# RETIREMENT PLAN FOR EMPLOYEES OF THE CITY OF JONESBORO

ACTUARIAL VALUATION AS OF JANUARY 1, 2010

CONTRIBUTIONS APPLICABLE TO THE PLAN/FISCAL YEAR ENDED DECEMBER 31, 2010



### Actuarial Consultants for Public Pension Plans

October 21, 2010

Jim Eagan City of Jonesboro 515 W. Washington Ave Jonesboro, AR 72401

Re: Retirement Plan for Employees of the City of Jonesboro

Dear Jim:

We are pleased to present to the Board this report of the annual actuarial valuation of the Retirement Plan for Employees of the City of Jonesboro. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits and to develop the appropriate funding requirements for the applicable plan year.

The valuation has been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, as well as applicable federal laws and regulations. In our opinion, the assumptions used in this valuation, as adopted by the Board of Trustees, represent reasonable expectations of anticipated plan experience.

In conducting the valuation, we have relied on personnel, plan design, and asset information supplied by the Board of Trustees, financial reports prepared by the custodian bank and the actuarial assumptions and methods described in the Actuarial Assumptions section of this report. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy of the information and believe that it has produced appropriate results. This information, along with any adjustments or modifications, is summarized in various sections of this report.

The undersigned is familiar with the immediate and long-term aspects of pension valuations, and meets the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the actuarial opinions.

Jim Eagan October 21, 2010 Page Two

To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the City of Jonesboro, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Retirement Plan for Employees of the City of Jonesboro. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

If there are any questions, concerns, or comments about any of the items contained in this report, please contact me at 847-325-5582.

Respectfully submitted,

Foster & Foster, Inc.

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lason L. Franken

Enrolled Actuary #08-6888

JLF/Isw

Enclosures

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# SECTION I

### SUMMARY OF REPORT

The regular annual actuarial valuation of the Retirement Plan for Employees of the City of Jonesboro, performed as of January 1, 2010, has been completed and the results are presented in this Report. The contribution amounts set forth herein are applicable to the plan/fiscal year ended December 31, 2010.

The contribution requirements, compared with those set forth in the January 1, 2009 actuarial report provided by Principal Financial Group, are as follows:

Valuation Date	1/1/2009	1/1/2010
Applicable Plan/Fiscal Year End	<u>12/31/2009</u>	12/31/2010
Total Required Contribution % of Total Annual Payroll	\$853,015 10.6%	\$690,346 9.2%

This is our first actuarial valuation performed for the Retirement Plan for Employees of the City of Jonesboro. Since much of the historical data typically shown in our report is not readily available, we are not able to provide all of the information we would like to include. As a result, we have shown an "N/A" where the data was not available. In future years, the N/A's will be replaced with actual results.

As can be seen, the Total Required Contribution has decreased due to a favorable experience during the past 12 months. The main component of this favorable experience is attributable to an 18.87% investment return (Market Value basis) that greatly exceeded the 7.5% assumption.

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The balance of this Report presents additional details of the actuarial valuation and the general operation of the Fund. The undersigned would be pleased to meet with the Board of Trustees in order to discuss the Report and answer any pending questions concerning its contents.

Respectfully submitted,

FOSTER & FOSTER, INC.

By: Jason & June ESA EA MA

Kurt T. Baxley

# Plan Changes Since Prior Valuation

No plan changes have been made since the prior valuation.

# Actuarial Assumption/Method Changes Since Prior Valuation

No assumption or method changes have been made since the prior valuation.

# Comparative Summary of Principal Valuation Results

A. Participant Data	1/1/2010	1/1/2009
Number Included Actives Service Retirees Beneficiaries Terminated Vested Total	219 43 2 52 316	243 40 0 39 322
Total Annual Payroll Payroll Under Assumed Ret. Age	\$7,487,589 7,487,589	\$8,092,412 8,092,412
Annual Rate of Payments to: Service Retirees Beneficiaries Terminated Vested	244,537 3,834 197,612	227,820 0 141,360
B. Assets		
Actuarial Value Market Value	6,776,314 6,776,314	5,127,195 5,127,195
C. Liabilities		
Present Value of Benefits * Active Members Retirement Benefits Death Benefits Vested Benefits Refund of Contributions Service Retirees Beneficiaries Terminated Vested	8,256,281 2,062 1,430,105 0 2,306,723 32,091 729,409	8,522,974 1,976 1,541,724 0 2,222,756 0 496,079
Total	12,756,671	12,785,509

<sup>\*</sup> The January 1, 2009 actuarial report provided by Principal Financial Group does not include this specific information.

