



ACTUARIAL VALUATION REPORT AS OF OCTOBER 1, 2012

**City of Wilton Manors Volunteer Firefighters' Retirement System**

March 22, 2013

Pension Board  
City of Wilton Manors Volunteer Firefighters Retirement System  
Wilton Manors, FL

Dear Board Members:

The results of the October 1, 2012 Annual Actuarial Valuation of the City of Wilton Manors Volunteer Firefighters Retirement System are presented in this report.

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

The purpose of the valuation is to measure the System's funding progress, to determine the employer contribution rate for the fiscal year ending September 30, 2013, and to determine the actuarial information for Governmental Accounting Standards Board (GASB) Statement No. 25 and No. 27. This report should not be relied on for any purpose other than the purpose described above.

The findings in this report are based on data or other information through September 30, 2012. 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 valuation was based upon information furnished by the City concerning Retirement Plan benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not otherwise audit the data. We are not responsible for the accuracy or completeness of the information provided by the Plan Administrator. Furthermore, this report was prepared using assumptions and methods prescribed by the Board as described in Section II.

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

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

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. In my 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.

Respectfully submitted,

GABRIEL, ROEDER, SMITH & COMPANY

By Theora P. Braccialarghe

Theora P. Braccialarghe, FSA, MAAA, FCA  
Enrolled Actuary No. 11-02826

By Peter N. Strong

Peter N. Strong, ASA, MAAA, FCA  
Enrolled Actuary No. 11-06975

By Rhonda Hart

Rhonda Hart, CEBS  
Senior Analyst

## TABLE OF CONTENTS

<b>I</b>	<b>Introduction</b>	
	a. Discussion.....	1
	b. Financial Soundness of the Plan .....	4
	c. Recent History of Plan Changes .....	8
<b>II</b>	<b>Valuation Results</b>	
	a. Comparative Summary of Valuation Results .....	9
	b. Derivation of Normal Cost and Present Value of Projected Benefits .....	10
	c. Liquidation of the Unfunded Actuarial Accrued Liability.....	11
	d. Chapter Revenue .....	12
	e. Recent History of Valuation Results.....	13
	f. Actuarial Gains and Losses.....	14
	g. FASB Information.....	16
	h. GASB Information .....	17
	i. Actuarial Assumptions and Cost Methods .....	19
	j. Glossary of Terms .....	21
<b>III</b>	<b>Pension Fund Information</b>	
	a. Statement of Assets .....	24
	b. Income and Disbursements .....	25
	c. Actuarial Value of Assets.....	26
	d. Investment Rate of Return.....	27
<b>IV</b>	<b>Member Statistics</b>	
	a. Statistical Data.....	28
	b. Reconciliation of Membership Data .....	29
<b>V</b>	<b>Summary of Retirement Plan Provisions.....</b>	<b>30</b>
<b>Appendix</b>	<b>State Requirements</b>	

**SECTION I**

**INTRODUCTION**

## DISCUSSION

### TOTAL REQUIRED CONTRIBUTION

The required City contribution for the plan year ending September 30, 2013, is \$0, as shown below.

<b>Required City Contribution</b>	
Total Required Employer Contribution	\$ 83,951
Expected State Premium Tax Refund	85,547
Remaining City Contribution	0

The actual amount received from the State for the fiscal year ended September 30, 2012 was \$146,649. Any amount received from the state up to \$85,847 (the previously established base amount) can be used toward the existing plan benefits. If the actual State contribution for the fiscal year ending September 30, 2013 is less than \$83,951, the City will need to make a contribution.

### EXPERIENCE

There was only a small actuarial loss this year, due primarily to investments. While the return on market value for the year was 20.5%, the recognized return under the asset smoothing method was 3.7%, as compared to the assumed rate of 8.0%. The valuation smoothing method recognized only 20% of the recent gain and continued to smooth in the market losses from prior years. However, since the total required employer contribution is less than the useable amount expected from the State, the remaining City contribution is expected to be zero.

### CHANGES IN BENEFITS

There were no changes in benefits in connection with this valuation.

## **CHANGES IN ACTUARIAL METHODS AND ASSUMPTIONS**

There were no changes in methods or assumptions in connection with this valuation.

The mortality table used is the RP-2000 Combined Healthy Participant Mortality Tables for males and females, projected to 2005. There is no provision for mortality improvement beyond 2005 in the current mortality assumption. Detail on this assumption can be found in the Actuarial Assumptions and Cost Methods section.

## **FUNDED RATIO**

The funded ratio, one measure of the Plan's financial health, is equal to the actuarial value of assets divided by the actuarial accrued (past service) liability. The funded ratio is 61.9% this year compared to 60.6% last year.

## **VARIABILITY OF FUTURE CONTRIBUTION RATES**

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

Over time, if the year-to-year gains and losses offset each other, the contribution would be expected to return to the current level, but this does not always happen.

The Market Value of Assets was \$32,725 greater than the Actuarial Value of Assets as of the valuation date. This difference will be recognized gradually over the next few years in the absence of offsetting losses. In turn, the computed employer contribution could decrease by approximately \$2,900. If Market Value had been the basis for the valuation, the total required contribution would have been approximately \$81,000 and the funded ratio would have been 64.7%.

