Actuarial Valuation of the City of Key West Municipal Police Officers' & Firefighters' Retirement Plan As of October 1, 2010

To determine annual contribution for the plan year 10/01/2010 - 09/30/2011 to be paid in the fiscal year 10/01/2010 - 09/30/2011

September 2011

# TABLE OF CONTENTS

		Page
Commentary		. 1
TABLE I	Summary of Retirement Plan Costs	. 4
TABLE II	Comparison of Cost Data as of Prior and Current Year	. 6
TABLE III	Characteristics of Participants in Actuarial Valuation	. 7
TABLE IV	Development of Actuarial Value of Plan Assets	. 8
TABLE V	Reconciliation of Plan Assets	. 9
TABLE VI	Statement of Assets	. 10
TABLE VII	Reconciliation of Share Accounts Balance	. 11
TABLE VIII	Actuarial Gains / (Losses) for Plan Year	. 12
TABLE IX	Amortization of Unfunded Accrued Liability	. 13
TABLE X	Accounting Disclosure Exhibit	. 14
TABLE XI	Outline of Principal Provisions of Retirement Plan	. 19
TABLE XII	Actuarial Assumptions and Methods	. 23
TABLE XIII	Distribution of Plan Participants by Attained Age Groups and Service Groups	. 26
TABLE XIV	Reconciliation of Employee Data	. 27
TABLE XV	Statistics for Participants Entitled to Deferred Benefits and Participants Receiving Benefits	. 28
TABLE XVI	Summary of Transaction Information	. 29
TABLE XVII	Recent Compensation, Termination and Investment Return Experience	. 30
TABLE XVIII	Summary of Retirements During Plan Year	31
TABLE XIX	State Required Exhibit	32





September 2, 2011

10691 N. Kendall Drive Suite 310 Miami, Florida 33176

Office: (305) 274-9970
Toll Free: 1-866-322-9970
Fax: (305) 274-9946

Police and Fire Retirement Committee c/o Ms. Susy Pita Plan Administrator, Key West Police and Fire Retirement Plan 21629 Stirling Pass Leesburg, FL 34748

Subject: October 1, 2010 Actuarial Valuation of Retirement Plan

Dear Committee Members:

We are pleased to present our October 1, 2010 Actuarial Valuation for the City of Key West Municipal Police Officers' and Firefighters' Retirement Plan. The purpose of this report is to indicate appropriate contribution levels, comment on the actuarial stability of the plan, and to satisfy State requirements. The Retirement Committee has retained DuLaney & Company to prepare an annual actuarial valuation under Section 5.039 of the plan.

This report consists of this commentary, detail Tables I through XVIII and the State Required Exhibit on Table XIX. The Tables contain basic plan cost figures plus significant details on the benefits, liabilities, and experience of the plan. We suggest that you thoroughly review the report at your convenience and contact us with any questions that may arise.

#### Costs for Fiscal Year Beginning October 1, 2010

This Actuarial Valuation develops the required minimum Retirement Plan payment for the fiscal year beginning October 1, 2010 and ending September 30, 2011 under the Florida Protection of Public Employee Retirement Benefits Act and for Police and Fire Retirement Chapters 175 and 185. The minimum payment consists of payment of annual normal costs plus amortization of the components of the unfunded actuarial accrued liability over various periods as prescribed by law. We anticipate that member contributions will be \$677,693 (7.0%).

The Division of Retirement has mandated that minimum required contributions be determined as a percent of actual emerging covered pension payroll basis, and not as a fixed dollar amount. The required minimum funding amount for the plan/fiscal year ending September 30, 2011, to be met by the City and State contributions under Chapter 175 and Chapter 185, is 29.9% of the actual emerging covered payroll for October 1, 2010 through September 30, 2011. The estimated City and State required contribution, computed based on the October 1, 2011 covered payroll of \$9,681,323, is \$2,897,915 or 29.9% of covered payroll, if the payment requirement is met by September 30, 2011.

Police and Fire Retirement Committee September 2, 2011 Page 2

The anticipated State contribution is \$468,315 (actual 2010 Chapter 185 contribution amount of \$141,975 + actual 2010 amount of Chapter 175 contribution of \$271,783 + assumed 2010 Chapter 175 Supplemental contribution of \$54,557 limited by the rules of Ch. 99-1). The resulting estimated required City contribution is \$2,429,600. Please note that under the rules of Chapters 175 and 185, if the Chapter 175 Supplemental payment is less than \$54,557, there will be an increase in the City's required minimum contribution.

As required by Chapters 175 and 185, City contributions must be made at least quarterly.

#### Changes in Benefits, Methods or Assumptions Recognized in This Valuation

This Actuarial Valuation recognizes the same benefit provisions as those considered in the previous Actuarial Valuation. The plan provisions are outlined in Table XI.

In this Valuation, we revised the amortization method such that for each plan/fiscal year, if the single equivalent amortization period of the total unfunded actuarial accrued liability with the new bases created (actuarial gain or loss, plan amendment and assumptions and methods changes, etc.) amortized over 30 years, would be over 30 years, then the new bases created will be amortized over 25 years. The change is made to comply with the requirements of the Governmental Accounting Standard Board statement. All other actuarial assumptions and methods utilized are the same as those in the October 1, 2009 Actuarial Valuation. The actuarial assumptions and methods are outlined in Table XII.

#### Comparison of October 1, 2009 and October 1, 2010 Valuation Results

Table II of the report provides information of a comparative nature. The left column of the Table indicates the costs calculated as of October 1, 2009. The center and right columns indicate the October 1, 2010 valuation results prior to and after the amortization method change.

Comparing the left and center columns shows the effect of plan experience during the year. The number of active members increased by about 4.3%. The estimated required City contribution increased as a dollar amount and as a percentage of covered payroll primarily as a result of the actuarial loss of \$3,416,015 during the year, which indicates that experience was less favorable than anticipated.

The effects of the amortization method change can be seen by comparing the center and right columns. Total normal cost for the plan year remained the same at \$2,152,829 and the unfunded actuarial accrued liability remained at \$15,831,506. The estimated City minimum required contribution increased by \$15,916 (0.2% of covered payroll) as the result of the change.

The plan had less assets (measured on a market value basis) than the present value of vested accrued benefits, resulting in a Vested Benefit Security Ratio of 78.4%, which represents an increase from 76.1% of a year ago.



Police and Fire Retirement Committee September 2, 2011 Page 3

#### **GASB Disclosures**

In November, 1994, the Government Accounting Standards Board (GASB) adopted Statements No. 25 and 27, changing the way in which government retirement systems must report financial information. Statement No. 25 has been adopted since the October 1, 1996 Actuarial Valuation. Relevant information under GASB 25 is included in Table X. Beginning with the October 1, 2006 valuation, Statement 27 disclosure information is also provided.

#### Plan Experience

Table VIII of the report indicates that the plan experienced an actuarial loss of \$3,416,015. This suggests that actual overall experience was less favorable than anticipated. Three (3) substantial components of plan experience are shown in Table XVII.

Table XVII shows that on average, the pay for each active member (who was in the plan for the last two (2) full plan years) increased by about 3.7%. The assumption was that pay would increase by 5.0%. Pay increases were a source of actuarial gain.

Table XVII also indicates that employee turnover was approximately 60% of expected turnover, a source of actuarial loss. The actuarial value return was 2.5% during the most recent plan year, while the assumed investment return was 7.90%, a significant source of actuarial loss which offset the actuarial gains from pay experience. The three (3) and five (5) year actuarial value returns were 3.5% and 5.8%, respectively.

#### **Participant Census and Financial Data**

We were provided with participant census data from the City. The data contains information such as name, sex, member contributions and pay information. Dates of termination or retirement and amounts distributed were supplied separately by the Plan Administrator. Although we did not audit the information, we reviewed the data for consistency and believe it to be reliable.

