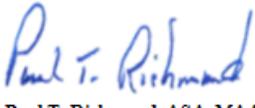


**2018 REGULAR SESSION
ACTUARIAL NOTE HB 10**

<p>House Bill 10 HLS 18RS-264 Engrossed with House Retirement Committee Amendment #1235</p> <p>Author: Representative Ivey Date: March 20, 2018 LLA Note HB 10.02</p> <p>Organizations Affected: Firefighters' Retirement System</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> <div style="text-align: center;">  Paul T. Richmond, ASA, MAAA, EA Manager Actuarial Services </div>
--	--

Bill Header: RETIREMENT/FIREFIGHTERS: Provides for the payment of refunded contributions to members of the Firefighters' Retirement System

Cost Summary:

The estimated actuarial and fiscal impact of HB 10 on the retirement systems and their plan sponsors is summarized below. Actuarial costs 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.

Actuarial Costs Pertaining to:		Actuarial Cost
The Retirement Systems		Increase
Other Post Employment Benefits (OPEB)		0
Other Government Entities		0
Total		Increase
Five Year Fiscal Cost Pertaining to:	Expenses	Revenues
The Retirement Systems	Increase	increase
Other Post Employment Benefits	0	0
Other Government Entities	0	0
Total	Increase	Increase

Bill Information

Current Law

Current law provides that any member of the system who ceases to be an employee, except by death or retirement, may apply for and obtain a refund of his accumulated contributions. Such refund shall not be payable until at least 90 days after termination or resignation.

Current law also provides that the board of trustees can approve an earlier refund of accumulated employee contributions based on a bona fide emergency, in which case a refund can be at least 45 days after termination or resignation.

In addition, current law provides survivor benefits for the spouse and children of a member who dies in the line of duty. The survivor benefit payable to the spouse is equal to two-thirds of the member's average compensation at the time of death. If there are a surviving spouse and surviving children, then an additional amount of 10% of the member's average compensation at the time of death per child will be paid, however the benefit shall not exceed 100% of the member's average compensation at the time of death. If there is no surviving spouse, the surviving children will receive benefits not to exceed 60% of the member's average compensation at the time of death.

Proposed Law

HB 10 provides that such refunds of accumulated employee contributions shall not be payable until approved by the board of trustees and until at least 30 days after termination or resignation.

HB 10 will also provide survivor benefits for the spouse and children of a member who was 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*). The survivor benefit payable to the spouse is equal to 100% of the member's salary at the time of death. If there is no surviving

**2018 REGULAR SESSION
ACTUARIAL NOTE HB 10**

spouse, the surviving children will receive 100% of the member's salary at the time of death. The benefit would be shared equally by the surviving children.

In addition, the benefits payable on or after July 1, 2018 for surviving spouse or children of a member killed on or before July 1, 2018, by an intentional act of violence who would otherwise qualify for the survivor benefit provided under the proposed law will be increased to the amount calculated pursuant to the proposed law regardless of the date of death of the member.

Implications of the Proposed Changes

HB 10 shortens the period a member must wait to receive a refund from at least 90 days to at least 30 days, and eliminates the need for the earlier payment after 45 days based on a bona fide emergency. It also adds a requirement for approval by the board of trustees before any refund is paid.

HB 10 will also 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 actuarial costs or savings associated with the retirement systems, with OPEB, and with other government entities.

1. Retirement Systems

The actuarial cost of HB 10 associated with the retirement systems is estimated to be an increase. The actuary's analysis is summarized below.

No interest paid on funds withdrawn from the system. Shortening the waiting period for refunds does not change the amount of the refund. To the extent the money is leaving the fund sooner than before, it is not generating investment earnings. Based on the amounts involved, the expected frequency of such payments and brief period of accelerated time to refund, investment earnings lost will be negligible or non-existent.

HB 10 will also increase the death benefit payable when a member 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.

The ultimate cost of the line of duty death benefit depends on the number of members who die 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 cost or savings of HB 10 associated with OPEB, including retiree health insurance premiums, is estimated to be \$0. The actuary's analysis is summarized below.

Members who cease to be employees, except by death or retirement, are not covered by OPEB. So shortening the waiting period for refunds would have no effect on OPEB costs. In addition, the OPEB costs are not affected by an increase in the death benefit.