## **RECOMMENDATIONS**

We recommend that steps be taken to improve the funded position of the plan. One way would be to shorten the amortization period for new bases or, better yet, for all existing bases. Another way would be to change the funding method to the Aggregate funding method. Under this method, the unfunded liability is paid off over a period of time which is based on the expected future working lifetime of the active members.

We also recommend that the mortality assumption be revised to include a provision to reflect future mortality improvements.

Finally, we recommend starting to lower the investment assumption. The fund is comingled for investment purposes with the fund for the General Employees and Police Officers Retirement Plan, which is closed to new members. The closed status shortens the maturity of the liability for that plan, so the investment allocation is expected to move toward a more conservative allocation over time to reflect that situation.

## **CONCLUSION**

The remainder of this Report covers detailed actuarial valuation results, financial information, other information and statistics, a summary of plan provisions, and annual filings required by law.

## **FINANCIAL SOUNDNESS OF THE PLAN**

The purpose of this Section of the Report is to provide certain measures which indicate the financial soundness of the program. These measures relate to short term solvency, long term solvency and level funding.

The various percentages listed in this Section as of a single valuation date are not overly significant standing alone. What is more significant is the trend of the rates over a period of years. It is also important to keep in mind that each time benefits or assumptions are revised, actuarial liabilities are created or diminished. Any newly created liabilities are financed systematically over a period of future years. All actuarially computed values in this analysis are based on the actuarial assumptions utilized in the respective years' actuarial valuations.

### **SHORT TERM SOLVENCY**

The ultimate test of financial soundness is the program's ability to pay all promised benefits when due. The program's progress in accumulating assets to pay all promised benefits can be measured by comparing the market value of assets with:

1. Accumulated contributions of active members of the program,
2. The actuarial present value (APV) of projected benefits payable to those already receiving benefits and to vested terminations, and
3. The employer-financed portion of the actuarial present value of accrued benefits payable to active participants. This amount is based on benefits earned to date without future credited service or salary increases.

The total of the first two items should generally be fully covered by assets. The portion of the third item covered by assets should increase over time. Increases in benefits will, of course, adversely affect the trend in the years when such increases are first reflected in the actuarial values.

Although different actuarial assumptions might be used in the event of a termination of the program, this test shows how much of the benefits accrued to date might be covered by assets in the event of a plan termination using the valuation assumptions.

<b>Valuation Date</b>	<b>Market Value of Assets*</b>	<b>Actuarial Present Value (APV) of Accrued Benefits</b>	<b>% of APV Covered by Assets</b>
10/1/12	\$ 777,500	\$ 1,185,049	66 %
10/1/11	597,867	1,129,647	53
10/1/10	598,119	1,078,432	55
10/1/09	543,061	1,032,779	53
10/1/08	537,933	987,601	54

\*Market Value reduced by Excess State Reserve

## **LONG TERM SOLVENCY**

Over the longer term, the solvency of an ongoing plan can be measured by comparing the actuarial value of assets to an amount known as the Actuarial Accrued Liability (AAL) under the Entry Age Actuarial Cost Method. This item has often been called the "past service liability". Its derivation differs from the short-term solvency value derivation in several ways, but mainly due to the fact that future salary increases are included in the AAL. As in the case of the short-term solvency values, the AAL is affected immediately by any revisions in benefits or assumptions. The accumulation of assets to equal the AAL can be considered a long-range funding goal. Largely because of periodic benefit increases, very few retirement programs have attained this goal.

<b>Valuation Date</b>	<b>Actuarial Value of Assets</b>	<b>Entry Age Actuarial Accrued Liability (AAL)</b>	<b>% of AAL Covered by Assets</b>
10/1/12	\$ 744,775	\$ 1,202,603	62 %
10/1/11	699,202	1,154,457	61
10/1/10	679,750	1,108,974	61
10/1/09	666,307	1,067,712	62
10/1/08	646,453	1,025,746	63

### LEVEL CONTRIBUTION RATES

The actuarial assumptions and cost methods have been chosen with the intent of producing required employer contributions which remain fairly level. If this goal is attained, future employer contributions will not have to be raised materially in order to make up for the past. For many employers, this measure of the program's soundness is the most important of all.

Since this is not a pay-related benefit, total dollar amounts are shown below:

<b>Contribution</b>		
<b>Valuation Date</b>	<b>Total</b>	<b>City</b>
10/1/12	\$ 83,951	\$ 0
10/1/11	81,024	0
10/1/10	77,607	0
10/1/09	68,752	0
10/1/08	76,864	0

A major factor affecting the stability of the amounts just shown is how well the actual plan experience is faring compared to the actuarial assumptions. The value of the difference between what actually occurred and what was assumed to occur is called the actuarial gain or loss. Gains tend to lower the subsequent cost of the program while losses tend to raise the subsequent cost of the program. A summary of the actuarial gains and losses of the Plan is in the next Section.

**CONCLUSION**

Analysis of all the benchmarks listed above over a period of years will provide an indication of whether the program is becoming financially stronger or weaker.

