



**2021 REGULAR SESSION  
ACTUARIAL NOTE SB 21**

<p><b>Senate Bill 21 SLS 21RS-35 Original</b></p> <p><b>Author: Senator Robert Mills Date: March 31, 2021 LLA Note SB 21.01</b></p>	<p>This Note has been prepared by the Actuary for the Louisiana Legislative Auditor (LLA) with assistance from either the Fiscal Notes staff of the Legislative Auditor or staff of the Legislative Fiscal Office (LFO). 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>	
<p><b>Organizations Affected: Municipal Employees' Retirement System of Louisiana</b></p> <p><b>OR INCREASE APV</b></p>	 <p><b>James J. Rizzo, ASA, EA, MAAA Senior Consultant &amp; Actuary Gabriel, Roeder, Smith &amp; Company</b></p>	 <p><b>Piotr Krekora, ASA, EA, MAAA, PhD Senior Consultant &amp; Actuary Gabriel, Roeder, Smith &amp; Company</b></p>

**Bill Header:** MUNICIPAL EMPLOYEE RET. Provides for the purchase of service and salary credit for members furloughed due to COVID-19. (gov sig)

**Cost Summary:**

The estimated net actuarial and fiscal impact of this proposed legislation on the retirement systems and their plan sponsors is summarized below. Net Actuarial Present Values pertain to estimated changes in the *net actuarial present value of future benefit payments and administrative expenses incurred by the retirement system*<sup>1</sup>. Net 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 local and state 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 *net 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 (i.e., contributions, benefit payments, and administrative expenses).

<b>Net Actuarial Present Values Pertaining to:</b>		<b>Net Actuarial Present Values</b>
The Retirement Systems		Increase
Other Post-employment Benefits (OPEB)		0
Total		Increase
<b>Five Year Net Fiscal Cost Pertaining to:</b>	<b>Expenditures</b>	<b>Revenues</b>
The Retirement Systems	Increase	Increase
Other Post-employment Benefits (OPEB)	0	0
Local Government Entities	Increase	0
State Government Entities	0	0
Total	Increase	Increase

**Bill Information**

**Current Law**

Current law allows any member of a state or statewide retirement system who is furloughed or placed on leave without pay to purchase service and salary credit for each day of service that he was furloughed or on such leave. The cost of service and salary credit is calculated on an **actuarial basis** in accordance with R.S. 11:158(C). There have been a few exceptions (including the 10 months following Hurricane Katrina, and employees of public colleges and universities participating in furloughs due to budget restrictions) where the price of purchasing service and salary credit is the **employee and employer contributions** that would have been paid to the system by the employer if it were not for the involuntary furlough or leave without pay, rather than the pricing being the actuarial equivalent cost.

**Proposed Law**

SB 21 adds another situation for which a member may purchase service and salary credit by paying the **employee and employer contributions** for the period instead of paying the **actuarial cost**.

SB 21 provides that any member of the Municipal Employees' Retirement System (MERS) who, due to the COVID-19 pandemic, was involuntarily furloughed without pay due to a reduction-in-force of his employer, or was involuntarily furloughed or placed

<sup>1</sup> **Note:** This is a different assessment from the actuarial cost relating the 2/3 vote (refer to the section near the end of this Actuarial Note “Information Pertaining to Article (10)(29)(F) of the Louisiana Constitution”).

## **2021 REGULAR SESSION ACTUARIAL NOTE SB 21**

on leave without pay, may purchase service and salary credit for each day of service during the period beginning on April 1, 2020, and ending on November 30, 2020, that he was furloughed or on such leave if such service was not credited to his account.

A member who purchases service and salary credit pursuant to SB 21 will pay MERS or his employer the employee and employer contributions which would have been remitted to MERS by his employer if not for the involuntary furlough or leave without pay. Such contributions, if paid to the employer, will be remitted by the employer to MERS. The member will remit the contributions no later than December 31, 2021.

