Comprehensive Annual Financial Report of the Charlotte Firefighters' Retirement System -A Component Unit of the City of Charlotte, North Carolina



For the Fiscal Years Ended June 30, 2013 and 2012

COMPREHENSIVE ANNUAL FINANCIAL REPORT OF THE CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM – A COMPONENT UNIT OF THE CITY OF CHARLOTTE, NORTH CAROLINA

FOR THE FISCAL YEARS ENDED JUNE 30, 2013 AND 2012

BOARD OF TRUSTEES

Kurt R. Hollar, Chairman of the Board, Citizen Appointee
F. Traylor Renfro, Vice Chairman, Citizen Appointee
Scott L. Greer, Treasurer, Ex-Officio
A. Scott King, Secretary, Elected Member
Cheryl L. Brown, Ex-Officio
Lydia F. Crutchfield, Citizen Appointee
Bobby W. Davis, Elected Retiree
Greg C. Gaskins, Ex-Officio
Kevin S. Gordon, Elected Member
Kenneth E. Levine, Citizen Appointee
Tim R. Ramsey, Elected Member

Prepared by the Charlotte Firefighters' Retirement System Staff Sandra J. Thiry, Interim Administrator

WHERE TO WRITE FOR INFORMATION

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Charlotte Firefighters' Retirement System Charlotte, North Carolina

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CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM

428 East Fourth Street • Suite 205 • Charlotte, North Carolina • (704) 336-4431 • Fax (704) 336-6101

March 10, 2014

Honorable Board, Members of the City Council of Charlotte, North Carolina, and Charlotte Firefighters' Retirement System Participants:

The Component Unit Financial Report ("Report") of the Charlotte Firefighters' Retirement System ("System") for the fiscal year ended June 30, 2013 is submitted herewith. The Board and the System's staff are responsible for the preparation and presentation of the financial information and all other data contained herein, and believe that the Report is based on accounting principles generally accepted in the United States of America, presents fairly and consistently the System's financial position and results of operations and conforms to the standards of governmental accounting and financial reporting principles as promulgated by the Governmental Accounting Standards Board (GASB). The Report consists of five sections:

- (1) <u>Introductory Section</u> which contains this Letter of Transmittal and general information regarding the system;
- (2) <u>Financial Section</u> consisting of the Independent Auditors' Report, audited financial statements and the accompanying notes to the financial statements, and required supplementary information and schedules which includes Management's Discussion and Analysis pursuant to GASB Statement No. 34;
- (3) <u>Investment Section</u> which contains supportive documentation related to the System's investments;
- (4) <u>Actuarial Section</u> which contains the consulting actuary's opinion and the results of the annual actuarial valuation report, as of July 1, 2013; and
- (5) <u>Statistical Section</u> which contains financial trends and information on investment policy and performance results and other statistical information which may be of interest to readers.

HISTORY

The System was organized pursuant to Chapter 926 of the 1947 Session Laws, as amended, of the State of North Carolina, and is officially known as the Charlotte Firefighters' Retirement System Act ("Act"). The System was established on the fifth day of April 1947, for the purpose of providing retirement and permanent and total

disability benefits to the uniformed members of the Fire Department of the City of Charlotte. The stated purpose of the System was amended on the 29th day of June 1987, to provide survivor benefits to named beneficiaries as an added objective. In 2002, the Act was amended to provide for acceptance of various rollover funds for member purchases of prior military, prior government and withdrawn service credit. In 2013, a new Letter of Determination from the Internal Revenue Service was received affirming the tax-qualified status of the System.

ADMINISTRATION OF THE SYSTEM

The administration and responsibility for the proper operation of the System is vested with the System's Board ("Board"), which is comprised of the following trustees as defined by the Act: (a) a Mecklenburg County resident who is appointed by the Resident Judge of the Superior Court of Mecklenburg County as Chairman of the Board for a three year term; (b) three Mecklenburg County residents who are appointed by the Resident Judge of the Superior Court of Mecklenburg County as trustees for three year staggered terms which results in the appointment of one trustee each year; (c) the City Manager, who serves by virtue of his position, or some other City department head or employee as designated by the City Manager; (d) the City Finance Director, who serves by virtue of his position, or a deputy finance director as designated by the Finance Director; (e) the City Treasurer who serves by virtue of his position; (f) three members of the System who are elected by the membership of the system as trustees for three year staggered terms which results in the election of one trustee each year; and (g) one retiree of the System who is elected by the retirees of the system for a term of three years.

The current Board is listed on the title page of this report. Ken Levine, Citizen Trustee, resigned effective June 30, 2013.

COMMITTEES

The Board operationally functions under a committee structure. An investment committee and a benefits committee are annually appointed by the Chairman of the Board to monitor, fact-find and recommend actions for the Board's consideration. Although not required, the committees have generally been comprised of at least three trustees with one committee member being a citizen appointee, another an elected member, and the other an ex-officio (i.e., City official) trustee. During the past fiscal year, F. Traylor Renfro, Appointed Citizen Trustee, served as Chair of the Investment Committee. Bobby W. Davis, Elected Retiree Trustee, served as Benefits Committee Chair. Other committees may be appointed for specific projects by the Board Chair on an ad hoc basis.

PROFESSIONAL SERVICES

The Board employs the services of various professionals to aid it in its fiduciary responsibility for the effective and prudent management of the System. These professionals include: (a) a full-time Administrator who is responsible for the supervision

of System staff and administration and coordination of all System operations and activities in accordance with the rules and regulations of the Act and the policies and direction of the Board; (b) the City Attorney and his staff serve as the legal advisor to the Board although additional outside legal counsel may be engaged by the Board from time to time for specialized services; (c) a consulting actuary who is engaged by the City of Charlotte to perform such studies and evaluations of the System as may be necessary and/or desirable in connection with the System's administration and funding, including preparation of the Annual Actuarial Valuation to determine the adequacy of the funding of the retirement benefit liabilities accrued by System members); (d) an independent auditor engaged by the Board on an annual basis to determine whether the financial statements present fairly, in all material respects, the financial position of the System and the results of its yearly operations in conformity with generally accepted accounting principles; (e) a Medical Board appointed by the Board to review and evaluate medical evidence and propose recommendations regarding disability retirements; and (f) investment management professionals employed to invest the system's assets consistent with the objectives and direction of the Board. The Board may engage other professionals with expertise in various fields for specific services as deemed necessary.

The System's investment performance is monitored on a continuous basis to ensure that the objectives and direction of the Board are being fulfilled. The investment consulting firm of Callan Associates, Inc. has been employed since 1987 to assist the Board to fulfill this obligation and providing other investment consulting services. All of the advisors, consultants and providers of professional services to the System are listed on <u>Page 10</u>. Information related to investment fees may be found on <u>Page 54</u>.

FINANCIAL REPORTING

An annual report of the financial and actuarial condition of the System is prepared and submitted to the City Council. The annual report to City Council contains, but is not limited to, the auditors' opinion, statements contained in the auditors' report, a summary of the annual actuarial valuation and the actuary's valuation certification. Additionally, a copy of the annual report to City Council is provided to each of the fire stations and fire department administrative offices of the City of Charlotte.

MAJOR INITIATIVES

During the year, as its primary duty, the Investment Committee spent considerable time reviewing the performance of all existing managers. The Committee met in person with each manager. As a result of continuing global market and economic volatility, the Committee had in-depth discussions with managers and the investment consultant to maintain the asset allocation and target diversification of the portfolio and to review risk management policies. The Committee conducted a periodic review of the Policy Statement of Investment Goals, Objectives and Guidelines and made no recommendation for revisions to the Board. No significant changes were made to the asset allocation or strategy. The previous Real Estate manager was replaced as was the Mid Cap Growth manager. The Investment Committee also received periodic reports during the year on the success of the securities class action litigation monitoring efforts and on some significant recoveries as the result of such litigation settlements. The volume of new class actions has dropped considerably over the past two years and the stream of recoveries has dropped by approximately 33% from Fiscal 2012 to Fiscal 2013.

Issues will continue to be examined by the Investment Committee on both a proactive and reactive basis to assure continued success as well as continued commitment to a well-diversified portfolio and strategic asset allocation. The total portfolio investment return for the year ended June 30, 2013 of 14.82% exceeded the assumed return rate of 7.75% by 707 basis points and reflected the continuing volatility of the global markets and economic conditions. Detailed information concerning the System's investments may be found in the *Investment Section* beginning on <u>Page 39</u>.

The Benefits Committee had a relatively quiet year and had a reduced meeting schedule due to lack of business to conduct during the year. The actuarial audit previously approved by the Board has been delayed. The System received its Letter of Determination from the Internal Revenue Service. The Committee started discussions regarding the impact of GASB 67 and 68 on the funding policy.

The Arrivos pension administration system was fully in use during this fiscal year with occasional minor issues identified and resolved during the year. Arrivos should continue to improve data availability, operations and the services provided to members as the database grows. It has reduced the time to prepare estimates and service purchase requests from members.

FINANCIAL INFORMATION

The System's internal control structure is designed to provide reasonable, but not absolute, assurance for the safeguarding of assets against loss from theft or unauthorized use and to ensure the reliability and adequacy of the accounting records. The concept of reasonable assurance recognizes that: (1) the cost of a control should not exceed the benefits likely to be derived, and (2) the valuation of costs and benefits requires estimates and judgment by management. Accounting data are maintained in a manner suitable for preparing financial reports in conformity with generally accepted accounting principles and for providing accurate and timely data to the City Council, Board, participants of the System, citizens and other interested parties.

Budgetary Controls

The North Carolina General Statutes require the adoption of an annual budget for all funds except those for which expenditures are authorized by project ordinance, fiduciary funds and internal service funds. The System is a fiduciary fund and is therefore exempt from budgetary requirements. However, the Board considers and adopts a budget for each current fiscal year of operations and receives a quarterly budget report from the Administrator.

Accounting and Actuarial Systems

The financial reports of the System are prepared in accordance with generally accepted principles of governmental accounting and reporting pronounced by the Governmental Accounting Standards Board. The accrual basis of accounting is used to record assets and liabilities, and revenues and expenses. Revenues and expenses are recorded when earned or incurred, regardless of collection or disbursement. Capital assets are recorded at cost and depreciated through charges to expense over the estimated useful lives of the assets. The system is funded on the entry age normal cost method, which means that the "annual required contribution" is comprised of two elements which are the current or "normal" cost for the year and a contribution to reduce the unfunded accrued liability.

Revenues and Funding

Revenues essential to the sound funding of the System flow from three sources:

Contributions by Members: A System member contributes an amount equal to the member's compensation multiplied by the current contribution rate of 12.65%. These contributions are made on a tax-deferred basis. The contributions are posted to individual accounts for each member. The accumulated amount in each account is used for the member's benefit if he or she remains in service. If the member leaves service, he or she may withdraw the amount of his or her accumulated contribution. A member with five or more years of membership service receives interest on his or her contributions if a refund is requested. A member may, if he or she has five or more years of membership service, choose to elect a deferred annuity providing lifetime income commencing at age 60.

Contributions by the City of Charlotte: The City of Charlotte matches the payroll contributions of the members. The difference between the aggregate City and Member contributions is due to service purchases made by members that are not matched by the City and by City contributions for those members away on military deployments during which they are not required to make contributions.

Investment Income: Investment income is the third source of System revenues and must be regarded as both a vital and major contributor to funding and assists the Board and the City of Charlotte to provide for the future security of the System's participants. Statutorily, since 1947, the Board has exercised responsibility for investing the System's assets in a prudent and discretionary manner. The Chairman of the Board appoints an Investment Committee that has the responsibility for oversight of the investment of the System assets in accordance with the Policy Statement of Investment Goals, Objectives, and Guidelines as established by the Board. The reader of this Report should note that year-to-year investment income variation is a function of appreciation and depreciation of stocks and the subsequent realization of gains or losses on the sale of investments and is not necessarily reflective of investment performance.

The primary concern for a retirement system is the level of funding. High funding percentages are directly related to benefit security for participants. It is the responsibility of the Board to make prudent and sound investment decisions in order to increase the assets and thereby the funding level of the System. The Board has a goal of maintaining the funding of the System at or near 100%. Due to global market volatility and prior years of financial market declines, decreased investment returns resulted in a funding level at July 1, 2013 of 84.4%, down from 85.0% as of July 1, 2012. A more complete discussion of System funding status may be found in the *Actuarial Section* beginning on <u>Page 57</u>.

Expenses

The primary expense of the System relates to the purpose for which it was created, namely, the payment of benefits to retirees and their beneficiaries. Benefit payments to retired participants and beneficiaries, and refunds to terminated members were responsible for 97.3% of all deductions from plan assets, compared to 97.5% for the prior year. Administrative costs and depreciation accounted for 2.7% of deductions from plan assets for fiscal year 2013, compared to 2.5% for the prior year. This is primarily the result of no disability retirement cases during the past year. A more detailed discussion of System expenses may be found in the *Financial Section* beginning on <u>Page 15</u>.

The reader may also obtain additional information in *Management's Discussion* and *Analysis* beginning on <u>Page 17</u>.

OTHER INFORMATION

Independent Audit

Pursuant to North Carolina law, the System is required to undergo an annual audit by a certified public accountant. The Board has selected the independent certified public accounting firm of Cherry Bekaert LLP to provide these services. The auditors' report on the financial statements and required supplementary information is included in the *Financial Section*.

Awards and Acknowledgments

The Government Finance Officers Association of the United States and Canada (G.F.O.A.) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Charlotte Firefighters' Retirement System for its comprehensive annual financial reports for the fiscal years ended June 30, 1995 - 2001 and June 30, 2003 - 2012. (The

System did not submit its June 30, 2002 report.) The Certificate of Achievement is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government financial reports. A Certificate of Achievement is valid for a period of one year only.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report or CAFR, whose contents conform to program standards. Such CAFR must satisfy both generally accepted accounting principles and applicable legal requirements.

The compilation of this Report is intended to provide complete and reliable information regarding the stewardship for the funds contributed by the members of the System and the City of Charlotte.

Several individuals assisted with the preparation of this report and we wish to acknowledge their efforts and assistance. H. Lee Madden, Consultant ; City Finance Staff, Teresa Smith, Chief Accountant, Kathy Pond, Financial Reporting Supervisor and Peggy Riblett, Staff Accountant all contributed many hours to insure the quality and completeness of this report.

We hope that this year's report will be of interest to you and will be helpful in understanding, evaluating, and assuring the continued success of the Charlotte Firefighters' Retirement System.

