


**2010 REGULAR SESSION  
ACTUARIAL NOTE SB 85**

<p><b>Senate Bill 85 SLS 10RS-473 Original</b></p> <p><b>Author: Senator D. A. "Butch" Gautreaux Date: April 5, 2010</b></p> <p><b>LLA Note SB 85.01</b></p> <p><b>Organizations Affected: Parochial Employees' Retirement System</b></p> <p><b>OR SEE ACTUARIAL NOTE APV</b></p>	<p>The Note was prepared by the Actuarial Services Department of the Office of the Legislative Auditor.</p> <div style="text-align: right;">   <b>David K. Greer, CPA</b>  <b>Assistant Legislative Auditor and Director of Performance Audit and Actuarial Services</b> </div>
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**Bill Header:** PAROCHIAL EMPLOYEES RET. Establishes a range for employee contributions to be set by the board of trustees for Plans A and B.

**Cost Summary:**

Actuarial Cost/(Savings) to Retirement Systems and OGB	See Actuarial Analysis Below
Total Five Year Fiscal Cost	
Expenditures	See Fiscal Analysis Below
Revenues	See Fiscal Analysis Below

**Estimated Actuarial Impact:**

The chart below shows the estimated increase/(decrease) in the actuarial value of benefits, if any, attributable to the proposed legislation. Note: it includes the present value cost of fiscal costs associated with benefit changes. It does **not** include present value costs associated with other fiscal concerns.

<b><u>Actuarial Cost (Savings) to:</u></b>	<b><u>Increase (Decrease) in The Actuarial Present Value</u></b>
All Louisiana public retirement systems	See Actuarial Analysis Below
Other Post Retirement Benefits	\$0
Total	See Actuarial Analysis Below

**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. Note: it includes the cash flow effect of the benefit changes on the retirement systems, the Office of Group Benefits, as well as other fiscal concerns.

<b>EXPENDITURES</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>5 Year Total</b>
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	See Below	See Below	See Below	See Below	See Below	See Below
Annual Total	See Below	See Below	See Below	See Below	See Below	See Below

<b>REVENUES</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>5 Year Total</b>
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	0	0	0	0	0	0
Annual Total	See Below	See Below	See Below	See Below	See Below	See Below

**Bill Information:**

**Current Law**

Current law provides that each member of Plan A of the Parochial Employees' Retirement System (PERS) shall contribute 9.5% of his earnings and each member of Plan B shall contribute 3% of his earnings.

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### **Proposed Law**

Proposed law provides for a range of employee contribution rates from 8% to 11% for PERS Plan A. It provides for a range of employee contribution rates from 3% to 5% for PERS Plan B.

The PERS board of trustees shall determine the employee contribution rates to be applied to Plan A and Plan B in consultation with the system's actuary.

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

Responsibility for setting the employee contribution rate within prescribed limits will be delegated to the board of directors of PERS. The board could set the employee contribution rate as much as 1.5% lower or 1.5% higher than the current rate in law. The Plan B employee contribution rate could be set up to 2% higher than the current rate in law.

### **Cost Analysis**

#### **Analysis of Actuarial Costs**

##### **Retirement Systems**

SB 85 will produce actuarial costs, be actuarially neutral, or produce actuarial savings depending on action taken by the PERS board of directors following the bill's enactment relative to employee contribution rates.

1. If the board increases the employee rate, PERS will have actuarial savings and employers will contribute less in the future than they do currently.
2. If the board keeps the employee rate at current levels, there will be no actuarial effect on PERS or employers.
3. If the board decreases the employee rate, PERS' actuarial costs will increase and employers will contribute more in the future than they do currently.

If PERS increases the employee contribution rate 1% of pay, the employer rate will decrease by about 0.75%. If PERS decreases the employee rate by 1%, the employer rate will increase by 0.75%. An increase/decrease in the employee rate does not produce an equivalent opposite effect on the employer rate for the following reasons.

