































City of Winter Springs  
Defined Benefit Plan

Development of Actuarial Value of Assets as of September 30

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
A. Preliminary total actuarial value from prior year	\$ 23,887,446	\$ 25,932,292	\$ 26,852,721			
B. Market value beginning of year	21,017,997	22,336,010	27,039,803			
C. Market value end of year	22,336,010	27,039,803				
D. Non-investment net cash flow	1,542,241	326,440				
E. Investment return	(224,228)	4,377,353				
F. Phased-in recognition of investment return:						
1. Current year	(393,471)	515,483				
2. First prior year	(251,629)	(393,471)	515,483			
3. Second prior year	(191,179)	(251,629)	(393,471)	515,483		
4. Third prior year	(885,152)	(191,179)	(251,629)	(393,471)	515,483	
5. Fourth prior year	480,907	(885,153)	(191,178)	(251,628)	(393,473)	515,483
6. Total phased-in recognition of investment return	<u>(1,240,524)</u>	<u>(1,205,949)</u>	<u>(320,795)</u>	<u>(129,616)</u>	<u>122,010</u>	<u>515,483</u>
G. Total actuarial value end of year						
1. Preliminary total actuarial value end of year	25,932,292	26,852,721				
2. Upper corridor limit: 120% of C.	26,803,212	32,447,764				
3. Lower corridor limit: 80% of C.	17,868,808	21,631,842				
4. Total actuarial value end of year:						
G.1., not more than G.2., nor less than G.3.	25,932,292	26,852,721				
H. Difference between total market value and total actuarial value	(3,596,282)	187,082				
I. Actuarial value rate of return	2.0%	2.3%				
J. Market value rate of return	(1.0%)	19.5%				

Table VI

**City of Winter Springs  
Defined Benefit Plan**

**Actuarial Gains (Losses) for  
Plan Year Ending September 30, 2012**

A. Derivation of Actuarial Gain (Loss)

1. City and County net normal cost	\$ 788,263
2. Unfunded actuarial accrued liability	15,635,107
3. City and County contributions previous year	1,824,431
4. Interest on:	
(a) City and County net normal cost	\$ 63,061
(b) Unfunded actuarial accrued liability	1,250,809
(c) City and County contributions	72,977
(d) Net total: (a) + (b) - (c)	\$ 1,240,893
5. Expected unfunded actuarial accrued liability current year: (1. + 2. - 3. + 4.)	\$ 15,839,832
6. Actual unfunded actuarial accrued liability current year	16,906,737
7. Actuarial gain (loss): (5. - 6.)	\$ (1,066,905)

B. Approximate Portion of Gain (Loss)

Due to Investments

1. Actuarial value of assets previous year	\$ 25,932,292
2. Contributions during period	2,243,066
3. Benefits and administrative expenses during period	1,916,626
4. Expected appreciation for period	2,087,641
5. Expected actuarial value of assets current year: (1. + 2. - 3. + 4.)	\$ 28,346,373
6. Actual actuarial value of assets current year	\$ 26,852,721
7. Approximate investment gain (loss): (6. - 5.)	\$ (1,493,652)

C. Approximate Portion of Gain (Loss)

Due to Liabilities: A. - B.

\$ 426,747



**City of Winter Springs  
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**Amortization of Unfunded Actuarial Accrued Liability**

A. Unfunded Actuarial Accrued Liability

<u>Date</u>	<u>Unfunded Liability</u>	<u>Amortization Payment</u>
October 1, 2012	\$ 16,906,737	\$ 1,473,330
October 1, 2013	\$ 16,668,080	\$ 1,473,330
October 1, 2014	\$ 16,410,330	\$ 1,473,330
October 1, 2015	\$ 16,131,960	\$ 1,473,330
October 1, 2016	\$ 15,831,320	\$ 1,473,330
...		
...		
October 1, 2042	\$ 0	\$ 0

B. Covered Payroll History\*

<u>Date</u>	<u>Covered Payroll</u>	<u>Annual Increase</u>
October 1, 2012	\$ 8,216,342	(7.4%)
October 1, 2011	\$ 8,875,836	(13.9%)
October 1, 2010	\$ 10,304,054	(4.2%)
October 1, 2009	\$ 10,752,720	(0.1%)
October 1, 2008	\$ 10,767,596	(3.8%)
October 1, 2007	\$ 11,190,013	6.7%
October 1, 2006	\$ 10,489,087	8.6%
October 1, 2005	\$ 9,659,446	7.5%
October 1, 2004	\$ 8,982,189	11.0%
October 1, 2003	\$ 8,094,829	22.9%
October 1, 2002	\$ 6,586,077	N/A
Ten-Year Average Annual Increase		2.2%

\* Information prior to October 1, 2008 as reported by prior actuary.