Respectfully Submitted,

F. Traylor Renfro, Chairman of the Board

Sendra Hury

Sandra J. Thiry, Interim Administrator

CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM CHARLOTTE, NORTH CAROLINA

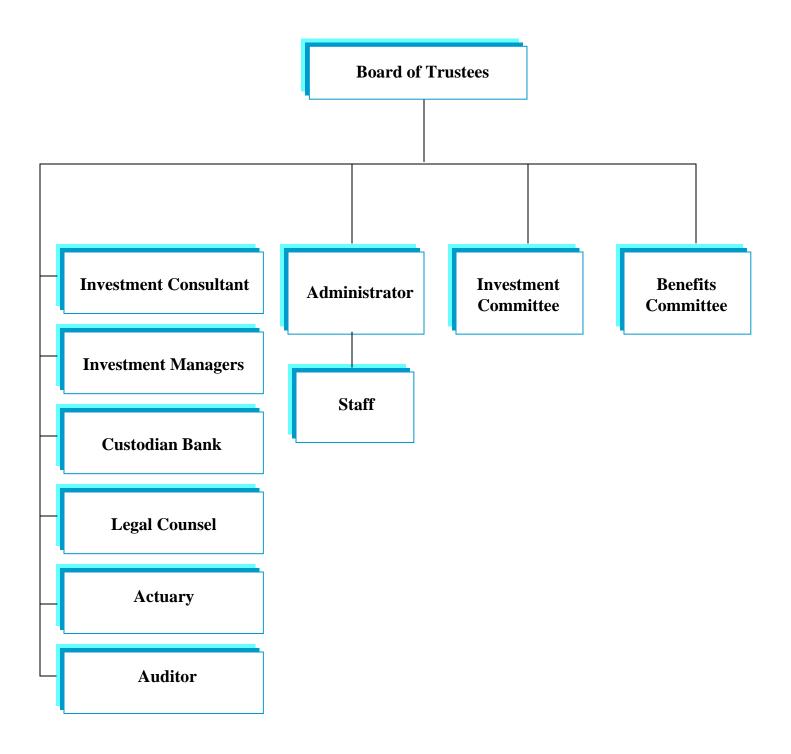
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STAFF

Sandra J. Thiry, Interim Administrator Kaisha Barron, Analyst Tyralyn Phelps, Office Assistant

CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM ORGANIZATIONAL CHART



PROFESSIONAL SERVICE PROVIDERS TO THE CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM

ACTUARY

Cavanaugh Macdonald Consulting, LLC

CUSTODIAN BANK

State Street Bank and Trust Company, NA

INDEPENDENT AUDITORS

Cherry Bekaert LLP, Raleigh, NC

INVESTMENT ADVISORS

Aronson + Johnson + Ortiz, L.P., Domestic Equities Baring Asset Management, Inc., Non-U.S. Fixed Income Barrow, Hanley, Mewhinney & Strauss, Inc., Core Plus Domestic Fixed Income BlackRock Realty, Real Estate UBS Realty Investors LLC, Real Estate Robeco Investment Management, Domestic Equities Cadence Capital Management, Domestic Equities D. E. Shaw Investment Management, L.L.C., Domestic Equities Eagle Asset Management, Domestic Equities Investment Counselors of Maryland, Domestic Equities Morgan Stanley, Non-U.S. Equities State Street Global Advisors, Domestic Fixed Income Index & Equities Index T. Rowe Price International, Inc., Non-U.S. Equities Winslow Capital Management, Inc., Domestic Equities

INVESTMENT CONSULTANT

Callan Associates, Inc.

MEDICAL ADVISORS

CMC-NorthEast Medical Center, Concord, North Carolina

CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM SUMMARY OF PLAN PROVISIONS

1. Eligibility for Membership

Membership is mandatory for all employees of the Charlotte Fire Department who are subject to the provisions of the Civil Service Act.

2. Normal Service Retirement

A member may elect to retire at any time after attaining age 50 with 25 or more years of service, age 60 with 5 or more years of service or at any age with 30 or more years of service.

3. Normal Service Retirement Benefit

A member receives 2.6% of final average salary per year of credited service not to exceed the limit imposed by Section 415 of the IRS Code. Final average salary is defined as the average monthly pay during the highest paid consecutive 24 months during the final 60 months of service.

4. Early Retirement

A member may retire early before age 50 at any time after completion for 25 years of membership service.

5. Early Retirement Benefit

The early retirement benefit is calculated in the same manner as for normal service retirement, but reduced by .25% for each month the early retirement date precedes age 50.

6. Disability Retirement Benefits

(a) <u>In Line of Duty</u> No minimum age or service requirements. Disability retirement benefits are the greater of 78% of final average salary determined as of date of total and permanent disability incurred in the line of duty or 2.6% of final average salary times membership service. (b) <u>Not In Line of</u> <u>Duty</u> Payable in the event of total and permanent disability after 10 years of service. Disability retirement benefit is 39% of final average salary, plus 1.95% of such salary for each year of service in excess of 10 years, maximum benefit not to exceed the limits imposed by Section 415 of the IRS Code determined as of date of disability.

7. Retirement Bonus Payment

A retiree may receive an annual bonus payment in the month of January following an annual actuarial valuation when the actuary recommends such a payment and provides the Board with a fiscal note which evaluates the effect of such a payment on the system's funded status. A retiree must have been retired for at least one year as of December 31 in order to be eligible for a bonus payment.

8. Benefit Upon Termination of Employment

(a) <u>Less Than 5 Years</u> Lump-sum distribution of member's contributions.

(b) <u>5 Or More Years</u> Normal service retirement benefits payable at age 60 or lump sum distribution of member's contribution plus interest compounded at 4.0 % per plan year of participation.

9. Death Benefits

(a) <u>Prior to Retirement</u> Member's contributions, plus those made by City on his or her behalf, together with interest at 4.0 % per year, are payable to the named beneficiary in a lump sum or annuity. Under certain conditions, the beneficiary may elect to receive an actuarial equivalent monthly benefit under the 66 2/3% Joint and Survivor Option.

(b) <u>After Retirement</u> Pre-retirement death benefit as of date of retirement, less any retirement benefits already

CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM SUMMARY OF PLAN PROVISIONS

received, is paid to retiree's named beneficiary.

10. Optional Benefits (Other Than Lifetime Benefits) All optional benefits are actuarially equivalent to lifetime retirement benefits.

Option 1 - 10 Years Certain and Life <u>Thereafter</u> Reduced lifetime monthly benefit to member. If member dies within 10 years following retirement, benefit continues to the named beneficiary for balance of 10 year period.

Option 2 - 100% Joint & Survivor

Reduced monthly lifetime benefit which continues after retiree's death to the designated beneficiary for beneficiary's lifetime.

<u>Option 3 - 75% Joint & Survivor</u> Similar to Option 2, but 3/4 of retiree's

benefit continues to the designated beneficiary after retiree's death.

<u>Option 4 - 66 2/3% Joint & Survivor</u> Similar to Option 2, but 2/3 of retiree's benefit continues to the designated beneficiary after retiree's death.

Option 5 - 50% Joint and Survivor

Similar to Option 2, but 1/2 of retiree's benefit continues to the designated beneficiary after retiree's death.

<u>Option 6</u> A retiree may elect any of the Options 2-5 with an added provision which allows the benefit to revert to the amount of the lifetime benefit (preoption reduced amount) in the event the beneficiary predeceases the retiree.

11. Requirements for Electing Optional Benefits

Any of the options may be elected at any time between 30 and 90 days prior to early or normal retirement. A disability retiree may elect to receive the benefit under Option 5, subject to approval by the Board of the disability retirement application.

12. Purchase of Membership Service Credit for Prior Active Military Duty

Up to five years of additional service may be purchased upon completion of 5 years in the CFRS, for active duty served prior to CFRS membership. This service may be used to qualify for normal service retirement, but not early retirement.

13. Return from Active Military Duty

Membership service credit is granted to a member who returns to CFRS membership from active duty served during any period of national emergency condition or entry at any time through the operation of the compulsory military service law of the United States of America.

14. Accumulated Sick Leave and Vacation at Retirement

Membership service is credited for the balance of any unpaid sick leave and/or vacation at the time of retirement. Also, a member receives the inclusion of the amount of lump sum payoff at retirement for any vacation and/or sick leave attributable to the member's period of final average salary.

15. Purchase of Membership Service for Prior Government Service Up to five years of additional service may be purchased upon completion of 5 years of service in the CFRS, for prior

CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM SUMMARY OF PLAN PROVISIONS

service with another government employer. 50% of prior government service may be purchased up to the maximum. The cost of such service is calculated at full actuarial cost and may be used to qualify for normal service requirement but not early retirement.

16. Purchase of Membership Service for Withdrawn Service

Prior service with the Charlotte Fire Department and contributions withdrawn from the CFRS may be purchased in total at full actuarial cost upon completion of 5 years of service in the CFRS.

This summary of plan provisions is intended for information purposes and is in no way intended to supplant or replace the language of the Charlotte Firefighters' Retirement System Act which is the controlling document relating to benefits and any disputes regarding same. The CFRS Act should be reviewed prior to applying for or selecting benefits from the system.



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Independent Auditors' Report

Board of Trustees Charlotte Firefighters' Retirement System Charlotte, North Carolina

Report on the Financial Statements

We have audited the accompanying financial statements of the Charlotte Firefighters' Retirement System (the "CFRS"), a component unit of the City of Charlotte, North Carolina, as of and for the years ended June 30, 2013 and 2012, and the related notes to the financial statements, which collectively comprise the CFRS' basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the CFRS' preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the CFRS' internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the CFRS as of June 30, 2013 and 2012 and the respective change in its financial position for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis and the Required Supplementary Information as listed in the table of contents be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary and Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the CFRS' basic financial statements. The Supplementary Schedules as listed in the table of contents are presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Supplementary Schedules are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The introductory, investment, actuarial and statistical sections and glossary of terms as listed in the table of contents have not been subjected to the auditing procedures applied in the audit of basic financial statements, and accordingly, we do not express an opinion or provide assurance on them.

Kondunt LLP Cheum

Raleigh, North Carolina March 10, 2014

MANAGEMENT'S DISCUSSION AND ANALYSIS

This section presents Management's Discussion and Analysis of the Charlotte Firefighters' Retirement System's ("System") financial statements and the significant events, conditions and decisions which affected the operations and performance of the CFRS during the years ended June 30, 2013 and 2012.

Overview of the Financial Statements and Accompanying Information

- 1) <u>Fund Financial Statements.</u> The System presents Statements of Plan Net Position as of June 30, 2013 and 2012 and Statements of Changes in Plan Net Position for the years then ended. These statements reflect resources available for payment of benefits as of year-end and the sources and uses of those funds during the year. For purposes of discussion and analysis, the condensed information shown below includes three fiscal years.
- 2) <u>Notes to the Financial Statements.</u> The notes to the financial statements are an integral part of the financial statements and have additional detailed information to provide a better understanding of the financial statements. Information in the notes discloses the System organization, benefits and contributions, how the asset values are determined, contingencies and commitments.
- 3) <u>Required Supplementary Information.</u> The required supplementary information consists of a schedule concerning the funding status of the System, employer contributions and this Management's Discussion and Analysis.
- 4) <u>Other Supplementary Schedules.</u> Other schedules include detailed information on administrative expenses incurred by the System, a schedule of investment manager fees by asset class and fees paid to consultants for professional services.

	(in thousands)		
	Y	Years ended June 3	0
	2013	2012	2011
Cash and Cash equivalents	\$ 18,772	\$ 6,209	\$ 4,622
Investments	388,773	356,263	361,240
Capital assets	262	311	364
Other assets	941	654	921
Total assets	408,748	363,437	367,147
Liabilities	(1,251)	(1,045)	(1,077)
Net Position	\$407,497	\$362,392	\$366,070

Comparative Statements of Plan Net Position

Comparative Statements of Changes in Plan Net Position

(in thousands)

	Years ended June 30					
	2013	2012	2011			
Contributions	\$ 16,420	\$ 16,094	\$ 15,958			
Net Investment Gain/(Loss)	51,854	2,434	75,299			
Total Additions/(Loss)	68,274	18,528	91,257			
Benefits	(22,423)	(21,135)	(20,080)			
Other deductions	(746)	(1,071)	(792)			
Total Deductions	(23,169)	(22,206)	(20,872)			
Change in Net Position	\$ 45,105	\$ (3,678)	\$ 70,385			

Financial Analysis

The CFRS provides retirement benefits to the uniformed firefighters of the City of Charlotte. The System benefits are funded through member and employer contributions and investment income. As reflected in the Comparative Statements of Changes in Plan Net Position on *Page 22*, the net position of the System increased approximately \$45.1 million in the year ended June 30, 2013, decreased approximately \$3.7 million and increased \$70.4 million during the years ended June 30, 2012 and June 30, 2011 respectively. These results reflect the extremely volatile market environment since the preceding several years of positive results, intense global economic issues in financial markets and the improving market conditions of the past year.

Funded Ratio

The funded ratio of the plan measures the ratio of actuarially determined assets against actuarial liabilities and is a good indicator of the fiscal strength of a pension fund's ability to meet obligations to its members. The System is required by the Act to perform an annual actuarial valuation. The valuation as of July 1, 2013 showed the funded status of the System decreasing to 84.4% from 85.0% at July 1, 2012 and 89.5% at July 1, 2011. The System valuations use a 5-year smoothed market basis. The System had an unfunded liability of \$70.3 million, \$64.7 million and \$42.8 million for the years ended June 30, 2013, 2012 and 2011, respectively. The decrease in the funded ratio was principally due to lower returns across all global markets as a result of the depressed global economy of the past several years and slow, volatile recovery during the past two years.

Contributions and Income

Additions to Plan Net Position include employer and member contributions and net income from investment activities. Member contributions were approximately \$8.3 million, \$8.3 million and \$8.3 million for the years ended June 30, 2013, 2012 and 2011, respectively, an annual decrease of \$54,000 and an increase of \$86,000 over the past two fiscal years. The member rate is 12.65% of eligible compensation, set by statute and made on a tax-deferred basis. The employer rate is set at 12.65% by statute to equally match that of members. Employer contributions were approximately \$8.1 million, \$7.7 million and \$7.7 million for the years ended June 30, 2013, 2012 and 2011, respectively. The variances between employer and member contributions may be attributed to significant prior government and military service purchases made by members and contributions not made by members who have been placed on military deployment during the past years.

Net investment gains of approximately \$51.9 during fiscal 2013, \$2.4 million during fiscal 2012 and \$75.3 million during fiscal 2011, resulted in returns of 14.82%, 1.14% and 26.22%, respectively as measured by Callan Associates, Inc. The positive returns in investment income in 2013 were the result of improving global equity market conditions combined with low rates for fixed income securities. The System outperformed its composite benchmark on a relative basis by 116 basis points and the Callan Public Fund Sponsor Database median return by 283 basis points. For the 5-year period ended June 30, 2013, the System returns were 5.60% compared to its composite benchmark returns of 5.54% and its actuarial assumed rate of return of 7.75%.

The most significant deduction from investment income is investment manager fees. The System's assets are managed 100% by external investment advisors hired by the Board of Trustees. Many of these managers are paid a fee based on the assets under management. Some of the active managers are paid a base fee plus the possibility of performance incentive. Some of the managers were generally compensated less than in prior years because of the effect of lower asset values during most of the year. Further, some performance fees were payable during the year for prior out-performance. Investment expenses for the years ended June 30, 2013, 2012 and 2011 were approximately \$2.1 million, \$1.9 million and \$1.9 million, respectively.

Prudent investment of the System's assets, diligent monitoring of investment advisors and a commitment to periodic allocation rebalancing in addition to conservative administrative costs has enabled the System to maintain a high funded status. The Board of Trustees is committed to maintaining the System at or near 100% funding and will dedicate its efforts to that goal.

Benefits, Refunds and Expenses

The most significant recurring deduction to Plan Net Position is benefit payments. During fiscal 2013, the System paid approximately \$22.6 million, up from \$21.6 million in fiscal 2012 and \$20.3 million in fiscal 2011, in benefits and refunds. The increased level of payments in fiscal year 2013 was due primarily to new retirements. The System does not provide an automatic Cost of Living Adjustment (COLA). Due to the funding ratio of the System, the Board of Trustees was unable to provide a bonus payment for retirees and beneficiaries receiving benefits as of January 1, 2012.

The administrative costs of the System represented approximately .14% of the net ending assets in fiscal year 2013, virtually the same over the past two fiscal years.

Plan Assets

During fiscal year 2013, investments allocated to domestic and international equity portfolios increased approximately \$35.6 million, after experiencing a decrease of \$9.0 million and an increase of \$66.4 million in fiscal years 2012 and 2011, respectively. The increase is attributable to the recovery. The System does not invest in alternative classes of investments such as hedge funds, venture capital and private equity. It also does not have a securities lending program at this time. During fiscal years 2013, 2012 and 2011, investments allocated to domestic and non-U.S. fixed income decreased approximately \$0.8 million, and increased \$3.4 million and \$2.9 million, respectively. These results are attributable to investment results and continuing volatility of global bond markets combined with historically low interest rates and global currency issues during this period.

