

**ORLANDO UTILITIES COMMISSION PENSION PLAN**  
ACTUARIAL VALUATION REPORT AS OF OCTOBER 1, 2016

ANNUAL EMPLOYER CONTRIBUTION FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 2018





February 3, 2017

Board of Trustees  
Orlando Utilities Commission Pension Plan  
Orlando, Florida

**Re: Orlando Utilities Commission Pension Plan  
Actuarial Valuation as of October 1, 2016 and Actuarial Disclosures**

Dear Members of the Board:

The results of the October 1, 2016 Annual Actuarial Valuation of the Orlando Utilities Commission Pension Plan (the "Plan") are presented in this report.

This report was prepared at the request of the Board of Trustees and is intended for use by the Plan and those designated or approved by the Board of Trustees. This report may be provided to parties other than the Orlando Utilities Commission only in its entirety and only with the permission of the Board of Trustees. GRS is not responsible for unauthorized use of this report.

The purpose of the valuation is to measure the Plan's funding progress and to determine the employer contribution rate for the fiscal year ending September 30, 2018. This report should not be relied on for any purpose other than the purposes described herein. Determinations of financial results associated with the benefits described in this report, for purposes other than those identified above may be significantly different.

The computed contribution rate shown on page 1 is best viewed as the minimum contribution rate that complies with the Board of Trustees' funding policy. Users of this report should be aware that contributions made at that rate do not guarantee benefit security.

The findings in this report are based on data or other information through September 30, 2016. 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 an actuarial valuation does not include an analysis of the potential range of such future measurements.

This valuation assumed the continuing ability of the plan sponsor to make the contributions necessary to fund this plan. A determination regarding whether or not the plan sponsor is actually able to do so is outside our scope of expertise and was not performed.

The valuation was based upon information furnished by Orlando Utilities Commission concerning plan benefits, financial information, plan provisions, and census data for active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not otherwise audit the data. We are not responsible for the accuracy or completeness of the information provided by Orlando Utilities Commission.

In addition, this report was prepared using assumptions approved by the Board of Trustees and prescribed by the Florida Statutes, as described in the section of this report entitled Actuarial Assumptions and Cost Method. The prescribed assumptions are the assumed mortality rates detailed in the Actuarial Assumptions and Cost Method section in accordance with Florida House Bill 1309 (codified in Chapter 2015-257).

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

Peter N. Strong and Melissa R. Moskovitz are members of the American Academy of Actuaries. These actuaries meet the Academy's Qualification Standards to render the actuarial opinions contained herein.

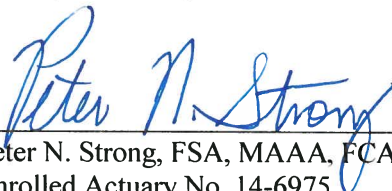
The signing actuaries are independent of the plan sponsor.


This actuarial valuation and/or cost determination was prepared and completed by us or under our direct supervision, and we acknowledge responsibility for the results. To the best of our knowledge, the results are complete and accurate. In our opinion, the techniques and assumptions used are reasonable, meet the requirements and intent of Part VII, Chapter 112, Florida Statutes, and are based on generally accepted actuarial principles and practices. 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.

Gabriel, Roeder, Smith & Company will be pleased to review this valuation report with the Board of Trustees and to answer any questions pertaining to the valuation.

Respectfully submitted,

GABRIEL, ROEDER, SMITH & COMPANY

By:   
Peter N. Strong, FSA, MAAA, FCA  
Enrolled Actuary No. 14-6975

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## TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
<b>A</b>	Discussion of Valuation Results	1
<b>B</b>	Valuation Results	
	1. Participant Data	5
	2. Actuarially Determined Employer Contribution	6
	3. Actuarial Value of Benefits and Assets	7
	4. Calculation of Employer Normal Cost	8
	5. Liquidation of the Unfunded Actuarial Accrued Liability (UAAL)	9
	6. Actuarial Gains and Losses	10
	7. Recent History of Valuation Results	16
	8. Recent History of UAAL and Funded Ratio	18
	9. Recent History of Required and Actual Contributions	19
	10. Actuarial Assumptions and Cost Method	21
	11. Glossary	26
<b>C</b>	Pension Fund Information	
	1. Summary of Assets at Market Value	29
	2. Summary of Fund's Income and Disbursements	30
	3. Development of Actuarial Value of Assets	31
	4. Investment Rate of Return	32
<b>D</b>	Financial Accounting Information	
	1. FASB No. 35	33
<b>E</b>	Miscellaneous Information	
	1. Reconciliation of Membership Data	34
	2. Active Members Data	35
	3. Inactive Members Data	37
	4. Projected Payroll and Retirement Benefits	38
<b>F</b>	Summary of Plan Provisions	
	1. Pre-1998 Plan Provisions	41
	2. Cash Balance Provisions	46

**SECTION A**  
**DISCUSSION OF VALUATION RESULTS**

## DISCUSSION OF VALUATION RESULTS

### Nature of the Plan

The Plan consists of a traditional pension plan and a cash balance plan. The former covers full-time employees hired before January 1, 1998. Those hired on or after January 1, 1998 and who were still employed on or after May 1, 2011 are covered by the cash balance plan. Additionally, approximately 80 members, who were hired prior to January 1, 1998 who had elected to transfer from the traditional pension plan to the defined contribution plan who were still employed on or after May 1, 2011, are covered by the cash balance plan. This valuation treats the two benefit structures applicable to two employee subgroups as one blended defined benefit plan with unallocated assets. All plan assets are available to pay all benefits to any plan member.

### Comparison of Required Employer Contributions

The minimum required employer contribution developed in this year's valuation is compared below with that of the previous valuation.

	For FYE 9/30/2018 Based on 10/1/2016 Valuation	For FYE 9/30/2017 Based on 10/1/2015 Valuation	Change	For FYE 9/30/2016 Based on 10/1/2014 Valuation
Preliminary Required Employer Contribution	\$ 22,524,385	\$ 21,875,854	\$ 648,531	\$ 18,321,715
As % of Covered Payroll	25.26 %	27.12 %	(1.86) %	23.59 %
Prepaid Employer Contribution	\$ -	\$ -	\$ -	\$ (519,190)
As % of Covered Payroll	0.00 %	0.00 %	0.00 %	(0.67) %
Net Required Employer Contribution	\$ 22,524,385	\$ 21,875,854	\$ 648,531	\$ 17,802,525
As % of Covered Payroll	25.26 %	27.12 %	(1.86) %	22.92 %
Estimated Employee Contribution*	\$ 653,296	\$ 744,498	\$ (91,202)	\$ 793,214
As % of Covered Payroll	0.73 %	0.92 %	(0.19) %	1.02 %
Total Contributions	\$ 23,177,681	\$ 22,620,352	\$ 557,329	\$ 18,595,739
As % of Covered Payroll	25.99 %	28.04 %	(2.05) %	23.94 %

\* 4% member contribution rate for employees covered by the traditional pension plan.

The required contribution has been calculated as though payments would be made at the end of each quarter. Pursuant to Chapter 112, Florida Statutes, employer contributions must be made on at least a quarterly basis.

The actual employer contribution for the year ending September 30, 2016 was \$18,321,715 (includes \$519,190 in prepaid contributions) compared to the required contribution of \$18,321,715.

### **Revisions in Benefits**

There were no revisions in benefits since the last actuarial valuation.

### **Revisions in Actuarial Assumptions**

The mortality assumption for active members was changed from the RP-2000 Healthy Annuitant mortality table for males and females with mortality improvements projected to all future years using Scale BB, to the current FRS mortality assumption for active regular class members, as shown in the Actuarial Assumptions and Cost Method section of this Report. The FRS mortality assumption for active members was changed to the RP-2000 Combined Healthy Participant Mortality Table with mortality improvements projected to all future years using Scale BB effective July 1, 2016. This change was made in order to continue using the same mortality assumption used by the Florida Retirement System, as now required under Florida Statutes.

The impact of this assumption change was a \$107,005 (0.12% of covered pay) increase in the employer contribution requirement for the fiscal year ending September 30, 2018. It increased the UAAL by \$171,295 (less than 0.1% of the Actuarial Accrued Liability).

### **Revisions in Methods**

There were no revisions in methods since the last actuarial valuation.

### **Actuarial Experience**

There was a net actuarial gain of \$1,047,303 since the last valuation. The gain was primarily due to a higher than expected investment return (on the smoothed actuarial value of assets) of 7.5% compared to the assumed rate of 7.25%, fewer than expected retirements (5 actual versus 12 expected for the cash balance plan, and 25 actual versus 30 expected for the traditional pension plan), and fewer than expected



terminations in the cash balance plan (15 actual versus 57 expected). The return on the market value of assets was 9.3%. The gain was partially offset by an experience loss due to higher than expected pay increases for traditional pension plan members (7.5% actual versus 4.6% expected). The net actuarial gain for the year resulted in a decrease in the annual required employer contribution of \$115,922, or 0.13% of covered payroll.

### **Analysis of Change in Employer Contribution**

The components of change in the required employer contribution are as follows:

Contribution Rate Last Year	27.12 %
Experience (Gains) or Losses	(0.13)
Payment on Unfunded Liability	(1.44)
Change in Employer Normal Cost Rate	(0.37)
Administrative Expense	(0.04)
Revision in Assumptions	0.12
Change in Method	-
Plan Amendment	-
Contribution Rate This Year	25.26

### **Funded Ratio**

The funded ratio as of October 1, 2016 is 73.1% compared to 71.4% as of October 1, 2015. The funded ratio as of October 1, 2016 was 73.2% before reflecting the assumption change described above. The funded ratio is equal to the Actuarial Value of Assets divided by the Actuarial Accrued (Past Service) Liability.

### **Variability of Future Contribution Rates**

The Actuarial Cost Method used to determine the contribution rate is intended to produce contribution rates which are generally level as a percent of payroll. Even so, when experience differs from the assumptions, as it often does, the employer's contribution rate can vary significantly from year-to-year.

Over time, if the year-to-year gains and losses offset each other, the contribution rate would be expected to return to the current level.

The Market Value of Assets exceeds the Actuarial Value of Assets Available for Benefits by \$3,815,392 as of the valuation date (see Section C). This difference will be gradually recognized over the next several years causing the required contribution to decrease slightly, in the absence of offsetting losses.

### **Relationship to Market Value**

If we were not using an asset smoothing method, the required contribution rate for the fiscal year ending September 30, 2018 would have been 24.78% (\$22,096,368), and the funded ratio as of October 1, 2016 would have been 73.9%. This is an increase from 71.0% as of October 1, 2015.

### **Conclusion**

The remainder of this Report includes detailed actuarial valuation results, financial information, miscellaneous information and statistics, and a summary of plan provisions.

**SECTION B**  
**VALUATION RESULTS**

<b>PARTICIPANT DATA</b>		
	<b>10/1/2016</b>	<b>10/1/2015</b>
<b>ACTIVE MEMBERS</b>		
Number	1,111	1,032
Covered Annual Payroll	\$ 86,572,980	\$ 78,313,766
Average Annual Pay	\$ 77,923	\$ 75,885
Average Age	46.4	47.2
Average Past Service	12.3	13.1
Average Age at Hire	34.1	34.1
<b>RETIREES &amp; BENEFICIARIES*</b>		
Number	864	843
Annual Benefits	\$ 27,174,408	\$ 26,279,730
Average Annual Benefit	\$ 31,452	\$ 31,174
Average Age	69.9	69.6
<b>DISABILITIES (DEFERRED OR RECEIVING BENEFITS)</b>		
Number in Cash Balance Plan	4	4
Total Cash Balances	\$ 286,242	\$ 275,094
Average Cash Balances	\$ 71,561	\$ 68,774
Average Age	56.5	55.5
Number in Defined Benefit Plan	7	6
Annual Benefits	\$ 162,672	\$ 133,778
Average Annual Benefit	\$ 23,239	\$ 22,296
Average Age	59.5	58.8
<b>TERMINATED VESTED MEMBERS</b>		
Number in Cash Balance Plan	79	69
Total Cash Balances	\$ 4,298,402	\$ 3,428,567
Average Cash Balances	\$ 54,410	\$ 49,689
Average Age	46.7	45.5
Number in Defined Benefit Plan	39	45
Annual Benefits	\$ 536,661	\$ 606,541
Average Annual Benefit	\$ 13,761	\$ 13,479
Average Age	56.0	56.0

\* Includes COLA benefits and benefits paid under Qualified Domestic Relations Orders.