1. If employees make larger contributions, they will receive larger refunds upon termination of employment. Refunds of employee contributions are considered benefits of the retirement system.
2. The cost to provide a larger refund benefit is estimated to be about 0.25% of pay.
3. Employees are contributing an additional 1.00% of pay to receive an additional refund benefit worth only 0.25% of pay.
4. Therefore, the employer rate decreases by 0.75% of pay.
5. The opposite is true if the employee rate is decreased.

#### **MAXIMUM ACTUARIAL SAVINGS**

Maximum actuarial savings will occur if SB 85 permits the employee contribution rate for Plan A to be increased from 9.5% of pay to 11.0%, and for Plan B from 3.0% to 5.0%. If PERS decides to increase employee rates to these levels:

1. The employer contribution rate for Plan A will be reduced 1.125% of pay.
2. The employer contribution rate for Plan B will be reduced 1.500% of pay.
3. Total contributions to PERS for Plans A and B will increase over the five year fiscal measurement period.
4. Contributions by local employers to PERS for Plans A and B will decrease over the five year period.
5. Contributions by employees to PERS for Plans A and B will increase over the five year period.
6. Refunds of employee contributions for Plan A and B will increase over the five year period.

Estimates of these increases and decreases are shown below under Analysis of Fiscal Costs.

#### **MAXIMUM ACTUARIAL COSTS**

Maximum actuarial costs will occur if SB 85 permits the employee contribution rate for Plan A to be decreased from 9.5% of pay to 8.0%; the Plan B rate cannot be lowered. If PERS decides to decrease employee rates to these levels:

1. The employer contribution rate for Plan A will be increased 1.125% of pay.
2. Total contributions to PERS for Plan A will decrease over the five year fiscal measurement period.
3. Contributions by local employers to PERS for Plan A will increase over the five year period.
4. Contributions by employees to PERS for Plans A will decrease over the five year period.
5. Refunds of employee contributions for Plan A will decrease over the five year period.
6. There will be no effect on actuarial or fiscal costs for Plan B.

Estimates of these increases and decreases are shown below under Analysis of Fiscal Costs.

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**Other Post Retirement Benefits**

There is no actuarial cost associated with this bill for other post retirement benefits.

**Analysis of Fiscal Costs**

Changes in employee contribution requirements will affect expenditures and revenues of PERS and its participating employers during the five year measurement period. Maximum fiscal savings and/or costs are provided below.

**MAXIMUM FISCAL SAVINGS**

Maximum actuarial savings occur if the employee rate for Plan A is increased 1.5% of pay from 9.5% to 11.0% and the employee rate for Plan B is increased 2.0% from 3.0% to 5.0%.

<u>Effect of a Maximum Increase in the Employee Contribution Rate</u>	<u>Plan A</u>	<u>Plan B</u>	<u>Total</u>
<b>Effect on Employee Contributions</b>			
Estimated Annual Pay	\$ 512,000,000	\$ 75,000,000	
Change in Employee Rate	<u>x 1.50%</u>	<u>x 2.00%</u>	
Estimated Employee Dollars	\$ 7,680,000	\$ 1,500,000	\$ 9,180,000
<b>Effect on Employer Contributions</b>			
Estimated Annual Pay	\$ 512,000,000	\$ 75,000,000	
Change in Employer Rate	<u>x - 1.125%</u>	<u>x 1.50%</u>	
Estimated Employer Contributions	\$ (5,760,000)	\$ (1,125,000)	\$ (6,885,000)
<b>Net Effect on System Contributions</b>	<b>\$ 1,920,000</b>	<b>\$ 375,000</b>	<b>\$ 2,295,000</b>

In the example above, employee expenditures increase \$9,180,000 while the employer contributions (local funds) decrease \$6,885,000. This results in a net increase in revenue to the system of \$2,295,000 from increased contributions (agency self generated funds). Fiscal savings based on this information is presented below, assuming employee rates are increased to the largest amounts permitted under SB 85.

