

**CHARLOTTE FIREFIGHTERS'
RETIREMENT SYSTEM
REPORT OF ACTUARY
ON THE VALUATION
PREPARED AS OF JULY 1, 2004**



October 19, 2004

Board of Trustees
Charlotte Firefighters' Retirement System
428 East Fourth Street
Suite 205
Charlotte, NC 28202

Dear Members of the Board:

We are pleased to submit herewith the results of the annual actuarial valuation of the City of Charlotte Firefighters' Retirement System prepared as of July 1, 2004. The purpose of this report is to provide a summary of the funded status of the System as of July 1, 2004, to recommend rates of contribution and to provide accounting information under Governmental Accounting Standards Board Statements No. 25 and 27 (GASB 25 and 27). While not verifying the data at source, the actuary performed tests for consistency and reasonability.

The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method. Actuarial value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 3.75% annually. The annual required employer contribution rate remains at 13.27% of payroll for the fiscal year ending June 30, 2006. However, it is our understanding that the System will continue funding at the statutory required contribution rate of 12.65%. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System.

The valuation has been prepared in accordance with the parameters set forth in Statement Nos. 25 and 27 of the Governmental Accounting Standards Board. The annual required contribution (ARC) of the City under GASB for the fiscal year ending June 30, 2006 is 13.27% of payroll, which will liquidate the unfunded accrued liability over a 30-year period.

We have prepared the Schedule of Active Member Valuation Data, Schedule of Retirants and Beneficiaries Added to and Removed from Rolls, the Solvency Test and the Analysis of Financial Experience for the actuarial section of the Annual Report and the Schedule of Funding Progress and Trend Information for the financial section of the Annual Report.

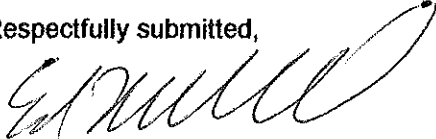
This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

In our opinion the System operated on an actuarially sound basis through the fiscal year ending June 30, 2004. Beginning in the fiscal year ending June 30, 2005, City contributions outlined in Section 25 of Title V of the Act will no longer be sufficient to fund the System in an actuarially sound manner. Assuming that the annual required employer contributions to the System are made by the City from year to year in the future at the rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the retirement fund to provide the benefits called for under the System may be safely anticipated.

We trust that the report will meet the approval of the Board and will furnish the desired information concerning the financial condition of the Retirement System.

The Table of Contents, which immediately follows, outlines the material contained in the report.

Respectfully submitted,



Edward A. Macdonald, ASA, MAAA, FCA
Principal, Consulting Actuary



Catherine G. Turcot
Senior Consultant, Retirement

EAM/CGT:sh

TABLE OF CONTENTS

<u>Section</u>	<u>Item</u>	<u>Page No.</u>
I	Summary of Principal Results	1
II	Membership Data	2
III	Assets	3
IV	Comments on Valuation	3
V	Contributions Payable	4
VI	Accounting Information	5
VII	Experience	8
 <u>Schedule</u>		
A	Development of the Unfunded Actuarial Accrued Liability	9
B	Valuation Balance Sheet and Solvency Test	10
C	Development of the Actuarial Value of Assets	12
D	Asset Information	13
E	Outline of Actuarial Assumptions and Methods	14
F	Actuarial Cost Method	16
G	Summary of Main System Provisions as Interpreted for Valuation Purposes	17
H	Tables of Membership Data	19

**CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM
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SECTION I - SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the current and preceding valuations are summarized below.

Valuation Date	July 1, 2004	July 1, 2003
Number of active members	897	876
Annualized compensation	\$ 44,009,056	\$ 41,354,976
Retired members and beneficiaries:		
Number	435	427
Annual allowances	\$ 14,887,728	\$ 14,512,752
Number of terminated vested members	1	2
Assets:		
Market Value	\$ 263,339,748	\$ 227,136,805
Actuarial Value	274,947,662	261,022,319
Unfunded actuarial accrued liability	\$ 17,393,171	\$ 16,821,205
Amortization Period	30 years	30 years
Fiscal Year Ending	June 30, 2006	June 30, 2005
City annual required contribution rate (ARC):		
Normal (including expenses of 0.75%)	11.19%	11.17%
Accrued liability	<u>2.08</u>	<u>2.10</u>
Total	13.27%	13.27%
Member contribution rate	12.65%	12.65%

2. The major benefit and contribution provisions of the System as reflected in the valuation are summarized in Schedule G. There have been no changes since the previous valuation.
3. Schedule E of this report outlines the full set of actuarial assumptions and methods used in the valuation. There have been no changes since the previous valuation.
4. The entry age actuarial cost method was used to prepare the valuation. Schedule F contains a brief description of the actuarial cost method.
5. Comments on the valuation results as of July 1, 2004 are given in Section IV and further discussion of the contributions is set out in Section V.