We received information on plan assets from the Plan Auditors. We did not audit this information; however, we reviewed the information for consistency and believe it to be reliable.

Donald A. DuLaney, Jr., A.S.A.

Senior Consulting Actuary

Yiu H. Lai

Senior Actuarial Analyst

Attachments

DAD/YHL



Table I

# CITY OF KEY WEST MUNICIPAL POLICE OFFICERS' & FIREFIGHTERS' RETIREMENT PLAN

# Summary of Retirement Plan Costs as of October 1, 2010

		 Cost Data	% of Payroll
A.	Participant Data Summary (Table III)		
<i>1</i> <b>1.</b>	1. Active employees	146	N/A
	2. Terminated vested	3	N/A
	3. Receiving benefits	88	N/A
	4. DROP participants	17	N/A
	5. Annual payroll of active employees	\$ 9,681,323	100.0%
B.	Total Normal Costs		
	1. Age retirement benefits	\$ 1,472,868	15.2%
	2. Termination benefits	110,011	1.1%
	3. Death benefits	19,742	0.2%
	4. Disability benefits	57,679	0.6%
	5. Estimated expenses	 492,529	5.1%
	6. Total annual normal costs	\$ 2,152,829	22.2%
C.	Total Actuarial Accrued Liability		
	1. Age retirement benefits active employees	\$ 33,323,037	344.2%
	2. Termination benefits active employees	427,728	4.4%
	3. Death benefits	122,579	1.3%
	4. Disability benefits	229,124	2.4%
	5. Retired or terminated vested participants		
	receiving benefits	23,845,188	246.3%
	6. DROP participants	10,539,330	108.9%
	7. Terminated vested participants entitled		
	to future benefits	358,096	3.7%
	8. Deceased participants whose beneficiaries		
	are receiving benefits	2,079,394	21.5%
	9. Disabled participants receiving benefits	1,197,524	12.4%
	10. Miscellaneous liability	70,008	0.7%
	11. Total actuarial accrued liability	\$ 72,192,008	745.7%
D.	Actuarial Value of Assets (Table IV)	\$ 56,360,502	582.2%
E.	Unfunded Actuarial Accrued Liability (CD.)	\$ 15,831,506	163.5%



# Table I (continued two)

			Cost Data	% of Payroll
		. —	Cost Buta	
F.	Minimum Required Contribution			
•	Total normal cost	\$	2,152,829	22.2%
	2. Amortization of unfunded liability	Ψ	1,299,489	13.4%
	3. Interest adjustment		123,290	1.3%
	4. Total payment	\$	3,575,608	36.9%
	Total paymont	Ψ,	3,575,000	30.570
G.	Contribution Sources			
	1. a) City	\$	2,429,600	25.1%
	b) State		468,315	4.8%
	c) Total City and State	<u>\$_</u> \$_	2,897,915	29.9%
	2. Member	\$	677,693	7.0%
		Ψ	0,7,0,0	,,,,,
H.	Actuarial Gains / (Losses)			
	(Table VIII)	\$	(3,416,015)	(35.3%)
	(	•	(-,,)	(00.07.5)
I.	Actuarial Present Value of Vested			
	Accrued Benefits			
	1. Retired, terminated vested,			
	beneficiaries, disabled			
	receiving benefits	\$	27,122,106	280.1%
	2. DROP participants	•	10,539,330	108.9%
	3. Terminated vested participants		10,007,000	100.570
	entitled to future benefits and miscellaneous		358,096	3.7%
	4. Active participants entitled		, 220,030	
	to future benefits		23,880,390	246.7%
	5. Total actuarial present value		25,000,570	<u>=</u>
	of vested accrued benefits	\$	61,899,922	639.4%
	of vested decided beliefits	Ψ	01,077,722	037.170
J.	Market Value of Assets (Table V)	\$	48,552,786	501.5%
•	Transcription (18616 T)	•	. 0,002,700	
K.	Unfunded Actuarial Present Value of			
	Vested Accrued Benefits			
	(I J.)	\$	13,347,136	137.9%
		<b>.</b>	12,2 17,100	
L.	Vested Benefit Security Ratio			
<b>.</b>	(J.÷ I.)		78.4%	N/A
	(0 1.)		, 3. 1 / 0	1 1/ 1 1



Table II

CITY OF KEY WEST MUNICIPAL POLICE OFFICERS' &
FIREFIGHTERS' RETIREMENT PLAN

Comparison of Cost Data as of Prior and Current Year

		October	1, 2009	Prior M October		Revised October	
					% of Annual		% of Annual
		Cost Data	Cost Data	Cost Data	Payroll	Cost Data	Payroll
Α.	Participants						
	1. Active employees	140	N/A	146	N/A	146	N/A
	2. Terminated vested	5	N/A	3	N/A	3	N/A
•	3. DROP participants	16	N/A	17	N/A	17	N/A
	4. Receiving benefits	86	N/A	88	N/A	88	N/A
	5. Annual payroll of						
	active employees	\$ 8,737,622	100.0%	\$ 9,681,323	100.0%	\$ 9,681,323	100.0%
B.	Total Normal Cost	\$ 2,041,817	23.4%	\$ 2,152,829	22.2%	\$ 2,152,829	22.2%
, . C.	Total Actuarial Accrued						
υ.	Liability	\$68,383,592	782.6%	\$ 72,192,008	745.7%	\$72,192,008	745.7%
D.	Actuarial Value of Assets	\$ 55,884,162	639.6%	\$ 56,360,502	582.2%	\$ 56,360,502	582.2%
E.	Unfunded Actuarial Accrued Liability	\$12,499,430	143.1%	\$ 15,831,506	163.5%	\$ 15,831,506	163.5%
F.	Estimated City Minimum Funding Payment	\$ 2,112,972	24.2%	\$ 2,413,684	24.9%	\$ 2,429,600	25.1%
G.	Actuarial Gains / (Losses)	\$ (1,177,232)	(13.5%)	\$ (3,416,015)	(35.3%)	\$ (3,416,015)	(35.3%)
H.	Vested Benefit Security Ratio (Market Value Basis)	76.1%	N/A	78.4%	N/A	78.4%	N/A



#### Table III

# CITY OF KEY WEST MUNICIPAL POLICE OFFICERS' & FIREFIGHTERS' RETIREMENT PLAN

# <u>Characteristics of Participants in</u> Actuarial Valuation as of October 1, 2010

#### A. Active Plan Participants Summary 1. Active participants fully vested 56 2. Active participants partially vested 36 3. Active participants non-vested 54 4. Total active participants 146 5. Annual rate of pay of active participants 9,681,323 Retired and Terminated Vested Participant Summary 1. Retired or terminated vested participants 71 receiving benefits 2. DROP participants 17 3. Terminated vested participants entitled to future benefits 3 4. Deceased participants whose beneficiaries are receiving benefits 12 5. Disabled participants receiving benefits 5 C. Projected Annual Retirement Benefits 2,524,584 1. Retired or terminated vested receiving benefits \$ 921,134 2. DROP participants 3. Terminated vested entitled to future benefits \$ 69,232 \$ 204,948 4. Beneficiaries of deceased participants \$ 140,022 5. Disabled participants



