

City of Vero Beach General Employee Retirement Plan

Actuarial Valuation and Review as of
October 1, 2016





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March 13, 2017

*Board of Trustees
City of Vero Beach General Employee Retirement Plan
1053 20th Place
Vero Beach, FL 32960*

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of October 1, 2016. The census information on which our calculations were based was prepared by the City's Finance Department in conjunction with the Human Resources Department,, and the financial information was provided by the City's Finance Department. That assistance is gratefully acknowledged.

Statement by Enrolled Actuary: This actuarial valuation and/or cost determination was 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, the techniques and assumptions used are reasonable and meet the requirements and intent of part VII, Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material increase in plan costs or required contribution rates have been taken into account in the valuation.

The measurements shown in this actuarial valuation may not be applicable for other purposes. 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; and changes in plan provisions or applicable law.

The actuarial calculations were directed under our supervision. We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

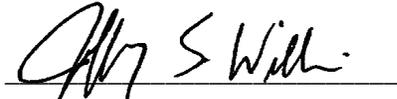
Segal Consulting, a Member of The Segal Group, Inc.

By:



Leon F. (Rocky) Joyner, Jr.

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SECTION 1

VALUATION SUMMARY

Purpose	i
Significant Issues in Valuation Year	i
Summary of Key Valuation Results	iii
Important Information About Actuarial Valuations	iv

SECTION 2

VALUATION RESULTS

A. Participant Data	1
B. Financial Information	4
C. Actuarial Experience	7
D. Recommended Contribution.....	12

SECTION 3

SUPPLEMENTAL INFORMATION

EXHIBIT A Table of Plan Coverage	14
EXHIBIT B Participants in Active Service as of September 30, 2016	15
EXHIBIT C Reconciliation of Participant Data	16
EXHIBIT D Summary Statement of Income and Expenses on an Actuarial Value Basis.....	17
EXHIBIT E Summary Statement of Income and Expenses on a Market Value Basis	18
EXHIBIT F Summary Statement of Plan Assets	19
EXHIBIT G Development of the Fund Through September 30, 2016.....	20
EXHIBIT H Development of Unfunded Actuarial Accrued Liability	21
EXHIBIT I Table of Amortization Bases	22
EXHIBIT J Definitions of Pension Terms.	23
EXHIBIT K Supplementary State of Florida Information – Recent History of Recommended and Actual Contributions.....	25

SECTION 4

REPORTING INFORMATION

EXHIBIT I Summary of Actuarial Valuation Results	29
EXHIBIT II History of City Contributions.....	31
EXHIBIT III Schedule of Funding Progress.....	32
EXHIBIT IV Funded Ratio	33
EXHIBIT V Actuarial Assumptions and Actuarial Cost Method	34
EXHIBIT VI Summary of Plan Provisions.....	37

SECTION 1: Valuation Summary for the City of Vero Beach General Employee Retirement Plan

Purpose

This report has been prepared by Segal Consulting to present a valuation of the City of Vero Beach General Employee Retirement Plan as of October 1, 2016. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- The benefit provisions of the Pension Plan, as administered by the Board.
- The characteristics of covered active participants, inactive vested participants, and retired participants and beneficiaries as of October 1, 2016, provided by the City's Finance Department and Human Resources Department;
- The assets of the Plan as of September 30, 2016, provided by the City's Finance Department;
- Economic assumptions regarding investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

The assumptions and methods used to value the Plan were approved by the Board based on the five-year experience study for the period ended September 30, 2008. The discount rate and amortization methodology were updated in the October 1, 2015 valuation as a result of the plan freeze.

Significant Issues in Valuation Year

The following key findings were the result of this actuarial valuation:

1. The Plan's mortality tables were changed with this year's valuation per Section 112.63(f) of Florida Statutes. The mortality update led to increases of \$3,252,361 in the Actuarial Accrued Liability and \$422,986 in the recommended contribution.
2. Effective June 30, 2015, the accrued benefits of all participants of the Plan were frozen, with no future accruals and no new entrants, and all eligible participants at that time became fully vested.
3. The unfunded liability is being amortized on a level dollar basis over eleven years.
4. The recommended contribution has increased by \$225,658, from \$4,274,277 in the prior valuation to \$4,499,935 this year. The increase in contribution from the mortality update was partially offset by an investment gain.

SECTION 1: Valuation Summary for the City of Vero Beach General Employee Retirement Plan

5. The Schedule of Funding Progress, provided in Exhibit III of Section 4, shows that the funded ratio has increased from 67.61% as of October 1, 2015 to 68.90% as of October 1, 2016. This increase is primarily due to an increase in the actuarial value of assets.
6. The investment rate of return on an actuarial basis for the year ended September 30, 2016 was 8.79%. Since the rate of return was greater than the assumed rate of return of 6.50% per year, there was an actuarial investment gain amounting to \$1,630,072. The return on a market value basis was 10.17%. As of the valuation date, the smoothed actuarial value of assets is equal to 99.17% of market value.
7. There was a loss from sources other than investments of \$344,325, or 0.32% of total liability.
8. As indicated in Section 2, Subsection B of this report, the total unrecognized investment gain as of September 30, 2016 is \$635,555. This investment gain will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years, to the extent it is not offset by recognition of investment losses derived from future experience.
9. The actuarial valuation report as of October 1, 2016 is based on financial information as of that date. Changes in the value of assets subsequent to that date, to the extent that they exist, are not reflected. Unfavorable asset experience will increase the actuarial cost of the Plan, while favorable experience will decrease the actuarial cost of the Plan. For example, a 10% change in the current year's actuarial value of assets would produce a \$992,285 change in the recommended contribution level.
10. The administrative expense assumption of \$32,265, assumed to be payable monthly, was updated in accordance with Florida law to be the prior year's reported administrative expenses of \$20,457.

SECTION 1: Valuation Summary for the City of Vero Beach General Employee Retirement Plan

Summary of Key Valuation Results

	2016	2015
Contributions for plan year beginning October 1:		
Actuarially Determined Employer Contribution (ADEC)	\$4,499,935	\$4,274,277
Actual	--	4,274,277
Funding elements for plan year beginning October 1:		
Normal cost, including administrative expenses	\$19,878	\$31,187
Market value of assets	76,932,732	71,912,556
Actuarial value of assets	76,297,177	72,228,788
Actuarial accrued liability	110,734,591	106,830,456
Unfunded/(overfunded) actuarial accrued liability	34,437,414	34,601,668
Funded Ratio - Actuarial Value of Assets	68.90%	67.61%
Funded Ratio - Market Value of Assets	69.47%	67.31%
Demographic data for plan year beginning October 1:		
Number of retired participants and beneficiaries	375	356
Number of vested former participants	96	92
Number of active participants	299	323

SECTION 1: Valuation Summary for the City of Vero Beach General Employee Retirement Plan

Important Information About Actuarial Valuations

An actuarial valuation is a budgeting tool with respect to the financing of future projected obligations of a pension plan. It is an estimated forecast – the actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.

In order to prepare a valuation, Segal Consulting (“Segal”) relies on a number of input items. These include:

- **Plan of benefits** Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. Even where they appear precise, outside factors may change how they operate. It is important to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan summary included in our report to confirm that Segal has correctly interpreted the plan of benefits.
- **Participant data** An actuarial valuation for a plan is based on data provided to the actuary by the City. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
- **Assets** The valuation is based on the market value of assets as of the valuation date, as provided by the City. The Plan uses an “actuarial value of assets” that differs from market value to gradually reflect year-to-year changes in the market value of assets in determining the contribution requirements.
- **Actuarial assumptions** In preparing an actuarial valuation, Segal projects the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This projection requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of each participant for each year. In addition, the benefits projected to be paid for each of those events in each future year reflect actuarial assumptions as to cost-of-living adjustments. The projected benefits are then discounted to a present value, based on the assumed rate of return that is expected to be achieved on the plan’s assets. There is a reasonable range for each assumption used in the projection and the results may vary materially based on which assumptions are selected. It is important for any user of an actuarial valuation to understand this concept. Actuarial assumptions are periodically reviewed to ensure that future valuations reflect emerging plan experience. While future changes in actuarial assumptions may have a significant impact on the reported results, that does not mean that the previous assumptions were unreasonable.

SECTION 1: Valuation Summary for the City of Vero Beach General Employee Retirement Plan

The user of Segal's actuarial valuation (or other actuarial calculations) should keep the following in mind:

- The actuarial valuation is prepared at the request of the City. Segal is not responsible for the use or misuse of its report, particularly by any other party.
- An actuarial valuation is a measurement of the plan's assets and liabilities at a specific date. Accordingly, except where otherwise noted, Segal did not perform an analysis of the potential range of future financial measures. The actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.
- If the City is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.
- Segal does not provide investment, legal, accounting, or tax advice. Segal's valuation is based on our understanding of applicable guidance in these areas and of the plan's provisions, but they may be subject to alternative interpretations. The City should look to their other advisors for expertise in these areas.

As Segal Consulting has no discretionary authority with respect to the management or assets of the Plan, it is not a fiduciary in its capacity as actuaries and consultants with respect to the Plan.

SECTION 2: Valuation Results for the City of Vero Beach General Employee Retirement Plan

A. PARTICIPANT DATA

The Actuarial Valuation and Review considers the number and demographic characteristics of covered participants, including active participants, vested terminated participants, retired participants and beneficiaries.

This section presents a summary of significant statistical data on these participant groups.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A, B, and C.

A historical perspective of how the participant population has changed over the past ten valuations can be seen in this chart.

