2018 REGULAR SESSION
ACTUARIAL NOTE SB 514

Senate Bill 514 SLS 18RS-131 **Original** **Author: Senator White** **Date: April 10, 2018** **LLA Note SB 514.01** **Organizations Affected:** **Municipal Police Employees' Retirement System** **OR INCREASE APV**	**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.** Paul T. Richmond **Paul T. Richmond, ASA, MAAA, EA** **Manager Actuarial Services**

<u>Bill Header:</u> MUNICIPAL POL EMPS RET. Provides relative to employee and employer contributions under certain circumstances. (6/30/18)

<u>Cost Summary:</u>

The estimated actuarial and fiscal impact of SB 514 on the retirement systems and their plan sponsors is summarized below. Actuarial costs pertain to estimated changes in the ***actuarial present value of future benefit payments***. Fiscal costs or savings pertain to changes to all cash flows over the next five year period including retirement system cash flows, employer sponsors' 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.

<u>Estimated Actuarial Impact:</u>

The top part of the following chart shows the estimated change in the ***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.

Actuarial Costs Pertaining to:		**<u>Actuarial Cost</u>**
The Retirement Systems		Increase
Employer Sponsors		0
Other Post Employment Benefits (OPEB)		Increase
Other Government Entities		<u>0</u>
Total		Increase
Five Year Fiscal Cost Pertaining to:	**<u>Expenses</u>**	**<u>Revenues</u>**
The Retirement Systems	Increase	Decrease
Employer Sponsors	Decrease	0
Other Post Employment Benefits	Increase	Increase
Other Government Entities	<u>0</u>	<u>0</u>
Total	Increase	Increase

<u>Bill Information</u>

Current Law

Current law provides that the retirement benefit provided to a member by the Municipal Police Employers' Retirement System (MPERS) is limited to 100% of the member's final average compensation.

When a member has earned benefits equal to 100% of his final average compensation, no further employee contributions are required. However, the employer is required to continue to its contributions to MPERS.

Proposed Law

SB 514 provides that when a member has accrued a benefit equal to 100% of his final average compensation, no further contributions will be required from the employer. However, the employee will be required to pay the employer contribution instead of the employee contribution.

Implications of the Proposed Changes

The employer contribution rate is 32.25% for FYE 2019, while the member contribution rate is 10.00% (8.00% for employees hired after 2012 and participating in the Nonhazardous Duty Subplan). It is unlikely that a member will continue to work after attaining 30 or more years of service if he is required to contribute at the employer rate. Instead, it is very likely that such a member will retire. As a result, members will retire earlier under SB 514 than under current law.

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I. ACTUARIAL ANALYSIS SECTION

A. Analysis of Actuarial Costs
(Prepared by the LLA)

This section of the actuarial note pertains to actuarial costs or savings associated with the retirement system, with the employers sponsoring MPERS, with OPEB, and with other government entities.

1. Retirement Systems and Sponsors

The actuarial cost of SB 514 associated with the MPERS is expected to increase. Our analysis is summarized below.

a. According to the June 30, 2017 valuation, there were 100 active members who had satisfied the following conditions (1) were eligible to retire immediately with an unreduced benefit, (2) had accrued 30 or more years of service, and (3) were entitled to a benefit of 100% of final average compensation. The pension benefit for such a member can increase only if he continues to work and he receives pay raises, thereby increasing his final average compensation. Additional years of service credit have no effect on the pension benefit payable from MPERS.

b. Employer and employee contribution rates under current law and under SB 514 are summarized in Table 1.

Table 1

	Current Law	SB 514
Employer Contribution Rate:		
Before Attaining 30 Years of Service	32.25%	32.25%
After Attaining 30 Years of Service	32.25%	0.00%
Employee Contribution Rate:		
Before Attaining 30 Years of Service	10.00%	10.00%
After Attaining 30 years of Service	0.00%	32.25%

Under current law, if a member, with 30 or more years of service continues to work, his income (all from employment) will be 100% of his current salary (he does not contribute to MPERS). If he retires, his income will be about 91% of his current salary because his final average compensation is only about 91% of his final salary.

Under SB 514, if he continues to work, the member's income (all from employment) will be 68% of his current salary (100% of salary minus the employer contribution rate (32.25% of salary)). If he retires, his income will be about 91% of his current salary.

Under current law he receives an income that is about 91% of his current salary if he continues to work. Under SB 514, he will take a 32% reduction in income if he continues to work. In our opinion, it is not likely that a member will continue his employment under these conditions, but instead he will retire.

c. In general, the earlier that a member retires, the greater the actuarial present value of future benefits will be. The pension benefit payable to the member will be the same (about 91% of final pay) regardless of whether SB 514 is enacted or current law remains in effect. However, the actuarial present value of future benefit payments will increase under SB 514 because the benefit will be paid to the member for a longer period of time.

d. Participating sponsors of MPERS will see an overall reduction of expenditures. When a member is induced to retire as a result of SB 514, the employer will likely replace the newly retired member with a younger employee who earns a smaller income. Salary costs (salary plus benefits) for participating sponsors will decrease if SB 514 is enacted because replacement employees will earn less than members induced to retire.

e. Employee contribution requirements are likely to be larger with the enactment of SB 514. The employee contribution rate for members with 30 of more years of service is currently 0.00%; under SB 514, the rate will be 32.25%. However, there will be very few, if any, members who will continue to work after attaining 30 years of service. Therefore, employee contribution requirements under SB 514 will be close to $0, about the same as they are under current law.