**City of Winter Springs  
Defined Benefit Plan**

**Accounting Disclosure Exhibit**

	<b>10/01/2011</b>	<b>10/01/2012</b>
<b>I. <u>Number of Plan Members</u></b>		
a. Retirees and beneficiaries receiving benefits	64	72
b. Terminated plan members entitled to but not yet receiving benefits	114	125
c. Active plan members	185	169
d. Total	363	366
<b>II. <u>Financial Accounting Standards Board Allocation as of October 1, 2012</u></b>		
<b>A. <u>Statement of Accumulated Plan Benefits</u></b>		
1. Actuarial present value of accumulated vested plan benefits		
a. Participants currently receiving benefits	\$ 15,498,049	\$ 17,183,388
b. Other participants	20,736,588	21,486,154
c. Total	\$ 36,234,637	\$ 38,669,542
2. Actuarial present value of accumulated non-vested plan benefits	\$ 723,879	\$ 649,175
3. Total actuarial present value of accumulated plan benefits	\$ 36,958,516	\$ 39,318,717
<b>B. <u>Statement of Change in Accumulated Plan Benefits</u></b>		
1. Actuarial present value of accumulated plan benefits as of October 1, 2011		\$ 36,958,516
2. Increase (decrease) during year attributable to:		
a. Plan amendment		\$ 0
b. Change in actuarial assumptions		0
c. Benefits paid including refunds		(1,606,752)
d. Other, including benefits accumulated, increase for interest due to decrease in the discount period		3,966,953
e. Net increase		\$ 2,360,201
3. Actuarial present value of accumulated plan benefits as of October 1, 2012		\$ 39,318,717
<b>C. <u>Significant Matters Affecting Calculations</u></b>		
1. Assumed rate of return used in determining actuarial present values		8.0%
2. Change in plan provisions		None.
3. Change in actuarial assumptions		None.

City of Winter Springs  
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Accounting Disclosure Exhibit

III. Financial Accounting Standards Board Allocation - Florida Statute Chapter 2011-216 Compliance  
As of October 1, 2012

F.S., Chapter, 2011-216 effective July 1, 2011 mandates each plan report the plan's present value of accrued vested, non-vested and total benefits, as adopted by the Financial Accounting Standards Board, using the Florida Retirement System's assumed rate of return (currently 7.75%) in order to promote the comparability of actuarial data between local plans.

	<u>10/01/2011</u>	<u>10/01/2012</u>
A. <u>Statement of Accumulated Plan Benefits</u>		
1. Actuarial present value of accumulated vested plan benefits		
a. Participants currently receiving benefits	\$ 16,155,049	\$ 17,903,964
b. Other participants	22,409,915	23,198,682
c. Total	<u>\$ 38,564,964</u>	<u>\$ 41,102,646</u>
2. Actuarial present value of accumulated non-vested plan benefits	<u>\$ 788,028</u>	<u>\$ 704,896</u>
3. Total actuarial present value of accumulated plan benefits	\$ 39,352,992	\$ 41,807,542
B. <u>Significant Matters Affecting Calculations</u>		
1. Assumed rate of return used in determining actuarial present values		7.75%
2. Change in plan provisions		N/A
3. Change in actuarial assumptions		N/A

**City of Winter Springs  
Defined Benefit Plan**

**Accounting Disclosure Exhibit**

IV. Notes to Required Supplementary Information (As required by GASB No.25)

Actuarial valuation date	October 1, 2012
Contributions made	To be determined
Actuarial cost method	Entry Age Normal
Amortization method	Level percent, closed
Remaining amortization period	25 years
Asset valuation method	5 year smoothed market
Actuarial assumptions:	
Investment rate of return *	8.0%
Projected salary increases *	3.0% - 7.5%
* Includes expected inflation at 3.0%	

City of Winter Springs  
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Accounting Disclosure Exhibit

V. Historical Trend Information

A. Schedule of Employer Costs (GASB No. 25)\*

Fiscal Year Ended	Annual Required Contribution (ARC)	Percentage of ARC Contributed
09/30/2007	\$ 1,807,722	102%
09/30/2008	\$ 2,005,100	100%
09/30/2009	\$ 1,781,651	100%
09/30/2010	\$ 2,311,058	100%
09/30/2011	\$ 2,627,659	101%
09/30/2012	\$ 1,965,643	97%

B. Schedule of Employer Costs (GASB No. 27)\*

Fiscal Year Ended	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation/(Asset)
09/30/2007	\$ 1,810,230	102%	\$ (1,563)
09/30/2008	\$ 2,004,975	100%	\$ (5,673)
09/30/2009	\$ 1,781,197	100%	\$ (5,673)
09/30/2010	\$ 2,331,410	99%	\$ 14,679
09/30/2011	\$ 2,627,713	101%	\$ (17,878)
09/30/2012	\$ 1,965,697	97%	\$ 34,102

