

**OFFICE OF LEGISLATIVE AUDITOR  
2022 REGULAR SESSION  
ACTUARIAL NOTE**

**House Bill 21 HLS 22RS-235**  
**Original**  
**Author: Bacala**  
**LLA Note HB 21.01**

**Date: March 8, 2022**  
**Organizations Affected: MPERS**  
  
**OR DECREASE APV**

**Bill Header:** RETIREMENT/MUNICIPAL POL: Provides for a funding deposit account for Municipal Police Employees' Retirement System and authorizes the board of trustees of the system to modify required employer contributions.

**Purpose of Bill:** This bill provides the opportunity for the Municipal Police Employees' Retirement System (MPERS) to set the employer contribution rate above the minimum rate otherwise determined under current law, to accumulate all surplus funds in a funding deposit account (FDA), and then to use that account to either reduce the outstanding balance of the oldest amortization base or to provide cost-of-living adjustments (COLAs). The bill also eliminates the opportunity for the MPERS board to authorize a COLAs described in La. R.S. 11:241 and La. R.S. 11:246 based on the gain-sharing provisions of current law.

The bill, as written, appears to retain the option for the MPERS board to pay a COLA under La. R.S. 11:2225(A)(7). It is our understanding this was not the original intent of the author and the bill will be amended to correct this issue. Therefore, this actuarial note is being written assuming the MPERS board will not be permitted to adopt a COLA under La. R.S. 225(A)(7).

**Cost Summary<sup>1</sup>:** The estimated net actuarial and fiscal impact of the proposed legislation is summarized below. An increase in actuarial present values (actuarial impact) and an increase in expenditures or revenues (fiscal impact) is denoted by "Increase" or a positive number. A decrease in actuarial present values (actuarial impact) or a decrease in expenditures or revenues (fiscal impact) are denoted by "Decrease" or a negative number.

We expect MPERS board-granted COLAs under this bill (with its use of FDA balances) to be less frequent and smaller than under current law (with its Gain-sharing COLAs). That would, therefore, constitute an expected decrease in net actuarial present value of future benefit payments. Nevertheless, if the board requires higher contributions, as allowed under this bill, that would constitute an increase in contribution during the next five fiscal years.

In the following table, "Net Actuarial Present Values" pertain to estimated changes in the *net actuarial present value of future benefit payments and administrative expenses incurred by a retirement system or associated with an OPEB plan*. A more detailed explanation of the information presented in this table can be found in Section I: Actuarial Impact on Retirement Systems and OPEB.

<b>Change in Net Actuarial Present Values Pertaining to:</b>	
The Retirement Systems	Decrease
Other Post-employment Benefits (OPEB)	0
<b>Total</b>	<b>Decrease</b>

"Net Fiscal Costs" 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.

In the following table, expenditures and revenues only include cash flows to or from the affected retirement system or OPEB plan, (e.g. administrative expenses incurred by, benefit payments from, or contributions to the retirement system) and do not include administrative expenditures and revenues specifically incurred by the state or local government entities associated with implementing the legislation. A more detailed explanation of the information presented in this table can be found in Section II: Fiscal Impact on Retirement Systems and OPEB.


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

From time to time, retirement legislation is proposed that affects administrative expenditures and revenues for state and local government entities associated with implementing the proposed legislation (other than contribution changes included in the above table). This information, provided by the LLA Local Government Services or the Legislative Fiscal Office, is summarized in the following table. A more detailed explanation of the information presented in this table can be found in Sections III: Fiscal Impact on Local Government Entities, and Section IV: Fiscal Impact on State Government Entities.

<b>Five Year Net Fiscal Costs Pertaining to:</b>	<u>Expenditures</u>	<u>Revenues</u>
Local Government Entities	\$ 0	\$ 0
State Government Entities	0	0
<b>Total</b>	<b>\$ 0</b>	<b>\$ 0</b>

<sup>1</sup> 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**").

**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.**

  
**Kenneth J. "Kenny" Herbold, ASA, EA, MAAA**  
**Director of Actuarial Services**  
**Louisiana Legislative Auditor**

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**I. ACTUARIAL IMPACT ON RETIREMENT SYSTEMS AND OPEB**

This section of the actuarial note pertains to changes in the net actuarial present value of expected future benefit payments and administrative expenses incurred by the retirement systems or associated with an OPEB plan.

**1. Retirement Systems**

The net change in actuarial present value of expected future benefits and administrative expenses incurred by the retirement systems from the proposed legislation is estimated to be a decrease.