Any service and salary credit purchased pursuant to proposed law will be subject to the following conditions and limitations:

1. There will be no duplication of service credit.
2. The employer will certify that the lost service credit was due to the COVID-19 pandemic.
3. The purchased service and salary credit may not be used for the purpose of meeting the minimum service requirements for disability retirement.
4. Compensation on which the required contributions for the purchase of service and salary credit are based will be the rate of compensation in effect for the last full pay period ending on or before the date the member was furloughed or placed on leave without pay.
5. The right to purchase service and salary credit pursuant to SB 21 will not apply to routine personnel actions or separations which are not the direct result of the COVID-19 pandemic.
6. Any dispute arising under the limitations of SB 21 will be resolved in the sole and exclusive discretion of the board of trustees of MERS.

In addition, the board of trustees may adopt rules to implement the provisions of SB 21.

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

SB 21 will allow a member of MERS who was furloughed due to COVID-19 to purchase service and salary credit for each day of service during the period beginning on April 1, 2020, and ending on November 30, 2020, that he was furloughed or on leave without pay by paying the **employee and employer contributions** which would have been made during that period.

### **I. ACTUARIAL IMPACT ON RETIREMENT SYSTEMS AND OPEB [Completed by LLA]**

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

This section of the actuarial note pertains to net actuarial present value costs or savings associated with the retirement systems and with OPEB.

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

The net actuarial cost or savings of the proposed legislation associated with the retirement systems is estimated to be an increase in cost. The actuary's analysis is summarized below.

SB 21 allows a member of MERS who was furloughed due to COVID-19 to purchase service and salary credit for each day of service during the period beginning on April 1, 2020, and ending on November 30, 2020, that he was furloughed or on leave without pay, by paying the employee and employer contributions rather than the actuarial cost. Members who exercise this option will receive greater benefits than otherwise available in the absence of SB 21 and may allow them to retire a few months earlier. Consequently, the net actuarial present value of future benefits will increase with the enactment of SB 21 since more benefits will be paid to the members electing to purchase service and salary credit. Furthermore, the retirement system might incur slightly higher administrative expenses for benefit and cost calculations and IRS tax considerations.

There is an opportunity for anti-selection due to the following:

- The MERS Part A employee and employer contributions are made at the same rate of pay for all members regardless of age. Similarly, the MERS Part B employee and employer contributions are made at the same rate of pay for all members regardless of age and
- The "value" of additional service and salary credit is much greater to members who are close to retirement age than to members who are much younger, and
- The "value" of additional service and salary credit may be of more value than the contributions made to purchase them for older members.

It is reasonable to assume a greater portion of older members than younger members will purchase the credit as a result of SB 21, which provides an opportunity for anti-selection. It is expected that members who would benefit from this provision are more likely to take advantage of this opportunity and, thereby, derive greater, or more valuable, benefits under SB 21 than under the current law.

The underpayments of "value" are amortized over time and financed by the Local Funds. Therefore, the cost of the increase in benefits is not expected to be borne entirely by the member through his purchase price.

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

The net actuarial cost or savings of the proposed legislation associated with OPEB, including retiree health insurance premiums, is estimated to be \$0. The actuary's analysis is summarized below.

**2021 REGULAR SESSION  
ACTUARIAL NOTE SB 21**

The actuarial cost of the proposed bill on OPEB, including eligibility conditions and retiree health insurance subsidies, is being treated as no cost for the purpose of this Actuarial Note. Post-employment health benefit programs for the covered employees of an entity depend on the provisions for such benefits within the employer-entity, not necessarily on their participation or benefits in the retirement system. Any OPEB program sponsored by an entity would have its own eligibility conditions and benefit subsidies. While this proposed bill affects the terms of participation or benefits of the retirement system, it does not directly affect the entity’s eligibility conditions for commencing OPEB benefits or the level of OPEB subsidies provided. Information regarding all the local municipal entities’ OPEB eligibilities and subsidies is not available and is outside the scope of this Actuarial Note. Any change in OPEB benefit eligibility or subsidy would be the decision and action of the entity itself. Therefore, the actuarial cost of the proposed bill relative to post-employment benefits is considered \$0.