The System values its assets at "fair value" as discussed in accounting policies footnote 2(d) (*Page 27*) to the financial statements. Fair value is the value the System expects to receive in a current sale between a willing buyer and a willing seller that are equally motivated; that is, other than a forced or liquidation sale. The value of publicly traded securities, stocks and bonds, are determined using the latest quote from national exchanges or pricing services. These prices reflect the securities' pricing at the close of business and can be affected by such factors as liquidity, current events and the size of lots being traded. Real Estate is valued using appraisal values by approved appraisers who meet professional qualifications. The appraisal process

involves a significant amount of judgment and estimates. As a result, the ultimate value on the sale of the asset may differ from the appraised value. The System terminated an open-end commingled real estate investment trust (REIT) and hired a manager with a core equity real estate portfolio for its real estate investment allocation. The new manager has been partially funded. Additional funds will be allocated in Fiscal 2014. In addition, the System replaced the Mid Cap Growth manager.

Contacting the CFRS Management

This financial report is designed to provide the City Council, participants of the System, citizens, taxpayers and other interested parties with an overview of its operations and financial position and to demonstrate its accountability. Questions concerning this report or requests for additional information should be directed to the Interim Administrator, Charlotte Firefighters' Retirement System, 428 East 4th Street, Suite 205, Charlotte, NC 28202.

CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM, A COMPONENT UNIT OF THE CITY OF CHARLOTTE, NORTH CAROLINA COMPARATIVE STATEMENTS OF PLAN NET POSITION (In Thousands)

	Jun	e 30
	2013	2012
ASSETS:		
Cash and cash equivalents	\$ 18,772	\$ 6,209
Receivables:		
Employer contributions	157	145
Member contributions	150	143
Interest and dividends	634	366
Total receivables	941	654
Investments, at fair value:		
Equity securities - stocks	160,330	133,794
Fixed income securities - bonds	60,875	41,347
Mutual funds	167,568	181,122
Total investments	388,773	356,263
Capital assets, at cost, net of accumulated depreciation		
of \$333 - 2013 and \$284 - 2012	262	311
Total assets	408,748	363,437
LIABILITIES:		
Accounts payable	1,251	1,045
NET POSITION HELD IN TRUST FOR PENSION		
BENEFITS	\$407,497	\$362,392

The notes to the financial statements are an integral part of this statement.

CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM, A COMPONENT UNIT OF THE CITY OF CHARLOTTE, NORTH CAROLINA COMPARATIVE STATEMENTS OF CHANGES IN PLAN NET POSITION (In Thousands)

	Years Ended June 30		
	2013	2012	
ADDITIONS:			
Contributions:			
Member	\$ 8,320	\$ 8,374	
Employer	8,100	7,720	
Total contributions	16,420	16,094	
Investment income:			
Net appreciation (depreciation) in fair value of investments	47,652	(1,481)	
Interest	1,522	1,449	
Dividends	4,789	4,326	
	53,963	4,294	
Less investment expense	2,109	1,860	
Net investment income	51,854	2,434	
Total additions	68,274	18,528	
DEDUCTIONS:			
Benefits	22,423	21,135	
Refunds	128	505	
Administration	569	517	
Depreciation	49	49	
Total deductions	23,169	22,206	
Change in net assets	45,105	(3,678)	
Net position - beginning	362,392	366,070	
Net position - ending	\$407,497	\$362,392	

The notes to the financial statements are an integral part of this statement.

1. PLAN DESCRIPTION:

The Charlotte Firefighters' Retirement System (the System), a single-employer, defined benefit plan, was organized pursuant to the 1947 Session Laws of the State of North Carolina, for the purpose of providing retirement, disability and death benefits to civil service employees of the Charlotte Fire Department. Membership is mandatory at the date of employment. The System is administered by a Board of Trustees. The City of Charlotte's (City) payroll for members covered by the System for the year ended June 30, 2013 and 2012 was \$63 million and \$61 million, respectively.

At June 30, the System's membership consisted of:

	2013	2012
Retired participants and beneficiaries		
currently receiving benefits	546	522
Terminated participants and beneficiarie	s	
entitled to benefits but not yet		
receiving benefits	5	6
Active participants	1,026	1,028
Total	<u>1,577</u>	<u>1,556</u>

Benefits vest after five years of credited service. The requirements for normal service retirement are: (a) any age with 30 years of service credit, (b) age 50 with 25 years of service credit, or (c) age 60 with 5 years of service credit. The normal service retirement monthly benefits are 2.6 percent of final average salary multiplied by the years of credited service. Salary in the final year includes portions of cashed-in vacation and sick days. Final average salary is the monthly average received by the member during any 2 consecutive years of membership which produces the highest average and is contained within the last 5 years of membership. The minimum monthly benefit is \$902.75. Members less than age 50 may elect early retirement with 25 years of service credit. Early retirement benefits are reduced by 3 percent for each year the early retirement date precedes age 50.

If an employee ceases employment with less than 5 years of service credit, accumulated employee contributions are refunded to the employee or designated beneficiary. After 5 or more years of service, the employee may elect to receive a refund of the employee's accumulated contributions with interest compounded annually at 4 percent or receive an accrued benefit at age 60.

Death and disability benefits are also available. Benefit and contribution provisions are established by State law and may be amended only by the North Carolina legislature.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

a. Basis of Presentation

The System provides services exclusively to the City; therefore, the System is included as a blended component unit and reported as a Fiduciary Pension Trust Fund in the City's basic financial statements.

The financial statements are presented in accordance with Governmental Accounting Standards Board (GASB) Statement No. 25, <u>Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans</u>, as amended by GASB Statement No. 50, <u>Pension Disclosures</u>, which establish reporting standards for defined benefit pension plans of state and local government entities. The System implemented GASB Statement No. 63, <u>Financial Reporting of Deferred Outflows of Resources</u>, Deferred Inflows of Resources, and Net Position, and Statement No. 65, <u>Items Previously reported as Assets and Liabilities</u>, in the fiscal year ending June 30, 2013. In accordance with GASB Statement 63, the Statement of Plan Net Assets has been replaced with the Statement of Plan Net Position. Items on the Statement of Plan Net Position are now classified into Assets, Liabilities and Net Position Held in Trust for Pension Benefits.

GASB Statement No. 9, <u>Reporting Cash Flows of Proprietary and Nonexpendable</u> <u>Trust Funds and Governmental Entities That Use Proprietary Fund Accounting</u>, as amended by GASB Statement No. 25, exempts pension plans from presenting a statement of cash flows. As a result, the System has chosen not to present this statement.

b. Basis of Accounting

The financial statements are presented on the accrual basis of accounting. Property is stated at historical cost. Depreciation is computed using the straightline method over an estimated useful life of twenty-five years for buildings and five years for intangible assets. Contributions are recognized in the period in which the contributions are due. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan. Interest and dividend

income is reported as earned. The net appreciation (depreciation) in the fair value of investments includes realized gains and losses on investments that were both bought and sold during the year.

c. Cash and Cash Equivalents/Investments

Short-term, highly liquid investments are considered cash equivalents. Short-term refers to investments with an original maturity of three months or less at date of acquisition. Highly liquid investments are those that are readily convertible to known amounts of cash and so near their maturity that the risk of changes in value because of changes in interest rates is insignificant.

The carrying amounts of deposits and investments were \$18,772 and \$388,773 at June 30, 2013 and \$6,209 and \$356,263 at June 30, 2012, respectively.

Deposits

All deposits of the System are made in board-designated official depositories and are insured or collateralized with securities held by the System's agent in the System's name. The System has no formal policy regarding custodial credit risk for deposits. The bank balances at June 30, 2013 and 2012 were \$244 and \$83, respectively.

Investments

The North Carolina Act (Act) which established the System requires the Board of Trustees to act with the same care, skill, prudence and diligence under the circumstances then prevailing, that a prudent person acting in a similar capacity and familiar with those matters would use in the conduct of a similar enterprise with similar aims. The Act requires the Trustees to design an investment plan to further the purpose of the System by giving consideration to the following: (a) diversification of investments, (b) liquidity and return relative to cash flow needs and (c) projected return. In accordance with the Act, the Board of Trustees has developed and periodically revises a policy statement of investment goals, objectives, and guidelines, which specifically define vehicles that may be used for the investment of System funds. The System invests in United States government securities, corporate bonds, common stocks and mutual funds.

The investments and maturities at June 30, 2013, were as follows:

				Investment Maturities (in Years)						
			Les	ss than						
Investment type	F	air Value		1		1 - 5		5 - 10	Mor	e than 10
U.S. Treasuries	\$	7,191	\$	-	\$	1,148	\$	4,459	\$	1,584
U.S. Agencies		18,073		-		-		-		18,073
Corporate bonds		35,611		827		17,820		9,021		7,943
Common stocks		160,330		N/A		N/A		N/A		N/A
Mutual funds		167,568		N/A		N/A		N/A		N/A
Total	\$	388,773	\$	827	\$	18,968	\$	13,480	\$	27,600
					_		-			

Interest Rate Risk. The System does not have a formal investment policy that limits investment maturities.

Credit Risk. The System is authorized to invest in bonds with a quality rating of no less than investment grade and unrated U.S. Treasuries and Agencies.

The quality ratings of investments in fixed income securities as described by nationally recognized statistical rating organizations at June 30, 2013 are as follows:

		Percentage
Quality Rating	Fair Value	of Portfolio
AAA	\$ 16,886	27.74%
Baa>AA	27,259	44.78
Total credit risk debt securities	44,145	72.52
US Government fixed income securities:		
Government National Mortgage Association	4,678	7.68
U.S. Treasury	7,191	11.81
Not rated	4,861	7.99
Total fixed income securities	\$ 60,875	100.00%

Custodial Credit Risk. The System has no formal policy regarding custodial credit risk for investments.

Concentration of Credit Risk. The System limits the amount of equity holdings in any one company to 8 percent of the market value of the portfolio; the amount of equity holdings in any one sector to 30 percent of the market value of the portfolio; and the amount of fixed-income securities in any one corporation to 5 percent of the market value of the portfolio. There is no limit on securities backed by the full faith and credit of the U.S. Government or any of its instrumentalities.

In accordance with the Act, the System has invested in collateralized mortgage obligations (CMO) and mortgage backed securities. CMO and mortgage backed securities are based on cash flows from principal and interest payments on underlying mortgages. CMO rates trade in sympathy with treasury rates. The System held \$1,520 and \$913 of these securities at June 30, 2013 and 2012, respectively.

d. Method Used to Value Investments

Investments are reported at fair value. Short-term investments are reported at cost, which approximates fair value. Securities and mutual funds traded on a national or international exchange are valued at the last reported sales price at current exchange rates. Mortgages are valued on the basis of future principal and interest payments and are discounted at prevailing interest rates for similar instruments. The fair value of real estate investments is based on independent appraisals. Investments that do not have an established market are reported at estimated fair value.

e. Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities and changes therein, disclosure of contingent assets and liabilities, and the actuarial present value of accumulated plan benefits at the date of the financial statements. Actual results could differ from those estimates.

f. Capital Assets

Capital asset activity for the year ended June 30, 2013, was as follows:

	Beg	inning					En	ding
	Ba	lance	Inc	rease	Decrease		Balance	
Capital assets, being depreciated:								
Buildings	\$	435	\$	-	\$	-	\$	435
Intangibles		160		-		-		160
Total capital assets being depreciated		595		-		-		595
Less accumulated depreciation for:								
Buildings		236		17		-		253
Intangibles		48		32		-		80
Total accumulated depreciation		284		49		-		333
Capital assets, net	\$	311	\$	(49)	\$	-	\$	262

3. CONTRIBUTIONS:

Pursuant to the Act that established the System, the City is required to match the member's contribution. The Act establishes the contribution rate pursuant to the Board of Trustees' recommendation and approval by the Charlotte City Council. The current rate is 12.65 percent. The total contributions for the year ended June 30, 2013 were \$16.4 million, which consisted of \$8.1 million from the City and \$8.3 million from employees. For 2012, contributions were \$16.1 million, which consisted of \$7.7 million from the City and \$8.4 million from employees. Administrative costs are funded through contributions and investment earnings.

An actuarial study is completed annually as of July 1 to determine the actuarial requirements of this funding method. The actuarial method used is the Entry Age Actuarial Cost Method.

The contributions made by the City and the members of the System compared to the actuarially determined requirements intended to cover normal cost and amortized unfunded actuarial accrued liabilities follows:

			Percent of	f Covered			
	<u>In I</u>	<u>Dollars</u>	Payre	Payroll Payroll			
	<u>2013</u>	<u>2012</u>	2013	2012			
Contributions made by -							
City	\$ 8,100	\$ 7,720	12.96%	12.62%			
Members	8,320	8,374	<u>13.31</u>	13.69			
Total	<u>\$16,420</u>	<u>\$16,094</u>	<u>26.27</u> %	<u>26.31</u> %			
Actuarially determined contributions -							
Normal cost	\$14,320	\$13,823	22.91%	22.60%			
Amortization of unfunded							
actuarial accrued liability	2,100	2,271	3.36	3.71			
Total	<u>\$16,420</u>	<u>\$16,094</u>	<u>26.27</u> %	<u>26.31</u> %			

The funded status as of July 1, 2013, the most recent actuarial valuation date, is as follows:

	Actuarial				
	Accrued				UAAL as a
Actuarial	Liability	Unfunded			Percentage
Value of	(AAL)	AAL	Funded	Covered	of Covered
Assets	Entry Age	(UAAL)	Ratio	Payroll	Payroll
(a)	(b)	(b-a)	(a/b)	(c)	[(b-a)/c]
\$ 381,254	\$ 451,579	\$ 70,325	84.4%	\$ 62,523	112.5%

The schedules of funding progress, presented as required supplementary information following the notes to the financial statements, present multiyear trend information as to whether the actuarial values of assets are increasing or decreasing over time relative to the AALs for benefits.

Additional information as of the latest actuarial valuation is as follows:

7/1/2013	
Entry age	
Level Percent of Pay, Open	
30 years	
5-year smoothed market value	
7.75%	
4.25 to 11.25%	
3.25%	
None	

4. CONCENTRATIONS:

The System had individual fixed income or equity investments at June 30 managed by the following organizations that represented 5 percent or more of the System's net assets:

<u>2013</u>	2012
15%	12%
12	12
12	10
11	10
8	16
6	6
6	6
6	5
6	6
5	-
-	6
	15% 12 12 11 8 6 6 6 6 6

In addition, the System owned individual assets at June 30 that represented 5 percent or more of the System's net assets:

	<u>2013</u>	2012
Morgan Stanley Pooled International Equity Trust	11%	10%
DE Shaw Investment Management	6	6
ICM Small Company Portfolio	6	6
State Street Global Advisors Fixed Income Index	-	11
State Street Global Advisors S&P 500 Flagship Fund	-	5

5. TREND INFORMATION:

Six-year historical trend information, designed to provide information about the System's progress made in accumulating sufficient assets to pay benefits when due, is presented as required supplementary information.

6. INTERNAL REVENUE STATUS:

The Internal Revenue Service has determined that the System meets the requirements of Section 401(a) of the Internal Revenue Code and is exempt from Federal income tax under Section 501(a) of the Code.

CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM, A COMPONENT UNIT OF THE CITY OF CHARLOTTE, NORTH CAROLINA REQUIRED SUPPLEMENTARY INFORMATION (Dollar Amounts in Thousands)

		Schedu	le of Funding Pro	ogress		
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]
7/1/2008	\$ 358,536	\$ 361,375	\$ 2,839	99.2%	\$ 55,219	5.1%
7/1/2009	360,003	376,027	16,024	95.7	56,890	28.2
7/1/2010	357,652	395,393	37,741	90.5	59,080	63.9
7/1/2011	366,147	408,999	42,852	89.5	59,086	72.5
7/1/2012	367,183	431,942	64,759	85.0	61,158	105.9
7/1/2013	381,254	451,579	70,325	84.4	62,523	112.5

Schedule of Employee and Employer Contributions

Year	А	Innual	
Ended	Re	equired	Percentage
June 30	Con	tributions	Contributed
2008	\$	14,245	100.0%
2009		15,052	100.0
2010		15,198	100.0
2011		15,958	100.0
2012		16,094	100.0
2013		16,420	100.0

CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM, A COMPONENT UNIT OF THE CITY OF CHARLOTTE, NORTH CAROLINA SCHEDULE OF CASH RECEIPTS AND DISBURSEMENTS (Dollar Amounts in Thousands)

	Years Ended June 30	
	2013	2012
CASH RECEIPTS:		
Contributions:		
Member	\$ 8,313	\$ 8,489
Employer	\$ 8,915 8,088	\$ 8,489 7,838
Total contributions	16,401	16,327
Investing activities:	10,401	10,527
Sales of investments	199,821	121,179
Interest	1,274	1,484
Dividends	4,784	4,325
Total investing activities	205,879	126,988
Total cash receipts	222,280	143,315
CASH DISBURSEMENTS:		
Benefits	22,138	20,997
Refunds	174	533
Administration	296	545
Investing activities:		
Purchase of investments	184,679	117,683
Investment expense	2,430	1,970
Total investing activities	187,109	119,653
Total cash disbursements	209,717	141,728
Net increase in cash and cash equivalents	12,563	1,587
CASH AND CASH EQUIVALENTS, beginning of year	6,209	4,622
CASH AND CASH EQUIVALENTS, end of year	\$ 18,772	\$ 6,209

CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM, A COMPONENT UNIT OF THE CITY OF CHARLOTTE, NORTH CAROLINA SCHEDULE OF ADMINISTRATIVE EXPENSES AND DEPRECIATION Year Ended June 30, 2013 (Dollar Amounts in Thousands)

PERSONAL SERVICES: Staff Salaries Insurance Retirement Social Security 401 (k) Contributions	\$211 13 13 14 4	
Total Personal Services		\$255
PROFESSIONAL SERVICES: Other Actuarial Services Audit Legal Counsel	120 1 11 20	
Total Professional Services	_	152
COMMUNICATION: Travel and Training Postage Printing Meetings Telecommunications Books and Subscriptions Parking	57 12 11 4 3 4 1	
Total Communication	_	92
MISCELLANEOUS: Depreciation Office Condominium Fees Insurance Annual Retiree Reunion Office Equipment Maintenance Professional Memberships Office and Computer Supplies Miscellaneous and Contingency Office Furniture and Equipment	$ \begin{array}{c} 49\\ 25\\ 20\\ 9\\ 3\\ 4\\ 4\\ 1\\ 4 \end{array} $	
Total Miscellaneous	-	119
TOTAL ADMINISTRATIVE EXPENSES ANI	D DEPRECIATION	\$618

CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM, A COMPONENT UNIT OF THE CITY OF CHARLOTTE, NORTH CAROLINA SCHEDULE OF INVESTMENT EXPENSES Year Ended June 30, 2013 (Dollar Amounts in Thousands)

INVESTMENT MANAGEMENT FEES: Morgan Stanley	\$ 389
DE Shaw Investment Management	86
Eagle Asset Management	169
T. Rowe Price	141
Barrow, Hanley, Mewhinney & Strauss	152
Investment Counselors of Maryland	152
Robeco Investment Management, Inc.	191
Winslow Capital Management	106
BlackRock	116
UBS Trumbull Property Fund	92
Cadence Capital Management	63
Baring Asset Management	80
Aronson + Johnson + Ortiz	107
State Street Global Advisors	16
Total Investment Management Fees	1,860
TRUST AND BANK FEES:	
State Street Bank and Trust Company NA	110
Bank of America	3
Total Trust and Bank Fees	113
INVESTMENT CONSULTING FEES - Callan Associates Inc.	136
TOTAL INVESTMENT EXPENSES	\$2,109

CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM, A COMPONENT UNIT OF THE CITY OF CHARLOTTE, NORTH CAROLINA SCHEDULE OF PROFESSIONAL SERVICE EXPENSES Year Ended June 30, 2013 (Dollar Amounts in Thousands)

	Official		
Name	System Position	Expenses	Nature of Services
Morgan Stanley	Investment Advisor	\$ 389	Investment Management
Robeco Investment Management	Investment Advisor	191	Investment Management
Eagle Asset Management	Investment Advisor	169	Investment Management
Barrow, Hanley, Mewhinney & Strauss	Investment Advisor	152	Investment Management
Investment Counselors of Maryland	Investment Advisor	152	Investment Management
T Rowe Price	Investment Advisor	141	Investment Management
Callan Associates Inc	Investment Consultant	136	Investment Consulting
BlackRock	Investment Advisor	116	Investment Management
State Street Bank and Trust Company NA	Trust Custodian	110	Trust Custodial Services
Aronson+Johnson+Ortiz	Investment Advisor	107	Investment Management
Winslow Capital	Investment Advisor	106	Investment Management
UBS Realty Investors LLC	Investment Advisor	92	Investment Management
DE Shaw Investment Management	Investment Advisor	86	Investment Management
Baring Asset Management	Investment Advisor	80	Investment Management
Cadence Capital Management	Investment Advisor	63	Investment Management
Tegrit Financial	Consultant	54	Consulting
Ceridian Employer Services	Payroll Service	48	Benefits Processing
Womble, Carlyle, Sandridge & Rice	Legal Counsel	20	Legal Services
State Street Global Advisors	Investment Advisor	16	Investment Management
Cherry Bekaert LLP	Independent Auditor	11	Audit
McLaughlin Young Consulting	Consultant	7	Consulting
ProfIT/CS, LLC	IT Consultant	7	IT Services
Bank of America	Banker	3	Banking Services
Sharon M. Kelly	Temporary Employees	2	Temporary Employees
Fryday & Doyne	Architect	1	Office Renovation
Cavanaugh Macdonald Consulting	Actuary	1	Actuarial Services
Dash Courier Service	Courier Service	1	Delivery Services
TOTAL PROFESSIONAL SERVICE EXP	ENSES	\$ 2,261	
		<u> </u>	

CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM, A COMPONENT UNIT OF THE CITY OF CHARLOTTE, NORTH CAROLINA SCHEDULE OF INVESTMENTS Year Ended June 30, 2013 (Dollar Amounts in Thousands)

Type of Investment	Jun	e 30, 2012 Fair Value	Р	urchases	Re	Sales demptions	1	Net opreciation oreciation)	Ju	ne 30, 2013 Fair Value	Percentage Fair Value
FIXED INCOME	\$	41,347	\$	39,001	\$	14,497	\$	(4,976)	\$	60,875	14.94%
COMMON AND PREFERRED STOCK		133,794		128,768		130,295		28,063		160,330	39.34%
MUTUAL FUNDS:											
Domestic Equities		61,111		6,473		12,018		5,870		61,436	15.07%
Fixed Income Bond Index		38,967				20,000		231		19,198	4.71%
International Equities		53,210		218		419		9,575		62,584	15.36%
International Fixed Income		14,554						(852)		13,702	3.36%
Real Estate		13,280		10,143		14,113		1,338		10,648	2.61%
Total mutual funds		181,122		16,834		46,550		16,162		167,568	41.11%
SHORT-TERM INVESTMENTS		6,209		113,758		101,844		649		18,772	4.61%
	\$	362,472	\$	298,361	\$	293,186	\$	39,898	\$	407,545	100.00%

Note: Short-term Investments are reflected as Cash and Cash Equivalents in the Statement of Plan Net Position. A portfolio listing is available for review at the System's office. This schedule is not computed on a consistent basis with that used in the Statement of Changes in Plan Net Position.



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October 7, 2013

The Charlotte Firefighters' Retirement System ("CFRS") investment program objective is to provide plan participants with retirement benefits. This is accomplished by the implementation of a carefully planned and executed long-term investment program. The Board of Trustees ("Board") has exclusive control of all retirement system investments and is responsible for establishing investment objectives, strategies, and policies.

The Board is charged with the responsibility of investing CFRS' assets to provide for the benefits of the members of the System. To achieve that goal the Board follows a policy of preserving capital, while seeking means of enhancing revenues and protecting against undue losses in any particular investment area. The Board diversifies the investment of the assets among classes of securities to reduce risk while maximizing the long-range return.

Asset Allocation Policy

Based on its analysis of capital and money market return patterns, both historical and projected, the Board considers the following asset allocation targets to be consistent with the return requirements and risk tolerance of the fund:

Asset Class	Target Weight	Asset Class Benchmark
Domestic Equity	51%	Russell 3000 Stock Index
International Equity	14%	MSCI Europe, Australia, Far East Index
Emerging Markets Equity	2%	MSCI Emerging Markets Free Index
Real Estate	6%	NCREIF Open-End Diversified Core Index
Domestic Fixed Income	23%	Barclays Aggregate Bond Index
International Fixed Income	4%	Citicorp Non-U.S. Government Bond Index

Total Fund Goals

The System's primary funding goal is to achieve a return of at least 7.75% and maintain a funded status that provides for the security of retirement income to participants in the Plan. The Fund's investment goal is to attain an annualized total return over a rolling period of five years which exceeds the fund benchmark by 75 basis points. The fund benchmark assumes a passive implementation of the asset allocation policy.

Total Fund Returns

For the fiscal year 2013, CFRS produced a return of 14.82 % which outperformed the fund benchmark, as described above, by 1.17%.

The five-year annualized return of 5.60% outperformed the fund benchmark by 0.06%. In the Callan Public Fund Universe, CFRS' total fund performance ranks at the 37th percentile for the trailing five-year period and at the 21st percentile since inception (25 years). The performance calculations presented above were prepared by the Systems' custodial bank using a time-weighted rate of return methodology based upon the market value of assets.

Kind regards,

Willey Bunk

Gwelda Swilley-Burke

Michael Swinney

BACKGROUND

The Charlotte Firefighters' Retirement System is the primary retirement income vehicle for its members and is cosponsored by the City of Charlotte and the uniformed employees of the Charlotte Fire Department. The Board will discharge its investment responsibilities and make all decisions solely in the interest of plan participants and their beneficiaries.

Funding Philosophy

The Board's funding goal for the system is to be as fully funded as prudently possible so that:

- the ability to pay all benefit obligations when due is ensured;
- the City of Charlotte and the Board have maximum flexibility in determining the future level of contributions; and
- a funding "cushion" is maintained for unexpected developments and for possible future changes in retirement benefit levels.

Investment results are considered to be a critical element in achieving the system's funding goal stated above.

Risk Tolerance

In establishing investment objectives and guidelines that are consistent with the Board's funding goal, several factors were examined to determine the system's financial ability to withstand variability of investment return. The Board analyzed the system's financial and legal characteristics, work force demographics, actuarial and funding policies as well as actual experience.

The assets of the system should be invested with a risk orientation that is consistent with a moderate ability to assume risk. The Board defines a moderate risk orientation as:

- a willingness to tolerate some interim fluctuations in market value and rates of return in order to achieve the asset allocation objective stated below; and
- a desire to limit the volatility in the fund's rate of return to a level that approximates the average volatility experienced by other U.S. defined benefit retirement plans.

INVESTMENT OBJECTIVES & GUIDELINES

Asset Allocation

The system's risk tolerance is, in large part, a function of the asset mix established for the fund. Based on its analysis of capital and money market return patterns, both historical and projected, the Board considers the following asset allocation to be consistent with the risk tolerance previously defined.

Total Fund Asset Mix Ranges

The Total Fund Asset Mix Guidelines will be implemented and maintained by the following distribution through a combination of "Specialist" Investment Managers and internal management in each of the asset class categories as follows:

"Specialist" Managers	<u>Target</u> <u>Allocation</u>	<u>Acceptable</u> <u>Range</u>
Domestic Equity	51%	+/-5%
Non-U.S. Equity	16%	+3/-2%
Real Estate	6%	+2/-3%
Domestic Fixed Incon	ne 23%	+/-4%
Non-U.S. Fixed	4%	+/-2%

Total Fund Asset Mix Ranges

This distribution of assets among the aforementioned investment managers and the individual manager guidelines will produce the following Total Fund Asset Mix Ranges:

Asset Class	Market Valu	ie Exposure
	<u>Maximum</u>	<u>Minimum</u>
Domestic Equities	56%	46%
Non-U.S. Equities	19%	14%
Real Estate	8%	3%
Domestic Fixed Income	e 27%	19%
Non-U.S. Fixed	6%	2%

These guidelines are to be pursued by the fund on a long term basis (five year goal) but will be revised if significant changes occur within the economic and/or capital market environments.

INVESTMENT GOALS

In formulating investment goals for the system's assets, the Board placed primary emphasis on the following:

 Achieving investment results that will accomplish the stated funding goal for the system. Inflation is the key factor driving the cost of retirement programs. The primary function of a retirement plan investment program is to help pay the cost of providing retirement benefits by offsetting the impact of inflation on costs. Therefore, investment performance that exceeds the rate of inflation, thereby providing a real rate of return, will contribute to the proper funding of the system.

- Receiving from its investment managers, performance that is above average compared to other comparably styled managers.
- Annual income production sufficient to cover benefit payments, administrative costs and investment manager, trustee, actuary, performance measurement and consultant fees.

Accordingly, the specific goals set forth below reflect the above general goals.

Total Fund Goals

As noted in a prior section, the system's primary funding goal is to achieve and maintain a funded status that provides for the security of retirement income to participants in the plan.

Given the impact of inflation on retirement plan funding, the primary total fund investment goal is to achieve a positive inflation adjusted (real) return. The Board recognizes that over short and intermediate periods of time its goal may be difficult to achieve because rapid increases or decreases in the level of inflation tend to adversely impact the capital markets. For this reason, the total fund inflation adjusted goal is established in the context of a longerterm time horizon:

• The fund's overall annualized total return (price change plus income) should exceed the return

available from a policy of "rolling over" 91-day Treasury Bills (as a proxy for the inflation rate) by at least 325 basis points per year measured over a period of 10 years. A 325 basis points annual premium above "risk free" Treasury Bill rates is consistent with the desired risk tolerance.

The fund's annualized total return over a rolling period of five years should exceed by 75 basis points the return that would have been achieved if the fund had been invested 51.0% in the Russell 3000 Stock Index, 14.0% in the Stanley Morgan Capital International (MSCI) Europe, Australia Far East (MSCI-EAFE) Index, 2.0% Morgan Stanley Capital International Emerging (MSCI-EM), Markets Index 23.0% in the Barclays Aggregate (Barclays Bond Index Aggregate), 6% in the National Council of Real Estate Investment Fiduciaries (NCREIF) Open-End DCE Index, and 4% in the Citigroup Government Non-US Bond Index.

Domestic Equity Segment Goals

The following performance goals have been established for the fund's domestic equity segment:

• The domestic equity segment total return should rank in the upper 50% compared to the domestic equity results of other retirement fund portfolios measured over a period of five years. • The domestic equity segment total return should exceed the total return of the Russell 3000 Stock Index by at least 50 basis points per year measured over a period of five years.

Non-Domestic Equity Segment Goals

The following performance goals have been established for the Non-domestic equity segment of the system's assets:

- The non-domestic equity segment total return should rank in the upper 50% compared to the non-domestic equity results of other retirement fund portfolios measured over a period of five years.
- The non-domestic equity segment total return should exceed the total return of the Morgan Stanley Capital International Europe, Australia, Far East Index (MSCI-EAFE) by at least 200 basis points per year measured over a period of five years.

Real Estate Segment Goals

The following performance goals have been established for the real estate segment of the system's assets:

- The total real estate segment return should rank in the upper 50% compared to the real estate results of other retirement fund portfolios measured over a period of five years.
- The total real estate segment return should exceed the NCREIF Open-End DCE Index

by at least 100 basis points per year over a period of five years.

Domestic Fixed Income Segment Goals

The following performance goals have been established for the domestic fixed income segment of the system's assets:

- The total domestic fixed income segment return should rank in the upper 50% compared to the fixed income results of other retirement fund portfolios measured over a period of five years.
- The total domestic fixed income return should exceed the total return of the Barclays Aggregate Bond Index by at least 25 basis points per year measured over a period of five years.

Non-Domestic Fixed Income Segment Goals

The following performance goals have been established for the fund's nondomestic fixed income segment of the system's assets:

- The total non-domestic fixed income segment should rank in the upper 50% compared to the non-domestic fixed income results of other retirement fund portfolios measured over a period of five years.
- The total non-domestic fixed income return should exceed the total return of the Citicorp Non-US Government Bond Index by at least 100 basis points per year

measured over a period of five years.