SECTION II - MEMBERSHIP DATA

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The valuation included 897 active members with annualized compensation totaling \$44,009,056.
2. The following table shows the number of retired members and beneficiaries as of July 1, 2004 together with the amount of their annual retirement benefits payable under the System as of that date.

**THE NUMBER AND ANNUAL BENEFITS OF
RETIRED MEMBERS AND BENEFICIARIES
AS OF JULY 1, 2004**

GROUP	NUMBER*	ANNUAL RETIREMENT BENEFITS
Service Retirements	356	\$ 13,273,536
Disability Retirements	62	1,343,268
Beneficiaries of Deceased Members	<u>17</u>	<u>270,924</u>
Total	435	\$ 14,887,728

* In addition, there is one terminated member entitled to deferred vested benefits.

3. Table 1 of Schedule H shows the distribution by age and years of membership service of the number of active members included in the valuation, while Table 2 shows the number and annual benefits of retired members and beneficiaries included in the valuation, distributed by age. Table 3 shows the schedule of active member valuation data and Table 4 shows the schedule of retirants and beneficiaries added to and removed from the rolls.

SECTION III - ASSETS

As of July 1, 2004, the total market value of assets amounted to \$263,339,748. The actuarial value of assets used for the current valuation was \$274,947,662. Schedule C shows the development of the actuarial value of assets as of July 1, 2004. Schedule D shows the allocation of the System's assets and the market value of assets for three years.

SECTION IV - COMMENTS ON VALUATION

1. Schedule B of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the System as of July 1, 2004. The valuation was prepared in accordance with the actuarial assumptions set forth in Schedule E and the actuarial cost method which is described in Schedule F.
2. The valuation balance sheet shows that the System has total prospective liabilities of \$403,355,452 of which \$139,470,337 is for the prospective benefits payable on account of present retired members, beneficiaries of deceased members, and terminated members entitled to deferred benefits, and \$263,885,115 is for the prospective benefits payable on account of present active members. Against these liabilities, the System has a total present actuarial value of assets of \$274,947,662 as of July 1, 2004. The difference of \$128,407,790 between the total liabilities and the total present assets represents the present value of future contributions.
3. The contributions to the System consist of normal contributions and accrued liability contributions. The valuation indicates that normal contributions at the rate of 23.09% of payroll are required under the entry age method. Of this amount, 12.65% is paid by the members and the remaining 10.44% is required by the City.
4. Prospective normal contributions at the rate of 23.09% have a present value of \$111,014,619. When this amount is subtracted from \$128,407,790, which is the present value of the total future contributions to be made, there remains \$17,393,171 as the amount of unfunded accrued liability contributions. The development of the unfunded accrued liability is shown in Schedule A.

SECTION V - CONTRIBUTIONS PAYABLE

1. The contributions consist of a normal contribution and an accrued liability contribution as determined by actuarial valuation.
2. The normal contribution rate is calculated as the level percentage of payroll which, if applied for the average new member during the entire period of his anticipated covered service, would be required to meet the cost of all benefits payable on his behalf. On the basis of the valuation the normal contribution rate was determined to be 23.09%.
3. Section 24 of Title V of the Charlotte Firefighters' Retirement System Act states that each member shall contribute an amount equal to the Member's Compensation multiplied by 12.65%.
4. The City normal contribution rate is equal to the difference between the normal contribution rate of 23.09% and the member contribution rate of 12.65%, or 10.44% of payroll. An additional 0.75% is required for expenses, making the total City normal rate 11.19% of payroll.
5. Section 25 of Title V of the Charlotte Firefighters Retirement System Act states that the City of Charlotte shall contribute an amount equal to the Member's Compensation multiplied by 12.65%. Beginning in the fiscal year ending June 30, 2005, these contributions will no longer be sufficient to fund the System in an actuarially sound manner. The required employer contribution rate beginning July 1, 2004, will be 13.27% of payroll.
6. Based on a total employer rate of 13.27%, the annual accrued liability contribution rate is determined to be 2.08% of payroll. This rate will be sufficient to amortize the unfunded actuarial accrued liability within approximately 30 years following the valuation date, on the assumption that the payroll will increase 3.75% each year.