<b>ACTUARIALLY DETERMINED EMPLOYER CONTRIBUTION (ADEC)</b>			
A. Valuation Date	10/1/2016 <i>After Assumption Change</i>	10/1/2016 <i>Before Assumption Change</i>	10/1/2015
B. ADEC to Be Paid During Fiscal Year Ending	9/30/2018	9/30/2018	9/30/2017
C. Assumed Dates of Employer Contributions	Quarterly	Quarterly	Quarterly
D. Annual Payment to Amortize Unfunded Actuarial Liability	\$ 15,853,391	\$ 15,835,577	\$ 15,506,002
E. Employer Normal Cost	\$ 5,086,984	\$ 5,007,582	\$ 4,839,155
F. ADEC if Paid on Valuation Date: D+E	\$ 20,940,375	\$ 20,843,159	\$ 20,345,157
G. ADEC Adjusted for Frequency of Payments	\$ 21,864,055	\$ 21,762,551	\$ 21,242,582
H. Covered Payroll	\$ 86,572,980	\$ 86,572,980	\$ 78,313,766
I. ADEC as % of Covered Payroll: G ÷ H	25.26%	25.14%	27.12%
J. Assumed Increase in Covered Payroll to Contribution Year	3.00%	3.00%	3.00%
K. Covered Payroll in Contribution Year	\$ 89,170,169	\$ 89,170,169	\$ 80,663,179
L. ADEC for Contribution Year: I x K	\$ 22,524,385	\$ 22,417,380	\$ 21,875,854
M. ADEC as % of Covered Payroll in Contribution Year: L ÷ K	25.26%	25.14%	27.12%

<b>ACTUARIAL VALUE OF BENEFITS AND ASSETS</b>			
A. Valuation Date	10/1/2016 <i>After Assumption Change</i>	10/1/2016 <i>Before Assumption Change</i>	10/1/2015
<b>B. Actuarial Present Value of All Projected Benefits for</b>			
1. Active Members			
a. Service Retirement Benefits	\$ 191,603,619	\$ 188,825,316	\$ 189,858,991
b. Vesting Benefits	14,300,201	14,090,986	12,656,699
c. Disability Benefits	-	-	-
d. Preretirement Death Benefits	4,854,421	6,778,346	6,510,685
e. Return of Member Contributions	-	-	-
f. Total	<u>210,758,241</u>	<u>209,694,648</u>	<u>209,026,375</u>
2. Inactive Members			
a. Service Retirees & Beneficiaries	292,153,059	292,153,059	280,901,076
b. Disability Retirees	1,668,971	1,668,971	1,460,862
c. Terminated Vested Members	7,375,451	7,375,451	7,070,402
d. Total	<u>301,197,481</u>	<u>301,197,481</u>	<u>289,432,340</u>
3. Total for All Members	<u>\$ 511,955,722</u>	<u>\$ 510,892,129</u>	<u>\$ 498,458,715</u>
C. Actuarial Accrued (Past Service) Liability	\$ 471,131,301	\$ 470,960,006	\$ 460,083,794
D. Actuarial Value of Accumulated Plan Benefits per FASB No. 35	\$ 444,628,699	\$ 444,472,118	\$ 433,550,284
E. Plan Assets			
1. Market Value	\$ 348,367,893	\$ 348,367,893	\$ 326,754,031
2. Actuarial Value	\$ 344,552,501	\$ 344,552,501	\$ 328,381,518
F. Unfunded Actuarial Accrued Liability: (C. - E.2.)	\$ 126,578,800	\$ 126,407,505	\$ 131,702,276
G. Actuarial Present Value of Projected Covered Payroll	\$ 719,825,877	\$ 710,898,625	\$ 640,368,022
H. Actuarial Present Value of Projected Member Contributions	\$ 3,588,974	\$ 3,560,647	\$ 4,038,414

<b>ENTRY AGE ACTUARIAL COST METHOD CALCULATION OF EMPLOYER NORMAL COST</b>			
A. Valuation Date	October 1, 2016 <i>After Assumption Change</i>	October 1, 2016 <i>Before Assumption Change</i>	October 1, 2015
B. Normal Cost for			
1. Service Retirement Benefits	\$ 4,836,882	\$ 4,681,694	\$ 4,648,357
2. Vesting Benefits	727,581	717,518	639,228
3. Disability Benefits	-	-	-
4. Preretirement Death Benefits	184,051	269,900	251,730
5. Total for Future Benefits	5,748,514	5,669,112	5,539,315
6. Assumed Amount for Administrative Expenses	79,038	79,038	103,432
7. Total Normal Cost	<u>5,827,552</u>	<u>5,748,150</u>	<u>5,642,747</u>
C. Expected Member Contribution	<u>740,568</u>	<u>740,568</u>	<u>803,592</u>
D. Employer Normal Cost: B7-C	<u>\$ 5,086,984</u>	<u>\$ 5,007,582</u>	<u>\$ 4,839,155</u>
E. Employer Normal Cost as a % of Covered Payroll	5.88%	5.78%	6.18%

### LIQUIDATION OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY

The Unfunded Actuarial Accrued Liability (UAAL) is being amortized as a level dollar amount over the number of years remaining in the amortization period. Details relating to the UAAL are as follows.

<b>UAAL AMORTIZATION PERIOD AND PAYMENTS</b>						
<b>Original UAAL</b>				<b>Current UAAL</b>		
<b>Date Established</b>	<b>Source</b>	<b>Amort'n Period (Years)</b>	<b>Amount</b>	<b>Years Remaining</b>	<b>Amount</b>	<b>Payment</b>
10/1/2014	Method Change	20	\$ 97,987,543	14	\$ 91,689,459	\$ 9,922,571
10/1/2014	Retirees Past COLA	5	13,558,883	3	8,650,742	3,087,596
10/1/2015	(Gain)/Loss	15	(1,456,021)	14	(1,426,863)	(154,414)
10/1/2015	Assumption Change	15	29,124,712	14	28,541,470	3,088,738
10/1/2016	(Gain)/Loss	15	(1,047,303)	15	(1,047,303)	(108,914)
10/1/2016	Assumption Change	15	171,295	15	171,295	17,814
			<u>\$ 138,339,109</u>		<u>\$ 126,578,800</u>	<u>\$ 15,853,391</u>

<b>Amortization Schedule</b>	
<b>Year</b>	<b>Expected UAAL</b>
2016	\$ 126,578,800
2017	118,753,008
2018	110,359,839
2019	101,358,166
2020	95,015,318
2021	88,212,613
2026	46,045,988
2030	-



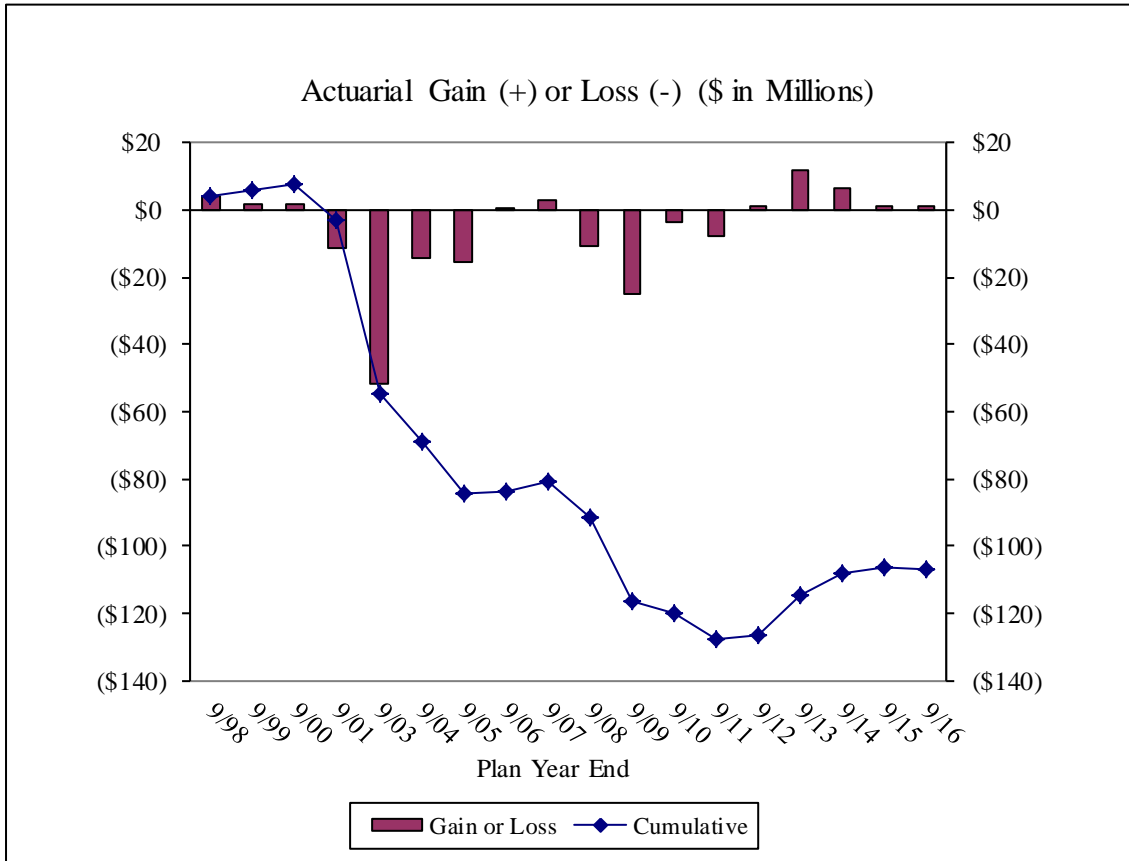
### ACTUARIAL GAINS AND LOSSES

The assumptions used to anticipate mortality, employment turnover, investment income, expenses, salary increases, and other factors have been based on long range trends and expectations. Actual experience can vary from these expectations. The variance is measured by the gain and loss for the period involved. If significant long term experience reveals consistent deviation from what has been expected and that deviation is expected to continue, the assumptions should be modified. The net actuarial gain (loss) based on the entry age normal method for the past year is computed as follows:

1. Last Year's UAAL	\$ 131,702,276
2. Last Year's Employer Normal Cost	4,839,155
3. Last Year's Contributions	18,321,715
4. Interest at the Assumed Rate on:	
a. 1 and 2 for one year	9,899,254
b. 3 from dates paid	664,162
c. a - b	<u>9,235,092</u>
5. This Year's Expected UAAL 1 + 2 - 3 + 4c	127,454,808
6. This Year's Actual UAAL (Before Any Changes in Benefits and Assumptions)	<u>126,407,505</u>
7. Net Actuarial Gain/(Loss): 5 - 6	1,047,303
8. Gain/(Loss) Due to Investments	<u>953,848</u>
9. Gain/(Loss) Due to Other Sources: 7 - 8	93,455
10. Change in UAAL Due to Assumption Changes	171,295
11. This Year's Actual UAAL (After Assumption Changes): 6 + 10	126,578,800

Actuarial gains and losses in previous years have been as follows:

<b>Year Ended</b>	<b>Gain/(Loss)</b>
9/30/98	\$ 4,185,711
9/30/99	1,908,161
9/30/00	2,001,644
9/30/01	(11,107,942)
9/30/03	(51,448,368)
9/30/04	(14,118,497)
9/30/05	(15,425,560)
9/30/06	160,195
9/30/07	2,839,647
9/30/08	(10,382,639)
9/30/09	(25,058,893)
9/30/10	(3,432,804)
9/30/11	(7,931,805)
9/30/12	1,180,109
9/30/13	12,043,484
9/30/14	6,781,305
9/30/15	1,456,021
9/30/16	1,047,303