C. Liabilities - (Continued)	<u>1/1/2010</u>	<u>1/1/2009</u>
Present Value of Future Salaries	70,269,556	N/A
Present Value of Future Member Cont.	0	N/A
Normal Cost (Entry Age Normal) Retirement Benefits Death Benefits Vested Benefits Refund of Contributions Total Normal Cost	395,515 90 78,443 0 474,048	N/A N/A N/A N/A 541,221
Present Value of Future Normal Costs	4,278,240	N/A
Actuarial Accrued Liability (Entry Age Norm Retirement Benefits Death Benefits Vested Benefits Refund of Contributions Inactives Total Actuarial Accrued Liability	4,765,401 1,404 643,403 0 3,068,223 8,478,431	4,533,961 1,627 643,225 0 2,718,835 7,897,648
Unfunded Actuarial Accrued Liab (UAAL)	1,702,117	2,770,453
D. Actuarial Present Value of Accrued Benefit	s	
Vested Accrued Benefits Inactives Actives Member Contributions Total	3,068,223 2,594,250 69,130 5,731,603	2,718,835 2,339,701 72,639 5,131,175
Non-vested Accrued Benefits	310,960	<b>317</b> ,960
Total Present Value Accrued Benefits	6,042,563	5,449,135
Increase (Decrease) in Present Value of Accrued Benefits Attributable to: Plan Amendments Assumption Changes New Accrued Benefits Benefits Paid Interest Other	0 0 423,434 (230,064) 400,058 0	
Total:	593,428	

Valuation Date Applicable to Fiscal Year Ending	1/1/2010 <u>12/31/2010</u>	1/1/2009 12/31/2009
E. Pension Cost		
Normal Cost (with interest) % of Total Annual Payroll*	\$509,602 6.8	\$581,813 7.2
Administrative Expense (with interest) % of Total Annual Payroll*	36,624 0.5	36,624 0.5
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 30 years (as of 01/1/2010) % of Total Annual Payroll*	144,120 1.9	234,578 2.9
Total Required Contribution % of Total Annual Payroll*	690,346 9.2	853,015 10.6
Expected Member Contributions % of Total Annual Payroll*	0 0.0	0 0.0
Expected City Contribution % of Total Annual Payroll*	690,346 9.2	853,015 10.6

# F. Past Contributions

G. Net Actuarial Gain (Loss)

Plan Year Ending:		12/31/2009
Total Required Contribution City Requirement		853,015 853,015
Actual Contributions N	/lade:	
Me City Tot		853, <b>015</b> 853,015

<sup>\*</sup> Contributions developed as of 01/1/10 are expressed as a percentage of projected annual payroll at 01/1/10 of \$7,487,589.

1,008,276

H. Schedule Illustrating the Amortization of the Total Unfunded Actuarial Accrued Liability as of:

<u>Year</u>	Projected Unfunded Accrued Liability
2010	\$1,702,117
2011	1,685,655
2012	1,667,959
2017	1,557,466
2022	1,398,839
2032	844,175
2040	0

I. (i) 3 Year Comparison of Actual and Assumed Increases in Pensionable Compensation

		<u>Actual</u>	<u>Assumed</u>
Year Ended	12/31/2009	N/A	4.5%
Year Ended	12/31/2008	N/A	4.5%
Year Ended	12/31/2007	N/A	N/A

(ii) 3 Year Comparison of Investment Return on Actuarial Value

		<u>Actual</u>	<u>Assumed</u>
Year Ended Year Ended	12/31/2009 12/31/2008	18.9% N/A	7.5% 7.5%
Year Ended	12/31/2007	N/A	7.5%

### Statement by Enrolled Actuary

This actuarial valuation 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 adhere to the Actuarial Standards of Practice. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material increase in plan costs or required contribution rates have been taken into account in the valuation.