**RECENT HISTORY OF PLAN CHANGES**

1. Ordinance 781, passed and effective August 25, 1998, is a revised version of Ordinance 754, which established the Plan. Ordinance 791, passed and effective December 8, 1998, is a revised version of Ordinance 781. Ordinance 754 is superseded by Ordinances 781 and 791.
2. Ordinance 811, effective December 31, 1999, provides for 10 years certain & life as the normal form.
3. The October 1, 2001 valuation reflects a change in benefit provisions. In June, 2001, pursuant to Chapter 21, Section 3(a)(2) of the City Code, the Board authorized increasing pension benefits from \$3.00 to \$1800 per month per year of service. The change applied to all years of service, for both active and inactive members.
4. Effective October 1, 2001 the actuarial funding method was changed from the Frozen Initial Liability Cost Method to the Entry Age Normal Cost Method.
5. Effective October 1, 2001 the assumed rate of administrative expense was changed from \$3,000 to \$6,000.
6. The October 1, 2004 valuation reflects the following changes in benefit provisions:
  - a. The normal form of retirement benefit payments for disability was changed from life annuity to ten years certain and life thereafter.
  - b. A non-service connected pre-retirement death benefit was added.
  - c. In November, 2003, pursuant to Chapter 21, Section 3(a)(2) of the City Code, the Board authorized an increase in pension benefits from \$18.00 per month to \$50.00 per month per year of service. The change was applicable to all years of service, for both active and inactive members.
7. Effective October 1, 2004 the assumed rate of administrative expense was changed from \$6,000 to actual administrative expenses for the previous year.
8. Effective October 1, 2005, the mortality table was changed from the 1983 Group Annuity Mortality Table for males with females set back six years to the RP 2000 Mortality Table Projected to 2005 for males and females (sex distinct tables), set forward five years for impaired mortality.
9. Ordinance 904, passed and effective November 14, 2006, increased pension benefits from \$50.00 per month to \$56.00 per month per year of service. The change was applicable to all years of service, for both active and inactive members.
10. The state required that there be at least two active members in the Plan. This requirement was met by a vested terminated member who returned to active status effective October 1, 2006.
11. Effective October 1, 2007 the normal cost for administrative expenses is the average of the past two years rather than the actual amount paid the preceding year.
12. Effective October 1, 2008, the valuation asset method was changed to one which smoothes the excess/(shortfall) of actual investment earnings as compared to expected earnings over five years. Additionally, the method of determining the normal cost for administrative expenses was changed from a two year average of actual expenses to a four year average of actual expenses.

**SECTION II**

**VALUATION RESULTS**

<b>WILTON MANORS FIREFIGHTERS RETIREMENT SYSTEM COMPARATIVE SUMMARY OF VALUATION RESULTS AS OF OCTOBER 1</b>		
	<b>2012</b>	<b>2011</b>
<b>Covered Group</b>		
A. Number of Participants		
Actives	2	2
Retirees, Disabilities, Beneficiaries and Vested Terminations	8	8
<b>Long Range Cost</b>		
B. Actuarial Present Value of Projected Benefits	\$ 1,210,889	\$ 1,165,459
C. Actuarial Present Value of Future Normal Costs	8,286	11,002
D. Actuarial Accrued Liability (AAL): B-C	1,202,603	1,154,457
E. Valuation Assets		
1. Total Valuation Assets	1,025,193	918,518
2. Excess State Money	<u>280,418</u>	<u>219,316</u>
3. Net Assets Available: 1 - 2	744,775	699,202
F. Unfunded Actuarial Accrued Liability (UAAL): D - E	457,828	455,255
<b>Current Cost</b>		
G. Payment Required to Amortize UAAL	\$ 38,911	\$ 38,303
H. Total Normal Cost (for current year)	39,498	37,357
I. Plan Year to which Contributions Apply	2012/13	2011/12
J. Interest	5,542	5,364
K. Total Required Contributions, with Interest	83,951	81,024
L. Estimate of State Contributions		
1. Amount Expected	146,649	114,679
2. Base Amt. + cost of increase	85,547	85,547
3. Lesser of 1 or 2	85,547	85,547
M. Required City Contributions	(1,596)	(4,523)

<b>WILTON MANORS FIREFIGHTERS RETIREMENT SYSTEM DERIVATION OF NORMAL COST AS OF OCTOBER 1</b>		
	<b>2012</b>	<b>2011</b>
A. Entry Age Normal Cost for		
Service Retirement Benefits	\$ 2,739	\$ 2,739
Vesting Benefits	367	367
Preretirement Death	100	100
Disability Benefits	214	214
Return of Contributions	0	0
Total	<u>3,420</u>	<u>3,420</u>
B. Normal Cost for Administrative Expense	36,078	33,937
C. Expected Member Contributions	0	0
D. Employer Normal Cost for Plan Year Beginning October 1: (A)+(B)-(C)	39,498	37,357

<b>WILTON MANORS FIREFIGHTERS RETIREMENT SYSTEM PRESENT VALUE OF PROJECTED BENEFITS AS OF OCTOBER 1</b>		
	<b>2012</b>	<b>2011</b>
A. Present Value of Future Salaries	\$ N/A	\$ N/A
B. Present Value of Projected Benefits		
1. Active Members		
Service Retirement Benefits	354,520	324,435
Vesting Benefits	3,218	5,272
Preretirement Death	1,042	1,615
Disability Benefits	1,383	2,177
Return of Contributions	0	0
Total	<u>360,163</u>	<u>333,499</u>
2. Inactive Members		
Service Retirees	525,469	531,411
Disability Retirees	0	0
Beneficiaries	0	0
Terminated Vested	325,257	300,549
Total	<u>850,726</u>	<u>831,960</u>
3. Grand Total	1,210,889	1,165,459