Internal Account

The following performance goals have been established for the Fund's Internal Account segment of the system's assets:

The internal account is used solely for payment of benefit payments and administrative expenses and shall be invested in a U.S. Treasury Money Market account with the Fund's Custodian at all times.

INVESTMENT PERFORMANCE

The investment performance of the system is being monitored by Callan Associates, Inc., a highly respected portfolio evaluation service provider and consultant in the United States.

A summary of the Charlotte Firefighters' Retirement System's performance results, along with a brief description of issues to be considered in interpreting the results follow. Since the purpose of the summary is to provide an overview, the reader is cautioned against forming conclusions that may be premature.

The information provided is prepared for the Charlotte Firefighters' Retirement System Comprehensive Annual Financial Report to provide a profile of the system's performance.

Total Annualized Rate of Return

This shows how the Charlotte Firefighters' Retirement System performed over multi-year periods

compared with a customized portfolio of asset class investments invested in the same proportion as the CFRS fund targets.

Segment Annualized Rate of Return

This shows how each asset class component of the Charlotte Firefighters' Retirement System performed over the multi-year periods. Since the system's total return is comprised of the combination of each segment, reviews are important because academic studies have clearly shown that the asset allocation decision (the decision on what segments and proportion invested in each) determines between 70% to 95% of the total annualized rate of return.

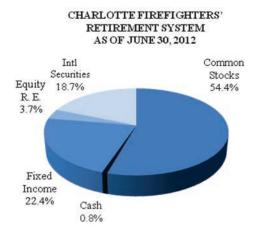
Percentile rank indicates the annualized rate of return of a comparable portfolio that attained that level of performance in each segment component as measured by the Callan Associates, Inc. universe. A low percentage indicates a relatively higher return. The reader can choose a time period of particular interest and examine the return the CFRS earned for that period. For any time period one chooses to examine, the median serves as an effective standard for determining what a "reasonable" return for that period would have been (the median is that return which outranked 50% of the funds in the Callan universe and which was outranked by 50% of the funds).

This summary should be regarded only as an introduction to evaluating the Charlotte Firefighters' Retirement System's investment performance results. Nevertheless, it is hoped that this brief overview will be of some assistance.

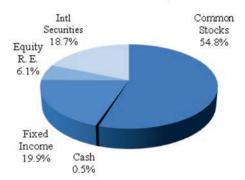
RETURN ON INVESTMENT

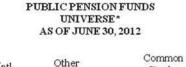
The return on investments, which is defined as the income plus or minus the appreciation or depreciation in value, is analyzed each quarter. The Charlotte Firefighters' Retirement System return on investments is compared with the returns of the Callan Associates. Incorporated universe which is comprised of over 80% of the professionally managed investments in the United States. Evaluation for the various time periods ended June 30. 2013 are shown on subsequent pages. All returns are "time weighted". annualized "total" rates of return in and are based on market values.

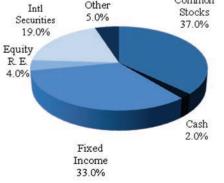
PORTFOLIO DISTRIBUTION



CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM AS OF JUNE 30, 2013





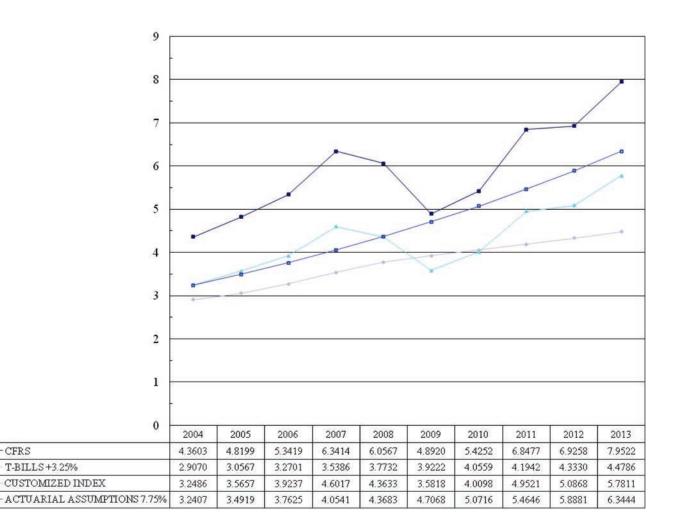


PUBLIC PENSION FUNDS UNIVERSE* AS OF JUNE 30, 2013



*Callan Associates, Inc. © 2013

TOTAL FUND INVESTMENT GOALS - LAST TEN YEARS Years Ended June 30



CFRS

CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM, A COMPONENT UNIT OF THE CITY OF CHARLOTTE, NORTH CAROLINA INVESTMENT RESULTS Periods Ended June 30

					FISCAI	VEAD					Average Rates Over	Cumulative 10-Year
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	10 Years	Rate
<u>RATE OF RETURN</u> CFRS	18.11%	10.54%	10.83%	18.71%	-4.49%	-19.23%	10.90%	26.22%	1.14%	14.82%	8.76%	87.55%
Consumer Price Index	3.17%	2.59%	4.47%	2.67%	5.55%	-1.98%	1.36%	4.06%	1.58%	1.75%	2.52%	25.22%
Customized Index	16.50%	9.76%	10.04%	17.28%	-5.18%	-17.91%	11.95%	23.50%	2.72%	13.65%	8.23%	82.31%
Market Indicators Citicorp Non-US Govt Bond	7.60%	7.75%	-0.01%	2.20%	18.72%	3.53%	1.52%	13.95%	0.44%	-5.72%	5.00%	49.98%
JP Morgan Emer Mkts Debt Plus	4.78%	21.37%	5.24%	11.94%	5.16%	2.43%	17.44%	11.75%	11.15%	0.07%	9.13%	91.33%
BC Aggregate Index	0.32%	6.80%	-0.81%	6.12%	7.12%	6.05%	9.50%	3.90%	7.47%	-0.69%	4.58%	45.78%
MSCI EAFE Index	32.37%	13.65%	26.56%	27.00%	-10.61%	-31.35%	5.92%	30.36%	-13.83%	18.62%	9.87%	98.69%
MSCI Emerging Markets Free	33.51%	34.89%	35.91%	45.45%	4.89%	-27.82%	23.48%	28.17%	-15.67%	3.23%	16.60%	166.04%
Russell 1000 Growth	9.48%	1.68%	6.12%	19.04%	-5.96%	-24.50%	13.62%	35.01%	5.76%	17.07%	7.73%	77.32%
Russell 1000 Value	17.54%	14.06%	12.10%	21.86%	-18.78%	-29.03%	16.92%	28.94%	3.01%	25.32%	9.19%	91.94%
Russell 2000 Stock Index	33.37%	9.45%	14.58%	16.43%	-16.19%	-25.01%	21.48%	37.41%	-2.08%	24.21%	11.37%	113.65%
Russell 2000 Growth	17.13%	4.29%	14.58%	16.83%	-10.83%	-24.85%	17.96%	43.50%	-2.71%	23.67%	9.96%	99.57%
Russell 3000 Stock Index	20.46%	8.05%	9.56%	20.07%	-12.69%	-26.56%	15.72%	32.37%	3.84%	21.46%	9.23%	92.28%
Russell Mid Cap Growth	18.81%	10.86%	13.04%	19.73%	-6.42%	-30.33%	21.30%	43.25%	-1.65%	25.41%	11.40%	114.00%
Russell Mid Cap Value	26.22%	21.80%	14.25%	22.09%	-17.09%	-30.52%	28.91%	34.28%	-0.37%	27.65%	12.72%	127.22%
Standard & Poor's 500 Index	19.11%	6.32%	8.63%	20.59%	-13.12%	-26.21%	14.43%	30.69%	5.45%	20.60%	8.65%	86.49%
Treasury Bills	0.98%	2.15%	3.98%	5.21%	3.63%	0.95%	3.41%	3.41%	3.31%	3.36%	3.04%	30.39%

Investment results are shown on a time-weighted rate of return based on the market rate of return.

See Glossary for explanation of the Market Indices shown in this Table.

CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM, A COMPONENT UNIT OF THE CITY OF CHARLOTTE, NORTH CAROLINA INVESTMENT RESULTS Periods Ended June 30

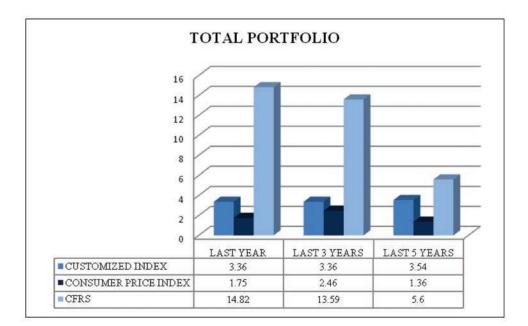
	Last Year	Last 3 Years	Last 5 Years
Domestic Equity	22.80%	19.43%	7.72%
Russell 3000	21.46%	18.63%	7.25%
SSgA S&P 500 Flagship	20.66%	18.50%	7.09%
S&P 500 Index	20.60%	18.45%	7.01%
DE Shaw	21.77%	20.37%	9.71%
Russell 1000 Index	21.24%	18.63%	7.12%
Winslow Capital Management	16.95%	18.37%	6.56%
Russell 1000 Growth	17.07%	18.68%	7.47%
Aronson + Johnson + Ortiz	27.02%	20.40%	8.08%
Russell 1000 Value	25.32%	18.51%	6.67%
Robeco Boston Partners	29.70%	22.65%	13.37%
Blended Benchmark	27.65%	19.53%	8.87%
Eagle Asset Management	28.51%	-	-
Russell 2000 Growth	23.67%	19.97%	8.89%
Investment Counselors of Maryland	22.95%	16.98%	7.63%
Blended Benchmark	24.76%	17.33%	8.59%
Domestic Fixed-Income	0.08%	4.09%	5.87%
Barrow, Hanley, MeWhinney & Strauss	0.58%	4.59%	6.48%
SSgA Bond Market Fund	-0.59%	3.53%	5.22%
BC Aggregate Index	-0.69%	3.51%	5.19%
International Equity	18.45%	12.32%	2.55%
Morgan Stanley International Equity	19.63%	12.84%	2.42%
MSCI EAFE Index	18.62%	10.04%	-0.63%
Morgan Stanley Emerging Markets	8.02%	6.79%	0.50%
MSCI Emerging Markets Free	3.23%	3.72%	-0.11%
T. Rowe Price	19.92%	13.60%	4.41%
Blended Benchmark	17.11%	9.95%	0.98%
International Fixed Income	-5.86%	2.61%	3.20%
Barings	-5.86%	2.61%	3.20%
Citicorp Non-U.S. Govt Bond	-5.72%	2.57%	2.55%
JP Morgan Emerging Markets Debt Plus	0.07%	7.52%	8.38%
Total Fund	14.82%	13.59%	5.60%
Treasury Bill + 3.25%	3.36%	3.36%	3.54%
Composite Benchmark	13.65%	13.01%	5.54%
Public PinSponsor DB	11.19%	11.02%	5.32%

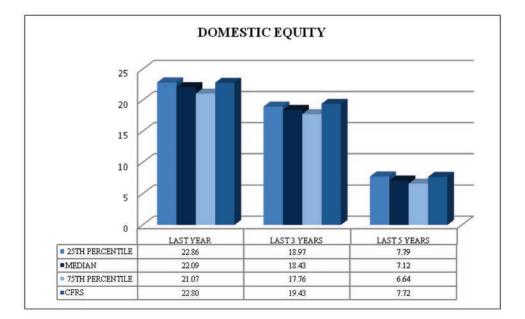
Returns for periods longer than one year are annualized.

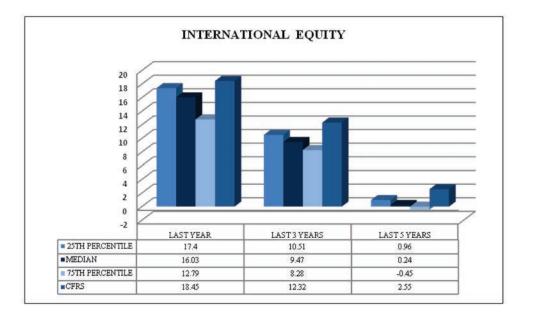
Investment results are shown on a time-weighted rate of return based on the market rate of return.

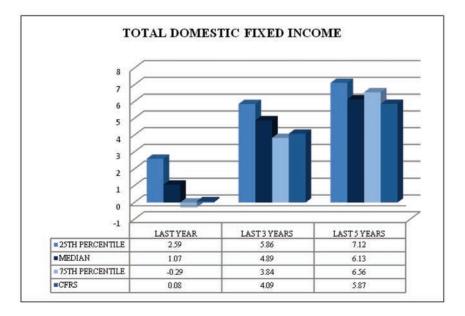
For performance purposes, blended benchmarks will be used until 36 months of rolling periods have expired.

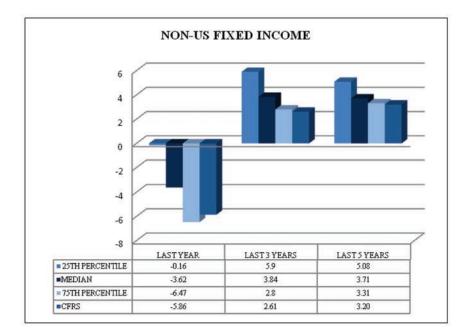
See Glossary for explanation of the Market Indices shown in this Table.

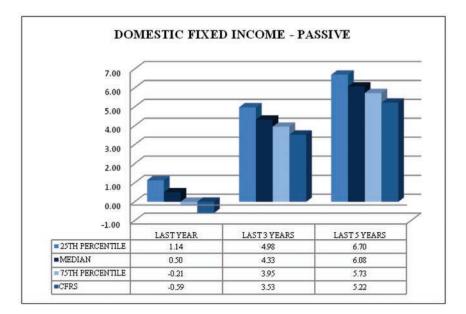


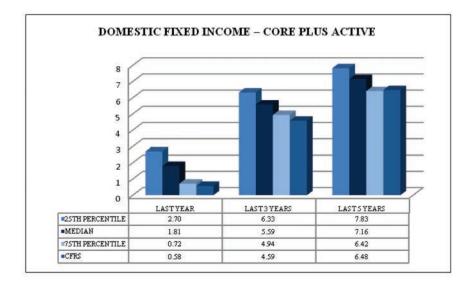












CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM, A COMPONENT UNIT OF THE CITY OF CHARLOTTE, NORTH CAROLINA LIST OF LARGEST ASSETS HELD (Dollar and Share Amounts in Thousands)

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	Shares	Stock	Fair Value
1)	201	Morgan Stanley Pooled International Equity Trust	\$44,488
2)	25,020	DE Shaw 130/30	25,020
3)	743	ICM Small Company Portfolio	23,828
4)	36	SSgA S&P 500 Flagship Fund	12,587
5)	247	T Rowe Price International Discovery Fund	12,022
6)	94	Morgan Stanley Emerging Markets Trust	6,074
7)	29	Exxon Mobil Corp	2,602
8)	12	Union Pacific Corp	1,867
9)	2	Google Inc	1,800
10)	32	JPMorgan Chase	1,673

Largest Stock Holdings (By Fair Value) June 30, 2013

Largest Bond Holdings (By Fair Value) June 30, 2013

	Par/Units	Bond	Fair Value
1)	724	SSgA Bond Market Index Fund	\$19,198
2)	42	Baring International Trust Fund - Non-Dollar Fixed Income/Emerging Debt	t 13,702
3)	307	Barrow Hanley High Yield Fund	4,861
4)	3,800	US Treasury Notes 2.000% due 2/15/2022 Rating AAA	3,717
5)	1,690	US Treasury Notes 3.125% due 11/15/2041 Rating AAA	1,584
6)	1,239	FNMA AB3395 4.500% due 8/1/2041 Rating AAA	1,322
7)	1,150	US Treasury Notes .875% due 1/31/2017 Rating AAA	1,148
8)	978	GNMA II 752599 4.000% due 10/20/2040 Rating AAA	1,039
9)	973	FNMA AB2265 4.000% due 2/1/2041 Rating AAA	1,021
10)	837	FNMA AL0247 4.000% due 4/1/2041 Rating AAA	878

A portfolio listing is available for review at the System's office.

CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM, A COMPONENT UNIT OF THE CITY OF CHARLOTTE, NORTH CAROLINA SCHEDULE OF FEES Year Ended June 30, 2013 (Dollar Amounts in Thousands)

	Fees	Assets under es Management	
INVESTMENT MANAGERS' FEES:			
Equity managers	\$ 1,416	\$	284,350
Fixed income managers	236		93,775
Real estate managers	208		10,648
Total investment managers' fees	1,860	\$	388,773

OTHER INVESTMENT SERVICE FEES:	
Investment consultant fees	136
Custodian fees	110
Banking fees	3
Total investment service fees	249
TOTAL INVESTMENT FEES	\$ 2,109

CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM, A COMPONENT UNIT OF THE CITY OF CHARLOTTE, NORTH CAROLINA SCHEDULE OF INVESTMENT SUMMARY Year Ended June 30, 2013 (Dollar Amounts in Thousands)

TYPE OF INVESTMENT	Fair Value	Percent of Total Fair Value
FIXED INCOME: Corporate Obligations Government and Agencies Total Fixed Income	\$ 35,611 25,264 60,875	14.94%
COMMON STOCK: Consumer Discretionary Consumer Staples Energy Financials Health Care Industrials Information Technology Materials Telecommunication Services Utilities Total Common Stock	$25,461 \\ 8,691 \\ 12,665 \\ 28,322 \\ 22,348 \\ 21,327 \\ 27,253 \\ 8,269 \\ 1,867 \\ 4,127 \\ 160,330 \\ 1,80$	39.34%
MUTUAL FUNDS:	167,568	41.11%
CASH AND CASH EQUIVALENTS: TOTAL	18,772 \$ 407,545	4.61% 100.00%



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October 25, 2013

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, 2013. The purpose of this report is to provide a summary of the funded status of the System as of July 1, 2013, to recommend rates of contribution and to provide accounting information under Governmental Accounting Standards Board Statements No. 25 and 27 (GASB 25 and 27). In performing the valuation, we relied on data provided by the System. 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 cost method. A five-year smoothed market value of plan assets was used for the actuarial value of assets. 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 3.25% annually. The annual required employer contribution rate is 16.87% of payroll for the fiscal year ending June 30, 2015. 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. There have been no changes to assumptions, methods, or plan provisions since the previous valuation.

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, 2015 is 16.87% of payroll, which will amortize the unfunded accrued liability of \$70,325,227 over a 30-year period.

We have prepared the Schedule of Active Member Valuation Data, Schedule of Retired Members 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.

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144 Phone (678) 388-1700 • Fax (678) 388-1730 www.CavMacConsulting.com Offices in Englewood, CO • Kennesaw, GA • Hilton Head Island, SC



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 System and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

In our opinion, in order for the System to operate in an actuarially sound manner, contributions equal to the ARC are necessary. 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.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

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

Respectfully submitted,

Todel B. G.

Todd B. Green, ASA, FCA, MAAA Principal and Senior Actuary

TBG/CT:dmw

atty Tincot

Cathy Turcot Principal and Managing Director



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CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM REPORT OF THE ACTUARY ON THE ANNUAL VALUATION PREPARED AS OF JULY 1, 2013

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, 2013	2	July 1, 2012
Active members:		6	
Number	1,026		1,028
Annualized compensation	\$ 62,523,240	\$	61,158,264
Retired members and beneficiaries:			
Number	546		522
Annual allowances	\$ 23,015,232	\$	21,528,876
Number of terminated vested members*	5		6
Assets:			
Market Value	\$ 407,496,811	\$	362,392,282
Actuarial Value	381,253,694		367,183,240
Unfunded actuarial accrued liability	\$ 70,325,227	\$	64,759,274
Funded Ratio	84.4%		85.0%
Amortization Period	30 years		30 years
Fiscal Year Ending	lune 30, 2015		lune 30, 2014
City annual required contribution rate (ARC):			
Normal (including expenses of 0.75%)	10.08%		10.05%
Accrued liability	6.79		6.39
Total	16.87%		16.44%
Member contribution rate	12.65%		12.65%

*In addition, there are 20 inactive members as of July 1, 2013 that are expected to receive a refund of member contributions that have not yet been paid.

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.
- 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, 2013 are given in Section IV and further discussion of the contributions is set out in Section V.

SECTION II - MEMBERSHIP DATA

- Data regarding the membership of the System for use as a basis of the valuation were furnished by the City. The valuation included 1,026 active members with annualized compensation totaling \$62,523,240.
- The following table shows the number of retired members and beneficiaries as of July 1, 2013 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, 2013

GROUP	NUMBER*	ANNUAL RETIREMENT BENEFITS
Service Retirements	470	\$ 21,398,568
Disability Retirements	42	988,116
Beneficiaries of Deceased Members	_34	628,548
Total	546	\$ 23,015,232

*In addition, there are 5 terminated members entitled to deferred vested benefits and 20 other inactive members expected to receive a refund of member contributions that have not yet been paid.



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 retired members added to and removed from the rolls.

SECTION III - ASSETS

As of July 1, 2013, the total market value of assets amounted to \$407,496,811. The actuarial value of assets used for the current valuation was \$381,253,694. Schedule C shows the development of the actuarial value of assets as of July 1, 2013. Schedule D shows the allocation of the System's assets and the market value of assets for three years.

SECTION IV - COMMENTS ON VALUATION

- 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, 2013. 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 \$599,082,828 of which \$216,864,436 is for the prospective benefits payable on account of present retired members, beneficiaries of deceased members, and terminated members entitled to deferred benefits, and \$382,218,392 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 \$381,253,694 as of July 1, 2013. The difference of \$217,829,134 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 21.98% of payroll are required under the entry age method. Of this amount, 12.65% is paid by the members and the remaining 9.33% is required by the City.



4. Prospective normal contributions at the rate of 21.98% have a present value of \$147,503,907. When this amount is subtracted from \$217,829,134, which is the present value of the total future contributions to be made, there remains \$70,325,227 as the amount of unfunded accrued liability contributions. The development of the unfunded accrued liability is shown in Schedule A.

SECTION V - CONTRIBUTIONS PAYABLE

- 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 21.98%.
- 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 21.98% and the member contribution rate of 12.65%, or 9.33% of payroll. An additional 0.75% is required for expenses, making the total City normal rate 10.08% 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%. These contributions are not sufficient to fund the system in an actuarially sound manner. The annual required employer contribution (ARC) rate beginning July 1, 2014 is 16.87% of payroll.
- 6. Based on a total employer rate of 16.87%, the annual accrued liability contribution rate is determined to be 6.79% of payroll. This rate will be sufficient to amortize the unfunded actuarial accrued liability of \$70,325,227 within approximately 30 years following the valuation date, on the assumption that the payroll will increase 3.25% each year.



 The following table summarizes the employer contributions which were determined by the July 1, 2013 valuation and are recommended for use.

CITY ANNUAL REQUIRED CONTRIBUTIONS (ARC) FOR FISCAL YEAR ENDING JUNE 30, 2015

CONTRIBUTION	PERCENTAGE OF ACTIVE MEMBERS' COMPENSATION
Normal (including expenses of 0.75%)	10.08%
Accrued Liability	6.79
Total	16.87%

SECTION VI - ACCOUNTING INFORMATION

 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, 2013

GROUP	NUMBER*
Retired participants and beneficiaries currently receiving benefits	546
Terminated participants and beneficiaries entitled to benefits but not yet receiving benefits	5
Active Participants	1,026
Total	1,577

*In addition, there are 20 inactive members expected to receive a refund of member contributions that have not yet been paid.



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

		•				
Actuarial Valuation <u>Date</u>	Actuarial Value of Assets <u>(a)</u>	Actuarial Accrued Liability (AAL) Entry Age <u>(b)</u>	Unfunded AAL (UAAL) <u>(b – a)</u>	Funded Ratio <u>(a / b)</u>	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
7/01/2008 ¹	\$358,536	\$361,375	\$2,839	99.2%	\$55,219	5.1%
7/01/2009	360,003	376,027	16,024	95.7	56,890	28.2
7/01/2010 ²	357,652	395,393	37,741	90.5	59,080	63.9
7/01/2011	366,147	408,999	42,852	89.5	59,086	72.5
7/01/2012	367,183	431,942	64,759	85.0	61,158	105.9
7/01/2013	381,254	451,579	70,325	84.4	62,523	112.5

SCHEDULE OF FUNDING PROGRESS (dollar amounts in thousands)

¹Reflects 4% COLA effective January 1, 2008. ²Economic and demographic assumptions were changed as of July 1, 2010 due to an experience review.

Following is the calculation of the annual pension cost and net pension obligation for the fiscal 3.

year ending June 30, 2013.

Annual Pension Cost and Net Pension Obligation for Fiscal Year Ending June 30, 2013

(a)	Employer annual required contribution	\$	9,214,000
(b)	Interest on net pension obligation		(468,000)
(c)	Adjustment to annual required contribution	<u></u>	(364,000)
(d)	Annual pension cost (a) + (b) – (c)	\$	9,110,000
(e)	Employer contributions made for fiscal year ending June 30, 2013		8,100,000
(f)	Increase (decrease) in net pension obligation (d) – (e)	\$	1,010,000
(g)	Net pension obligation beginning of fiscal year		(6,033,000)
(h)	Net pension obligation end of fiscal year (f) + (g)	\$	(5,023,000)



TREND INFORMATION

(dollar amounts in thousands)

Year Ending	Annual Pension Cost <u>(APC)</u>	Percentage of APC Contributed	Net Pension Obligation (NPO)
June 30, 2011	\$7,988	96.0%	\$(6,609)
June 30, 2012	8,296	93.1	(6,033)
June 30, 2013	9,110	88.9	(5,023)

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) FOR FISCAL YEAR ENDING JUNE 30, 2015

CONTRIBUTION	PERCENTAGE OF ACTIVE MEMBERS' COMPENSATION			
Normal (including expenses)	10.08%			
Accrued liability	<u>6.79</u>			
Total	16.87%			

5. Additional information as of July 1, 2013 follows:

Valuation date	7/01/2013		
Actuarial cost method	Entry age		
Amortization period	Level Percent of Pay, Open		
Remaining amortization period	30 years		
Asset valuation method	Five-year smoothed market value		
Actuarial assumptions:			
Investment rate of return (includes inflation)	7.75%		
Projected salary increases (includes inflation)	4.25 - 11.25%		
Inflation	3.25%		
Cost-of-living adjustments	None		



SECTION VII - EXPERIENCE

- 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, 2009. The valuation was based on the assumptions adopted by the Board at the April 22, 2010 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 \$5,565,953 in the unfunded accrued liability from \$64,759,274 to \$70,325,227 during the fiscal year ending June 30, 2013.

ANALYSIS OF FINANCIAL EXPERIENCE – CHANGE IN UNFUNDED ACCRUED LIABILITY (dollar amounts in thousands)

ITEM	AMOUNT OF INCREASE/(DECREASE)		
Interest (7.75%) added to previous unfunded accrued liability	\$ 5,019		
Accrued Liability Contribution	(2,100)		
Recognized Asset (Gain)/Loss	7,427		
Liability (Gain)/Loss	566		
Salary Increases	(5,344)		
Amendments (COLA)	0		
Assumption and Method Changes	0		
Increase/(Decrease) in Unfunded Accrued Liability	\$5,566		



SCHEDULE A

DEVELOPMENT OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY AS OF JULY 1, 2013

(1)	Present value of prospective benefits:					
	(a)	Present active members	\$	382,218,392		
	(b)	Present retired members, beneficiaries and former members entitled to deferred vested benefits and refunds		216,864,436		
	(c)	Total	\$	599,082,828		
(2)		nt value of future System and member normal contributions expenses		147,503,907		
(3)	Actuarial accrued liabilities 1(c) – (2)		\$	451,578,921		
(4)	Actuarial value of assets			381,253,694		
(5)	Unfund	ded actuarial accrued liability (3) – (4)	\$	70,325,227		



SCHEDULE B

VALUATION BALANCE SHEET

The present and prospective assets and liabilities of the System as of July 1, 2013:

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 and refunds	\$ 216,864,436
Present value of prospective benefits payable on account of present active members	382,218,392
Total liabilities	<u>\$ 599,082,828</u>
PRESENT AND PROSPECTIVE ASSETS	
Actuarial value of assets	\$ 381,253,694
Present value of future contributions	
City and member normal contributions \$ 147,503,907	7
Unfunded accrued liability contributions70,325,227	
Total prospective contributions	\$ 217,829,134
Total assets	<u>\$ 599,082,828</u>

•



	Aggregate	Accrued Liabili	ties For			of Accrued Li	19.00
Valuation Date	(1) Active Member Contributions	(2) Retirees and Beneficiaries	(3) Active Members (Employer Financed Portion)	Reported Assets	(1)	(2)	(3)
7/1/13	\$87.7	\$216.9	\$147.0	\$381.3	100%	100%	52.2%
7/1/12	84.8	202.8	144.3	367.2	100	100	55.2
7/1/11	77.9	191.7	139.4	366.1	100	100	69.2
7/1/10 ¹	73.4	185.9	136.1	357.7	100	100	72.3
7/1/09	69.0	171.2	135.8	360.0	100	100	88.2
7/1/08 ²	62.6	164.6	134.1	358.5	100	100	97.9
7/1/07	60.1	151.4	123.2	336.4	100	100	100.0
7/1/06	52.8	149.7	114.4	309.9	100	100	93.9
7/1/05 ³	49.8	145.5	105.0	291.2	100	100	91.3
7/1/04	46.7	139.5	106.1	274.9	100	100	83.6

SOLVENCY TEST (dollar amounts in millions)

All figures prior to July 1, 2005 were reported by a prior actuarial firm.

¹Economic and demographic assumptions were changed as of July 1, 2010 due to an experience review.
 ²Reflects 4% COLA effective January 1, 2008.
 ³Demographic assumptions were changed as of July 1, 2005 due to an experience review.



SCHEDULE C

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

(1)	Actuarial Value of Assets as of July 1, 2012	\$ 367,183,240
(2)	Market Value of Assets as of July 1, 2013	407,496,811
(3)	Market Value of Assets as of July 1, 2012	362,392,282
(4)	Net Cash Flow During Plan Year	
	(a) Contributions	16,420,000
	(b) Benefit Payments	 23,120,000
	(c) Net Cash Flow (a) – (b)	(6,700,000)
(5)	Investment Return	
	(2) - (3) - (4c)	51,804,529
(6)	Expected Investment Return	
	[(3) x 7.75%] + [(4)c x 7.75% x 0.5]	27,825,777
(7)	Investment Gain/(Loss) for Phased-In Recognition (5) – (6)	23,978,752
(8)	Recognized Amounts for Plan Year	
	(a) Current Year 0.20 x (7)	4,795,750
	(b) First Prior Year	(5,149,965)
	(c) Second Prior Year	10,507,576
	(d) Third Prior Year	1,494,855
	(e) Fourth Prior Year	 <u>(18,703,539)</u>
	(f) Total Recognized Investment Gain/(Loss)	(7,055,323)
(9)	Actuarial Value of Assets as of July 1, 2013	
	(1) + (4)(c) + (6) + (8)(f)	\$ 381,253,694
(10)	Rate of Return on Actuarial Value	5.71%
(11)	Rate of Return on Market Value	14.43%



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SCHEDULE D

ASSET INFORMATION

Reconciliation of Market value of Assets (In Thousands)

	Years Ended June 30				
	 2013		2012		
Market Value of Assets - Beginning of Year	 362,392	<u> </u>	366,070		
ADDITIONS:					
Contributions:					
Member	\$ 8,320	\$	8,374		
Employer	8,100		7,720		
Total Contributions	 16,420		16,094		
Investment Income (loss):					
Net Appreciation (depreciation) in fair value of investments	47,652		(1,481)		
Interest	1,522		1,449		
Dividends	 4,789	_	4,326		
	53,963	5 0.000	4,294		
Less Investment Expense	 2,109		1,860		
Net Investment Income (loss)	51,854		2,434		
Total Additions (loss)	 68,274		18,528		
D Benefits	22,423		21,135		
Refunds	128		505		
Administration	569		517		
Depreciation	 49		49		
Total Deductions	 23,169		22,206		
Change in Net Assets	45,105		(3,678)		
	\$ 407,497	\$	362,392		
Market Value of Assets - End of Year					

Allocation of Market Value of Assets

	J	une 30, 2013	J	une 30, 2012	J	une 30, 2011
Cash	\$	136,476	\$	(706,636)	\$	(90,969)
Cash Equivalents		18,635,899		6,915,481		4,712,602
Fixed Income Investments		93,774,240		95, 152, 920		91,742,569
Equity Investments		294,998,224		261,110,234		269,497,448
Other		261,987		311,447		364,057
Accrued Income		633,289		366,424		399,688
Accrued Contributions		307,486		288,083		521,487
Accrued Liabilities/Expenses		(1,250,790)		(1,045,671)		(1,077,232)
Total Market Value	\$	407,496,811	\$	362,392,282	\$	366,069,650



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 22, 2010.

