


**2014 REGULAR SESSION  
ACTUARIAL NOTE HB 94**

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| <p>House Bill 94 HLS 11RS-733<br/>Engrossed</p> <p><b>Author: Representative Walter J. Leger III</b><br/><b>Date: May 7, 2014</b></p> <p>LLA Note HB 94.02</p> <p><b>Organizations Affected:</b><br/><b>Firefighters' Pension and Relief Fund in the city of New Orleans</b></p> <p><b>EG INCREASE APV</b></p> | <p>This Note has been prepared by the Actuarial Services Department of the Office of the Legislative Auditor. The attachment of this Note to HB 94 provides compliance with the requirements of R.S. 24:52</p> <div style="text-align: center;"> <br/> <b>Paul T. Richmond, ASA, MAAA, EA</b><br/> <b>Manager Actuarial Services</b> </div> |
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**Bill Header:** RETIREMENT/LOCAL: Provides relative to the minimum retirement age, accrual rate, and benefits for new members of the Firefighters' Pension and Relief Fund in the city of New Orleans hired after January 1, 2015.

**Cost Summary:**

The estimated actuarial and fiscal impact of the proposed legislative is summarized below. Actuarial costs pertain to changes in the *actuarial present value of future benefit payments*. A cost is denoted by "Increase" or a positive number. Savings are denoted by "Decrease" or a negative number.

|  |          |
|--|----------|
| Actuarial Cost to Retirement Systems and OGB | Increase |
| Total Five Year Fiscal Cost                  |          |
| Expenditures                                 | Increase |
| Revenues                                     | Increase |

**Estimated Actuarial Impact:**

The chart below shows the estimated change in the *actuarial present value of future benefit payments*, if any, attributable to the proposed legislation. A cost is denoted by "Increase" or a positive number. Savings are denoted by "Decrease" or a negative number. Present value costs associated with administration or other fiscal concerns are not included in these values.

| <b>Actuarial Cost to:</b>               | <b><u>Change in the Actuarial Present Value</u></b> |
|---|---|
| All Louisiana Public Retirement Systems | Increase  |
| Other Post Retirement Benefits          | \$0   |
| Total                                   | Increase  |

**Estimated Fiscal Impact:**

The chart below shows the estimated fiscal impact of the proposed legislation. This represents the effect on cash flows for government entities including the retirement systems and the Office of Group Benefits. Fiscal costs include estimated administrative costs and costs associated with other fiscal concerns. A fiscal cost is denoted by "Increase" or a positive number. Actuarial or fiscal savings are denoted by "Decrease" or a negative number.

| <b>EXPENDITURES</b> | <b>2014-15</b> | <b>2015-16</b> | <b>2016-17</b> | <b>2017-18</b> | <b>2018-2019</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              | Increase       | Increase       | Increase       | Increase         | Increase            |
| Annual Total        | \$ 0           | Increase       | Increase       | Increase       | Increase         | Increase            |

| <b>REVENUES</b>    | <b>2014-15</b> | <b>2015-16</b> | <b>2016-17</b> | <b>2017-18</b> | <b>2018-2019</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            |

**2014 REGULAR SESSION  
ACTUARIAL NOTE HB 94**

**Bill Information:**

**Current Law**

Current law contains the following provisions for the Firefighters' Pension and Relief Fund in the city of New Orleans (NOFF):

1. A member who is age 50 or older and who has at least 12 years of service as a firefighter, but less than 30 years of creditable service may retire and receive a benefit equal to:

[2.5% x creditable service earned prior to age 50 + 3 1/3% x creditable service earned after age 50]  
x the average of the highest five consecutive years of compensation.

2. A member who is age 50 or older and who has at least 30 years of creditable service may retire and receive a benefit equal to:

[2.5% x the first 12 years of creditable service + 3 1/3% x years of creditable service after the first 12 years]  
x the average of the highest five consecutive years of compensation.

3. The maximum benefit is 100% x the average of the highest five consecutive years of compensation.

4. A member who has at least 12 years of creditable service and who withdraws from service prior to age 50 may begin to receive his benefit when he attains age 50.

5. A member with at least 12 years of creditable service but less than 20 years who withdraws from service prior to age 50 may receive a benefit beginning at age 50 equal to:

2.5% x creditable service x the highest year of compensation

**Proposed Law**

HB 94 pertains to firefighters first employed on or after January 1, 2015. Benefits for these members are summarized below.

1. A member who is age 52 or older and who has at least 12 years of service as a firefighter may retire and receive a benefit equal to:

2.75% x creditable service x the average of the highest five consecutive years of compensation.

2. The maximum benefit is 100% x the average of the highest five consecutive years of compensation.

3. A member who has at least 12 years of creditable service and who withdraws from service prior to age 52 may begin to receive his benefit when he attains age 52.