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

Unless indicated otherwise, the actuarial note for the proposed legislation was prepared using actuarial data, methods, and assumptions as disclosed in the most recent actuarial valuation report adopted by the Public Retirement Systems’ Actuarial Committee (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. With certain exceptions, the actuary for the LLA finds the assumptions used by the retirement systems and PRSAC to be reasonable.

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

There is nothing in the proposed legislation that will compromise the signing actuary’s ability to present an unbiased statement of actuarial opinion.

**II. FISCAL IMPACT ON RETIREMENT SYSTEMS AND OPEB [Completed by LLA]**

This section of the actuarial note pertains to fiscal (annual) costs or savings associated with the retirement systems (Table A) and with OPEB (Table B). Fiscal costs or savings in Table A include benefit-related actuarial costs and administrative costs incurred by the retirement systems.

**A. Estimated Fiscal Impact – Retirement Systems  
(Prepared by 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**

<b>EXPENDITURES</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</b>	<b>5 Year Total</b>
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

<b>REVENUES</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</b>	<b>5 Year Total</b>
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	0	0	0	0	0
Annual Total	Increase	Increase	Increase	Increase	Increase	Increase

All expenditures for employer contributions are reflected on a single line in the table above. The actual sources of funding (e.g., Federal Funds, State General Fund) may vary by employer and are not differentiated in the table.

The proposed legislation will have the following effects on retirement related fiscal costs and revenues during the five year measurement period.

2. Expenditures:

- a. Expenditures by MERS (Agy Self Generated) are expected to increase since greater benefits will be paid to members purchasing service and salary credit.

**2021 REGULAR SESSION  
ACTUARIAL NOTE SB 21**

b. Expenditures from Local Funds are expected to increase slightly over time because amortization payments would be required due to actuarial losses expected, as described in section I(A)(1) above.

3. Revenues:

MERS revenues (Agy Self Generated) are expected to increase since the payment of employer and employee contributions during the involuntary furlough or leave without pay for the purchase of service and salary credit by some members will be received and because receipts of Local Funds contributions are expected to increase slightly over time because amortization payments would be required due to actuarial losses expected, as described in section I(A)(1) above.

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

1. Narrative

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

**OPEB Fiscal Cost: Table B**

<b>EXPENDITURES</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</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>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</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

All expenditures for employer contributions are reflected on a single line in the table above. The actual sources of funding (e.g., Federal Funds, State General Fund) may vary by employer and are not differentiated on the table.

The proposed legislation will have the following effects on OPEB related fiscal costs and revenues during the five year measurement period.

2. Expenditures:

No measurable effects.

3. Revenues:

No measurable effects.

**III. FISCAL IMPACT ON LOCAL GOVERNMENT ENTITIES [Completed by LLA]**

This section of the actuarial note pertains to annual fiscal costs (savings) relating to administrative expenditures and revenue impacts incurred by local government entities other than those included in Tables A and B. See Table C.

**Estimated Fiscal Impact - Local Government Entities (other than the impact included in Tables A and B)**  
(Prepared by Bradley Cryer, Director of Local Government Services)

1. Narrative

From time to time, legislation is proposed that has an indirect effect on administrative expenditures and revenues associated with local government entities (other than the impact included in Tables A and B). Table C shows the estimated fiscal administrative cost impact of the proposed legislation on such local government entities. 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.

**2021 REGULAR SESSION  
ACTUARIAL NOTE SB 21**

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

<b>EXPENDITURES</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</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>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</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

The proposed legislation will have the following effects on fiscal administrative costs and revenues related to local government entities during the five year measurement period.

- 2. Expenditures:  
No measurable effects.
- 3. Revenues:  
No measurable effects.

**IV. FISCAL IMPACT ON STATE GOVERNMENT ENTITIES [Completed by LFO]**

This section of the actuarial note pertains to annual fiscal cost (savings) relating to administrative expenditures and revenue impacts incurred by state government entities other than those included in Tables A and B. See Table D.

**Estimated Fiscal Impact – State Government Entities (other than the impact included in Tables A and B)**  
**(Prepared by Chris Keaton, Legislative Fiscal Officer)**

- 1. Narrative

From time to time, legislation is proposed that has an indirect effect on administrative expenditures and revenues associated with state government entities (other than the impact included in Tables A and B). Table D shows the estimated fiscal administrative cost impact of the proposed legislation on such state government entities. 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.