<b>EXPENDITURES</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>5 Year Total</b>
State General Fund	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Agy Self Generated	459,000	909,000	1,350,000	1,784,000	2,212,000	6,714,000
Stat Deds/Other	0	0	0	0	0	0
Federal Funds	0	0	0	0	0	0
Local Funds	(6,885,000)	(7,092,000)	(7,304,000)	(7,523,000)	(7,749,000)	(36,553,000)
<b>Annual Total</b>	<b>\$ (6,426,000)</b>	<b>\$ (6,183,000)</b>	<b>\$ (5,954,000)</b>	<b>\$ (5,739,000)</b>	<b>\$ (5,537,000)</b>	<b>\$ (29,839,000)</b>

<b>REVENUES</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>5 Year Total</b>
State General Fund	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Agy Self Generated	2,295,000	2,364,000	2,435,000	2,508,000	2,583,000	12,185,000
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
<b>Annual Total</b>	<b>\$ 2,295,000</b>	<b>\$ 2,364,000</b>	<b>\$ 2,435,000</b>	<b>\$ 2,508,000</b>	<b>\$ 2,583,000</b>	<b>\$ 12,185,000</b>

The estimates of savings and costs provided above are based on the following assumptions:

1. Salaries and contributions will increase 3% per year due to inflation.
2. 5% of the active members of PERS each year will terminate employment and request a refund of contributions.

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MAXIMUM FISCAL COSTS

Maximum actuarial costs occur if the employee rate for Plan A is decreased 1.5% of pay from 9.5% to 8.0%. The employee rate for Plan B cannot be decreased.

<u>Effect of a Maximum Increase in the Employee Contribution Rate</u>	<u>Plan A</u>	<u>Plan B</u>
Effect on Employee Contributions		
Estimated Annual Pay	\$ 512,000,000	\$ 75,000,000
Change in Employee Rate	<u>x - 1.50%</u>	<u>x 0.00%</u>
Estimated Employee Dollars	\$ (7,680,000)	\$ 0
Effect on Employer Contributions		
Estimated Annual Pay	\$ 512,000,000	\$ 75,000,000
Change in Employer Rate	<u>x 1.125%</u>	<u>x 0.00%</u>
Estimated Employer Contributions	\$ 5,760,000	\$ 0
<b>Net Effect on System Contributions</b>	<b>\$ (1,920,000)</b>	<b>\$ 0</b>

In the example above, employee expenditures decrease \$7,680,000 while the employer contributions (local funds) increase \$5,760,000. This results in a net decrease in revenue to the system of \$1,920,000 from decreased contributions (agency self generated funds). Fiscal costs based on this information is presented below, assuming employee rates are decreased to the smallest amounts permitted under SB 85.

<b>EXPENDITURES</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>5 Year Total</b>
State General Fund	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Agy Self Generated	(384,000)	(760,000)	(1,130,000)	(1,493,000)	(1,850,000)	(5,617,000)
Stat Deds/Other	0	0	0	0	0	0
Federal Funds	0	0	0	0	0	0
Local Funds	5,760,000	5,933,000	6,111,000	6,294,000	6,483,000	30,581,000
<b>Annual Total</b>	<b>\$ 5,376,000</b>	<b>\$ 5,173,000</b>	<b>\$ 4,981,000</b>	<b>\$ 4,801,000</b>	<b>\$ 4,633,000</b>	<b>\$ 24,964,000</b>

<b>REVENUES</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>5 Year Total</b>
State General Fund	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Agy Self Generated	(1,920,000)	(1,978,000)	(2,037,000)	(2,098,000)	(2,161,000)	(10,194,000)
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
<b>Annual Total</b>	<b>\$ (1,920,000)</b>	<b>\$ (1,978,000)</b>	<b>\$ (2,037,000)</b>	<b>\$ (2,098,000)</b>	<b>\$ (2,161,000)</b>	<b>\$ (10,194,000)</b>

The estimates of savings and costs provided above are based on the following assumptions:

3. Salaries and contributions will increase 3% per year due to inflation.
4. 5% of the active members of PERS each year will terminate employment and request a refund of contributions.

**Dual Referral**

**Senate**

13.5.1 ≥ \$500,000 Annual Fiscal Cost

13.5.2 ≥ \$500,000 Annual Tax or Fee Change

**House**

6.8(F) ≥ \$500,000 Annual Fiscal Cost

6.8(G) ≥ \$500,000 Tax or Fee Increase or a Net Fee Decrease