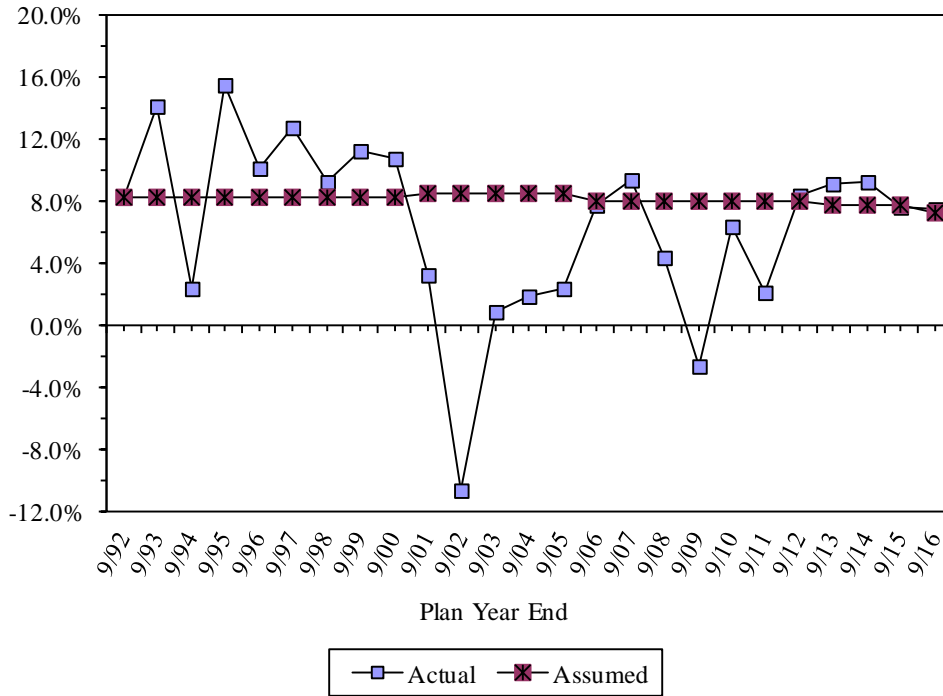


The fund earnings and salary increase assumptions have considerable impact on the cost of the Plan, so it is important that they are in line with the actual experience. The following table shows a recent history of actual fund earnings and salary increase rates compared to the assumed rates:

Year Ending	Investment Return		Salary Increases	
	Actual	Assumed	Actual	Assumed
9/30/1992	8.2 %	8.25 %	8.6 %	6.00 %
9/30/1993	14.1	8.25	5.3	6.00
9/30/1994	2.4	8.25	5.2	6.00
9/30/1995	15.5	8.25	4.6	6.00
9/30/1996	10.1	8.25	3.7	6.00
9/30/1997	12.7	8.25	4.6	6.00
9/30/1998	9.3	8.25	5.0	6.00
9/30/1999	11.3	8.25	4.9	6.00
9/30/2000	10.7	8.25	5.4	6.00
9/30/2001	3.2	8.50	4.4	5.75
9/30/2002	(10.7)	8.50	4.8	5.75
9/30/2003	0.8	8.50	4.0	5.75
9/30/2004	1.8	8.50	4.6	5.75
9/30/2005	2.3	8.50	4.2	5.50
9/30/2006	7.8	8.00	5.7	5.50
9/30/2007	9.4	8.00	4.8	5.50
9/30/2008	4.3	8.00	6.3	5.50
9/30/2009	(2.6)	8.00	0.5	5.50
9/30/2010	6.3	8.00	3.9	5.00
9/30/2011	2.1	8.00	4.0	5.00
9/30/2012	8.4	8.00	1.0	5.00
9/30/2013	9.1	7.75	5.9	5.00
9/30/2014	9.2	7.75	5.0	5.00
9/30/2015	7.6	7.75	5.5	5.00
9/30/2016	7.5	7.25	7.5	4.55
Average	6.3 %	---	4.8 %	---

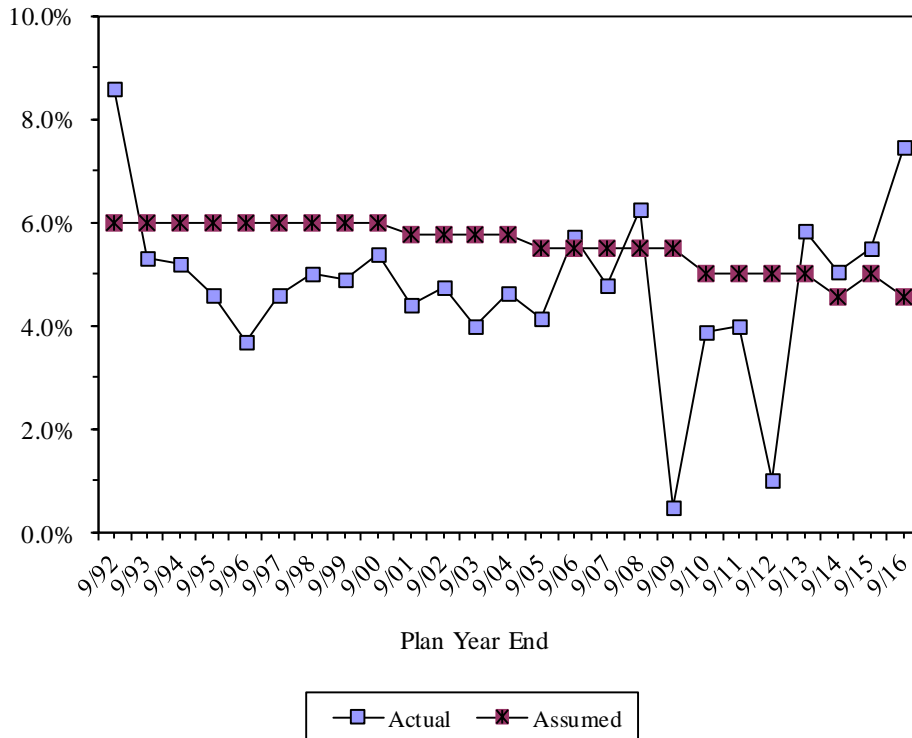
The actual investment return rates shown above are based on the actuarial value of assets. The actual salary increase rates shown above are the increases received by those active members who were included in the actuarial valuations both at the beginning and the end of each year.

### History of Investment Return Based on Actuarial Value of Assets



—□— Actual —×— Assumed

### History of Salary Increases



—□— Actual —×— Assumed

Actual (A) Compared to Expected (E) Decrements Among Active Employees													
Year Ended	Number Added During Year		Normal & Early Retirement		Disability Retirement		Death		Terminations				Active Members End of Year
	A	E	A	E	A	E	A	E	Vested	Other	Totals		
									A	A	A	E	
Traditional Pension Plan													
9/30/2002	0	0	29	44	0	2	3	1	6	0	6	13	<b>658</b>
9/30/2003	0	0	24	43	0	2	2	1	11	0	11	11	<b>621</b>
9/30/2004	0	0	24	43	0	2	4	2	5	0	5	9	<b>588</b>
9/30/2005	0	0	26	44	0	2	0	2	7	0	7	8	<b>555</b>
9/30/2006	0	0	36	50	0	2	2	2	2	0	2	7	<b>515</b>
9/30/2007	0	0	27	49	2	2	0	2	3	4	7	6	<b>479</b>
9/30/2008	0	0	33	48	0	2	1	2	2	0	2	5	<b>443</b>
9/30/2009	0	0	20	47	0	2	1	2	0	0	0	4	<b>422</b>
9/30/2010	1	0	28	29	0	2	0	1	0	0	0	3	<b>395</b>
9/30/2011	0	0	38	28	0	2	1	1	1	0	1	2	<b>355</b>
9/30/2012	0	0	30	33	1	2	2	1	1	0	1	2	<b>321</b>
9/30/2013	1	0	30	33	0	2	0	1	5	0	5	1	<b>287</b>
9/30/2014	0	0	24	31	0	2	0	1	0	0	0	1	<b>263</b>
9/30/2015	0	0	33	31	0	2	0	1	0	0	0	1	<b>230</b>
9/30/2016	<u>0</u>	<u>0</u>	<u>25</u>	<u>30</u>	<u>0</u>	<u>0</u>	<u>3</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>1</u>	<b>201</b>
Totals	2	0	427	583	3	28	19	21	44	4	48	74	
Expected 9/30/2017		0		28		0		1				0	
Cash Balance Plan													
9/30/2012	19	50	3	7	0	2	0	1	12	35	47	21	<b>758</b>
9/30/2013	58	61	4	8	7	2	2	1	24	24	48	19	<b>755</b>
9/30/2014	65	67	7	8	1	2	1	1	20	14	34	18	<b>777</b>
9/30/2015	71	79	4	13	2	3	1	1	14	25	39	18	<b>802</b>
9/30/2016	<u>129</u>	<u>50</u>	<u>5</u>	<u>12</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>3</u>	<u>10</u>	<u>5</u>	<u>15</u>	<u>57</u>	<b>910</b>
Totals	342	307	23	48	10	9	5	7	80	103	183	133	
Expected 9/30/2017		124		16		0		2				77	

<b>RECENT HISTORY OF VALUATION RESULTS</b>						
Valuation Date	Number of Members		Covered Annual Payroll	Actuarial Value of Assets	Employer Normal Cost***	
	Active	Inactive			Amount	% of Payroll
10/1/1992	1,086	306	\$38,566,337	\$110,048,366	\$3,226,220	8.36 %
10/1/1993	1,094	323	40,318,967	125,478,328	2,960,272	7.34
10/1/1994	1,052	341	40,645,961	127,557,755	2,706,006	6.66
10/1/1995	1,024	387	40,525,414	140,666,432	3,470,125	8.56
10/1/1996	1,008	414	40,540,266	152,202,484	3,240,881	7.99
10/1/1997	1,075 *	443	43,240,797	169,603,158	3,127,299	7.23
10/1/1998	847 **	498	36,404,917	179,808,287	2,391,378	6.57
10/1/1999	779	549	34,778,576	193,358,416	2,152,232	6.19
10/1/2000	719	598	33,802,501	208,334,966	2,764,276	8.18
10/1/2001	696	601	34,113,735	203,818,902	4,250,601	12.46
10/1/2003	621	659	33,332,980	224,562,213	3,968,409	11.91
10/1/2004	588	682	32,844,874	219,853,057	5,848,145	17.81
10/1/2005	555	705	32,393,300	243,972,731	5,969,287	18.43
10/1/2006	515	728	31,686,048	254,461,877	5,776,429	18.23
10/1/2007	479	753	30,981,376	268,893,745	5,165,819	16.67
10/1/2008	443	778	30,479,169	254,352,846	9,507,264	31.19
10/1/2009	422	789	28,963,856	241,001,979	12,095,155	41.76
10/1/2010	1,106	812	69,967,434	251,496,569	13,226,017	18.90
10/1/2011	1,144	846	73,230,186	252,224,649	14,688,780	20.06
10/1/2012	1,079	892	70,147,352	267,020,081	19,643,172	28.00
10/1/2013	1,042	939	72,478,712	286,722,421	19,004,497	26.22
10/1/2014	1,040	956	75,405,142	310,012,409	4,766,970	6.32
10/1/2015	1,032	967	78,313,766	328,381,518	4,839,155	6.18
10/1/2016 (b)	1,111	993	86,572,980	344,552,501	5,007,582	5.78
10/1/2016 (a)	1,111	993	86,572,980	344,552,501	5,086,984	5.88

\* The increase from '96 to '97 is due to inclusion of 79 former St. Cloud employees.

\*\* The decrease from '97 to '98 is due to 143 employees transferring to Defined Contribution Plan.

