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



For the Fiscal Year Ended June 30, 2003

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

# FOR THE FISCAL YEAR ENDED JUNE 30, 2003

### **BOARD OF TRUSTEES**

Kurt R. Hollar, Chairman of the Board, Citizen Appointee James E. Burke, Vice Chairman, Elected Member W. Carey Odom, Treasurer, Ex-Officio Bobby W. Davis, Secretary, Elected Retiree Greg C. Gaskins, Trustee, Ex-Officio Angela R. Hubbard, Citizen Appointee Alan Scott King, Trustee, Elected Member Timothy D. Mayes, Trustee, Ex-Officio Alan K. Middleton, Elected Member
F. Traylor Renfro, Trustee, Citizen Appointee Allen J. Stewart, Trustee, Citizen Appointee

Prepared by the Charlotte Firefighters' Retirement System Staff Barbara J. Avard, Administrator Patricia E. Adams, Retirement Analyst Barbara B. Polson, Office Assistant III

#### WHERE TO WRITE FOR INFORMATION

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# Charlotte Firefighters' Retirement System Charlotte, North Carolina

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# **INTRODUCTORY SECTION**

The Introductory Section includes a letter of transmittal that includes the responsibilities of the Board of Trustees and its staff, the history, administration and operations of the retirement system and significant activities of the year being reported.

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428 East Fourth Street • Suite 205 • Charlotte, North Carolina 28202 • 704/336-4431 • Fax: 704/336-6101

December 22, 2003

Honorable Board of Trustees, 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 (CFRS) for the fiscal year ended June 30, 2003, is submitted herewith. The Board of Trustees and its 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 generally accepted accounting principles, presents fairly and consistently the CFRS'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. The Report consists of five sections: (1) an Introductory Section which contains this Letter of Transmittal and general (2) the Financial Section consisting of the information regarding the system; Independent Auditors' Report, audited financial statements and the accompanying notes to financial statements, and required supplementary information which includes Management's Discussion and Analysis pursuant to GASB 34; (3) the Investment Section which contains supportive documentation related to the System's investments; (4) the Actuarial Section which contains the consulting actuary's opinion and the results of the annual actuarial valuation report, as of July 1, 2003; and (5) the Statistical Section which contains financial trends and information on investment policy and performance results and other statistical information which may be of interest to those reading this report.

#### HISTORY

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The CFRS was organized pursuant to Chapter 926 of the 1947 Session Laws, as amended, of the State of North Carolina. The CFRS was established on the fifth day of April1947, 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 CFRS was amended on the 29<sup>th</sup> day of June 1987, to provide survivor benefits to named beneficiaries as an added objective.

#### ADMINISTRATION OF THE SYSTEM

The administration and responsibility for the proper operation of the CFRS is vested with the Board of Trustees of the Charlotte Firefighters' Retirement System, which is comprised of the following trustees as defined by the Charlotte Firefighters'

Retirement System Act (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 for the City of Charlotte, or her designated trustee, who serves by virtue of her position; (d) the City Finance Director, or his designated trustee, who serves by virtue of his position; (e) the City Treasurer who serves by virtue of his position; (f) three members of the Charlotte Firefighters' Retirement 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 Charlotte Firefighters' Retirement System who is elected by the retirees of the system for a term of three years. The Board of Trustees are listed on the title page of this report.

#### COMMITTEES

The Board of Trustees 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 trustee. During the past fiscal year, W. Carey Odom, Treasurer, served as the Investment Committee Chairman and Bobby W. Davis, Elected Retiree, served as Benefits Committee Chairman.

#### **PROFESSIONAL SERVICES**

The Board of Trustees 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 administration and coordination of all system operations and activities in accordance with the rules and regulations of the Act and subject to the policies and direction of the Board of Trustees and supervisor of system staff; (b) the City Attorney and his staff serve as the legal advisor to the Board of Trustees; (c) a consulting actuary who is employed by the City of Charlotte to perform such studies and evaluations of the Charlotte Firefighters' Retirement System as may be necessary and/or desirable in connection with the administration of the system (the actuary prepares an 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 of Trustees 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 of Trustees to review and evaluate medical evidence and propose recommendations regarding disability retirements; and (f) investment management counselors employed to invest the system's assets consistent with the objectives and direction of the Board of Trustees. The Board of Trustees may employ 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 insure that the objectives and direction of the Board of Trustees are being fulfilled. The investment consulting firm of Callan Associates, Inc., has been employed since 1987 to assist the Board of Trustees to fulfill this obligation and provide other investment consulting services. All of the advisors, consultants and purveyors of professional services to the system are listed on *Page 11*.

## FINANCIAL REPORTING

An annual report of the financial and actuarial condition of the CFRS 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. The report is also provided to all retired participants.