Table IV

# CITY OF KEY WEST MUNICIPAL POLICE OFFICERS' & FIREFIGHTERS' RETIREMENT PLAN

# Development of Actuarial Value of Assets

	10/1/2009 — 9/30/2010	10/1/2008 — 9/30/2009	10/1/2007 — 9/30/2008	10/1/2006 — 9/30/2007
A. Market value of assets as of beginning of year	\$ 46,570,135	\$ 48,498,200	\$ 56,900,488	\$ 49,349,049
B. Contributions	3,249,807	3,103,412	3,328,827	3,715,359
C. Benefit payments and expenses	4,156,356	4,203,307	3,994,334	3,385,324
D. Expected investment income (A. x I + (BC.) x i / 2)*	3,643,232	3,955,731	4,666,838	4,084,910
E. Expected assets at end of year (A. + B. – C. + D.)	49,306,818	51,354,036	60,901,819	53,763,994
F. Actual market value at end of year	48,552,786	46,570,135	48,498,200	56,900,488
<ul> <li>G. Excess/(shortfall) of actual over expected assets (F. – E.)</li> <li>1. From previous plan year</li> <li>2. From two plan years ago</li> <li>3. From three plan years ago</li> </ul>	\$ (754,032) (4,783,901) (12,403,619)	\$ (4,783,901) (12,403,619) 3,136,494	(12,403,619) 3,136,494	3,136,494
4. From four plan years ago	3,136,494	-,,		
<ul> <li>H. Deferred recognized amounts of excess/(shortfall)</li> <li>1. 80% from previous plan year</li> <li>2. 60% from two plan years ago</li> <li>3. 40% from three plan years ago</li> <li>4. 20% from four plan years ago</li> <li>5. Total</li> </ul>	\$ (603,226) (2,870,341) (4,961,448) <u>627,299</u> \$ (7,807,716)			
<ul> <li>I. Preliminary actuarial value of assets at end of year (F. – H.5.)</li> </ul>	\$ 56,360,502			
J. 80% of end of year market value of assets (F. x 0.80)	38,842,229			
K. 120% of end of year market value of assets (F. x 1.20)	58,263,343			
L. Actuarial value of assets (I., but not less than J. and not more than K.)	\$ 56,360,502			

<sup>\*</sup> i = 7.90%, and was 8.25% prior to 10/1/2009.

# Table V

### CITY OF KEY WEST MUNICIPAL POLICE OFFICERS' & FIREFIGHTERS' RETIREMENT PLAN

# Reconciliation of Plan Assets

	Recond	ciliation of Plan Assets	
A.	Market Value of Assets as of October 1, 2009	<u>)</u> \$	46,570,135
В.	Receipts During Period		
	<ol> <li>Contributions         <ul> <li>a. Member</li> <li>b. City</li> <li>c. State</li> <li>d. Service buybacks</li> <li>e. Sub-total</li> </ul> </li> </ol>	\$ 648,267 2,058,415 543,125 0 \$ 3,249,807	
	<ul><li>2. Investment income</li><li>a. Interest, dividends and others</li><li>b. Investment expenses</li><li>c. Net investment income</li></ul>	\$ 1,381,100 (339,366) \$ 1,041,734	
	<ul><li>3. Realized and unrealized appreciation</li><li>a. Realized appreciation</li><li>b. Unrealized appreciation</li><li>c. Net</li></ul>	\$ 331,563 1,515,903 \$ 1,847,466	
C.	4. Total receipts during period <u>Disbursements During Period</u>		\$ 6,139,007
	<ol> <li>Pension payments</li> <li>DROP</li> <li>Contribution refunds</li> <li>Administrative expenses</li> <li>Increase (decrease) to         <ul> <li>Excess Chapter Reserves</li> </ul> </li> </ol>	\$ 3,121,157 615,094 216,373 153,163	
	<ul><li>6. Increase (decrease) to Share Plan payable</li><li>7. Total disbursements during period</li></ul>	50,569	\$ 4,156,356
D.	Market Value of Assets as of September 30, 20	010 (A. + B. – C.)	\$ 48,552,786
	Reconcilia	ation of DROP Accounts I	Balance
A. B. C. D. E.	DROP Accounts Balance as of October 1, 20 Benefit Payments into DROP Accounts Durin Distributions from DROP Accounts During Investment Gains (Losses) During Year <sup>1/</sup> DROP Accounts Balance as of September 30	ng Year Year	\$ 3,933,278 615,094 (235,600) 273,198 \$ 4,585,970

<sup>&</sup>lt;sup>1</sup> Based on actual fund performance.

### Table VI

# CITY OF KEY WEST MUNICIPAL POLICE OFFICERS' & FIREFIGHTERS' RETIREMENT PLAN

# Statement of Assets as of October 1, 2010

	<u>Assets</u>	Marl	ket Value 1
A.	Cash	\$	50
В.	General Investments		
2.	1. Cash equivalents	\$ 2	2,261,040
	2. U.S. Government securities		5,061,130
	3. Corporate bonds		0,001,130 0,070,167
	4. Common stocks		3,019,300
	5. International equity fund		5,017,300
	6. Municipal bonds		,573,139
	7. Foreign bonds	. 1	.0
	8. Alternative investment		5,081,987
	9. Total		3,240,053
	9. 10tai	دوق	,,240,033
C.	Receivables		
	1. City contribution	\$	445,865
	2. State contribution		108,440
	3. Member contribution		25,536
	4. Accrued interest and dividends		234,076
	5. Receivable for securities sold		7,913
	6. Total	\$	821,830
		,	<b>,</b>
D.	<u>Payables</u>		
	1. DROP Accounts	\$ 4	,585,970
	2. Accrued expenses		69,292
	3. Payable for securities purchased		197,806
	4. Prepaid City contribution		0
	5. Reserve for Excess Chapter reserves		0
	6. Share Plan Allocations Payable		656,079
	7. Total	\$ 5	,509,147
E.	$\underline{\text{Total Fund}}(A + B + C - D)$	\$48	3,552,786



<sup>&</sup>lt;sup>1</sup> As reported on plan's audited financial statements.

### Table VII

# CITY OF KEY WEST MUNICIPAL POLICE OFFICERS' & FIREFIGHTERS' RETIREMENT PLAN

# Reconciliation of Share Accounts Balance

Α.	Share Accounts Balance as of September 30, 2009	\$ 605,510
В.	Forfeitures during Plan Year	(22,569)
C.	Distributions Made to Retirees and Beneficiaries During Plan Year	(38,610)
D.	Investment Earnings Credited During Plan Year	35,296
E.	Allocations as of September 30, 2010 (Made from Available Annual Excess	
	Chapter 175 and Chapter 185 Contributions)	53,883
F.	Allocations of Forfeitures during Plan Year	22,569
G.	Share Accounts Balance as of September 30, 2010 (A. + B. + C. + D. + E. + F.)	\$ 656,079



#### **Table VIII**

# CITY OF KEY WEST MUNICIPAL POLICE OFFICERS' & FIREFIGHTERS' RETIREMENT PLAN

Actuarial Gains / (Losses) for Plan Year Ended September 30, 2010

### A. Derivation of Actuarial Gains / (Losses)

1.	City/State net normal cost previous valuation	\$ 1,430,183
2.	Unfunded actuarial accrued liability previous valuation	\$ 12,499,430
3.	Contributions previous year	
	(a) City \$ 2,058,415	
	(b) State (limited by Chapters 175	
	and 185) 489,242	
	(c) Total	\$ 2,547,657
4.	Interest on:	, ,
	(a) City/State net normal cost \$ 112,984	
	(b) Unfunded actuarial accrued	
	liability 987,455	
	(c) Contributions 66,904	
	(d) Net total: (a) + (b) - (c)	\$ 1,033,535
5.	Increase (decrease) due to assumption / method changes	\$ 0
6.	Increase (decrease) due to plan amendment	\$ 0
7.	Expected unfunded actuarial accrued	
	liability current year:	
	(1. + 2 3. + 4. + 5. + 6.)	\$ 12,415,491
8.	Actual unfunded actuarial accrued	, ,
	liability current year	\$ 15,831,506
9.	Actuarial gains / (losses): 7 8.	\$ (3,416,015)

# B. Approximate Portion of Gain (Loss) Due to Investments

1.	Actuarial value of assets previous year	\$ 55,884,162
2.	Contributions during period	\$ 3,249,807
3.	Benefits and expenses during period	\$ 4,495,722
4.	Expected net appreciation for period	\$ 4,329,421
5.	Expected actuarial value of assets current year: $(1. + 2 3. + 4.)$	\$ 58,967,668
6.	Actual actuarial value of assets current year	\$ 56,360,502
7.	Approximate gains / (losses): 6 5.	\$ (2,607,166)

