



May 3, 2017

Mr. Jeff Templeton  
Plan Administrator  
Winter Park Firefighters' Retirement System  
9154 Lake Burkett Drive  
Orlando, Florida 32817

**Re: Projection Actuarial Valuation**

Dear Jeff:

As requested, we are pleased to enclose ten (10) copies of the October 1, 2016 Projection Actuarial Valuation Report for the City of Winter Park Firefighters' Retirement System.

We appreciate the opportunity to work with the Board on this important project and look forward to presenting the key financial results of our Projection Actuarial Valuation at the Board Meeting on May 4<sup>th</sup>.

As you are aware, the State issued a Memorandum on January 20, 2017 announcing the activation of their new online reporting portal for pension plans. Upon approval of the Actuarial Valuation Report, we will upload a copy of the Actuarial Valuation Report along with the newly required disclosure information as required by the State.

If you should have any questions concerning the above, please do not hesitate to contact us.

Sincerest regards,

A handwritten signature in black ink that reads "L. F. Wilson". The signature is written in a cursive style with a large, prominent "L" and "W".

Lawrence F. Wilson, A.S.A.  
Senior Consultant and Actuary

Enclosures

# CITY OF WINTER PARK FIREFIGHTERS' RETIREMENT SYSTEM

PROJECTION ACTUARIAL VALUATION AS OF OCTOBER 1, 2016

This Valuation Determines the Annual Contribution for the System Year October 1, 2017 through September 30, 2018 to Be Paid in System Year October 1, 2017 to September 30, 2018

May 3, 2017





**City of Winter Park  
Firefighters' Retirement System**

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May 3, 2017

Board of Trustees  
c/o Mr. Jeff Templeton, Plan Administrator  
Winter Park Firefighters' Retirement System  
9154 Lake Burkett Drive  
Orlando, Florida 32817

Dear Board of Trustees:

### **October 1, 2016 Projection Actuarial Valuation**

We are pleased to present our October 1, 2016 Projection Actuarial Valuation Report for the City of Winter Park Firefighters' Retirement System. The purpose of this report is to indicate appropriate contribution levels, monitor minimum funding requirements, comment on the actuarial stability of the System and to satisfy State and accounting requirements. Gabriel, Roeder, Smith & Company (GRS), as System actuary, is authorized to prepare an annual Actuarial Valuation under Section 3 of the System. This report is prepared for and at the request of the Board of Trustees.

This report consists of this commentary, detailed Tables I through XIX, thirty (30) year projections on Table XX and the State Required Exhibit on Table XXI. The Tables contain basic System cost figures plus significant details on the benefits, liabilities and experience of the System. We suggest you thoroughly review the report at your convenience and contact us with any questions that may arise.

### **Retirement System Costs**

Our Projection Actuarial Valuation develops the required minimum Retirement System payment for the System year beginning October 1, 2017 under the Florida Protection of Public Employee Retirement Benefits Act and Chapter 175. The minimum payment consists of payment of annual normal costs including administrative expenses and amortization of the components of the unfunded actuarial accrued liability over various periods as prescribed by law. The minimum payment is **\$2,502,303 (50.9%)**. The figure in parentheses is the System cost expressed as a percentage of projected covered annual payroll for fiscal year beginning October 1, 2017 (\$4,915,236).

This total cost is to be met by Member, City and State contributions. We anticipate Member contributions will be **\$294,914 (6.0%)** and that allowable State contributions will be **\$406,405 (8.3%)**. This leaves a City requirement of **\$1,800,984 (36.6%)**. The City contribution includes an interest adjustment and must be increased if State contributions are less than expected.

### **Changes in System Benefits, Actuarial Assumptions and Methods**

The System provisions remain unchanged from our October 1, 2015 Actuarial Valuation. System benefits are summarized on Table XI.

The mortality assumption has been updated to use the mortality assumptions used by the Florida Retirement System (FRS) as required under F.S., Chapter 2015-157 based upon the July 1, 2016 FRS Actuarial Valuation. The remaining actuarial assumptions and methods remain unchanged from the October 1, 2015 Actuarial Valuation. The actuarial assumptions and methods are outlined on Table XII.

### **Comparison of October 1, 2015 and October 1, 2016 Valuation Results**

Table II of our report provides information of a comparative nature. The left columns of the Table indicate the costs as calculated for October 1, 2015. The center columns indicate the costs as calculated for October 1, 2016 prior to the assumption change. The right columns indicate the costs as calculated for October 1, 2016 after the assumption change.

Comparing the left and center columns of Table II shows the effect of System experience during the year. The number of active participants increased by approximately 7%. Covered payroll increased by approximately 15%. Total System membership increased by approximately 3%. Total normal cost increased both as a dollar amount and as a percentage of covered payroll. Both the unfunded actuarial accrued liability and the net City minimum funding requirement increased as a dollar amount but decreased as a percentage of covered payroll.

Comparing the center and right columns of Table II shows the effect of the update of actuarial assumptions. Total normal cost, unfunded actuarial accrued liability and net City minimum funding requirement decreased both as a dollar amount and as a percentage of covered payroll.

The present value of vested accrued benefits exceeds the market value of System assets. The Vested Benefit Security Ratio is 97.7% (97.5% prior to assumption change). This is an increase from 94.2% as of October 1, 2015. The Vested Benefit Security Ratio is based upon the market value of System assets.

### **System Experience**

Table VIII indicates net System experience resulted in an actuarial loss of \$1,570,744. This suggests actual overall System experience was less favorable than expected.

Table XVIII provides information on recent System experience (salary, turnover and investment yield). The salary experience indicates actual salary increases averaged approximately 11.7%. The

average salary increase assumption is 7.5%. Salary experience was generally a source of actuarial loss. The three, five and ten-year average salary increases are 7.8%, 6.0% and 4.4%, respectively.

There was no turnover this year. Turnover was generally an additional source of actuarial loss. The three, five and ten-year turnover are 0%, 20% and 30% of expected turnover, respectively.

The smoothed actuarial value investment return of 6.38% was less than the 7.75% assumption for investment return. Smoothed actuarial value investment return was an additional source of actuarial loss during the year. The three, five and ten-year average annual smoothed actuarial value investment returns are 8.07%, 7.82% and 5.82%, respectively. The one, three, five and ten-year average annual market value returns are 9.29%, 5.25%, 8.73% and 5.48%, respectively.

### **Member Census and Financial Data**

The City submitted the Member census data as of October 1, 2016 used for this valuation to us. This information contains name, Social Security number, date of birth, date of hire, employee contributions and actual salary paid for the previous year. Dates of termination and retirement are provided where applicable. The City updated information on inactive participants including retirees, beneficiaries, DROPs and vested terminees.

We received financial information concerning System assets as of September 30, 2016 from the City. We do not audit the Member census data and asset information that is provided to us; however, we perform certain reasonableness checks. The System is responsible for the accuracy of the data.

### **Summary**

In our opinion the benefits provided for under the current System will be sufficiently funded through the payment of the amount as indicated in this and future Actuarial Valuation reports. We will continue to update you on the future payment requirements for the System through our actuarial valuation reports. These reports will also continue to monitor emerging experience of the System.

The actuarial assumptions used in this Actuarial Valuation are as adopted by the Board of Trustees. Each assumption represents an estimate of future System experience.

If all actuarial assumptions are met and if all future minimum required contributions are paid, System assets will be sufficient to pay all System benefits, future contributions are expected to remain relatively stable as a percent of payroll and the funded status is expected to improve. System minimum required contributions are determined in compliance with the requirements of the Florida Protection of Public Employee Retirement Benefits Act and Firefighters Retirement

Chapter 175 with normal cost determined as a level percent of covered payroll and a level percent amortization payment using an initial amortization period of 20 years.

The Unfunded Actuarial Accrued Liability (UAAL) may not be appropriate for assessing the sufficiency of System assets to meet the estimated cost of settling benefit obligations but may be appropriate for assessing the need for or the amount of future contributions. The UAAL would be different if it reflected the market value of assets rather than the actuarial value of assets.

The Unfunded Actuarial Present Value of Vested Accrued Benefits and the corresponding Vested Benefit Security Ratio may be appropriate for assessing the sufficiency of System assets to meet the estimated cost of settling benefit obligations but may not be appropriate for assessing the need for or the amount of future contributions.

The GASB Net Pension Liability and System Fiduciary Net Position as a Percentage of Total Pension Liability may not be appropriate for assessing the sufficiency of System assets to meet the estimated cost of settling benefit obligations but may be appropriate for assessing the need for or the amount of future contributions.

The Funded Ratio shown in Table XX may not be appropriate for assessing the sufficiency of System assets to meet the estimated cost of settling benefit obligations but may be appropriate for assessing the need for or the amount of future contributions. This ratio is based on a smoothed value of assets and would be different if based on market value of assets.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from anticipated under 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) and changes in System provisions or applicable law. Due to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements.

This report should not be relied upon for any purpose other than the purpose described in the primary communication. Determinations of the financial results associated with the benefits described in this report in a manner other than the intended purpose may produce significantly different results.

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 System 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

Board of Trustees  
May 3, 2017  
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with applicable statutes.

This report may be provided to parties other than the Board only in its entirety and only with the permission of an approved representative of the Board.

The signing actuaries are independent of the System sponsor.

The undersigned are Members of the American Academy of Actuaries and meet the qualification standards of the American Academy of Actuaries to render the actuarial opinions contained in this report. We are available to respond to any questions with regards to matters covered in this report.

