


**2017 REGULAR SESSION  
ACTUARIAL NOTE SB 7**

<p><b>Senate Bill 7 SLS 17RS-39 Reengrossed with Senate Floor Amendment #925</b></p> <p><b>Author: Representatives Barrow Peacock and Dan Morrish</b> <b>Date: April 27, 2017</b> <b>LLA Note SB 7.03</b></p> <p><b>Organizations Affected:</b> <b>Louisiana State Police Retirement System</b></p> <p><b>RE INCREASE APV</b></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 modified by Act 353 of the 2016 Regular Session.</p> <div style="text-align: center;">   <b>Paul T. Richmond, ASA, MAAA, EA</b>  <b>Manager Actuarial Services</b> </div>
---	--

**Bill Header:** State Police Ret Fund.: Provides for benefits for survivors of members killed in the line of duty by an intentional act of violence.

**Cost Summary:**

The estimated actuarial and fiscal impact of SB 7 on the retirement systems and their plan sponsors is summarized below. Actuarial costs or savings pertain to estimated changes in the *actuarial present value of future benefit payments*. 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 *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.

<b>Actuarial Costs Pertaining to:</b>	<b><u>Actuarial Cost</u></b>	
The Retirement Systems		Increase
Other Post-Employment Benefits (OPEB)		0
Other Government Entities		0
Total		Increase
	<b><u>Fiscal Costs</u></b>	
<b>Five Year Fiscal Cost Pertaining to:</b>	<b><u>Expenses</u></b>	<b><u>Revenues</u></b>
The Retirement Systems	Increase	Increase
Other Post-Employment Benefits	0	0
Other Government Entities	0	0
Total	Increase	Increase

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

**Bill Information**

**Current Law**

Current law provides survivor benefits for law enforcement officers of the office of state police who are members of the Louisiana State Police Retirement System (LSPRS) and who die in the line of duty (or from immediate effects of an injury received while in the line of duty).

For members hired on or before December 31, 2010, the benefit payable to the surviving spouse is equal to 75% of the member’s salary at the time of death. If there is no surviving spouse, the surviving minor children will receive the benefit.

For members hired on or after January 1, 2011, the benefit is equal to 80% of the member’s average compensation at the time of death. The benefit is shared equally by the surviving spouse and children.

**Proposed Law**

SB 7 will provide survivor benefits for law enforcement officers of the office of state police who are members of LSPRS and who were killed by *an intentional act of violence in the line of duty* (or from immediate effects of an injury received by *an intentional act of violence in the line of duty*).

## 2017 REGULAR SESSION ACTUARIAL NOTE SB 7

For members hired on or before December 31, 2010, the benefit payable to the surviving spouse is equal to 100% of the member's salary at the time of death. If there is no surviving spouse, the surviving minor children will receive the benefit.

For members hired on or after January 1, 2011, the benefit is equal to 100% of the member's salary at the time of death. The benefit is shared equally by the surviving spouse and children.

In addition, SB 7 will increase the benefit of a surviving spouse of a member who was killed on or before June 29, 2017 by *an intentional act of violence in the line of duty* (or from immediate effects of an injury received by *an intentional act of violence in the line of duty*). The benefit, payable on or after June 30, 2017, will be increased to 100% of the member's salary at the time of death.

The LSPRS board of trustees shall electronically notify all members of the legislature when a survivor benefit is granted as provided for in SB 7.

### **Implications of the Proposed Changes**

SB 7 will provide for a greater survivor benefit in the case of a death by *an intentional act of violence in the line of duty* (or from immediate effects of an injury received by *an intentional act of violence in the line of duty*).

## I. ACTUARIAL ANALYSIS SECTION

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

This section of the actuarial note pertains to the *actuarial present value cost or savings* associated with the retirement systems, with OPEB, and with other government entities.

#### **1. Retirement Systems**

The actuarial present value cost of SB 7 associated with the retirement systems will increase. Our analysis is summarized below.

SB 7 will increase the death benefit payable when an officer dies by an intentional act of violence in the line of duty (or from immediate effects of an injury received by an intentional act of violence in the line of duty). While an intentional act of violence is not explicitly defined, it is reasonable to assume that a few deaths in the line of duty will fall in that category and the system will pay a greater death benefit in those instances. It is also reasonable to assume that benefits payable to a few survivors will be increased going forward as deaths prior to June 30, 2017 are classified as being due to an intentional act of violence.

The ultimate cost of the line of duty death benefit depends on the number of officers killed in the line of duty. The cost increase associated with the proposed higher benefit payable due to an intentional act of violence will depend on how "intentional act of violence" is interpreted. A broad interpretation would encompass a larger number of line of duty deaths than would a narrower interpretation.

#### **2. Other Post-Employment Benefits (OPEB)**

The actuarial present value cost of SB 7 associated with OPEB, including retiree health insurance premiums, is estimated to be \$0. Our analysis is summarized below.

The liability for post-retirement medical insurance protection provided to retirees by the Office of Group Benefits or other insurers is not affected by an increase in the death benefit.

#### **3. Other Government Entities**

The actuarial cost of SB 7 associated with government entities other than those identified in SB 7, is estimated to be \$0.

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

Unless indicated otherwise, the actuarial note for SB 7 was prepared using actuarial data, methods and assumptions as disclosed in the most recent actuarial valuation reports adopted by 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.

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

There is nothing in SB 7 that will compromise the signing actuary's ability to present an unbiased statement of actuarial opinion.