CHART 1
Participant Population: 2007 – 2016

Year Ended September 30	Active Participants	Vested Terminated Participants*	Retired Participants and Beneficiaries	Ratio of Non-Actives to Actives
2007	355	85	233	0.90
2008	356	84	243	0.92
2009	386	83	249	0.86
2010	407	84	275	0.88
2011	405	88	281	0.91
2012	379	95	309	1.07
2013	350	91	324	1.19
2014	339	87	348	1.28
2015	323	92	356	1.39
2016	299	96	375	1.58

**Includes beneficiaries entitled to deferred benefits if applicable.*

SECTION 2: Valuation Results for the City of Vero Beach General Employee Retirement Plan

Active Participants

In this year's valuation, there were 299 active participants with an average age of 49.7 and average years of service of 16.7 years. The 323 active participants in the prior valuation had an average age of 49.5 and average service of 15.8 years.

Inactive Participants

In this year's valuation, there were 96 participants with a vested right to a deferred or immediate vested benefit.

These graphs show a distribution of active participants by age and by years of service.

CHART 2

Distribution of Active Participants by Age as of September 30, 2016

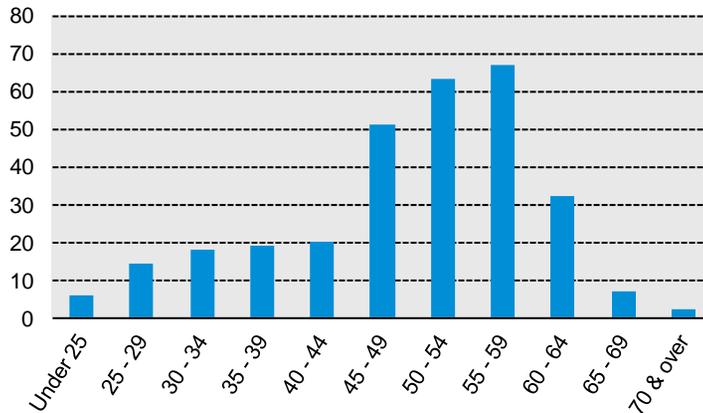
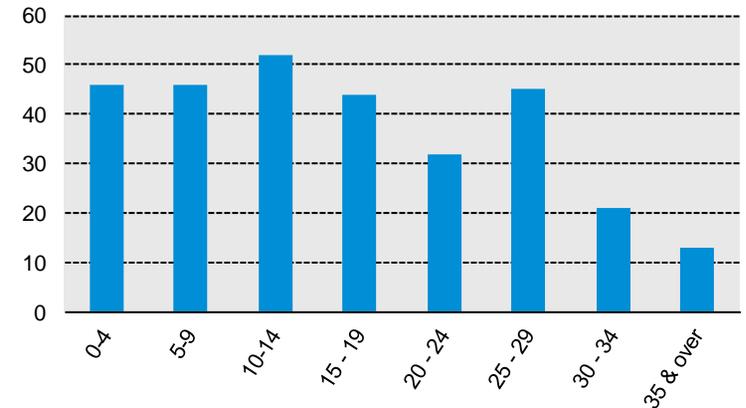


CHART 3

Distribution of Active Participants by Years of Service as of September 30, 2016



SECTION 2: Valuation Results for the City of Vero Beach General Employee Retirement Plan

Retired Participants and Beneficiaries

As of September 30, 2016, 330 retired participants and 45 beneficiaries were receiving total monthly benefits of \$530,287. For comparison, in the previous valuation, there were 314 retired participants and 42 beneficiaries receiving monthly benefits of \$502,069.

These graphs show a distribution of the current retired participants based on their monthly amount and age, by type of pension.

- QDRO
- Late
- Disability
- Early
- Regular

CHART 4
Distribution of Retired Participants by Type and by Monthly Amount as of September 30, 2016

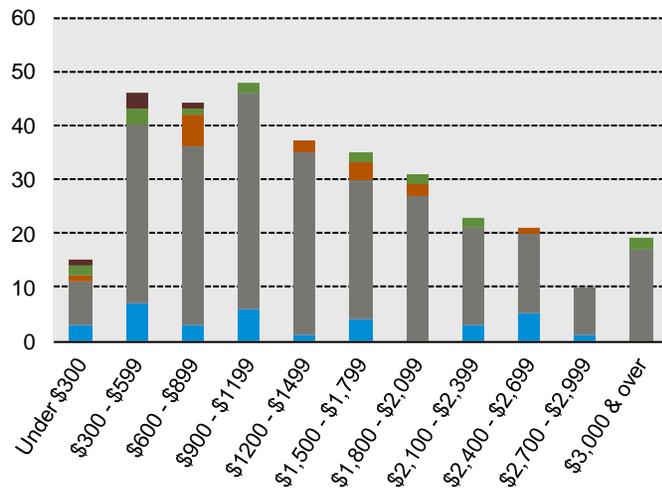
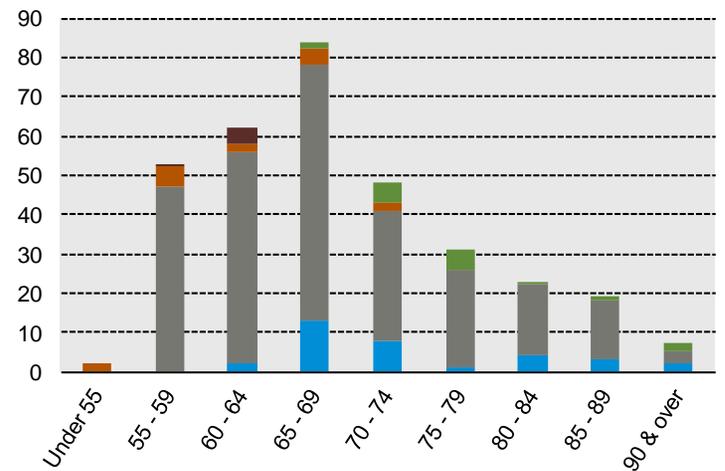


CHART 5
Distribution of Retired Participants by Type and by Age as of September 30, 2016



SECTION 2: Valuation Results for the City of Vero Beach General Employee Retirement Plan

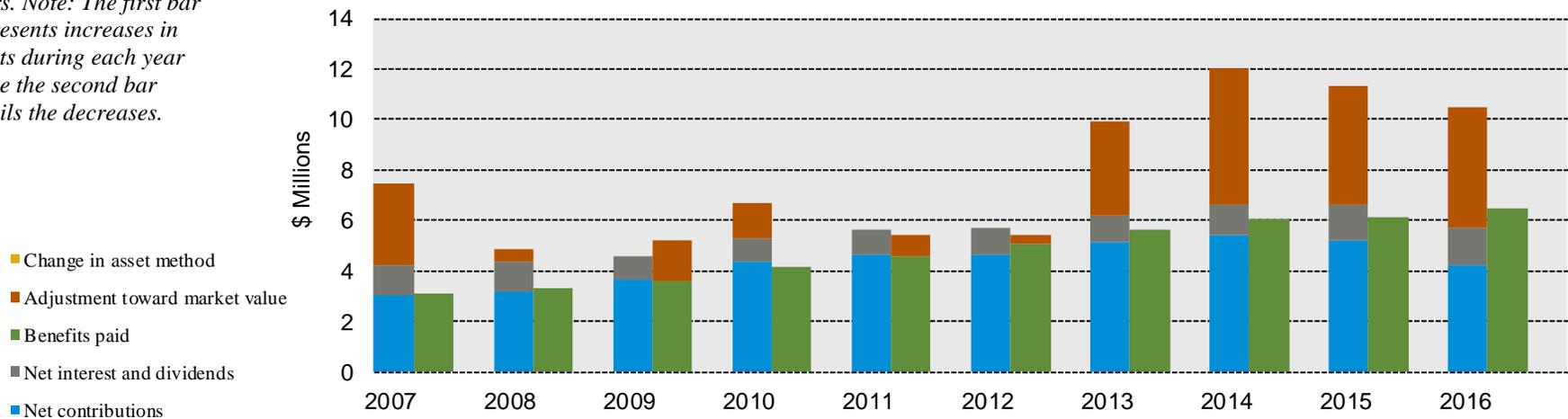
B. FINANCIAL INFORMATION

Retirement plan funding anticipates that, over the long term, both contributions (less administrative expenses) and net investment earnings (less investment fees) will be needed to cover benefit payments.

Retirement plan assets change as a result of the net impact of these income and expense components. Additional financial information, including a summary of these transactions for the valuation year, is presented in Section 3, Exhibits D, E and F.

The chart depicts the components of changes in the actuarial value of assets over the last ten years. Note: The first bar represents increases in assets during each year while the second bar details the decreases.

CHART 6
Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended September 30, 2007 – 2016



SECTION 2: Valuation Results for the City of Vero Beach General Employee Retirement Plan

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable.

The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

The chart shows the determination of the actuarial value of assets as of the valuation date.

