



# CITY OF WINTER SPRINGS DEFINED BENEFIT PLAN

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 Fiscal Year Ended September 30, 2015

# GRS



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November 2, 2016

Board of Trustees c/o Mr. Shawn Boyle Finance and Administrative Services Director City of Winter Springs Defined Benefit Plan 1126 East State Road 434 Winter Springs, Florida 32708

### Re: October 1, 2015 Chapter 112.664 Compliance Report

Dear Board Members:

Gabriel, Roeder, Smith & Company (GRS) has been engaged by the Board of Trustees (Board) of the City of Winter Springs Defined Benefit Plan (Plan) to prepare a disclosure report to satisfy the requirements set forth in Chapter 112.664, F.S. and as further required pursuant to Chapter 60T-1.0035, F.A.C.

This report was prepared at the request of the Board and is intended for use by the Board and those designated or approved by the Board. This report may be provided to parties other than the Board 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 Chapter 112.664, F.S. and to supplement this information with additional exhibits. This report should not be relied on for any purpose other than the purpose described above.

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 the Board concerning Plan benefits, Plan provisions and Plan members as used in the corresponding Actuarial Valuation Reports for the Valuation Dates indicated. Financial information was provided by the City and Board as of September 30, 2015. We reviewed the information provided for internal and yearto-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 Board. Board of Trustees November 2, 2016 Page 2

Except where specific assumptions are required by Chapter 112.664, F.S, this report was prepared using actuarial assumptions adopted by the Board as described in Section C. The assumptions relating to incidence of disability were last updated October 1, 2014. The Board's assumptions are based on past and expected future Plan experience and represent an estimate of future Plan experience.

The investment return assumption of 2% higher than the investment return assumption utilized in the Actuarial Valuation Report does not represent an estimate of future Plan experience nor observation of the estimates inherent in market data. This assumption is provided as a counterpart to the Chapter 112.664, F.S. requirement to utilize an investment return assumption of 2% lower than the investment return assumption utilized in the Actuarial Valuation Report. The inclusion of the additional 2% higher assumption shows a more complete assessment of the range of potential results as opposed to the *one-sided* range required by statute.

If all actuarial assumptions are met and if all current and future minimum required contributions are paid, Plan assets will be sufficient to pay all Plan benefits. Plan minimum required contributions are determined in compliance with the requirements of the Florida Protection of Public Employee Retirement Benefits Act with normal cost determined as a level percent of covered payroll and a level dollar amortization payment using an initial closed amortization period of 30 years.

The Plan's funded ratio as of October 1, 2015 is 73.0% defined as the ratio of the market value of Plan assets to the actuarial accrued liability.

The Plan's funded ratio and the GASB Net Pension Liability may not be appropriate for assessing the sufficiency of Plan assets to meet the estimated cost of settling benefit obligations but may be appropriate for assessing the need for or the amount of future contributions.

The undersigned 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 presents the actuarial position of the Plan as of the valuation date as required by statute. 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. Board of Trustees November 2, 2016 Page 3

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.

By\_

Respectfully submitted,

GABRIEL, ROEDER, SMITH AND COMPANY

By

Lawrence F. Wilson, M.A.A.A Enrolled Actuary No. 14-02802 Senior Consultant & Actuary

Date: November 2, 2016

Jennifer Borregard

Jennifer M. Borregard, M.A.A.A Enrolled Actuary No. 14-07624 Consultant & Actuary

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# SECTION A

# CHAPTER 112.664, F.S. RESULTS

### Net Pension Liability Using Financial Reporting Assumptions per GASB Statements No. 67 and No. 68

	Measurement Date	Sep	otember 30, 2015
A.	Total Pension Liability (TPL)		
	Service Cost	\$	834,402
	Interest		3,851,130
	Benefit Changes		0
	Difference Between Actual and Expected Experience		(107,513)
	Assumption Changes		8,107
	Benefit Payments		(2,202,769)
	Contribution Refunds		0
	Other		0
	Net Change in Total Pension Liability	\$	2,383,357
	Total Pension Liability (TPL) - (beginning of year)		48,505,511
	Total Pension Liability (TPL) - (end of year)	\$	50,888,868
B.	Plan Fiduciary Net Position		
	Contributions - County and City	\$	2,392,948
	Contributions - Member		358,106
	Net Investment Income		5,160
	Benefit Payments		(2,202,769)
	Contribution Refunds		0
	Administrative Expenses		(11,937)
	Other		0
	Net Change in Plan Fiduciary Net Position	\$	541,508
	Plan Fiduciary Net Position - (beginning of year)		36,821,261
	Plan Fiduciary Net Position - (end of year)	\$	37,362,769
C.	Net Pension Liability (NPL) - (end of year): (A) - (B)	\$	13,526,099
	Valuation Date		October 1, 2014
Ce	rtain Key Assumptions		
Inv	estment Return Assumption		8.0%

Investment Return Assumption

Mortality Table:

Healthy General Members: RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA. Healthy Firefighter and Police Officer Members: RP-2000 Combined Healthy Participant Mortality Tables with Blue Collar Adjustment, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA. Disabled Members: RP-2000 Disabled Mortality Tables, separate rates for males and females, with fully generational mortality Tables, separate rates for males and females, with fully generational mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA. Disabled Members: RP-2000 Disabled Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