**LIQUIDATION OF THE  
UNFUNDED ACTUARIAL ACCRUED LIABILITY  
AS OF OCTOBER 1, 2012**

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 AS OF OCTOBER 1, 2012</b>					
Original			Current		
Date & Source	Amort. Years	Amount	Years Remaining	Amount	Payment
10/1/98 UFAAL	30	\$ 20,672	16	\$ (10,781)	\$ (1,128)
2001 Amendment	30	136,484	19	70,386	6,786
10/1/01 Change Method	30	(32,181)	19	(16,597)	(1,600)
10/1/03 Loss	30	25,189	21	18,677	1,726
10/1/03 Amendment	30	303,320	21	224,905	20,790
10/1/04 Gain	30	(22,267)	22	(17,616)	(1,599)
10/1/05 Gain	30	(5,030)	23	(4,213)	(376)
10/1/05 Assumption Change	30	21,786	23	18,247	1,629
10/1/06 Loss	30	5,458	24	4,645	408
10/1/06 Member Status Change (Required by the State)	15	39,702	9	25,085	3,718
10/1/07 Gain	30	(25,431)	25	(22,282)	(1,933)
10/1/08 Loss	30	129,503	26	115,390	9,884
10/1/08 Method Change	15	108,520	11	(81,294)	(10,544)
10/1/09 Loss	30	41,341	27	37,368	3,164
10/1/10 Loss	30	48,460	28	46,229	3,873
10/1/11 Loss	30	37,375	29	37,375	3,101
10/1/12 Loss	30	12,304	30	12,304	1,012
				457,828	38,911

**WILTON MANORS FIREFIGHTERS RETIREMENT SYSTEM  
CHAPTER REVENUE**

Increments in Chapter revenue over that received in 1998 must first be used to fund the cost of compliance with minimum benefits. Once minimums are met, any subsequent additional Chapter revenue must be used to provide extra benefits.

As of the valuation date, the Pension Plan needed the following cost-related changes in order to comply with minimum benefit requirements:

- None

Since all required changes have been made, any additional revenue must be spent on extra benefits.

<b>Actuarial Confirmation of the Use of State Chapter Money</b>		
	2012	2011
1. Base Amount Previous Plan Year	\$ 85,547	\$ 85,547
2. Amount Received for Previous Plan Year	146,649	114,679
3. Benefit Improvements Made in Previous Plan Year	0	0
4. Excess Funds for Previous Plan Year: (2) - (1) - (3)	61,102	29,132
5. Accumulated Excess at Beginning of Previous Year	219,316	190,184
6. Prior Excess Used in Previous Plan Year	0	0
7. Accumulated Excess as of Valuation Date (Available for Benefit Improvements): (4) +(5) – 6)	280,418	219,316
8. Base Amount This Plan Year: (1) + (3)	85,547	85,547

<b>WILTON MANORS FIREFIGHTERS RETIREMENT SYSTEM RECENT HISTORY OF VALUATION RESULTS</b>					
<b>Valuation Date</b>	<b>Number of</b>		<b>Actuarial Value of Assets</b>	<b>Unfunded Actuarial Accrued Liability</b>	<b>Employer Normal Cost</b>
	<b>Active Members</b>	<b>Inactive Members</b>			
10/1/12	2	8	\$ 744,775	\$ 457,828	\$ 39,498
10/1/11	2	8	699,202	455,255	37,357
10/1/10	2	8	679,750	429,224	36,481
10/1/09	2	8	666,307	401,405	30,826
10/1/08	2	8	646,453	379,293	26,393
10/1/07	2	8	593,576	380,637	30,879
10/1/06	2	8	482,457	435,220	26,993
10/1/05	1	9	397,713	344,937	19,221
10/1/04	1	9	338,383	344,812	14,730

## 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 gains (losses) for this and previous years are as follows:

A. Derivation of Actuarial Gain / (Loss)	
1. Unfunded Actuarial Accrued Liability (UAAL) Previous Valuation	\$ 455,255
2. Normal Cost (NC) Previous Valuation	37,357
3. Contributions Previous Year	85,547
4. Interest on:	
a. UAAL and NC	39,409
b. Contributions	950
c. Net Total: (a) - (b)	<u>38,459</u>
5. Expected UAAL Current Year Before Changes: (1) + (2) - (3) + (4)	445,524
6. Change Due to Plan Amendments	0
7. Change Due to Assumptions or Methods	0
8. Expected UAAL Current Year After Changes: (5)+(6)+(7)	445,524
9. Actual UAAL Current Year	<u>457,828</u>
10. Actuarial Gain/(Loss): (8) - (9)	(12,304)
B. Approximate Portion of Gain/(Loss) Due to Investments	(18,526)
C. Approximate Portion of Gain/(Loss) Due to Liabilities: (A)-(B)	\$ 6,222