CHART 7

Determination of Actuarial Value of Assets for Year Ended September 30, 2016

1. Market value of assets, September 30, 2016			\$76,932,732
2. Calculation of unrecognized return	Original Amount*	Unrecognized Return**	
(a) Year ended September 30, 2016	\$2,602,414	\$2,081,931	
(b) Year ended September 30, 2015	-4,680,845	-2,808,507	
(c) Year ended September 30, 2014	1,917,756	767,102	
(d) Year ended September 30, 2013	2,975,144	595,029	
(e) Year ended September 30, 2012	5,438,661	<u>0</u>	
(f) Total unrecognized return			635,555
3. Preliminary actuarial value: (1) - (2f)			76,297,177
4. Adjustment to be within 20% corridor			0
5. Final actuarial value of assets as of September 30, 2016: (3) + (4)			<u>\$76,297,177</u>
6. Actuarial value as a percentage of market value: (5) ÷ (1)			99.2%
7. Amount deferred for future recognition: (1) - (5)			\$635,555

*Total return minus expected return on a market value

**Recognition at 20.00% per year over five years

***Deferred return as of September 30, 2016 recognized in each of the next five years:

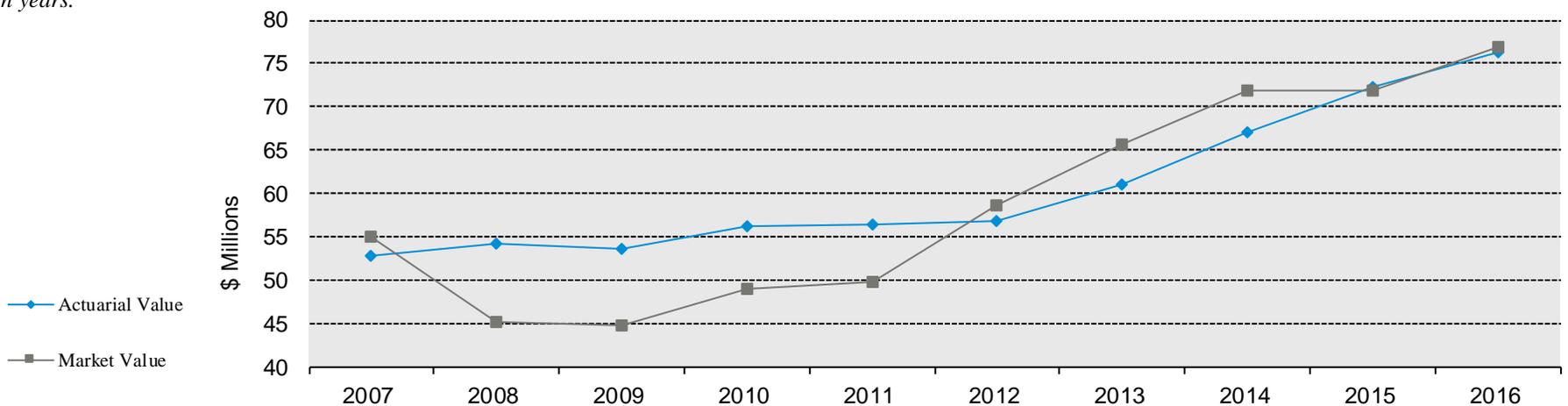
(a) Amount recognized on September 30, 2017	\$562,894
(b) Amount recognized on September 30, 2018	-32,135
(c) Amount recognized on September 30, 2019	-415,686
(d) Amount recognized on September 30, 2020	520,482
(e) Amount recognized on September 30, 2021	0

SECTION 2: Valuation Results for the City of Vero Beach General Employee Retirement Plan

Both the actuarial value and market value of assets are representations of the Plan's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets. The actuarial asset value is significant because the Plan's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.

This chart shows the change in the actuarial value of assets versus the market value over the past ten years.

CHART 8
Actuarial Value of Assets vs. Market Value of Assets as of September 30, 2007 – 2016



SECTION 2: Valuation Results for the City of Vero Beach General Employee Retirement Plan

C. ACTUARIAL EXPERIENCE

To calculate the required contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the contribution requirement will decrease from the previous year. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

The total gain is \$1,285,747, \$1,630,072 from investment gains and \$344,325 in losses from all other sources. The net experience variation from individual sources other than investments was 0.3% of the actuarial accrued liability. A discussion of the major components of the actuarial experience is on the following pages.

This chart provides a summary of the actuarial experience during the past year.

CHART 9
Actuarial Experience for Year Ended September 30, 2016

1. Net gain/(loss) from investments*	\$1,630,072
2. Net gain/(loss) from administrative expenses	12,757
3. Net gain/(loss) from other experience**	<u>-357,082</u>
4. Net experience gain/(loss): (1) + (2) + (3)	\$1,285,747

* Details in Chart 10

** Details in Chart 13

SECTION 2: Valuation Results for the City of Vero Beach General Employee Retirement Plan

Investment Rate of Return

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the Plan’s investment policy. For valuation purposes, the assumed rate of return on the actuarial value of assets is 6.50%. The actual rate of return on an actuarial basis for the 2016 plan year was 8.79%.

Since the actual return for the year was greater than the assumed return, the Plan experienced an actuarial gain during the year ended September 30, 2016 with regard to its investments.

This chart shows the gain due to investment experience.

CHART 10
Actuarial Value Investment Experience for Year Ended September 30, 2016

1. Actual return	\$6,253,914
2. Average value of assets	71,136,025
3. Actual rate of return: (1) ÷ (2)	8.79%
4. Assumed rate of return	6.50%
5. Expected return: (2) x (4)	\$4,623,842
6. Actuarial gain/(loss): (1) – (5)	<u>\$1,630,072</u>

SECTION 2: Valuation Results for the City of Vero Beach General Employee Retirement Plan

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. The chart below shows the rate of return on an actuarial basis compared to the market value investment return for the last ten years, including five-year and ten-year averages.

Based upon this experience and future expectations, the Plan has maintained the assumed rate of return of 6.50%.

CHART 11

Investment Return – Actuarial Value vs. Market Value: 2007 - 2016

Year Ended September 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
2007	\$1,221,463	2.53%	\$3,221,562	6.67%	\$4,443,025	9.20%	\$6,757,891	13.99%
2008	1,177,126	2.24	497,950	0.94	1,675,076	3.18	-9,681,175	-17.62
2009	918,445	1.69	-1,638,013	-3.02	-719,568	-1.33	-614,363	-1.36
2010	875,864	1.63	1,441,638	2.68	2,317,502	4.31	3,965,519	8.85
2011	996,912	1.77	-814,957	-1.45	181,955	0.32	782,364	1.60
2012	1,032,672	1.84	-296,881	-0.53	735,791	1.31	9,274,615	18.74
2013	1,050,845	1.86	3,778,664	6.69	4,829,509	8.55	7,494,369	12.85
2014	1,145,044	1.88	5,453,286	8.98	6,598,330	10.86	6,975,362	10.69
2015	1,370,200	2.06	4,698,638	7.05	6,068,838	9.11	859,603	1.20
2016	<u>1,453,213</u>	2.04	<u>4,800,701</u>	6.75	<u>6,253,914</u>	8.79	<u>7,205,701</u>	10.17
Total	\$11,241,784		\$21,142,588		\$32,384,372		\$33,019,886	
					Five-year average return	7.87%		10.09%
					Ten-year average return	5.62%		5.92%

Note: Each year's yield is weighted by the average asset value in that year.

SECTION 2: Valuation Results for the City of Vero Beach General Employee Retirement Plan

Subsection B described the actuarial asset valuation method that gradually takes into account fluctuations in the market value rate of return. The effect of this is to stabilize the actuarial rate of return, which contributes to leveling pension plan costs.

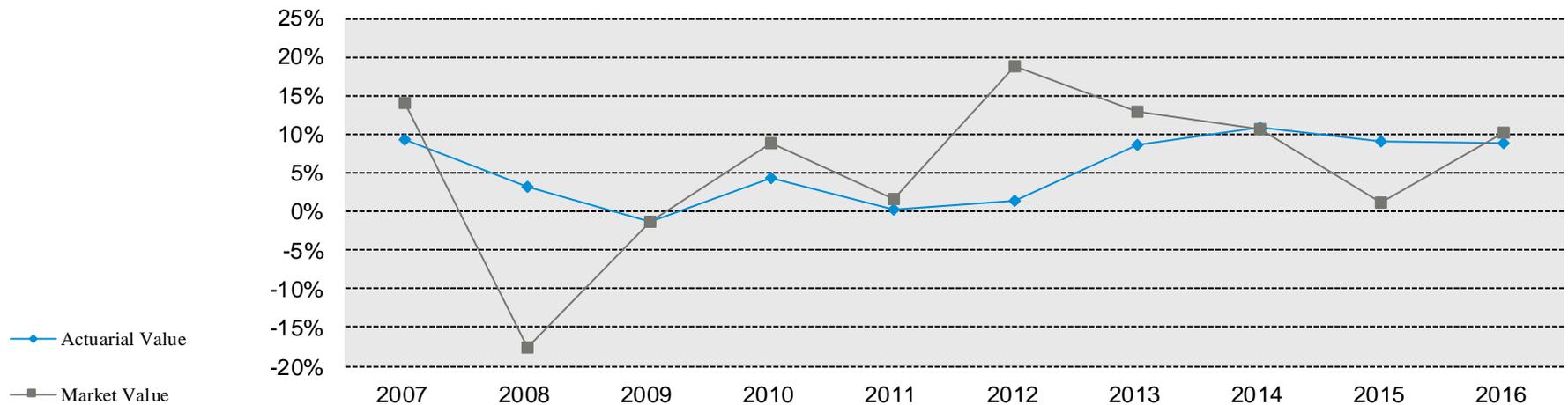
Administrative Expenses

Administrative expenses for the year ended September 30, 2016 totaled \$20,457 compared to the assumption of \$32,265, payable monthly. This resulted in a gain of \$12,757 for the year, once adjusted for timing. We have changed the assumption from \$32,265 to the prior year's reported amount of \$20,457 for the current year, in accordance with Florida Law.

This chart illustrates how this leveling effect has actually worked over the years 2007 - 2016.