Very truly yours,



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Lawrence F. Wilson, A.S.A., E.A.  
Senior Consultant and Actuary



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Jennifer M. Borregard, E.A.  
Consultant and Actuary

Table I

**City of Winter Park  
Firefighters' Retirement System**

**Summary of Retirement System Costs as of October 1, 2016**

	<u>Prior Assumptions</u>		<u>Current Assumptions</u>	
	<u>Cost Data</u>	<u>% of Payroll</u>	<u>Cost Data</u>	<u>% of Payroll</u>
<b>A. Participant Data Summary (Table III)</b>				
1. Active employees	60	N/A	60	N/A
2. Terminated vested	1	N/A	1	N/A
3. Receiving benefits (including DROPs)	54	N/A	54	N/A
4. Annual payroll of active employees	\$ 4,915,236	100.0%	\$ 4,915,236	100.0%
<b>B. Total Normal Costs</b>				
1. Age retirement benefits	\$ 1,130,596	23.0%	\$ 1,107,313	22.5%
2. Termination benefits	70,760	1.4%	68,092	1.4%
3. Death benefits	14,109	0.3%	22,690	0.5%
4. Disability benefits	51,223	1.0%	50,567	1.0%
5. Estimated expenses	114,691	2.3%	114,691	2.3%
6. Total annual normal costs	<u>\$ 1,381,379</u>	28.1%	<u>\$ 1,363,353</u>	27.7%
<b>C. Total Actuarial Accrued Liability</b>				
1. Age retirement benefits active employees	\$ 22,740,280	462.6%	\$ 22,314,976	454.0%
2. Termination benefits active employees	109,514	2.2%	106,293	2.2%
3. Death benefits active employees	151,373	3.1%	227,622	4.6%
4. Disability benefits active employees	63,396	1.3%	67,440	1.4%
5. Retired or terminated vested participants receiving benefits including DROPs	34,099,906	693.8%	34,222,832	696.3%
6. Terminated vested participants entitled to future benefits	249,906	5.1%	251,451	5.1%
7. Deceased participants whose beneficiaries are receiving benefits	795,367	16.2%	818,401	16.7%
8. Disabled participants receiving benefits	232,260	4.7%	241,119	4.9%
9. Miscellaneous liability (refunds in process)	69,980	1.4%	69,980	1.4%
10. Share Plan liability	102,056	2.1%	102,056	2.1%
11. Total actuarial accrued liability	<u>\$ 58,614,038</u>	1192.5%	<u>\$ 58,422,170</u>	1188.6%
<b>D. Smoothed Actuarial Value of Assets (Table VI)</b>	\$ 51,466,953	1047.1%	\$ 51,466,953	1047.1%
<b>E. Unfunded Actuarial Accrued Liability (C-D)</b>	\$ 7,147,085	145.4%	\$ 6,955,217	141.5%

**City of Winter Park  
Firefighters' Retirement System**

**Summary of Retirement System Costs as of October 1, 2016**

	<b>Prior Assumptions</b>		<b>Current Assumptions</b>	
	<b>Cost Data</b>	<b>% of Payroll</b>	<b>Cost Data</b>	<b>% of Payroll</b>
F. Minimum Required Contribution				
1. Total normal cost	\$ 1,381,379	28.1%	\$ 1,363,353	27.7%
2. Amortization of unfunded liability	1,059,452	21.6%	1,041,652	21.2%
3. Interest adjustment	98,634	2.0%	97,298	2.0%
4. Total required contribution	\$ 2,539,465	51.7%	\$ 2,502,303	50.9%
G. Expected payroll of active employees for 2017 / 2018 year (\$4,915,236 x 1.000)				
	\$ 4,915,236	100.0%	\$ 4,915,236	100.0%
H. Contribution Sources (percent of expected 2017 / 2018 payroll)				
1. Expected City	\$ 1,838,146	37.4%	\$ 1,800,984	36.6%
2. Expected State	406,405	8.3%	406,405	8.3%
3. Expected Member	294,914	6.0%	294,914	6.0%
4. Total required contribution	\$ 2,539,465	51.7%	\$ 2,502,303	50.9%
I. Actuarial Gain / (Loss) (Table VIII)	\$ (1,570,744)	(32.0%)	\$ (1,570,744)	(32.0%)
J. Actuarial Present Value of Vested Accrued Benefits				
1. Retired, terminated vested, beneficiaries and disabled receiving benefits including DROPs	\$ 35,127,533	714.7%	\$ 35,282,352	717.8%
2. Terminated vested participants entitled to future benefits and miscellaneous	319,886	6.5%	321,431	6.5%
3. Active participants entitled to future benefits	15,358,873	312.5%	15,132,910	307.9%
4. Share Plan liability	102,056	2.1%	102,056	2.1%
5. Total actuarial present value of vested accrued benefits	\$ 50,908,348	1035.7%	\$ 50,838,749	1034.3%
K. Market Value of Assets (Table V)	\$ 49,659,796	1010.3%	\$ 49,659,796	1010.3%
L. Unfunded Actuarial Present Value of Vested Accrued Benefits (J. - K., not less than zero)	\$ 1,248,552	25.4%	\$ 1,178,953	24.0%
M. Vested Benefit Security Ratio (K. ÷ J.)	97.5%	N/A	97.7%	N/A

**City of Winter Park  
Firefighters' Retirement System**

**Comparison of Cost Data of October 1, 2015 and October 1, 2016 Valuations**

	<b>October 1, 2015</b>		<b>Prior Assumptions October 1, 2016</b>		<b>Current Assumptions October 1, 2016</b>	
	<b>Cost Data</b>	<b>% of Annual Compensation</b>	<b>Cost Data</b>	<b>% of Annual Compensation</b>	<b>Cost Data</b>	<b>% of Annual Compensation</b>
A. Participants						
1. Active employees	56	N/A	60	N/A	60	N/A
2. Terminated vested	1	N/A	1	N/A	1	N/A
3. Receiving benefits (including DROPs)	55	N/A	54	N/A	54	N/A
4. Annual payroll of active employees	\$ 4,275,632	100.0%	\$ 4,915,236	100.0%	\$ 4,915,236	100.0%
B. Total Normal Costs	\$ 1,182,650	27.7%	\$ 1,381,379	28.1%	\$ 1,363,353	27.7%
C. Total Actuarial Accrued Liability	\$ 56,277,717	1316.2%	\$ 58,614,038	1192.5%	\$ 58,422,170	1188.6%
D. Smoothed Actuarial Value of Assets	\$ 49,902,483	1167.1%	\$ 51,466,953	1047.1%	\$ 51,466,953	1047.1%
E. Unfunded Actuarial Accrued Liability	\$ 6,375,234	149.1%	\$ 7,147,085	145.4%	\$ 6,955,217	141.5%
F. Net City Cost	\$ 1,653,747	38.7% <sup>1</sup>	\$ 1,838,146	37.4% <sup>2</sup>	\$ 1,800,984	36.6% <sup>2</sup>
G. Actuarial Gain / (Loss)	\$ (390,712)	(9.1%)	\$ (1,570,744)	(32.0%)	\$ (1,570,744)	(32.0%)
H. Unfunded Actuarial Present Value of Vested Accrued Benefits	\$ 2,896,453	67.7%	\$ 1,248,552	25.4%	\$ 1,178,953	24.0%
I. Vested Benefit Security Ratio	94.2%	N/A	97.5%	N/A	97.7%	N/A

<sup>1</sup> Percent of expected 2016 / 2017 covered payroll (\$4,275,632)

<sup>2</sup> Percent of expected 2017 / 2018 covered payroll (\$4,915,236)

**Table III**

**City of Winter Park  
Firefighters' Retirement System  
Characteristics of Participants in  
Actuarial Valuation as of October 1, 2016**

A. Active System Participants Summary

1. Active participants fully vested	38
2. Active participants partially vested	0
3. Active participants non-vested	22
4. Total active participants	60
5. Annual rate of pay of active participants	\$ 4,915,236

B. Retired and Terminated Vested Participant Summary

1. Retired or terminated vested participants receiving benefits including DROP participants	46
2. Terminated vested participants entitled to future benefits	1
3. Deceased participants whose beneficiaries are receiving benefits	7
4. Disabled participants receiving benefits	1

C. Projected Annual Retirement Benefits

1. Retired or terminated vested receiving benefits including DROP participants	\$ 2,213,934
2. Terminated vested entitled to future benefits	18,287
3. Beneficiaries of deceased participants receiving benefits	92,506
4. Disabled participants receiving benefits	22,259

Table IV

**City of Winter Park  
Firefighters' Retirement System**

**Statement of System Assets as of October 1, 2016**

	<u>Market Value</u>
A. <u>Cash and cash equivalents</u>	\$ 1,610,871
B. <u>General Investments</u>	
1. U.S. Government obligations	445,691
2. Corporate bonds	0
3. Common stocks	14,693,977
4. Commingled funds	26,026,925
5. Convertible securities	4,029,173
6. Real estate	2,852,302
7. Accrued income	17,269
C. <u>Receivables</u>	
1. Employee contribution	10,827
2. Other	8,333
D. <u>Payables</u>	35,572
E. <u>Total Fund Assets</u> (A + B + C - D)	\$ 49,659,796
F. <u>Credit Balance</u>	0
G. <u>Net Fund Assets</u> (E - F)	\$ 49,659,796

**City of Winter Park  
Firefighters' Retirement System**

**Reconciliation of System Assets**

A. <u>Total Market Value of Assets as of October 1, 2015</u>		\$ 46,938,709
B. <u>Receipts During Period</u>		
1. Contributions		
a. Employee	\$ 288,518	
b. City	1,563,461	
c. State	406,405	
d. Total	\$ 2,258,384	
2. Investment Income		
a. Interest, dividends and other	\$ 435,486	
b. Investment expenses	(108,802)	
c. Net investment income	\$ 326,684	
3. Realized gains / (losses)	1,653,946	
4. Unrealized gains / (losses)	2,308,790	
5. Total receipts during period		\$ 6,547,804
C. <u>Disbursements During Period</u>		
1. Pension payments	\$ 1,397,365	
2. DROP distributions	2,314,661	
3. Share Plan distributions	0	
4. Contribution refunds	0	
5. Administrative expenses	114,691	
6. Total disbursements during period		\$ 3,826,717
D. <u>Total Market Value of Assets as of September 30, 2016</u>		\$ 49,659,796
E. <u>Credit Balance</u>		\$ 0
F. <u>Net Market Value of Assets as of September 30, 2016</u> (D - E)		\$ 49,659,796

**City of Winter Park  
Firefighters' Retirement System**

**Reconciliation of System Assets**

**G. Excess State Funds**

1. Balance as of October 1, 2015	\$ 374,486
2. Increase for current year	81,902
3. Funds released to Share Plan	(102,056)
4. Funds released to reduce unfunded actuarial accrued liability	(354,332)
5. Balance as of September 30, 2016	<u>\$ 0</u>

**H. Share Plan**

1. Balance as of October 1, 2015	\$ 0
2. Increase from State funds received	102,056
3. Investment credits	0
4. Administrative fees	0
5. Distributions	0
6. Balance as of September 30, 2016	<u>\$ 102,056</u>

**I. Reconciliation of DROP Account Balances**

1. DROP account balances as of October 1, 2015	\$ 5,077,353
2. Benefit credits during year	941,478
3. Investment gains / (losses) during year	272,775
4. Administrative expenses during year	(32,167)
5. DROP account distributions during year	(2,314,661)
6. DROP account balances as of September 30, 2016	<u>\$ 3,944,778</u>