# C. Approximate Portion of Gains / (Losses) Due to Liabilities: A. - B. \$ (808,849)



Table IX

CITY OF KEY WEST MUNICIPAL POLICE OFFICERS' & FIREFIGHTERS' RETIREMENT PLAN

# Amortization of Unfunded Accrued Liability

Date	 Amount	 Payment
10/01/2010	\$ 15,831,506	\$ 1,299,489
10/01/2011	\$ 15,680,046	\$ 1,299,489
10/01/2012	\$ 15,516,621	\$ 1,299,489
10/01/2013	\$ 15,340,285	\$ 1,299,489
10/01/2040	\$ 0	\$ 0



#### Table X

# CITY OF KEY WEST MUNICIPAL POLICE OFFICERS' & FIREFIGHTERS' RETIREMENT PLAN

### Accounting Disclosure Exhibit

### I. Number of Plan Members

	_10/1/2009_	_10/1/2010_
A. Retirees and beneficiaries		
receiving benefits	86	88
B. DROP participants	16	17
C. Terminated plan members entitled		
to but not yet receiving benefits	5	3
D. Active plan members	140	146
E. Total	247	254

### II. Financial Accounting Standards Board Allocations

### A. Statement of Accumulated Plan Benefits

1.	Actuarial present value of		
	accumulated vested plan benefits		
	a. Participants currently receiving benefits	\$ 26,353,418	\$ 27,122,106
	b. DROP participants	9,961,383	10,539,330
	c. Other participants	24,878,857	24,238,486
	d. Total	\$ 61,193,658	\$ 61,899,922
2.	Actuarial present value of accumulated		
	non-vested plan benefits	1,446,689	1,455,496
3.	Total actuarial present value of		
	accumulated plan benefits	\$ 62,640,347	\$ 63,355,418

# B. Statement of Change in Accumulated Plan Benefits

1.	Actuarial present value of accumulated	
	plan benefits as of October 1, 2009	\$ 62,640,347
2.	Increase (decrease) during year attributable to:	
	a. Plan amendment	\$ 0
	b. Change in actuarial assumptions	0
	c. Benefits paid including refunds	(3,337,530)
	d. DROP benefits	(615,094)
	e. Other, including benefits accumulated	
	and increase for interest due	
	to decrease in the discount period	 4,667,695
	f. Net increase	\$ 715,071
3.	Actuarial present value of accumulated	
	plan benefits as of October 1, 2010	\$ 63,355,418



# Table X (continued two)

# C. Significant Matters Affecting Calculations

1.	Assumed rate of return used in determining	
	actuarial present values	7.90%
2.	Change in actuarial assumptions	None.
3.	Plan amendments	None.



Table X (continued three)

# III. Schedule of Funding Progress (as required by GASB No. 25)

(1)		(2)		(3)		(4)	(5)	(6)	(7)
						<b>Unfunded</b>			
						arial Accrued			
		arial Value of		arial Accrued		Liability	Funded Ratio	ual Covered	UAAL as % of
Valuation Date	Ass	sets (AVA)	Liab	oility (AAL)	(U <i>A</i>	AAL)(3) -(2)	(2) / (3)	 Payroll	Payroll (4) / (6)
October 1, 1991	\$	11,141	\$	13,162	\$	2,021	84.6%	\$ 5,144	39.3%
October 1, 1992	\$	13,213	\$	15,847	\$	2,634	83.4%	\$ 6,142	42.9%
October 1, 1993	\$	15,076	\$	17,454	\$	2,378	86.4%	\$ 6,070	39.2%
October 1, 1994	\$	16,264	\$	19,190	\$	2,926	84.8%	\$ 6,100	48.0%
October 1, 1995	\$	18,799	\$	21,548	\$	2,749	87.2%	\$ 5,809	47.3%
October 1, 1996	\$	20,718	\$	22,445	\$	1,727	92.3%	\$ 6,201	27.9%
October 1, 1997	\$	25,668	\$	24,811	\$	(857)	103.5%	\$ 6,404	(13.4%)
October 1, 1998	\$	28,686	\$	30,493	\$	1,807	94.1%	\$ 5,794	31.2%
October 1, 1999	\$	32,543	\$	33,489	\$	946	97.2%	\$ 6,174	15.3%
October 1, 2000	\$	36,211	\$	35,286	\$	(925)	102.6%	\$ 6,156	(15.0%)
October 1, 2001	\$	38,270	\$	36,873	\$	(1,397)	103.8%	\$ 5,849	(23.9%)
October 1, 2002	\$	38,430	\$	40,335	\$	1,905	95.3%	\$ 7,153	26.6%
October 1, 2003	\$	39,160	\$	43,515	\$	4,355	90.0%	\$ 7,464	58.3%
October 1, 2004	\$	39,488	\$	45,713	\$	6,255	86.4%	\$ 8,089	77.0%
October 1, 2005	\$	40,679	\$	51,732	\$	11,053	78.6%	\$ 9,611	115.0%
October 1, 2006	\$	48,066	\$	57,645	\$	9,579	83.4%	\$ 10,277	93.2%
October 1, 2007	\$	53,303	\$	61,829	\$	8,526	86.2%	\$ 9,780	87.2%
October 1, 2008	\$	56,358	\$	65,189	\$	8,831	86.5%	\$ 9,293	95.0%
October 1, 2009	\$	55,884	\$	68,384	\$	12,499	81.7%	\$ 8,738	143.0%
October 1, 2010	\$	56,361	\$	72,192	\$	15,831	78.1%	\$ 9,681	163.5%

Note: Dollar amounts in thousands

Table X (continued four)

### IV. GASB No. 27 Disclosures

	(a) Annual	(b)	(c)	(d)	(e)	(f) Annual	(g)	(h)
Period	Required Contribution (ARC)	Actual Employer Contributions	Interest on NPO Balance	Amortization Factor	Adjustment to ARC (h)/(d)	Pension Cost (APC) (a)+(c)-(e)	Change in NPO (f) – (b)	NPO = Prior NPO + (g)
10/01/2001 – 09/30/2002*								\$ (530,961)
10/01/2002 - 09/30/2003*	\$ 1,268,134	\$1,341.127	\$ (43,804)	10.9229	\$ (48,610)	\$1,272,940	\$ (68,187)	\$ (599,148)
10/01/2003 - 09/30/2004*	\$ 1,439,588	\$1,427,587	\$ (49,430)	11.0000	\$ (54,468)	\$1,444,626	\$ 17,039	\$ (582,109)
10/01/2004 - 09/30/2005*	\$ 1,722,112	\$1,741,641	\$ (48,024)	11.0000	\$ (52,919)	\$1,727,007	\$ (14,634)	\$ (596,743)
10/01/2005 - 09/30/2006	\$ 2,381,623	\$2,381,623	\$ (49,231)	11.0000	\$ (54,249)	\$2,386,641	\$ 5,018	\$(591,725)
10/01/2006 - 09/30/2007**	\$ 2,644,093	\$2,644,093	\$ (48,817)	11.0000	\$ (53,793)	\$2,649,069	\$ 4,976	\$ (586,749)
10/01/2007 09/30/2008	\$ 2,476,424	\$2,476,424	\$ (48,407)	11.0000	\$ (53,341)	\$2,481,358	\$ 4,934	\$(581,815)
10/01/2008 - 09/30/2009	\$ 2,467,552	\$2,467,552	\$ (48,000)	11.0000	\$ (52,892)	\$2,472,444	\$ 4,892	\$ (576,923)
10/01/2009 - 09/30/2010	\$ 2,547,657	\$2,547,657	\$ (45,577)	11.0000	\$ (52,448)	\$2,554,528	<b>\$ 6,87</b> 1	\$(570,052)
10/01/2010 - 09/30/2011	\$ 2,897,915		\$ (45,034)	11.0000	\$ (51,823)	\$2,904,704		