CHART 12

Market and Actuarial Rates of Return for Years Ended September 30, 2007 - 2016



SECTION 2: Valuation Results for the City of Vero Beach General Employee Retirement Plan

Other Experience

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- the extent of turnover among the participants,
- retirement experience (earlier or later than expected),
- mortality (more or fewer deaths than expected), and
- the number of disability retirements.

The net loss from this other experience for the year ended September 30, 2016 amounted to \$357,082, which is 0.3% of the actuarial accrued liability.

A brief summary of the demographic gain/(loss) experience of the Plan for the year ended September 30, 2016 is shown in the chart below.

The chart shows elements of the experience gain/(loss) for the most recent year.

CHART 13
Experience Due to Changes in Demographics for Year Ended September 30, 2016

1. Post-retirement mortality experience	\$663,736
2. Turnover experience	141,039
3. Disability retirement experience	36,507
4. Change in number of actives	11,981
5. Pre-retirement mortality	-31,575
6. Retirement experience for active and terminated vested participants	-516,008
7. Other demographic experience	<u>-662,762</u>
8. Total	-\$357,082

SECTION 2: Valuation Results for the City of Vero Beach General Employee Retirement Plan

D. RECOMMENDED CONTRIBUTION

The amount of annual contribution required to fund the Plan is comprised of administrative expenses and a payment on the unfunded actuarial accrued liability.

The recommended contribution is based on an 11-year, level dollar amortization of the unfunded actuarial accrued liability.

The contribution requirements as of October 1, 2016 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions.

The chart compares this valuation's recommended contribution with the prior valuation.

CHART 14
Recommended Contribution

	Year Beginning October 1	
	2016	2015
	Amount	Amount
1. Total normal cost, including administrative expenses	\$19,878	\$31,187
2. Expected employee contributions	<u>0</u>	<u>0</u>
3. Employer normal cost: (1) + (2)	\$19,878	\$31,187
4. Actuarial accrued liability	110,734,591	106,830,456
5. Actuarial value of assets	<u>76,297,177</u>	<u>72,228,788</u>
6. Unfunded/(overfunded) actuarial accrued liability: (4) - (5)	\$34,437,414	\$34,601,668
7. Payment on unfunded/(overfunded) actuarial accrued liability	4,225,291	3,982,219
8. Total recommended contribution: (3) + (7), adjusted for timing*	<u>\$4,499,935</u>	<u>\$4,274,277</u>

**Recommended contributions are assumed to be paid at the end of every year.*

SECTION 2: Valuation Results for the City of Vero Beach General Employee Retirement Plan

Reconciliation of Recommended Contribution

The chart below details the changes in the recommended contribution from the prior valuation to the current year's valuation.

The chart reconciles the contribution from the prior valuation to the amount determined in this valuation.

CHART 15

Reconciliation of Recommended Contribution from October 1, 2015 to October 1, 2016

Recommended Contribution as of October 1, 2015	\$4,274,277
Effect of change in assumed mortality	422,986
Effect of change in administrative expense assumption	-12,044
Effect of investment (gain)/loss	-211,999
Effect of other gains and losses on accrued liability	26,715
Total change	<u>\$225,658</u>
Recommended Contribution as of October 1, 2016	\$4,499,935

SECTION 3: Supplemental Information for the City of Vero Beach General Employee Retirement Plan

EXHIBIT A

Table of Plan Coverage

Category	Year Ended September 30		Change From Prior Year
	2016	2015	
Active participants in valuation:			
Number	299	323	-7.4%
Average age	49.7	49.5	N/A
Average years of service	16.7	15.8	N/A
Account balances	\$4,878,585	\$5,194,177	-6.1%
Total active vested participants	299	323	-7.4%
Vested terminated participants	93	89	4.5%
Beneficiaries with rights to a deferred benefit	3	3	0.0%
Retired participants:			
Number in pay status	315	297	6.1%
Average age	70.0	70.4	N/A
Average monthly benefit	\$1,457	\$1,459	-0.1%
Disabled participants:			
Number in pay status	15	17	-11.8%
Average age	62.4	61.5	N/A
Average monthly benefit	\$1,207	\$1,314	-8.1%
Beneficiaries in pay status:			
Number in pay status	45	42	7.1%
Average age	78.2	77.9	N/A
Average monthly benefit	\$1,186	\$1,108	7.0%

SECTION 3: Supplemental Information for the City of Vero Beach General Employee Retirement Plan

EXHIBIT B

**Participants in Active Service as of September 30, 2016
By Age, Years of Service**

Age	Years of Service									
	Total	0-4	5-9	10-14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 & over
Under 25	6	6	--	--	--	--	--	--	--	--
25 - 29	14	10	4	--	--	--	--	--	--	--
30 - 34	18	4	5	9	--	--	--	--	--	--
35 - 39	19	5	6	6	2	--	--	--	--	--
40 - 44	20	2	7	4	4	3	--	--	--	--
45 - 49	51	6	8	7	14	7	9	--	--	--
50 - 54	63	6	3	7	11	10	13	11	2	--
55 - 59	67	4	6	11	8	3	20	9	5	1
60 - 64	32	3	4	6	4	8	3	--	4	--
65 - 69	7	--	2	1	1	1	--	1	1	--
70 & over	2	--	1	1	--	--	--	--	--	--
Total	299	46	46	52	44	32	45	21	12	1

SECTION 3: Supplemental Information for the City of Vero Beach General Employee Retirement Plan

EXHIBIT C

Reconciliation of Participant Data

	Active Participants	Vested Former Participants*	Disableds	Retired Participants	Beneficiaries	Total
Number as of October 1, 2015	323	92	17	297	42	771
New participants	0	N/A	N/A	N/A	N/A	0
Terminations – with vested rights	-7	7	0	0	0	0
Terminations – without vested rights	0	N/A	N/A	N/A	N/A	0
Retirements	-19	-7	N/A	26	N/A	0
New disabilities	-1	0	1	N/A	N/A	0
Return to work	1	-1	0	0	N/A	0
Died with beneficiary	0	0	-1	-8	9	0
Died without beneficiary	0	0	0	-5	-6	-11
Lump sum payoffs	0	0	0	0	0	0
Rehire	0	0	N/A	0	N/A	0
Certain period expired	N/A	N/A	0	0	0	0
Data adjustments	2	5	-2	4	0	9
Active participants no longer accruing benefits	0	0	N/A	N/A	N/A	0
New QDRO	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>
Number as of October 1, 2016	299	96	15	315	45	770

* Includes beneficiaries entitled to deferred benefits.

SECTION 3: Supplemental Information for the City of Vero Beach General Employee Retirement Plan

EXHIBIT D

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended September 30, 2016	Year Ended September 30, 2015
Net assets at actuarial value at the beginning of the year	\$72,228,788	\$67,033,343
Contribution income:		
Employer contributions	\$4,274,277	\$4,889,995
Employee contributions	0	373,250
Less administrative expenses	<u>-20,457</u>	<u>-32,265</u>
Net contribution income	\$4,253,820	\$5,230,980
Investment income:		
Interest, dividends and other income	\$1,850,699	\$1,766,134
Recognition of capital appreciation	4,800,701	4,698,638
Less investment fees	<u>-397,486</u>	<u>-395,934</u>
Net investment income	<u>6,253,914</u>	<u>6,068,838</u>
Total income available for benefits	\$10,507,734	\$11,299,818
Less benefit payments:		
Pension Payments	-\$6,408,133	-\$6,070,239
Refunds	<u>-31,212</u>	<u>-34,134</u>
Net benefit payments	-\$6,439,345	-\$6,104,373
Change in actuarial value of assets	\$4,068,389	\$5,195,445
Net assets at actuarial value at the end of the year	\$76,297,177	\$72,228,788

SECTION 3: Supplemental Information for the City of Vero Beach General Employee Retirement Plan

EXHIBIT E

Summary Statement of Income and Expenses on a Market Value Basis

	Year Ended September 30, 2016	Year Ended September 30, 2015
Net assets at market value at the beginning of the year	\$71,912,556	\$71,926,346
Contribution income:		
Employer contributions	\$4,274,277	\$4,889,995
Employee contributions	0	373,250
Less administrative expenses	<u>-20,457</u>	<u>-32,265</u>
Net contribution income	4,253,820	5,230,980
Investment income:		
Interest, dividends and other income	\$1,850,699	\$1,766,134
Appreciation/(depreciation)*	5,752,488	-510,597
Less investment and administrative fees	<u>-397,486</u>	<u>-395,934</u>
Net investment income	<u>7,205,701</u>	<u>859,603</u>
Total income available for benefits	\$11,459,521	\$6,090,583
Less benefit payments:		
Pension Payments	-\$6,408,133	-\$6,070,239
Refunds	<u>-31,212</u>	<u>-34,134</u>
Net benefit payments	-\$6,439,345	-\$6,104,373
Change in market value of assets	\$5,020,176	-\$13,790
Net assets at market value at the end of the year	\$76,932,732	\$71,912,556
<i>*Total realized investment gains and losses</i>	\$377,733	\$820,763
<i>Total unrealized investment gains and losses</i>	<u>5,374,755</u>	<u>-1,331,360</u>
	\$5,752,488	\$510,597

SECTION 3: Supplemental Information for the City of Vero Beach General Employee Retirement Plan

EXHIBIT F

Summary Statement of Plan Assets

	Year Ended September 30, 2016	Year Ended September 30, 2015
Investments:		
Equities	\$40,037,493	\$35,383,409
International Equities	7,445,164	7,057,065
Fixed income	25,487,499	25,722,786
Real Estate	<u>3,990,980</u>	<u>3,755,418</u>
Total assets	\$76,961,136	\$71,918,678
Less accounts payable	-\$28,404	-\$6,122
Net assets at market value	<u>\$76,932,732</u>	<u>\$71,912,556</u>
Net assets at actuarial value	<u>\$76,297,177</u>	<u>\$72,228,788</u>

SECTION 3: Supplemental Information for the City of Vero Beach General Employee Retirement Plan

EXHIBIT G

Development of the Fund Through September 30, 2016

Year Ended September 30	Employer Contributions	Employee Contributions	Net Investment Return*	Administrative Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
2007	\$2,656,451	\$334,089	\$4,443,025	\$0	\$3,093,547	\$52,695,243
2008	2,866,308	295,394	1,675,076	0	3,283,957	54,248,064
2009	3,347,010	321,102	-719,568	0	3,579,773	53,616,835
2010	4,050,000	339,504	2,317,502	0	4,133,241	56,190,600
2011	4,115,761	520,384	181,955	0	4,605,651	56,403,049
2012	4,153,621	507,866	735,791	0	5,099,786	56,700,541
2013	4,641,428	483,024	4,829,509	0	5,602,587	61,051,915
2014	4,972,378	461,199	6,598,330	0	6,050,479	67,033,343
2015	4,889,995	373,250	6,068,838	32,265	6,104,373	72,228,788
2016	4,274,277	0	6,253,914	20,457	6,439,345	76,297,177

* Net of investment fees and administrative expenses prior to fiscal 2015.