**City of Winter Park  
Firefighters' Retirement System**

**Development of Smoothed Actuarial Value of Assets as of September 30**

	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
A. Preliminary total smoothed actuarial value from prior year	\$ 45,458,567	\$ 49,902,483	\$ 51,466,953		
B. Market value beginning of year	47,692,847	46,938,709	49,659,796		
C. Market value end of year	46,938,709	49,659,796			
D. Net non-investment cash flow	678,919	(1,568,333)			
E. Investment return					
1. Total market value return: C. - B. - D.	(1,433,057)	4,289,420			
2. Amount for immediate recognition (7.75%)	3,722,504	3,576,977			
3. Amount for phased-in recognition: E.1. - E.2.	(5,155,561)	712,443			
F. Phased-in recognition of investment return:					
1. Current year: 25% of E.3.	(1,288,890)	178,111			
2. First prior year	236,292	(1,288,890)	178,111		
3. Second prior year	430,315	236,292	(1,288,890)	178,111	
4. Third prior year	664,776	430,313	236,292	(1,288,891)	178,110
5. Total phased-in recognition of investment return	<u>42,493</u>	<u>(444,174)</u>	<u>(874,487)</u>	<u>(1,110,780)</u>	<u>178,110</u>
G. Total smoothed actuarial value end of year					
1. Preliminary total smoothed actuarial value end of year: A. + D. + E.2. + F.5.	49,902,483	51,466,953			
2. Upper corridor limit: 120% of C.	56,326,451	59,591,755			
3. Lower corridor limit: 80% of C.	37,550,967	39,727,837			
4. Total smoothed actuarial value end of year: G.1., not more than G.2., nor less than G.3.	49,902,483	51,466,953			
H. Difference between total market value and total smoothed actuarial value	(2,963,774)	(1,807,157)			
I. Smoothed actuarial value rate of return	8.22%	6.38%			
J. Market value rate of return	(2.98%)	9.29%			
K. Credit Balance	0	0			
L. Net Smoothed Actuarial Value of Assets	49,902,483	51,466,953			

Table VII

**City of Winter Park  
Firefighters' Retirement System**

**Funding Standard Account for  
System Year Ended September 30, 2016**

A. Charges to the Funding Standard Account

1. Prior year funding deficiency	\$	0
2. City / State normal cost for the System year		868,074
3. Net amortization charges		937,243
4. Interest charge		<u>82,647</u>
5. Total employer charges	\$	1,887,964

B. Credits to the Funding Standard Account

1. Prior year credit balance	\$	0
2. State contribution		324,503
3. City contribution		<u>1,563,461</u>
4. Total credits	\$	1,887,964

C. Credit Balance / (Funding Deficiency)  
(B.4. - A.5.)

\$ 0

Table VIII

**City of Winter Park**  
**Firefighters' Retirement System**  
Actuarial Gain / (Loss) for  
System Year Ended September 30, 2016 \*

A. Derivation of Actuarial Gain / (Loss)

1. City and State net normal cost previous valuation	\$ 926,112
2. Unfunded actuarial accrued liability previous valuation	6,375,234
3. Net City and State contributions previous year	2,242,296
4. Interest on:	
(a) City and State net normal cost	\$ 71,774
(b) Unfunded actuarial accrued liability	494,081
(c) City and State contributions	48,564
(d) Net total: (a) + (b) - (c)	<u>\$ 517,291</u>
5. Increase (decrease) in unfunded actuarial accrued liability due to assumption changes	\$ (191,868)
6. Expected unfunded actuarial accrued liability current year: (1. + 2. - 3. + 4. + 5.)	\$ 5,384,473
7. Actual unfunded actuarial accrued liability current year	<u>6,955,217</u>
8. Actuarial gain / (loss): (6. - 7.)	\$ (1,570,744)

B. Approximate Portion of Gain / (Loss)  
due to Investments

1. Smoothed actuarial value of net assets previous year	\$ 49,527,997
2. Net contributions during period	2,530,814
3. Benefits and admin expenses during period	3,826,717
4. Expected net appreciation for period	<u>3,749,879</u>
5. Expected actuarial value of net assets current year: (1. + 2. - 3. + 4.)	\$ 51,981,973
6. Actual smoothed actuarial value of net assets current year	\$ 51,364,897
7. Approximate investment gain / (loss) due to investments: (6. - 5.)	\$ (617,076)

C. Approximate Portion of Gain / (Loss)  
due to Liabilities: A. - B.

	\$ (953,668)
--	--------------

\* Net of reserve for excess State funds / Share Plan

**City of Winter Park  
Firefighters' Retirement System**

**Amortization of Unfunded Actuarial Accrued Liability**

A. Actuarial Accrued Liability Remaining Unfunded

<u>Date</u>	<u>Unfunded Liability</u>	<u>Amortization Payment</u>
October 1, 2016	\$ 6,955,217	\$ 1,041,652
October 1, 2017	\$ 6,371,866	\$ 1,041,652
October 1, 2018	\$ 5,743,306	\$ 1,041,652
October 1, 2019	\$ 5,066,032	\$ 1,041,652
October 1, 2020	\$ 4,336,269	\$ 1,041,649
...		
...		
October 1, 2038	\$ 0	\$ 0

B. Covered Payroll History

<u>Date</u>	<u>Covered Payroll *</u>	<u>Annual Increase</u>
October 1, 2016	\$ 4,915,236	15.0%
October 1, 2015	\$ 4,275,632	5.1%
October 1, 2014	\$ 4,067,097	0.4%
October 1, 2013	\$ 4,050,149	(5.6%)
October 1, 2012	\$ 4,288,651	3.4%
October 1, 2011	\$ 4,148,374	(8.9%)
October 1, 2010	\$ 4,555,879	(5.8%)
October 1, 2009	\$ 4,837,509	(4.9%)
October 1, 2008	\$ 5,085,154	(4.5%)
October 1, 2007	\$ 5,323,188	7.7%
October 1, 2006	\$ 4,940,704	N/A
Ten-Year Average Annual Increase		(0.1%)

\* Excludes DROP payroll

**City of Winter Park  
Firefighters' Retirement System**

**Accounting Disclosure Exhibit**

	<u>10/01/2015</u>	<u>Prior Assumptions 10/01/2016</u>	<u>Current Assumptions 10/01/2016</u>
<b>I. <u>Number of System Members</u></b>			
a. Receiving benefits including DROPs	55	54	54
b. Terminated due deferred benefits	1	1	1
c. Active System members	56	60	60
d. Total	<u>112</u>	<u>115</u>	<u>115</u>
<b>II. <u>Financial Accounting Standards Board Allocation</u></b>			
<b><u>As of October 1, 2016</u></b>			
<b>A. <u>Statement of Accumulated System Benefits</u></b>			
1. Actuarial present value of accumulated vested System benefits			
a. Participants currently receiving benefits including DROP participants	\$ 36,174,056	\$ 35,127,533	\$ 35,282,352
b. Other participants (including reserve for excess State funds / Share Plan liability)	13,661,106	15,780,815	15,556,397
c. Total	<u>\$ 49,835,162</u>	<u>\$ 50,908,348</u>	<u>\$ 50,838,749</u>
2. Actuarial present value of accumulated non-vested System benefits	<u>\$ 595,825</u>	<u>\$ 500,641</u>	<u>\$ 496,256</u>
3. Total actuarial present value of accumulated System benefits	\$ 50,430,987	\$ 51,408,989	\$ 51,335,005
<b>B. <u>Statement of Change in Accumulated System Benefits</u></b>			
1. Actuarial present value of accumulated System benefits as of October 1, 2015			\$ 50,430,987
2. Increase (decrease) during year attributable to:			
a. System amendment			\$ 0
b. Change in actuarial assumptions			(73,984)
c. Benefits paid including refunds and DROP distributions			(3,712,026)
d. Other, including benefits accumulated, increase for interest due to decrease in the discount period			4,690,028
e. Net increase			<u>\$ 904,018</u>
3. Actuarial present value of accumulated System benefits as of October 1, 2016			\$ 51,335,005
<b>C. <u>Significant Matters Affecting Calculations</u></b>			
1. Assumed rate of return used in determining actuarial present values			7.75%
2. Change in System provisions			None.
3. Change in actuarial assumptions			See Table XII, Item L.

**Table X  
(Cont'd)**

**City of Winter Park  
Firefighters' Retirement System  
Accounting Disclosure Exhibit**

**III. Net Pension Liability and Related Ratios (GASB No. 67 & No. 68)**

Measurement date	9/30/2014	9/30/2015	9/30/2016	Projected 9/30/2017 *
<b>A. <u>Total Pension Liability (TPL)</u></b>				
Service Cost	\$ 1,034,774	\$ 1,038,799	\$ 1,094,871	\$ 1,248,662
Interest	3,762,630	4,027,050	4,273,512	4,475,889
Benefit Changes	0	0	0	0
Difference Between Actual and Expected Experience	(273,916)	166,585	401,430	1,052,070
Assumption Changes	0	0	0	(191,868)
Benefit Payments, including				
Refunds of Member Contributions	(1,452,381)	(1,559,126)	(3,712,026)	(3,834,860)
Net Change in Total Pension Liability	\$ 3,071,107	\$ 3,673,308	\$ 2,057,787	\$ 2,749,893
Total Pension Liability (TPL) - (beginning of year)	48,759,766	51,830,873	55,504,181	57,561,968
Total Pension Liability (TPL) - (end of year)	<u>\$ 51,830,873</u>	<u>\$ 55,504,181</u>	<u>\$ 57,561,968</u>	<u>\$ 60,311,861</u>
<b>B. <u>System Fiduciary Net Position</u></b>				
Contributions - City and State	\$ 2,029,490	\$ 2,020,802	\$ 1,969,866	\$ 1,974,157
Contributions - Member	353,350	305,022	288,518	294,914
Net Investment Income	4,278,932	(1,433,057)	4,289,420	3,783,516
Benefit Payments, including				
Refunds of Member Contributions	(1,452,381)	(1,559,126)	(3,712,026)	(3,834,860)
Administrative Expenses	(73,301)	(87,779)	(114,691)	(114,691)
Other	0	0	0	0
Net Change in System Fiduciary Net Position	\$ 5,136,090	\$ (754,138)	\$ 2,721,087	\$ 2,103,036
System Fiduciary Net Position - (beginning of year)	42,556,757	47,692,847	46,938,709	49,659,796
System Fiduciary Net Position - (end of year)	<u>\$ 47,692,847</u>	<u>\$ 46,938,709</u>	<u>\$ 49,659,796</u>	<u>\$ 51,762,832</u>
<b>C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u></b>	\$ 4,138,026	\$ 8,565,472	\$ 7,902,172	\$ 8,549,029
<b>D. <u>System Fiduciary Net Position as a Percentage of TPL: (B)</u></b>	92.02 %	84.57 %	86.27 %	85.83 %
<b>E. <u>Covered Employee Payroll</u> **</b>	\$ 4,130,864	\$ 4,351,071	\$ 4,808,627	\$ 4,915,236
<b>F. <u>NPL as a Percentage of Covered Employee Payroll: (C) / (E)</u></b>	100.17 %	196.86 %	164.33 %	173.93 %
<b>G. <u>Notes to Schedule:</u></b>				
Valuation Date	10/01/2013	10/01/2014	10/01/2015	10/01/2016
Reporting Date (GASB No. 68)	09/30/2015	09/30/2016	09/30/2017	09/30/2018
Update procedures used to roll forward TPL excluding DROP account balances and reserve for excess State funds to the measurement dates - actual DROP account balances and reserve for excess State funds as of measurement dates included in TPL				
See Table X, Item V. and Table XII, Item L. for benefit and assumption changes during the years.				

