


**2019 REGULAR SESSION  
ACTUARIAL NOTE HB 22**

<p>House Bill 22 HLS 19RS-155 Enrolled</p> <p>Author: Representative Bacala Date: June 3, 2019 LLA Note HB 22.06</p> <p>Organizations Affected: Municipal Police Employees’ Retirement System</p> <p>EN INCREASE APV</p>	<p>This Note has been prepared by the Actuarial Services Department of the Legislative Auditor with assistance from either the Fiscal Notes staff of the Legislative Auditor or staff of the Legislative Fiscal Office. 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 style="text-align: center;"></p> <p>James J. Rizzo, ASA, MAAA Senior Consultant &amp; Actuary Gabriel, Roeder, Smith &amp; Company, Actuary for the Legislative Auditor</p>
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**Bill Header:** RETIREMENT/MUNICIPAL POL: Provides relative to the calculation of benefits of certain employees of the Baton Rouge Police Department who are members of the Municipal Police Employees’ Retirement System

**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 costs pertain to estimated changes in the *net actuarial present value of future benefit payments and administrative expenses incurred by the retirement system*. 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 other 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 Costs (Liabilities) Pertaining to:</b>		<b>Net Actuarial Cost</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	0	0
Other Government Entities	0	0
Total	Increase	Increase

**Bill Information**

**Current Law**

Current law provides that the average final compensation of a member of the Municipal Police Employees’ Retirement System (MPERS) is based on his annual earned compensation, not including overtime.

**Proposed Law**

HB 22 codifies into law the inclusion of certain overtime payments which have been paid to specified Baton Rouge police officers in the calculation of their average final compensation. It also provides that City of Baton Rouge is responsible for all of the actuarial and administrative costs associated with including these overtime payments.

**Implications of the Proposed Changes**

The Baton Rouge Police Department (BRPD) employees became covered under MPERS on February 26, 2000. Prior to that, the BRPD employees were covered under its separate independent retirement plan that included certain overtime in the definition of compensation.

It has been determined that the same types of overtime payments made by BRPD to employees who are now members of MPERS (original transfers and new hires) were being included in the compensation reported to MPERS up to January 1, 2018.

HB 22 will address the situation by including these overtime payments in the calculation of the final average compensation, and requiring the City of Baton Rouge to pay for all of the actuarial and administrative costs.

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**I. ACTUARIAL ANALYSIS SECTION**

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

This section of the actuarial note pertains to net actuarial 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. The actuary's analysis is summarized below.

Prior to covering BRPD employees in MPERS, compensation for retirement purposes for Baton Rouge police officers included certain overtime. Compensation reported to MPERS until January 1, 2018 continued to include the same type of overtime, even though MPERS' definition of compensation excluded overtime. Those amounts were used for all system purposes – member contributions, employer contributions, benefit payments (based on average compensation), etc.

Without the passage of the proposed legislation, the benefits and contributions may need to be reversed. Benefits payable to current retirees (and disabilities and survivors) may have been overstated and the board may need to consider recovering the overpayments already made in addition to reducing the benefits going forward. Furthermore, without the passage of the proposed legislation, currently active employees affected (transfers at February 26, 2000 and new hires since then) may need to have their future benefits paid based on compensation without overtime, as the statutes require. Without the passage of the proposed legislation, employee contributions on the overtime portion of compensation reported may need to be refunded to the employees if the benefits paid are based on compensation without overtime; but the employer contributions previously made on the overtime portion may or may not be allowed to be refunded to BRPD or offset against future required contributions.

The proposed legislation authorizes the payment of the higher benefits to a closed group of BRPD employees, based on compensation that includes the overtime reported. However, to the extent it is determined that contributions made have not been sufficient to cover the additional actuarial cost of including the overtime in benefits, the City of Baton Rouge will be responsible for paying the extra costs. In addition, under the proposed legislation, the City of Baton Rouge will be responsible for paying the administrative expenses associated with the calculation of the benefits and actuarial costs.

The proposed legislation increases benefits and, therefore, the actuarial costs as compared to the current law.

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

The net actuarial cost or savings of the proposed legislation associated with OPEB, including retiree health insurance premiums, cannot be determined. It is therefore recorded as zero in the Actuarial Note Tables. The actuary's analysis is summarized below.

The liability for post-retirement medical insurance protection provided to retirees is generally not affected by including overtime payments in the calculation of average final compensation. However, the effect cannot be determined without detailed information concerning the BRPD OPEB program, if any. It is not known whether there is an OPEB program sponsored by Baton Rouge or whether it would be affected by this proposed legislation.