4. A member with at least 12 years of creditable service but less than 20 years who withdraws from service prior to age 52 may receive a benefit beginning at age 52 equal to:

2.5% x creditable service x the highest year of compensation

**Implications of the Proposed Changes**

The retirement age for NOFF members hired after January 1, 2015, will be changed from age 50 to age 52. Benefits payable to members at retirement may increase or decrease depending upon their age and service at retirement.

**Cost Analysis:**

**Analysis of Actuarial Costs**

**Retirement Systems**

HB 94 contains benefit provisions having an actuarial cost. Benefits for some members first employed on or after January 1, 2015, will be larger under HB 94 than what they would have been under current law.

Benefits under current law and under HB 94 are based on percentages of final average compensation. These percentages vary by age and service at retirement. Table 1 shows the increase or decrease in percentage resulting from HB 94. A minus sign in front of a number (numbers in red) indicates that benefits under HB 94 will be less than benefits under current law. A positive percentage (black numbers) indicates that benefits under HB 94 will be larger than under current law. The following conclusions can be drawn from HB 94.

1. Future members of NOFF who retire with 30 or more years of service will receive a benefit under HB 94 that is smaller than the benefit that would be paid under current law. This produces actuarial savings.
2. Future members of NOFF who retire after age 59 will receive a benefit under HB 94 that is smaller than the benefit that would be paid under current law. This produces actuarial savings.

**2014 REGULAR SESSION  
ACTUARIAL NOTE HB 94**

3. Future members of NOFF who retire after attaining age 50 but before age 54 with less than 30 years of service will receive a benefit under HB 94 that is greater than the benefit that would be paid under current law. This produces actuarial costs.
4. Future members of NOFF who retire during the prime age-service combinations (age 50 to 57 with 24 to 29 years of service) will receive a benefit under HB 94 that is greater than the benefit that would be paid under current law. This produces actuarial costs.
5. The earliest that a member may retire has been delayed two years from age 50 to age 52. This produces actuarial savings.

**Table 1  
Increases and Decreases in Benefit Percentage  
HB 94 minus Current Law**

| Service | Age at Retirement |        |        |        |        |        |        |        |        |        |
|---------|-------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|         | 50                | 51     | 52     | 53     | 54     | 55     | 56     | 57     | 58     | 59     |
| 12      | 3.00%             | 2.17%  | 1.33%  | 0.50%  | -0.33% | -1.17% | -2.00% | -2.83% | -3.67% | -4.50% |
| 13      | 3.25%             | 2.42%  | 1.58%  | 0.75%  | -0.08% | -0.92% | -1.75% | -2.58% | -3.42% | -4.25% |
| 14      | 3.50%             | 2.67%  | 1.83%  | 1.00%  | 0.17%  | -0.67% | -1.50% | -2.33% | -3.17% | -4.00% |
| 15      | 3.75%             | 2.92%  | 2.08%  | 1.25%  | 0.42%  | -0.42% | -1.25% | -2.08% | -2.92% | -3.75% |
| 16      | 4.00%             | 3.17%  | 2.33%  | 1.50%  | 0.67%  | -0.17% | -1.00% | -1.83% | -2.67% | -3.50% |
| 17      | 4.25%             | 3.42%  | 2.58%  | 1.75%  | 0.92%  | 0.08%  | -0.75% | -1.58% | -2.42% | -3.25% |
| 18      | 4.50%             | 3.67%  | 2.83%  | 2.00%  | 1.17%  | 0.33%  | -0.50% | -1.33% | -2.17% | -3.00% |
| 19      | 4.75%             | 3.92%  | 3.08%  | 2.25%  | 1.42%  | 0.58%  | -0.25% | -1.08% | -1.92% | -2.75% |
| 20      | 5.00%             | 4.17%  | 3.33%  | 2.50%  | 1.67%  | 0.83%  | 0.00%  | -0.83% | -1.67% | -2.50% |
| 21      | 5.25%             | 4.42%  | 3.58%  | 2.75%  | 1.92%  | 1.08%  | 0.25%  | -0.58% | -1.42% | -2.25% |
| 22      | 5.50%             | 4.67%  | 3.83%  | 3.00%  | 2.17%  | 1.33%  | 0.50%  | -0.33% | -1.17% | -2.00% |
| 23      | 5.75%             | 4.92%  | 4.08%  | 3.25%  | 2.42%  | 1.58%  | 0.75%  | -0.08% | -0.92% | -1.75% |
| 24      | 6.00%             | 5.17%  | 4.33%  | 3.50%  | 2.67%  | 1.83%  | 1.00%  | 0.17%  | -0.67% | -1.50% |
| 25      | 6.25%             | 5.42%  | 4.58%  | 3.75%  | 2.92%  | 2.08%  | 1.25%  | 0.42%  | -0.42% | -1.25% |
| 26      | 6.50%             | 5.67%  | 4.83%  | 4.00%  | 3.17%  | 2.33%  | 1.50%  | 0.67%  | -0.17% | -1.00% |
| 27      | 6.75%             | 5.92%  | 5.08%  | 4.25%  | 3.42%  | 2.58%  | 1.75%  | 0.92%  | 0.08%  | -0.75% |
| 28      | 7.00%             | 6.17%  | 5.33%  | 4.50%  | 3.67%  | 2.83%  | 2.00%  | 1.17%  | 0.33%  | -0.50% |
| 29      | 7.25%             | 6.42%  | 5.58%  | 4.75%  | 3.92%  | 3.08%  | 2.25%  | 1.42%  | 0.58%  | -0.25% |
| 30      | -7.50%            | -7.50% | -7.50% | -7.50% | -7.50% | -7.50% | -7.50% | -7.50% | -7.50% | -7.50% |
| 31      | -8.08%            | -8.08% | -8.08% | -8.08% | -8.08% | -8.08% | -8.08% | -8.08% | -8.08% | -8.08% |
| 32      | -8.67%            | -8.67% | -8.67% | -8.67% | -8.67% | -8.67% | -8.67% | -8.67% | -8.67% | -8.67% |
| 33      | -9.25%            | -9.25% | -9.25% | -9.25% | -9.25% | -9.25% | -9.25% | -9.25% | -9.25% | -9.25% |
| 34      | -6.50%            | -6.50% | -6.50% | -6.50% | -6.50% | -6.50% | -6.50% | -6.50% | -6.50% | -6.50% |
| 35      | -3.75%            | -3.75% | -3.75% | -3.75% | -3.75% | -3.75% | -3.75% | -3.75% | -3.75% | -3.75% |
| 36      | -1.00%            | -1.00% | -1.00% | -1.00% | -1.00% | -1.00% | -1.00% | -1.00% | -1.00% | -1.00% |