\* Projected - actual amounts will be available after fiscal year end

\*\* Reported payroll on which contributions to the System are based as provided under GASB No. 82

**City of Winter Park  
Firefighters' Retirement System**

**Accounting Disclosure Exhibit**

**IV. Schedule of Employer Contributions (GASB No. 67 & No. 68)**

<u>Fiscal Year End 9/30</u>	<u>Actuarially Determined Contribution</u>	<u>Actual Contribution</u>	<u>Contribution Deficiency (Excess)</u>	<u>Covered Payroll<sup>1,2</sup></u>	<u>Actual Contribution as a % of Covered Payroll</u>
2007	\$ 1,354,977	\$ 1,354,977	\$ 0	\$ 4,940,704	27.42%
2008	1,324,691	1,324,691	0	5,323,188	24.89%
2009	1,529,032	1,529,032	0	5,085,154	30.07%
2010	1,537,037	1,537,037	0	4,837,509	31.77%
2011	1,701,327	1,851,293	(149,966)	4,555,879	40.64%
2012	1,742,515	1,853,995	(111,480)	4,148,374	44.69%
2013	2,038,955	2,038,955	0	4,288,651	47.54%
2014	2,029,490	2,029,490	0	4,130,864	49.13%
2015	2,020,802	2,020,802	0	4,351,071	46.44%
2016	1,969,866	1,969,866	0	4,808,627	40.97%
2017 <sup>3</sup>	1,974,157	1,974,157	0	4,915,236	40.16%

<sup>1</sup> Projected prior to fiscal year ended September 30, 2014

<sup>2</sup> Reported payroll on which contributions to the System are based as provided under GASB No. 82

<sup>3</sup> Projected - actual amounts will be available after fiscal year end

City of Winter Park  
Firefighters' Retirement System

Accounting Disclosure Exhibit

V. Notes to Schedule of Contributions (GASB No. 67 & No. 68)

**Valuation Date:** Actuarially determined contributions are calculated as of October 1st - two years prior the fiscal year end in which contributions are reported.

**Methods and Assumptions Used to Determine Contribution Rates:**

Actuarial Cost Method	Entry Age
Amortization Method	Level percent of pay, Closed
Amortization Period	20 years
Asset Valuation Method	4-year smoothed market
Inflation	2.75%
Salary Increases	5.5% - 9.5%
Investment Rate of Return	7.75%
Payroll Growth Assumption	3.5% per annum - not greater than historical 10-year average but not less than 0% (0.0%).
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition
Mortality	For healthy participants, RP 2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, and fully generational mortality improvements projected to each future payment date with Scale AA. For disabled participants, RP 2000 Disabled Mortality Tables, separate rates for males and females, and fully generational mortality improvements projected to each future payment date with Scale AA.
<b>Cost of Living Adjustment</b>	3.00%

**Other Information:**

Benefit Changes

2013: Compensation updated to include accruals as of September 30, 2011. 2012: Employee contributions no longer credited with interest at 5%, termination benefits updated to be payable at age 55 and effective March 1, 2013, only participants who retire on or after Early or Normal Retirement Date (including DROPs) will be entitled to a 3% annual COLA on benefit payments beginning at age 60.

Assumption Changes

2013: Active liabilities and normal costs increased by 1.35% to account for unused annual leave pay at time of retirement for members hired prior to October 1, 2011. 2008: Mortality assumption for healthy lives updated to RP 2000 Combined Healthy Participant Mortality Tables (RP 2000 Disabled Mortality Tables for disabled lives), separate rates for males and females, and fully generational mortality improvements projected to each future decrement date with Scale AA, interest to be earned by fund updated to 7.75% (net of investment expenses), compounded annually and allowances for expenses updated to actual administrative expenses incurred during prior System year. Withdrawal rates and salary increases updated and payroll growth assumption added. 2006: Asset valuation method updated.

**City of Winter Park  
Firefighters' Retirement System**

**Accounting Disclosure Exhibit**

**VI. Discount Rate (GASB No. 67 & No. 68)**

A discount rate of 7.75% was used to measure the TPL. This discount rate was based on the expected rate of return on System investments of 7.75%. The projection of cash flows used to determine this discount rate assumed member contributions will be made at the current member contribution rate and employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member contribution rate. Based on these assumptions, the System's fiduciary net position was projected to be available to make all projected future expected benefit payments of current System members. Therefore, the long-term expected rate of return on System investments was applied to all periods of projected benefit payments to determine the TPL.

**VII. Sensitivity of the NPL to the Discount Rate Assumption (GASB No. 67 & No. 68)**

Measurement date: September 30, 2016

	1% Decrease	Current Discount Rate	1% Increase
Discount Rate	6.75%	7.75%	8.75%
NPL	\$ 15,204,843	\$ 7,902,172	\$ 1,917,355

Measurement date: September 30, 2017 \*

	1% Decrease	Current Discount Rate	1% Increase
Discount Rate	6.75%	7.75%	8.75%
NPL	\$ 16,499,669	\$ 8,549,029	\$ 2,064,822

\* Projected - actual amounts will be available after fiscal year end

**City of Winter Park  
Firefighters' Retirement System**

**Accounting Disclosure Exhibit**

VIII. Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources  
Related to Pensions - Reporting Date (GASB No. 68)

Pension Expense for Fiscal Year Ending September 30, 2017 \$ 2,387,875

Summary of Outstanding Deferred Inflows and Outflows of Resources as of September 30, 2017

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between actual and expected experience on liabilities	\$ 402,743	\$ 102,718
Changes of assumptions or other inputs	0	0
Net difference between projected and actual earnings on pension System investments	2,144,357	0
Total	\$ 2,547,100	\$ 102,718

Projected Deferred Outflows for City Contributions to Be Recognized in Pension Expense for Fiscal Year Ending September 30, 2018 \$ 1,567,752

Summary of Deferred Outflows and Inflows of Resources that will be Recognized in Pension Expense in Future Years.

Year Ending 30-Sep	Amount
2018	\$ 770,296
2019	781,712
2020	998,367
2021	(105,993)
2022	0
Thereafter	0

**City of Winter Park**  
**Firefighters' Retirement System**

**Accounting Disclosure Exhibit**

The following information is not required to be disclosed but is provided for informational purposes.

**IX. Components of Pension Expense (GASB No. 68)**

Measurement Date	<u>9/30/2014</u>	<u>9/30/2015</u>	<u>9/30/2016</u>	<u>Projected 9/30/2017*</u>
Service Cost	\$1,034,774	\$1,038,799	\$1,094,871	\$1,248,662
Interest on Total Pension Liability	3,762,630	4,027,050	4,273,512	4,475,889
Current-Period Benefit Changes	0	0	0	0
Contributions - Member	(353,350)	(305,022)	(288,518)	(294,914)
Projected Earnings on System Investments	(3,331,364)	(3,722,504)	(3,576,977)	(3,783,516)
Administrative Expenses	73,301	87,779	114,691	114,691
Other Changes in System Fiduciary Net Position	0	0	0	0
Recognition of Beginning Deferred Outflows / (Inflows) due to Liabilities	(57,066)	(20,047)	71,187	258,187
Recognition of Beginning Deferred Outflows / (Inflows) due to Assets	(189,514)	841,598	699,109	699,109
Total Pension Expense	<u>\$ 939,411</u>	<u>\$ 1,947,653</u>	<u>\$ 2,387,875</u>	<u>\$ 2,718,108</u>

\* Projected - actual amounts will be available after measurement date

**City of Winter Park**  
**Firefighters' Retirement System**

**Accounting Disclosure Exhibit**

The following information is not required to be disclosed but is provided for informational purposes.

X. Recognition of Deferred Outflows and (Inflows) Due to Liabilities - Measurement Date (GASB No. 68)

Recognition of Deferred Outflows due to Differences Between Actual and Expected Experience on Liabilities

Established	Initial Balance	Initial Recognition Period	Remaining Recognition Period as of 9/30/2016	Recognition Amount for 2015 / 2016	Balance as of 9/30/2016
2013 / 2014	\$ 0	4.8	1.8	\$ 0	\$ 0
2014 / 2015	166,585	4.5	2.5	37,019	92,547
2015 / 2016	401,430	4.4	3.4	91,234	310,196
TOTAL				\$ 128,253	\$ 402,743

Recognition of Deferred (Inflows) due to Differences Between Actual and Expected Experience on Liabilities

Established	Initial Balance	Initial Recognition Period	Remaining Recognition Period as of 9/30/2016	Recognition Amount for 2015 / 2016	Balance as of 9/30/2016
2013 / 2014	\$ (273,916)	4.8	1.8	\$ (57,066)	\$ (102,718)
2014 / 2015	0	4.5	2.5	0	0
2015 / 2016	0	4.4	3.4	0	0
TOTAL				\$ (57,066)	\$ (102,718)

Recognition of Deferred Outflows due to Changes of Assumptions or Other Inputs

Established	Initial Balance	Initial Recognition Period	Remaining Recognition Period as of 9/30/2016	Recognition Amount for 2015 / 2016	Balance as of 9/30/2016
2013 / 2014	\$ 0	4.8	1.8	\$ 0	\$ 0
2014 / 2015	0	4.5	2.5	0	0
2015 / 2016	0	4.4	3.4	0	0
TOTAL				\$ 0	\$ 0

**City of Winter Park  
Firefighters' Retirement System**

**Accounting Disclosure Exhibit**

The following information is not required to be disclosed but is provided for informational purposes.

