revenues:

The revenues for the affected retirement systems of Louisiana (Agy Self-Generated) will increase since the employer contribution requirements 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.

**2019 REGULAR SESSION
ACTUARIAL NOTE SB 107**

OPEB Fiscal Cost: Table B

EXPENDITURES	2019-20	2020-21	2021-22	2022-23	2023-24	5 Year Total
State General Fund	Increase	Increase	Increase	Increase	Increase	Increase
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	Increase	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	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 OPEB related fiscal costs and revenues during the five year measurement period.

2. Expenditures:

Expenditures by Local Funds and State General Fund will likely increase somewhat due to an increase in disability retirements.

3. Revenues:

No measurable effects.

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

1. Narrative

Proposed law provides that any workers' compensation policy which provides coverage for an employee of the division of state police shall include coverage for post traumatic stress injury (PTSI). Proposed law also provides that an employee of the division of state police who is diagnosed with PTSI, either during employment or thereafter, shall be presumed to have a disease or infirmity connected with his employment.

Fiscal Costs for Other Government Entities: Table C

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	See Below	See Below	See Below	See Below	See Below	See Below
Stat Deds/Other	0	0	0	0	0	0
Federal Funds	0	0	0	0	0	0
Local Funds	Increase	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	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:

a. This bill may increase the number of workers' compensation claims paid by the Division of Administration – Office of Risk Management (ORM) related to PTSI. To the extent that a state police officer files a workers' compensation claim related to PTSI, this bill provides the presumption is that the PTSI is connected with his employment, which increases the likelihood that the claim will be paid. The LFO is working with ORM to determine the number of claims that were

**2019 REGULAR SESSION
ACTUARIAL NOTE SB 107**

denied due to the claimant’s inability to prove that PTSI is connected with his employment. This note will be updated once the information is received from the agency.

- b. The effect on retirement systems and OPEB is addressed in Sections A and B above. However, for local government entities there may be an impact with respect to workers’ compensation or other benefits programs. The bill’s presumption that a post-traumatic stress injury occurred in connection with employment will likely result in an increase in the frequency of claims. In addition, the employer can only rebut these claims by “clear and convincing evidence.” Collectively, these factors may increase the frequency of claims and require an employer to dedicate more resources (e.g., increased staff time, professional service fees, legal fees) if the employer attempts to rebut an employee’s claim. The amount of increased expenditures can not be accurately determined.

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	Increase	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	Increase	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

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 (PR SAC).

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);

**2019 REGULAR SESSION
ACTUARIAL NOTE SB 107**

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

SB 107 contains a retirement system benefit provision having an actuarial cost.

Some members of the retirement systems of Louisiana will receive a larger benefit with the enactment of SB 107 than what they would have received without SB 107.

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>
<p><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</p>	<p><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</p>
<p><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</p>	<p><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</p>