SECTION 3: Supplemental Information for the City of Vero Beach General Employee Retirement Plan

EXHIBIT H

**Development of Unfunded Actuarial Accrued Liability
for Year Ended September 30, 2016**

1. Unfunded actuarial accrued liability at beginning of year		\$34,601,668
2. Employer normal cost at beginning of year		31,187
3. Total contributions		-4,274,277
4. Interest		
(a) For whole year on (1) + (2)	\$2,251,136	
(b) For half year on (3)	<u>-138,914</u>	
(c) Total interest		<u>2,112,222</u>
5. Expected unfunded/(overfunded) actuarial accrued liability		\$32,470,800
6. Changes due to:		
(a) (Gain)/loss	-\$1,285,747	
(b) Assumptions	<u>3,252,361</u>	
(c) Total changes		<u>1,966,614</u>
7. Unfunded actuarial accrued liability at end of year		<u>\$34,437,414</u>

SECTION 3: Supplemental Information for the City of Vero Beach General Employee Retirement Plan

EXHIBIT I

Table of Amortization Bases

Type	Date Established	Years Remaining	Outstanding Balance	Annual Payment*
Unfunded actuarial accrued liability	10/1/2016	11	\$34,437,414	\$4,205,413

**Effective October 1, 2015, as a result of the plan freeze, the unfunded actuarial accrued liability was amortized on a level dollar basis over twelve years to approximate the average future-working lifetime of the remaining active population. As of October 1, 2016, the remaining period has been reduced to eleven years. The period will be evaluated annually and adjusted as necessary.*

SECTION 3: Supplemental Information for the City of Vero Beach General Employee Retirement Plan

EXHIBIT J

Definitions of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

Assumptions or Actuarial Assumptions:

The estimates on which the cost of the Plan is calculated including:

- (a) Investment return — the rate of investment yield that the Plan will earn over the long-term future;
- (b) Mortality rates — the death rates of employees and pensioners; life expectancy is based on these rates;
- (c) Retirement rates — the rate or probability of retirement at a given age;
- (d) Withdrawal rates — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.

Normal Cost:

The amount of contributions required to fund the benefit allocated to the current year of service.

Actuarial Accrued Liability For Actives:

The value of all projected benefit payments for current members less the portion that will be paid by future normal costs.

Actuarial Accrued Liability For Pensioners:

The single-sum value of lifetime benefits to existing pensioners. This sum takes account of life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits.

Unfunded Actuarial Accrued Liability:

The extent to which the actuarial accrued liability of the Plan exceeds the assets of the Plan. There is a wide range of approaches to paying off the unfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.

SECTION 3: Supplemental Information for the City of Vero Beach General Employee Retirement Plan

Amortization of the Unfunded

Actuarial Accrued Liability: Payments made over a period of years equal in value to the Plan's unfunded actuarial accrued liability.

Investment Return:

The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.

SECTION 3: Supplemental Information for the City of Vero Beach General Employee Retirement Plan

EXHIBIT K

Supplementary State of Florida Information – Recent History of Recommended and Actual Contributions

Fiscal Year Ended September 30	Valuation Date September 30	Recommended Contribution	Actual Contribution
2008	2007	\$2,866,308	\$2,866,308
2009	2008	3,347,010	3,347,010
2010	2009	4,028,814	4,050,000
2011	2010	4,115,761	4,115,761
2012	2011	4,153,621	4,153,621
2013	2012	4,641,428	4,641,428
2014	2013	4,972,378	4,972,378
2015	2014	4,889,995	4,889,995
2016	2015	4,274,277	4,274,277
2017	2016	4,499,935	--

SECTION 3: Supplemental Information for the City of Vero Beach General Employee Retirement Plan

EXHIBIT K (continued)

Supplementary State of Florida Information - Comparative Summary of Principal Valuation Results

	Year Ended September 30, 2016		Year Ended September 30, 2015
	Old Plan New Assumptions	Old Plan Old Assumptions	
Participant data			
Active members	299	299	323
Retired members and beneficiaries	375	375	356
Total annualized benefit	\$6,363,444	\$6,363,444	\$6,024,828
Terminated vested members	96	96	92
Total annualized benefit	\$802,812	\$802,812	\$774,312
Actuarial value of assets	\$76,297,177	\$76,297,177	\$72,228,788
Present value of all future expected benefit payments:			
Active members:			
Retirement benefits	\$26,971,348	\$25,137,068	\$27,041,961
Vesting benefits	791,712	732,486	883,933
Disability benefits	1,423,561	1,365,292	1,530,108
Death benefits	803,375	890,158	975,983
Return of contributions	<u>4,878,585</u>	<u>4,878,585</u>	<u>5,194,177</u>
Total	\$34,868,581	\$33,003,589	\$35,626,162
Terminated vested members	4,228,649	3,870,605	4,052,199
Retired members and beneficiaries	<u>71,637,361</u>	<u>70,608,036</u>	<u>67,152,095</u>
Total	\$110,734,591	\$107,482,230	\$106,830,456

SECTION 3: Supplemental Information for the City of Vero Beach General Employee Retirement Plan

EXHIBIT K (continued)

Supplementary State of Florida Information – Comparative Summary of Principal Valuation Results

	Year Ended September 30, 2016		Year Ended September 30, 2015
	Old Plan New Assumptions	Old Plan Old Assumptions	
Unfunded actuarial accrued liability	\$34,437,414	\$31,185,053	\$34,601,668
Actuarial present value of accrued benefits			
Vested accrued benefits			
Active members	\$34,753,034	\$32,875,944	\$35,464,922
Inactive members	4,228,649	3,870,605	4,052,199
Pensioners and beneficiaries	71,637,361	70,608,036	67,152,095
Nonvested active members	<u>198,988</u>	<u>205,087</u>	<u>263,160</u>
Total	\$110,818,032	\$107,559,672	\$106,932,376
Pension cost			
Normal cost, including administrative expenses	\$19,878	\$31,187	\$31,187
Payment to amortize unfunded actuarial accrued liability	4,205,413	3,808,243	3,982,219
Total minimum annual cost payable monthly at valuation date	4,499,935	4,088,993	4,274,277

SECTION 3: Supplemental Information for the City of Vero Beach General Employee Retirement Plan

EXHIBIT K (continued)

Supplementary State of Florida Information - Actuarial Present Value of Accumulated Plan Benefits

The factors that affected the change in the actuarial present value of accumulated plan benefits from the preceding to the current benefit information date are as follows:

Factors	Change in Actuarial Present Value of Accumulated Plan Benefits
Actuarial present value of accumulated benefits as of October 1, 2015	\$106,932,376
Benefits accumulated, net experience gain or loss, changes in data	\$342,756
Assumption changes	3,258,360
Benefits paid	-6,439,345
Interest	<u>6,723,885</u>
Net increase	<u>3,885,656</u>
Actuarial present value of accumulated benefits as of October 1, 2016	\$110,818,032

SECTION 4: Reporting Information for the City of Vero Beach General Employee Retirement Plan

EXHIBIT I

Summary of Actuarial Valuation Results

The valuation was made with respect to the following data supplied to us:

1. Retired participants as of the valuation date (including 45 beneficiaries in pay status)	375
2. Participants inactive during year ended September 30, 2016 with vested rights (including three beneficiaries with rights to deferred pensions)	96
3. Participants active during the year ended September 30, 2016	299

The actuarial factors as of the valuation date are as follows:

1. Normal cost, including administrative expenses	\$19,878
2. Actuarial accrued liability	110,734,591
Retired participants and beneficiaries	\$71,637,361
Inactive participants with vested rights	4,228,649
Active participants	34,868,581
3. Actuarial value of assets (\$76,932,732 at market value as reported by City's Finance Department)	76,297,177
4. Unfunded actuarial accrued liability	\$34,437,414

SECTION 4: Reporting Information for the City of Vero Beach General Employee Retirement Plan

EXHIBIT I (continued)

Summary of Actuarial Valuation Results

The determination of the recommended contribution is as follows:

1. Total normal cost, including administrative expenses	\$19,878
2. Expected employee contributions	<u>0</u>
3. Employer normal cost: (1) + (2)	\$19,878
4. Payment on unfunded/(overfunded) actuarial accrued liability	4,205,413
5. Total recommended contribution: (3) + (4), adjusted for timing	<u>\$4,499,935</u>