INVESTMENT RATE OF RETURN: 7.75% per year, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of salary increases are as follows:

Years of Service	Rate*
≤ 5	11.25%
6	10.25
7	8.75
8	7.75
9	6.75
10 - 14	5.25
15	4.75
16	4.25

*Includes inflation of 3.25% and real rate of salary increase component of 1.00%

SEPARATIONS FROM ACTIVE SERVICE: For death rates, the RP 2000 Employee Mortality Table was used. Representative values of the assumed annual rates of separation from active service are as follows:

	Annual Rate of							
Age	Withdrawal	Disability*	Death					
20	1.8%	0.04%	0.03%					
25	1.5	0.04	0.04					
30	1.0	0.06	0.04					
35	0.8	0.16	0.08					
40	0.6	0.29	0.11					
45	0.4	0.43	0.15					
50		0.70	0.21					
55		1.00	0.30					

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



	Ann	ual Rate of Retireme	ent*
Age	Age 60 with 5 Years Service or 25 Years Service	Age 50 with 25 Years Service*	30 Years Service
< 50	12%	N/A	40%
50 – 53	12	25%	40
54 – 56	12	50	40
57 – 64	12	20	40
65	100	100	100

*An additional 20% are assumed to retire when first eligible.

DEATHS AFTER RETIREMENT: The RP-2000 Combined Healthy Retiree Mortality Table is used for the period after retirement and for dependent beneficiaries. The UP 1994 Mortality Table set forward five years is used for the period after disability retirement.

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.

VALUATION METHOD: Entry age actuarial cost method. See Schedule F for a brief description of this method.

UNUSED SICK AND VACATION DAYS: 12% load on Final Average Salary at Retirement for cashed-in vacation and sick days. In addition, ½ year added to credited service at retirement.

PAYROLL GROWTH ASSUMPTION: 3.25% per year.



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%), 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.
- 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 the highest 2 consecutive years within the last 5 years of membership service. Salary in the final year includes cashed-in vacation and sick days.
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. 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 receive a lump sum equal to the return of the member's accumulated contributions, plus those contributions made by the City on his behalf, plus interest of 4% per year. In lieu of the lump sum, his beneficiary may elect an annuity which is the actuarial equivalent of the lump sum. If the deceased member was eligible for a service or early retirement on the day before death, the spouse may elect to receive the 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 contribution 12.65%.



SCHEDULE H

TABLE 1

DISTRIBUTION OF ACTIVE MEMBERS BY AGE AND SERVICE GROUPS AS OF JULY 1, 2013

	Completed Years of Service									
Attained Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & Over	Total
Under 25 Average Pay	8 \$40,430	22 \$42,808			-					30 \$42,174
25 to 29 Average Pay	14 \$41,076	82 \$45,940	41 \$53,212	1 \$55,900						138 \$47,679
30 to 34 Average Pay	7 \$42,313	36 \$46,218	68 \$54,462	46 \$62,913	1 \$58,760					158 \$54,533
35 to 39 Average Pay	3 \$41,305	26 \$47,238	40 \$56,120	91 \$63,327	39 \$68,589	1 \$54,548				200 \$60,446
40 to 44 Average Pay		5 \$47,486	17 \$54,062	42 \$60,960	83 \$67,856	38 \$69,424	1 \$76,648			186 \$64,858
45 to 49 Average Pay		1 \$42,692	4 \$53,482	15 \$60,244	35 \$65,260	65 \$72,326	39 \$73,440			159 \$69,243
50 to 54 Average Pay		1 \$49,348		7 \$60,736	13 \$59,252	35 \$67,697	48 \$72,764	4 \$94,978		108 \$69,322
55 to 59 Average Pay			1 \$50,700	2 \$55,900	4 \$61,126	15 \$66,927	11 \$74,180	6 \$93,808	2 \$76,648	41 \$71,782
60 to 64 Average Pay						1 \$76,648	1 \$58,760	2	2 \$109,070	4 \$88,387
65 to 69 Average Pay						2 \$58,136				2 \$58,136
70 & up Average Pay										0 \$0
Total Count Average Pay	32 \$41,207	173 \$45,840	171 \$54,465	204 \$62,321	175 \$66,655	157 \$69,809	100 \$73,082	10 \$94,276	4 \$92,859	1,026 \$60,939

Average Age:40.0Average Service:13.8



TABLE 2

NUMBER OF RETIRED MEMBERS AND BENEFICIARIES AND THEIR BENEFITS BY AGE

Attained Age	Number of Members	Total Annu	al Benefits	Average Annu	al Benefits
	}				
50 & Under	15	\$	644,605	\$	42,974
51 - 55	65		3,145,056		48,385
56 - 60	116 {		5,654,592		48,746
61 - 65	119 {		4,915,848		41,310
66 - 70	87		3,206,388		36,855
71 - 75	57 }		2,479,140		43,494
76 - 80	55 }		2,079,984		37,818
Over 80	32		889,620		27,801
Total	546	\$	23,015,233	\$	42,152

TABLE 3

SCHEDULE OF ACTIVE MEMBER VALUATION DATA

Valuation <u>Date</u>	Number Prior <u>Year</u>	<u>Exits</u>	New Entrants & <u>Rehires</u>	Number <u>Current Year</u>	<u>Annual Payroll</u>	Annual <u>Average Pay</u>	% Increase in Average Pay
7/1/2013	1028	36	34	1,026	\$62,523,240	\$60,939	2.4%
7/1/2012	1028	32	32	1028	61,158,264	59,492	3.5%
7/1/2011	1031	30	27	1028	59,086,270	57,477	0.3%
7/1/2010	991	25	65	1031	59,079,990	57,304	-0.2%
7/1/2009	957	22	56	991	56,890,253	57,407	-0.5%
7/1/2008	948	27	36	957	55,219,358	57,700	4.3%
7/1/2007	953	25	20	948	52,462,717	55,340	5.4%
7/1/2006	935	25	43	953	50,037,809	52,506	4.1%
7/1/2005	897	22	60	935	47,165,418	50,444	2.8%
7/1/2004	876	17	38	897	44,009,056	49,062	3.9%

Results prior to the 7/1/05 valuation were reported by a prior actuarial firm.



TABLE 4

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

Year <u>Ended</u>	:	– Beginning of Year Annual <u>Allowances</u>	Added to Rolls Annual <u>No. Allowances</u>		Rem <u>No.</u>	Removed from Annual <u>No. Allowances</u>		lls – End of Annual <u>Allowances</u>	% Increase in Annual <u>Allowances</u>	Average Annual <u>Allowances</u>
7/1/2013	522	\$21,528,876	33	\$1,745,808	9	\$259,452	546	\$23,015,232	6.9%	\$42,152
7/1/2012	505	20,386,139	28	1,478,178	11	335,441	522	21,528,876	5.6%	
7/1/2011	492	19,428,912	22	1,180,748	9	223,521	505	20,386,139	4.9%	
7/1/2010	477	18,461,651	22	1,136,772	7	169,511	492	19,428,912	5.2%	
7/1/2009	466	17,656,422 *	23	1,176,339	12	371,110	477	18,461,651	4.6%	38,704
7/1/2008	456	16,204,943	22	1,813,530 *	12	362,051	466	17,656,422 *	9.0%	
7/1/2007	452	15,910,529	15	652,817	11	358,403	456	16,204,943	1.9%	
7/1/2006	443	15,438,131	18	707,890	9	235,492	452	15,910,529	3.1%	
7/1/2005	435	14,887,728	19	854,621	11	304,218	443	15,438,131	3.7%	and the second second second
7/1/2004	427	14,512,752	16	629,172	8	254,196	435	14,887,728	2.6%	34,225

Results prior to the 7/1/05 valuation were reported by the prior actuarial firm.

* Includes 4.00% benefit adjustment effective January 1, 2008.



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CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM, A COMPONENT UNIT OF THE CITY OF CHARLOTTE, NORTH CAROLINA PARTICIPANT INFORMATION Year Ended June 30, 2013

SERVICE RETIREMENTS

	SERVICE RETIRENTENTS
Name	Date of Retirement
Albaugh, Richard	12/22/2012
Auten, John A. IV	09/15/2012
Bateman, Anthony K.	07/14/2012
Blackmon, Robert A	12/22/2012
Bowlin, Robert W.	07/14/2012
Campbell, Jeffery	12/29/2012
Caraway, Donald A.	07/28/2012
Carmichael, Irwin	12/01/2012
Dan Carpenter	10/27/2012
Dedmon, James	12/22/2012
Ennis, Lee E.	05/04/2013
Garrison, Robert	12/22/2012
Honeycutt, Jeffrey H.	03/09/2013
Johnson, Daniel A.	04/27/2013
Johnston, Richard M	12/22/2012
Keistler Jr., Reginald A.	07/21/2012
Knight, Charlie B	12/22/2012
Lucas, Julian L.	07/28/2012
Moore, Anthony	12/01/2012
Morris, Traci	12/29/2012
Moxley, Randle D.	07/21/2012
Mullis, Thomas	04/06/2013
Navarro, Gustavo	07/21/2012
Rogers Jr, Charles A	12/22/2012
Ross, Nathan M.	10/20/2012
Rudisill, Jimmy O.	12/22/2012
Rushing, Jimmie T.	04/27/2013
Strickland, David E.	11/17/2012
Thompson, Teddie C.	11/17/2012
Thrower, Mark	03/30/2013
Tinsley, Anthony	12/01/2012
Workman, Gary	12/22/2012
	IN MEMORIAM
	Retiree Deaths
Name	Date of Death
Atkins, James B.	12/17/2012
Bacot, Charles R.	09/28/2012

1 vanie
Atkins, James B.
Bacot, Charles R.
Brown, Joan
Ford, Joseph E.
Gabriel, C. Wayne
Klutz, Robert C
Roy K. Bradey
Watts, Ernest C.
Wilder, Martha K.

Date of Death 12/17/2012 09/28/2012 04/08/2013 03/28/2013 09/20/2012 02/03/2013 12/18/2012 08/05/2012 07/23/2012

CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM, A COMPONENT UNIT OF THE CITY OF CHARLOTTE, NORTH CAROLINA CHANGES IN NET POSITION for Fiscal Years Ended June 30 (Dollar Amounts in Thousands)

		Revenues b	y Source						
Fiscal	Employee	Employer	Investment	Total		Administrative	2	Total	Change in
Year	Contributions	Contributions	Income	Revenues	Benefits	Expenses	Refunds	Expenses	Net Position
2004	\$ 6,099	\$ 5,554	\$ 39,495	\$ 51,148	\$ 14,549	\$ 355	\$ 41	\$ 14,945	\$ 36,203
2005	6,254	5,871	26,267	38,392	15,217	389	105	15,711	22,681
2006	6,471	6,229	29,440	42,140	16,052	394	171	16,617	25,523
2007	6,772	6,574	56,552	69,898	16,609	441	241	17,291	52,607
2008	7,327	6,918	(17,818)	(3,573)	17,081	489	112	17,682	(21,255)
2009	7,711	7,341	(67,070)	(52,018)	18,146	490	138	18,774	(70,792)
2010	7,758	7,440	28,394	43,592	19,210	601	200	20,011	23,581
2011	8,288	7,670	75,299	91,257	20,080	544	248	20,872	70,385
2012	8,374	7,720	2,434	18,528	21,135	566	505	22,206	(3,678)
2013	8,320	8,100	51,854	68,274	22,423	618	128	23,169	45,105

Revenues by Source and Expenses by Type

CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM, A COMPONENT UNIT OF THE CITY OF CHARLOTTE, NORTH CAROLINA SCHEDULE OF BENEFIT AND REFUND EXPENSES BY TYPE for Fiscal Years Ended June 30 (Dollar Amounts in Thousands)

Fiscal	A 9	Carrie Da		Death in	Detine	Dischille	Dana	D - C I-	Defende	
Year		Service Be		Service		Disability		Refunds	Refunds	T (1
Ending	Retirees	Survivors	QDROs	Benefits	Duty	Non-duty	Survivor	Death	Separation	Total
2004	\$12,952	\$ 189	\$ 32	\$ -	\$ 542	\$ 793	\$ 41	\$ -	\$ 41	\$ 14,590
2005	13,383	192	33	-	514	769	50	276	105	15,322
2006	14,186	212	48	1	528	783	55	239	171	16,223
2007	14,712	219	59	13	538	791	59	218	241	16,850
2008	15,379	258	61	22	526	757	78	-	112	17,193
2009	16,395	273	67	36	553	743	79	-	138	18,284
2010	17,439	260	115	46	545	725	80	-	200	19,410
2011	18,316	265	112	46	500	682	159	-	248	20,328
2012	19,429	267	125	46	475	635	158	186	319	21,640
2013	20,771	268	135	46	457	576	170	-	128	22,551

CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM, A COMPONENT UNIT OF THE CITY OF CHARLOTTE, NORTH CAROLINA SCHEDULE OF RETIRED MEMBERS BY TYPE OF BENEFIT as of June 30, 2013

Monthly	Number of				Туре	of Reti	rement						Optic	on Sele	cted		
Benefit	Retirees	1	2	3	4	5	6	7	8	9	Basic C)pt.1	Opt.2	Opt.3	Opt.4	Opt.5	Opt.6
Deferred	5								5		5						
\$ 1 - 500	6	1		1		1	1			2	4					2	
501 - 600	2									2	2						
601 - 700	1						1				1						
701 - 800	1									1	1						
801 - 900	1							1			1						
901-1000	4			1				3			4						
Over 1000	531	398	75	11		16	23	4		4	350	9	14	11	31	102	14
Totals	551	399	75	13	0	17	25	8	5	9	368	9	14	11	31	104	14

Type of Retirement

1 - Service retirement

2 - Early retirement

3 - Survivor payment - normal or early retirement

4 - Survivor payment - death in service

5 - Duty disability retirement

6 - Non-duty disability retirement

7 - Survivor payment - disability retirement

 ${\bf 8}$ - Former member with deferred future benefit

9 - Spouse payment - QDRO

Option Selected

Basic - Basic Benefit

Option 1 - 10CC

Option 2 - 100% Joint Survivor

Option 3 - 75% Joint Survivor

Option 4 - 66.67% Joint Survivor

Option 5 - 50% Joint Survivor

Option 6 - Joint Survivor with Reversion to Basic

CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM, A COMPONENT UNIT OF THE CITY OF CHARLOTTE, NORTH CAROLINA SCHEDULE OF AVERAGE BENEFIT PAYMENTS for Fiscal Years Ended June 30