We have not made any actuarial calculations to determine the effect that HB 1225 will have on employer contribution requirements. However, based on the information available to us, we believe HB 94 will result in an increase in the actuarial present value of future benefits and an increase in employer contribution requirements. Our conclusion is based on the following.

1. Most future members will either retire or enter DROP during the prime retirement ages. As a result, actuarial costs will increase.
2. Delaying the age at which members can retire for two years, from age 50 to age 52, is not likely to have a significant effect on retirement patterns. Actuarial costs will decrease, but the savings will be small.
3. The increased cost associated with Item 1 above exceeds the savings associated with Item 2. Therefore, actuarial costs in the aggregate will increase.

Comparative actuarial valuations of HB 94 benefit provisions with benefit provisions under current law would be of limited value in analyzing the cost implications of HB 94. Retirement patterns will change as a result of the bill, but the effect such a change in pattern can only be made if the cost of HB 94 benefits are measured using a different retirement assumption than that used to measure the cost of benefits under current law.

**Other Post-Employment Benefits**

The actuarial cost associated with post-employment benefits other than pensions cannot be measured. It is likely to be negligible, if any.

**2014 REGULAR SESSION  
ACTUARIAL NOTE HB 94**

**Analysis of Fiscal Costs**

HB 94 will have the following effect on fiscal costs during the five year measurement period.

Expenditures:

1. Expenditures from NOFF (Agy Self-Generated) will not change significantly during the five year measurement period. It is unlikely that a future member will receive a benefit under the provisions of HB 94 during the measurement period.
2. Expenditures from Local Funds will increase. Employer contributions will increase because HB 94 has an actuarial cost. However, the effect on employer contribution requirements during the five year measurement period will be small.

Revenues:

- NOFF revenues will increase because employer contribution requirements will increase. The increase will be small during the five year measurement period.

Annual fiscal costs are not expected to exceed \$100,000 in any year of the measurement period.

**Actuarial Data, Methods and Assumptions**

This actuarial note has been prepared based on the January 1, 2013 actuarial valuation report prepared by Conefry & Company, LLC. We are relying on the professional certification of the actuary signing the valuation report.

**Actuarial Caveat**

There is nothing in HB 94 that will compromise the signing actuary's ability to present an unbiased statement of actuarial opinion.

**Actuarial Credentials:**

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.

**Dual Referral:**

**Senate**

- 13.5.1: Annual Fiscal Cost  $\geq$  \$100,000
- 13.5.2: Annual Tax or Fee Change  $\geq$  \$500,000

**House**

- 6.8(F)(1): Annual State Fiscal Cost  $\geq$  \$100,000
- 6.8(F)(2): Annual State Revenue Reduction  $\geq$  500,000
- 6.8(G): Annual Tax or Fee Change  $\geq$  \$500,000