SECTION 4: Reporting Information for the City of Vero Beach General Employee Retirement Plan

EXHIBIT II

History of City Contributions

Plan Year Ended September 30	Actuarially Determined Employer Contributions (ADEC)	Actual Contributions	Percentage Contributed
2012	\$4,153,621	\$4,153,621	100.0%
2013	4,641,428	4,641,428	100.0%
2014	4,972,378	4,972,378	100.0%
2015	4,889,995	4,889,995	100.0%
2016	4,274,277	4,274,277	100.0%
2017	4,499,935	--	--

SECTION 4: Reporting Information for the City of Vero Beach General Employee Retirement Plan

EXHIBIT III

Schedule of Funding Progress

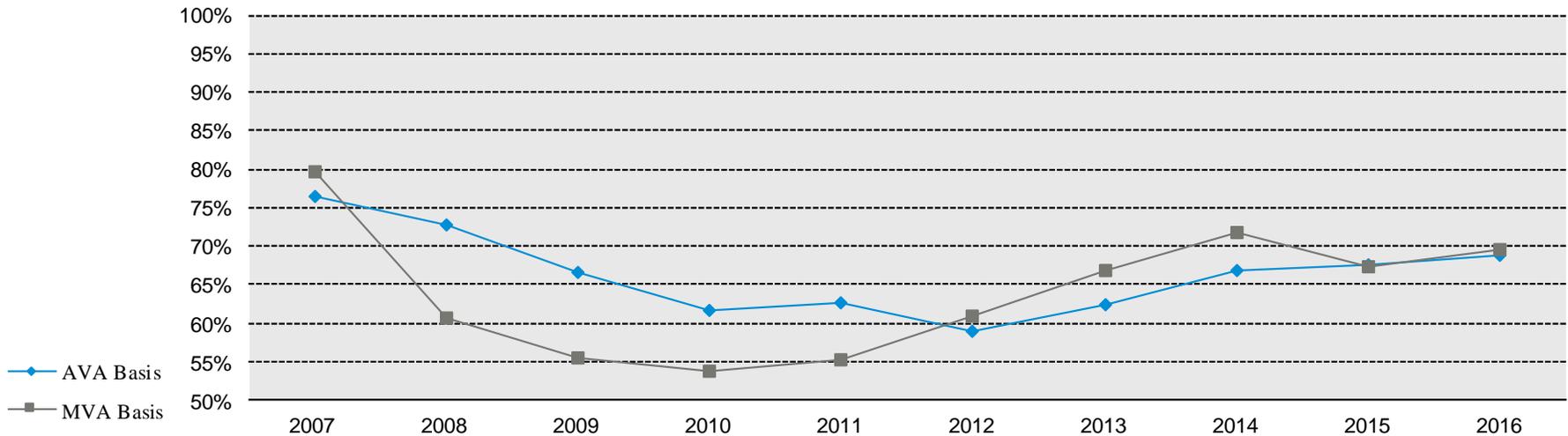
Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)
10/01/2011	\$56,403,049	\$90,069,213	\$33,666,164	62.62%
10/01/2012	56,700,541	96,081,699	39,381,158	59.01%
10/01/2013	61,051,915	97,981,168	36,929,253	62.31%
10/01/2014	67,033,343	100,265,184	33,231,841	66.86%
10/01/2015	72,228,788	106,830,456	34,601,668	67.61%
10/01/2016	76,297,177	110,734,591	34,437,414	68.90%

SECTION 4: Reporting Information for the City of Vero Beach General Employee Retirement Plan

**EXHIBIT IV
Funded Ratio**

A critical piece of information regarding the Plan's financial status is the funded ratio. This ratio compares the actuarial value of assets to the actuarial accrued liabilities of the Plan as calculated. High ratios indicate a well-funded plan with assets sufficient to cover the plan's actuarial accrued liabilities. Lower ratios may indicate recent changes to benefit structures, funding of the plan below actuarial requirements, poor asset performance, or a variety of other factors.

The chart below depicts a history of the funded ratios for this plan.



SECTION 4: Reporting Information for the City of Vero Beach General Employee Retirement Plan

EXHIBIT V

Actuarial Assumptions and Actuarial Cost Method

Mortality Rates:

Healthy pre-retirement: 50% RP2000 Combined Healthy White Collar and 50% RP2000 Combined Healthy Blue Collar, projected generationally with Scale BB for males; RP2000 Combined Healthy White Collar, projected generationally with Scale BB for females.

Healthy post-retirement: 50% RP2000 White Collar Annuitant and 50% RP2000 Blue Collar Annuitant, projected generationally with Scale BB for males; RP2000 White Collar Annuitant, projected generationally with Scale BB for females.

Disabled: RP-2000 Disabled Retiree Mortality Table, set back four years for males and forward two years for females.

Per Florida Statute Section 112.63(f), the mortality tables were updated in the October 1, 2016 actuarial valuation.

Termination Rates before Retirement:

Age	Rate (%)			
	Mortality*		Disability	Withdrawal**
	Male	Female		
20	0.03	0.02	0.03	15.57
25	0.04	0.02	0.04	11.44
30	0.04	0.03	0.05	10.27
35	0.06	0.05	0.07	8.06
40	0.09	0.06	0.10	5.59
45	0.13	0.10	0.16	3.38
50	0.20	0.16	0.27	1.43
55	0.33	0.26	0.45	0.65
60	0.56	0.47	0.73	0.00
65	1.11	0.87	0.00	0.00

* Tabular rates do not include generational projection.

** Withdrawal rates cut off at Early Retirement Age.

SECTION 4: Reporting Information for the City of Vero Beach General Employee Retirement Plan

Retirement Rates:	Retirement Age	Rate (per year)
	55	22.00%
	56-57	2.50
	58	8.00
	59-61	10.00
	62	40.00
	63	10.00
	64	17.50
	65	25.00
	66-69	35.00
	70	100.00

Retirement Age for Inactive Vested Participants: 65

Unknown Data for Participants: Same as those exhibited by Participants with similar known characteristics. If not specified, Participants are assumed to be male.

Percent Married: 80%

Age of Spouse: Females 3 years younger than males

Net Investment Return: 6.50%, net of investment expenses

Salary Increases: N/A

Payroll Growth Rate: N/A

Cost of Living Adjustments: 1% per year to all retirees and beneficiaries

Administration Expenses: \$20,457, paid monthly

SECTION 4: Reporting Information for the City of Vero Beach General Employee Retirement Plan

Actuarial Value of Assets:	Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized over a five-year period. The actuarial value of assets is further adjusted, if necessary, to be within 20% of the market value.
Actuarial Cost Method:	Entry Age Normal Cost Method. Entry Age is the age at the time the participant commenced employment. Normal Cost and Actuarial Accrued Liability is calculated on an individual basis and are allocated by service, with Normal Cost determined as if the current benefit accrual rate had always been in effect.
Changes in Assumptions:	<ul style="list-style-type: none">➤ Mortality tables were updated per Florida Statute Section 112.63(f).➤ The administrative expense assumption was lowered to \$20,457, payable monthly.

SECTION 4: Reporting Information for the City of Vero Beach General Employee Retirement Plan

EXHIBIT VI

Summary of Plan Provisions

This exhibit summarizes the major provisions of the Plan included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year: October 1 through September 30

Plan Status: Frozen, with no future accruals as of July 1, 2015

Normal Retirement:

Participants with 25 years of service or vested participants who have reached age 65 by September 30, 2010:

<i>Age Requirement</i>	65
<i>Service Requirement</i>	5 years of continuous service
<i>Amount</i>	2.25% of Average Basic Monthly Compensation for each of the first 25 years of continuous service plus 0.5% of Average Basic Monthly Compensation for each year thereafter
<i>Basic Monthly Compensation</i>	The average salary of the Member's highest five consecutive years within the last 10 years of consecutive service preceding retirement. The salary in effect on each January 1 st shall be used as the basis for this computation.
<i>Normal Annuity Form</i>	Single life

Participants with less than 25 years of service or employees younger than age 65 on October 1, 2010:

<i>Age Requirement</i>	65
<i>Service Requirement</i>	5 years of continuous service
<i>Amount</i>	2.25% of Average Basic Monthly Compensation for each year of service accrued before October 1, 2010 plus 1.60% of Average Basic Monthly Compensation for each year of service accrued after September 30, 2010
<i>Basic Monthly Compensation</i>	The average salary of the Member's highest five consecutive years within the last 10 years of consecutive service preceding retirement. The salary in effect on each January 1 st shall be used as the basis for this computation.
<i>Normal Annuity Form</i>	Single life

SECTION 4: Reporting Information for the City of Vero Beach General Employee Retirement Plan

Early Retirement:

Participants with 25 years of service or vested participants who have reached age 65 by September 30, 2010:

<i>Age Requirement</i>	55
<i>Service Requirement</i>	5 years of continuous service
<i>Amount</i>	Normal pension accrued reduced by 1.5% for each year preceding normal retirement.

Participants with less than 25 years of service or employees younger than age 65 on October 1, 2010:

<i>Age Requirement</i>	55
<i>Service Requirement</i>	5 years of continuous service
<i>Amount</i>	Normal pension accrued reduced by 1.5% for each year preceding normal retirement for benefits accrued before October 1, 2010 and 3% for each year preceding normal retirement for benefits accrued after September 30, 2010.

Disability:

<i>Age Requirement</i>	None
<i>Service Requirement</i>	5 years of continuous service
<i>Amount</i>	Normal pension accrued, but not less than 25% of Basic Monthly Compensation at date of disability. The monthly benefit payable when combined with any benefit payable under workers compensation and social security, shall not exceed 100% of the participants final basic monthly salary at the time of disability.