**2017 REGULAR SESSION  
ACTUARIAL NOTE SB 7**

**II. FISCAL ANALYSIS SECTION**

This section of the actuarial note pertains to fiscal costs or savings associated with the retirement systems (Table A), with OPEB (Table B), and with other fiscal costs or savings attributable to government entities not associated with either the retirement systems or OPEB (Table C). Fiscal costs or savings reflect all forms of cash flow including benefit costs or savings, administrative costs or savings, or any other identifiable type of fiscal cost or savings. The total effect of SB 7 on fiscal costs, fiscal savings, or cash flows is presented in Table D.

**A. Estimated Fiscal Impact – Retirement Systems**

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.

Table A shows the estimated fiscal impact of the proposed legislation on the retirement systems and the government entities that sponsor them. The impact on fiscal information in Table A includes administrative costs or savings associated with the retirement system and the sponsoring government entities.

**Fiscal Cost for the Retirement Systems and Their Sponsors: Table A**

<b>EXPENDITURES</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-2020</b>	<b>2020-2021</b>	<b>2021-2022</b>	<b>5 Year Total</b>
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	0	0	0	0	0
Annual Total	Increase	Increase	Increase	Increase	Increase	Increase

<b>REVENUES</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-2020</b>	<b>2020-2021</b>	<b>2021-2022</b>	<b>5 Year Total</b>
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 effect that SB 7 will have on retirement related fiscal costs and revenues during the five year measurement period is shown in Table A and in Items 2 and 3 below.

2. Expenditures:

- a. Expenditures from the General Fund will increase to the extent that employer contribution requirements increase to accommodate the additional benefits paid to surviving spouses. These expenditures are expected to be small to negligible.
- b. Expenditures from LSPRS (Agy Self-Generated) will increase to the extent that larger benefits will be paid to surviving spouses.

3. Revenues:

- a. LSPRS revenues (Agy Self-Generated) will increase to the extent that employer contributions increase to accommodate additional benefit payable to surviving spouses.

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

1. Narrative

Table B shows the estimated fiscal impact of SB 7 on costs associated with OPEB and the government entities that sponsor these benefits. Fiscal costs in Table B include administrative costs associated with the government entity sponsoring the OPEB program. 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.

**2017 REGULAR SESSION  
ACTUARIAL NOTE SB 7**

**OPEB Fiscal Cost: Table B**

<b>EXPENDITURES</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-2020</b>	<b>2020-2021</b>	<b>2021-2022</b>	<b>5 Year Total</b>
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

<b>REVENUES</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-2020</b>	<b>2020-2021</b>	<b>2021-2022</b>	<b>5 Year Total</b>
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

SB 7 will have no effect on OPEB related fiscal costs and revenues during the five year measurement period.

**C. Estimated Fiscal Impact – Other Government Entities (unrelated to the retirement systems or OPEB)  
(Prepared by Tanesha Morgan, Legislative Fiscal Office)**

1. Narrative

*Proposed law* provides for the survivor benefit for the spouse and children of any sworn commissioned law enforcement officer of the office of state police who was killed in the line of duty by an intentional act of violence shall be equal to 100% of the salary received by the officer at the time of death.

**Fiscal Costs for Other Government Entities: Table C**

<b>EXPENDITURES</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-2020</b>	<b>2020-2021</b>	<b>2021-2022</b>	<b>5 Year Total</b>
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

<b>REVENUES</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-2020</b>	<b>2020-2021</b>	<b>2021-2022</b>	<b>5 Year Total</b>
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

2. Expenditures:

*There is no anticipated direct material effect on governmental expenditures as a result of this measure. The cost of survivor's benefits paid under this measure would be paid from the State Police Retirement System's trust*

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 the LLA)**

1. Narrative

Table D shows the estimated fiscal impact of SB 7 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.

**2017 REGULAR SESSION  
ACTUARIAL NOTE SB 7**

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

<b>EXPENDITURES</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-2020</b>	<b>2020-2021</b>	<b>2021-2022</b>	<b>5 Year Total</b>
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	0	0	0	0	0
Annual Total	Increase	Increase	Increase	Increase	Increase	Increase

<b>REVENUES</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-2020</b>	<b>2020-2021</b>	<b>2021-2022</b>	<b>5 Year Total</b>
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:**

Paul T. Richmond is the Manager of Actuarial Services for the Louisiana Legislative Auditor. He is an Enrolled Actuary, a member of the American Academy of Actuaries, a member of the Society of Actuaries and has met the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinion contained herein.

John D Carpenter, Legislative Fiscal Officer, has supervised the preparation of the fiscal analyses contained in Section II; Subsection C.

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

SB 7 contains a retirement system benefit provision having an actuarial cost.

Survivor benefits under some circumstances will be larger with the enactment of SB 7 than they would be without its enactment.

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

The information presented below is based on information contained in Table D.

**Senate**

**House**

13.5.1 Applies to Senate or House Instruments.  
An expenditure cell or sum of cells in first 3 years following session  $\geq$  \$100,000.

6.8F Applies to Senate Instruments only.  
A General Fund expenditure cell or sum of cells in first 3 years following session  $\geq$  \$100,000.

**Dual Referral: Senate Finance**

**Dual Referral to Appropriations**

13.5.2 Applies to Senate or House Instruments  
A revenue cell or sum of cells in first 3 years following session  $\geq$  \$500,000.

6.8G Applies to Senate Instruments only.  
A net decrease in fees or an increase in annual fees and taxes leading to a change in a revenue cell in the first 3 years following session  $\geq$  \$500,000.

**Dual Referral: Revenue and Fiscal Affairs**

**Dual Referral: Ways and Means**