#### Annual Pension Cost and Net Pension Asset:

Fiscal Year Ended Annual Required Contribution (ARC) Interest on Net Pension Asset Adjustment to Annual Required Contribution Annual Pension Cost (APC) Employer Contributions Made (Increase) decrease in Net Pension (Asset)	09/30/2008 \$ 2,476,424 (48,407) 53,341 \$ 2,481,358 (2,476,424) \$ 4,934	09/30/2009 \$ 2,467,552 (48,000) 52,892 \$ 2,472,444 (2,467,552) \$ 4,892	09/30/2010*** \$ 2,547,657 (45,577) 52,448 \$ 2,554,528 (2,547,657) \$ 6,871	09/30/2011 \$ 2,897,915 (45,034) 51,823 \$ 2,904,704
(Increase) decrease in Net Pension (Asset) Net Pension (Asset), beginning of year Net Pension (Asset), end of year	\$ 4,934 (586,749) \$ (581,815)	\$ 4,892 (581,815) \$ (576,923)	\$ 6,871 (576,923) \$ (570,052)	

<sup>&#</sup>x27; As disclosed in the City's financial statements.



<sup>\*\*</sup> Reflects the adoption of Ordinance 08-01.

<sup>\*\*\*</sup> Reflects the adoption of Assumptions Changes.

Table X (continued five)

### V. Schedule of Employer Contributions (as required by GASB No. 25)

Plan Year Beginning	Annual Required	Percentage
in	Contribution	Contributed
(1)	(2)	(3)
1990	\$ 727,470	110%
1 <b>99</b> 1	635,359	128%
1992	848,937	110%
1993	779,862	122%
1994	838,100	110%
1995	781,342	122%
1996	791,939	138%
1997	1,207,136	137%
1998	781,943	140%
1999	833,983	117%
2000	848,552	121%
2001	811,027	149%
2002	1,268,134	106%
2003	1,439,588	99%
2004	1,722,112	101%
2005	2,381,623	100%
2006	2,644,093	100%
2007	2,476,424	100%
2008	2,467,551	100%
2009	2,547,767	100%

Figures for plan years beginning prior to 2004 were provided by plan's former actuaries.

### VI. Notes to 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 follows:

Valuation Date	October 1, 2010
Actuarial cost method	Entry Age Normal
Amortization method	Layered amortization
Remaining amortization period	8 - 29 years
Asset valuation method	See Item H., Table XII
Actuarial assumptions:	
Investment rate of return*	7.90%
Projected salary increases*	5.00%
*Includes inflation at	4.00%
Cost-of-living adjustments	None.



#### Table XI

# CITY OF KEY WEST MUNICIPAL POLICE OFFICERS' & FIREFIGHTERS' RETIREMENT PLAN

#### Outline of Principal Provisions of the Plan

#### A. Effective Date:

January 1, 1973, as amended through Ordinance 08-01. The provisions recognized in this valuation also reflect the adoption of the Share Plan.

#### B. Eligibility Requirements:

Regular, permanent and full-time employment as certified Police Officers or Firefighters.

### C. Credited Service:

Service in completed months from date of employment to the date of termination of service. Effective October 1, 2004 and ending on October 1, 2007, active police officer members who have completed more than 17 years but less than 20 years of Credited Service were allowed optionally to purchase additional service to meet the 20 years Credited Service retirement requirement to have retirement benefits at no more than 60% of their Final Monthly Compensation. The purchases were at their true actuarial costs and were paid by the electing members and incurred no cost to the plan.

#### D. Basic Compensation:

Compensation paid including overtime pay, compensatory time pay, assignment pay, educational incentive pay, licensure or training pay and *pick-up* contributions, but excluding payments for accrued sick leave, accrued vacation leave, accrued compensatory pay and any other form of remuneration.

#### E. <u>Final Monthly Compensation:</u>

Average monthly rate of basic compensation during the best thirty-six (36) consecutive calendar months out of the last one-hundred twenty (120) calendar months preceding date of termination. Denoted FMC.

#### F. Employee Contributions:

*Pick-up* contributions of 7.0% of basic annual compensation.

#### G. Normal Retirement:

- (1) Eligibility: The earliest of (a) or (b), where
  - (a) Attainment of age 55 and the completion of 10 years of Credited Service, and
  - (b) Completion of 20 years of Credited Service.
- (2) Benefit: 3.0% times FMC times Credited Service.

# Table XI (continued two)

#### H. Early Retirement:

- (1) Eligibility: Attainment of age 50, completion of 10 years of Credited Service.
- (2) Benefit: Benefit accrued to date of retirement, reduced in an actuarial equivalent manner, but not by more than 3% per year, to reflect commencement of benefit at an earlier age.

#### I. Deferred Retirement:

- (1) Eligibility: Retirement subsequent to reaching normal retirement age.
- (2) Benefit: Benefit accrued at deferred retirement date based on Credited Service and FMC at deferred retirement date.

#### J. Disability Retirement:

- (1) Eligibility: Total and permanent qualifying disability. If non-service incurred, the completion of 10 years of Credited Service.
- (2) Benefit: Benefit (payable for ten (10) years certain and life thereafter)
  - Incurred in Line-of-Duty: Greatest of (a), (b) or (c), where
    - (a) is 42% of average monthly compensation as of date of disability
    - (b) is the benefit supported by the present value of accrued benefit as of date of disability, and
    - (c) is the benefit supported by eighteen (18) times average monthly compensation. Benefit under (c) shall not exceed 60% of anticipated retirement benefit.
  - <u>Not Incurred in Line-of-Duty</u>: Greater of accrued benefit or 25% of average monthly compensation as of date of disability.
  - <u>Catastrophic Injury</u>: a member who receives a "catastrophic injury", as provided in Section 440.02, Florida Statutes, which renders the member totally and permanently disabled from all gainful employment, shall receive a disability benefit equal to seventy-five percent (75%) of the member's compensation at the time of disability.

#### K. Death Benefit:

Benefit to beneficiary (payable for 10 years certain and life thereafter) which can be supported by the greater of A or B, where A is the single-sum value of the accrued benefit at date of death and B is the smaller of (1) and (2), where (1) is 18 times FMC at date of death and (2) is 100 times the anticipated monthly normal retirement benefit.

# Table XI (continued three)

#### L. <u>Vested Benefit Upon Termination:</u>

- (1) Eligibility: Vesting schedule with no vesting until completion of five (5) years of Credited Service (50%). Vesting is 50% upon completion of five (5) years of Credited Service, increasing by 10% per year until 100% vesting upon completion of ten (10) years of Credited Service.
- (2) Benefit at Normal Retirement Date: Benefit is the accrued benefit at date of termination, times the vested percentage, commencing at normal retirement date, or reduced benefit as of early retirement date with 10 years of Credited Service.

#### M. Cash Termination Benefit:

- (1) Accumulated employee contributions for non-vested employees.
- (2) Vested members may elect to receive a refund of accumulated employee contributions in lieu of deferred vested benefit.

#### N. Normal Form of Retirement Income:

10 years certain and life thereafter annuity with guaranteed return of employee contributions.

### O. Deferred Retirement Option Plan (DROP):

- (1) Eligibility: Upon meeting the eligibility for normal or early retirement.
- (2) Participation in the DROP must be exercised within the first thirty (30) years of employment; provided, however, that participation in the DROP, when combined with participation in the retirement plan as an active member may not exceed thirty (30) years. The maximum period of participation in the DROP is five (5) years.
- (3) An employee's account in the DROP program shall earn or lose interest based upon the actual earnings of the Fund or a fixed rate of return of 6.5% as elected by the member.
- (4) No payment may be made from DROP until the employee actually separates from service with the City.

