


**2015 REGULAR SESSION  
ACTUARIAL NOTE HB 10**

<p><b>House Bill 10 HLS 15RS-23 Engrossed</b></p> <p><b>Author: Representative J. Kevin Pearson</b> <b>Date: April 28, 2015</b></p> <p><b>LLA Note HB 10.02</b></p> <p><b>Organizations Affected: Teachers' Retirement System of Louisiana</b></p> <p><b>EG SEE ACTUARIAL ANALYSIS</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 10 provides compliance with the requirements of R.S. 24:521</p> <div style="text-align: center;">   <b>Paul T. Richmond, ASA, MAAA, EA</b>  <b>Manager Actuarial Services</b> </div>
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**Bill Header:** RETIREMENT/TEACHERS: Authorizes a member of the Teachers' Retirement System of Louisiana to purchase credit for service as a teacher at an out-of-state nonpublic school.

**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	See Actuarial Analysis
Total Five Year Fiscal Cost	
Expenditures	See Actuarial Analysis
Revenues	See Actuarial Analysis

**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	See Actuarial Analysis
Other Post Retirement Benefits	See Actuarial Analysis
Total	See Actuarial Analysis

**Estimated Fiscal Impact:**

The chart below shows the estimated fiscal impact of the proposed legislation. This represents the effect on cash flows for the retirement systems and other government entities.. 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>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-2020</b>	<b>5 Year Total</b>
State General Fund	See Analysis	See Analysis	See Analysis	See Analysis	See Analysis	See Analysis
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	See Analysis	See Analysis	See Analysis	See Analysis	See Analysis	See Analysis
Annual Total	See Analysis	See Analysis	See Analysis	See Analysis	See Analysis	See Analysis

<b>REVENUES</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-2020</b>	<b>5 Year Total</b>
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	Decrease	Decrease	Decrease	Decrease	Decrease	Decrease
Annual Total	See Analysis	See Analysis	See Analysis	See Analysis	See Analysis	See Analysis

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**Bill Information:**

**Current Law**

An active member of the Teachers' Retirement System of Louisiana (TRSL) may purchase service credits under the system for teaching service rendered in any of the following:

1. A charter school.
2. A nonpublic college or university in Louisiana.
3. A state-approved elementary or secondary nonpublic or parochial school in Louisiana.

To obtain such credit, the active member must submit an application to the board of trustees. The application:

1. Must be made prior to the date of the member's application for retirement.
2. Must furnish a detailed statement of all service for which credit is claimed.
3. Must pay an amount equal to the present value of the additional benefit to be granted as a result of the purchased service credit. This calculation is based on the following assumptions:
  - a. If the member is eligible to retire (early or normal retirement), he will retire immediately. The amount to be paid by the member will be based on interest and mortality tables approved by the board of trustees and used in the most recent actuarial valuation.
  - b. If the member is not yet eligible to retire (early or normal retirement), he will remain in service until he is eligible and then retire. The amount to be paid by the member will be based on the following:
    - 1). The member will not leave the system for any reason until he become eligible to retire.
    - 2). The member's salary will increase from the date of the service purchase until the date of his earliest eligibility for retirement.
    - 3). It will be assumed that the member will retire on the date he is first eligible for retirement.
    - 4). Interest and mortality used in the present value calculation will be based on assumptions approved by the board of trustees and used in the most recent valuation.

To obtain such credit, the board of trustees must verify the statement of service claimed by the member.

**Proposed Law**

Under HB 10, the list of institutions for which additional service credits can be purchased will be expanded to include elementary or secondary nonpublic schools in a state other than Louisiana.

**Implications of the Proposed Changes**

HB 10 authorizes a member of TRSL to purchase service credit for time spent as a teacher in a nonpublic elementary or secondary school in another state.

**Cost Analysis:**

**Analysis of Actuarial Costs**

HB 10 contains a benefit improvement: the ability to purchase service credits relative to out of state nonpublic school teaching. If HB 10 is enacted, there will be actuarial costs for some TRSL members who purchase such service and actuarial savings for others.

