

# CITY OF SUNRISE POLICE OFFICERS' RETIREMENT SYSTEM

Chapter 112.664, F.S. Compliance Report In Connection with the October 1, 2015 Funding Actuarial Valuation Report And the Plan's Financial Reporting for the Year Ending September 30, 2015

July 11, 2016

**Board of Trustees** City of Sunrise Police Officers' Retirement System Sunrise, Florida

#### Dear Board Members:

Gabriel, Roeder, Smith & Company (GRS) has been engaged by the City of Sunrise Police Officers' Retirement System (Plan) to prepare a disclosure report to satisfy the requirements set forth in Ch. 112.664, F.S. and as further required pursuant to Ch. 60T-1.0035, F.A.C.

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Suite 505

This report was prepared at the request of the Board and is intended for use by the Retirement System and those designated or approved by the Board. This report may be provided to parties other than the System only in its entirety and only with the permission of the Board.

The purpose of the report is to provide the required information specified in Ch. 112.664, F.S. as well as supplement this information with additional exhibits. This report should not be relied on for any purpose other than the purpose described above.

The findings in this report are based on data or other information through September 30, 2015. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; 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 plan's funded status); and changes in plan provisions or applicable law. The scope of this engagement does not include an analysis of the potential range of such measurements.

This report was based upon information furnished by the City and Plan Administrator concerning Plan benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not otherwise audit the data. We are not responsible for the accuracy or completeness of the information provided by the City and Plan Administrator.

Except as otherwise indicated as required for the disclosures contained herein, this report was prepared using certain assumptions selected by the Board as described in our October 1, 2015 actuarial valuation report. This report is also based on the Plan Provisions, census data, and financial information as summarized in our October 1, 2015 actuarial valuation report. Please refer to the October 1, 2015 actuarial valuation report, dated May 3, 2016, for summaries and descriptions of this information.

The use of an investment return assumption that is 2% higher than the investment return assumption used to determine the funding requirements does not represent an estimate of future Plan experience nor does it reflect an observation of future return estimates inherent in financial market data. The use of this investment return assumption is provided as a counterpart to the Chapter 112.664, Florida Statutes requirement to utilize an investment return assumption that is 2% lower than the assumption used to determine the funding requirements. The inclusion of the additional exhibits showing the effect of using a 2% higher investment return assumption shows a more complete assessment of the range of possible results as opposed to showing a one-sided range as required by Florida Statutes.

Jeffrey Amrose and Trisha Amrose are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. The signing actuaries are independent of the plan sponsor.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the Retirement Plan as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board and with applicable statutes.

With respect to the reporting standards for defined benefit retirement plans or systems contained in Section 112.664(1) F.S., the actuarial disclosures required under this section were prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, meet the requirements of Section 112.664(1), F.S. and Section 60T-1.0035, F.A.C.

Respectfully submitted,

GABRIEL, ROEDER, SMITH AND COMPANY

By

Jeffrey Amrose, MAAA Enrolled Actuary No. 14-6599 Senior Consultant & Actuary Trisha Amrose, MAAA

Enrolled Actuary No. 14-8010

Consultant & Actuary

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# CH. 112.664, Florida Statutes RESULTS

# Schedule of Changes in the Employers' Net Pension Liability Using Financial Reporting Assumptions per GASB Statement No. 67

Fiscal year ending September 30,	2015	
1. Total pension liability		
a. Service Cost	\$	4,068,061
b. Interest		12,756,539
c. Benefit Changes		-
d. Difference between actual & expected experience & Other		(417,253)
e. Assumption Changes		6,918,969
f. Benefit Payments		(5,761,251)
g. Contribution Refunds		(56,610)
h. Net Change in Total Pension Liability		17,508,455
i. Total Pension Liability - Beginning		158,297,607
j. Total Pension Liability - Ending	\$	175,806,062
2. Plan Fiduciary Net Position		
a. Contributions - Employer	\$	8,194,759
b. Contributions - Employer (from State)	·	639,176
c. Contributions - Member		1,524,051
d. Net Investment Income		366,132
e. Benefit Payments		(5,761,251)
f. Contribution Refunds		(56,610)
g. Administrative Expense		(231,098)
h. Other		-
i. Net Change in Plan Fiduciary Net Position		4,675,159
j. Plan Fiduciary Net Position - Beginning		105,563,905
k. Plan Fiduciary Net Position - Ending	\$	110,239,064
3. Net Pension Liability / (Asset)		65,566,998
Certain Key Assumptions		
Valuation Date		10/01/2014
Measurement Date		09/30/2015
Investment Return Assumption		7.80%
Mortality Table	RP-200	0 fully generational
		using Scale AA