Jason L. Franken, FSA, EA, MAAA

Guan S. Front

Enrolled Actuary #08-6888

# SECTION II VALUATION INFORMATION

# Reconciliation of Unfunded Actuarial Accrued Liabilities

(1)	Unfunded Actuarial Accrued Liability as of January 1, 2009	\$2,770,453
(2)	City's Normal Cost Applicable for the year	575,290
(3)	Interest on (1) and (2)	249,653
(4)	Sponsor Contributions to the System during the year ending December 31, 2009	853,015
(5)	Interest on (4)	31,988
(6)	Expected UAAL as of January 1, 2010 (1)+(2)+(3)-(4)-(5)	2,710,393
(7)	Change in UAAL Due to Actuarial (Gain)/Loss	(1,008,276)
(8)	Unfunded Accrued Liability as of January 1, 2010	1,702,117

	Date	Years	1/1/2010	Amortization
	Established	Remaining	Amount	Amount
UAAL	1/1/2010	30	1,702,117	134,065

# Projection of Benefit Payments

Year	Payments for	Payments for	Total
	Current Actives	Current Inactives	Payments
Year  2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044			
2045	2,295,643	105,712	2,401,355
2046	2,266,350	98,548	2,364,898
2047	2,210,237	91,430	2,301,667
2048	2,192,731	85,195	2,277,926
2049	2,227,264	78,962	2,306,226

# ACTUARIAL ASSUMPTIONS AND FUNDING METHODS

# <u>Assumptions</u>

Mortality Rate	2009 IRS Prescribed Mortality Optional Combined Table for Small Plans
Interest Rate	7.5% per year compounded annually, net of investment related expenses
Retirement Age	100% retiring at age 65.
Termination Rate	2003 Society of Actuaries Small Plan Age Table, multiplied by 0.60. See be- low.
Salary Increases	4.5% per year until the assumed Retirement Age.
Administrative Expenses	\$34,069
Disability	None
Interest Rate for	

Age	% Terminating During the Year
20	14.58%
30	9.30
40	5.64
50	3.36

2.95% (2.48% last year)

Member Contributions

# **Funding Method**

Entry Age Normal Actuarial Cost Method.

**Actuarial Asset Method** 

Market Value of Assets

Amortization Method Level Dollar, Open

### **VALUATION NOTES**

<u>Total Annual Payroll</u> is the projected annual rate of pay for the fiscal year following the valuation date of all covered members.

<u>Present Value of Benefits</u> is the single sum value on the valuation date of all future benefits to be paid to current Members, Retirees, Beneficiaries and Vested Terminations.

Normal (Current Year's) Cost is the current year's cost for benefits yet to be funded.

<u>Unfunded Accrued Liability</u> is a liability which arises when a pension plan is initially established or improved and such establishment or improvement is applicable to all years of past service.

Total Required Contribution is equal to the Normal Cost plus an amount sufficient to amortize the Unfunded Accrued Liability over no more than 30 years. The required amount is adjusted for interest according to the timing of contributions during the year.

<u>Entry Age Normal Cost Method</u> - Under this method, the normal cost is the sum of the individual normal costs for all active participants. For an active participant, the normal cost is the participant's normal cost accrual rate, multiplied by the participant's current compensation.

- (a) The normal cost accrual rate equals:
  - (i) the present value of future benefits for the participant, determined as of the participant's entry age, divided by

- (ii) the present value of the compensation expected to be paid to the participant for each year of the participant's anticipated future service, determined as of the participant's entry age.
- (b) In calculating the present value of future compensation, the salary scale is applied both retrospectively and prospectively to estimate compensation in years prior to and subsequent to the valuation year based on the compensation used for the valuation.
- (c) The accrued liability is the sum of the individual accrued liabilities for all participants and beneficiaries. A participant's accrued liability equals the present value, at the participant's attained age, of future benefits less the present value at the participant's attained age of the individual normal costs payable in the future. A beneficiary's accrued liability equals the present value, at the beneficiary's attained age, of future benefits. The unfunded accrued liability equals the total accrued liability less the actuarial value of assets.
- (d) Under this method, the entry age used for each active participant is the participant's age at the time he or she would have commenced participation if the plan had always been in existence under current terms, or the age as of which he or she first earns service credits for purposes of benefit accrual under the current terms of the plan.