**Retirement Systems**

1. Analysis relative to a member who is eligible to retire and who purchases service under the provisions of HB 10
  - a. The purchase price for such a member will be equal to the increase in the accrued liability incurred by the retirement system. However, this conclusion does not account for adverse selection costs or the cost associated with the member being induced to retire earlier than he would otherwise.
  - b. Adverse selection is likely to occur because a member who purchases such service knows information about himself that the retirement system cannot use in its purchase price calculation or its accrued liability calculations.
  - c. A member who is already eligible to retire may retire earlier with the additional service credits than he would have without them. The additional service credits may be sufficient to provide the member with a retirement benefit that he will deem satisfactory for his retirement.

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- d. The net effect will be an increase in actuarial costs.
2. Analysis relative to a member who is not eligible to retire and who purchases service under the provisions of HB 10.
  - a. The purchase price for such a member will be greater than the increase in the accrued liability incurred by the retirement system. Therefore, actuarial savings will occur. However, this conclusion does not account for adverse selection costs.
  - b. Adverse selection is likely to occur because a member who purchases such service knows information about himself that the retirement system cannot use in its purchase price calculation or its accrued liability calculations.
  - c. A member who terminates employment before becoming eligible to retire is likely to retire as soon as he becomes eligible regardless of the amount of service credit he has. Therefore, this portion of HB 10 will not induce earlier retirement and there are no additional actuarial costs associated with retirement inducements.
  - d. The actuarial savings discussed under item "a" above will be offset by adverse selection costs (item "b"). The net effect will be a cost for some members and savings for others.

**Other Post-Employment Benefits**

Actuarial costs associated with post-employment benefits other than pensions will increase to the extent that a person who makes such a purchase is induced to retire earlier than he would have otherwise. Actuarial costs will also increase should the percentage of the premium paid by the state or school be based on accumulated service credits.

**Analysis of Fiscal Costs**

HB 10 will have the following effects on fiscal costs during the five year measurement period.

Expenditures:

1. Expenditures from the General Fund to TRSL will increase or decrease depending upon the characteristics of higher education members electing to purchase HB 10 service credits.
2. Expenditures from the General Fund to retiree health insurance providers will increase to the extent that higher education members are induced to retire earlier than otherwise. Premiums will be paid by the state for a longer period of time.
3. The net effect of items 1 and 2 will be an increase or decrease depending on the characteristics of the higher education members purchasing HB 10 service credits.
4. Expenditures from TRSL (Agy Self Generated) will increase to the extent that a member purchases service credits and retires during the 5-year fiscal measurement period.
5. Expenditures from Local Funds to TRSL will increase or decrease depending upon the characteristics of K-12 teachers electing to purchase HB 10 service credits.
6. Expenditures from Local Funds to retiree health insurance providers will increase to the extent that higher education members are induced to retire earlier than otherwise. Premiums will be paid by school district for a longer period of time.
7. The net effect of items 5 and 6 will be an increase or decrease depending on the characteristics of the K-12 members purchasing HB 10 service credits.

Revenues:

1. General Fund revenues will increase to the extent that higher education members are induced to retire earlier than otherwise. Health insurance premiums will be received from employees and higher education employers for a longer period of time.
2. TRSL revenues (Agy Self Generated) will increase to the extent that members purchase such service credits during the 5-year fiscal measurement period.
3. Local Fund revenues will decrease to the extent that the percentage of the health insurance premium paid by a member in K-12 who purchases such service decreases.

The net effect on expenditures and revenues can only be determined for each individual member actually electing to purchase HB 10 service. No definitive conclusion about expenditures and revenues in the aggregate can be made. However, expenditures and revenues for each Fund separately and in total during the three year period immediately following the 2015 session are estimated to be less than \$100,000.

According to TRSL, publications and educational/training materials must be updated should HB 10 become law. However, on-going education/training and the issuance of updated publications will be covered in communications and education/training programs which are already in place for TRSL.

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**Actuarial Data, Methods and Assumptions**

This actuarial note was prepared using actuarial data, methods, and assumptions as disclosed in the most recent actuarial valuation report adopted by PRSAC.

**Actuarial Caveat**

There is nothing in HB 10 that will compromise the signing actuary's ability to present an unbiased statement of actuarial opinion.

**Actuarial Credentials:**

Paul T. Richmond is the actuary 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 Fiscal Cost  $\geq$  \$100,000
- 6.8(F)(2): Annual Revenue Reduction  $\geq$  \$100,000
- 6.8(G): Annual Tax or Fee Change  $\geq$  \$500,000