### Net Pension Liability Using Assumptions Required Under 112.664(1)(a), F.S.

	Measurement Date	Sept	ember 30, 2015
A.	Total Pension Liability (TPL)		
	Service Cost	\$	845,215
	Interest		3,881,782
	Benefit Changes		0
	Difference Between Actual and Expected Experience		(138,375)
	Assumption Changes		(49,919)
	Benefit Payments		(2,202,769)
	Contribution Refunds		0
	Other		0
	Net Change in Total Pension Liability	\$	2,335,934
	Total Pension Liability (TPL) - (beginning of year)		48,966,743
	Total Pension Liability (TPL) - (end of year)	\$	51,302,677
В.	Plan Fiduciary Net Position		
	Contributions - County and City	\$	2,392,948
	Contributions - Member		358,106
	Net Investment Income		5,160
	Benefit Payments		(2,202,769)
	Contribution Refunds		0
	Administrative Expenses		(11,937)
	Other		0
	Net Change in Plan Fiduciary Net Position	\$	541,508
	Plan Fiduciary Net Position - (beginning of year)		36,821,261
	Plan Fiduciary Net Position - (end of year)	\$	37,362,769
C.	Net Pension Liability (NPL) - (end of year): (A) - (B)	\$	13,939,908
	Valuation Date		October 1, 2014
Cer	rtain Key Assumptions		
Inv	estment Return Assumption		8.0%
Mo	ortality Table:		

RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

## Net Pension Liability Using Assumptions Required Under 112.664(1)(b), F.S.

	Measurement Date	Sep	tember 30, 2015
A.	Total Pension Liability (TPL)		
	Service Cost	\$	1,393,707
	Interest		3,733,049
	Benefit Changes		0
	Difference Between Actual and Expected Experience		(187,539)
	Assumption Changes		(51,218)
	Benefit Payments		(2,202,769)
	Contribution Refunds		0
	Other		0
	Net Change in Total Pension Liability	\$	2,685,230
	Total Pension Liability (TPL) - (beginning of year)		62,163,926
	Total Pension Liability (TPL) - (end of year)	\$	64,849,156
B.	Plan Fiduciary Net Position		
	Contributions - County and City	\$	2,392,948
	Contributions - Member		358,106
	Net Investment Income		5,160
	Benefit Payments		(2,202,769)
	Contribution Refunds		0
	Administrative Expenses		(11,937)
	Other		0
	Net Change in Plan Fiduciary Net Position	\$	541,508
	Plan Fiduciary Net Position - (beginning of year)		36,821,261
	Plan Fiduciary Net Position - (end of year)	\$	37,362,769
C.	Net Pension Liability (NPL) - (end of year): (A) - (B)	\$	27,486,387
	Valuation Date		October 1, 2014
Ce	rtain Key Assumptions		
Inv	estment Return Assumption		6.0%
Mo	ortality Table:		

RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

### Net Pension Liability

# Using Assumptions Required Under 112.664(1)(a), F.S. Plus 2% on Investment Return Assumption

	Measurement Date	Sept	ember 30, 2015
A.	Total Pension Liability (TPL)		
	Service Cost	\$	525,397
	Interest		3,888,828
	Benefit Changes		0
	Difference Between Actual and Expected Experience		(96,344)
	Assumption Changes		(48,837)
	Benefit Payments		(2,202,769)
	Contribution Refunds		0
	Other		0
	Net Change in Total Pension Liability		2,066,275
	Total Pension Liability (TPL) - (beginning of year)		39,609,450
	Total Pension Liability (TPL) - (end of year)	\$	41,675,725
В.	Plan Fiduciary Net Position		
	Contributions - County and City	\$	2,392,948
	Contributions - Member		358,106
	Net Investment Income		5,160
	Benefit Payments		(2,202,769)
	Contribution Refunds		0
	Administrative Expenses		(11,937)
	Other		0
	Net Change in Plan Fiduciary Net Position		541,508
	Plan Fiduciary Net Position - (beginning of year)		36,821,261
	Plan Fiduciary Net Position - (end of year)	\$	37,362,769
C.	Net Pension Liability (NPL) - (end of year): (A) - (B)	\$	4,312,956
	Valuation Date		October 1, 2014
Cer	rtain Key Assumptions		
Inv	estment Return Assumption		10.0%
Mo	rtality Table:		

RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

#### Asset and Benefit Payment Projection Not Reflecting Any Future Contributions Using Financial Reporting Assumptions per GASB Statements No. 67 and No. 68

	Market Value of	Expected	Investment	Projec	ted Benefit	Mark	ket Value of
FYE	Assets (BOY)	Re	turn	Pa	yments	Ass	ets (EOY)
2016	\$ 37,362,769	\$	2,878,978	\$	2,569,681	\$	37,672,066
2017	37,672,066		2,896,312		2,742,713		37,825,665
2018	37,825,665		2,902,405		2,887,369		37,840,701
2019	37,840,701		2,891,527		3,169,474		37,562,754
2020	37,562,754		2,862,927		3,318,081		37,107,600
2021	37,107,600		2,819,689		3,477,484		36,449,805
2022	36,449,805		2,755,010		3,758,980		35,445,835
2023	35,445,835		2,666,500		3,950,302		34,162,033
2024	34,162,033		2,558,049		4,084,485		32,635,597
2025	32,635,597		2,428,776		4,251,644		30,812,729
2026	30,812,729		2,277,091		4,388,367		28,701,453
2027	28,701,453		2,103,346		4,501,461		26,303,338
2028	26,303,338		1,907,383		4,597,529		23,613,192
2029	23,613,192		1,689,172		4,667,577		20,634,787
2030	20,634,787		1,447,481		4,747,408		17,334,860
2031	17,334,860		1,182,166		4,778,248		13,738,778
2032	13,738,778		893,715		4,796,095		9,836,398
2033	9,836,398		581,507		4,796,494		5,621,411
2034	5,621,411		246,188		4,752,593		1,115,006
2035	1,115,006		6,795		4,714,218		-
2036	-		-		4,639,339		-
2037	-		-		4,615,270		-
2038	-		-		4,576,153		-
2039	-		-		4,493,639		-
2040	-		-		4,395,212		-
2041	-		-		4,266,531		-
2042	-		-		4,130,506		-
2043	-		-		3,986,874		-
2044	-		-		3,830,085		-
2045	-		-		3,684,824		-
2046	-		-		3,523,537		-
2047	-		-		3,352,166		-