Vesting:

	All participants vested as of July 1, 2015.
<i>Age Requirement</i>	None
<i>Service Requirement</i>	5 years of continuous service
<i>Amount</i>	Refund of contributions or the Normal retirement benefit, payable at Normal retirement date. If participant elects an earlier commencement date, early retirement reduction factors apply.

SECTION 4: Reporting Information for the City of Vero Beach General Employee Retirement Plan

Pre-Retirement Death Benefit:

Requirement

Death while in active service or on total and permanent disability.

Amount

a. Before Vesting

If a member dies before becoming Vested, the spouse (or designated beneficiary, if not married) receives 100% of the member's contributions without interest.

b. After Vesting

A benefit payable to the spouse (or designated beneficiary, if not married) as though participant had retired on his date of death and chosen the 66 2/3% joint and survivor option; benefit begins when the participant would have reached age 55.

Participation:

Effective October 1, 2010, an employee begins participation on the first day of the month following date of hire. For employees hired prior to October 1, 2010 who had not met the previous eligibility requirement for participation in the Plan, participation began on October 1, 2010.

Contributions:

Members no longer pay contributions, but some have balances remaining in the plan.

Military Service Buy Back:

Vested employees with prior military service may elect to purchase up to 4 years of retirement credit. The cost of purchase shall be determined by the employee's current contribution rate at the time of purchase, multiplied by the number of months being purchased.

Cost-of-Living Adjustment:

Benefits will be increased 1% each year on October 1st for all retirees and beneficiaries receiving benefits at the time of each increase and who retired on or after October 1, 1998. The Board may grant the COLA to annuitants who retired prior to October 1, 1998 at their discretion.

SECTION 4: Reporting Information for the City of Vero Beach General Employee Retirement Plan

Changes in Plan Provisions: There were no changes in Plan provisions since the prior valuation.

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VIA EMAIL

March 15, 2017

Ms. Cindy Lawson
Finance Director
City of Vero Beach
1053 20th Place
Vero Beach, FL 32960

Re: GASB Statements 67 & 68 Disclosures for the City of Vero Beach General Employee Retirement Plan for Fiscal Year Ending September 30, 2016

Dear Cindy:

We are pleased to submit these updated Governmental Accounting Standards Board Statements 67 and 68 disclosures for the City of Vero Beach Employee Retirement Plan fiscal year ending September 30, 2016. The exhibits contain information that will need to be disclosed in order to comply with the GASB requirements for pension plan reporting. See Illustration 3 of GASB Statement 67 and Illustration 2 of GASB Statement 68 for items to be included in the financial statements, note disclosures, and required supplementary information. These can be found on the GASB website under Pronouncements. Information shown in Illustration 3 of GASB Statement 67 and Illustration 2 of GASB Statement 68 not included here will need to be provided by the City of Vero Beach Finance and/or Human Resource departments, investment consultant or auditor.

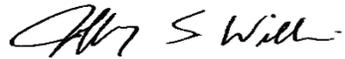
This report was prepared in accordance with generally accepted actuarial principles and practices to assist in administering the Retirement Plan. The census and financial information on which our calculations were based was provided by the Finance Department, in conjunction with the Human Resource Department. That assistance is gratefully acknowledged.

The measurements shown in these disclosures may not be applicable for other purposes. 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; and changes in plan provisions or applicable law.

Cindy Lawson
March 15, 2017
Page 2

The actuarial calculations were completed under my supervision. I am a member of the American Academy of Actuaries and meet their Qualification Standards to render the actuarial opinion herein. To the best of my knowledge, the information supplied in these disclosures is complete and accurate. Further, in my opinion, the assumptions as approved by the Board of Trustees are reasonably related to the experience for the Plan.

Sincerely,

A handwritten signature in black ink that reads "Jeffrey S. Williams". The signature is written in a cursive style with a horizontal line at the end.

Jeffrey S. Williams, FCA, ASA, MAAA, EA
Vice President and Consulting Actuary

cc: Leon F. (Rocky) Joyner, Jr.

EXHIBIT 1**General Information – “Financial Statements”, Note Disclosures and Required Supplementary Information for a Single Employer Pension Plan**

Plan membership: All qualified participants of the General Employee Retirement Plan of Vero Beach, Florida

At September 30, 2015, pension plan membership consisted of the following:

Retirees or beneficiaries currently receiving benefits	356
Terminated participants entitled to, but not yet receiving benefits	92
Active employees	<u>323</u>
Total	771

At September 30, 2016, pension plan membership consisted of the following:

Retirees or beneficiaries currently receiving benefits	375
Terminated participants entitled to, but not yet receiving benefits	96
Active employees	<u>299</u>
Total	770

Plan provisions: Please see a copy of the October 1, 2016 actuarial valuation for a summary of plan benefits.

EXHIBIT 2**Net Pension Liability**

The components of the net pension liability of the Retirement Plan at September 30, 2016 were as follows:

Total pension liability	\$108,242,002
Plan fiduciary net position	<u>76,932,732</u>
City's net pension liability	31,309,270
Plan fiduciary net position as a percentage of the total pension liability	71.07%

Actuarial assumptions: The total pension liability was determined by an actuarial valuation as of October 1, 2016, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	N/A
Salary increases	N/A
Investment rate of return	6.50%, including inflation, net of pension plan investment expense
Cost-of-living adjustments	1.00% annually

Mortality Rates:

Healthy pre-retirement: 50% RP2000 Combined Healthy White Collar and 50% RP2000 Combined Healthy Blue Collar, projected generationally with Scale BB for males; RP2000 Combined Healthy White Collar, projected generationally with Scale BB for females.

Healthy post-retirement: 50% RP2000 White Collar Annuitant and 50% RP2000 Blue Collar Annuitant, projected generationally with Scale BB for males; RP2000 White Collar Annuitant, projected generationally with Scale BB for females.

Disabled: RP-2000 Disabled Retiree Mortality Table, set back four years for males and forward two years for females.

Per Florida Statute Section 112.63(f), the mortality tables were updated in the October 1, 2016 actuarial valuation.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the Plan’s target asset allocation as of September 30, 2016 are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Domestic equity	50%	6.75%
International equity	10%	7.45%
Fixed income	30%	1.75%
Short-term money market	5%	4.55%
Real estate	<u>5%</u>	1.15%
Total	100%	

Discount rate: The blended discount rate used to measure the total pension liability is 6.50%. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at their applicable contribution rates and that City contributions will be made at rates equal to the actuarially determined contribution rates. Based on these assumptions, the Fund’s fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on the Plan’s investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the net pension liability to changes in the discount rate: The following presents the net pension liability of the Fund, calculated using the discount rate of 6.50%, as well as what the Plan’s net pension liability would be if it were calculated using a discount rate that is one percentage point lower (5.50%) or one percentage point higher (7.50%) than the current rate:

	1% Decrease (5.50%)	Current Discount Rate (6.50%)	1% Increase (7.50%)
Net pension liability	\$44,081,288	\$31,309,270	\$20,658,820

EXHIBIT 3**Schedule of Changes in Retirement Fund's Net Pension Liability – Last Three Fiscal Years**

	2016	2015	2014
Total pension liability			
Service cost	\$689,965	\$1,455,560	\$1,525,171
Interest	6,546,450	7,466,958	7,257,316
Change of benefit terms	0	-1,270,795	0
Differences between expected and actual experience	358,687	2,986,908	0
Changes of assumptions	3,151,956	0	0
Benefit payments, including refunds of employee contributions	<u>-6,439,345</u>	<u>-6,104,373</u>	<u>-6,050,479</u>
Net change in total pension liability	\$4,307,713	\$4,534,258	\$2,732,008
Total pension liability – beginning	<u>103,934,289</u>	<u>99,400,031</u>	<u>96,668,023</u>
Total pension liability – ending (a)	<u>\$108,242,002</u>	<u>\$103,934,289</u>	<u>\$99,400,031</u>
Plan fiduciary net position			
Contributions – employer	\$4,274,277	\$4,889,995	\$4,972,378
Contributions – employee	0	373,250	461,199
Net investment income	7,205,701	859,603	6,975,362
Benefit payments, including refunds of employee contributions	-6,439,345	-6,104,373	-6,050,479
Administrative expense	-20,457	-32,265	0
Other	<u>0</u>	<u>0</u>	<u>0</u>
Net change in plan fiduciary net position	\$5,020,176	-\$13,790	\$6,358,460
Plan fiduciary net position – beginning	<u>71,912,556</u>	<u>71,926,346</u>	<u>65,567,886</u>
Plan fiduciary net position – ending (b)	\$76,932,732	\$71,912,556	\$71,926,346
City's net pension liability – ending (a) – (b)	<u>\$31,309,270</u>	<u>\$32,021,733</u>	<u>\$27,473,685</u>
Plan fiduciary net position as a percentage of the total pension liability	71.07%	69.19%	72.36%
Covered employee payroll*	TBD	\$15,456,663	\$15,704,293
City's net pension liability as percentage of covered employee payroll*	TBD	207.17%	174.94%

*Effective September 30, 2015 the Plan was frozen with no new accruals; employer contributions are no longer related to payroll.

Notes to Schedule:

Benefit changes: See the end of Exhibit I for changes in benefit provisions.

Change of assumptions: For fiscal year 2016 the mortality rates were updated in accordance with Florida Statute Section 112.63(f).