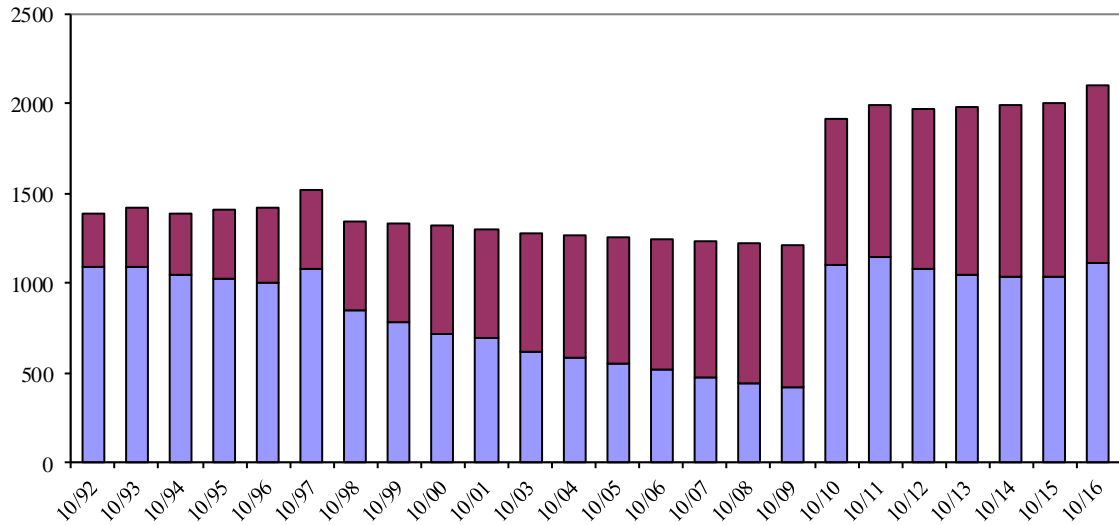
\*\*\*Aggregate funding method used prior to October 1, 2014.

(b)=before changes

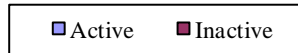
(a)=after changes

**RECENT HISTORY OF VALUATION RESULTS (Cont'd)**

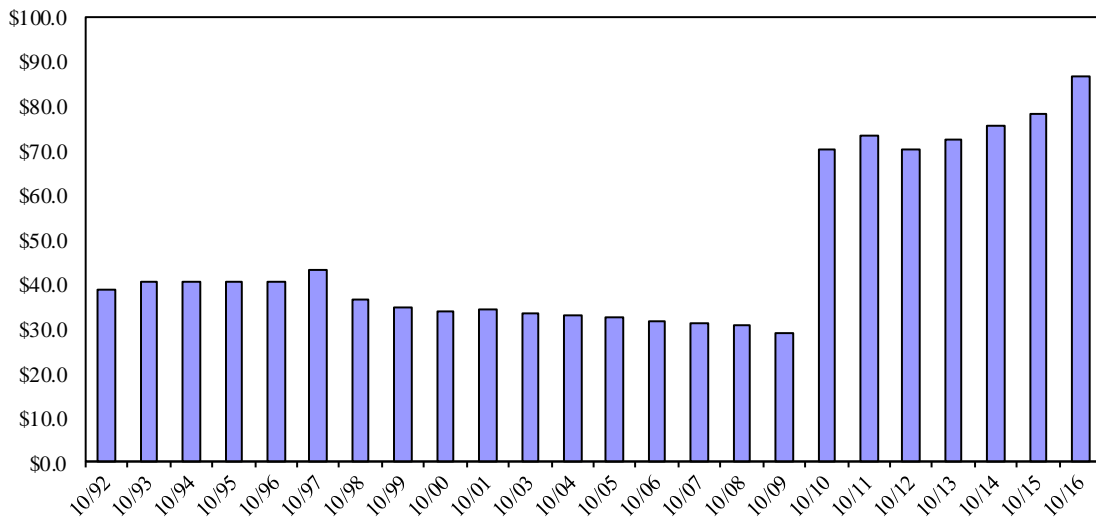
Recent History of Numbers of Members



Actuarial Valuation Date, October 1



Recent History of Covered Payroll (\$ in Millions)



Actuarial Valuation Date, October 1



**RECENT HISTORY OF UAAL AND FUNDED RATIO**

<b>Actuarial Valuation Date</b>	<b>Actuarial Value of Assets (a)</b>	<b>Entry Age Actuarial Accrued Liability (AAL) (b)</b>	<b>Unfunded AAL (UAAL) (b) - (a)</b>	<b>Funded Ratio (a) / (b)</b>	<b>Covered Payroll (c)</b>	<b>UAAL As % of Covered Payroll (b - a) / c</b>
10/1/1992	\$110,048,366	-	-	-	\$38,566,337	-
10/1/1993	125,478,328	-	-	-	40,318,967	-
10/1/1994	127,557,755	-	-	-	40,645,961	-
10/1/1995	140,666,432	\$145,148,060	\$4,481,628	96.9 %	40,525,414	11.1 %
10/1/1996	152,202,484	153,235,342	1,032,858	99.3	40,540,266	2.5
10/1/1997	169,603,158	164,797,178	(4,805,980)	102.9	43,240,797	(11.1)
10/1/1998	179,808,287	171,340,336	(8,467,951)	104.9	36,404,917	(23.3)
10/1/1999	193,358,416	183,332,431	(10,025,985)	105.5	34,778,576	(28.8)
10/1/2000	205,886,587	209,333,935	3,447,348	98.4	33,802,501	10.2
10/1/2001	203,818,902	218,357,743	14,538,841	93.3	34,113,735	42.6
10/1/2003	224,562,213	236,163,511	11,601,298	95.1	33,332,980	34.8
10/1/2004	219,853,057	244,485,261	24,632,204	89.9	32,844,874	75.0
10/1/2005	243,972,731	266,617,632	22,644,901	91.5	32,393,300	69.9
10/1/2006	254,461,877	275,758,525	21,296,648	92.3	31,686,048	67.2
10/1/2007	268,893,745	285,786,436	16,892,691	94.1	30,981,376	54.5
10/1/2008	254,352,846	297,139,500	42,786,654	85.6	30,479,169	140.4
10/1/2009	241,001,979	306,798,448	65,796,469	78.6	28,963,856	227.2
10/1/2010	251,496,569	339,186,958	87,690,389	74.1	69,967,434	125.3
10/1/2011	252,224,649	352,684,289	100,459,640	71.5	73,230,186	137.2
10/1/2012	267,020,081	401,073,223	134,053,142	66.6	70,147,352	191.1
10/1/2013	286,722,421	412,298,594	125,576,173	69.5	72,478,712	173.3
10/1/2014	310,012,409	421,558,835	111,546,426	73.5	75,405,142	147.9
10/1/2015	328,381,518	460,083,794	131,702,276	71.4	78,313,766	168.2
10/1/2016 (b)	344,552,501	470,960,006	126,407,505	73.2	86,572,980	146.0
10/1/2016 (a)	344,552,501	471,131,301	126,578,800	73.1	86,572,980	146.2

(b)=before changes

(a)=after changes

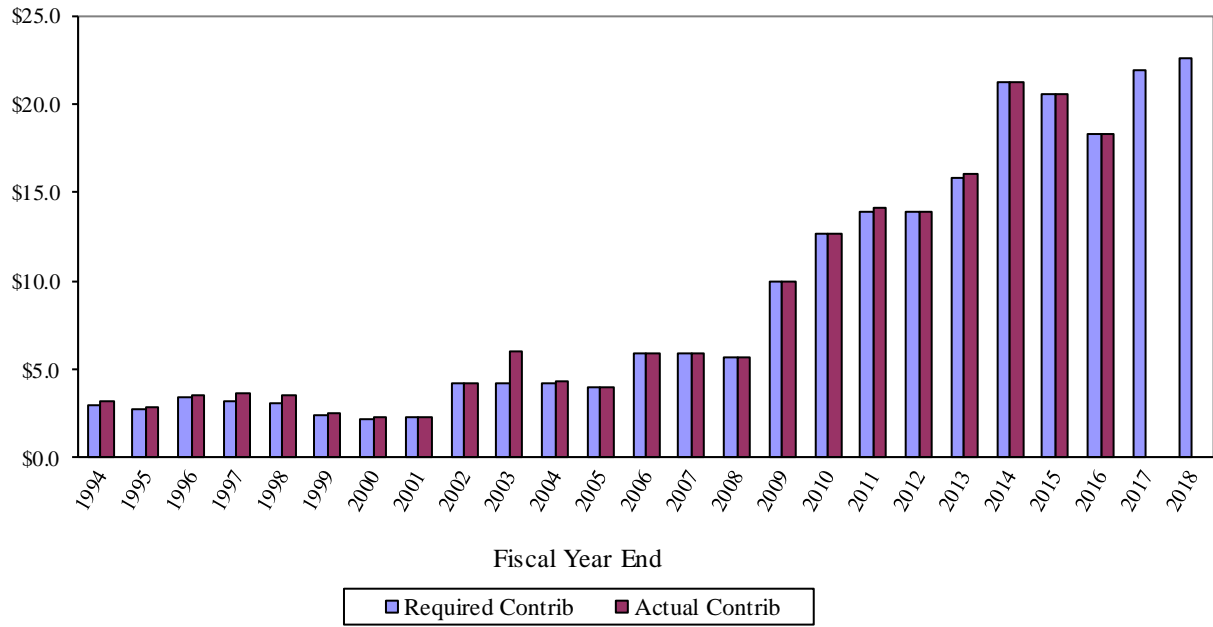
<b>RECENT HISTORY OF REQUIRED AND ACTUAL CONTRIBUTIONS</b>				
<b>Valuation Date</b>	<b>End of Year To Which Valuation Applies</b>	<b>Required Employer Contribution</b>		<b>Actual Employer Contribution for Year to Which Valuation Applies</b>
		<b>Amount</b>	<b>% of Payroll</b>	
10/1/1992	9/30/1993	-	-	-
10/1/1993	9/30/1994	\$ 2,960,272	7.34 %	\$ 3,230,549
10/1/1994	9/30/1995	2,706,006	6.66	2,896,534
10/1/1995	9/30/1996	3,470,125	8.56	3,555,309
10/1/1996	9/30/1997	3,240,881	7.99	3,662,399
10/1/1997	9/30/1998	3,127,299	7.23	3,544,420
10/1/1998	9/30/1999	2,391,378	6.57	2,468,225
10/1/1999	9/30/2000	2,152,232	6.19	2,311,353
10/1/2000	9/30/2001	2,308,286	6.83	2,308,286
10/1/2001	9/30/2002	4,250,601	12.46	4,250,601
10/1/2001	9/30/2003	4,224,413	12.46	5,972,937
10/1/2003	9/30/2004	4,172,703	12.52	4,277,001
10/1/2003	9/30/2005	3,984,391	12.52	4,021,572
10/1/2004	9/30/2006	5,840,101	18.72	5,891,438
10/1/2005	9/30/2007	5,872,213	19.32	5,872,213
10/1/2006	9/30/2008	5,665,227	19.12	5,665,887
10/1/2008	9/30/2009	9,969,736	32.71	9,972,135
10/1/2009	9/30/2010	12,683,273	45.77	12,682,074
10/1/2010	9/30/2011	13,868,008	19.82	14,149,906
10/1/2010	9/30/2012	13,856,257	19.82	13,930,576
10/1/2011	9/30/2013	15,862,317	21.03	16,009,039
10/1/2012	9/30/2014	21,184,220	29.32	21,184,220
10/1/2013	9/30/2015	20,499,734 *	27.46	20,499,734 *
10/1/2014	9/30/2016	18,321,715 **	23.59	18,321,715 **
10/1/2015	9/30/2017	21,875,854	27.12	---
10/1/2016	9/30/2018	22,524,385	25.26	---

\* Before reflecting the prepaid contribution of \$1,965,498.

\*\* Before reflecting the prepaid contribution of \$519,190.

Note: The difference between actual and required contributions for the '96-'97 year consists of contributions for St. Cloud employees and interest.

## Recent History of Required and Actual Contributions (\$ in Millions)



## ACTUARIAL ASSUMPTIONS AND COST METHOD

### Valuation Methods

**Actuarial Cost Method** – Normal cost and the allocation of benefit values between service rendered before and after the valuation date were determined using an **Individual Entry-Age Actuarial Cost Method** having the following characteristics:

- (i) the annual normal cost for each individual active member, payable from the date of employment to the date of retirement, is sufficient to accumulate the value of the member's benefit at the time of retirement;
- (ii) each annual normal cost is a constant percentage of the member's year by year projected covered pay.

Actuarial gains/(losses), as they occur, reduce (increase) the Unfunded Actuarial Accrued Liability.

**Financing of Unfunded Actuarial Accrued Liabilities** – Unfunded Actuarial Accrued Liabilities (full funding credit if assets exceed liabilities) were amortized by level (principal & interest combined) dollar contributions over a reasonable period of future years.