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits reflecting no contributions from the City, County or Members:

#### **Certain Key Assumptions**

Investment return assumption	8.0%
Mortality Table:	

Healthy General Members: RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA. Healthy Firefighter and Police Officer Members: RP-2000 Combined Healthy Participant Mortality Tables with Blue Collar Adjustment, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA. Disabled Members: RP-2000 Disabled Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

Note: As required in Section 112.664(c) of the Florida Statutes, the projection of Plan assets does not include future contributions from the City, County or Members. For this reason, this projection should not be viewed as representative of the amount of time the Plan can sustain benefit payments. Under the Government Accounting Standards Board standards which include City, County and Member contributions, the Plan is expected to be able to pay all future benefit payments.

19.17

### Asset and Benefit Payment Projection Not Reflecting Any Future Contributions Using Assumptions Required Under 112.664(1)(a), F.S.

Market Value of		Expected Investment	<b>Projected Benefit</b>	Market Value of		
FYE	Assets (BOY)	Return	Payments	Assets (EOY)		
2016	\$ 37,362,769	\$ 2,878,980	\$ 2,569,621	\$ 37,672,128		
2017	37,672,128	2,896,303	2,743,041	37,825,390		
2018	37,825,390	2,902,338	2,888,406	37,839,322		
2019	37,839,322	2,891,329	3,171,520	37,559,131		
2020	37,559,131	2,862,497	3,321,348	37,100,280		
2021	37,100,280	2,818,898	3,482,269	36,436,909		
2022	36,436,909	2,753,684	3,765,871	35,424,722		
2023	35,424,722	2,664,409	3,959,669	34,129,462		
2024	34,129,462	2,554,932	4,096,435	32,587,959		
2025	32,587,959	2,424,317	4,266,772	30,745,504		
2026	30,745,504	2,270,919	4,406,915	28,609,508		
2027	28,609,508	2,095,029	4,523,912	26,180,625		
2028	26,180,625	1,896,430	4,624,051	23,453,004		
2029	23,453,004	1,675,026	4,698,638	20,429,392		
2030	20,429,392	1,429,524	4,783,014	17,075,902		
2031	17,075,902	1,159,718	4,818,663	13,416,957		
2032	13,416,957	866,022	4,841,563	9,441,416		
2033	9,441,416	547,741	4,847,120	5,142,037		
2034	5,142,037	205,455	4,808,244	539,248		
2035	539,248	909	4,774,974	-		
2036	-	-	4,704,948	-		
2037	-	-	4,686,058	-		
2038	-	-	4,652,128	-		
2039	-	-	4,574,400	-		
2040	-	-	4,480,674	-		
2041	-	-	4,356,214	-		
2042	-	-	4,224,063	-		
2043	-	-	4,083,813	-		
2044	-	-	3,929,816	-		
2045	-	-	3,786,821	-		
2046	-	-	3,626,945	-		
2047	-	-	3,456,122	-		

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits reflecting no contributions from the City, County or Members:

#### **Certain Key Assumptions**

Investment return assumption Mortality Table:

RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

Note: As required in Section 112.664(c) of the Florida Statutes, the projection of Plan assets does not include future contributions from the City, County or Members. For this reason, this projection should not be viewed as representative of the amount of time the Plan can sustain benefit payments. Under the Government Accounting Standards Board standards which include City, County and Member contributions, the Plan is expected to be able to pay all future benefit payments.

19.08

8.0%

### Asset and Benefit Payment Projection Not Reflecting Any Future Contributions <u>Using Assumptions Required Under 112.664(1)(b), F.S.</u>

	Market Value of	Expected Investment	<b>Projected Benefit</b>	Market Value of
FYE	Assets (BOY)	Return	Payments	Assets (EOY)
2016	\$ 37,362,769	\$ 2,158,997	\$ 2,569,621	\$ 36,952,145
2017	36,952,145	2,128,773	2,743,041	36,337,877
2018	36,337,877	2,087,235	2,888,406	35,536,706
2019	35,536,706	2,030,045	3,171,520	34,395,231
2020	34,395,231	1,956,731	3,321,348	33,030,614
2021	33,030,614	1,869,671	3,482,269	31,418,016
2022	31,418,016	1,763,780	3,765,871	29,415,925
2023	29,415,925	1,637,412	3,959,669	27,093,668
2024	27,093,668	1,493,671	4,096,435	24,490,904
2025	24,490,904	1,332,019	4,266,772	21,556,151
2026	21,556,151	1,151,419	4,406,915	18,300,655
2027	18,300,655	952,321	4,523,912	14,729,064
2028	14,729,064	734,800	4,624,051	10,839,813
2029	10,839,813	499,042	4,698,638	6,640,217
2030	6,640,217	244,349	4,783,014	2,101,552
2031	2,101,552	22,138	4,818,663	-
2032	-	-	4,841,563	-
2033	-	-	4,847,120	-
2034	-	-	4,808,244	-
2035	-	-	4,774,974	-
2036	-	-	4,704,948	-
2037	-	-	4,686,058	-
2038	-	-	4,652,128	-
2039	-	-	4,574,400	-
2040	-	-	4,480,674	-
2041	-	-	4,356,214	-
2042	-	-	4,224,063	-
2043	-	-	4,083,813	-
2044	-	-	3,929,816	-
2045	-	-	3,786,821	-
2046	-	-	3,626,945	-
2047	-	-	3,456,122	-