		Membership Service Credit									
	L	<u>5-10</u>		<u>11-15</u>		<u>16-20</u>		<u>21-25</u>	<u>26-30</u>		<u>31 +</u>
Period 7/1/2003 to 6/30/2004 Average Monthly Benefit Average Final Average Salary Number of Active Retirants	\$	413 3,112 1	\$	1,264 2,115 17	\$	1,662 2,845 14	\$	2,080 2,914 34	\$ 2,800 3,656 257	\$	3,603 3,680 113
Period 7/1/2004 to 6/30/2005 Average Monthly Benefit Average Final Average Salary Number of Active Retirants	\$	413 3,112 1	\$	1,264 2,115 17	\$	1,591 2,845 14	\$	2,185 3,118 36	\$ 2,847 3,768 263	\$	3,696 3,831 114
Period 7/1/2005 to 6/30/2006 Average Monthly Benefit Average Final Average Salary Number of Active Retirants	\$	277 1,556 2	\$	1,264 2,115 17	\$	1,655 3,064 15	\$	2,174 3,166 36	\$ 2,892 3,899 271	\$	3,722 3,889 114
Period 7/1/2006 to 6/30/2007 Average Monthly Benefit Average Final Average Salary Number of Active Retirants	\$	277 1,556 2	\$	1,264 2,115 17	\$	1,566 2,873 16	\$	2,161 3,277 35	\$ 2,918 3,980 273	\$	3,779 4,002 116
Period 7/1/2007 to 6/30/2008 Average Monthly Benefit Average Final Average Salary Number of Active Retirants	\$	396 1,556 2	\$	1,315 2,115 17	\$	1,704 2,928 17	\$	2,316 3,548 37	\$ 3,084 4,082 281	\$	4,124 4,294 115
Period 7/1/2008 to 6/30/2009 Average Monthly Benefit Average Final Average Salary Number of Active Retirants	\$	396 1,556 2	\$	1,408 2,230 18	\$	1,704 2,928 17	\$	2,345 3,562 36	\$ 3,134 4,206 291	\$	4,241 4,460 118
Period 7/1/2009 to 6/30/2010 Average Monthly Benefit Average Final Average Salary Number of Active Retirants	\$	396 1,556 2	\$	1,377 2,246 17	\$	1,704 2,928 17	\$	2,387 3,708 39	\$ 3,215 4,369 299	\$	4,272 4,561 123
Period 7/1/2010 to 6/30/2011 Average Monthly Benefit Average Final Average Salary Number of Active Retirants	\$	396 1,556 2	\$	1,380 2,285 16	\$	1,687 2,843 16	\$	2,388 3,679 35	\$ 3,286 4,531 310	\$	4,339 4,676 126
Period 7/1/2011 to 6/30/2012 Average Monthly Benefit Average Final Average Salary Number of Active Retirants	\$	930 1,865 2	\$	1,326 2,354 16	\$	1,835 2,946 15	\$	2,815 4,397 39	\$ 3,455 4,675 324	\$	4,535 4,897 126
Period 7/1/2012 to 6/30/2013 Average Monthly Benefit Average Final Average Salary Number of Active Retirants	\$	930 1,865 2	\$	1,363 2,354 16	\$	2,157 3,615 15	\$	3,403 5,143 40	\$ 3,524 4,710 345	\$	4,591 4,763 128

CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM, A COMPONENT UNIT OF THE CITY OF CHARLOTTE, NORTH CAROLINA SCHEDULE OF BONUS HISTORY for Fiscal Years Ended June 30 (Dollar Amounts in Thousands)

Year	Bonus Distribution			Bonus Percentage	Consumer Price Index*
1990	\$ 26	\$ 3,332	198	0.78%	4.6%
1990	\$ 20 142	· · · · · · · · · · · · · · · · · · ·	221		
		3,735		3.80%	6.1%
1992	115	4,236	237	2.71%	3.1%
1993	90	4,892	255	1.84%	2.9%
1994	69	6,339	292	1.09%	2.7%
1995	65	6,429	292	1.01%	2.7%
1996	109	6,641	294	1.64%	2.5%
1997	366	7,388	312	4.95%	3.3%
1998	600	7,948	331	7.55%	1.6%
1999	734	8,753	357	8.39%	1.9%
2000	808	9,733	371	8.30%	3.2%
2001	1,070	12,998	398	8.23%	1.3%
▶ 2002	197	13,064	395	1.51%	0.7%
**2003	-	-	-	-	2.1%
**2004	-	-	-	-	3.2%
**2005	-	-	-	-	2.6%
**2006	-	-	-	-	4.5%
► 2007	266	15,966	454	1.67%	2.7%
**2008	-	-	-	-	5.6%
**2009	-	-	-	-	-2.0%
**2010	-	-	-	-	1.4%
**2011	-	-	-	-	4.1%
**2012	-	-	-	-	1.4%
**2013	-	-	-	-	1.8%

Average Percentage of Bonus Amount Per Retiree over 25-year Period:	2.23%
Average Percentage of Bonus Amount Per Retiree over 5-year Period :	0.00%

*Source: Callan Associates, Inc.

► In 2002, each eligible retiree received a \$500 bonus.

**Pursuant to the Actuary's recommendations, the Board of Trustees did not approve bonuses for 2003 - 2006, 2008 - 2013.

▶ In 2007, each eligible retiree received a \$600 bonus.

ACCRUED BENEFIT

The amount of a pension plan participant's benefit (whether or not vested) as of a specified date, determined in accordance with the terms of the pension plan and based on compensation (if applicable) and service to that date.

ACTIVE PARTICIPANTS

Eligible individuals who have hours of service and make contributions to a retirement plan.

ACTUARIAL ACCRUED LIABILITY

The difference between the actuarial present value of system benefits and the actuarial value of future normal costs. Sometimes referred to as "accrued liability".

ACTUARIAL ASSUMPTIONS

Estimates of future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.

ACTUARIAL PRESENT VALUE (APV)

The discounted value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of actuarial assumptions.

ACTUARIAL VALUATION

An examination by an actuary of a group of people, with regard to certain characteristics of the people in that group. Some of the characteristics are age, service, salary, rate of turnover by death or termination. The actuary can then determine whether contributions are sufficient to fund liabilities earned.

ALPHA

This is a statistic that measures a portfolio's Return in excess of the market return adjusted for risk. A positive alpha indicates that a portfolio was positively rewarded for the residual risk which was taken for that level of market exposure.

AMENDMENT

Changes made to an existing plan.

AMORTIZE

To pay off an interest-discounted amount with periodic payments of interest and principal as opposed to paying off with a lump sum payment.

AUDIT

An examination by someone or some firm outside an organization of the accounting records developed by the staff of the organization. Recommendations and suggestions for better record keeping and management are often part of an audit.

AUDITOR

A certified public accountant who examines an organization's accounting records according to a set of procedures and issues a report.

BARCLAYS U.S. AGGREGATE INDEX

(formerly Lehman Brothers Aggregate Bond Index) This index represents securities that are SEC-registered, taxable and dollar denominated. The index covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities and assetbacked securities. These major sectors are subdivided into more specific indices that are calculated and reported on a regular basis.

BENEFICIARY/BENEFICIARIES

The person(s) to whom a share of a deceased participant's account balance is payable.

BENEFITS

Payments to which participants may be entitled under a pension plan, including pension benefits, death benefits and benefits due on termination of employment.

CALLAN REAL ESTATE MEDIAN

A database comprised totally of the open-end funds of banks and insurance companies.

CITICORP EXTENDED MARKET BOND (EMB) MARKET EX-US

An index that is comprised of the bottom 20% of the cumulative available market capital of the Citicorp (previous Salomon Smith Barney) Broad Market Index. The EMB ex-US defines the small stock index.

CITICORP NON-US DOLLAR WORLD BOND INDEX

An index that is composed of the Citicorp (formerly Salomon Brothers) World Bond Index excluding U.S. bonds. The index consists of Government bonds, Eurobonds and foreign bonds rated at least AA with remaining maturities of 5 or more years. The index is weighted by the outstanding principal amount of each issue and is expressed in terms of U.S. dollars.

COMPENSATION

The amount of a participant's taxable and nontaxable wages that is considered for purposes of a certain employee benefit requirement.

CONSUMER PRICE INDEX (CPI)

A measure of the average change in prices for a fixed market basket of goods and services. This market basket is based on the spending patterns of urban wage earners and clerical workers, who represent 40 percent of the total civilian population.

COST-OF-LIVING ADJUSTMENT (COLA)

Provision for the adjustment of payment designed to offset changes in the cost of living, usually as measured by the consumer price index.

CUSTOM MIDCAP VALUE INDEX

A customized mid cap value index consisting of 50 percent of the Standard and Poor's Mid Cap Value and 50 percent of the Russell Mid Cap Value.

DEFINED BENEFIT PENSION PLAN

A pension plan that defines an amount of pension benefit to be provided, usually as a function of one or more factors, such as age, years of service and/or compensation.

DISABILITY

Inability to pursue an occupation because of physical or mental impairment.

DISCOUNT RATE

The rate used to adjust a series of future payments to reflect the time value of money. For the purpose of calculating the pension benefit obligation defined by G.A.S.B., this rate is equal to the estimated long-term rate of return on current and future investments of the pension plan.

DIVERSIFICATION

The practice of investing in several different businesses, industries and classes of investment securities in order to minimize total portfolio risks.

EARLY RETIREMENT

Provision made in a retirement plan to allow employees who have met certain conditions, such as length of service and specified age, to retire prior to their regularly scheduled retirement age. In general, in case of such early retirement, the benefits which a participant can expect to receive from the plan will be less than those offered at full retirement age.

FIDUCIARY FUND TYPE

The trust and agency funds used to account for assets held by a government unit in a trustee capacity or as an agent for individuals, private organizations, other government units and/or other funds.

FRMS UNIVERSE INDEX

An index composed of all common stock issues used in the Fundamental Risk Measurement Service (FRMS) by Barra. The index contains about 5,700 companies and is capitalizationweighted. This index was terminated by Barra as of September 30, 1999.

FUNDING RATIO

The actuarial value of benefit obligations accrued to date, compared to the pension plan assets expressed as a percentage.

GASB

Governmental Accounting Standards Board is the body which creates the various accounting standards for governmental and non-profit organizations.

INVESTMENT POLICY

A formal statement outlining the broad investment objectives of the plan.

J. P. MORGAN EMERGING MARKETS BOND INDEX PLUS

An index that tracks total returns for traded external debt instruments in the emerging markets. The instruments include external currency-denominated Brady bonds, loans and Eurobonds, as well as U.S. dollar local markets instruments.

LEVEL-COST FINANCING

A method of financing a retirement system in which contributions, as a percentage of payroll, remain level from generation to generation, if benefit provisions are not changed.

MERRILL LYNCH 1-3 YEAR GOVERNMENT CORPORATE BOND INDEX

An unmanaged index trading short-term U.S. government securities and short-term domestic investment-grade corporate bonds with maturities between 1 and 2.99 years.

MORGAN STANLEY CAPITAL INTERNATIONAL (MSCI) EAFE INDEX

An index that is composed of approximately 1,000 equity securities representing stock exchanges of Europe, Australia, New Zealand and the Far East. The index is capitalization-weighted, includes currency changes and is expressed in terms of U.S. dollars.

MSCI EMERGING MARKETS INDEX

The MSCI Emerging Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets. This index consists of the following 21 emerging market country indices: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Morocco, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand and Turkey. The index is market capitalizationweighted and is expressed in terms of U.S. dollars.

NCREIF INDEX

The National Council of Real Estate Investment Fiduciaries (NCREIF) calculates a number of real estate benchmarks. This core index is comprised of return series of various properties in each region of the U.S. The index comprises properties by type and subtype by region and division. The return series analyzes appreciation, income, market value and total return. This benchmark is compiled on a onequarter lag basis.

NET PENSION OBLIGATION (NPO)

The standardized measure of funding status and progress required by the GASB to be disclosed in the notes to the financial statements. It is the actuarial present value of credited projected benefits, prorated on service and is counted at a rate equal to the expected return on present and future plan assets.

NORMAL COST

The actuarial present value of retirement system benefits allocated to the current year by the actuarial cost method. This amount does not include any payment related to an unfunded actuarial accrued liability. For plans financed in part by employee contributions, normal cost ordinarily refers to the total of employee contributions and employer normal cost.

PENSION CONTRIBUTION

The amount paid into a pension plan by an employer (or employee), pursuant to the terms of the plan, state law, actuarial calculations or some other basis of determination.

PORTFOLIO

The total of all investments held.

PRUDENT PERSON

Requires that a plan fiduciary use the "care, skill and diligence" that would be used by a reasonably prudent person familiar with "such matters". While essentially an extension of the common-law requirement of good faith in handling other people's money, it creates a "prudent expert" test that places an additional burden on the plan sponsor---to know what a person in this position of responsibility should know, rather than a reliance on the knowledge level of the general populace.

QUALIFIED DOMESTIC RELATIONS ORDER (QDRO)

A domestic relations order that creates or recognizes the existence of an alternate payee's right or assigns an alternate payee the right to receive all or a portion of the benefits payable with respect to a participant under a qualified retirement plan, and that it complies with certain special requirements. Only a spouse, former spouse or dependent can be the alternate payee.

RISK

The possibility that the expected rate of return many not be attained for the total portfolio or for specific asset classes.

RUSSELL 1000 INDEX

An index which measures the performance of the 1,000 largest companies in the Russell 3000 Index, which represents approximately, 92% of the total market capitalization of the Russell 3000 Index.

RUSSELL 1000 GROWTH INDEX

Measures the performance of the large-cap growth segment of the U.S. equities.

RUSSELL 1000 VALUE INDEX

Measures the performance of the large-cap value segment of U.S. equities.

RUSSELL 2000 INDEX

An index composed of the 2000 smallest stocks in the Russell 3000 Index, representing approximately 11 percent of the U.S. equity market capitalization.

RUSSELL 2000 GROWTH INDEX

Measures the performance of the small-cap growth segment of the U.S. Equities.

RUSSELL 2000 VALUE INDEX

Measures the performance of the small-cap value segment of the U.S. equities.

RUSSELL 3000 Index

The Russell 3000 Index offers investors access to the broad U.S. equity universe representing approximately 98% of the U.S. market. The Russell 3000 is constructed to provide a comprehensive, unbiased and stable barometer of the broad market. It is completely reconstituted annually to ensure new and growing equities are reflected.

RUSSELL MIDCAP INDEX

Measures the performance of the 800 smallest companies in the Russell 1000 index, which represent approximately 35% of the total market capitalization of the Russell 1000 Index.

SECTION 415

Sets out the maximum contribution and benefit limitations of the Internal Revenue Code for qualified plans.

STANDARD AND POOR'S 500 (S&P 500) INDEX

An index that is an unmanaged market index generally considered representative of the stock market as a whole. It is a composite of 400 industrial, 40 financial, 40 utility and 20 transportation common stocks. The index is capitalization-weighted with each stock weighted by its proportion of the total market

value of all 500 issues. It focuses on the largecap segment of the U.S. equities market.

TOTAL RATE OF RETURN

Cash income plus capital appreciation, less capital depreciation, realized and unrealized, adjusted for capital contributions and withdrawals expressed as a percentage on an accrual basis.

TOTAL REAL ESTATE FUNDS

A database that consists of both open and closed-end commingled funds managed by real estate firms. The returns represent the overall performance of commingled institutional capital invested in real estate properties.

TREASURY BILLS

Short-term direct obligations of the U.S. Government, usually issued with maturities of three months, six months, or one year. Because of their safety and liquidity, Treasury bills are often used as risk-free proxies in portfolio analytics.

TRUSTEE

A fiduciary holding property on behalf of another. An individual with the responsibility of administering all aspects of a pension fund.

UNFUNDED ACTUARIAL ACCRUED LIABILITIES

The difference between actuarial accrued liabilities and valuation assets. Sometimes referred to as "unfunded actuarial liability" or "unfunded accrued liability".

VESTED BENEFIT

A benefit for which the employer has an obligation to make payment even if an employee terminates; thus, the benefit is not contingent on an employee's future service.

WILSHIRE 5000 TOTAL MARKET INDEX

An index which measures the performance of all U.S. headquartered equity securities with readily available price data. Over 7,000 capitalization weighted security returns are used to adjust the index. The Wilshire 5000 base is its 12/31/80

capitalization of \$1,404,596 billion. Therefore, the index is an excellent approximation of dollar changes in the U.S. equity market.



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