7. The following table summarizes the employer contributions which were determined by the July 1, 2004 valuation and are recommended for use.

**CITY ANNUAL REQUIRED CONTRIBUTIONS (ARC)
FOR FISCAL YEAR ENDING JUNE 30, 2006**

CONTRIBUTION	PERCENTAGE OF ACTIVE MEMBERS' COMPENSATION
Normal (including expenses of 0.75%)	11.19%
Accrued Liability	<u>2.08</u>
Total	13.27%

SECTION VI - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

**NUMBER OF ACTIVE AND RETIRED PARTICIPANTS
AS OF JULY 1, 2004**

GROUP	NUMBER
Retired participants and beneficiaries currently receiving benefits	435
Terminated participants and beneficiaries entitled to benefits but not yet receiving benefits	1
Active Participants	<u>897</u>
Total	1,333

2. Another such item is the schedule of funding progress as shown below.

SCHEDULE OF FUNDING PROGRESS
Dollar Amounts in Thousands

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
7/1/99	\$216,336	\$186,854	\$(29,482)	115.8%	\$32,462	(90.8)%
7/1/00*	235,901	239,784	3,883	98.4	33,080	11.7
7/1/01	246,614	254,767	8,153	96.8	38,079	21.4
7/1/02	254,013	265,712	11,699	95.6	39,849	29.4
7/1/03	261,022	277,843	16,821	93.9	41,355	40.7
7/1/04	274,948	292,341	17,393	94.1	44,009	39.5

* Economic and demographic assumptions were changed as of July 1, 2000 due to an experience review. In addition, the asset valuation method was changed.

3. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2004.

Annual Pension Cost and Net Pension Obligation for Fiscal Year Ending 6/30/04

(a) Employer annual required contribution	\$ 5,554,000
(b) Interest on net pension obligation	(549,000)
(c) Adjustment to annual required contribution	<u>(347,000)</u>
(d) Annual pension cost (a) + (b) - (c)	\$ 5,352,000
(e) Employer contributions made for fiscal year ending 6/30/04	<u>5,554,000</u>
(f) Increase (decrease) in net pension obligation (d) - (e)	\$ (202,000)
(g) Net pension obligation beginning of fiscal year	<u>(7,078,000)</u>
(h) Net pension obligation end of fiscal year (f) + (g)	\$ (7,280,000)

TREND INFORMATION
Dollar Amounts in Thousands

Year Ending	Annual Pension Cost (APC)	Percentage Of APC Contributed	Net Pension Obligation (NPO)
June 30, 2002	\$5,024	100.8%	\$(6,883)
June 30, 2003	5,083	103.8	(7,078)
June 30, 2004	5,352	103.8	(7,280)

4. The annual required contribution (ARC) as a percentage of payroll, determined in accordance with the parameters of GASB 25/27, is shown below.

EMPLOYER ANNUAL REQUIRED CONTRIBUTION (ARC)

EMPLOYER ANNUAL REQUIRED CONTRIBUTION (ARC)	Fiscal Year Ending June 30, 2006
Normal (includes expenses)	11.19%
Accrued liability	<u>2.08</u>
Total	13.27%

5. Additional information as of July 1, 2004 follows.

Valuation date	7/1/04
Actuarial cost method	Entry age
Amortization method	Level dollar open
Remaining amortization period	30 years
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Investment rate of return*	7.75%
Projected salary increases*	4.75-7.75%
*Includes inflation at	3.75%
Cost-of-living adjustments	N/A

SECTION VII – EXPERIENCE

1. As an aid to the Board in adopting service and mortality tables, the actuary prepared an experience investigation for the five-year period ending June 30, 1999. The valuation was based on the assumptions adopted by the Board at the April 27, 2000 Board meeting as a result of that investigation.

2. The following table shows the estimated change in the unfunded accrued liability from various factors that resulted in an increase of \$572,000 in the unfunded accrued liability from \$16,821,000 to \$17,393,000 during the fiscal year ending June 30, 2004.