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits reflecting no contributions from the City, County or Members:

### 15.42

6.0%

#### **Certain Key Assumptions**

Investment return assumption

Mortality Table:

RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

Note: As required in Section 112.664(c) of the Florida Statutes, the projection of Plan assets does not include future contributions from the City, County or Members. For this reason, this projection should not be viewed as representative of the amount of time the Plan can sustain benefit payments. Under the Government Accounting Standards Board standards which include City, County and Member contributions, the Plan is expected to be able to pay all future benefit payments.

### Asset and Benefit Payment Projection Not Reflecting Any Future Contributions Using Assumptions Required Under 112.664(1)(a), F.S. Plus 2% on Investment Return Assumption

	Market Value of	Expecte	ed Investment	Proje	cted Benefit	Mark	xet Value of
FYE	Assets (BOY)		keturn	Pa	ayments	ASS	ets (EOY)
2016	\$ 37,362,769	\$	3,599,116	\$	2,569,621	\$	38,392,264
2017	38,392,264		3,692,808		2,743,041		39,342,031
2018	39,342,031		3,780,026		2,888,406		40,233,651
2019	40,233,651		3,854,076		3,171,520		40,916,207
2020	40,916,207		3,914,334		3,321,348		41,509,193
2021	41,509,193		3,965,043		3,482,269		41,991,967
2022	41,991,967		3,998,182		3,765,871		42,224,278
2023	42,224,278		4,011,068		3,959,669		42,275,677
2024	42,275,677		4,008,908		4,096,435		42,188,150
2025	42,188,150		3,991,063		4,266,772		41,912,441
2026	41,912,441		3,956,012		4,406,915		41,461,538
2027	41,461,538		3,904,676		4,523,912		40,842,302
2028	40,842,302		3,837,407		4,624,051		40,055,658
2029	40,055,658		3,754,762		4,698,638		39,111,782
2030	39,111,782		3,655,870		4,783,014		37,984,638
2031	37,984,638		3,541,253		4,818,663		36,707,228
2032	36,707,228		3,412,290		4,841,563		35,277,955
2033	35,277,955		3,269,066		4,847,120		33,699,901
2034	33,699,901		3,113,335		4,808,244		32,004,992
2035	32,004,992		2,945,620		4,774,974		30,175,638
2036	30,175,638		2,766,423		4,704,948		28,237,113
2037	28,237,113		2,573,579		4,686,058		26,124,634
2038	26,124,634		2,364,142		4,652,128		23,836,648
2039	23,836,648		2,139,492		4,574,400		21,401,740
2040	21,401,740		1,901,004		4,480,674		18,822,070
2041	18,822,070		1,649,681		4,356,214		16,115,537
2042	16,115,537		1,386,081		4,224,063		13,277,555
2043	13,277,555		1,109,770		4,083,813		10,303,512
2044	10,303,512		820,585		3,929,816		7,194,281
2045	7,194,281		517,295		3,786,821		3,924,755
2046	3,924,755		198,876		3,626,945		496,686
2047	496,686		1,664		3,456,122		-

Number of years for which current market value of assets are adequate to sustain the payment ofexpected retirement benefits reflecting no contributions from the City, County or Members:31.08

#### **Certain Key Assumptions**

Investment return assumption Mortality Table:

RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

Note: As required in Section 112.664(c) of the Florida Statutes, the projection of Plan assets does not include future contributions from the City, County or Members. For this reason, this projection should not be viewed as representative of the amount of time the Plan can sustain benefit payments. Under the Government Accounting Standards Board standards which include City, County and Member contributions, the Plan is expected to be able to pay all future benefit payments.