On the other hand, a replacement worker will contribute 10.00% of pay under SB 514. However his pay will be much smaller than the pay of the member he replaced.

The combination of these factors will lead to an increase in employee contribution requirements should SB 514 be enacted.

f. The employer contribution rate is likely to increase with the enactment of SB 514. The actuarial present value of future benefit payments (the numerator of the contribution rate formula) is likely to be larger under SB 514 than under current law. On the other hand, the present value of future payroll (the denominator) is likely to be smaller. However, while it is quite certain that the employer contribution rate will increase; it is less certain the direction of employer contribution amounts in dollars. A larger rate multiplied by a smaller payroll could produce employer contributions that are larger or smaller under SB 514 than under current law. However, it is our opinion that employer contributions will decrease if SB 514 is enacted.

g. Changes in actuarial costs and changes in payroll costs will depend of the age, service, and salary characteristics of each participating employee and their propensity to retire. Some cost shifting from one employer to another is likely to occur.

2. Other Post-Employment Benefits (OPEB)

Actuarial costs or savings for SB 514 associated with OPEB, including retiree health insurance premiums, are expected to increase. Our analysis is summarized below.

Members who earn benefits equal to 100% of their average compensation can be expected to retire at an earlier date, and collect OPEB benefits sooner and for a longer period of time.

3. Other Government Entities

Actuarial costs or savings for SB 514 associated with government entities other than MPERS and its sponsoring employers are expected to be $0.

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

Unless indicated otherwise, the actuarial note for SB 514 was prepared using actuarial data, methods, and assumptions as disclosed in the most recent actuarial valuation report adopted by 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.

C. Actuarial Caveat
(Prepared by the LLA)

There is nothing in SB 514 that will compromise the signing actuary's ability to present an unbiased statement of actuarial opinion.

II. FISCAL ANALYSIS SECTION

This section of the actuarial note pertains to fiscal costs or savings associated with the retirement systems (Table A1), with the sponsoring employers of MPERS (Table (A2), with OPEB (Table B), and with other fiscal costs or savings associated with government entities not associated with either the retirement systems, its sponsors, or OPEB (Table C). Fiscal costs or savings in Tables A1 and A2 include administrative costs associated with the retirement systems and the sponsoring government entities. The total effect of SB 514 on fiscal costs, fiscal savings, or cash flows is presented in Table D.

A. Estimated Fiscal Impact – Retirement Systems
(Prepared by the 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 A1

EXPENDITURES	2018-19	2019-2020	2020-2021	2021-2022	2022-23	5 Year Total
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	Decrease	Decrease	Decrease	Decrease	Decrease
Annual Total	Increase	Increase	Increase	Increase	Increase	Increase

REVENUES	2018-19	2019-2020	2020-2021	2021-2022	2022-23	5 Year Total
State General Fund	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Agy Self Generated	0	Decrease	Decrease	Decrease	Decrease	Decrease
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	Decrease	Decrease	Decrease	Decrease	Decrease

SB 514 will have the following effects on retirement related fiscal costs and revenues during the five-year measurement period. The following analysis assumes that all participants in MPERS with 30 or more years of service will retire immediately and all who attain 30 years of service in the future will retire as soon as they attain 30 years.

2. Expenditures (MPERS)

   Effect on MPERS' Expenditures (Agy Self-Generated)

   a. Expenditures from MPERS (Agy Self-Generated) will not change because pension benefits for an individual retiring with 30 or more years of service will be the same regardless of whether current law applies or SB 514 applies.

   b. However, expenditures from MPERS (Agy Self-Generated) will increase because members will be retiring earlier than they would have otherwise. As a result, pension benefits will be paid from the system for a longer period of time under SB 514 than they are currently being paid under current law.

3. Revenues (MPERS)

   Effect on MPERS Revenues (Agy Self-Generated)

   a. MPERS revenues (Agy Self-Generated) will decrease to the extent that employer contribution requirements decrease with the enactment of SB 514.

   b. MPERS revenues (Agy Self-Generated) will remain the same relative to an active member who works after attaining 30 years of service. Under current law, the employer contributes 32.25% of pay, but the member contributes 0.00%. Under SB 514, the employer will contribute 0.00% of pay, but the member will contribute 32.25% of pay. In either case, MPERS' revenues relative the member is 32.25% of pay.