# Schedule of Changes in the Employers' Net Pension Liability Using Assumptions required under 112.664(1)(a), F.S.

Fiscal year ending September 30,	2015	
1. Total pension liability		
a. Service Cost	\$	4,068,061
b. Interest		12,756,539
c. Benefit Changes		-
d. Difference between actual & expected experience & Other		(417,253)
e. Assumption Changes		6,918,969
f. Benefit Payments		(5,761,251)
g. Contribution Refunds		(56,610)
h. Net Change in Total Pension Liability		17,508,455
i. Total Pension Liability - Beginning		158,297,607
j. Total Pension Liability - Ending	\$	175,806,062
2. Plan Fiduciary Net Position		
a. Contributions - Employer	\$	8,194,759
b. Contributions - Employer (from State)	·	639,176
c. Contributions - Member		1,524,051
d. Net Investment Income		366,132
e. Benefit Payments		(5,761,251)
f. Contribution Refunds		(56,610)
g. Administrative Expense		(231,098)
h. Other		-
i. Net Change in Plan Fiduciary Net Position		4,675,159
j. Plan Fiduciary Net Position - Beginning		105,563,905
k. Plan Fiduciary Net Position - Ending	\$	110,239,064
3. Net Pension Liability / (Asset)		65,566,998
Certain Key Assumptions		
Valuation Date		10/01/2014
Measurement Date		09/30/2015
Investment Return Assumption		7.80%
Mortality Table	RP-200	0 fully generational
		using Scale AA



# Schedule of Changes in the Employers' Net Pension Liability Using Assumptions required under 112.664(1)(b), F.S.

Fiscal year ending September 30,	2015	
1. Total pension liability		
a. Service Cost	\$	6,554,188
b. Interest		12,635,059
c. Benefit Changes		-
d. Difference between actual & expected experience & Other		-
e. Assumption Changes		-
f. Benefit Payments		(5,761,251)
g. Contribution Refunds		(56,610)
h. Net Change in Total Pension Liability		13,371,386
i. Total Pension Liability - Beginning		214,200,594
j. Total Pension Liability - Ending	\$	227,571,980
2. Plan Fiduciary Net Position		
a. Contributions - Employer	\$	8,194,759
b. Contributions - Employer (from State)	•	639,176
c. Contributions - Member		1,524,051
d. Net Investment Income		366,132
e. Benefit Payments		(5,761,251)
f. Contribution Refunds		(56,610)
g. Administrative Expense		(231,098)
h. Other		-
i. Net Change in Plan Fiduciary Net Position		4,675,159
j. Plan Fiduciary Net Position - Beginning		105,563,905
k. Plan Fiduciary Net Position - Ending	\$	110,239,064
3. Net Pension Liability / (Asset)		117,332,916
Certain Key Assumptions		
Valuation Date		10/01/2014
Measurement Date		09/30/2015
Investment Return Assumption		5.80%
Mortality Table	RP-200	0 fully generational
		using Scale AA



# Schedule of Changes in the Employers' Net Pension Liability Using Assumptions under 112.664(1)(b), F.S. except 2% higher investment return assumption

Fiscal year ending September 30,	year ending September 30, 2015	
1. Total pension liability		
a. Service Cost	\$	2,691,535
b. Interest		12,882,356
c. Benefit Changes		-
d. Difference between actual & expected experience & Other		-
e. Assumption Changes		-
f. Benefit Payments		(5,761,251)
g. Contribution Refunds		(56,610)
h. Net Change in Total Pension Liability		9,756,030
i. Total Pension Liability - Beginning		131,670,006
j. Total Pension Liability - Ending	\$	141,426,036
2. Plan Fiduciary Net Position		
a. Contributions - Employer	\$	8,194,759
b. Contributions - Employer (from State)	Ψ	639,176
c. Contributions - Member		1,524,051
d. Net Investment Income		366,132
e. Benefit Payments		(5,761,251)
f. Contribution Refunds		(56,610)
g. Administrative Expense		(231,098)
h. Other		(231,070)
i. Net Change in Plan Fiduciary Net Position		4,675,159
j. Plan Fiduciary Net Position - Beginning		105,563,905
k. Plan Fiduciary Net Position - Ending	\$	110,239,064
3. Net Pension Liability / (Asset)		31,186,972
Certain Key Assumptions		
Valuation Date		10/01/2014
Measurement Date		09/30/2015
Investment Return Assumption		9.80%
Mortality Table	RP-2000	) fully generational
		using Scale AA