**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.

Current or future litigation is not considered in the preparation of the Actuarial Note.

**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.

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**II. FISCAL ANALYSIS SECTION**

This section of the actuarial note pertains to fiscal (annual) costs or savings associated with the retirement systems (Table A), with OPEB (Table B), and with other fiscal costs or savings incurred by other government entities (Table C). Fiscal costs or savings in Table A include benefit-related actuarial costs and administrative costs incurred by the retirement systems. The total effect of HB 22 on fiscal costs, fiscal savings, or cash flows is presented in Table D.

**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>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</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	Increase	Increase	Increase	Increase	Increase	Increase
Annual Total	Increase	Increase	Increase	Increase	Increase	Increase

<b>REVENUES</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</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

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 from MPERS (Agy Self-Generated) will increase for additional benefits payable as associated with HB 22.
- b. Expenditures of the City of Baton Rouge (Local Funds) will increase to pay MPERS for the actuarial costs and to reimburse the administrative costs associated with the implementation of HB 22. Without more details concerning the actuarial methodologies to be employed in the certification and subsequent annual actuarial valuations of the plan, it is not known what the effect of the proposed legislation will be on all other MPERS-participating entities (Local Funds).

3. Revenues:

MPERS revenues (Agy Self-Generated) will increase since the system will receive from the City of Baton Rouge the actuarial costs of any members’ additional benefits along with a reimbursement of all the administrative costs associated with HB 22.

**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.

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**OPEB Fiscal Cost: Table B**

<b>EXPENDITURES</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</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>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</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 OPEB related fiscal costs and revenues during the five year measurement period.

2. Expenditures:

No measurable effects on the State General Fund or MPERS. For the reasons stated in the Actuarial Analysis Section I.A.2, the OPEB Fiscal Cost Expenditures cannot be determined and are, therefore, recorded as zero in the Actuarial Note Tables.

3. Revenues:

No measurable effects on the State General Fund or MPERS. For the reasons stated in the Actuarial Analysis Section I.A.2, the OPEB Fiscal Cost Revenues cannot be determined and are, therefore, recorded as zero in the Actuarial Note Tables.

**C. Estimated Fiscal Impact: Other Government Entities (other than the retirement systems or OPEB)  
(Prepared by Bradley Cryer, Director of Local Government Services, LLA)**

1. Narrative

From time to time, legislation is proposed that has an indirect effect on cash flows associated with other government entities (other than the retirement systems or OPEB). Table C shows the estimated fiscal impact of the proposed legislation on such government entities. A fiscal cost is denoted by "Increase" or a positive number. Fiscal savings are denoted by "Decrease" or a negative number.

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

<b>EXPENDITURES</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</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>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</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 other government entities during the five year measurement period.

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2. Expenditures:

The BRPD will incur administrative costs related to providing necessary data to the retirement system for the actuarial certification(s); however, these costs should be absorbed by the department’s existing administrative staff. Accordingly, no direct material effect on government expenditures is expected as a result of this measure.

3. Revenues:

No measurable effect

**D. Estimated Fiscal Impact – All Retirement Systems, OPEB, and All Government Entities  
(Prepared by LLA)**

1. Narrative

Table D shows the estimated fiscal impact of the proposed legislation on all government entities within the state of Louisiana. Cell values in Table D are the sum of the respective cell values in Table A, table B, and Table C. 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.

**Total Fiscal Cost: Table D (Cumulative Costs from Tables A, B, & C)**

<b>EXPENDITURES</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</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	Increase	Increase	Increase	Increase	Increase	Increase
Annual Total	Increase	Increase	Increase	Increase	Increase	Increase

<b>REVENUES</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</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

**Credentials of the Signatory Staff:**

James J. Rizzo is a Senior Consultant and Actuary with Gabriel, Roeder, Smith & Company, which is currently serving as the actuary for the Louisiana Legislative Auditor. He is an Enrolled Actuary, a member of the American Academy of Actuaries, an Associate 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.

**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;

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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.

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

HB 22 contains a retirement system benefit provision having an actuarial cost.

Certain members of MPERS will receive larger benefits with the enactment of HB 22 than what they would have received without HB 22.

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

The information presented below is based on information contained in Table D for the first three years following the 2019 regular session.

<u>Senate</u>	<u>House</u>
<input 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>