VI. Annual Pension Cost and Net Pension Asset

Fiscal Year Ended	9/30/2012*	Projected 9/30/2013
Annual Required Contribution (ARC)	\$ 1,965,643	\$ 2,258,769
Interest on Net Pension Asset (NPA)	(450)	(1,430)
Adjustment to ARC	504	(3,029)
APC	\$ 1,965,697	\$ 2,254,310
City Contributions	\$ (1,913,717)	
(Increase) Decrease in NPA	\$ 51,980	
NPA (beginning of year)	(17,878)	
NPA (end of year)	\$ 34,102	

\* As reported in the Comprehensive Annual Financial Report (CAFR)

**Table VIII  
(Cont'd)**

**City of Winter Springs  
Defined Benefit Plan**

**Schedule of Funding Progress  
(Dollar Amounts in Thousands)**

VII. Schedule of Funding Progress<sup>1</sup>

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (EAN <sup>2</sup> ) (AAL) (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a/b)	Payroll (c)	UAAL as a Percentage of Payroll ((b-a)/c)
10/01/2007	\$ 15,527	\$ 20,114	\$ 4,587	77.2%	\$ 11,190	41.0%
10/01/2008	\$ 18,747	\$ 32,414	\$ 13,667	57.8%	\$ 10,768	126.9%
10/01/2009	\$ 20,789	\$ 37,651	\$ 16,862	55.2%	\$ 10,753	156.8%
10/01/2010 <sup>3</sup>	\$ 23,887	\$ 40,331	\$ 16,444	59.2%	\$ 10,304	159.6%
10/01/2010 <sup>4</sup>	\$ 23,887	\$ 37,307	\$ 13,420	64.0%	\$ 10,304	130.2%
10/01/2011	\$ 25,932	\$ 41,567	\$ 15,635	62.4%	\$ 8,876	176.1%
10/01/2012	\$ 26,853	\$ 43,759	\$ 16,906	61.4%	\$ 8,216	205.8%

<sup>1</sup> Information prior to October 1, 2008 as reported by prior actuary.

<sup>2</sup> Frozen Initial Liability prior to change in method as of October 1, 2008.

<sup>3</sup> Actuarial Valuation as of October 1, 2010.

<sup>4</sup> Actuarial Impact Statement as of October 1, 2010.

**City of Winter Springs  
Defined Benefit Plan**

**Outline of Principal Provisions of the Retirement Plan**

A. Effective Date

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

B. Eligibility Requirements

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

C. Accrual Service

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

D. Compensation

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

E. Final Average Compensation

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

F. Normal Retirement

1. Eligibility:

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

City of Winter Springs  
Defined Benefit Plan

**Outline of Principal Provisions of the Retirement Plan**

2. Benefit:

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

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

G. Early Retirement

1. Eligibility:

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

2. Benefit:

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

H. Late Retirement

1. Eligibility:

Continued employment beyond Normal Retirement Date.

2. Benefit:

Greater of (a) and (b):

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

I. Disability Retirement

1. Eligibility:

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

2. Benefit:

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



City of Winter Springs  
Defined Benefit Plan

Outline of Principal Provisions of the Retirement Plan

J. Death Benefit

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

K. Participant Contributions

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

L. Vested Benefit Upon Termination

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

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

<u>Years of Service</u>	<u>Vested Percentage</u>
Less Than 7	0%
7 or More	100%

M. Normal Form of Payment of Retirement Income

Monthly benefit payable for life.

Other Options

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

N. Changes Since Previous Valuation

None.

**City of Winter Springs  
Defined Benefit Plan**

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

A. Mortality

For healthy General Employee participants, the RP-2000 Combined Mortality Table was used with separate rates for males and females and fully generational mortality improvements projected to each future decrement date.

For healthy Firefighter and Police Officer participants, the RP-2000 Combined Mortality Table with Blue Collar Adjustment was used with separate rates for males and females and fully generational mortality improvements projected to each future decrement date.

For disabled participants, the RP-2000 Combined Disabled Mortality Table was used with separate rates for males and females and fully generational mortality improvements projected to each future decrement date.

B. Investment Return

8.0%, compounded annually, net of investment expenses.

C. Allowances for Expenses or Contingencies

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

D. Salary Increase Factors

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

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

City of Winter Springs  
Defined Benefit Plan

Actuarial Assumptions and Actuarial Cost Methods  
Used in the Valuation

E. Employee Withdrawal Rates

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

<u>Withdrawal Rates per 100 Employees</u>											
<u>Age</u>	<u>Service</u>										
	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10+</u>
20	32.8	25.4	22.7	18.4	15.8	11.7	11.1	11.1	11.0	10.0	9.8
25	27.2	18.5	17.2	14.6	12.7	9.7	8.5	8.4	7.7	6.3	6.2
30	25.8	15.4	14.0	13.2	11.8	8.8	7.8	7.1	6.4	5.5	4.7
35	25.8	14.3	12.8	12.6	10.9	8.5	7.5	6.8	6.2	5.3	4.2
40	24.4	12.6	12.0	10.7	9.0	7.4	6.7	6.2	5.8	5.3	3.0
45	24.4	12.5	11.6	10.3	8.8	6.8	6.5	6.0	5.1	5.1	2.7
50	23.4	12.2	10.7	9.4	7.9	6.0	5.5	5.3	4.6	4.6	3.0
55	27.4	12.2	10.7	9.3	7.8	6.8	5.4	5.2	4.4	4.3	4.5
60	27.4	12.2	10.7	9.3	7.8	6.8	5.4	5.1	4.3	4.2	5.3
65	27.4	12.2	10.7	9.3	7.8	6.8	5.4	5.1	4.3	4.2	3.7