**Actuarial Value of Assets** – The Actuarial Value of Assets is calculated by recognizing 20% of the difference between the Market Value of Assets and the expected Actuarial Asset Value. The Actuarial Value of Assets will be further adjusted to the extent necessary to fall within the corridor whose lower limit is 90% of the Market Value of plan assets and whose upper limit is 110% of the Market Value of plan assets. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than Market Value. During periods when investment performance is less than assumed rate, Actuarial Value of Assets will tend to be greater than Market Value.

### Valuation Assumptions

*The actuarial assumptions* used in the valuation are shown in this Section. The decrement assumptions were established following the Experience Study Report dated August 24, 2015.

### Economic Assumptions

*The investment return rate* assumed in the valuation is 7.25% per year, compounded annually (net after investment expenses).

*The inflation rate* assumed in this valuation was 2.25% per year. The inflation rate is defined to be the long-term rate of annual increases in the prices of goods and services.

*Pay increase assumptions* for individual active members are as follows:

Rounded Years of Service	% Increase in Salary		
	Merit and Seniority	Base Inflation	Total Increase
0-1	5.25%	2.25%	7.50%
2-3	4.55%	2.25%	6.80%
4-5	2.75%	2.25%	5.00%
6-7	2.25%	2.25%	4.50%
8-9	2.05%	2.25%	4.30%
10+	1.50%	2.25%	3.75%

### Demographic Assumptions

*The mortality table* used was the RP-2000 Combined Healthy Participant Mortality Table for active members and the RP-2000 Mortality Table for Annuitants for non-disabled inactive members, with mortality improvement projected to all future years using Scale BB. For females, the base mortality rates include a 100% white collar adjustment. For males, the base mortality rates include a 50% blue collar adjustment and a 50% white collar adjustment. These are the same rates currently in use for Regular Class members of the Florida Retirement System (and they are based on a statewide experience study).

Sample Attained Ages (in 2016)	(Active) Probability of Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women
	50	0.21 %	0.15 %	35.47
55	0.36	0.24	30.35	33.42
60	0.62	0.40	25.42	28.40
65	1.10	0.71	20.77	23.58
70	1.81	1.25	16.49	19.10
75	3.01	2.12	12.64	15.04
80	5.10	3.55	9.33	11.43

Sample Attained Ages (in 2016)	(Inactive) Probability of Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women
	50	0.55 %	0.23 %	34.55
55	0.60	0.32	29.92	33.19
60	0.77	0.48	25.25	28.29
65	1.16	0.75	20.73	23.56
70	1.81	1.25	16.49	19.10
75	3.01	2.12	12.64	15.04
80	5.10	3.55	9.33	11.43

For disabled retirees, the mortality table used was the RP-2000 mortality for disabled annuitants, set-forward 4 years for males and set-back 2 years for females, with no provision being made for future mortality improvements. These are the same rates currently in use for Regular Class members of the Florida Retirement System (and they are based on a statewide experience study).

Sample Attained Ages	Probability of Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women
	50	2.38 %	1.35 %	20.25
55	3.03	1.87	17.78	20.46
60	3.67	2.41	15.55	17.43
65	4.35	3.13	13.44	14.58
70	5.22	4.29	11.39	11.96
75	6.58	5.95	9.43	9.65
80	8.70	8.23	7.65	7.66

*The rates of retirement* are as follows:

Age	Assumed Retirement Rates					
	Pre-98 Pension Plan Years of Service			Cash Balance Plan Years of Service		
	< 24	24 - 29	30 +	< 30	30 - 34	35 +
< 51	N/A	6%	12%	N/A	25%	100%
51	N/A	12%	15%	N/A	25%	100%
52	N/A	16%	15%	N/A	25%	100%
53	N/A	18%	20%	N/A	25%	100%
54	N/A	17%	10%	N/A	25%	100%
55	6%	16%	10%	N/A	25%	100%
56	3%	9%	15%	N/A	25%	100%
57	8%	9%	15%	N/A	25%	100%
58	8%	9%	20%	N/A	25%	100%
59	12%	15%	30%	N/A	25%	100%
60	15%	20%	30%	N/A	25%	100%
61	21%	20%	15%	N/A	25%	100%
62	21%	40%	30%	25%	30%	100%
63	30%	20%	40%	15%	40%	100%
64	20%	25%	25%	15%	25%	100%
65	55%	55%	55%	35%	55%	100%
66	45%	45%	45%	30%	45%	100%
67 - 68	40%	40%	40%	25%	40%	100%
69 - 74	50%	50%	50%	50%	50%	100%
75 +	100%	100%	100%	100%	100%	100%

**Rates of separation from active membership** for the Pre-98 Pension Plan are 1.1% per year for males and 1.7% per year for females. Separation rates for the Cash Balance Plan vary by gender, age, and years of service, as follows:

<b>% of Active Members Separating Within Next Year</b>													
<b>Years of Service - Males</b>							<b>Years of Service - Females</b>						
<b>Age</b>	0	1	2	3	4	5+	<b>Age</b>	0	1	2	3	4	5+
< 25	35%	30%	7.5%	5%	5%	5.0%	< 43	50%	25%	12.5%	10%	5%	4.0%
25	35%	30%	7.5%	5%	5%	4.8%	43	50%	25%	12.5%	10%	5%	4.2%
26	35%	30%	7.5%	5%	5%	4.6%	44	50%	25%	12.5%	10%	5%	4.4%
27	35%	30%	7.5%	5%	5%	4.4%	45	50%	25%	12.5%	10%	5%	4.6%
28	35%	30%	7.5%	5%	5%	4.2%	46	50%	25%	12.5%	10%	5%	4.8%
29	35%	30%	7.5%	5%	5%	4.0%	47	50%	25%	12.5%	10%	5%	5.0%
30	35%	30%	7.5%	5%	5%	3.8%	48	50%	25%	12.5%	10%	5%	5.2%
31	35%	30%	7.5%	5%	5%	3.6%	49	50%	25%	12.5%	10%	5%	5.4%
32	35%	30%	7.5%	5%	5%	3.4%	50	50%	25%	12.5%	10%	5%	5.6%
33	35%	30%	7.5%	5%	5%	3.2%	51	50%	25%	12.5%	10%	5%	5.8%
34	35%	30%	7.5%	5%	5%	3.0%	52 +	50%	25%	12.5%	10%	5%	6.0%
35	35%	30%	7.5%	5%	5%	2.8%							
36	35%	30%	7.5%	5%	5%	2.6%							
37	35%	30%	7.5%	5%	5%	2.5%							
38 +	35%	30%	7.5%	5%	5%	2.4%							

**The rate of interest** credited on account balances is assumed to be 5.0% per year for active members and 4.0% per year for vested terminated members.

**The annual rate of payroll growth** assumed was 3.0%.

**The annual future COLA rate** for eligible traditional pension plan members was 1.5% per year for 2017 (based on actual COLA granted for the year) and 1.0% per year, compounded annually, for each year thereafter. The 1.0% COLA assumption is the approximate equivalent annual COLA based on the 50<sup>th</sup> percentile of expected COLAs payable over the next 30 years.

**Changes from previous valuation:**

The mortality table for active members was updated from the RP-2000 Mortality Table for Annuitants (for females, the base mortality rates include a 100% white collar adjustment, and for males, the base mortality rates include a 50% blue collar adjustment and a 50% white collar adjustment) with mortality improvement projected to all future years using Scale BB to the RP-2000 Combined Healthy Participant Mortality Table (for females, the base mortality rates include a 100% white collar adjustment, and for males, the base mortality rates include a 50% blue collar adjustment and a 50% white collar adjustment), with mortality improvement projected to all future years using Scale BB. This mortality assumption is the same as the mortality assumption used by the Florida Retirement System (FRS) for regular class members in the actuarial valuation report as of July 1, 2016.

### Miscellaneous and Technical Assumptions

<i>Administrative &amp; Investment Expenses</i>	The investment return assumption is intended to be the return net of investment expenses. Annual administrative expenses are assumed to be equal to the average of the expenses over the previous 2 years. Assumed administrative expenses are added to the Normal Cost.
<i>Benefit Service</i>	Fractional service is used to determine the amount of benefit payable under the Plan. Pay credits for the cash balance plan are based on whole years of service.
<i>Decrement Operation</i>	Disability and mortality decrements operate during retirement eligibility.
<i>Decrement Timing</i>	Decrements of all types are assumed to occur at the beginning of the year.
<i>Eligibility Testing</i>	Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the valuation date.
<i>Forfeitures</i>	For vested separations from service, it is assumed that 0% of members separating will withdraw their contributions and forfeit an employer financed benefit. It was further assumed that the liability at termination is the greater of the vested deferred benefit (if any) or the member's accumulated contributions.
<i>Incidence of Contributions</i>	Employer contributions are assumed to be made at the end of each calendar quarter. Member contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made.
<i>Marriage Assumption</i>	100% of males and 100% of females are assumed to be married for purposes of death-in-service benefits. Male spouses are assumed to be four years older than female spouses for active member valuation purposes.
<i>Normal Form of Benefit</i>	50% Joint and Survivor Annuity for traditional pension plan members. Cashout of account balance for cash balance plan members.
<i>Pay Increase Timing</i>	End of fiscal year. This is equivalent to assuming that reported pays represent rate of pay on the valuation date.
<i>Service Credit Accruals</i>	It is assumed that members accrue one year of service credit per year.



## GLOSSARY

<b><i>Actuarial Accrued Liability (AAL)</i></b>	The difference between the Actuarial Present Value of Future Benefits, and the Actuarial Present Value of Future Normal Costs.
<b><i>Actuarial Assumptions</i></b>	Assumptions about future plan experience that affect costs or liabilities, such as: mortality, withdrawal, disablement, and retirement; future increases in salary; future rates of investment earnings; future investment and administrative expenses; characteristics of members not specified in the data, such as marital status; characteristics of future members; future elections made by members; and other items.
<b><i>Actuarial Cost Method</i></b>	A procedure for allocating the Actuarial Present Value of Future Benefits between the Actuarial Present Value of Future Normal Costs and the Actuarial Accrued Liability.
<b><i>Actuarial Equivalent</i></b>	Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.
<b><i>Actuarial Present Value (APV)</i></b>	The amount of funds required to provide a payment or series of payments in the future. It is determined by discounting the future payments with an assumed interest rate and with the assumed probability each payment will be made.
<b><i>Actuarial Present Value of Future Benefits (APVFB)</i></b>	The Actuarial Present Value of amounts which are expected to be paid at various future times to active members, retired members, beneficiaries receiving benefits, and inactive, nonretired members entitled to either a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.
<b><i>Actuarial Valuation</i></b>	The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial Valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB Statement Nos. 67 and 68.
<b><i>Actuarial Value of Assets</i></b>	The value of the assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets or a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the actuarially determined employer contribution (ADEC).

<b><i>Amortization Method</i></b>	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.
<b><i>Amortization Payment</i></b>	That portion of the plan contribution or ADEC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.
<b><i>Amortization Period</i></b>	The period used in calculating the Amortization Payment.
<b><i>Actuarially Determined Employer Contribution (ADEC)</i></b>	The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation. The ADEC consists of the Employer Normal Cost and Amortization Payment.
<b><i>Closed Amortization Period</i></b>	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.
<b><i>Employer Normal Cost</i></b>	The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.
<b><i>Equivalent Single Amortization Period</i></b>	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.
<b><i>Experience Gain/Loss</i></b>	A measure of the difference between the normal cost rate from last year and the normal cost rate from this year.
<b><i>Funded Ratio</i></b>	The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability.
<b><i>GASB</i></b>	Governmental Accounting Standards Board.
<b><i>Normal Cost</i></b>	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 (UAAL)***

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.