**X. Recognition of Deferred Outflows and (Inflows) Due to Liabilities - Measurement Date (GASB No. 68) (cont'd)**

Recognition of Deferred (Inflows) due to Changes of Assumptions or Other Inputs

Established	Initial Balance	Initial Recognition Period	Remaining Recognition Period as of 9/30/2016	Recognition Amount for 2015 / 2016	Balance as of 9/30/2016
2013 / 2014	\$ 0	4.8	1.8	\$ 0	\$ 0
2014 / 2015	0	4.5	2.5	0	0
2015 / 2016	0	4.4	3.4	0	0
TOTAL				\$ 0	\$ 0

**XI. Recognition of Deferred Outflows and (Inflows) Due to Assets - Measurement Date (GASB No. 68)**

Recognition of Deferred Outflows / (Inflows) due to Difference Between Projected and Actual Earnings on Pension System Investments

Established	Initial Balance	Initial Recognition Period	Remaining Recognition Period as of 9/30/2016	Recognition Amount for 2015 / 2016	Balance as of 9/30/2016
2013 / 2014	\$ (947,568)	5	2	\$ (189,514)	\$ (379,026)
2014 / 2015	5,155,561	5	3	1,031,112	3,093,337
2015 / 2016	(712,443)	5	4	(142,489)	(569,954)
TOTAL				\$ 699,109	\$ 2,144,357

**City of Winter Park  
Firefighters' Retirement System**

**Outline of Principal Provisions of the Retirement System**

A. Effective Date:

October 1, 1992. Most recently amended by Ordinance No. 2942-13 adopted October 28, 2013.

B. Eligibility:

All regular uniformed members of the Fire Department; includes active volunteers.

C. Member:

An actively employed Firefighter who fulfills the eligibility requirements.

D. Contributions:

Employee:	6.0% of compensation.
State:	Premium Tax Revenue.
City:	Balance required to maintain System on sound actuarial basis.

E. Credited Service:

Total years and fractional parts of years of service as a Firefighter with member contributions.

F. Purchase of Prior Military Service:

A participant may purchase from 1 year up to 4 years of credited service for military service prior to employment. The cost shall be an amount actuarially determined to fund the cost to the System of adding this credited service.

G. Compensation:

Total pay, excluding special detail pay (includes vacation and comp time accrual as of September 30, 2011).

H. Average Final Compensation (AFC):

Average monthly compensation during the best 60 calendar months out of the last 120 calendar months preceding date of retirement (or termination).

City of Winter Park  
Firefighters' Retirement System

**Outline of Principal Provisions of the Retirement System**

I. Normal Retirement:

1. Eligibility:

Earlier of:

- (a) Attainment of age 55 with completion of 10 years of credited service.
- (b) Completion of 20 years of credited service.

2. Benefit:

3.0% times AFC times credited service.

J. Early Retirement:

1. Eligibility:

Attainment of age 50 with completion of 10 years of credited service.

2. Benefit:

Benefit accrued to date of retirement, reduced by 3% for each year early retirement date precedes normal retirement date, payable immediately.

K. Delayed Retirement:

Computed the same as set forth under Normal Retirement, based upon AFC and credited service as of delayed retirement date.

L. Disability Retirement:

1. Service Incurred:

Accrued benefit, but not less than 42% of AFC.

2. Non-Service Incurred:

- a. Eligibility: 10 or more years of credited service; totally and permanently disabled.
- b. Benefit: Accrued benefit, but not less than 25% of AFC.

City of Winter Park  
Firefighters' Retirement System

Outline of Principal Provisions of the Retirement System

M. Pre-Retirement Death Benefit:

1. Service Incurred:

The greater of (a) the accrued benefit at the time of death or (b) 30% of monthly salary at time of death payable to the spouse until death.

2. Non-Service Incurred:

- a. Eligible for Normal Retirement: Determined as though had retired on the date of death.
- b. Not Eligible for Normal Retirement: Less than 10 years of credited service - return of employee contributions.  
10 or more years - accrued benefit payable for 10 years.

N. Termination Benefits:

1. Eligibility:

100% vesting upon the completion of 10 years of credited service. Employees who have not completed 10 years of credited service at date of termination of employment shall only be entitled to the return of their employee contributions.

2. Benefit:

Accrued benefit based upon credited service and AFC as of date of termination, payable at age 55.

O. Normal Form of Retirement Income:

Monthly benefit payable for ten (10) years certain and life thereafter.

P. Deferred Retirement Option Program (DROP)

1. Eligibility:

Participant must be eligible for Normal Retirement.

2. Benefit:

Retirement benefits are transferred to a hypothetical DROP account within the pension fund. Interest is credited or debited quarterly based upon either the rate of return earned by the Fund or a 6.5% fixed rate of return, as elected by the Member. A deduction is made each quarter for administrative expenses. The period of participation in the DROP is limited to at least 12 months but no more than 84 months. The benefit is paid as a lump sum upon actual termination of employment.

**City of Winter Park  
Firefighters' Retirement System**

**Outline of Principal Provisions of the Retirement System**

Q. Cost of Living Adjustment (COLA)

A participant who terminates employment on or after October 1, 2002 is entitled to a 3.0% annual COLA on benefit payments beginning at age 60.

Effective March 1, 2013, only participants who retire on or after Early or Normal Retirement Date (including DROPs) are entitled to a 3% annual COLA on benefit payments beginning at age 60.

R. Changes Since Previous Valuation

None.

**City of Winter Park  
Firefighters' Retirement System**

**Actuarial Assumptions and Actuarial Cost Methods  
Used in the Valuation**

**A. Mortality**

For healthy participants during employment, RP 2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB.

For healthy participants post employment, RP 2000 Annuitant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB.

For disabled male participants, 60% RP 2000 Disabled Male Mortality Table setback four years / 40% RP 2000 Annuitant Male Mortality Table with White Collar Adjustment with no setback, without projected mortality improvements. For disabled female participants, 60% RP 2000 Disabled Female Mortality Table set forward two years / 40% RP 2000 Annuitant Female Mortality Table with White Collar Adjustment with no setback, without projected mortality improvements.

Sample Ages (2016)	Pre-retirement Future Life Expectancy (Years)		Post-retirement Future Life Expectancy (Years)	
	Men	Women	Men	Women
	55	29.61	32.95	29.10
60	24.73	27.88	24.52	27.72
62	22.86	25.91	22.74	25.80

Sample Ages (2036)	Pre-retirement Future Life Expectancy (Years)		Post-retirement Future Life Expectancy (Years)	
	Men	Women	Men	Women
	55	31.85	35.06	31.35
60	27.00	30.03	26.81	29.89
62	25.12	28.06	25.01	27.97

**B. Interest to be Earned by Fund**

7.75% (net of investment expenses), compounded annually - includes inflation at 2.75%.

**C. Allowances for Expenses or Contingencies**

Actual administrative expenses incurred during the prior System year.

**City of Winter Park  
Firefighters' Retirement System**

**Actuarial Assumptions and Actuarial Cost Methods  
Used in the Valuation**

D. Employee Withdrawal Rates

Withdrawal rates for males and for females were used in accordance with the following illustrative example.

E. Disability Rates

Disability rates for males and for females were used in accordance with the following illustrative example.

<u>Age</u>	<u>Withdrawal Rates Per 100 Employees</u>	<u>Disability Rates Per 100 Employees</u>
20	7.20	0.14
25	6.84	0.15
30	6.00	0.18
35	4.56	0.23
40	3.12	0.30
45	1.92	0.51

F. Salary Increase Factors

Current salary is assumed to increase at a rate based on the table below - includes wage inflation of 3.75%.

<u>Service</u>	<u>Salary Increase</u>
0 - 4	9.5%
5 - 9	8.5%
10 - 14	7.5%
15 - 19	6.5%
20 + years	5.5%

City of Winter Park  
Firefighters' Retirement System

Actuarial Assumptions and Actuarial Cost Methods  
Used in the Valuation

G. Rates of Retirement

<u>Age</u>	<u>Annual Rate of Retirement</u>
< 50	10%
50	30%
51 - 54	10%
55 - 59	30%
60 & Over	100%

50% of employees are assumed to enter the DROP when first eligible.

All active members on the valuation date are assumed to have a minimum of one year of future service.

H. Loading

Active liabilities and normal costs are increased by 1.35% to account for unused annual leave pay at time of retirement for Firefighters hired prior to October 1, 2011.

I. Payroll Growth Assumption

3.5% per annum - not greater than historical 10-year average but not less than 0% (0.0%).

J. Asset Valuation Method

The method used for determining the smoothed actuarial value of assets phases in the deviation between the expected and actual return on assets at the rate of 25% per year. The smoothed actuarial value of assets will be further adjusted to the extent necessary to fall within the corridor whose lower limit is 80% of the fair market value of System assets and whose upper limit is 120% of the fair market value of System assets.

City of Winter Park  
Firefighters' Retirement System

Actuarial Assumptions and Actuarial Cost Methods  
Used in the Valuation

K. Cost Method

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

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

L. Changes Since Previous Valuation

Mortality was:

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

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

Table XIII

**City of Winter Park  
Firefighters' Retirement System  
Distribution by Attained Age Groups  
and Service Groups as of October 1, 2016**

<u>Attained</u> <u>Age Group</u>	-----COMPLETED YEARS OF SERVICE-----							<u>Total</u>
	<u>0-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30 &amp; Over</u>	
Under 25	1	-	-	-	-	-	-	1
25-29	6	4	-	-	-	-	-	10
30-34	2	2	2	-	-	-	-	6
35-39	2	3	4	2	-	-	-	11
40-44	-	2	2	3	3	-	-	10
45-49	-	-	6	4	5	-	-	15
50-54	-	-	3	2	1	-	-	6
55-59	-	-	-	-	-	1	-	1
60-64	-	-	-	-	-	-	-	-
65 & Over	-	-	-	-	-	-	-	-
<b>TOTAL</b>	<b>11</b>	<b>11</b>	<b>17</b>	<b>11</b>	<b>9</b>	<b>1</b>	<b>0</b>	<b>60</b>
				<u>10/01/2015</u>		<u>10/01/2016</u>		
Average Attained Age				39.6 years		39.8 years		
Average Hire Age				27.5 years		27.5 years		
Average Pay				\$ 76,351		\$ 81,921		
Percent Female				1.8%		3.3%		