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

<u>Withdrawal Rates per 100 Employees</u>											
<u>Age</u>	<u>Service</u>										
	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10+</u>
20	30.3	25.8	22.1	17.4	15.4	13.5	11.4	11.3	10.5	10.2	11.6
25	26.6	19.8	17.1	13.0	12.9	10.7	9.7	9.2	7.8	7.1	5.3
30	25.4	16.9	14.5	11.6	11.3	9.4	8.7	8.1	7.1	6.5	5.4
35	25.4	15.9	13.5	11.2	10.9	9.0	8.0	7.8	6.8	6.2	4.6
40	24.4	14.0	12.1	10.0	9.1	7.0	6.5	6.3	6.1	5.0	3.3
45	24.4	13.9	11.9	9.8	8.8	6.7	6.5	6.1	5.8	4.7	3.0
50	23.2	13.4	11.0	8.8	8.4	6.2	5.9	5.5	5.5	4.6	3.0
55	23.2	13.4	11.0	8.7	8.3	6.1	5.8	5.4	5.4	4.5	3.0
60	23.2	13.4	11.0	8.7	8.3	6.1	5.8	5.4	5.4	4.5	3.0
65	23.2	13.4	11.0	8.7	8.3	6.1	5.8	5.4	5.4	4.5	3.0

The withdrawal assumptions are the withdrawal assumptions used in the July 1, 2012 Florida Retirement System (FRS) Actuarial Valuation.

City of Winter Springs  
Defined Benefit Plan

Actuarial Assumptions and Actuarial Cost Methods  
Used in the Valuation

E. Employee Withdrawal Rates (continued)

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

<u>Withdrawal Rates per 100 Employees</u>											
<u>Age</u>	<u>Service</u>										
	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10+</u>
20	21.4	10.3	8.6	8.4	7.5	5.3	5.2	3.1	2.9	2.6	2.3
25	20.6	9.8	8.1	7.9	7.0	5.3	5.2	3.1	2.9	2.6	2.3
30	20.6	9.5	7.7	7.5	6.7	5.3	5.2	3.1	2.9	2.6	2.1
35	20.6	8.8	7.4	7.2	6.5	5.3	5.1	3.1	2.9	2.6	2.0
40	20.6	8.0	6.8	6.7	6.0	4.8	4.6	3.1	2.9	2.6	1.9
45	20.6	7.3	6.0	6.0	5.5	4.3	4.1	3.1	2.9	2.6	1.8
50	20.6	6.5	5.3	5.3	5.0	3.8	3.6	3.1	2.9	2.6	1.8
55	20.6	5.8	4.7	4.7	4.6	3.3	3.2	3.1	2.9	2.6	1.8
60	20.6	5.3	4.7	4.7	4.6	3.3	3.2	3.1	2.9	2.6	1.8
65	20.6	5.3	4.7	4.7	4.6	3.3	3.2	3.1	2.9	2.6	1.8

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

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

The withdrawal assumptions are the withdrawal assumptions used in the July 1, 2012 FRS Actuarial Valuation.

City of Winter Springs  
Defined Benefit Plan

Actuarial Assumptions and Actuarial Cost Methods  
Used in the Valuation

F. Disability Rates

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

<u>Age</u>	<u>Male</u>	<u>Female</u>
20	0.002%	0.000%
25	0.002%	0.001%
30	0.003%	0.001%
35	0.005%	0.003%
40	0.009%	0.005%
45	0.014%	0.008%
50	0.022%	0.010%
55	0.034%	0.016%
60	0.048%	0.022%
65	0.050%	0.020%

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

<u>Age</u>	<u>Male</u>	<u>Female</u>
20	0.000%	0.000%
25	0.027%	0.010%
30	0.053%	0.026%
35	0.066%	0.049%
40	0.092%	0.070%
45	0.122%	0.114%
50	0.203%	0.184%
55	0.339%	0.294%
60	0.445%	0.419%
65	0.215%	0.105%

The disability assumptions are the disability assumptions used in the July 1, 2012 FRS Actuarial Valuation.