ANALYSIS OF FINANCIAL EXPERIENCE - CHANGE IN UNFUNDED ACCRUED LIABILITY
(in thousands of dollars)

Item	Amount of Increase/ (Decrease)
Interest (7.75%) added to previous unfunded accrued liability	1,304
Accrued Liability Contribution	(632)
Recognized Asset Loss	2,902
Liability (Gain)/ Loss	(992)
Salary Increases	(2,010)
Amendments	0
Asset Method Change	0
Assumption Changes	<u>0</u>
Increase In Unfunded Accrued Liability	572

SCHEDULE A**DEVELOPMENT OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY
AS OF JULY 1, 2004**

(1)	Present value of prospective benefits:	
(a)	Present active members	\$ 263,885,115
(c)	Present retired members, beneficiaries and former members entitled to deferred vested benefits	<u>139,470,337</u>
(c)	Total	\$ 403,355,452
(2)	Present value of future System and member normal contributions before expenses	<u>111,014,619</u>
(3)	Actuarial accrued liabilities 1(c) – (2)	\$ 292,340,833
(4)	Actuarial value of assets	<u>274,947,662</u>
(5)	Unfunded actuarial accrued liability (3) – (4)	\$ 17,393,171

SCHEDULE B - VALUATION BALANCE SHEET AND SOLVENCY TEST**VALUATION BALANCE SHEET****RESULTS OF THE VALUATION AS OF JULY 1, 2004
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES
OF THE CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM****ACTUARIAL LIABILITIES**

Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, and terminated members entitled to deferred benefits	\$ 139,470,337
Present value of prospective benefits payable on account of present active members	<u>\$ 263,885,115</u>
Total liabilities	<u>\$ 403,355,452</u>

PRESENT AND PROSPECTIVE ASSETS

Actuarial value of assets	\$ 274,947,662
Present value of future contributions	
City and member normal contributions	111,014,619
Unfunded accrued liability contributions	<u>17,393,171</u>
Total prospective contributions	\$ 128,407,790
Total assets	<u>\$ 403,355,452</u>

SCHEDULE B (cont'd)**SOLVENCY TEST
(\$ millions)**

Valuation Date	Aggregate Accrued Liabilities For			Reported Assets	Portion of Accrued Liabilities Covered by Reported Assets		
	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)		(1)	(2)	(3)
7/1/04	\$46.7	\$139.5	\$106.1	\$274.9	100%	100%	83.6%
7/1/03	42.5	137.3	98.0	261.0	100	100	82.9
7/1/02	39.7	130.5	95.5	254.0	100	100	87.7
7/1/01	37.7	121.1	96.0	246.6	100	100	91.5
7/1/00*	34.0	123.8	82.0	235.9	100	100	95.2
7/1/99	32.3	87.9	66.7	216.3	100	100	100.0
7/1/98	31.1	79.6	68.7	187.4	100	100	100.0
7/1/97	29.4	73.6	65.1	161.7	100	100	90.2
7/1/96	28.1	68.3	64.8	142.9	100	100	71.7
7/1/95	26.1	63.7	61.9	129.0	100	100	63.4

All figures prior to July 1, 1999 are from the July 1, 1998 actuarial report prepared by the prior actuary.

* Economic and demographic assumptions were changed as of July 1, 2000 due to an experience review. In addition, the asset valuation method was changed.

SCHEDULE C**DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS**

(1)	Actuarial Value of Assets as of July 1, 2003	\$ 261,022,319
(2)	2003/2004 Net Cash Flow	
	(a) Contributions	11,653,184
	(b) Disbursements	<u>14,928,186</u>
	(c) Net Cash Flow	
	(2)a – (2)b	(3,275,002)
(3)	Expected Investment Return [(1) x .0775] + [(2)c x .03875]	20,102,324
(4)	Expected Actuarial Value of Assets as of July 1, 2004 (1) + (2)c + (3)	277,849,641
(5)	Market Value of Assets as of July 1, 2004	263,339,748
(6)	Excess of Market Over Expected (5) – (4)	(14,509,893)
(7)	20% Adjustment Towards Market .20 x (6)	(2,901,979)
(8)	Actuarial Value of Assets as of July 1, 2004 (4) + (7)	\$ 274,947,662
(9)	Rate of Return on Market Value	17.51%
(10)	Rate of Return on Actuarial Value	6.63%