EXHIBIT 4**Schedule of City of Vero Beach's Contributions to General Employee Retirement Plan – Last Ten Fiscal Years**

Year Ended September 30	Actuarially Determined Contribution	Contributions in Relation to the Actuarially Determined Contribution	Contribution Deficiency (Excess)	Covered-Employee Payroll*	Contributions as a Percentage of Covered-Employee Payroll
2007	\$2,656,451	\$2,656,451	\$0	\$14,905,998	17.82%
2008	2,866,308	2,866,308	0	15,539,566	18.45%
2009	3,347,010	3,347,010	0	16,548,463	20.23%
2010	4,028,814	4,050,000	(21,186)	18,811,487	21.42%
2011	4,115,761	4,115,761	0	19,305,268	21.32%
2012	4,153,621	4,153,621	0	18,830,488	22.06%
2013	4,641,428	4,641,428	0	17,094,905	27.15%
2014	4,972,378	4,972,378	0	16,224,526	30.65%
2015	4,889,995	4,889,995	0	15,704,293	31.14%
2016	4,274,277	4,274,277	0	--	--

**Effective September 30, 2015 the Plan was frozen with no new accruals; employer contributions are no longer related to payroll.*

EXHIBIT 5**Notes to Required Supplementary Information**

Valuation date	Actuarially determined contribution is calculated using an October valuation date as of the beginning of the fiscal year in which contributions are reported
Methods and used assumptions to determine contribution rates:	
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level dollar
Remaining amortization period	Effective period of 11 years remaining as of October 1, 2016
Asset valuation method	Market value of assets for GASB; five-year smoothing of market gains and losses for funding
Actuarial assumptions:	
Investment rate of return	6.50%, including inflation, net of pension plan investment expense
Inflation rate	N/A
Projected salary increases	N/A
Cost-of-living adjustment	1.00%
Retirement rates	Rates based on age ranging from 55 to 70 years, with 100% retirement at age 70
Mortality:	
<i>Healthy pre-retirement:</i>	50% RP2000 Combined Healthy White Collar and 50% RP2000 Combined Healthy Blue Collar, projected generationally with Scale BB for males; RP2000 Combined Healthy White Collar, projected generationally with Scale BB for females.
<i>Healthy post-retirement:</i>	50% RP2000 White Collar Annuitant and 50% RP2000 Blue Collar Annuitant, projected generationally with Scale BB for males; RP2000 White Collar Annuitant, projected generationally with Scale BB for females.
<i>Disabled retirement:</i>	RP-2000 Disabled Retiree Mortality Table, set back four years for males and forward two years for females.
	Per Florida Statute Section 112.63(f), the mortality tables were updated in the October 1, 2016 actuarial valuation.
Other information:	See Exhibit 3 for the history of changes to plan provisions and assumptions, if any.

Exhibit 6**Detailed development of pension expense**

Pension expense for the year ended September 30, 2016

Service cost	\$689,965	
Interest on Total Pension Liability	6,546,450	
Employee contributions	0	
Administrative expenses	20,457	
Expected return on assets	(4,603,287)	
Expensed portion of current year period differences between expected and actual experience in Total Pension Liability	119,563	
Expensed portion of current year period assumption changes	1,050,652	
Current year plan changes	0	
Expensed portion of current year period differences between projected and actual investment earnings	(520,482)	
Current year recognition of deferred inflows and outflows established in prior years	1,682,896	
Total expense		\$4,986,214

Exhibit 7**GASB 68 Pension Expense and Deferrals for City of Vero Beach General Employee Retirement Plan**

For the year ended September 30, 2016 the City's recognized pension expense is \$4,986,214. At September 30, 2016, the City reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$1,732,578	--
Net difference between projected and actual earnings on pension plan investments	726,575	--
Assumption Changes	<u>2,101,304</u>	<u>--</u>
Total	<u>\$4,560,457</u>	<u>--</u>

It is our understanding that there were not any contributions reported as deferred outflows of resources related to pensions resulting from the City's contributions subsequent to subsequent to September 30, 2016; if such contributions exist, they will be recognized as a reduction of the net pension liability in the year ended September 30, 2017. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year Ended	Recognition of deferred outflows/(inflows)
September 30, 2017	\$2,332,627
September 30, 2018	\$2,332,627
September 30, 2019	\$415,686
September 30, 2020	(\$520,483)
Thereafter	--

Exhibit 7**Pension Expense and Deferred Outflows/Inflows of Resources Related to Pensions (continued)****Projected recognition of deferred outflows/(inflows)**

	Year Established	Prior Year's Balances Plus Newly Created Balances	Amount Recognized During FYE September 30, 2016	Outstanding Balance at September 30, 2016	Deferred Outflows/(Inflows) Recognized in Future Years			
					FYE September 30, 2017	FYE September 30, 2018	FYE September 30, 2019	FYE September 30, 2020 and Thereafter
Fiscal Year Inflows								
Investment	2016	(\$2,602,414)	<u>(\$520,482)</u>	<u>(\$2,081,932)</u>	<u>(\$520,483)</u>	<u>(\$520,483)</u>	<u>(\$520,483)</u>	<u>(\$520,483)</u>
Total Inflows			<u>(\$520,482)</u>	<u>(\$2,081,932)</u>	<u>(\$520,483)</u>	<u>(\$520,483)</u>	<u>(\$520,483)</u>	<u>(\$520,483)</u>
Fiscal Year Outflows								
Investment	2015	\$3,744,676	\$936,169	\$2,808,507	\$936,169	\$936,169	\$936,169	--
Liability	2015	\$2,240,181	\$746,727	\$1,493,454	\$746,727	\$746,727	--	--
Assumptions	2016	\$3,151,956	\$1,050,652	\$2,101,304	\$1,050,652	\$1,050,652	--	--
Liability	2016	\$358,687	<u>\$119,563</u>	<u>\$239,124</u>	<u>\$119,562</u>	<u>\$119,562</u>	--	--
Total Outflows			\$2,853,111	\$6,642,389	\$2,853,100	\$2,853,110	\$936,169	--
Total (Inflow)/Outflow			\$2,332,629	\$4,560,457	\$2,332,627	\$2,332,627	\$415,686	(\$520,483)

Exhibit 8

Projection of Pension Plan's Fiduciary Net Position for Use in Calculation of Discount Rate

Year Beginning October 1,	Projected Beginning Plan Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Plan Fiduciary Net Position (f)= (a) + (b) + (c) + (d) + (e)
2015	\$71,912,556	\$4,274,277	\$6,439,345	\$20,457	\$7,205,701	\$76,932,732
2016	76,932,732	4,500,552	6,651,060	20,457	4,930,071	79,691,838
2017	79,691,838	4,504,275	7,177,987	20,457	5,092,409	82,090,078
2018	82,090,078	4,565,559	7,443,340	20,457	5,241,662	84,433,502
2019	84,433,502	4,474,313	7,674,607	20,457	5,383,503	86,596,254
2020	86,596,254	4,474,149	7,877,009	20,457	5,517,499	88,690,436
2021	88,690,436	4,473,985	8,085,294	20,457	5,646,846	90,705,516
2022	90,705,516	4,473,821	8,264,040	20,457	5,772,012	92,666,852
2023	92,666,852	4,473,657	8,354,310	20,457	5,896,559	94,662,301
2024	94,662,301	4,473,493	8,444,580	20,457	6,023,324	96,694,081
2025	96,694,081	4,473,329	8,518,419	20,457	6,152,985	98,781,519
2026	98,781,519	4,473,165	8,687,930	20,457	6,283,154	100,829,451
2027	100,829,451	20,475	8,712,120	20,457	6,270,771	98,388,120
2028	98,388,120	20,311	8,706,882	20,457	6,112,249	95,793,341
2029	95,793,341	20,147	8,763,268	20,457	5,941,751	92,971,514
2030	92,971,514	19,983	8,660,036	20,457	5,761,682	90,072,686
2031	90,072,686	19,819	8,565,069	20,457	5,576,339	87,083,318
2109	680,272,071	21,787	1	20,457	44,217,728	724,491,128
2110	\$724,491,128					
2110 Discounted Value		\$1,946,121*				

* When discounted with interest at the rate of 6.50% per annum, \$724,491,128 has a value of \$1,946,121 as of September 30, 2015

Notes:

- (1) The projected beginning plan fiduciary net position amounts shown have not been adjusted for the time value of money.
- (2) Actual contributions, benefit payments, administrative expenses, and investment earnings are used in the determination of the September 30, 2016 Fiduciary Net Position.
- (3) The projection above is based on the actuarial valuation as of October 1, 2016, which was used as the basis of the TPL measurements as of September 30, 2016. The NPL measurements corresponding to these TPL measurements were used for the purpose of GASB 67 disclosures and GASB 68 disclosures as of September 30, 2016. The projection demonstrates that the current funding policy supports the use of the full 6.50% rate of return.
- (4) Projected benefit payments have been determined in accordance with Paragraph 39 of GASB Statement No. 67, and are based on the closed group of active, inactive vested, retired members and beneficiaries as of October 1, 2016. Benefit payments are assumed to be paid with an average timing equivalent to mid-year payment.
- (5) Administrative expenses are assumed to be \$20,457, payable at the end of each year.
- (6) Projected investment earnings are based on the assumed investment rate of return of 6.50% per annum.
- (7) As illustrated in this Exhibit, the Plan's fiduciary net position was projected to be available to make all projected future benefit payments for current Plan members. In other words, there is no projected "cross-over date" when projected benefits are not covered by projected assets. Therefore, the long-term expected rate of return on Plan investments of 6.50% per annum was applied to all periods of projected benefit payments to determine the total pension liability, pursuant to Paragraph 44 of GASB Statement No. 67.

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