City of Winter Springs  
Defined Benefit Plan

Actuarial Assumptions and Actuarial Cost Methods  
Used in the Valuation

F. Disability Rates (continued)

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

<u>Age</u>	<u>Male</u>	<u>Female</u>
20	0.012%	0.008%
25	0.012%	0.008%
30	0.017%	0.016%
35	0.029%	0.037%
40	0.051%	0.068%
45	0.087%	0.106%
50	0.138%	0.153%
55	0.215%	0.152%
60	0.301%	0.151%
65	0.231%	0.143%

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

<u>Age</u>	<u>Male</u>	<u>Female</u>
20	0.037%	0.036%
25	0.037%	0.036%
30	0.043%	0.046%
35	0.055%	0.075%
40	0.087%	0.118%
45	0.140%	0.209%
50	0.292%	0.254%
55	0.244%	0.328%
60	0.206%	0.328%
65	0.206%	0.328%

The disability assumptions are the disability assumptions used in the July 1, 2012 FRS Actuarial Valuation.

**City of Winter Springs  
Defined Benefit Plan**

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

**G. Assumed Retirement Age**

Retirement rates were used in accordance with the following tables.

1. For Police Officers and Firefighters:

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

2. For General Employees:

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

**H. Marital Assumptions**

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

**I. Interest on Future Participant Contributions**

3.75%, compounded annually.

City of Winter Springs  
Defined Benefit Plan

Actuarial Assumptions and Actuarial Cost Methods  
Used in the Valuation

J. Asset Valuation Method

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

K. Cost Method

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

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

L. Changes Since Previous Valuation

None.



Table XI

**City of Winter Springs  
Defined Benefit Plan  
Distribution by Attained Age Groups  
and Service Groups as of October 1, 2012**

**Firefighters**

<u>Attained 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	-	-	-	-	-	-	-	0
25-29	-	-	-	-	-	-	-	0
30-34	-	-	-	-	-	-	-	0
35-39	-	-	-	-	-	-	-	0
40-44	-	-	-	-	-	-	-	0
45-49	-	-	-	-	4	1	-	5
50-54	-	-	-	1	3	2	1	7
55-59	-	-	-	-	-	-	-	0
60-64	-	-	-	-	-	-	-	0
65 & Over	-	-	-	-	-	-	-	0
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>7</b>	<b>3</b>	<b>1</b>	<b>12</b>
				<u>10/01/2011</u>		<u>10/01/2012</u>		
Average Attained Age				49.90 years		50.68 years		
Average Hire Age				26.90 years		27.18 years		
Average Pay				\$ 63,880		\$ 69,034		
Percent Female				0.0%		0.0%		

**Table XI  
(Cont'd)**

**City of Winter Springs  
Defined Benefit Plan  
Distribution by Attained Age Groups  
and Service Groups as of October 1, 2012**

**General Employees**

<u>Attained 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	2	-	-	-	-	-	-	2
25-29	5	3	-	-	-	-	-	8
30-34	6	2	3	-	-	-	-	11
35-39	-	7	2	3	-	-	-	12
40-44	1	4	2	1	1	-	-	9
45-49	2	4	1	1	-	1	-	9
50-54	2	6	3	3	4	1	-	19
55-59	-	5	-	3	3	2	-	13
60-64	-	2	4	-	-	1	-	7
65 & Over	-	-	1	-	1	-	-	2
<b>TOTAL</b>	<b>18</b>	<b>33</b>	<b>16</b>	<b>11</b>	<b>9</b>	<b>5</b>	<b>0</b>	<b>92</b>

	<u>10/01/2011</u>	<u>10/01/2012</u>
Average Attained Age	45.65 years	45.62 years
Average Hire Age	36.28 years	35.04 years
Average Pay	\$ 42,923	\$ 43,465
Percent Female	33.3%	33.7%

**Table XI  
(Cont'd)**

**City of Winter Springs  
Defined Benefit Plan  
Distribution by Attained Age Groups  
and Service Groups as of October 1, 2012**

**Police Officers**

<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	2	1	-	-	-	-	-	3
25-29	7	2	-	-	-	-	-	9
30-34	1	7	2	-	-	-	-	10
35-39	1	5	4	3	-	-	-	13
40-44	-	4	3	3	3	-	-	13
45-49	1	-	3	2	2	-	-	8
50-54	1	-	1	-	-	3	-	5
55-59	1	1	-	-	-	-	-	2
60-64	-	-	-	-	-	-	-	0
65 & Over	-	-	-	-	-	-	-	0
<b>TOTAL</b>	<b>14</b>	<b>20</b>	<b>13</b>	<b>8</b>	<b>5</b>	<b>3</b>	<b>0</b>	<b>63</b>

Average Attained Age	<u>10/01/2011</u> 38.07 years	<u>10/01/2012</u> 38.59 years
Average Hire Age	27.95 years	28.22 years
Average Pay	\$ 53,396	\$ 52,561
Percent Female	15.0%	12.7%