3. Other Government Entities

The actuarial cost or savings of HB 10 associated with government entities other than those identified in HB 10, is estimated to be \$0.

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

Unless indicated otherwise, the actuarial note for HB 10 was prepared using actuarial data, methods, and assumptions as disclosed in the most recent actuarial valuation report 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 HB 10 that will compromise the signing actuary's ability to present an unbiased statement of actuarial opinion.

**2018 REGULAR SESSION
ACTUARIAL NOTE HB 10**

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 associated with government entities not associated with either the retirement systems or OPEB (Table C). Fiscal costs or savings in Table A include administrative costs associated with the retirement systems and the sponsoring government entities. The total effect of HB 10 on fiscal costs, fiscal savings, or cash flows is presented in Table D.

**A. Estimated Fiscal Impact – Retirement Systems
(Prepared by the 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	2018-19	2019-2020	2020-2021	2021-2022	2022-23	5 Year Total
State General Fund	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Agy Self Generated	Increase	Increase	Increase	Increase	Increase	Increase
Stat Deds/Other	0	0	0	0	0	0
Federal Funds	0	0	0	0	0	0
Local Funds	0	Increase	Increase	Increase	Increase	Increase
Annual Total	Increase	Increase	Increase	Increase	Increase	Increase

REVENUES	2018-19	2019-2020	2020-2021	2021-2022	2022-23	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	Increase	Increase	Increase	Increase	Increase
Annual Total	\$ 0	Increase	Increase	Increase	Increase	Increase

The effect that HB 10 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 Local Funds will increase to the extent that employer contribution requirements increase to accommodate the additional benefits paid to surviving spouses and children. These expenditures are expected to be small to negligible.
- b. Expenditures from FRS (Agy Self-Generated) will increase to the extent that larger benefits will be paid to surviving spouses and children.

3. Revenues:

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

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

1. Narrative

Table B shows the estimated fiscal impact of HB 10 on actuarial costs or savings associated with OPEB and the government entities that sponsor these benefit programs. Fiscal costs or savings 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.

**2018 REGULAR SESSION
ACTUARIAL NOTE HB 10**

OPEB Fiscal Cost: Table B

EXPENDITURES	2018-19	2019-2020	2020-2021	2021-2022	2022-23	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	2018-19	2019-2020	2020-2021	2021-2022	2022-23	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

HB 10 has 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 Bradley Cryer, Assistant Legislative Auditor.)**

1. Narrative

From time to time, legislation is proposed that has an indirect effect on cash flows associated with other government entities, unrelated to the retirement systems or OPEB. Table C shows the estimated fiscal impact of HB 10 on such government entities. A fiscal cost is denoted by “Increase” or a positive number. Fiscal savings are denoted by “Decrease” or a negative number.

Fiscal Costs for Other Government Entities: Table C

EXPENDITURES	2018-19	2019-2020	2020-2021	2021-2022	2022-23	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	2018-19	2019-2020	2020-2021	2021-2022	2022-23	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

HB 10 will have the following effects on fiscal costs and revenues related to other government entities during the five year measurement period.

2. Expenditures:

This bill is not expected to have a fiscal impact.

3. Revenues:

This bill is not expected to have a fiscal impact.

**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 HB 10 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

**2018 REGULAR SESSION
ACTUARIAL NOTE HB 10**

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	2018-19	2019-2020	2020-2021	2021-2022	2022-23	5 Year Total
State General Fund	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Agy Self Generated	Increase	Increase	Increase	Increase	Increase	Increase
Stat Deds/Other	0	0	0	0	0	0
Federal Funds	0	0	0	0	0	0
Local Funds	0	Increase	Increase	Increase	Increase	Increase
Annual Total	Increase	Increase	Increase	Increase	Increase	Increase

REVENUES	2018-19	2019-2020	2020-2021	2021-2022	2022-23	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:

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.

Bradley Cryer, Assistant Legislative Auditor, has supervised the preparation of the fiscal analyses contained herein.

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

HB 10 contains a retirement system benefit provision having an actuarial cost.

Survivor benefits under some circumstances will be larger with the enactment of HB 10 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 for the first three years following the 2018 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