SECTION III

TRUST FUND

# BALANCE SHEET December 31, 2009

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Receivable: Additional City Contributions	853,015.00	853,015.00
Total Receivable	853,015.00	853,015.00
Flexible Pension Investments	5,923,298.64	5,923,298.64
TOTAL ASSETS	6,776,313.64	6,776,313.64
LIABILITIES AND NET ASSETS		
Total Liabilities	0.00	0.00
Net Assets: Active and Retired Members' Equity	6,776,313.64	6,776,313.64
Total Net Assets	6,776,313.64	6,776,313.64
TOTAL LIABILITIES AND NET ASSETS	6,776,313.64	6,776,313.64

# City of Jonesboro Retirement Plan for Employees

# CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS December 31, 2009 Market Value Basis

# INCOME

Contributions: City	853,015.00	
Total Contributions		853,015.00
Total Earnings and Investment Gains		1,056,441.81
Administrativo Evponsos:	EXPENSES	
Administrative Expenses: Investment Related*	30,273.46	
Total Expenses		30,273.46
Distributions to Members: Benefit Payments	230,064.43	
Total Distributions		230,064.43
Change in Net Assets for the Year		1,649,118.92
Net Assets Beginning of the Year		5,127,194.72
Net Assets End of the Year		6,776,313.64

<sup>\*</sup>Investment Related expenses include investment advisory, custodial and performance monitoring fees.

# SECTION IV MEMBER STATISTICS

# STATISTICAL DATA \*

Active Members	1/1/2007	1/1/2008	1/1/2009	1/1/2010
Number Average Current Age Average Age at Employment Average Past Service Average Annual Salary				219 44.8 37.4 7.4 \$34,190
Retirees & Beneficiaries				
Number Average Current Age Average Annual Benefit				45 68.8 \$5,519
<u>Terminated Vested Members</u>				
Number Average Current Age Average Annual Benefit				52 45.4 \$3,800

<sup>\*</sup> Foster & Foster does not have enough historical data to include data prior to 1/1/2010. We will add historical data going forward.

# AGE AND SERVICE DISTRIBUTION

# PAST SERVICE

AGE	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30+	Total
15 - 19	1	0	0	0	0	0	0	0	0	0	0	1
20 - 24	0	1	1	0	0	0	0	0	0	0	0	2
25 - 29	2	3	5	8	1	5	1	0	0	0	0	25
30 - 34	4	3	6	4	3	3	2	0	0	0	0	25
35 - 39	0	4	6	3	0	6	3	2	0	0	0	24
40 - 44	3	2	1	5	0	9	8	1	0	0	0	29
45 - 49	1	6	6	1	1	5	3	1	1	1	0	26
50 - 54	3	5	5	5	2	4	8	4	2	2	0	40
55 - 59	1	2	2	0	0	6	6	3	1	3	0	24
60 - 64	0	2	2	0	2	0	5	0	1	3	0	15
65+	0	0	0	3	1	1	1	1	1	0	0	8
Total	15	28	34	29	10	39	37	12	6	9	0	219

# VALUATION PARTICIPANT RECONCILIATION

# 1. Active lives

a. Number in prior valuation 01/1/2009	243
b. Terminations	
i. Vested (partial or full) with deferred benefits	13
ii. Non-vested or full lump sum distribution	24
received	
c. Deaths i. Beneficiary receiving benefits	Λ
ii. No future benefits payable	Ö
d. Retired	5
e. Voluntary withdrawal	0
f. Continuing participants	201
g. New entrants	18
h. Total active life participants in 01/1/2010 valuation	219

# 2. Non-Active lives (including beneficiaries receiving benefits)

	Service Retirees, Vested Receiving Benefits	Receiving Death <u>Benefits</u>	Vested <u>Deferred</u>	<u>Total</u>
a. Number prior valuation	40	0	39	79
b. In	5	2	13	20
c. Out	2	0	0	2
d. Number current valuation	43	2	52	97

# SECTION V SUMMARY OF PLAN PROVISIONS

# SUMMARY OF CURRENT PLAN

Eligibility Any full-time employee who is employed for

more than 20 hours per week and more than

five months per year.