Current law includes a series of rules under which COLAs may be granted. These rules, outlined under La. R.S. 11:242, 246, and 11:2225(A)(7), are primarily tied to the system earning greater than the assumed rate of return in a given year before a COLA may be granted. Because these rules are tied to market returns, there is no clear mechanism for knowing with any certainty when a COLA may be granted. Further, there does not exist a mechanism for explicitly pre-funding these COLAs, contributions for a COLA commence after such an increase is granted. This results in confusion surrounding when a COLA is likely to be granted as well as how much the ultimate cost to employers will be.

Under the proposed bill, COLAs based on current statute are prohibited. As noted above, for purpose of this actuarial note, it is presumed that COLAs under La. R.S. 11:225(A)(7) would be prohibited. Instead, the bill creates a Funding Deposit Account (FDA) for MPERS. Surplus contributions, defined as an employer contribution rate above the minimum required contribution, can be used to either (a) reduce the outstanding balance of the oldest amortization base or (b) accumulate in the FDA until such time the board determines there are sufficient funds to grant a COLA. Surplus contributions can be up to 1) 0.85% greater than the otherwise minimum required contribution rate if the minimum required contribution is greater than the previous year or 2) 0.85% plus one-half the difference between the otherwise minimum required contribution rate and the previous year's minimum contribution rate if the minimum contribution rate is less than the previous year.

While it may not be certain, it can be reasonably expected that the MPERS board of trustees will exercise its authority to fund the FDA by establishing contribution rates in the future that are higher than the minimum employer rate otherwise determined under current law. In addition, while it may not be certain, it can be reasonably expected that sometime after accumulating sufficient funds in the FDA, the MPERS board would then grant COLAs from the FDA balance. This approach allows for both pre-funding of any future COLAs through accumulation of funds in the FDA as well as the opportunity to exercise control over the expected cost of such COLAs by setting the surplus contribution rate and only granting COLAs FDA funds can reasonably support.

Given the length of time needed to accumulate sufficient FDA balances and the flexibility in granting increases from the FDA in subsequent years, the proposed bill can be reasonably expected to result in a decrease of actuarial costs over time. However, this bill provides the opportunity for the MPERS board to grant a retiree benefit increase that might not be available under current law, even though the net actuarial present value of benefits is a decrease.

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

The net change in actuarial present value of expected future benefits and administrative expenses associated with OPEB, including retiree health insurance premiums, from the proposed legislation is estimated to be \$0.

The liability and expenses for post-retirement medical insurance is not impacted by any provisions of this bill.

**II. FISCAL IMPACT ON RETIREMENT SYSTEMS AND OPEB**

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 only include cash flows to or from the affected retirement system or OPEB plan, (e.g. administrative expenses incurred by, benefit payments from, or contributions to the retirement system) and do not include administrative expenditures and revenues specifically incurred by the state or local government entities associated with implementing the legislation.

**A. Estimated Fiscal Impact – Retirement Systems**

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.

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**Retirement System Fiscal Cost: Table A**

<b>EXPENDITURES</b>	<b>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</b>	<b>2026-27</b>	<b>5 Year Total</b>
State General Fund	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Agy Self Generated	0	0	0	0	Decrease	Decrease
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	Decrease	Increase

<b>REVENUES</b>	<b>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</b>	<b>2026-27</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

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

1. Expenditures:

- a. Expenditures from MPERS are not expected to change during the next four years as a result of this bill. We assume that assets in the FDA will not be used by MPERS until a sufficient pool of assets is accumulated for the payment of retiree benefit increases. We estimate that the accumulated balance would not be sufficient to support a meaningful thirteenth check until FY 2028-29. Therefore, we conclude that expenditures from the FDA for the granting of retiree benefit increases will be \$0 during the five-year fiscal measurement period.

Under current law, we expected a COLA to be adopted once in the next five years, based on actuarial investment returns for either FYE 6/30/21 or a later year. The superior market return for FYE 6/30/21 is smoothed into actuarial returns for a full five years creating opportunities for current law COLAs in future years. These grants of COLAs under current law are subject to a timing restriction that allows such grants only once every three years.

For the purpose of this actuarial note and Table A above, we presume that the MPERS board will grant a COLA based on the FYE 6/30/21 actuarial return and payable during FY 2022-23, regardless of whether this bill passes or not. Therefore, we anticipated the next opportunity for a COLA to be paid would be FY 2026-27, if the bill does not pass (based on the three-year timing restriction). If the bill passes, this COLA would not be permitted and would cause a decrease in MPERS expected expenditures in the FY 2026-27. To the extent a COLA is not granted during FY 2022-23 under current law, the anticipated change in pattern of distributions would change slightly.