10.0%

ACTUARIALLY DETERMINED CONTRIBUTION								
	Valuation Assumptions	112.664(1)(a), F.S. Assumptions	112.664(1)(b), F.S. Assumptions	112.664(1)(a), F.S. Assumptions Plus 2% on Investment Return Assumption				
A. Valuation Date	October 1, 2015	October 1, 2015	October 1, 2015	October 1, 2015				
B. Actuarial Determined Contribution to Be Paid During Fiscal Year Ending	September 30, 2017	September 30, 2017	September 30, 2017	September 30, 2017				
C. Annual Payroll of Active Employees	\$ 6,868,214	\$ 6,868,214	\$ 6,868,214	\$ 6,868,214				
<ul> <li>D. Total Minimum Funding Requirement <ol> <li>Total Normal Cost</li> <li>Annual Payment to Amortize Unfunded <ul> <li>Actuarial Liability</li> </ul> </li> <li>Interest Adjustment</li> <li>Total Minimum Funding Requirement</li> </ol></li></ul>	\$ 820,218 1,257,178 97,510 \$ 2,174,906	\$ 830,958 1,289,688 <u>99,610</u> \$ 2,220,256	\$ 1,368,324 2,049,083 <u>122,814</u> \$ 3,540,221	\$ 517,835 535,653 <u>59,325</u> \$ 1,112,813				
<ul> <li>E. Expected Payroll of Active Employees for Following Plan Year (\$ / % of pay) (C x 1.000)</li> </ul>	\$ 6,868,214 100.00%	\$ 6,868,214 100.00%	\$ 6,868,214 100.00%	\$ 6,868,214 100.00%				
<ul> <li>F. Expected Contribution Sources (\$ / % of pay)</li> <li>1. County and City</li> <li>2. Member</li> <li>3. Total</li> </ul>	\$         1,831,495         26.67%           343,411         5.00%           \$         2,174,906         31.67%	\$         1,876,845         27.33%           343,411         5.00%           \$         2,220,256         32.33%	\$ 3,196,810 46.54% <u>343,411</u> 5.00% \$ 3,540,221 51.55%	\$         769,402         11.20%           343,411         5.00%           \$         1,112,813         16.20%				

### Unfunded Actuarial Accrued Liabilities Bases and Amortization Payments

			Amortization Payment								_
	Amortization Base	Current Unfunded Liabilities	Valuation Assumptions		112.664(1)(a), F.S. <u>Assumptions</u>		112.664(1)(b), F.S. <u>Assumptions</u>		112.664(1)(a), F.S. Assumptions Plus 2%		Remaining Funding <u>Period</u>
10/01/2000	Initial	\$ 1,817,448	\$	196,603	\$	196,603	\$	176,537	\$	217,224	15 years
10/01/2002	Assumption Change	(23,856)		(2,422)		(2,422)		(2,148)		(2,704)	17 years
10/01/2003	Plan Amendment	152,251		15,042		15,042		13,265		16,876	18 years
10/01/2004	Plan Amendment	232,644		22,430		22,430		19,670		25,284	19 years
10/01/2005	Plan Amendment	485,389		45,776		45,776		39,923		51,831	20 years
10/01/2006	Plan Amendment	561,747		51,926		51,926		45,048		59,047	21 years
10/01/2007	Plan Amendment	577,999		52,465		52,465		45,283		59,904	22 years
10/01/2008	Plan Amendment and Assumption Change	2,607,342		232,783		232,783		199,925		266,830	23 years
10/01/2008	Method Change	5,827,796		520,304		520,304		446,863		596,405	23 years
10/01/2009	Actuarial Loss / (Gain)	2,502,693		220,093		220,093		188,125		253,227	24 years
10/01/2010	Actuarial Loss / (Gain)	(464,479)		(40,289)		(40,289)		(34,278)		(46,519)	25 years
10/01/2010	Plan Amendment	(2,692,935)		(233,584)		(233,584)		(198,735)		(269,705)	25 years
10/01/2011	Actuarial Loss / (Gain)	2,955,724		253,172		253,172		214,442		293,313	26 years
10/01/2012	Actuarial Loss / (Gain)	1,001,111		84,768		84,768		71,492		98,525	27 years
10/01/2013	Actuarial Loss / (Gain)	(782,407)		(65,555)		(65,555)		(55,058)		(76,428)	28 years
10/01/2014	Actuarial Loss / (Gain)	(835,440)		(69,325)		(69,325)		(57,992)		(81,059)	29 years
10/01/2014	Assumption Change	7,847		651		651		545		761	29 years
10/01/2015	Actuarial Loss / (Gain)	(336,299)		(27,660)		(27,660)		(23,049)		(32,431)	30 years
10/01/2015	Assumption Change - 112.664(1)(a), F.S. Assumptions	395,270		N/A		32,510		N/A		N/A	30 years
10/01/2015	Assumption Change - 112.664(1)(b), F.S. Assumptions	13,995,780		N/A		N/A		959,225		N/A	30 years
10/01/2015	Assumption Change - 112.664(1)(a), F.S. Assumptions Plus 2%	(9,277,973)		N/A		N/A		N/A		(894,728)	30 years

# **SECTION B**

# SUMMARY OF PLAN PROVISIONS

# Outline of Principal Provisions of the Retirement Plan (as of October 1, 2015)

### A. Effective Date

Plan adopted as a Money Purchase Floor Offset plan on October 1, 1997. Plan amended and restated as a Defined Benefit Plan effective October 1, 2000. Plan most recently amended by Resolution 2011-57 adopted December 12, 2011.

### B. Eligibility Requirements

General Employees hired prior to October 1, 2011, Police Officers and Forensic Professionals working 30 or more hours per week are eligible to join the Plan on the first day of the month following completion of six (6) months of service. Electing transferring Firefighters as of October 2, 2008 under the Agreement with the County.

### C. Accrual Service

Years of Accrual Service are any Plan Years during which an Employee completes at least 1,000 hours of service, including years of service completed prior to participation in the Plan.

### D. Compensation

Wages, salaries and other amounts received (whether or not paid in cash) for personal services actually rendered in the course of employment. Effective October 10, 2011 Compensation shall exclude commissions, bonuses, overtime pay in excess of one hundred fifty (150) hours per Plan year and payments for accrued leave in excess of the dollar amount of an Employee's accrued leave balance on July 1, 2011.