**SECTION C**  
**PENSION FUND INFORMATION**

**SUMMARY OF ASSETS AT MARKET VALUE**

Item	September 30	
	2016	2015
A. Receivables:		
1. Member Contributions	\$ -	\$ -
2. Employer Contributions	-	-
3. Investment Income & Other	803,557	1,173,060
4. Total Receivables	803,557	1,173,060
B. Investments		
1. Short-Term Investments	8,355,224	10,248,323
2. Domestic Equities	146,906,283	136,246,349
3. International Equities	47,957,299	43,546,210
4. Domestic Fixed Income	70,603,790	67,882,801
5. International Fixed Income	-	-
6. Real Estate	37,316,517	34,476,213
7. Alternative Investments	19,696,877	18,271,242
8. Other Mutual Fund Investments	17,115,848	16,358,091
9. Total Investments	347,951,838	327,029,229
C. Liabilities		
1. Benefits/Refunds Payable	-	-
2. Accrued Expenses and Other Payables	-	-
3. Due Brokers	(387,502)	(929,068)
4. Total Liabilities	(387,502)	(929,068)
D. Market Value of Assets Held in Trust	348,367,893	327,273,221
E. Contribution Paid for Future Period	-	(519,190)
F. Market Value of Assets Available for Benefits	\$ 348,367,893	\$ 326,754,031
G. Allocation of Investments		
1. Short-Term Investments	2.4%	3.1%
2. Domestic Equities	42.2%	41.7%
3. International Equities	13.8%	13.3%
4. Domestic Fixed Income	20.3%	20.8%
5. International Fixed Income	0.0%	0.0%
6. Real Estate	10.7%	10.5%
7. Alternative Investments	5.7%	5.6%
8. Other Mutual Fund Investments	4.9%	5.0%
9. Total Investments	100.0%	100.0%

**SUMMARY OF FUND'S INCOME AND DISBURSEMENTS**

Item	September 30	
	2016	2015
A. Market Value of Assets at Beginning of Year	\$ 326,754,031	\$ 327,025,577
B. Revenues and Expenditures		
1. Contributions		
a. Employee Contributions	748,224	821,322
b. Employer Contributions	18,321,715	20,499,734
c. Other	-	-
d. Total	19,069,939	21,321,056
2. Investment Income		
a. Interest, Dividends, and Other Income	8,237,922	8,108,481
b. Net Realized and Unrealized Gains/(Losses)	23,333,934	(1,563,819)
c. Investment Expenses	(1,667,982)	(1,762,075)
d. Net Investment Income	29,903,874	4,782,587
3. Benefits and Refunds		
a. Monthly Benefits and Refunds	(27,324,387)	(26,252,678)
b. Other	-	-
c. Total	(27,324,387)	(26,252,678)
4. Administrative and Miscellaneous Expenses	(35,564)	(122,511)
5. Transfers	-	-
C. Market Value of Assets Available for Benefits	348,367,893	326,754,031
D. Contribution Paid for Future Period	-	519,190
E. Market Value of Assets Held in Trust	\$ 348,367,893	\$ 327,273,221

**DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS**

	<b>Year Ending 9/30/2016</b>	<b>Year Ending 9/30/2015</b>
A. Beginning of Year Assets		
1. Market Value	\$ 326,754,031	\$ 327,025,577
2. Actuarial Value	328,381,518	310,012,409
B. End of Year Market Value of Assets	348,367,893	326,754,031
C. Net of Contributions Less Disbursements	(8,290,012)	(5,054,133)
D. Actual Net Investment Earnings	29,903,874	4,782,587
E. Expected Investment Earnings	23,507,147	23,830,114
F. Expected Actuarial Value End of Year: A2 + C + E	343,598,653	328,788,390
G. Market Value End of Year Less Expected Actuarial Value: B - F	4,769,240	(2,034,359)
H. 20% of Difference	953,848	(406,872)
I. End of Year Assets		
1. Actuarial Value: F + H	344,552,501	328,381,518
2. Final Actuarial Value Within 90% to 110% of Market Value	344,552,501	328,381,518
J. Recognized Investment Return: E + H + I2 - I1	24,460,995	23,423,242
K. Gain/(Loss) Due to Investments	953,848	(406,872)
L. Recognized Rate of Return	7.5 %	7.6 %

### INVESTMENT RATE OF RETURN

<u>Year Ending September 30th</u>	<u>Investment Rate of Return</u>	
	<u>Market Value</u>	<u>Actuarial</u>
1992	10.7 %	8.2 %
1993	14.6	14.1
1994	0.9	2.4
1995	15.8	15.5
1996	8.8	10.1
1997	23.9	12.7
1998	(1.4)	9.3
1999	12.2	11.3
2000	10.9	10.7
2001	(16.2)	3.2
2002	(9.8)	(10.7)
2003	16.1	0.8
2004	8.4	1.8
2005	13.9	2.3
2006	7.1	7.8
2007	16.0	9.4
2008	(15.0)	4.3
2009	(2.4)	(2.6)
2010	9.7	6.3
2011	(0.8)	2.1
2012	21.2	8.4
2013	12.9	9.1
2014	9.6	9.2
2015	1.5	7.6
2016	9.3	7.5
<b>Average</b>		
<b>Returns:</b>		
Last 5 Years	10.7 %	8.4 %
Last 10 Years	5.7 %	6.1 %
All Years	6.6 %	6.3 %

\*Net of investment expenses after 2005.



**SECTION D**  
**FINANCIAL ACCOUNTING INFORMATION**

<b>FASB NO. 35 INFORMATION</b>		
<b>A. Valuation Date</b>	10/1/2016	10/1/2015
<b>B. Actuarial Present Value of Accumulated Plan Benefits</b>		
1. Vested Benefits		
a. Members Currently Receiving Payments	\$ 293,822,030	\$ 282,361,938
b. Terminated Vested Members	7,375,451	7,070,402
c. Other Members	139,072,632	139,388,606
d. Total	<u>440,270,113</u>	<u>428,820,946</u>
2. Non-Vested Benefits	<u>4,358,586</u>	<u>4,729,338</u>
3. Total Actuarial Present Value of Accumulated Plan Benefits: 1d + 2	<u>\$ 444,628,699</u>	<u>\$ 433,550,284</u>
4. Accumulated Contributions of Active Members	\$ 25,904,751	\$ 27,266,291
<b>C. Changes in the Actuarial Present Value of Accumulated Plan Benefits</b>		
1. Total Value at Beginning of Period	\$ 433,550,284	\$ 392,439,706
2. Increase (Decrease) During the Period Attributable to:		
a. Change in Actuarial Assumptions	156,581	30,304,413
b. Plan Amendment	-	-
c. Latest Member Data, Benefits Accumulated and Decrease in the Discount Period	38,246,221	37,058,843
d. Benefits Paid	<u>(27,324,387)</u>	<u>(26,252,678)</u>
e. Net Increase	<u>11,078,415</u>	<u>41,110,578</u>
3. Total Value at End of Period	<u>\$ 444,628,699</u>	<u>\$ 433,550,284</u>
<b>D. Market Value of Assets</b>	\$ 348,367,893	\$ 326,754,031

**SECTION E**  
**MISCELLANEOUS INFORMATION**

<b>Reconciliation of Membership Data through September 30, 2016</b>			
<b>Valuation Date</b>	<b>Defined Benefit</b>	<b>Cash Balance</b>	<b>Total</b>
<b>A. Active Members</b>			
1. Number Included in Last Valuation	230	802	1,032
2. New Members	0	123	123
3. Rehired Members	0	6	6
4. Non-Vested Employment Terminations	0	(5)	(5)
5. Vested Employment Terminations	(1)	(10)	(11)
6. Service Retirements	(25)	(5)	(30)
7. Disability Retirements	0	0	0
8. Deaths	<u>(3)</u>	<u>(1)</u>	<u>(4)</u>
9. Number Included in This Valuation	201	910	1,111
<b>B. Terminated Vested Members</b>			
1. Number Included in Last Valuation	45	69	114
2. Additions from Active Members	0	10	10
3. Lump Sum Payments/Refunds	0	0	0
4. Payments Commenced	(6)	0	(6)
5. Rehired	0	0	0
6. Other - Data Adjustment	<u>0</u>	<u>0</u>	<u>0</u>
7. Number Included in This Valuation	39	79	118
<b>C. Other Deferred Benefits (Survivors &amp; Disabilities)</b>			
1. Number Included in Last Valuation	4	4	8
2. Additions from Active Members	3	0	3
3. Additions from Service Retirees (Deferred Survivor)	0	0	0
4. Payments Commenced	(1)	0	(1)
5. Rehired	0	0	0
6. Other - Data Adjustment	<u>0</u>	<u>0</u>	<u>0</u>
7. Number Included in This Valuation	6	4	10
<b>D. Retirees and Beneficiaries</b>			
1. Number Included in Last Valuation	825	0	825
2. Additions from Active Members	25	5	30
3. Additions from Terminated Vested Members	6	0	6
4. Additions from Other Deferred Benefits	1	0	1
5. Deaths Resulting in No Further Payments	(14)	0	(14)
6. End of Certain Period - No Further Payments	0	0	0
7. Lump Sum Payments	0	(5)	(5)
8. Rehired	<u>0</u>	<u>0</u>	<u>0</u>
9. Number Included in This Valuation	843	0	843
<b>E. QDRO Alternate Payees</b>			
1. Number Included in Last Valuation	20	0	20
2. Additions	2	0	2
3. Deaths	<u>0</u>	<u>0</u>	<u>0</u>
4. Number Included in This Valuation	22	0	22

**ORLANDO UTILITIES COMMISSION PENSION PLAN**  
**ACTIVE MEMBERS ON OCTOBER 1, 2016**  
**DEFINED BENEFIT MEMBERS**

Age Group	Years of Service					Totals		
	0-4	5-9	10-14	15-19	20-24		25-29	30 & Up
30-34								
Total Pay								
Avg Pay								
35-39				2				2
Total Pay				146,043				146,043
Avg Pay				73,022				73,022
40-44				2	2			4
Total Pay				127,217	237,620			364,837
Avg Pay				63,608	118,810			91,209
45-49				13	9	11		33
Total Pay				1,049,890	852,331	972,446		2,874,667
Avg Pay				80,761	94,703	88,404		87,111
50-54				8	16	36	7	67
Total Pay				630,023	1,605,056	3,477,295	577,818	6,290,191
Avg Pay				78,753	100,316	96,592	82,545	93,883
55-59				7	4	29	13	53
Total Pay				458,121	346,400	2,758,730	1,239,166	4,802,417
Avg Pay				65,446	86,600	95,129	95,320	90,612
60-64				3	11	12	8	34
Total Pay				208,077	1,017,144	1,055,493	754,961	3,035,675
Avg Pay				69,359	92,468	87,958	94,370	89,285
65-99				1	2	2	3	8
Total Pay				81,016	124,424	161,724	633,203	1,000,367
Avg Pay				81,016	62,212	80,862	211,068	125,046
Total No.				36	44	90	31	201
Total Pay				2,700,387	4,182,974	8,425,688	3,205,148	18,514,197
Avg Pay				75,011	95,068	93,619	103,392	92,110

**ORLANDO UTILITIES COMMISSION PENSION PLAN**  
**ACTIVE MEMBERS ON OCTOBER 1, 2016**  
**CASH BALANCE MEMBERS**

Age Group	Years of Service							Totals
	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	
Under 25	26	4						30
Total Pay	1,101,221	236,704						1,337,925
Avg Pay	42,355	59,176						44,597
25-29	41	18	2					61
Total Pay	1,722,306	1,023,510	144,456					2,890,272
Avg Pay	42,007	56,862	72,228					47,382
30-34	46	38	17	1				102
Total Pay	2,339,873	2,332,508	1,169,303	81,016				5,922,700
Avg Pay	50,867	61,382	68,783	81,016				58,066
35-39	42	39	32	9				122
Total Pay	2,789,445	2,696,128	2,525,725	789,733				8,801,031
Avg Pay	66,415	69,132	78,929	87,748				72,140
40-44	43	46	27	26	8			150
Total Pay	3,081,866	3,134,497	1,927,199	1,990,233	761,429			10,895,224
Avg Pay	71,671	68,141	71,378	76,547	95,179			72,635
45-49	32	33	40	21	15	13	1	155
Total Pay	2,643,374	2,447,040	3,050,799	1,558,158	1,489,242	1,289,185	156,949	12,634,748
Avg Pay	82,605	74,153	76,270	74,198	99,283	99,168	156,949	81,515
50-54	17	29	32	23	4	9	6	120
Total Pay	1,583,145	2,215,482	2,670,420	2,046,696	278,224	1,177,216	615,537	10,586,719
Avg Pay	93,126	76,396	83,451	88,987	69,556	130,802	102,589	88,223
55-59	30	12	16	23	9	4	3	97
Total Pay	2,207,693	1,166,379	1,350,265	1,802,449	901,202	296,342	275,230	7,999,560
Avg Pay	73,590	97,198	84,392	78,367	100,134	74,085	91,743	82,470
60-64	9	16	21	13	3		1	63
Total Pay	1,042,704	1,367,397	2,004,162	1,125,440	272,980		235,000	6,047,682
Avg Pay	115,856	85,462	95,436	86,572	90,993		235,000	95,995
65-99		4	2	4				10
Total Pay		397,343	198,722	346,859				942,924
Avg Pay		99,336	99,361	86,715				94,292
Total No.	286	239	189	120	39	26	11	910
Total Pay	18,511,625	17,016,988	15,041,051	9,740,582	3,703,077	2,762,743	1,282,716	68,058,783
Avg Pay	64,726	71,201	79,582	81,172	94,951	106,259	116,611	74,790