**City of Winter Park  
Firefighters' Retirement System**

**Statistics for Participants Entitled to Deferred Benefits  
and Participants Receiving Benefits**

A. Entitled to Deferred Benefits

<b><u>Current Age Group</u></b>	<b><u>Count</u></b>	<b><u>Total Annual Benefit</u></b>	<b><u>Average Annual Benefit</u></b>
<b>Less than 40</b>	-	-	-
40-44	1	\$ 18,287	\$ 18,287
45-49	-	-	-
50-54	-	-	-
55-59	-	-	-
60-64	-	-	-
65 & Over	-	-	-
<b>TOTAL</b>	<u>1</u>	<u>\$ 18,287</u>	<u>\$ 18,287</u>

B. Receiving Benefits (including DROPs)

<b><u>Current Age Group</u></b>	<b><u>Count</u></b>	<b><u>Total Annual Benefit</u></b>	<b><u>Average Annual Benefit</u></b>
<b>Less than 50</b>	2	\$ 60,757	\$ 30,379
50-54	11	742,708	67,519
55-59	6	354,800	59,133
60-64	12	517,632	43,136
65-69	7	388,540	55,506
70-74	6	129,473	21,579
75-79	3	72,714	24,238
80-84	3	29,696	9,899
85-89	3	19,783	6,594
90 & Over	1	12,596	12,596
<b>TOTAL</b>	<u>54</u>	<u>\$ 2,328,699</u>	<u>\$ 43,124</u>

Table XV

**City of Winter Park  
Firefighters' Retirement System  
Reconciliation of Member Data**

<b>A. <u>Active Participants</u></b>	
1. Active participants previous year	56
2. Retired during year	0
3. Entered DROP	0
4. Died during year	0
5. Disabled during year	0
6. Terminated during year	0
7. New active participants	4
8. Re-instated during year	0
9. Active participants current year	<u>60</u>
<b>B. <u>Participants Receiving Benefits</u></b>	
1. Participants receiving benefits previous year	38
2. New retired participants	0
3. Former DROPs now receiving benefits	4
4. New terminated vested receiving benefits	0
5. New disabled receiving benefits	0
6. New beneficiaries receiving benefits	0
7. Died or ceased payment during year	<u>(1)</u>
8. Retired or terminated vested receiving benefits current year	41
<b>C. <u>DROP Participants</u></b>	
1. DROP participants previous year	17
2. Died during year	0
3. Became disabled during year	0
4. Employment terminated and retired during year	(4)
5. Entered DROP during year	<u>0</u>
6. DROP participants current year	13
<b>D. <u>Terminated Vested Participants Entitled to Future Benefits</u></b>	
1. Terminated vested entitled previous year	1
2. Died during year	0
3. Commenced receiving benefits during year	0
4. New terminated vested	0
5. Terminated vested paid lump sum	<u>0</u>
6. Terminated vested entitled current year	1

**City of Winter Park  
Firefighters' Retirement System**

**Projected Retirement Benefits**

<b><u>Fiscal Year</u></b>	<b><u>Projected Total Annual Payout</u></b>
2017	\$ 2,341,309
2018	\$ 2,571,665
2019	\$ 2,760,152
2020	\$ 3,095,276
2021	\$ 3,347,878
2022	\$ 3,601,696
2023	\$ 3,837,747
2024	\$ 4,062,053
2025	\$ 4,368,213
2026	\$ 4,645,519

The above projected payout of System benefits during the next ten years is based on assumptions involving all decrements. The actual payouts may differ from the above estimates depending upon the death, salary and retirement experience of the System. However, since the projected payment is recomputed each valuation date, there is an automatic correction to the extent that actual experience varies from expected experience.

Table XVII

**City of Winter Park  
Firefighters' Retirement System**

**Summary of Transaction Information**

Valuation Date	Benefits Paid <sup>1</sup>	Administrative Expenses	Employee Contributions	Net City Contributions	Total State Contributions	Smoothed Actuarial Value <sup>2,3</sup>
10/01/2016	\$ 3,712,026	\$ 114,691	\$ 288,518	\$ 1,563,461	\$ 406,405	\$ 51,466,953
10/01/2015	1,559,126	87,779	305,022	1,635,666	385,136	49,902,483
10/01/2014	1,452,381	73,301	353,350	1,645,874 <sup>4</sup>	383,616	45,458,567
10/01/2013	1,631,069	73,376	275,751	1,653,307	385,648	40,648,629
10/01/2012	1,801,288	58,645	332,768	1,520,031	333,964	33,953,123
10/01/2011	1,628,475	81,407	365,921	1,485,504	365,789	31,790,960
10/01/2010	1,390,982	53,060	282,788	1,137,419	399,618	31,299,968
10/01/2009	1,176,207	50,871	302,189	1,153,948	375,084	30,139,278
10/01/2008	936,515	57,115	534,132	960,801	363,890	28,964,427
10/01/2007	945,663	44,399	300,809	1,021,370	333,607	26,896,728
10/01/2006	883,842	41,655	278,223	870,265	297,803	24,212,684
10/01/2005	666,874	40,843	272,488	823,182	258,362	20,589,160
10/01/2004	608,736	38,001	247,266	535,623	249,694	18,848,476
10/01/2003	606,567	25,399	233,224	444,398	238,801	18,324,159
10/01/2002	607,523	40,060	203,488	136,979	194,782	16,920,846
10/01/2001	532,368	37,489	178,650	0	185,140	17,092,391
10/01/2000	499,109	30,814	160,599	0	180,322	16,471,008
10/01/1999	426,441	31,143	169,343	103,912	170,214	14,597,429

<sup>1</sup> Includes DROP distributions (previously included DROP benefit credits), effective for October 1, 2013 valuation date.

<sup>2</sup> Includes DROP account balances and Excess State Funds, effective for October 1, 2013 valuation date.

<sup>3</sup> Net of Credit Balance, if any, prior to October 1, 2014 valuation date.

<sup>4</sup> Includes use of credit balance

Table XVIII

**City of Winter Park  
Firefighters' Retirement System**

**Recent Compensation, Termination and Investment Return Experience**

Valuation Date	Compensation		Termination Ratio of Actual to Expected	Investment Return <sup>1</sup>		
	% Increase (Decrease)	Assumed Increase		Market Value	Smoothed Actuarial Value	Assumed
10/01/2016	11.7%	7.5%	0.0	9.29%	6.38%	7.75%
10/01/2015	8.7%	7.6%	0.0	(2.98%)	8.22%	7.75%
10/01/2014	3.3%	7.7%	0.0	9.95%	9.62%	7.75%
10/01/2013	2.3%	7.7%	0.5	12.32%	9.14%	7.75%
10/01/2012	4.3%	7.8%	0.5	16.06%	5.78%	7.75%
10/01/2011	(0.9%)	8.0%	0.0	(1.28%)	0.36%	7.75%
10/01/2010	1.9%	7.8%	0.9	8.90%	2.91%	7.75%
10/01/2009	1.5%	7.9%	0.0	0.09%	2.17%	7.75%
10/01/2008	2.3%	6.0%	0.5	(8.44%)	5.17%	8.00%
10/01/2007	9.4%	6.0%	1.0	13.86%	8.85%	8.00%
Last 3 Years	7.8%	7.6%	0.0	5.25%	8.07%	7.75%
Last 5 Years	6.0%	7.7%	0.2	8.73%	7.82%	7.75%
Last 10 Years	4.4%	7.4%	0.3	5.48%	5.82%	7.80%

<sup>1</sup> Computed as  $2I/(A+B-I)$ , where A is beginning value, B is ending value and I is investment return.

Table XIX

**City of Winter Park  
Firefighters' Retirement System**

**Employer Contribution Information**

Valuation Date	Contribution Fiscal Year End	Minimum Required Employer Contributions	Actual Net City Contributions Made	Actual State Contributions Made	Actual Employer Contributions Made
10/01/2016	09/30/2018	\$ 2,207,389	TBD	TBD	TBD
10/01/2015	09/30/2017	\$ 1,974,157	TBD	TBD	TBD
10/01/2014	09/30/2016	\$ 1,969,866	\$ 1,563,461	\$ 406,405	\$ 1,969,866
10/01/2013	09/30/2015	\$ 2,020,802	\$ 1,635,666	\$ 385,136	\$ 2,020,802
10/01/2012	09/30/2014	\$ 2,029,490	\$ 1,645,874 <sup>1</sup>	\$ 383,616	\$ 2,029,490
10/01/2011	09/30/2013	\$ 2,038,955	\$ 1,653,307	\$ 385,648	\$ 2,038,955
10/01/2010	09/30/2012	\$ 1,742,515	\$ 1,520,031	\$ 333,964	\$ 1,853,995
10/01/2009	09/30/2011	\$ 1,701,327	\$ 1,485,504	\$ 365,789	\$ 1,851,293
10/01/2008	09/30/2010	\$ 1,537,037	\$ 1,137,419	\$ 399,618	\$ 1,537,037
10/01/2007	09/30/2009	\$ 1,529,032	\$ 1,153,948	\$ 375,084	\$ 1,529,032
10/01/2006	09/30/2008	\$ 1,324,691	\$ 960,801	\$ 363,890	\$ 1,324,691
10/01/2005	09/30/2007	\$ 1,354,977	\$ 1,021,370	\$ 333,607	\$ 1,354,977
10/01/2004	09/30/2006	\$ 1,168,068	\$ 870,265	\$ 297,803	\$ 1,168,068
10/01/2004	09/30/2005	\$ 1,081,544	\$ 823,182	\$ 258,362	\$ 1,081,544
10/01/2003	09/30/2004	\$ 785,317	\$ 535,623	\$ 249,694	\$ 785,317
10/01/2002	09/30/2003	\$ 676,299	\$ 444,398	\$ 238,801	\$ 683,199
10/01/2001	09/30/2002	\$ 276,166	\$ 136,979	\$ 194,782	\$ 331,761
10/01/2000	09/30/2001	\$ 129,595	\$ 0	\$ 185,140	\$ 185,140
10/01/1999	09/30/2000	\$ 212,241	\$ 60,966	\$ 180,322	\$ 241,288
10/01/1998	09/30/1999	\$ 274,126	\$ 103,912	\$ 170,214	\$ 274,126
10/01/1997	09/30/1998	\$ 333,068	\$ 230,624	\$ 177,010	\$ 407,634
10/01/1996	09/30/1997	\$ 396,140	\$ 270,731	\$ 128,742	\$ 399,473
10/01/1995	09/30/1996	\$ 425,170	\$ 303,333	\$ 124,641	\$ 427,974
10/01/1994	09/30/1995	\$ 326,333	\$ 213,246	\$ 113,087	\$ 326,333
10/01/1993	09/30/1994	\$ 251,234	\$ 148,209	\$ 110,966	\$ 259,175
10/01/1992	09/30/1993	\$ 317,292	\$ 217,418	\$ 99,875	\$ 317,293
10/01/1991	09/30/1992	\$ 265,415	\$ 166,256	\$ 99,159	\$ 265,415
10/01/1990	09/30/1991	\$ 250,484	\$ 142,559	\$ 107,925	\$ 250,484

<sup>1</sup> Includes use of credit balance

**City of Winter Park  
Firefighters' Retirement System**

**30-Year Projections**

Throughout the forecast period, new members are assumed to be hired each year at a rate sufficient to maintain a constant active employee headcount – stationary population. Newly employed members are assumed to have the same average demographic characteristics (age, gender, salary – adjusted each year for inflation) as those of members hired during the past five (5) years. State monies are projected to be level at the amount received in 2016.