SCHEDULE D
ASSET INFORMATION

Investment Managers	Type of Investment	Percent Allocation
Evergreen Investment Management Company	Value Equity – Large Capitalization	15.1%
Boston Partners Asset Management	Value Equity – Mid Capitalization	9.0%
Investment Counselors of Maryland	Value Equity – Small Capitalization	3.7%
Alliance Bernstein Capital Management	Growth Equity – Large Capitalization	10.0%
Cadence Capital Management	Growth Equity – Mid Capitalization	8.1%
Banc of America Capital Management	Growth Equity – Small Capitalization	3.5%
SSGA S&P 500 Flagship Fund	Large Capitalization	4.6%
Morgan Stanley Dean Witter	International Equity Fund Emerging Markets Equity Fund	13.1% 1.9%
T. Rowe Price International, Inc.	International Equity Fund	3.0%
Metropolitan Life Insurance Company	Real Estate Equity Fund	5.0%
Barrow, Hanley, McWhinney & Strauss	Fixed Income	9.4%
State Street Global Advisors	Fixed Income Index Fund	9.2%
Baring Asset Management	International Fixed Income Fund Emerging Debt Fund	3.0% 0.5%
Internal Management	Money Market	1.0%

	June 30, 2004	June 30, 2003	June 30, 2002
Cash	\$ (848,933)	\$ 526,430	\$ (9,186,275)
Cash Equivalents	6,699,784	6,892,425	15,066,403
Fixed Income Investments	47,824,541	48,349,199	58,935,800
Equity Investments	208,900,164	171,604,466	158,815,054
Other	338,520	355,927	373,334
Accrued Income	319,498	310,373	409,094
Accrued Contributions	438,629	256,099	118,234
Accrued Liabilities/Expenses	<u>(332,455)</u>	<u>(1,158,115)</u>	<u>(520,037)</u>
Total Market Value	\$ 263,339,748	\$ 227,136,805	\$ 224,011,606

SCHEDULE E

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were selected by the Actuary and adopted by the Board April 27, 2000 unless otherwise indicated.

INVESTMENT RATE OF RETURN: 7.75% per year, compounded annually. (adopted 10-26-2000)

SALARY INCREASES: Representative values of the assumed annual rates of salary increases (adopted 10-26-2000) are as follows:

<u>Age</u>	<u>Rate*</u>
20	7.75%
25	7.75
30	7.75
35	7.25
40	6.25
45	4.75
50	4.75
55	4.75

* Includes inflation of 3.75%

SEPARATIONS FROM ACTIVE SERVICE: For death rates, the UP 1994 Male Table was used. Representative values of the assumed annual rates of separation from active service are as follows:

<u>Age</u>	<u>Annual Rate of</u>		
	<u>Withdrawal</u>	<u>Disability*</u>	<u>Death</u>
20	2.0%	0.05%	.0006%
25	2.0	0.05	.0007
30	2.0	0.09	.0009
35	2.0	0.23	.0009
40	1.7	0.41	.0012
45	0.8	0.61	.0017
50		1.00	.0028
55		1.00	.0048

* 65% of the disabilities are assumed to be in the line of duty.

<u>Annual Rate of Retirement*</u>			
<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
50-54	20%	60	20%
55	20	61	20
56	20	62	20
57	20	63	20
58	20	64	20
59	20	65	100

* An additional 30% are assumed to retire at the age when first eligible for unreduced retirement and 100% are assumed to retire after completing 30 years of membership service.

DEATHS AFTER RETIREMENT: The UP 1994 Male Table is used for the period after retirement and for dependent beneficiaries. The same table is used for the period after disability set forward five years.

EXPENSES: 0.75% of payroll.

PERCENT MARRIED: 100% of active members are assumed to be married with the male three years older than his spouse.

ASSETS: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected actuarial value. (adopted 10-26-2000)

VALUATION METHOD: Entry age actuarial cost method (adopted 7-1-98). See Schedule F for a brief description of this method.