#### P. Retiree Benefit Adjustments:

Persons retiring on or after October 1, 1988 shall be eligible for any future benefit changes from the date of the change forward.

# Q. <u>Post-retirement Supplement</u>

A supplemental benefit of \$269 per month shall be paid to a member in benefit payment status until the month immediately preceding the member's 65<sup>th</sup> birthday.

# Table XI (continued four)

### R. Share Plan

Available cumulative excess Chapter 175 and Chapter 185 contributions are distributed to the members through a Share Plan, with the initial allocation effective September 30, 2008. Initially, retirees separated from employment with the City were paid \$5,000.00 each. Remaining available funds were then allocated equally between the active and DROP members employed as of the date of adoption of the ordinance creating the Share Plan (November 5, 2008). For each following plan year, available excess Chapter 175 and Chapter 185 contributions are allocated equally to the active, DROP and retiree members.

S. <u>Changes From Previous Valuation</u> None.



#### Table XII

# CITY OF KEY WEST MUNICIPAL POLICE OFFICERS' & FIREFIGHTERS' RETIREMENT PLAN

# Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation

#### A. Mortality

For healthy participants, the 1983 Group Annuity Mortality Table was used with separate rates for males and females.

For disabled participants, the 1985 Pension Disability Table was used with separate rates for males and females.

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

7.90%, compounded annually.

#### C. Allowances for Expenses or Contingencies

Previous year's actual administrative expense paid of \$153,163 plus assumed investment expenses of \$339,366 were added to normal cost.

#### D. Employee Withdrawal Rates

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

	Withdrawal Rates Per 100 Employees			
<u>Age</u>	<u>Male</u>	<u>Females</u>		
20	39.8	55.8		
25	23.8	39.8		
30	12.6	23.8		
35	4.6	12.6		
40	0.0	4.6		
45 & Over	0.0	0.0		

#### E. Disability rates

The 1985 Disability Study - Class 1 separate male and female rates were used. Additionally, thirty-five percent (35%) of disabilities assumed to be service incurred, twenty-five percent (25%) non-service incurred, and forty percent (40%) of disabilities are assumed to be catastrophic injuries.

#### F. Salary Increase Factors and Covered Payroll

Current salary was assumed to increase at a rate equal to 5.0% per year. Assumed covered payroll is actual annual pension basic compensation from the prior plan year, increased by 5.0%

# Table XII (continued two)

#### G. Retirement Age

The following are the retirement rates assumed for the participants eligible for retirement:

	with <u>20 or more</u> redited Service	Participants with less than 20 years of Credited Service			
Age	Percentage Retiring	Age	Percentage Retiring		
40-44	75%	50-54	50%		
45+	100%	55-59	75%		
		60	100%		

However, active participants eligible for retirement as of the valuation date are assumed to have a minimum of one year future service.

### H. Valuation of Assets

The actuarial value of assets is determined by smoothing the differences between actual investment earnings and assumed investment return over five (5) years. This method was adopted effective October 1, 2006 with no phase-in. The resulting value would then be limited to between 80% and 120% of market value.

#### I. Cost Methods

Normal Retirement, Termination, Death, and Disability 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 plan had always been in effect. The normal cost for the plan 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 plan 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 plan.

The amortization bases would be funded by the excess of actual contributions over prior year's normal cost, adjusted with interest. For each existing base, the funding is done proportionally, determined based on the individual base's required amortization payment as a percentage of the overall total required total amortization payment for the prior year. New bases are then added to the total outstanding unfunded actuarial accrued liability as new layers.

Beginning with the October 1, 2010 through September 30, 2011 plan year, new bases created each year will be amortized over 25 years (instead of 30 years) if the resulting overall equivalent single amortization period of the total outstanding unfunded accrued liability with 30 year amortization periods for the new bases would exceed 30 years.

# Table XII (continued three)

### J. Changes From Previous Valuation

Previously, newly created amortization bases were amortized over 30 years, without regard to whether the equivalent overall single amortization period of the total unfunded accrued liability would have exceeded 30. The new method limits the amortization period of new bases to 25 years if the equivalent overall single amortization period of the total unfunded accrued liability would have exceeded 30.



Table XIII

CITY OF KEY WEST MUNICIPAL POLICE OFFICERS' & FIREFIGHTERS' RETIREMENT PLAN

Distribution of Plan Participants by Attained Age Groups and Service Groups as of October 1, 2010

Attained				Years of S	Service			
Age Group	0-4 5	<u>- 9</u>	10 – 14	15 – 19	20 - 24 25	3 29	0 & Over	Total
Under 25	9	_	en de la companya de La companya de la co		en ja en			9
25 – 29	21	4				· · · · · ·	_	25
30 – 34	10	8	<u>-</u>	•		-	· <u>-</u> · ·	18
35 – 39	6	13	7	6		<del>.</del>	-	32
40 – 44	3	7	8	6	3	-	- · · · · · · · · · · · · · · · · · · ·	27
45 – 49	3	1	2	6	5	1	<u>.</u> -	18
50 – 54	2	3	1	2	5 5	-		13
55 – 59	· · · -	<del>-</del>	1	•	1	- 1. - 1.	1	3
60 – 64	-	- <del>-</del>	: - · ·			1		1.
65 & Over			·			<del></del>	<u> </u>	0
TOTAL	54	36	19	20	14	2	1	146
	Average Attain Average Hire A Average Pay Percent Female	ge	3	0/01/2009 77.74 years 28.52 years \$62,412 10.7%	10/01/2010 37.81 years 28.38 years \$66,310 11.6%			



#### Table XIV

# CITY OF KEY WEST MUNICIPAL POLICE OFFICERS' & FIREFIGHTERS' RETIREMENT PLAN

### Reconciliation of Employee Data

#### A. **Active Participants** 1. Active participants previous year 140 2. Retired during year (1) 3. **Entered DROP** (1) 4. Died during year 0 5. Disabled during year 0 Terminated during year (6)7. New active participants 13 8. Transferred from General plan 0 9. Re-hired during year 10. Active participants current year 146 B. Participants Receiving Benefits 1. Participants receiving benefits previous year 86 New retired participants 2. 1 New terminated vested receiving benefit 3. 1 New disabled receiving benefits 4. 0 New beneficiaries receiving benefits 0 DROP participants retired 0 7. Died or ceased payment during year 0 8. Retired or terminated vested receiving benefits current year 88 C. **DROP Participants** 1. DROP participants previous year 16 2. Died during year 0 Became disabled during year 0 4. Employment terminated and retired during year 0 5. Entered DROP during year DROP participants current year 17 D. Terminated Vested Participants Entitled to Future Benefits 1. Terminated vested entitled previous year 5 2. Died during year 0 3. Commenced receiving benefits during year (1)New terminated vested 0 5. Rehired and active 0 Terminated vested paid lump sum (1) 6. 7. Terminated vested entitled current year



Table XV

# CITY OF KEY WEST MUNICIPAL POLICE OFFICERS' & FIREFIGHTERS' RETIREMENT PLAN

# Statistics for Participants Entitled to Deferred Vested Benefits and Participants Receiving Payments

### A. Entitled to Deferred Benefits

		Total	Average
Current Age		Annual	
Group	Count	<u>Benefit</u>	Benefit_
Less than 40	0	\$ 0	\$ 0
40 - 44	2	33,047	16,524
45 - 49	* <b>1</b> .	36,185	36,185
50 - 54	0	0	0
55 - 59	0	0	0
60 - 64	0	· 0	0
65 & over	0	0	0
TOTAL	3	\$ 69,232	\$ 23,077

# B. Receiving Benefits (includes DROP participants)

		Total	Average
Current Age		Annual	Annual
Group	<u>Count</u>	Benefit	Benefit
Less than 50	13	\$ 505,642	\$ 38,896
50 - 54	14	647,076	46,220
55 - 59	22	932,804	42,400
60 - 64	18	629,987	34,999
65 - 69	13	385,080	29,622
70 - 74	8	273,311	34,164
75 & over	<u>17</u>	439,893	25,876
TOTAL	105	\$ 3,813,793	\$ 36,322