### E. Final Average Compensation

Average earnings during the best five (5) consecutive years out of the last ten (10) years preceding termination or retirement, but not less than the three (3) highest consecutive compensation periods during employment with the City as of September 30, 2011.

### F. Normal Retirement

## 1. Eligibility:

- (a) Attainment of age 65; or
- (b) Completion of 30 years of service and determined to be disabled under the City's long term disability insurance policy.

# Outline of Principal Provisions of the Retirement Plan (as of October 1, 2015)

### 2. Benefit:

For Firefighters, Police Officers and Forensic Professionals, 3.00% times Final Average Compensation multiplied by Accrual Service, up to a maximum of 30 years.

For General Employees, 3.00% times Accrual Service earned through September 30, 2011 times Final Average Compensation plus 2.50% times Accrual Service earned after September 30, 2011 times Final Average Compensation, up to a maximum of 30 years of Accrual Service.

### G. Early Retirement

## 1. Eligibility:

- (a) Attainment of age 55 and completion of 15 years of service; or
- (b) Completion of 25 years of service.

### 2. Benefit:

Benefit accrued to date of early retirement, actuarially reduced for each year early retirement benefit commencement precedes age 55.

## H. Late Retirement

1. Eligibility:

Continued employment beyond Normal Retirement Date.

2. Benefit:

Greater of (a) and (b):

- (a) Accrued benefit calculated as for Normal Retirement based upon service and pay at Late Retirement Date.
- (b) Actuarially increased benefit as of Late Retirement Date.

# I. **Disability Retirement**

1. Eligibility:

Completion of 30 years of service and determined to be disabled under the City's long term disability insurance policy.

2. Benefit:

Accrued benefit calculated as for Normal Retirement based upon service and pay at Disability Retirement Date.

# Outline of Principal Provisions of the Retirement Plan (as of October 1, 2015)

### J. Death Benefit

Beneficiary entitled to a monthly benefit supported by the present value of the non-forfeitable accrued benefit at the time of the participant's death. If death occurs after actual retirement, the beneficiary receives whatever is payable under the form of benefit option elected.

### K. Participant Contributions

Five percent (5%) of compensation for all employees.

### L. Vested Benefit Upon Termination

100% vested in required participant contributions. Participant contributions made after October 1, 2000 are included in the deferred vested benefit payable at normal or early retirement date.

Upon termination of service prior to normal or early retirement date a participant shall be entitled to a benefit payable at normal or early retirement date calculated as for normal retirement. Based on pay and service at date of termination multiplied by a percentage from the following table.

Years of Service	Vested Percentage
Less Than 7	0%
7 or More	100%

## M. Normal Form of Payment of Retirement Income

Monthly benefit payable for life.

### Other Options

Actuarially equivalent joint and survivor at 50%, 75%, 100%; or ten (10) years certain and life.

## N. Changes Since Previous Valuation

None.

# SECTION C

### ACTUARIAL ASSUMPTIONS AND COST METHODS USED FOR FUNDING

# Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation (as of October 1, 2015)

### A. Mortality

For healthy General Employee participants, RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

For healthy Firefighter and Police Officer participants, RP-2000 Combined Healthy Participant Mortality Tables with Blue Collar Adjustment, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

For disabled participants, RP-2000 Disabled Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

### B. Investment Return

8.0%, compounded annually, net of investment expenses.

### C. Allowances for Expenses or Contingencies

Prior year's actual administrative expenses are included in normal cost.

### D. Salary Increase Factors

Current salary is assumed to increase at a rate based on the table below per year until retirement.

<u>Service</u>	General <u>Employees</u>	Firefighters and <u>Police Officers</u>
Less than 5 years	6.5%	7.5%
5 - 9 years	5.5%	5.5%
10 - 14 years	4.5%	5.5%
15+ years	3.0%	3.5%

### Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation (as of October 1, 2015)

### E. Employee Withdrawal Rates

1. Withdrawal rates for male General Employees were used in accordance with the following illustrative example:

				Wit	<u>thdrawal R</u>	lates per 10	00 Employ	<u>ees</u>			
						Service					
Age	<u>0</u>	1	2	3	4	<u>5</u>	<u>6</u>	<u>7</u>	8	<u>9</u>	<u>10+</u>
20	32.8	25.4	22.7	18.4	15.8	11.7	11.1	11.1	11.0	10.0	9.8
25	27.2	18.5	17.2	14.6	12.7	9.7	8.5	8.4	7.7	6.3	6.2
30	25.8	15.4	14.0	13.2	11.8	8.8	7.8	7.1	6.4	5.5	4.7
35	25.8	14.3	12.8	12.6	10.9	8.5	7.5	6.8	6.2	5.3	4.2
40	24.4	12.6	12.0	10.7	9.0	7.4	6.7	6.2	5.8	5.3	3.0
45	24.4	12.5	11.6	10.3	8.8	6.8	6.5	6.0	5.1	5.1	2.7
50	23.4	12.2	10.7	9.4	7.9	6.0	5.5	5.3	4.6	4.6	3.0
55	27.4	12.2	10.7	9.3	7.8	6.8	5.4	5.2	4.4	4.3	4.5
60	27.4	12.2	10.7	9.3	7.8	6.8	5.4	5.1	4.3	4.2	5.3
65	27.4	12.2	10.7	9.3	7.8	6.8	5.4	5.1	4.3	4.2	3.7