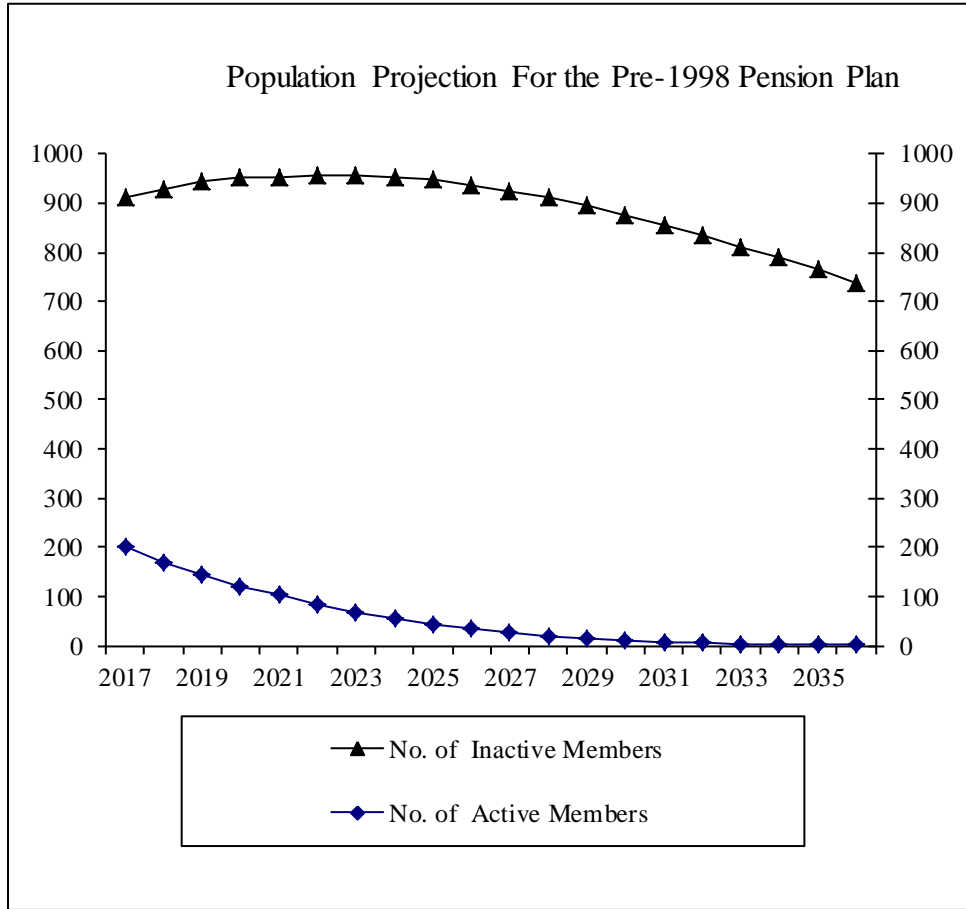
## Inactive Members on October 1, 2016

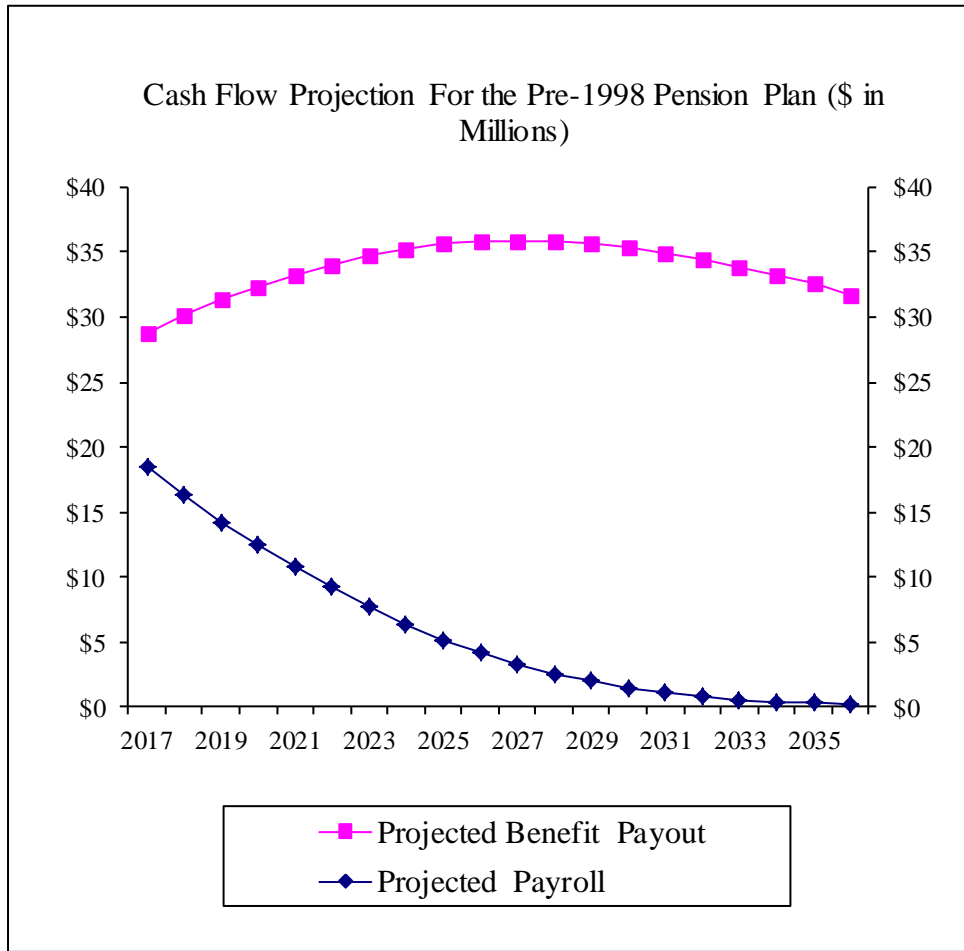
Age	Terminated Vested				Disabled				Retired*		Beneficiaries*	
	Defined Benefit		Cash Balance		Defined Benefit		Cash Balance		Defined Benefit		Defined Benefit	
	No.	Annual Benefits	No.	Current Cash Balance	No.	Annual Benefits	No.	Current Cash Balance	No.	Annual Benefits	No.	Annual Benefits
Under 45	0	\$0	32	\$1,074,503	0	\$0	1	\$39,530	0	\$0	4	\$69,294
45-49	5	49,655	13	806,960	0	0	0	0	1	31,300	2	13,053
50-54	8	101,347	17	1,023,306	2	40,995	0	0	26	1,029,106	1	12,074
55-59	18	236,038	12	970,109	1	28,894	1	50,830	78	3,421,906	9	176,701
60-64	8	149,621	5	423,524	4	92,783	1	20,822	135	5,313,848	19	274,114
65-69	0	0	0	0	0	0	1	175,060	190	6,219,103	20	354,797
70-74	0	0	0	0	0	0	0	0	119	4,046,492	19	283,007
75-79	0	0	0	0	0	0	0	0	78	2,506,523	23	363,858
80-84	0	0	0	0	0	0	0	0	51	1,590,148	21	255,581
85-89	0	0	0	0	0	0	0	0	24	630,044	21	213,732
90 & Up	0	0	0	0	0	0	0	0	11	269,679	12	100,048
<b>Total</b>	<b>39</b>	<b>\$536,661</b>	<b>79</b>	<b>\$4,298,402</b>	<b>7</b>	<b>\$162,672</b>	<b>4</b>	<b>\$286,242</b>	<b>713</b>	<b>\$25,058,149</b>	<b>151</b>	<b>\$2,116,259</b>

\* Totals include \$228,696 in benefits payable under Qualified Domestic Relations Orders.

<b>PROJECTED PAYROLL AND RETIREMENT BENEFITS FOR THE PRE-1998 PENSION PLAN</b>				
<b><u>Fiscal Year End</u></b>	<b><u>No. of Active Members</u></b>	<b><u>Projected Payroll</u></b>	<b><u>No. of Inactive Members</u></b>	<b><u>Projected Benefit Payout</u></b>
2017	201	\$18,514,197	910	\$28,768,677
2018	171	16,332,402	928	30,184,139
2019	144	14,222,939	943	31,325,777
2020	122	12,454,346	951	32,294,439
2021	103	10,850,696	954	33,196,642
2022	85	9,235,882	957	33,999,711
2023	69	7,737,776	956	34,706,636
2024	55	6,316,998	953	35,236,808
2025	43	5,145,225	946	35,601,299
2026	34	4,148,746	937	35,789,991
2027	26	3,289,965	924	35,827,320
2028	20	2,589,914	910	35,765,392
2029	15	1,994,484	894	35,604,271
2030	11	1,495,014	876	35,349,091
2031	8	1,086,166	856	34,951,752
2032	5	800,675	835	34,442,035
2033	4	608,096	812	33,902,245
2034	3	444,961	788	33,249,287
2035	2	324,068	764	32,526,815
2036	1	234,636	738	31,755,732







**SECTION F**  
**SUMMARY OF PLAN PROVISIONS**

## SUMMARY OF CURRENT PRE-1998 PLAN PROVISIONS

### A. Governing Document

Plan established by the Orlando Utilities Commission, and was most recently amended and restated effective under the amended Plan described in the Actuarial Impact Statement dated July 2, 2014. The Plan is also governed by certain provisions of Part VII, Chapter 112, Florida Statutes and the Internal Revenue Code.

### B. Effective Date

September 1, 1954

### C. Plan Year

October 1 through September 30

### D. Type of Plan

Qualified, governmental defined benefit retirement plan; for GASB purposes, it is a single employer plan.

### E. Eligibility Requirements

Each regular full-time or part-time employee is eligible on the date he becomes a regular employee. A regular employee is one who is regularly scheduled for at least 20 hours of work weekly and whose employment is expected to last at least 12 months. The pension plan has been closed to those hired on or after January 1, 1998 and those employees are participating in a defined contribution plan. Effective May 1, 2011, the plan is closed to a terminated vested participant of the Defined Pension Plan who is re-employed; a retired participant of the Defined Benefit Pension Plan who is rehired in a regular full time position is eligible to be a participant, pension benefits are suspended for the period of re-employment.

### F. Credited Service/Benefit Service

Service is measured as continuous service from date of employment to date of termination from active employment to nearest month for which member has made required contributions and has not received a refund of contributions.

### G. Compensation

Base compensation excluding bonuses, commissions, shift differential, overtime or other forms of nonrecurring compensation. Lump sum payment for unused leave is not included.

### H. Average Final Compensation (AFC)

The average of Compensation over the highest 36 consecutive months immediately preceding termination or retirement.

**I. Normal Retirement**

**Eligibility:** A member may retire on the first day of the month coincident with or next following age 62 and 5 years of Credited Service. Transferred St. Cloud employees who terminate employment prior to May 1, 2007 may retire on or after age 65.

**Benefit:** The Accrued Benefit computed at retirement date. The Accrued Benefit is 2.5% of AFC multiplied by Benefit Service up to a maximum of 30 years.

For transferred St. Cloud employees, the Accrued Benefit is:

- 1.75% of AFC multiplied by the first 10 years of St. Cloud Credited Service, plus
- 2.0% of AFC multiplied by St. Cloud Credited Service in excess of 10 years, plus
- 2.5% of AFC multiplied by years of Benefit Service with OUC after April 30, 1997,
- subject to a maximum of 75% of AFC

**Normal Form of Benefit:** 50% Joint and Survivor Annuity; other options are also available.

**COLA:** Payable to eligible retirees in accordance with Subsection U.

**J. Early Retirement**

**Eligibility:** A member may retire with a reduced benefit on the first day of the month coincident with or next following the earlier of age 55 with 10 years of Credited Service, or 25 year of Credited Service regardless of age.