Year Ending	Actuarial Gain (Loss)
9/30/12	\$ (12,304)
9/30/11	(38,103)
9/30/10	(48,460)
9/30/09	(41,341)
9/30/08	(129,503)
9/30/07	25,431
9/30/06	(5,458)
9/30/05	5,030
9/30/04	22,267

The investment return assumption has considerable impact on the cost of the Plan so it is important that it is in line with actual experience. The following table shows the fund earnings on actuarial value of assets compared to the assumed rates for the last few years:

Year Ended	Investment Rate of Return		Salary Increases
	Actual	Assumed	
9/30/12	3.7 %	8.0 %	N/A
9/30/11	1.9	8.0	N/A
9/30/10	2.6	8.0	N/A
9/30/09	2.6	8.0	N/A
9/30/08	(13.4)	8.0	N/A
9/30/07	13.7	8.0	N/A
9/30/06	7.2	8.0	N/A
9/30/05	9.7	8.0	N/A
9/30/04	10.1	8.0	N/A
9/30/03	17.9	8.0	N/A



<b>WILTON MANORS FIREFIGHTERS RETIREMENT SYSTEM</b>			
<b>FASB NO. 35 INFORMATION AS OF OCTOBER 1</b>			
	<b>2012</b>		
	<b>Reflecting</b>		
	<b>FRS Interest</b>		
	<b>Rate</b>	<b>2012</b>	<b>2011</b>
<b>A. Actuarial Present Value of Accumulated Plan Benefits</b>			
1. Vested Benefits			
a. Members Currently Receiving Benefits	\$ 536,918	\$ 525,469	\$ 531,411
b. Terminated Vested Members	335,446	325,257	300,549
c. Other Members	343,476	334,323	297,687
d. Total	<u>1,215,840</u>	<u>1,185,049</u>	<u>1,129,647</u>
2. Non-Vested Benefits	0	0	0
3. Total: (1) + (2)	1,215,840	1,185,049	1,129,647
4. Accumulated Contributions of Active Members	N/A	N/A	N/A
<b>B. Statement of Change in Accumulated Plan Benefits</b>			
1. Total Value at Beginning of Year	1,160,403	1,129,647	1,078,432
2. Increase (decrease) during year attributable to:			
a. Plan Amendment	0	0	0
b. Change in actuarial assumptions & methods	0	0	0
c. Benefits paid and contribution refunds	(47,702)	(47,702)	(47,702)
d. Other, including latest member data, benefits accumulated and decrease in discount period	<u>103,139</u>	<u>103,104</u>	<u>98,917</u>
e. Net Increase	55,437	55,402	51,215
3. Total Value at End of Year	1,215,840	1,185,049	1,129,647
C. Assumed Rate of Return	7.75%	8.00%	8.00%
D. Market Value of Assets less Excess State Money	777,500	777,500	597,867
E. Funded Ratio	63.9%	65.6%	52.9%

<b>WILTON MANORS FIREFIGHTERS RETIREMENT SYSTEM GASB STATEMENT NO. 25 SCHEDULE OF EMPLOYER CONTRIBUTIONS</b>					
Valuation Date	Fiscal Year End	Total Required Contributions	Actual Contributions		
			City	State	Usable State
10/1/12	9/30/13	\$ 83,951	N/A	N/A	N/A
10/1/11	9/30/12	81,024	\$ 0	\$ 146,649	\$ 85,547
10/1/10	9/30/11	77,607	0	114,679	85,547
10/1/09	9/30/10	68,752	0	111,648	85,547
10/1/08	9/30/09	76,864	0	77,739	77,739
10/1/07	9/30/08	84,187	0	155,049	85,547
10/1/06	9/30/07	84,459	0	148,841	85,547
10/1/05	9/30/06	52,014	0	90,876	59,589
10/1/04	9/30/05	46,877	0	84,258	59,589
10/1/01	9/30/04	43,306	0	80,211	59,589

<b>GASB STATEMENT NO. 25 SCHEDULE OF FUNDING PROGRESS</b>						
Actuarial Valuation Date	Actuarial Value of Assets: (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b)-(a)	Funded Ratio (a)/(b)	Covered Payroll (c)	UAAL As % of Covered Payroll [(b)-(a)]/(c)
10/1/12	\$ 744,775	\$ 1,202,603	\$ 457,828	61.9 %	N/A	N/A
10/1/11	699,202	1,154,457	455,255	60.6	N/A	N/A
10/1/10	679,750	1,108,974	429,224	61.3	N/A	N/A
10/1/09	666,307	1,067,712	401,405	62.4	N/A	N/A
10/1/08	646,453	1,025,746	379,293	63.0	N/A	N/A
10/1/07	593,576	974,213	380,637	60.9	N/A	N/A
10/1/06	482,457	917,677	435,220	52.6	N/A	N/A
10/1/05	397,713	742,650	344,937	53.6	N/A	N/A
10/1/04	338,383	683,195	344,812	49.5	N/A	N/A

**WILTON MANORS FIREFIGHTERS RETIREMENT SYSTEM**

**GASB STATEMENT NO. 25**

**REQUIRED SUPPLEMENTARY INFORMATION**

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation:

Valuation Date	October 1, 2012
Required Contribution:	
Employer (City and State)	\$83,951
Plan Members	\$0
Actuarial Cost Method	Entry Age Normal Actuarial Cost Method
Amortization Method	Level dollar amount
Equivalent Single Amortization Period	27 years
Asset Valuation Method	Smoothed Market Value
Actuarial Assumptions	
Investment rate of return*	8.0%
Projected salary increases	N/A
Cost-of-living adjustments	N/A
*Includes inflation and other general increases at	3.5%

## ACTUARIAL ASSUMPTIONS AND ACTUARIAL COST METHODS

### A. Mortality

RP 2000 Combined Healthy Mortality Table Projected to 2005 for males and females (sex distinct tables), set forward five years for impaired mortality.