These projections are deterministic – assume all actuarial assumptions are realized.

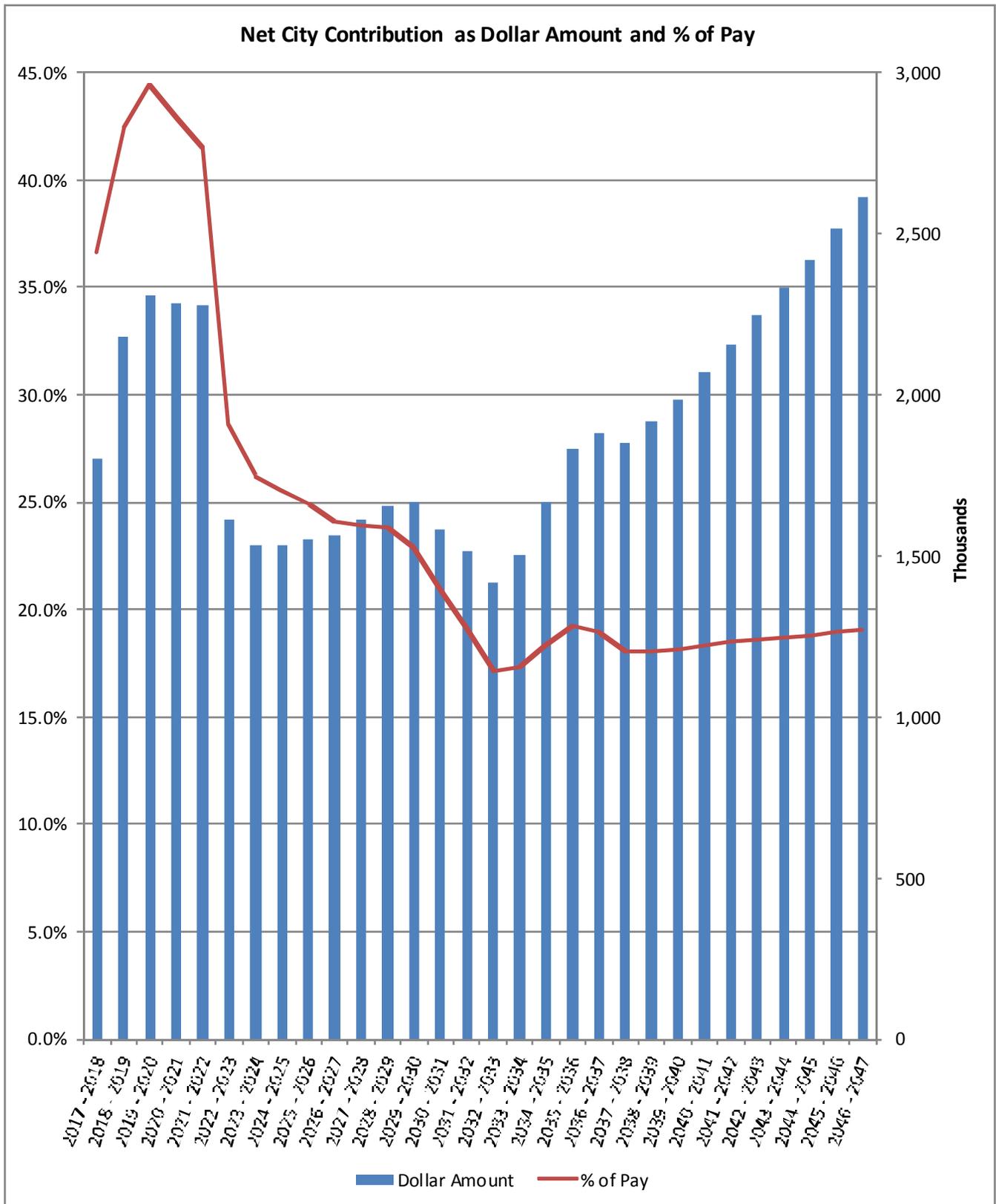
**Table XX  
(Cont'd)**

**City of Winter Park  
Firefighters' Retirement System**

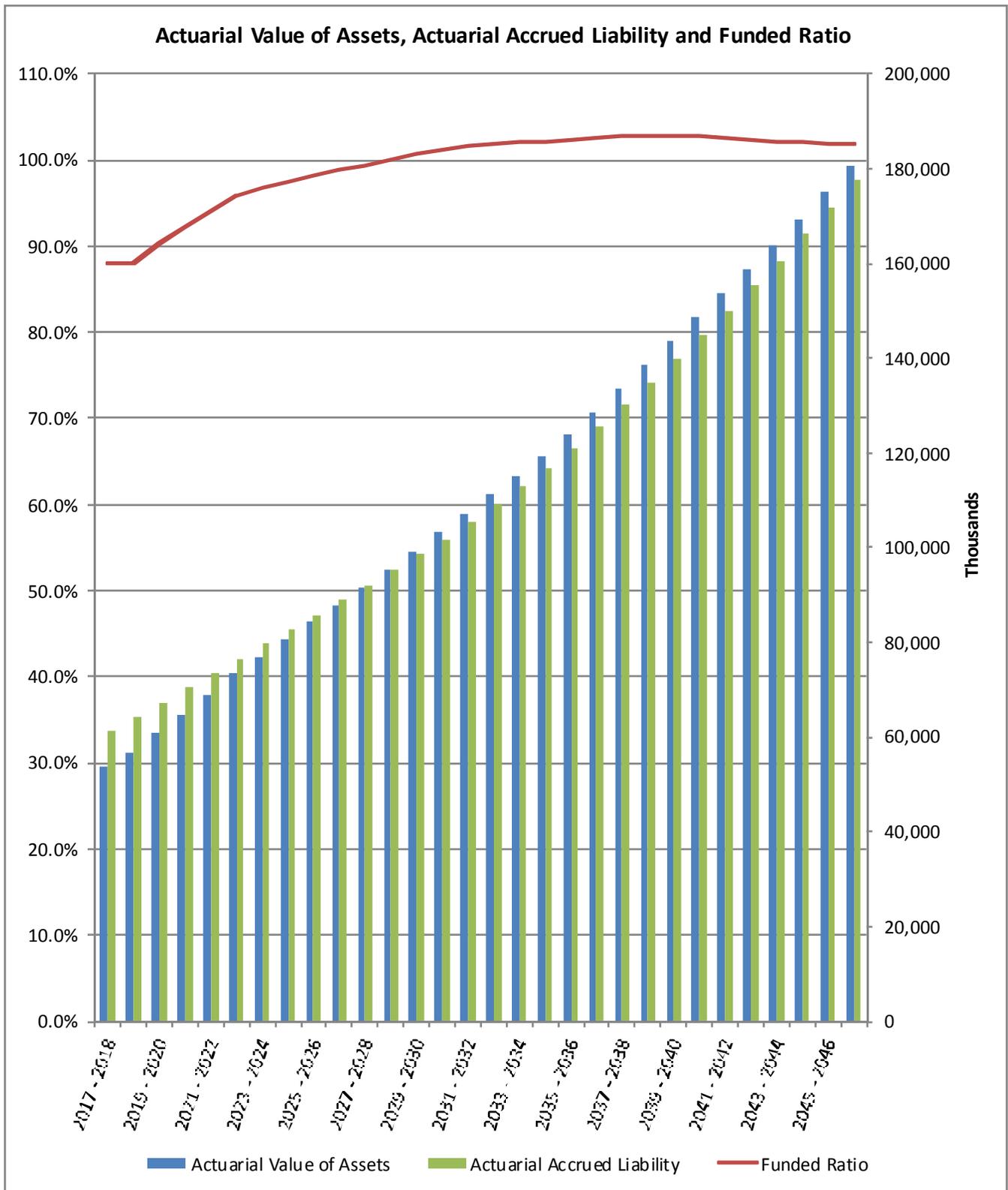
**30-Year Projections**

<b>Contribution Fiscal Year</b>	<b>Projected Non-DROP Payroll</b>	<b>Projected Net City Required Contribution Amount</b>	<b>% of Pay</b>	<b>Actuarial Value of Assets</b>	<b>Actuarial Accrued Liability</b>	<b>Funded Ratio</b>
2017 - 2018	4,915,236	1,800,984	36.6%	53,909,830	61,202,227	88.1%
2018 - 2019	5,142,770	2,182,736	42.4%	56,515,353	64,208,678	88.0%
2019 - 2020	5,197,856	2,307,224	44.4%	60,738,266	67,320,638	90.2%
2020 - 2021	5,330,175	2,283,885	42.8%	64,884,684	70,412,062	92.1%
2021 - 2022	5,479,377	2,274,994	41.5%	69,073,708	73,483,988	94.0%
2022 - 2023	5,643,373	1,612,496	28.6%	73,318,485	76,480,643	95.9%
2023 - 2024	5,844,813	1,531,253	26.2%	76,972,053	79,595,386	96.7%
2024 - 2025	6,016,386	1,535,023	25.5%	80,598,631	82,693,331	97.5%
2025 - 2026	6,216,698	1,551,088	25.0%	84,207,336	85,734,629	98.2%
2026 - 2027	6,482,371	1,563,043	24.1%	87,834,617	88,888,891	98.8%
2027 - 2028	6,722,829	1,609,862	23.9%	91,526,773	92,116,906	99.4%
2028 - 2029	6,951,035	1,653,021	23.8%	95,309,053	95,394,656	99.9%
2029 - 2030	7,275,077	1,666,922	22.9%	99,153,666	98,509,203	100.7%
2030 - 2031	7,560,191	1,580,281	20.9%	103,135,918	101,839,805	101.3%
2031 - 2032	7,912,196	1,516,450	19.2%	107,086,814	105,315,324	101.7%
2032 - 2033	8,275,248	1,415,711	17.1%	111,080,015	109,004,424	101.9%
2033 - 2034	8,684,300	1,500,212	17.3%	115,065,697	112,794,618	102.0%
2034 - 2035	9,074,636	1,664,252	18.3%	119,262,750	116,849,346	102.1%
2035 - 2036	9,499,832	1,829,679	19.3%	123,758,035	121,035,273	102.2%
2036 - 2037	9,901,132	1,880,897	19.0%	128,572,530	125,399,576	102.5%
2037 - 2038	10,234,393	1,850,107	18.1%	133,575,354	130,031,171	102.7%
2038 - 2039	10,608,851	1,915,358	18.1%	138,616,347	134,815,077	102.8%
2039 - 2040	10,944,295	1,987,499	18.2%	143,666,417	139,738,592	102.8%
2040 - 2041	11,298,656	2,071,855	18.3%	148,575,786	144,714,356	102.7%
2041 - 2042	11,679,430	2,156,927	18.5%	153,564,578	149,876,465	102.5%
2042 - 2043	12,074,457	2,245,822	18.6%	158,694,039	155,175,157	102.3%
2043 - 2044	12,476,030	2,332,936	18.7%	163,957,369	160,600,560	102.1%
2044 - 2045	12,875,867	2,421,029	18.8%	169,421,740	166,118,996	102.0%
2045 - 2046	13,289,351	2,517,676	18.9%	175,035,094	171,685,884	102.0%
2046 - 2047	13,747,018	2,616,760	19.0%	180,782,435	177,447,102	101.9%