**Benefit:** The Accrued Benefit, reduced by 0.0833% for each month by which the Early Retirement date precedes the Normal Retirement date.

For transferred St. Cloud employees who leave employment prior to May 1, 2007, the reduction is a full actuarial reduction.

**Normal Form of Benefit:** 50% Joint and Survivor Annuity; other options are also available.

**COLA:** Payable to eligible retirees in accordance with Subsection U.

**K. Delayed Retirement**

Same as Normal Retirement with computation made as of the Delayed Retirement Date.

**L. Service Connected Disability** Not Applicable

**M. Non-Service Connected Disability** Not Applicable

**N. Death Before Retirement**

Eligibility: All members with 10 or more years of Credited Service.

Eligible

Survivor: To be eligible for the survivor annuity payable for the life of the survivor, the survivor must be the spouse.

Minimum

Benefit Refund of accumulated member contributions with interest.

Benefit:

Before Earliest Retirement Age: For eligible survivors of members who die prior to being eligible for Early Retirement, one-half (1/2) of the Early Retirement Benefit payable to the spouse starting at the member's earliest retirement age. The Early Retirement Benefit is reduced by 0.5% for each month that the benefit commencement date precedes the Normal Retirement Date. Ineligible survivors will receive the Minimum Benefit.

Benefit:

After Earliest Retirement Age: For eligible survivors of members who die while eligible to Retire, one-half (1/2) of the Accrued Benefit payable to the spouse. If the member was eligible for Early Retirement and not yet eligible for Normal Retirement, the benefit is reduced by 0.0833% for each month that the benefit commencement date precedes the Normal Retirement Date. In the case of simultaneous death, a benefit will be paid for 60 months only.

Normal Form

of Benefit: Payable for lifetime of the eligible survivor.

COLA:

None

**O. Death After Retirement**

Benefit determined by the form of benefit elected upon retirement.

**P. Optional Forms**

In lieu of electing the Normal Form of benefit, the optional forms of benefits available to all retirees are a Single life Annuity, a 5 or 10 Year Certain and Life Annuity, or the 50%, 75% and 100% Joint and Survivor Annuity options.

**Q. Vested Termination/Severance Benefits**

Eligibility: Members with 5 or more years of Credited Service has earned a non-forfeitable right to Plan benefits, provided they elect to leave their accumulated contributions in the fund. Members with less than 5 years of Credit Service are not vested.

Benefit: Vested members: The vested portion of the Accrued Benefit as of the date of termination, payable at Normal Retirement Date. A member with at least 10 years of Credited Service may elect to receive a reduced benefit beginning any time after age Early Retirement Date. The benefit will be reduced by 0.5% for each month prior to Normal Retirement date.

Normal Form of Benefit: 50% Joint and Survivor Annuity; other options are also available.

COLA: None

**R. Refunds**

Eligibility: All members; A refund is in lieu of any vested benefits otherwise due.

Benefit: Refund of the member's contributions with interest. Interest is credited at the rate of 2.5% through May 31, 1976, 5% from June 1, 1976 through September 30, 1988, and 7.5% thereafter.

**S. Member Contributions**

4.0% of Compensation is paid through the later of age 62 or when maximum benefit accrual is reached.

**T. Employer Contributions**

The additional amount determined by the actuary to properly fund the Plan according to State laws.

### U. Cost of Living Increases

Prior to the amendment referenced above, the last cost-of-living adjustment (COLA) granted was effective October 1, 1999. Since that time, annual COLAs have been paid outside the Plan.

Based on the amendment, the total amount of prior annual COLA increases from October 1, 2000 through October 1, 2013 will be paid from the Pension Plan.

Additionally, future COLAs will be paid to eligible retirees (includes current members who retire from active employment) starting when the member is retired and reaches age 65. These increases will be compounded annually and are based on the net return on Plan investments for the previous fiscal year in accordance with the following schedule:

Net Investment Return	COLA Rate
≤ 4.0%	0.0%
> 4.0% and ≤ 8.0%	1.0%
> 8.0% and ≤ 12.0%	1.5%
> 12.0%	2.0%

Past and future COLAs are payable only to members who retire from active employment and are payable for the lifetime of the retiree. Upon death of the retiree, all COLAs cease, and the benefit payable to the survivor, if any, is based on the original benefit the retiree was receiving when the member first retired.

### V. Other Ancillary Benefits

There are no ancillary retirement type benefits not required by statutes but which might be deemed a Orlando Utilities Commission Pension Plan liability if continued beyond the availability of funding by the current funding source.

### W. Changes From Previous Valuation

None.



## SUMMARY OF CURRENT CASH BALANCE PROVISIONS

### A. Governing Document

The Cash Balance Plan was adopted by the Orlando Utilities Commission effective May 1, 2011 as part of the OUC Hybrid Retirement Program document signed on April 29, 2011. The Plan was recently amended as described in our July 11, 2014 opinion letter. The Plan is also governed by certain provisions of Part VII, Chapter 112, Florida Statutes and the Internal Revenue Code.

### B. Effective Date

May 1, 2011

### C. Plan Year

October 1 through September 30

### D. Type of Plan

Qualified, governmental defined benefit retirement plan; for GASB purposes, it is a single employer plan.

### E. Eligibility Requirements

Each regular full-time or part-time employee hired on or after January 1, 1998 and who is employed on May 1, 2011 is automatically eligible to participate on the Effective Date. A regular employee is one who is regularly scheduled for at least 20 hours of work weekly and whose employment is expected to last at least 12 months. Each regular full-time or part-time employee hired on or after the Effective Date is eligible to participate in the Cash Balance Plan. Regular full-time or part time employees who were hired prior to January 1, 1998 who elected to transfer from the Pension Plan to the Defined Contribution Plan are also automatically eligible on the Effective Date.

### F. Credited Service/Benefit Service

For purpose of determining retirement eligibility and Pay Credits (see Section H below), Credited Service is based on Plan Years in which the employee works at least 1,000 hours. In the event a former employee of OUC is rehired, such service shall commence as if the employee was a newly hired employee.

### G. Compensation

Base compensation excluding bonuses, commissions, shift differential, overtime or other forms of nonrecurring compensation. Effective May 1, 2011, lump sum merit awards as defined in the personnel policies of OUC shall be included in compensation.

## H. Pay Credits

Pay Credits are granted each September 30<sup>th</sup> for actively employed eligible members and are based on the following schedule:

<u>Age Plus Credited Service</u>	<u>Pay Credit</u>
0 - 24	5%
25 - 34	6%
35 - 44	7%
45 - 54	8%
55 - 64	9%
65 - 74	10%
75 - 84	11%
85+	12%

For purposes of the above schedule, age is defined as the age of the employee as of the most recent birthday immediately preceding the date the Pay Credits are granted.

## I. Interest Credits

The annual interest crediting rate for active members is based on the net return on investments in accordance with the following schedule:

<u>Net Investment Return</u>	<u>Interest Credit</u>
≤ 4.0%	4.0%
> 4.0% and ≤ 8.0%	5.0%
> 8.0% and ≤ 12.0%	5.5%
> 12.0%	6.0%

Vested members who terminate employment will receive the 4.0% minimum interest crediting rate until eligibility for receipt of benefits.

## J. Account Balance

The Account Balance is the accumulated value of Pay and Interest Credits. Actively employed eligible members as of May 1, 2011 were granted retroactive Pay Credits based on Section H above and Interest Credits of 4% from date of hire through September 30, 2010. For members who were previously employed and rehired by OUC, retroactive Pay and Interest credits were granted provided the employee had at least 5 years of Credited Service at the time of initial separation. Pay and Interest Credits were granted for such rehires only upon implementation of the Cash Balance Plan.

**K. Additional Credit for Pre-1998 Employees**

Additional credits were provided upon implementation of the Cash Balance Plan for members who had transferred from the Pension Plan to the Defined Contribution plan in 1998. The additional credit was determined as the difference between the lump sum amount that was transferred to the Defined Contribution Plan and the amount the employee would have received had he/she been a member of the Defined Contribution Plan from initial hire date through 1998 and earned annual interest at 7%. This additional amount was credited for such members during 1998, and is included in the Account Balance as of September 30, 2010.

**L. Normal Retirement**

**Eligibility:** A member may retire on the first day of the month coincident with or next following the earlier of age 62 and 5 years of Credited Service, or 30 years of continuous Credited Service.

**Benefit:** The Account Balance computed at retirement date or, at the employee's election, an actuarial equivalent annuity based on the following assumptions:

- The most recent mortality table as adopted by the Committee
- Annual interest of 7.5%
- Annual cost-of-living adjustment based on the member's election

Normal  
Form of

**Benefit:** Single Life Annuity; other options are also available.

**COLA:** Members may elect an actuarially reduced annuity and receive future annual increases of 1%, 2%, or 3%. Members may also elect an actuarially equivalent annuity without any future cost-of-living increases.

**M. Early Retirement**

Not Applicable

**N. Delayed Retirement**

Same as Normal Retirement with computation made as of the Delayed Retirement Date.

**O. Service Connected Disability**

Eligibility: Members with 5 or more years of Credited Service who become permanently and totally disabled prior to eligibility for Normal Retirement. Benefits are not payable until Normal Retirement Eligibility.

Benefit: Account Balance as of date of disability, with Interest Credits through Normal Retirement Date at 4.0%. Member may select an annuity option based on the same actuarial equivalence assumptions described in Section L above.

**P. Non-Service Connected Disability**

Eligibility: Members with 5 or more years of Credited Service who become permanently and totally disabled prior to eligibility for Normal Retirement. Benefits are not payable until Normal Retirement Eligibility.

Benefit: Account Balance as of date of disability, with Interest Credits through Normal Retirement Date at 4.0%. Member may select an annuity option based on the same actuarial equivalence assumptions described in Section L above.

**Q. Death Before Retirement**

Eligibility: No service requirement.

Eligible

Survivor: Employee's designated beneficiary.

Benefit: Less than 20 years of Credited Service: Eligible survivors of members who die prior to completing 20 years of Credited Service receive payment of the member's Account Balance as of date of death.

Twenty (20) or more years of Credited Service: Eligible survivors of members who die after completing at least 20 years of Credited Service receive payment of the member's Account Balance as of date of death, or, at the option of the eligible survivor, an annuity that would have been payable as if the member retired one day prior to date of death and elected a 100% joint and survivor option.

**R. Death After Retirement**

Benefit determined by the form of benefit elected upon retirement.

**S. Optional Forms**

In lieu of electing the Normal Form of benefit, the optional forms of benefits available to retirees are Joint and Survivor Annuity options or a lump sum payment of Account Balance.

**T. Vested Termination/Severance Benefits**

Eligibility: Members with 5 or more years of Credited Service earn a non-forfeitable right to Plan benefits. Members with less than 5 years of Credited Service are not vested and their Account Balances are forfeited upon termination.

Benefit: Vested members: Pay Credits cease upon termination. Account Balance as of termination with annual Interest Credits of 4.0% until Normal Retirement date. Members may receive a lump sum of the Account Balance at Normal Retirement or an actuarial equivalent annuity based on the same assumptions described in Section L above.

Normal  
Form of

Benefit: Single Life Annuity; other options are also available.

COLA: Members may elect an actuarially reduced annuity and receive future annual increases of 1%, 2%, or 3%. Members may also elect an actuarially equivalent annuity without any future cost-of-living increases.

**U. Member Contributions**

None.

**V. Employer Contributions**

The additional amount determined by the actuary to properly fund the Plan according to State laws.

**W. Cost of Living Increases**

Members may elect an actuarially reduced annuity and receive future annual increases of 1%, 2%, or 3%. Members may also elect an actuarially equivalent annuity without any future cost-of-living increases.

**X. Other Ancillary Benefits**

There are no ancillary retirement type benefits not required by statutes but which might be deemed a Orlando Utilities Commission Cash Balance Plan liability if continued beyond the availability of funding by the current funding source.