#### Asset and Benefit Payment Projection Not Reflecting Any Contributions from the Employer, State or Employee Using Assumptions per the Plan's latest Actuarial Valuation

	Market Value of	<b>Expected Investment</b>	<b>Projected Benefit</b>	Market Value of
<b>FYE</b>	Assets (BOY)	Return	<b>Payments</b>	Assets (EOY)
2016	101,549,566	7,636,496	7,291,536	101,894,526
2017	101,894,526	7,642,206	7,835,042	101,701,691
2018	101,701,691	7,599,355	8,548,132	100,752,913
2019	100,752,913	7,504,791	9,075,278	99,182,427
2020	99,182,427	7,351,577	9,862,891	96,671,112
2021	96,671,112	7,123,711	10,682,973	93,111,850
2022	93,111,850	6,821,755	11,306,895	88,626,711
2023	88,626,711	6,448,023	11,919,498	83,155,236
2024	83,155,236	6,005,851	12,314,297	76,846,789
2025	76,846,789	5,497,214	12,739,379	69,604,624
2026	69,604,624	4,915,286	13,176,283	61,343,627
2027	61,343,627	4,257,648	13,516,797	52,084,478
2028	52,084,478	3,524,813	13,789,138	41,820,152
2029	41,820,152	2,712,076	14,099,882	30,432,347
2030	30,432,347	1,814,013	14,351,551	17,894,808
2031	17,894,808	827,186	14,579,723	4,142,271
2032	4,142,271	-	14,805,755	-
2033	-	-	14,984,027	-
2034	-	-	15,188,713	-
2035	-	-	15,359,312	-
2036	-	-	15,509,188	-
2037	-	-	15,641,452	-
2038	-	-	15,754,107	-
2039	-	-	15,829,811	-
2040	-	-	15,908,481	-
2041	-	-	15,956,248	-

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits, <u>reflecting no contributions from the Employer</u>, Employee or State, contrary to Florida Statutes and Plan provisions:

16.25

#### **Certain Key Assumptions**

Valuation Investment return assumption Valuation Mortality Table 7.80%

RP-2000 fully generational using Scale AA

Note: As required in Section 112.664(c) of the Florida Statutes, the projection of the Fund assets <u>do not include contributions from the Employer, Employee or State, which is contrary to Florida Statutes and Plan provisions</u>. For this reason, these projections should not be viewed as a representation of the amount of time the Fund can sustain benefit payments. Under the GASB standards which DO include contributions from the employer, employee and State, the Fund is expected to be able to sustain the benefit payment demands in the near-term and long-term future.



#### Asset and Benefit Payment Projection Not Reflecting Any Contributions from the Employer, State or Employee Using Assumptions required under 112.664(1)(a), F.S.

	Market Value of	<b>Expected Investment</b>	Projected Benefit	Market Value of
<b>FYE</b>	Assets (BOY)	Return	<b>Payments</b>	Assets (EOY)
2016	101,549,566	7,636,496	7,291,536	101,894,526
2017	101,894,526	7,642,206	7,835,042	101,701,691
2018	101,701,691	7,599,355	8,548,132	100,752,913
2019	100,752,913	7,504,791	9,075,278	99,182,427
2020	99,182,427	7,351,577	9,862,891	96,671,112
2021	96,671,112	7,123,711	10,682,973	93,111,850
2022	93,111,850	6,821,755	11,306,895	88,626,711
2023	88,626,711	6,448,023	11,919,498	83,155,236
2024	83,155,236	6,005,851	12,314,297	76,846,789
2025	76,846,789	5,497,214	12,739,379	69,604,624
2026	69,604,624	4,915,286	13,176,283	61,343,627
2027	61,343,627	4,257,648	13,516,797	52,084,478
2028	52,084,478	3,524,813	13,789,138	41,820,152
2029	41,820,152	2,712,076	14,099,882	30,432,347
2030	30,432,347	1,814,013	14,351,551	17,894,808
2031	17,894,808	827,186	14,579,723	4,142,271
2032	4,142,271	-	14,805,755	-
2033	=	=	14,984,027	=
2034	-	-	15,188,713	-
2035	=	=	15,359,312	=
2036	-	-	15,509,188	-
2037	=	=	15,641,452	=
2038	=	=	15,754,107	=
2039	-	-	15,829,811	-
2040	-	=	15,908,481	-
2041	-	-	15,956,248	-