This assumption is used to measure the probabilities of members dying before retirement and the probabilities of each benefit payment being made after retirement. For disabled retirees, the regular mortality tables are set forward five years to reflect impaired longevity. As noted in the Discussion of Valuation Results Section, we recommend that the mortality assumption be revised to include a margin for future mortality improvement.

Sample Ages	% Mortality During the Year		Future Life Expectancy (years)	
	Men	Women	Men	Women
50	0.20%	0.15%	31.31	33.86
55	0.33%	0.26%	26.66	29.16
60	0.62%	0.49%	22.19	24.61
65	1.19%	0.95%	18.01	20.35
70	2.06%	1.63%	14.22	16.44
75	3.53%	2.70%	10.83	12.92
80	6.12%	4.43%	7.92	9.82
Ref:	452 x 1.00	453 x 1.00		

### B. Interest to be Earned by Fund

8% per direction from the Board of Trustees. The 8% rate is total return, compounded annually

### C. Allowances for Expenses

The average of actual expenses incurred during the prior four plan years

### D. Employee Withdrawal Rates

Samples Rates are shown below:

<u>Age</u>	<u>Males</u>	<u>Females</u>
20	7.5%	12.5%
25	5.0	7.5
30	3.5	5.0
35	2.5	3.5
40	1.5	2.5
45	1.0	1.5
50	0.5	1.0
55 & up	0.0	0.0

E. Disability Rates

Sample Rates are shown below:

<u>Age</u>	<u>Males</u>	<u>Females</u>
20	0.17%	0.34%
25	0.17	0.34
30	0.17	0.34
35	0.18	0.36
40	0.20	0.40
45	0.23	0.46
50	0.29	0.58
55	0.39	0.78
60 & up	0.00	0.00

F. Salary Increase Factors

N/A – Flat benefit, not salary related.

G. Inflation Rate

An implicit rate of 3.5% is assumed to be included in the assumed interest rate to be earned by the Fund (Item B.) as well as the assumed annual salary increase factor (Item F.).

H. Retirement Age

Participants are assumed to retire one half year after the valuation date at which they are first eligible for normal retirement. Participants who are beyond normal retirement date are assumed to retire one half year after the valuation date.

I. Valuation of Assets

Effective with the October 1, 2008 valuation, the assets are valued using an IRS approved smoothed market value without phase in, beginning with the market value at October 1, 2004, as if the method had always been in effect. It recognizes the difference between actual and expected investment income at the rate of 20% per year. The actuarial value of assets is calculated as market value minus unrecognized excesses (shortages) of actual investment income as compared to expected. Actual contributions and expenses are used to determine the expected return. The actuarial value of assets is further adjusted to the extent necessary to fall within the corridor of 80% to 120% of the fair market value of plan assets.

Excess State Money is excluded for funding purposes.

J. Cost Method Entry Age Normal Actuarial Cost Method.K. Changes From Previous Valuation None.

## GLOSSARY OF TERMS

<i><b>Actuarial Accrued Liability (AAL)</b></i>	The difference between the Actuarial Present Value of Future Benefits, and the Actuarial Present Value of Future Normal Costs.
<i><b>Actuarial Assumptions</b></i>	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.
<i><b>Actuarial Cost Method</b></i>	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.
<i><b>Actuarial Equivalent</b></i>	Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.
<i><b>Actuarial Present Value (APV)</b></i>	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.
<i><b>Actuarial Present Value of Future Benefits (APVFB)</b></i>	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.
<i><b>Actuarial Valuation</b></i>	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 No. 25, such as the Funded Ratio and the Annual Required Contribution (ARC).
<i><b>Actuarial Value of Assets</b></i>	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 required contribution (ARC).

<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 ARC 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>Annual Required Contribution (ARC)</i></b>	The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under GASB No. 25. The ARC 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>GASB No. 25 and GASB No. 27</i></b>	These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 27 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 25 sets the rules for the systems themselves.