Fiscal Costs for Employer Sponsor's of MPERS: Table A2

EXPENDITURES	**2018-19**	**2019-2020**	**2020-2021**	**2021-2022**	**2022-23**	**5 Year Total**
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	Decrease	Decrease	Decrease	Decrease	Decrease	Decrease
Annual Total	Decrease	Decrease	Decrease	Decrease	Decrease	Decrease

REVENUES	**2018-19**	**2019-2020**	**2020-2021**	**2021-2022**	**2022-23**	**5 Year Total**
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

4. Expenditures (Employer Sponsors)

   Effect on Employer Sponsors (Local Funds)

   a. Expenditures from Local Funds will decrease as a result of SB 514 because everyone who attains or has attained 30 or more years of service will retire. The employer payroll for those with 30 or more years of service will become $0. Even if everyone who retires is replaced with a new employee, payroll will still be less because the salaries of replacement workers will be less than the salaries of those who retired.

   b. The employer contribution rate will increase as a result of SB 514. However, the new rate will be applied against a smaller payroll. The net effect will be a decrease in employer contributions.

   c. On the other hand, local employers will not be contributing for anyone with 30 or more years of service. This will cause employer contribution rates to decrease.

   d. The net effect of SB 514 on employer contribution requirements will be a decrease.

   e. The net effect of SB 514 on Local Funds will be a decrease – a decrease in payroll and a decrease in employer contribution requirements.

5. Revenues (Employer Sponsors)

   Effect on Revenues of Employers Participating in MPERS (Local Funds)

   a. SB 514 has no effect on revenues of the sponsoring employers of MPERS.

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

1. Narrative

Table B shows the estimated fiscal impact of SB 514 on actuarial costs or savings associated with OPEB and the government entities that sponsor these benefit programs. Fiscal costs or savings in Table B include administrative costs associated with the government entity sponsoring the OPEB program. 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

EXPENDITURES	2018-19	2019-2020	2020-2021	2021-2022	2022-23	5 Year Total
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

REVENUES	2018-19	2019-2020	2020-2021	2021-2022	2022-23	5 Year Total
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

SB 514 will have the following effects on OPEB related fiscal costs and revenues during the five year measurement period.

2. Expenditures:

   a. Expenditures from the Local Funds will increase to the extent that the local employer provides an OPEB program. Such premiums will be paid for a longer period of time should SB 514 be enacted.

3. Revenues:

   a. OPEB revenues will increase to the extent that sponsoring employers participate in self-funded OPEB programs administered by the state of Louisiana.

C. Estimated Fiscal Impact: Other Government Entities (unrelated to the retirement systems or OPEB)
(Prepared by Bradley Cryer, Assistant Legislative Auditor)

1. Narrative

From time to time, legislation is proposed that has an indirect effect on cash flows associated with other government entities, unrelated to the retirement systems or OPEB. Table C shows the estimated fiscal impact (administrative and actuarial) of SB 514 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

EXPENDITURES	2018-19	2019-2020	2020-2021	2021-2022	2022-23	5 Year Total
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	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0

REVENUES	2018-19	2019-2020	2020-2021	2021-2022	2022-23	5 Year Total
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

SB 514 will have the following effects on fiscal costs and revenues related to other government entities during the five year measurement period.

2. Expenditures:

This bill will have an impact on participating employers' ability to retain experienced employees. The additional recruiting, hiring, and administrative costs may or may not be offset by decreased staffing or decreased payroll costs for potentially replacing higher-paid employees with lower-paid employees; consequently, the net fiscal impact on expenditures cannot be accurately estimated for the five-year period.

3. Revenues:

This bill is not expected to have a fiscal impact.

D. <u>Estimated Fiscal Impact − All Retirement Systems, Employer Sponsors of MPERS, OPEB, and All Government Entities</u> (Prepared by the LLA)

1. Narrative

Table D shows the estimated fiscal impact of SB 514 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 A1, A2, B, & C)

EXPENDITURES	2018-19	2019-2020	2020-2021	2021-2022	2022-23	5 Year Total
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	Decrease	Decrease	Decrease	Decrease	Decrease	Decrease
Annual Total	Increase	Increase	Increase	Increase	Increase	Increase

REVENUES	2018-19	2019-2020	2020-2021	2021-2022	2022-23	5 Year Total
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

<u>Credentials of the Signatory Staff:</u>

Paul T. Richmond is the Manager of Actuarial Services 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.

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Bradley Cryer, Assistant Legislative Auditor, has supervised the preparation of the fiscal analyses contained herein.

<u>Information Pertaining to Article (10)(29(F) of the Louisiana Constitution</u>

[X] SB 514 contains a retirement system benefit provision having an actuarial cost.

Some members of MPERS will collect benefits for a longer period of time due to the enactment of SB 514 than they would have without SB 514.

<u>Dual Referral Relative to Total Fiscal Costs or Total Cash Flows:</u>

The information presented below is based on information contained in Table D for the first three years following the 2018 regular session.

Senate			**House**		
[ ]	13.5.1	Applies to Senate or House Instruments. If an annual fiscal cost ≥ \$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 ≥ \$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 ≥ \$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 ≥ \$500,000, then the bill is dual referred to: **Dual Referral: Ways and Means**