Table XVI

#### CITY OF KEY WEST MUNICIPAL POLICE OFFICERS' & FIREFIGHTERS' RETIREMENT PLAN

### **SUMMARY OF TRANSACTION INFORMATION**

Year Ending	Benefits Paid*	Expenses	Employee Contributions	City Contributions	State Contributions	Actuarial** Value
09/30/2010	\$ 3,952,624	\$ 492,529	\$ 648,267	\$ 2,058,415	\$ 543,125	\$ 56,360,502
09/30/2009	3,553,804	531,035	635,861	2,022,206	445,345	55,584,162
09/30/2008	3,527,261	467,073	683,167	1,957,085	688,575	56,358,023
09/30/2007	2,915,371	394,054	733,646	2,122,932	<b>858,78</b> 1	53,303,089
09/30/2006	2,626,916	388,808	714,098	1,974,764	<b>640,96</b> 1	48,066,020
09/30/2005	2,387,278	346,990	659,715	1,334,782	549,690	40,678,710
09/30/2004	2,385,305	321,426	566,872	1,020,728	490,308	39,488,276
09/30/2003	2,286,232	266,208	552,164	895,560	429,702	39,195,993
09/30/2002	2,148,985	312,222	500,408	852,554	355,925	38,430,103
09/30/2001	1,971,385	341,357	440,118	751,924	314,408	38,269,799
09/30/2000	1,816,865	330,561	448,684	761,769	217,453	36,210,916
09/30/1999	1,668,156	261,153	463,516	798,388	294,718	32,542,597
09/30/1998	1,144,834	216,072	454,011	1,375,497	273,837	28,686,102
09/30/1997	883,103	199,736	463,169	846,528	244,373	25,667,822
09/30/1996	798,746	200,268	448,988	761,174	189,353	20,718,174
09/30/1995	756,398	99,714	427,392	733,455	186,089	18,798,939
09/30/1994	533,094	133,583	<b>441,88</b> 3	771,749	180,207	16,263,841
09/30/1993	464,658	171,319	442,793	777,504	156,876	15,075,831
09/30/1992	442,503	155,913	456,065	665,256	149,061	13,212,604
09/30/1991	450,042	11 <b>8,44</b> 7	398,200	636,828	163,831	11,141,258

<sup>\*</sup> Includes DROP account payments and refunds, amounts prior to year ended 09/30/2004 were as disclosed by the plan's prior actuaries. \*\* Market value prior to 1993

Table XVII

# CITY OF KEY WEST MUNICIPAL POLICE OFFICERS' & FIREFIGHTERS' RETIREMENT PLAN

### Recent Compensation, Termination and Investment Return Experience

	Compensation		Termination	Investment Return <sup>1</sup>				
Plan Year Ended	Assumed Increase	Actual Increase	Ratio of Actual To Expected	Assumed Return	Market Value Return	Actuarial Value Return		
09/30/2010	5.0%	3.7%	0.6	7.90%	6.3%	2.5%		
09/30/2009	5.5%	(1.5%)	2.5	8.25%	(1.7%)	1.1%		
09/30/2008	5.5%	3.9%	1.4	8.25%	(13.7%)	7.0%		
09/30/2007	5.5%	2.9%	1.4	8.25%	15.4%	11.0%		
09/30/2006	5.5%	8.9%	2.3	8.25%	8.8%	7.7%		
Last 3 years	5.3%	2.0%	1.5	8.13%	(3.4%)	3.5%		
Last 5 years	5.4%	3.5%	1.6	8.18%	2.5%	5.8%		



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

#### **Table XVIII**

# THE CITY OF KEY WEST MUNICIPAL POLICE OFFICERS' & FIREFIGHTERS' RETIREMENT PLAN

### Summary of Retirements During Plan Year

### A. Members with 20 or more years of service:

Age	Number of Members	Number Eligible To Retire	Number Actually Retired	Number Entered DROP
< 40	0	0	0	0
40 - 44	4	4	0	1
45 - 49	6	6	0	0
50 - 54	2	2	1	0
> 55	2	2	0	0

### B. Members with less than 20 years of service:

Age	Number of Members	Number Eligible To Retire	Number Actually Retired	Number Entered DROP
< 50	116	0	0	0
50 - 54	8	0	0	0
55 - 59	0	. 0	0	0
> 60	0	0	0	0



### Table XIX

# THE CITY OF KEY WEST MUNICIPAL POLICE OFFICERS' & FIREFIGHTERS' RETIREMENT PLAN

# Actuarial Valuation as of October 1, 2010 State Required Exhibit

		State Requir	<u>ed</u>	Exhibit				
				10/01/2000		Prior Methods		Revised Methods
<b>A</b>	n	4:-:4 D-4-		10/01/2009	_	10/01/2010	_	10/01/2010
Α.		ticipant Data		140		146		146
	1. 2.	Active participants		140		146		146
	۷.	Retired participants and beneficiaries receiving benefits		81		83		83
	3.	DROP participants		16		17		17
	<i>3</i> . 4.	Disabled participants receiving benefits		5		5		5
	4. 5.	Terminated vested participants		5		3		3
	<i>5</i> . 6.	Annual payroll of active participants	\$	8,737,622	\$	9,681,323	\$	9,681,323
		Annual benefits payable to those	Ф	6,737,022	Ф	9,061,323	Φ	9,061,323
	/.	currently receiving benefits	\$	2,775,158	•	2,869,554	\$	2,869,554
	0	Annual benefits payable to DROP participants	_	868,480	\$ \$	921,134	\$	921,134
	8.	Annual benefits payable to DKOP participants	Ф	000,400	Ф	921,134	Ф	921,134
D	Val	ue of Assets						
ъ.		Actuarial Value	\$	55,884,162	\$	56,360,502	2	56,360,502
		Market Value		46,570,135	\$	48,552,786		48,552,786
	۷.	Wanter Value	Ψ	40,570,155	Ψ	10,552,700	Ψ	10,552,700
C.	Lial	bilities						
٠.		Actuarial present value of future expected						
	• •	benefit payments for active members						
		a. Retirement benefits	\$	38,908,326	\$	42,530,051	\$	42,530,051
		b. Vesting benefits		703,117		790,349	-	790,349
		c. Death benefits		235,859		255,049		255,049
		d. Disability benefits		553,634		589,838		589,838
		e. Total	\$		\$	44,165,287	\$	
								, ,
	2.	Actuarial present value of future						
		expected benefit payments for						
		terminated vested members	\$	1,046,867	\$	358,096	\$	358,096
	3.	Actuarial present value of future expected						
		benefit payments for those receiving benefits						
		a. Service retired	\$	23,033,652	\$	23,845,188	\$	23,845,188
		b. DROP participants		9,961,383		10,539,330		10,539,330
		c. Disability retired		1,211,711		1,197,524		1,197,524
		d. Beneficiaries		2,108,055		2,079,394		2,079,394
		e. Miscellaneous		122,835		70,008	_	70,008
		f. Total	\$	36,437,636	\$	37,731,444	\$	37,731,444
	4.	Total actuarial present value of						
		future expected benefit payments	\$	77,885,439	\$	82,254,827	\$	82,254,827