**Table XI  
(Cont'd)**

**City of Winter Springs  
Defined Benefit Plan  
Distribution by Attained Age Groups  
and Service Groups as of October 1, 2012**

**Forensic Professionals**

<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	-	-	-	-	-	-	-	0
25-29	-	1	-	-	-	-	-	1
30-34	-	-	-	-	-	-	-	0
35-39	-	-	-	1	-	-	-	1
40-44	-	-	-	-	-	-	-	0
45-49	-	-	-	-	-	-	-	0
50-54	-	-	-	-	-	-	-	0
55-59	-	-	-	-	-	-	-	0
60-64	-	-	-	-	-	-	-	0
65 & Over	-	-	-	-	-	-	-	0
<b>TOTAL</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>

	<u>10/01/2011</u>	<u>10/01/2012</u>
Average Attained Age	30.48 years	31.48 years
Average Hire Age	19.48 years	19.48 years
Average Pay	\$ 39,094	\$ 38,874
Percent Female	100.0%	100.0%

**Table XI  
(Cont'd)**

**City of Winter Springs  
Defined Benefit Plan  
Distribution by Attained Age Groups  
and Service Groups as of October 1, 2012**

**All Members**

<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	4	1	-	-	-	-	-	5
25-29	12	6	-	-	-	-	-	18
30-34	7	9	5	-	-	-	-	21
35-39	1	12	6	7	-	-	-	26
40-44	1	8	5	4	4	-	-	22
45-49	3	4	4	3	6	2	-	22
50-54	3	6	4	4	7	6	1	31
55-59	1	6	-	3	3	2	-	15
60-64	-	2	4	-	-	1	-	7
65 & Over	-	-	1	-	1	-	-	2
<b>TOTAL</b>	<b>32</b>	<b>54</b>	<b>29</b>	<b>21</b>	<b>21</b>	<b>11</b>	<b>1</b>	<b>169</b>
				<u>10/01/2011</u>		<u>10/01/2012</u>		
				Average Attained Age 43.37 years		43.19 years		
				Average Hire Age 32.63 years		31.75 years		
				Average Pay \$ 47,977		\$ 48,617		
				Percent Female 25.4%		24.3%		

Table XII

**City of Winter Springs  
Defined Benefit Plan**

**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>	31	\$ 203,516	\$ 6,565
40-44	27	263,978	9,777
45-49	31	355,312	11,462
50-54	20	200,554	10,028
55-59	8	45,600	5,700
60-64	5	26,322	5,264
65 & Over	3	5,175	1,725
<b>TOTAL</b>	<u>125</u>	<u>\$ 1,100,457</u>	<u>\$ 8,804</u>

B. Receiving 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 50</b>	3	\$ 24,124	\$ 8,041
50-54	1	69,549	69,549
55-59	18	663,625	36,868
60-64	19	432,786	22,778
65-69	16	292,135	18,258
70-74	11	150,068	13,643
75 & Over	4	17,771	4,443
<b>TOTAL</b>	<u>72</u>	<u>\$ 1,650,058</u>	<u>\$ 22,917</u>

**City of Winter Springs  
Defined Benefit Plan**

**Reconciliation of Employee Data**

A. Active Participants

1. Active participants previous year	185
2. Retired during year	(6)
3. Died during year	0
4. Disabled during year	0
5. Terminated non-vested during year	(4)
6. Terminated vested during year	(17)
7. New active participants	11
8. Out on military leave	0
9. Rehired during year	2
10. Transferred to DC Plan	(2)
11. Active participants current year	<u>169</u>

B. Participants Receiving Benefits

1. Participants receiving benefits previous year	64
2. New retired participants	6
3. New DRO recipient	0
4. New terminated vested receiving benefits	2
5. New beneficiaries receiving benefits	1
6. Died or ceased payment during year	(1)
7. Retired or terminated vested receiving benefits current year	<u>72</u>

C. Terminated Vested Participants Entitled to Future Benefits

1. Terminated vested entitled previous year	114
2. Died during year	0
3. Commenced receiving benefits during year	(2)
4. New terminated vested	16
5. Terminated vested paid lump sum	(1)
6. Rehired	(2)
7. Terminated vested entitled current year	<u>125</u>

**City of Winter Springs  
Defined Benefit Plan**

**Projected Retirement Benefits**

<b><u>Fiscal Year</u></b>	<b><u>Projected Total Annual Payout</u></b>
2013	\$ 1,817,364
2014	\$ 2,027,095
2015	\$ 2,196,001
2016	\$ 2,373,066
2017	\$ 2,578,747
2018	\$ 2,810,758
2019	\$ 3,124,999
2020	\$ 3,320,732
2021	\$ 3,544,425
2022	\$ 3,970,096

The above projected payout of Plan benefits during the next ten years is based on assumptions involving all decrements. Actual payouts may differ from the above estimates depending upon the death, salary and retirement experience of the Plan. 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 XV**