2. Withdrawal rates for female General Employees were used in accordance with the following illustrative example:

				Wi	thdrawal F	ates per 1	00 Employ	vees			
						Service					
<u>Age</u>	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10+</u>
20	30.3	25.8	22.1	17.4	15.4	13.5	11.4	11.3	10.5	10.2	11.6
25	26.6	19.8	17.1	13.0	12.9	10.7	9.7	9.2	7.8	7.1	5.3
30	25.4	16.9	14.5	11.6	11.3	9.4	8.7	8.1	7.1	6.5	5.4
35	25.4	15.9	13.5	11.2	10.9	9.0	8.0	7.8	6.8	6.2	4.6
40	24.4	14.0	12.1	10.0	9.1	7.0	6.5	6.3	6.1	5.0	3.3
45	24.4	13.9	11.9	9.8	8.8	6.7	6.5	6.1	5.8	4.7	3.0
50	23.2	13.4	11.0	8.8	8.4	6.2	5.9	5.5	5.5	4.6	3.0
55	23.2	13.4	11.0	8.7	8.3	6.1	5.8	5.4	5.4	4.5	3.0
60	23.2	13.4	11.0	8.7	8.3	6.1	5.8	5.4	5.4	4.5	3.0
65	23.2	13.4	11.0	8.7	8.3	6.1	5.8	5.4	5.4	4.5	3.0

The withdrawal assumptions are the withdrawal assumptions used in the July 1, 2015 Florida Retirement System (FRS) Actuarial Valuation.

### Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation (as of October 1, 2015)

### E. Employee Withdrawal Rates (continued)

3. Withdrawal rates for male Firefighters and Police Officers were used in accordance with the following illustrative example:

				Wit	<u>thdrawal</u> R	lates per 1	00 Employ	<u>/ees</u>			
						Service					
Age	0	1	2	3	4	5	6	7	8	9	10+
		_	_					_		_	
20	21.4	10.3	8.6	8.4	7.5	5.3	5.2	3.1	2.9	2.6	2.3
25	20.6	9.8	8.1	7.9	7.0	5.3	5.2	3.1	2.9	2.6	2.3
30	20.6	9.5	7.7	7.5	6.7	5.3	5.2	3.1	2.9	2.6	2.1
35	20.6	8.8	7.4	7.2	6.5	5.3	5.1	3.1	2.9	2.6	2.0
40	20.6	8.0	6.8	6.7	6.0	4.8	4.6	3.1	2.9	2.6	1.9
45	20.6	7.3	6.0	6.0	5.5	4.3	4.1	3.1	2.9	2.6	1.8
50	20.6	6.5	5.3	5.3	5.0	3.8	3.6	3.1	2.9	2.6	1.8
55	20.6	5.8	4.7	4.7	4.6	3.3	3.2	3.1	2.9	2.6	1.8
60	20.6	5.3	4.7	4.7	4.6	3.3	3.2	3.1	2.9	2.6	1.8
65	20.6	5.3	4.7	4.7	4.6	3.3	3.2	3.1	2.9	2.6	1.8

4. Withdrawal rates for female Firefighters and Police Officers were used in accordance with the following illustrative example:

	Withdrawal Rates per 100 Employees										
						Service					
Age	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10+</u>
20	21.3	15.5	12.3	10.3	9.7	6.1	5.9	5.0	4.2	4.2	1.9
25	21.3	14.2	11.6	9.8	9.2	6.1	5.9	5.0	4.2	4.2	1.9
30	21.3	13.2	10.6	9.3	8.7	6.1	5.9	5.0	4.2	4.2	1.7
35	21.3	12.2	9.6	8.8	8.4	6.1	5.9	5.0	4.2	4.1	1.5
40	21.3	11.2	8.6	8.3	7.6	6.1	5.9	5.0	4.1	4.1	2.5
45	21.3	10.2	7.6	7.6	7.0	6.1	5.9	5.0	4.1	4.1	2.5
50	21.3	9.2	6.6	6.6	6.4	6.1	5.9	5.0	4.1	4.0	1.6
55	21.3	8.4	5.8	5.6	5.4	5.3	5.1	5.0	4.1	4.0	4.0
60	21.3	8.4	5.8	5.6	5.4	5.3	5.1	5.0	4.1	4.0	4.0
65	21.3	8.4	5.8	5.6	5.4	5.3	5.1	5.0	4.1	4.0	4.0

The withdrawal assumptions are the withdrawal assumptions used in the July 1, 2015 FRS Actuarial Valuation.

### Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation (as of October 1, 2015)

### F. Disability Rates

1. Line-of-duty disability rates for General Employees were used in accordance with the following illustrative example.

Age	Male	Female
20	0.000%	0.000%
25	0.001%	0.001%
30	0.001%	0.001%
35	0.001%	0.001%
40	0.001%	0.001%
45	0.004%	0.001%
50	0.006%	0.006%
55	0.006%	0.006%
60	0.010%	0.013%
65	0.010%	0.010%

2. Non-duty disability rates for General Employees were used in accordance with the following illustrative example.

Age	Male	Female
20	0.000%	0.000%
25	0.010%	0.010%
30	0.010%	0.010%
35	0.020%	0.010%
40	0.020%	0.020%
45	0.080%	0.060%
50	0.160%	0.100%
55	0.250%	0.160%
60	0.300%	0.260%
65	0.100%	0.080%

The disability assumptions are the disability assumptions used in the July 1, 2015 FRS Actuarial Valuation.

### Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation (as of October 1, 2015)

### F. Disability Rates (continued)

3. Line-of-duty disability rates for Firefighters and Police Officers were used in accordance with the following illustrative example.

Age	Male	<u>Female</u>
20	0.010%	0.000%
25	0.010%	0.004%
30	0.010%	0.004%
35	0.010%	0.004%
40	0.020%	0.040%
45	0.060%	0.040%
50	0.140%	0.050%
55	0.100%	0.080%
60	0.140%	0.150%
65	0.260%	0.150%

4. Non-duty disability rates for Firefighters and Police Officers were used in accordance with the following illustrative example.

Age	Male	Female
20	0.020%	0.000%
25	0.020%	0.020%
30	0.030%	0.020%
35	0.030%	0.030%
40	0.030%	0.030%
45	0.030%	0.060%
50	0.080%	0.110%
55	0.050%	0.110%
60	0.050%	0.110%
65	0.050%	0.110%

The disability assumptions are the disability assumptions used in the July 1, 2015 FRS Actuarial Valuation.

# Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation (as of October 1, 2015)

# G. Assumed Retirement Age

Retirement rates were used in accordance with the following tables.

1. For Police Officers and Firefighters:

	Years of Service							
Age	<u>0 - 10</u>	<u>10 - 15</u>	<u>15 - 25</u>	<u>25 - 30</u>	<u>30 or more</u>			
Under 55	0%	0%	0%	4%	5%			
55	0%	10%	15%	40%	50%			
56 - 64	0%	10%	15%	15%	20%			
65 and above	100%	100%	100%	100%	100%			

2. For General Employees:

	Years of Service							
Age	<u>0 - 10</u>	<u>10 - 15</u>	<u>15 - 25</u>	<u>25 - 30</u>	<u>30 or more</u>			
Under 55	0%	0%	0%	2%	2%			
55	0%	5%	10%	20%	25%			
56 - 64	0%	5%	10%	4%	5%			
65 and above	100%	100%	100%	100%	100%			

## H. Marital Assumptions

- 1. 100% of active members are assumed to be married.
- 2. Females are assumed to be three (3) years younger than their male spouses.

## I. Interest on Future Participant Contributions

3.75%, compounded annually.

# Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation (as of October 1, 2015)

## J. Asset Valuation Method

The method used for determining the smoothed actuarial value of assets phases in the deviation between the expected and actual return on assets at the rate of 20% per year. The smoothed actuarial value of assets will be further adjusted to the extent necessary to fall within the corridor whose lower limit is 80% of the fair market value of plan assets and whose upper limit is 120% of the fair market value of plan assets - adjusted for equation of balance October 1, 2010.

# K. Cost Method

Normal Retirement, Termination, Disability, and Death Benefits: Entry Age Normal Cost Method

Under this method the normal cost for each active employee is the amount which is calculated to be a level percentage of pay that would be required annually from his entry age to his assumed retirement age to fund his estimated benefits, assuming the Fund had always been in effect. The normal cost for the Fund is the sum of such amounts for all employees. The actuarial accrued liability as of any valuation date for each active employee or inactive employee who is eligible to receive benefits under the Fund is the excess of the actuarial present value of estimated future benefits over the actuarial present value of current and future normal costs. The unfunded actuarial accrued liability as of any valuation date is the excess of the actuarial accrued liability over the assets of the Fund.

# L. Changes Since Previous Valuation

None.

## GLOSSARY

Amortization Method	A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization Payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the rate at which total covered payroll of all active members is assumed to increase.
Amortization Payment	That portion of the plan contribution which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.
Amortization Period	The period used in calculating the Amortization Payment.
Annual Required Contribution	The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation. The annual required contribution consists of the Employer Normal Cost and Amortization Payment plus interest adjustment.
Closed Amortization Period	A specific number of years that is reduced by one each year, and declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc.
Employer Normal Cost	The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.
Equivalent Single Amortization Period	For plans that do not establish separate amortization bases (separate components of the UAAL), this is the same as the Amortization Period. For plans that do establish separate amortization bases, this is the period over which the UAAL would be amortized if all amortization bases were combined upon the current UAAL payment.
Experience Gain/Loss	A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two actuarial valuations. To the extent that actual experience differs from that assumed, Unfunded Actuarial Accrued Liabilities emerge which may be larger or smaller than projected. Gains are due to favorable experience, e.g., the assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. Losses are the result of unfavorable experience, i.e., actual results that produce Unfunded Actuarial Accrued Liabilities which are larger than projected.
Funded Ratio	The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability.
GASB	Governmental Accounting Standards Board.

GASB No. 67 and GASB No. 68	These are the governmental accounting standards that set the accounting rules for public retirement plans and the employers that sponsor or contribute to them. Statement No. 67 sets the accounting rules for the plans themselves, while Statement No. 68 sets the accounting rules for the employers that sponsor or contribute to public retirement plans.
Normal Cost	The annual cost assigned, under the Actuarial Cost Method, to the current plan year.
Open Amortization Period	An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. In other words, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never completely disappear, but will become smaller each year, either as a dollar amount or in relation to covered payroll.
Unfunded Actuarial Accrued Liability	The difference between the Actuarial Accrued Liability and Actuarial Value of Assets.
Valuation Date	The date as of which the Actuarial Present Value of Future Benefits are determined. The benefits expected to be paid in the future are discounted to this date.