SCHEDULE F
ACTUARIAL COST METHOD

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (currently 7.75 per cent), of each member's expected benefits at retirement or death is determined, based on age, service and sex. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.
2. The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.
3. The normal contribution is determined using the entry age actuarial cost method. Under this method, a calculation is made to determine the level percentage of payroll which, if applied for the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.
4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

SCHEDULE G**SUMMARY OF MAIN SYSTEM PROVISIONS
AS INTERPRETED FOR VALUATION PURPOSES**

Member	An employee of the Charlotte Fire Department who is subject to the provisions of the Civil Service Act.
Membership Service Credit	Service for all periods of employment with the Charlotte Fire Department for which contributions have been paid.
Final Average Salary	A member's average monthly compensation for any 2 consecutive years within the last 5 years of membership service.
Accrued Benefit	The monthly amount of retirement benefits earned by a member as of any date computed on his Final Average Salary and Membership Service Credit at that date.
Service Retirement Benefit	
Eligibility	Age 50 and 25 years of membership service credit, age 60 and 5 years of membership service credit or 30 years of membership service credit.
Benefit	Monthly benefit is 2.6% of final average salary multiplied by years of membership service credit. Salary in the final year includes cashed-in vacation and sick days. The minimum monthly benefit is \$902.75.
Early Retirement Benefit	
Eligibility	25 years of membership service credit.
Benefit	Accrued benefit reduced by 3% for each year member is under age 50.
In the Line of Duty Disability Retirement Benefit	
Eligibility	No requirements.
Benefit	78% of final average salary or normal retirement benefit if greater.
Not in the Line of Duty Disability Retirement Benefit	
Eligibility	10 years of service.
Benefit	39% of final average salary plus 1.95% of such salary for each year of membership service credit in excess of 10 years, not less than \$902.75 per month.

**Deferred Vested
Retirement Benefit**

Eligibility

5 years of service. Member contributions not withdrawn.

Benefit

Accrued benefit payable at age 60. A member may choose a refund of contributions with 4% interest in lieu of this benefit.

Termination Benefit

If a member is terminated with less than 5 years of membership service credit, he is entitled to a return of his accumulated contributions.

Death Benefit

If a member dies in service, his beneficiary is entitled to a return of the member's accumulated contributions, plus those contributions made by the City on his behalf, plus interest of 4% per year. May elect to receive actuarial equivalent monthly benefit under the 66-2/3% Joint and Survivor Option.

Optional Forms of Benefit

- (1) 10 year certain and life annuity.
- (2) 100%, 75%, 66-2/3% or 50% joint and survivorship annuity.
- (3) Joint and survivorship annuity with a pop-up provision.

Contributions

The City and the members each contribute 12.65%.

SCHEDULE H**TABLE 1****AGE - SERVICE TABLE**

Distribution of Active Members as of July 1, 2004 by Age and Service Groups

Attained Age	Completed Years of Service									Total
	0	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	> 35	
24 & under	7	36	1							44
Total Pay	217,932	1,222,364	37,284							1,477,580
Avg. Pay	31,133	33,955	37,284							33,581
25 to 29	9	83	38							130
Total Pay	287,196	2,923,544	1,645,124							4,855,864
Avg. Pay	31,911	35,223	43,293							37,353
30 to 34	5	54	74	27	1					161
Total Pay	159,796	1,930,864	3,427,840	1,505,244	65,312					7,089,056
Avg. Pay	31,959	35,757	46,322	55,750	65,312					44,031
35 to 39	2	16	60	38	54					170
Total Pay	64,532	597,428	2,749,500	2,104,700	3,049,800					8,565,960
Avg. Pay	32,266	37,339	45,825	55,387	56,478					50,388
40 to 44		6	19	34	94	27				180
Total Pay		217,152	829,140	1,833,156	5,328,388	1,598,324				9,806,160
Avg. Pay		36,192	43,639	53,916	56,685	59,197				54,479
45 to 49		3	5	14	45	48	16			131
Total Pay		108,316	213,928	777,764	2,457,312	2,874,404	946,920			7,378,644
Avg. Pay		36,105	42,786	55,555	54,607	59,883	59,183			56,326
50 to 54		1	1	3	14	14	26	4		63
Total Pay		30,680	47,580	180,960	781,196	801,840	1,635,140	248,404		3,725,800
Avg. Pay		30,680	47,580	60,320	55,800	57,274	62,890	62,101		59,140
55 to 59				2	5		4	3		14
Total Pay				95,316	256,048		217,256	193,440		762,060
Avg. Pay				47,658	51,210		54,314	64,480		54,433
≥ 60					1				3	4
Total Pay					45,344				302,588	347,932
Avg. Pay					45,344				100,863	86,983
Total	23	199	198	118	214	89	46	7	3	897
Total Pay	729,456	7,030,348	8,950,396	6,497,140	11,983,400	5,274,568	2,799,316	441,844	302,588	44,009,056
Avg. Pay	31,715	35,328	45,204	55,061	55,997	59,265	60,855	63,121	100,863	49,062