**City of Winter Springs  
Defined Benefit Plan**

**Summary of Transaction Information<sup>1</sup>**

Year Ending	Benefits Paid <sup>2</sup>	Administrative Expenses	Employee Contributions	City / County Contributions <sup>3</sup>	Actuarial Value
09/30/2012	\$ 1,606,752	\$ 309,874	\$ 418,635	\$ 1,824,431	\$ 26,852,721
09/30/2011	1,165,350	196,423	287,090	2,616,924	25,932,292
09/30/2010	886,521	178,530	284,866	2,311,058	23,887,446
09/30/2009	617,274	116,982	306,420	1,781,197	20,788,655
09/30/2008	384,482	70,423	365,288	1,663,951	18,746,975
09/30/2007	233,953	123,197	N/A	1,843,147	15,526,572
09/30/2006	171,697	84,340	N/A	1,505,020	11,951,383
09/30/2005	N/A	N/A	N/A	1,260,627	9,716,089
09/30/2004	140,509	62,225	N/A	1,013,379	8,134,588
09/30/2003	138,353	47,477	N/A	903,748	7,279,048

<sup>1</sup> Information prior to September 30, 2008 as reported by prior actuary.

<sup>2</sup> Includes refunds.

<sup>3</sup> Values prior to September 30, 2008 include Employee Contributions.

**City of Winter Springs  
Defined Benefit Plan**

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

Valuation Date	General & Forensic		Police & Fire		General & Forensic		Police & Fire		Investment Return		
	Compensation		Compensation		Termination		Termination		Net Market Value Yield*	Net Actuarial Value Yield*	Assumed Rate of Return*
	Actual	% Increase / (Decrease) Assumed	Actual	Assumed	Ratio of Actual to Expected						
10/01/2012	(2.4%)	4.8%	(6.5%)	5.0%	2.4	2.4	19.5%	2.3%	8.0%		
10/01/2011	4.9%	4.8%	3.5%	5.2%	1.9	2.4	(1.0%)	2.0%	8.0%		
10/01/2010	0.9%	5.0%	2.8%	5.3%	1.2	1.7	12.0%	7.3%	8.0%		
10/01/2009	6.4%	5.1%	11.6%	5.3%	1.1	1.1	2.1%	3.5%	8.0%		
10/01/2008	3.9%	3.0%	5.6%	3.0%	1.2	3.1	(16.8%)	10.1%	8.0%		
10/01/2007	N/A	N/A	N/A	N/A	N/A	N/A	13.8%	15.4%	8.0%		
10/01/2006	N/A	N/A	N/A	N/A	N/A	N/A	8.6%	9.5%	8.0%		
10/01/2005	N/A	N/A	N/A	N/A	N/A	N/A	11.5%	4.2%	8.0%		
10/01/2004	N/A	N/A	N/A	N/A	N/A	N/A	12.6%	0.6%	8.0%		
Last 3 Years	1.1%	4.9%	(0.2%)	5.2%	1.8	2.1	9.8%	3.8%	8.0%		
Last 5 Years	2.7%	4.5%	3.2%	4.8%	1.5	2.0	2.4%	5.0%	8.0%		
Last 9 Years	N/A	N/A	N/A	N/A	N/A	N/A	6.4%	6.0%	8.0%		

\* Information prior to October 1, 2008 as reported by prior actuary.

**City of Winter Springs  
Defined Benefit Plan**

**Actuarial Valuation as of October 1, 2012**

**State Required Exhibit**

	<u>10/01/2011</u>	<u>10/01/2012</u>
<b>A. <u>Participant Data</u></b>		
1. Active participants	185	169
2. Retired participants and beneficiaries receiving benefits	64	72
3. Disabled participants receiving benefits	0	0
4. Terminated vested participants	114	125
5. Annual payroll of active participants	\$ 8,875,836	\$ 8,216,342
6. Annual benefits payable to those currently receiving benefits	\$ 1,474,151	\$ 1,650,058
<b>B. <u>Value of Assets</u></b>		
1. Actuarial Value	\$ 25,932,292	\$ 26,852,721
2. Market Value	\$ 22,336,010	\$ 27,039,803
<b>C. <u>Liabilities</u></b>		
1. Actuarial present value of future expected benefit payments for active members		
a. Retirement benefits	\$ 26,647,279	\$ 25,875,093
b. Vesting benefits	2,296,321	2,093,181
c. Death benefits	804,237	776,273
d. Disability benefits	792,182	810,009
e. Total	<u>\$ 30,540,019</u>	<u>\$ 29,554,556</u>
2. Actuarial present value of future expected benefit payments for terminated vested members	\$ 4,440,904	\$ 5,308,023
3. Actuarial present value of future expected benefit payments for members currently receiving benefits		
a. Service retired (includes DROPs)	\$ 13,784,683	\$ 15,464,181
b. Disability retired	0	0
c. Beneficiaries	1,713,366	1,719,207
d. Miscellaneous (Refunds in Process)	16,159	17,104
e. Total	<u>\$ 15,514,208</u>	<u>\$ 17,200,492</u>