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits, <u>reflecting no contributions from the Employer</u>, <u>Employee or State</u>, <u>contrary to Florida Statutes and Plan provisions</u>:

16.25

#### **Certain Key Assumptions**

Valuation Investment return assumption Valuation Mortality Table

7.80%

RP-2000 fully generational using Scale AA

Note: As required in Section 112.664(c) of the Florida Statutes, the projection of the Fund assets <u>do not include contributions</u> from the Employer, Employee or State, which is contrary to Florida Statutes and Plan <u>provisions</u>. For this reason, these projections should not be viewed as a representation of the amount of time the Fund can sustain benefit payments. Under the GASB standards which DO include contributions from the employer, employee and State, the Fund is expected to be able to sustain the benefit payment demands in the near-term and long-term future.



### Asset and Benefit Payment Projection Not Reflecting Any Contributions from the Employer, State or Employee Using Assumptions required under 112.664(1)(b), F.S.

	Market Value of	<b>Expected Investment</b>	<b>Projected Benefit</b>	Market Value of
<b>FYE</b>	Assets (BOY)	Return	<b>Payments</b>	Assets (EOY)
2016	101,549,566	5,678,420	7,291,536	99,936,450
2017	99,936,450	5,569,098	7,835,042	97,670,506
2018	97,670,506	5,416,994	8,548,132	94,539,368
2019	94,539,368	5,220,100	9,075,278	90,684,190
2020	90,684,190	4,973,659	9,862,891	85,794,958
2021	85,794,958	4,666,301	10,682,973	79,778,287
2022	79,778,287	4,299,241	11,306,895	72,770,632
2023	72,770,632	3,875,031	11,919,498	64,726,165
2024	64,726,165	3,397,003	12,314,297	55,808,871
2025	55,808,871	2,867,473	12,739,379	45,936,965
2026	45,936,965	2,282,232	13,176,283	35,042,914
2027	35,042,914	1,640,502	13,516,797	23,166,619
2028	23,166,619	943,779	13,789,138	10,321,259
2029	10,321,259	189,736	14,099,882	-
2030	-	-	14,351,551	-
2031	-	-	14,579,723	-
2032	-	-	14,805,755	-
2033	-	-	14,984,027	-
2034	-	-	15,188,713	-
2035	-	-	15,359,312	-
2036	-	-	15,509,188	-
2037	-	-	15,641,452	-
2038	-	-	15,754,107	-
2039	-	-	15,829,811	-
2040	-	-	15,908,481	-
2041	-	-	15,956,248	-

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits, <u>reflecting no contributions from the Employer</u>, Employee or State, contrary to Florida Statutes and Plan provisions:

13.75

#### **Certain Key Assumptions**

Valuation Investment return assumption Valuation Mortality Table

5.80%

RP-2000 fully generational using Scale AA

Note: As required in Section 112.664(c) of the Florida Statutes, the projection of the Fund assets do not include contributions from the Employer, Employee or State, which is contrary to Florida Statutes and Plan provisions. For this reason, these projections should not be viewed as a representation of the amount of time the Fund can sustain benefit payments. Under the GASB standards which DO include contributions from the employer, employee and State, the Fund is expected to be able to sustain the benefit payment demands in the near-term and long-term future.



### Asset and Benefit Payment Projection Not Reflecting Any Contributions from the Employer, State or Employee Using Assumptions under 112.664(1)(b), F.S. except 2% higher investment return assumption