Accrual Service Years and fractional parts of years (to the near-

est month) of service as employed by the City.

<u>Compensation</u> Gross annual compensation, without reduction

for flexible spending account contributions.

Average Compensation The monthly average of the five latest Compen-

sation Years.

Normal Retirement

Date Age 65 and 5 years of Accrual Service.

Benefit 1.5% for each year of Accrual Service times av-

erage compensation. Minimum of \$25 per

month.

Form of Benefit For the Retiree's lifetime with 120 payments

guaranteed.

Early Retirement

Date Age 55 and 5 years of Accrual Service.

Benefit Accrued benefit, reduced 6.7% per year for the

first five years then 3.3% per year for the next

five years.

Form of Benefit For the Retiree's lifetime with 120 payments

guaranteed.

# Vesting

Schedule 100% after 5 years of Accrual

Service.

Benefit Amount Member will receive the vested portion

of his (her) accrued benefit payable at the otherwise Normal Retirement Date.

Death Benefit

Benefit 100% refund of Member's contribution account.

# SECTION VI

GOVERNMENTAL ACCOUNTING STANDARDS BOARD STATEMENTS NO. 25 AND NO. 27 INFORMATION

# DISCLOSURE INFORMATION PER STATEMENT NO. 25 OF THE GOVERNMENTAL ACCOUNTING STANDARDS BOARD

The schedule provided below has been prepared in accordance with the requirements of paragraph 37 of Statement No. 25 of the Governmental Accounting Standards Board.

# SCHEDULE OF FUNDING PROGRESS

4	UAAL as a % of	Covered	Payroll	((p-a)/c)	22.7% 34.2%
		Covered	Payroll	(c)	7,487,589 8,092,412
		Funded	Ratio	(a/b)	79.9% 64.9%
	Unfunded	AAL	(NAAL)	(p-a)	1,702,117 2,770,453
Actuarial	Accrued Liability	(AAL)	- Entry Áge	(q)	8,478,431 7,897,648
	Actuarial	Value of	Assets	(a)	6,776,314 5,127,195
		Actuarial	Valuation	Date	01/01/10 01/01/09

The schedule provided below has been prepared in accordance with the requirements of paragraph 38 of Statement No. 25 of the Governmental Accounting Standards Board.

# SCHEDULE OF CONTRIBUTIONS FROM THE EMPLOYER AND OTHER CONTRIBUTING ENTITIES

Percentage Contributed	100.0% 100.0% 100.0%
City	853,015 604,978 512,673 504,064
Annual Required Contribution	853,015 604,978 512,673 504,064
Year Ended December 31	2009 2008 2007 2006

# DISCLOSURE INFORMATION PER STATEMENT NO. 27 OF THE GOVERNMENTAL ACCOUNTING STANDARDS BOARD

# ANNUAL PENSION COSTS AND RELATED INFORMATION \*

# Contribution rates as of 12/31/2009

City Plan Members	853,015 0
Actuarially Determined Contribution	853,015
Contributions made	853,015
Actuarial valuation date	1/1/2009
Actuarial cost method	Entry Age Normal
Amortization method	Level Dollar, Open
Remaining amortization period	30 Years
Asset valuation method	Market
Actuarial assumptions: Investment rate of return Projected salary increase* * Includes inflation at Post Retirement COLA	7.5% 4.5% 3.0% 0.0%

# THREE YEAR TREND INFORMATION

	Actuarially	Percentage	Net
Year	Determined	of APC *	Pension
Ending	Contribution	_Contributed_	Obligation
12/31/2009	853,015	100%	0
12/31/2008	604,978	100%	0
12/31/2007	512,673	100%	0

<sup>\*</sup> Annual Pension Cost from City sources.