**Fiscal Costs for State Government Entities: Table D**

<b>EXPENDITURES</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</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>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</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

The proposed legislation will have the following effects on fiscal costs and revenues related to state government entities during the five year measurement period.

**2021 REGULAR SESSION  
ACTUARIAL NOTE SB 21**

2. Expenditures:

N/A - This bill only impacts local government, and therefore, has no state impact. The LFO does not review local government bills.

3. Revenues:

N/A - This bill only impacts local government, and therefore, has no state impact. The LFO does not review local government bills.

**Credentials of the Signatory Staff:**

James J. Rizzo and Piotr Krekora, on behalf of Gabriel, Roeder, Smith & Company, serve as the Actuary for the Louisiana Legislative Auditor. They are Enrolled Actuaries, members of the American Academy of Actuaries, Associates of the Society of Actuaries and have met the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinion contained herein.

**Actuarial Disclosure: Risks Associated with Measuring Costs**

This Actuarial Note is an actuarial communication, and is required to include certain disclosures in compliance with Actuarial Standards of Practice (ASOP) No. 51.

A full actuarial determination of the retirement system's costs, actuarially determined contributions and accrued liability require the use of assumptions regarding future economic and demographic events. The assumptions used to determine the retirement system's contribution requirement and accrued liability are summarized in the system's most recent Actuarial Valuation Report accepted by the respective retirement board and by the Public Retirement Systems' Actuarial Committee (PRSAC).

The actual emerging future experience, such as a retirement fund's future investment returns, may differ from the assumptions. To the extent that emerging future experience differs from the assumptions, the resulting shortfalls (or gains) must be recognized in future years by future taxpayers. Future actuarial measurements may also differ significantly from the current measurements due to other factors: changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period; or additional cost or contribution requirements based on the system's funded status); and changes in plan provisions or applicable law.

Examples of risk that may reasonably be anticipated to significantly affect the plan's future financial condition include:

1. Investment risk – actual investment returns may differ from the expected returns (assumptions);
2. Contribution risk – actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the plan's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll, or other relevant contribution base;
3. Salary and Payroll risk – actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and contributions differing from expected;
4. Longevity and life expectancy risk – members may live longer or shorter than expected and receive pensions for a period of time other than assumed;
5. Other demographic risks – members may terminate, retire or become disabled at times or with benefits other than assumed, resulting in actual future accrued liability and contributions differing from expected.

The scope of an Actuarial Note prepared for the Louisiana Legislature does not include an analysis of the potential range of such future measurements or a quantitative measurement of the future risks of not achieving the assumptions. In certain circumstances, detailed or quantitative assessments of one or more of these risks as well as various plan maturity measures and historical actuarial measurements may be requested from the actuary. Additional risk assessments are generally outside the scope of an Actuarial Note. Additional assessments may include stress tests, scenario tests, sensitivity tests, stochastic modeling, and a comparison of the present value of accrued benefits at low-risk discount rates with the actuarial accrued liability.

However, the general cost-effects of emerging experience deviating from assumptions can be known. For example, the investment return since the most recent actuarial valuation may be less (or more) than the assumed rate, or a cost-of-living adjustment may be more (or less) than the assumed rate, or life expectancy may be improving (or worsening) compared to what is assumed. In each of these situations, the cost of the plan can be expected to increase (or decrease).

The use of reasonable assumptions and the timely receipt of the actuarially determined contributions are critical to support the financial health of the plan. However, employer contributions made at the actuarially determined rate do not necessarily guarantee benefit security.

**2021 REGULAR SESSION  
ACTUARIAL NOTE SB 21**

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

SB 21 contains a retirement system benefit provision having an actuarial cost.

Some members of the Municipal Employees' Retirement System could receive a larger benefit with the enactment of SB 21 than what they would have received without SB 21.

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

The information presented below is based on information contained in Tables A, B, C, and D for the first three years following the 2021 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**