<i>Normal Cost</i>	The annual cost assigned, under the Actuarial Cost Method, to the current plan year.
<i>Unfunded Actuarial Accrued Liability</i>	The difference between the Actuarial Accrued Liability and Actuarial Value of Assets.
<i>Valuation Date</i>	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 III**

**PENSION FUND INFORMATION**

<b>WILTON MANORS FIREFIGHTERS RETIREMENT SYSTEM</b>		
<b>STATEMENT OF ASSETS AT MARKET VALUE</b>		
<b>AS OF SEPTEMBER 30</b>		
	2012	2011
Cash & Cash Equivalents	\$ 28,271	\$ 31,140
Investments		
Common Stock	431,546	365,292
Corporate bonds and notes	139,777	142,257
Domestic equity funds	106,337	78,474
U.S. government securities	218,022	157,369
International equity Funds	76,540	0
Total Investments	972,222	743,392
Total Cash & Investments	1,000,493	774,532
Receivables		
Contributions Receivable	51,607	37,117
Accrued Interest & Dividends	4,005	4,236
Due from Brokers	1,813	1,298
Liabilities		
Accounts Payable	0	0
Due to Brokers	0	0
Total Pension Funds Assets	1,057,918	817,183
Excess State Money	280,418	219,316
Net Assets Available for Benefits	777,500	597,867

<b>WILTON MANORS FIREFIGHTERS RETIREMENT SYSTEM INCOME AND DISBURSEMENTS FOR THE YEAR ENDED SEPTEMBER 30</b>		
	2012	2011
A. Market Value as of Beginning of Year	\$ 817,183	\$ 788,303
B. Receipts During Period		
1. Contributions		
a. Employee	N/A	N/A
b. Receivable	0	0
c. State	146,649	114,679
d. Total	<u>146,649</u>	<u>114,679</u>
2. Investment Earnings Allocation		
a. Interest & Dividends	30,795	28,178
b. Realized Gain/(Loss)	8,910	(3,608)
c. Unrealized Gain/(Loss)	129,611	(27,821)
d. Total	<u>169,316</u>	<u>(3,251)</u>
3. Total Receipts During Period	315,965	111,428
C. Disbursements During Period		
1. Benefits	47,702	47,702
2. Allocated Administrative Expenses	27,528	34,846
3. Total Disbursements During Period	75,230	82,548
D. Market Value as of End of Year	1,057,918	817,183

<b>Actuarial Value of Assets as of October 1,</b>			
Valuation Date	10/1/2012	10/1/2011	
A. Market Value of Assets at Beginning of Year	817,183	788,303	
B. Contributions	146,649	114,679	
C. 1. Benefit Payments	47,702	47,702	
2. Administrative Expenses	27,528	34,846	
3. Total Disbursements	75,230	82,548	
D. Expected Investment Income	68,231	64,349	
E. Expected Assets End of Year: A+B-C+D	956,833	884,783	
F. Actual Market Value at End of Year	1,057,918	817,183	
G. Excess/(Shortfall) of Actual over Expected Assets: F-E			
1. From This Year	101,085	(67,600)	
2. From One Year Ago	(67,600)	6,126	
3. From Two Years Ago	6,126	(50,165)	
4. From Three Years Ago	(50,165)	(154,324)	
H. Decreasing Fractions of Excess/(Shortfall)			
1. 80% From This Year	80,868	(54,080)	
2. 60% From One Year Ago	(40,560)	3,676	
3. 40% From Two Years Ago	2,450	(20,066)	
4. 20% From Three Years Ago	<u>(10,033)</u>	<u>(30,865)</u>	
5. Total	32,725	(101,335)	
I. Preliminary Actuarial Value of Assets as of EOY: F-H5	1,025,193	918,518	
J. Market Value Corridor Adjustment			
1. 80% of Market Value	846,334	653,746	
2. 120% of Market Value	1,269,502	980,620	
3. Valuation Assets within Corridor	1,025,193	918,518	
K. Adjustment for State Reserve	280,418	219,316	
L. Net Actuarial Value of Assets	744,775	699,202	
M. Net Market Value of Assets	777,500	597,867	
N. Investment Gain/(Loss)			
1. Actual Investment Income: J3TY-J3LY+Disb-Contr	35,256	16,453	
2. Expected Income: int * (J3LY+1/2(Contr-Disb))	53,782	51,934	
3. Gain/(Loss): (1) - (2)	(18,526)	(35,481)	

**WILTON MANORS FIREFIGHTERS RETIREMENT SYSTEM**

**INVESTMENT RATE OF RETURN**

The investment rate of return has been calculated on the following bases:

**Basis 1: Market Value Basis** - interest, dividends, realized gains (losses) and unrealized appreciation (depreciation), divided by the weighted average of the market value of the fund during the year. This figure is normally called the Total Rate of Return.

**Basis 2: Valuation Asset Basis** - investment earnings recognized in the Actuarial Value of Assets divided by the weighted average of the Actuarial Value of Assets during the year.

Year Ended	Investment Rate of Return	
	Basis 1	Basis 2
9/30/2012	20.5 %	3.7 %
9/30/2011	(0.4)	1.9
9/30/2010	9.1	2.6
9/30/2009	0.9	2.6
9/30/2008	(13.4)	(13.4)
9/30/2007	13.7	13.7
9/30/2006	7.2	7.2
9/30/2005	9.7	9.7
9/30/2004	10.1	10.1
9/30/2003	17.9	17.9
Average Compounded Rate of Return for:		
Last 3 Years	9.4 %	2.7 %
Last 5 Years	2.7 %	(0.7) %
Last 10 Years	7.1 %	5.3 %