	Market Value of	<b>Expected Investment</b>	<b>Projected Benefit</b>	Market Value of
<b>FYE</b>	Assets (BOY)	Return	<b>Payments</b>	Assets (EOY)
2016	101,549,566	9,594,572	7,291,536	103,852,602
2017	103,852,602	9,793,638	7,835,042	105,811,198
2018	105,811,198	9,950,639	8,548,132	107,213,705
2019	107,213,705	10,062,254	9,075,278	108,200,682
2020	108,200,682	10,120,385	9,862,891	108,458,176
2021	108,458,176	10,105,436	10,682,973	107,880,638
2022	107,880,638	10,018,265	11,306,895	106,592,008
2023	106,592,008	9,861,961	11,919,498	104,534,471
2024	104,534,471	9,640,978	12,314,297	101,861,152
2025	101,861,152	9,358,163	12,739,379	98,479,936
2026	98,479,936	9,005,396	13,176,283	94,309,049
2027	94,309,049	8,579,964	13,516,797	89,372,216
2028	89,372,216	8,082,809	13,789,138	83,665,887
2029	83,665,887	7,508,363	14,099,882	77,074,368
2030	77,074,368	6,850,062	14,351,551	69,572,879
2031	69,572,879	6,103,736	14,579,723	61,096,892
2032	61,096,892	5,262,013	14,805,755	51,553,150
2033	51,553,150	4,317,991	14,984,027	40,887,115
2034	40,887,115	3,262,690	15,188,713	28,961,092
2035	28,961,092	2,085,581	15,359,312	15,687,361
2036	15,687,361	777,411	15,509,188	955,584
2037	955,584	-	15,641,452	-
2038	-	-	15,754,107	-
2039	-	-	15,829,811	-
2040	-	-	15,908,481	-
2041	-	-	15,956,248	-

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits, <u>reflecting no contributions from the</u>

Employer, Employee or State, contrary to Florida Statutes and Plan provisions:

21.08

#### **Certain Key Assumptions**

Valuation Investment return assumption Valuation Mortality Table

9.80%

RP-2000 fully generational using Scale AA

Note: As required in Section 112.664(c) of the Florida Statutes, the projection of the Fund assets <u>do not include contributions from the Employer, Employee or State, which is contrary to Florida Statutes and Plan provisions</u>. For this reason, these projections should not be viewed as a representation of the amount of time the Fund can sustain benefit payments. Under the GASB standards which DO include contributions from the employer, employee and State, the Fund is expected to be able to sustain the benefit payment demands in the near-term and long-term future.



ACTUARIALLY DETERMINED CONTRIBUTION					
	Plan's Latest Actuarial Valuation Assumptions	112.664(1)(a) F.S. Assumptions	112.664(1)(b) F.S. Assumptions	112.664(1)(b) F.S. Except 2% Higher Investment Return Assumption	
A. Valuation Date	October 1, 2015	October 1, 2015	October 1, 2015	October 1, 2015	
B. Actuarially Determined Contribution (ADC) to Be Paid During Fiscal Year Ending	9/30/2017	9/30/2017	9/30/2017	9/30/2017	
C. Assumed Dates of Employer Contributions	Biweekly	Biweekly	Biweekly	Biweekly	
D. Annual Payment to Amortize Unfunded Actuarial Liability	\$ 6,488,493	\$ 6,488,493	\$ 9,191,450	\$ 4,161,499	
E. Employer Normal Cost	3,146,299	3,146,299	5,786,266	1,626,727	
F. Employer ADC if Paid on Valuation Date: D + E	9,634,792	9,634,792	14,977,716	5,788,226	
G. Employer ADC Adjusted for Frequency of Payments	10,010,934	10,010,934	15,416,563	6,069,534	
H. Employer ADC Adjusted for Frequency of Payments as % of Covered Payroll	65.85 %	65.85 %	101.41 %	39.92 %	
Assumed Rate of Increase in Covered     Payroll to Contribution Year	3.00 %	3.00 %	3.00 %	3.00 %	
J. Covered Payroll for Contribution Year	15,658,483	15,658,483	15,658,483	15,658,483	
K. ADC for Contribution Year: H x J	10,311,111	10,311,111	15,879,268	6,250,867	
L. Allowable Credit for State Revenue in Contribution Year	639,176	639,176	639,176	639,176	
M. Net Employer ADC After State Revenue in Contribution Year	9,671,935	9,671,935	15,240,092	5,611,691	
N. Net Employer ADC as % of Covered Payroll in Contribution Year: M ÷ J	61.77 %	61.77 %	97.33 %	35.84 %	
O. Expected Member Contributions	1,540,795	1,540,795	1,540,795	1,540,795	
P. Total Contribution (including Members) in Contributing Year: K + O	11,851,906	11,851,906	17,420,063	7,791,662	
Q. Total Contribution as a % of covered payroll in Contribution Year: P ÷ J	75.69 %	75.69 %	111.25 %	49.76 %	
R. Certain Key Assumptions Investment Return Assumption Mortality Table	7.80% RP-2000 fully generational using Scale AA	7.80% RP-2000 fully generational using Scale AA	5.80% RP-2000 fully generational using Scale AA	9.80% RP-2000 fully generational using Scale AA	