**City of Winter Springs  
Defined Benefit Plan**

**Actuarial Valuation as of October 1, 2012**

**State Required Exhibit**

	<b>10/01/2011</b>	<b>10/01/2012</b>
4. Total actuarial present value of future expected benefit payments	\$ 50,495,131	\$ 52,063,071
5. Actuarial accrued liabilities	\$ 41,567,399	\$ 43,759,458
6. Unfunded actuarial accrued liabilities	\$ 15,635,107	\$ 16,906,737
 <b>D. <u>Statement of Accumulated Plan Benefits</u></b>		
1. Actuarial present value of accumulated vested benefits		
a. Participants currently receiving benefits	\$ 15,498,049	\$ 17,183,388
b. Other participants	20,736,588	21,486,154
c. Total	\$ 36,234,637	\$ 38,669,542
2. Actuarial present value of accumulated non-vested plan benefits	723,879	649,175
3. Total actuarial present value of accumulated plan benefits	\$ 36,958,516	\$ 39,318,717
 <b>E. <u>Pension Cost</u></b>		
1. Total normal cost	\$ 1,232,055	\$ 1,282,286
2. Payment required to amortize unfunded liability	1,349,497	1,473,330
3. Interest adjustment	121,009	129,779
4. Total required contribution	\$ 2,702,561	\$ 2,885,395
5. Item 4 as a percentage of base payroll	30.4%	35.1%
6. Estimated employee contributions	\$ 443,792	\$ 410,817
7. Item 6 as a percentage of base payroll	5.0%	5.0%
8. Net amount payable by County and City	\$ 2,258,769	\$ 2,474,578
9. Item 8 as a percentage of base payroll	25.4%	30.1%

**City of Winter Springs  
Defined Benefit Plan**

**Actuarial Valuation as of October 1, 2012**

	<b><u>State Required Exhibit</u></b>	
	<b><u>10/01/2011</u></b>	<b><u>10/01/2012</u></b>
<b>F. <u>Past Contributions</u></b>		
1. Total contribution required (previous valuation, % of pay)	\$ 2,080,788	\$ 2,702,561
2. Actual contributions made:		
a. Members	\$ 418,635	N/A
b. City and County	1,824,431	N/A
c. Total	<u>\$ 2,243,066</u>	N/A
<b>G. <u>Disclosure of Following Items:</u></b>		
1. Actuarial present value of future salaries - attained age	\$ 79,108,370	\$ 73,826,561
2. Actuarial present value of future employee contributions - attained age	\$ 3,955,418	\$ 3,691,328
3. Actuarial present value of future contributions from other sources	N/A	N/A
4. Amount of active members' accumulated contributions	\$ 2,108,483	\$ 2,347,257
5. Actuarial present value of future salaries and future benefits at entry age	N/A	N/A
6. Actuarial present value of future employee contributions at entry age	N/A	N/A

**Table XVI  
(Cont'd)**

**City of Winter Springs  
Defined Benefit Plan**


**State Required Exhibit**

Amortization balances are written down in proportion to amortization payments.

	<u>Unfunded Actuarial Accrued Liabilities</u>	<u>Current Unfunded Liabilities</u>	<u>Amortization Payment</u>	<u>Remaining Funding Period</u>
10/01/2000	Initial	2,080,120	205,512	18 years
10/01/2002	Assumption Change	(26,767)	(2,524)	20 years
10/01/2003	Plan Amendment	169,442	15,663	21 years
10/01/2004	Plan Amendment	257,049	23,332	22 years
10/01/2005	Plan Amendment	532,883	47,576	23 years
10/01/2006	Plan Amendment	613,197	53,926	24 years
10/01/2007	Plan Amendment	627,720	54,448	25 years
10/01/2008	Plan Amendment and Assumption Change	2,818,666	241,432	26 years
10/01/2008	Method Change	6,300,135	539,636	26 years
10/01/2009	Actuarial Loss (Gain)	2,694,381	228,144	27 years
10/01/2010	Actuarial Loss (Gain)	(498,194)	(41,742)	28 years
10/01/2010	Plan Amendment	(2,888,410)	(242,008)	28 years
10/01/2011	Actuarial Loss (Gain)	3,159,610	262,185	29 years
10/01/2012	Actuarial Loss (Gain)	1,066,905	87,750	30 years
	<b>TOTAL</b>	<b>\$ 16,906,737</b>	<b>\$ 1,473,330</b>	

This actuarial valuation and/or cost determination was prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of Part VII, Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or other wise provided for in the valuation. All known events or trends which may require material increase in plan costs or required contribution rates have been taken into account in the valuation.

Enrollment Number: 11-02802  
Dated: October 14, 2013

  
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Lawrence F. Wilson, A.S.A.