- b. Expenditures from Local Funds will increase under the proposed bill for fiscal years in which the board requires an employer contribution rate that is greater than the minimum actuarially required rate. This increase may be expected to commence some time during the next five years. For the purpose of this actuarial note, Table A presents a potential increase in employer contributions every year, commencing possibly in FY 2023-24, the first year the MPERS board would be allowed to require a higher contribution as permitted by this bill. Furthermore, any COLA granted under the current law would not have an effect on contribution requirements until at least FY 2027-28, which is beyond the five-year period.

2. Revenues:

MPERS revenues (Agy Self Generated) will increase under the proposed bill to the extent that the employer contribution rate is greater than the minimum actuarially required rate.

**B. Estimated Fiscal Impact – OPEB**

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>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</b>	<b>2026-27</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>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</b>	<b>2026-27</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

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

1. Expenditures: No measurable effects.
2. Revenues: No measurable effects.

**III. FISCAL IMPACT ON LOCAL GOVERNMENT ENTITIES  
(Prepared by LLA Local Government Services)**

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)**

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.

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

<b>EXPENDITURES</b>	<b>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</b>	<b>2026-27</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>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</b>	<b>2026-27</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.

1. Expenditures: No measurable effects.
2. Revenues: No measurable effects.

**IV. FISCAL IMPACT ON STATE GOVERNMENT ENTITIES  
(Prepared by Legislative Fiscal Office)**

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)**

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

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

<b>EXPENDITURES</b>	<b>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</b>	<b>2026-27</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>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</b>	<b>2026-27</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

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### V. ACTUARIAL DISCLOSURES

#### Intended Use

This actuarial note is based on our understanding of the bill as of the date shown above. It is intended to be used by the Legislature during the current legislative session only and assumes no other legislative changes affecting the funding or benefits of the affected systems, other than those identified, will be adopted. Other readers of this actuarial note are advised to seek professional guidance as to its content and interpretation, and not to rely upon this communication without such guidance. The actuarial note, and any referenced documents, should be read as a whole. Distribution of, or reliance on, only parts of this actuarial note could result in its misuse and may mislead others. The summary of the impact of the bill included in this actuarial note is for the purposes of an actuarial analysis only, as required by La. R.S. 24:521, and is not a legal interpretation of the provisions of the bill.

#### Actuarial Data, Methods and Assumptions

Unless indicated otherwise, this actuarial note 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 assumptions and methods are reasonable for the purpose of this analysis.

For certain calculations that may be presented herein, we have utilized commercially available valuation software and/or are relying on proprietary valuation models and related software developed by our actuarial contractor. We made a reasonable attempt to understand the intended purpose of, general operation of, major sensitivities and dependencies within, and key strengths and limitations of these models. In our professional judgment, the models have the capability to provide results that are consistent with the purposes of the analysis and have no material limitations or known weaknesses. Tests were performed to ensure that the model reasonably represents that which is intended to be modeled.

To the extent that this actuarial note relies on calculations performed by the retirement systems' actuaries, to the best of our knowledge, no material biases exist with respect to the data, methods or assumptions used to develop the analysis other than those specifically identified. We did not audit the information provided, but have reviewed the information for reasonableness and consistency with other information provided by or for the affected retirement systems.

#### Conflict of Interest

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

#### 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 at rates that differ from what was 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).

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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.

**Certification**

Kenneth J. Herbold is an Associate of the Society of Actuaries (ASA), a Member of the American Academy of Actuaries (MAAA), and an Enrolled Actuary (EA) under the Employees Retirement Income Security Act of 1974. Mr. Herbold meets the US Qualification Standards necessary to render the actuarial opinion contained herein.

**VI. LEGISLATIVE PROCEDURAL ITEMS**

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

This bill contains a retirement system benefit provision having an actuarial cost.

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

**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 2022 regular session.

<b><u>Senate</u></b>		<b><u>House</u></b>	
<input checked="" type="checkbox"/>	13.5.1 Applies to Senate or House Instruments. If an annual fiscal cost $\geq$ \$100,000, then bill is dual referred to: <b>Dual Referral: Senate Finance</b>	<input type="checkbox"/>	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: <b>Dual Referral to Appropriations</b>
<input type="checkbox"/>	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: <b>Dual Referral: Revenue and Fiscal Affairs</b>	<input type="checkbox"/>	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: <b>Dual Referral: Ways and Means</b>