TABLE 2
NUMBER OF RETIRED MEMBERS AND BENEFICIARIES
AND THEIR BENEFITS BY AGE

<u>Attained Age</u>	<u>Number Of Members</u>	<u>Total Annual Benefits</u>	<u>Average Annual Benefit</u>
50 & Under	20	\$ 517,344	\$ 25,867
51-55	79	3,054,360	38,663
56-60	104	3,618,456	34,793
61-65	72	2,780,052	38,612
66-70	68	2,518,332	37,034
71-75	37	1,122,624	30,341
76-80	33	829,980	25,151
Over 80	<u>22</u>	<u>446,580</u>	<u>20,299</u>
Total	435	\$ 14,887,728	\$ 34,225

TABLE 3
SCHEDULE OF ACTIVE MEMBER VALUATION DATA

<u>Valuation Date</u>	<u>Number Prior Year</u>	<u>Exits</u>	<u>New Entrants</u>	<u>Number Current Year</u>	<u>Annual Payroll</u>	<u>Annual Average Pay</u>	<u>% Increase in Average Pay</u>
7/1/04	876	17	38	897	\$44,009,056	\$49,062	3.9%
7/1/03	856	29	49	876	41,354,976	47,209	1.4
7/1/02	853	31	34	856	39,848,691	46,552	4.3
7/1/01	780	15	88	853	38,079,024	44,641	5.3
7/1/00	783	35	32	780	33,079,899	42,410	2.3
7/1/99	778	31	36	783	32,462,456*	41,459	11.4
7/1/98	749	30	59	778	28,963,868	37,229	3.6
7/1/97	721	29	57	749	26,922,035	35,944	-0.6
7/1/96	709	25	37	721	26,072,828	36,162	3.7
7/1/95	N/A	N/A	N/A	709	24,723,956	34,872	4.7

Results prior to the 7/1/99 valuation were provided by the prior actuary.

* Reflects all pay raises granted to firefighters effective July 7, 1999.

TABLE 4
SCHEDULE OF RETIRED MEMBERS AND BENEFICIARIES
ADDED TO AND REMOVED FROM ROLLS

<u>Year Ended</u>	<u>Rolls – Beginning of Year</u>		<u>Added to Rolls</u>		<u>Removed from Rolls</u>		<u>Rolls – End of Year</u>		<u>% Increase in Annual Allowances</u>	<u>Average Annual Allowances</u>
	<u>No.</u>	<u>Annual Allowances</u>	<u>No.</u>	<u>Annual Allowances</u>	<u>No.</u>	<u>Annual Allowances</u>	<u>No.</u>	<u>Annual Allowances</u>		
7/1/04	427	\$14,512,752	16	\$ 629,172	8	\$254,196	435	\$14,887,728	2.6	\$34,225
7/1/03	411	13,754,121	23	970,560	7	211,929	427	14,512,752	5.5	33,988
7/1/02	389	12,824,893	29	1,202,320	7	273,092	411	13,754,121	7.2	33,466
7/1/01	394	13,000,973**	11	287,966	16	464,046	389	12,824,893	(1.4)	32,969
7/1/00	377	9,946,747*	28	3,260,650**	11	206,424	394	13,000,973**	30.7	32,997
7/1/99	358	8,882,634	26	950,857	7	119,640	377	9,946,747*	12.0	26,384
7/1/98	337	8,199,997	24	762,314	3	79,677	358	8,882,634	8.3	24,812
7/1/97	321	7,602,561	22	698,791	6	101,335	337	8,199,997	7.9	24,332
7/1/96	307	7,046,272	19	616,589	5	60,300	321	7,602,561	7.9	23,684
7/1/95	298	6,552,767	18	613,085	9	119,580	307	7,046,272	7.5	22,952

Results prior to the 7/1/99 valuation were provided by the prior actuary.

- * Includes 8.33% benefit adjustment effective July 1, 1998 for members retired prior to July 1, 1989.
- ** Includes ad hoc benefit adjustments granted since the previous valuation.