City of Winter Park  
Firefighters' Retirement System



City of Winter Park  
Firefighters' Retirement System



**City of Winter Park  
Firefighters' Retirement System**

**Actuarial Valuation as of October 1, 2016**

**State Required Exhibit**

	<u>10/01/2015</u>	<u>Prior Assumptions 10/01/2016</u>	<u>Current Assumptions 10/01/2016</u>
<b>A. <u>Participant Data</u></b>			
1. Active participants	56	60	60
2. Retired participants and beneficiaries receiving benefits (including DROPs)	54	53	53
3. Disabled participants receiving benefits	1	1	1
4. Terminated vested participants	1	1	1
5. Annual payroll of active participants	\$ 4,275,632	\$ 4,915,236	\$ 4,915,236
6. Expected payroll of active employees for the following year	\$ 4,275,632	\$ 4,915,236	\$ 4,915,236
7. Annual benefits payable to those currently receiving benefits including DROPs	\$ 2,316,032	\$ 2,328,699	\$ 2,328,699
<b>B. <u>Value of Assets</u></b>			
1. Smoothed Actuarial Value of Assets	\$ 49,902,483	\$ 51,466,953	\$ 51,466,953
2. Market Value of Assets	\$ 46,938,709	\$ 49,659,796	\$ 49,659,796
<b>C. <u>Liabilities</u></b>			
1. Actuarial present value of future expected benefit payments for active members			
a. Retirement benefits	\$ 26,390,820	\$ 31,103,137	\$ 30,479,513
b. Vesting benefits	604,597	662,868	637,090
c. Death benefits	223,790	254,937	393,468
d. Disability benefits	394,118	425,709	424,265
e. Total	<u>\$ 27,613,325</u>	<u>\$ 32,446,651</u>	<u>\$ 31,934,336</u>
2. Actuarial present value of future expected benefit payments for terminated vested members	\$ 231,916	\$ 249,906	\$ 251,451
3. Actuarial present value of future expected benefit payments for members currently receiving benefits			
a. Service retired including DROP participants	\$ 35,068,944	\$ 34,099,906	\$ 34,222,832
b. Disability retired	231,404	232,260	241,119
c. Beneficiaries	873,708	795,367	818,401
d. Miscellaneous (refunds in process)	69,980	69,980	69,980
e. Total	<u>\$ 36,244,036</u>	<u>\$ 35,197,513</u>	<u>\$ 35,352,332</u>

**Table XXI**  
**(Cont'd)**

**City of Winter Park**  
**Firefighters' Retirement System**  
**Actuarial Valuation as of October 1, 2016**  
**State Required Exhibit**

	<u>10/01/2015</u>	<b>Prior Assumptions</b> <u>10/01/2016</u>	<b>Current Assumptions</b> <u>10/01/2016</u>
4. Reserve for excess State funds / Share Plan liability	\$ 374,486	\$ 102,056	\$ 102,056
5. Total actuarial present value of future expected benefit payments	\$ 64,463,763	\$ 67,996,126	\$ 67,640,175
6. Actuarial accrued liabilities	\$ 56,277,717	\$ 58,614,038	\$ 58,422,170
7. Unfunded actuarial accrued liabilities	\$ 6,375,234	\$ 7,147,085	\$ 6,955,217

**D. Statement of Accumulated System Benefits**

1. Actuarial present value of accumulated vested benefits			
a. Participants currently receiving benefits including DROP participants	\$ 36,174,056	\$ 35,127,533	\$ 35,282,352
b. Other participants (including reserve for excess State funds / Share Plan liability)	13,661,106	15,780,815	15,556,397
c. Total	\$ 49,835,162	\$ 50,908,348	\$ 50,838,749
2. Actuarial present value of accumulated non-vested System benefits	\$ 595,825	\$ 500,641	\$ 496,256
3. Total actuarial present value of accumulated System benefits	\$ 50,430,987	\$ 51,408,989	\$ 51,335,005

**E. Statement of Change in Accumulated System Benefits**

1. Actuarial present value of accumulated System benefits as of October 1, 2015			\$ 50,430,987
2. Increase (decrease) during year attributable to:			
a. System amendment			\$ 0
b. Change in actuarial assumptions			(73,984)
c. Benefits paid including refunds and DROP benefits			(3,712,026)
d. Other, including benefits accumulated and increase for interest due to decrease in the discount period			4,690,028
e. Net increase			\$ 904,018
3. Actuarial present value of accumulated System benefits as of October 1, 2016			\$ 51,335,005

**City of Winter Park  
Firefighters' Retirement System  
Actuarial Valuation as of October 1, 2016  
State Required Exhibit**

	<u>10/01/2015</u>	<u>Prior Assumptions 10/01/2016</u>	<u>Current Assumptions 10/01/2016</u>
<b>F. Pension Cost</b>			
1. Total normal cost	\$ 1,182,650	\$ 1,381,379	\$ 1,363,353
2. Payment required to amortize unfunded liability	962,062	1,059,452	1,041,652
3. Interest adjustment	85,983	98,634	97,298
4. Total required contribution	<u>\$ 2,230,695</u>	<u>\$ 2,539,465</u>	<u>\$ 2,502,303</u>
5. Item 4 as a percentage of payroll	52.2%	51.7%	50.9%
6. Estimated employee contributions	\$ 256,538	\$ 294,914	\$ 294,914
7. Item 6 as a percentage of payroll	6.0% <sup>1</sup>	6.0% <sup>2</sup>	6.0% <sup>2</sup>
8. Estimated State contributions	\$ 320,410	\$ 406,405	\$ 406,405
9. Item 8 as a percentage of payroll	7.5% <sup>1</sup>	8.3% <sup>2</sup>	8.3% <sup>2</sup>
10. Net amount payable by City	\$ 1,653,747	\$ 1,838,146	\$ 1,800,984
11. Item 10 as a percentage of payroll	38.7% <sup>1</sup>	37.4% <sup>2</sup>	36.6% <sup>2</sup>
<b>G. Past Contributions</b>			
1. Total contribution required (previous valuation)	\$ 2,176,482	\$ 2,230,695	\$ 2,230,695
2. Actual contributions made:			
a. Employees (not including service purchases)	\$ 288,518	N/A	N/A
b. State (net)	324,503	N/A	N/A
c. City	1,563,461	N/A	N/A
d. Total	<u>\$ 2,176,482</u>	N/A	N/A
<b>H. Net Actuarial Gain (Loss)</b>	\$ (390,712)	\$ (1,570,744)	\$ (1,570,744)
<b>I. Disclosure of Following Items:</b>			
1. Actuarial present value of future salaries - attained age	\$ 32,285,921	\$ 36,927,796	\$ 36,821,083
2. Actuarial present value of future employee contributions - attained age	\$ 1,937,155	\$ 2,215,668	\$ 2,209,265
3. Actuarial present value of future contributions from other sources	N/A	N/A	N/A
4. Amount of active members' accumulated contributions	\$ 3,224,512	\$ 3,513,030	\$ 3,513,030
5. Actuarial present value of future salaries and future benefits at entry age	N/A	N/A	N/A
6. Actuarial present value of future employee contributions at entry age	N/A	N/A	N/A

<sup>1</sup> Percent of expected 2016 / 2017 covered payroll as of October 1, 2015 (\$4,275,632)

<sup>2</sup> Percent of expected 2017 / 2018 covered payroll as of October 1, 2016 (\$4,915,236)

City of Winter Park  
Firefighters' Retirement System

State Required Exhibit

	<u>Unfunded Actuarial Accrued Liabilities</u>	Current Unfunded <u>Liabilities</u>	Amortization <u>Payment</u>	Remaining Funding <u>Period</u>
10/01/2009	Combined Charge & Credit Bases	\$ 2,523,580	\$ 582,727	5 years
10/01/2007	Actuarial Loss / (Gain)	69,078	13,763	6 years
10/01/2008	Actuarial Loss / (Gain)	(8,785)	(1,553)	7 years
10/01/2008	Assumption Changes	1,226,180	109,362	22 years
10/01/2009	Actuarial Loss / (Gain)	1,013,473	117,372	13 years
10/01/2010	Actuarial Loss / (Gain)	749,643	83,168	14 years
10/01/2011	Actuarial Loss / (Gain)	1,587,883	169,549	15 years
10/01/2011	System Amendment	(263,207)	(28,104)	15 years
10/01/2012	Actuarial Loss / (Gain)	(155,645)	(16,060)	16 years
10/01/2013	Actuarial Loss / (Gain)	(782,707)	(78,313)	17 years
10/01/2014	Actuarial Loss / (Gain)	(755,428)	(73,516)	18 years
10/01/2015	Actuarial Loss / (Gain)	372,276	35,332	19 years
10/01/2016	Actuarial Loss / (Gain)	1,570,744	145,725	20 years
10/01/2016	Assumption Changes	(191,868)	(17,800)	20 years
	TOTAL	\$ 6,955,217	\$ 1,041,652	

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 System and / or paid from the System's assets for which liabilities or current costs have not been established or other wise provided for in the valuation. All known events or trends which may require material increase in System costs or required contribution rates have been taken into account in the valuation.

Enrollment Number: 17-02802

Dated: May 3, 2017

  
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Lawrence F. Wilson, A.S.A.