**SECTION IV**

**MEMBER STATISTICS**

<b>WILTON MANORS FIREFIGHTERS RETIREMENT SYSTEM</b>			
<b>STATISTICAL DATA</b>			
	<b>10/1/12</b>	<b>10/1/11</b>	<b>10/1/10</b>
<b>Active Participants</b>			
Number	2	2	2
Averages			
Current Age	48.4	47.4	46.4
Age at Employment	23.2	23.2	23.2
Past Service	25.2	24.2	23.2
Service at Age 50	26.8	26.8	26.8
<b>Members Receiving Benefits</b>			
Number	3	3	3
Total Annual Pensions	\$ 47,702	\$ 47,702	\$ 47,515
Average Monthly Benefit	1,325	1,325	1,320
Average Current Age	58.0	57.0	56.0
<b>Terminated Members with Vested Benefits</b>			
Number	5	5	5
Total Annual Pensions	\$ 43,624	\$ 43,624	\$ 43,624
Average Monthly Benefit	727	727	727
Average Current Age	48.8	47.8	46.8

<b>WILTON MANORS FIREFIGHTERS RETIREMENT SYSTEM RECONCILIATION OF MEMBERSHIP DATA</b>	
Year Ended	9/30/12
<b>A. Active Members</b>	
1 Number Included in Last Valuation	2
2 Additions from Vested Terminated Members	0
3 Non-Vested Employment Terminations	0
4 Vested Employment Terminations	0
5 Service Retirements	0
6 Disability Retirements	0
7 Deaths	<u>0</u>
8 Number Included in This Valuation	2
<b>B. Terminated Vested Members</b>	
1 Number Included in Last Valuation	5
2 Transfer to Active Status	0
3 Lump Sum Payments	0
4 Payments Commenced	0
5 Deaths	0
6 Refunds	<u>0</u>
7 Number Included in This Valuation	5
<b>C. Service Retirees, Disability Retirees and Beneficiaries</b>	
1 Number Included in Last Valuation	3
2 Additions from Active Members	0
3 Additions from Terminated Vested Members	0
4 Deaths Resulting in No Further Payments	0
5 End of Certain Period - No Further Payments	<u>0</u>
6 Number Included in This Valuation	3

**SECTION V**

**SUMMARY OF**

**RETIREMENT PLAN PROVISIONS**

**WILTON MANORS FIREFIGHTERS RETIREMENT SYSTEM  
SUMMARY OF RETIREMENT PLAN PROVISIONS**

**Through Ordinance 904, Effective November 14, 2006**

A. Effective Date:

April 9, 1996.

B. Eligibility Requirements:

All active members of the Wilton Manors Volunteer Fire Department shall become participants on date of membership.

C. Credited Service:

Service in completed calendar months from date first served as an active member to the earlier of the participant's termination of service or actual retirement date.

D. Pensionable Compensation:

None. The plan benefits are not compensation related.

E. Normal Retirement:

Eligibility:

Earlier of (i) or (ii), where:

(i) is attainment of age 55, and

(ii) is attainment of age 50 and completion of 20 years of creditable service.

Monthly Benefit:

\$56 multiplied by years of creditable service (\$50 prior to Ordinance 904, effective 11/14/06).

F. Deferred Retirement:

Eligibility

Retirement after normal retirement date and approval by the Board.

Monthly Benefit:

The benefit is calculated in the same manner as normal retirement except it is based on years of creditable service at deferred retirement date.

G. Service-Connected Disability Benefit:

Eligibility: Unable to perform regular and continuous duties as a volunteer firefighter as a result of a service-connected injury, disease, or disability.

Benefit: Benefit in an amount equal to the normal retirement benefit which would have been paid at the participant's normal retirement date. The benefit is payable monthly for life, with 120 payments guaranteed (payable for life only as of the last valuation).

H. Pre-Retirement Death Benefit:

Eligibility: Death while an active volunteer firefighter.

Benefit: The participant's beneficiary shall be entitled to receive the participant's normal retirement benefit as if the member had retired on the date of death.

I. Vested Benefit Upon Termination:

Eligibility: At least 10 years of creditable service at date of termination. However, upon reaching normal retirement age, a participant will be 100% vested, regardless of service.

Benefit: The monthly benefit payable at normal retirement date equal to the benefit accrued to the date of termination.

J. Employee Contributions:

None.

K. Normal Form of Retirement Income:

The normal form of payment shall be a 10 year certain and life annuity.

Optional forms are available.

## **STATE REQUIREMENTS**

1. Copies of this Report are to be furnished to the Division of Retirement and the State Treasurer's Office within 60 days of receipt from the actuary, at the following addresses:

Division of Retirement  
Bureau of Local Retirement  
P.O. Box 9000  
Tallahassee, Florida 32315-9000

Division of Retirement  
Municipal Police Officers' and Firefighters'  
Retirement Trust Fund  
P.O. Box 3010  
Tallahassee, Florida 32315-3010

2. Contributions to the System -
  - (a) Employee contributions must be deposited to the fund on at least a monthly basis.
  - (b) City contributions must be deposited to the fund on at least a monthly basis.
  - (c) Premium tax refunds and any other revenues collected for this Plan must be deposited within 5 days of receipt by the City.
3. Information for employees -
  - (a) A written plan description is to be distributed to each member every two years.
  - (b) Pertinent actuarial and financial information is to be included as part of the written plan description distributed to members.