# Table XIX (continued two)

# State Required Exhibit

					10/1/2009	 Prior Methods 10/01/2010	_1	Revised Methods 0/01/2010
	5.	Actuarial accrued liabilities		\$	68,383,592	\$ 72,192,008	\$	72,192,008
	6.	Unfunded actuarial liabilities						
		(see footnote 1/ for separation)		\$	12,499,430	\$ 15,831,506	\$	15,831,506
D.	Sta	tement of Accumulated Plan Benefits						
	1.	Actuarial present value of accumulated vested benefits						
		a. Participants currently receiving						
		benefits		\$	26,353,418	\$ 27,122,106	\$	27,122,106
		b. DROP participants			9,961,383	10,539,330		10,539,330
		c. Other participants		_	24,878,857	 24,238,486	_	24,238,486
		d. Total		\$	61,193,658	\$ 61,899,922	\$	61,899,922
	2.	Actuarial present value of						
		accumulated non-vested			1 446 600	1 455 405		1 455 406
	2	plan benefits		_	1,446,689	 1,455,496	_	1,455,496
	3.	Total actuarial present value of accumulated plan benefits	- !	\$	62,640,347	\$ 63,355,418	\$	63,355,418
E.	<u>Sta</u>	tement of Change in Accumulated Plan Benef	its					
	1.	Actuarial present value of						
	1.	accumulated plan benefits						
		as of October 1, 2009				\$ 62,640,347		
	2.	Increase (decrease) during year attributable to	o:					
		a. Plan amendment				\$ 0		
		b. Change in actuarial assumptions				0		
		c. Benefits paid including refunds				(3,337,530)		
		d. DROP benefits				(615,094)		
		e. Other, including benefits accumulated	l,					
		increase for interest due to decrease						
		in the discount period				 4,667,695		
		f. Net increase				\$ 715,071		
	3.	Actuarial present value of accumulated plan						
		benefits as of October 1, 2010				\$ 63,355,418		



# Table XIX (continued three)

# State Required Exhibit

F. <u>P</u>	ension Cost	_1	0/01/2009		Prior Methods 10/01/2010	_	Revised Methods 10/01/2010
1. 2.	Payment required to amortize	\$	2,041,817	\$	2,152,829	\$	2,152,829
2	unfunded liability		1,004,492		1,284,010		1,299,489
3. 4.		<u>-</u>	112,982	\$	122,853	4	123,290
5.	Estimated total required contributions  Item 4 as a percentage of payroll	\$	3,159,291 36.2%	Ф	3,559,692 36. <b>8</b> %	\$	3,575,608 36,9%
6.	Estimated employee contributions	\$	611,634	\$	677,693	\$	677,693
7.	Item 6 as a percentage of payroll	Φ	7.0%	Ф	7.0%	Ф	7.0%
7. 8.			7.070		7.070		7.076
0.	required contributions	\$	2,547,657	\$	2,881,999	\$	2,897,915
9.		. Ф	29.2%	Ψ	29.8%	Ф	29.9%
10.	Estimated State contributions	\$	434,685	\$	468,315	\$	468,315
11.	Items 10 as a percentage of payroll	Ψ	5.0%	Ψ	4.8%	Ψ	4.8%
12.	Estimated net amount payable by City	\$	2,112,972	\$	2,413,684	\$	2,429,600
13.	Item 12 as a percentage of payroll	Ψ	24.2%	Ψ	24.9%	Ψ	25.1%
G. P.	· · · · · · · · · · · · · · · · · · ·	\$ \$	3,159,291 648,267	\$	3,559,692 N/A	\$	3,575,608 N/A
	b. City	*	2,058,415		N/A		N/A
	c. State (as limited by Chs. 175 & 185)		489,242		N/A		N/A
	d. Total	\$	3,195,924		N/A		N/A
	et Actuarial Gains / (Losses) isclosure of Following Items:	\$	(1,177,232)	\$	(3,416,015)	\$	(3,416,015)
1.	Actuarial present value of						
2.	future salaries - attained age	\$	51,788,610	\$	56,107,948	\$	56,107,948
2	attained age	\$	3,625,203	\$	3,927,556	\$	3,927,556
	Actuarial present value of future contributions from other sources		N/A		N/A		N/A
4.	Amount of active members' accumulated contributions	\$	4,752,107	\$	5,128,424	\$	5,128,424
5.	Actuarial present value of future salaries and future benefits at				•		
,	entry age			No	t provided by s	oft	ware
6.	Actuarial present value of future employee contributions at entry age			No	t provided by s	oft	ware

# Table XIX (continued four)

# State Required Exhibit

1/ Unfunded Actuarial Accrued Liabilities	Curre Unfun Liabili	ded	Amortizat Paymen	Ų
			,	
10/1/1988 Plan Amendment	\$ (57	<sup>7</sup> ,151)	\$ (9,182	2) 8 years
10/1/1988 Actuarial Loss (Gain)		,774)	(51,376	•
10/1/1989 Plan Amendment		,022)	(117,31)	
10/1/1989 Actuarial Loss (Gain)	-	3,648	51,510	
10/1/1990 Actuarial Loss (Gain)		(989)	(125,670	
10/1/1991 Plan Amendment	`	5,414	44]	
10/1/1991 Actuarial Loss (Gain)	1,116		144,273	•
10/1/1992 Plan Amendment		,277)	(46,402	_
10/1/1992 Method Change	•	,855)	(12,828	,
10/1/1992 Actuarial Loss (Gain)	•	,,441)	(13,145	,
10/1/1993 Actuarial Loss (Gain)		,792	2,54	,
10/1/1994 Plan Amendment		5,278)	(20,819	_
10/1/1994 Actuarial Loss (Gain)	•	,71 <b>8</b> )	(22,768	•
10/1/1995 Actuarial Loss (Gain)	•	,486	72,047	
10/1/1995 Assumption Change		,668)	(70,452	
10/1/1996 Actuarial Loss (Gain)	(62	2,618)	(6,515	•
10/1/1996 Assumption Change		,138	51,513	•
10/1/1997 Actuarial Loss (Gain)	1,685		170,095	
10/1/1997 Plan Amendment	(292	.,229)	(29,494	1) 17 years
10/1/1998 Actuarial Loss (Gain)		,202	9,448	18 years
10/1/1998 Assumption Change	395	5,772	38,867	7 18 years
10/1/1998 Plan Amendment	(2,317	<sup>7</sup> ,867)	(227,626	5) 18 years
10/1/1999 Actuarial Loss (Gain)	•	,423	46,988	l 19 years
10/1/1999 Assumption Change	388	3,458	37,218	3 19 years
10/1/1999 Plan Amendment	(670	,042)	(64,197	7) 19 years
10/1/2000 Actuarial Loss (Gain)	568	3,675	53,28	20 years
10/1/2000 Plan Amendment	(163	3,398)	(15,309	9) 20 years
10/1/2001 Actuarial Loss (Gain)	(641	,980)	(58,942	2) 21 years
10/1/2001 Plan Amendment	817	',126	75,023	3 21 years
10/1/2002 Actuarial Loss (Gain)	2,854	,196	257,269	22 years
10/1/2003 Actuarial Loss (Gain)	2,282		202,298	
10/1/2004 Actuarial Loss (Gain)	1,770	,749	154,57	
10/1/2005 Actuarial Loss (Gain)	2,332	2,375	200,770	
10/1/2005 Plan Amendment	2,321	,128	199,802	
10/1/2006 Actuarial Loss (Gain)	2,599	•	220,95	-
10/1/2006 Method Change	(4,004	,377)	(340,317	•
10/1/2006 Plan Amendment		5,086	74,455	
10/1/2007 Actuarial Loss (Gain)	(1,870		(157,146	
10/1/2008 Actuarial Loss (Gain)		,606	28,388	
10/1/2009 Actuarial Loss (Gain)	1,167		96,099	
10/1/2009 Assumptions Change	2,516		207,091	-
10/1/2010 Actuarial Loss (Gain)	3,416	<u>,015</u>	294,049	25 years
TOTAL	\$ 15,831	,506	\$ 1,299,489	)

Equivalent single amortization period:

29.269 years

# Table XVIII (continued five)

#### State Required Exhibit

#### **Actuary Statement**

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

Donald A. DuLaney, Jr., Actuary

11-4191

**Enrollment Number**