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. 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. The CFRS did not submit its June 30, 2002 report to the G.F.O.A. but we believe that our current comprehensive annual financial report (CAFR) meets the Certificate of Achievement program requirements and we will submit the June 30, 2003 report to the G.F.O.A. for consideration to determine its eligibility for another certificate.

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

#### MARKET OUTLOOK

#### The Past Year

The volatility in financial markets during Fiscal 2002 and into Fiscal 2003 was extreme and few asset classes were spared. Equities were the hardest hit and for the first time since 1941 the stock market declined for three consecutive years. Bonds were led by strong gains in treasuries.

Investors were challenged by questions of corporate credibility, fear of war and continued terrorism. In addition, significant earnings reductions, continued high unemployment, slower than expected economic and profit growth all contributed to these volatile markets and investor caution.

Two additional reductions in the Fed funds rate by the Federal Open Market Committee during the year (one a surprise 50-basis point reduction in November 2002) brought the rate to an unprecedented 1.0%, the lowest rate in 45 years.

At the end of the third quarter of the fiscal year, the United States stood at the brink of war with Iraq, a situation not viewed positively by many of the European countries. The subsequent onset of the war and apparent success by the U.S. boosted consumer confidence radically and major equity market indices experienced gains in excess of 10%. Broad based gains continued during April 2003, as growth, value, large and small stocks all performed well. In the bond market, corporate and high yield bonds performed well. Of all sectors, energy experienced fractional losses while all other sectors of the S&P500 rose during the third quarter of the fiscal year.

As the end of the fiscal year approached, the economy continued to struggle but there was a new air of optimism. The CFRS ended the year with returns of 11.42% compared to its benchmark returns of 12.46%. After three years of negative returns, this was a positive beginning to a long awaited recovery. Its longer-term relative and absolute results continue to be positive though below its assumed investment return rate of 7.75%. It ranked in the forty-second percentile of the Public Plan Sponsor Database for the year ended June 30, 2003. Most public retirement systems experienced similar volatility and median returns were in the 10-11% range. Professionals with many years of experience in the public pension arena continue their commitment to and belief in diversification of assets as the primary success factor in these volatile years. The CFRS also believes its diversified asset allocation will continue to benefit it over the long term.

#### Going Forward

The global economic and currency problems as well as ongoing conflict in Iraq continued to cause concern into fiscal year 2004. The U.S. economy continued its struggle for economic growth through the summer months. While business spending remained restrained, consumer spending held up relatively well as confidence improved due to the low interest and mortgage rates and rising stock prices. The continuing unsettled employment situation will likely cause the Federal Reserve to maintain its position of low interest rates through the end of 2003 and into 2004. While most economic and financial professionals gave a positive outlook for the economy during the first quarter of fiscal 2004, only time will tell. Resolution of the Iraq conflict will be a significant factor as well.

The Charlotte Firefighters' Retirement System follows a strategic asset allocation approach whereby it recognizes that markets move in cyclical patterns and that timing these market changes is an elusive skill. Consequently, the success of the Charlotte Firefighters' Retirement System is tied to its long term commitment to a well diversified investment approach across several asset classes and management styles. In light of past returns using the existing asset allocation approach and with the belief that the global markets and the U.S. economy will begin a slow yet volatile improvement, we expect Fiscal 2003-2004 overall returns for the Charlotte Firefighters' Retirement System to be at or above its expected return rate of 7.75%.

#### MAJOR INITIATIVES

During the year, as its primary duty, the Investment Committee spent considerable time reviewing the performance of all existing managers and recommended replacement of one firm due to not meeting investment objectives over an extended period. The Investment Committee also recommended to the Board of Trustees a change from a "core" domestic fixed income allocation to a "core plus" mandate after considerable research and discussion. The Board approved this recommendation and a search was conducted which resulted in the replacement of one firm. The Investment Committee continued discussions of benchmarks and asked Callan Associates to prepare a domestic equity structure study. The study will be completed early in the next fiscal year.

Finally, the Investment Committee continued discussion and information gathering on the subject of securities litigation. The Committee developed a lead plaintiff policy and made a recommendation to the Board of Trustees for its approval. The policy was approved and the Investment Committee continued related discussion of securities litigation monitoring services. The Committee plans to report on their findings and possibly bring some recommendations to the Board of Trustees in the next fiscal year.

Issues will continue to be examined 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 CFRS rebalanced its portfolio in accordance with its asset allocation and investment objectives and guidelines in May 2003 and also increased its real estate allocation at that time from 3% to 6%.

There was significant activity in the benefits area during the past year. With the passage of the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA), the Benefits Committee continued its work with the staff and legal counsel to incorporate necessary language into the Act to comply with new provisions contained in EGTRRA. The Benefits Committee completed its consideration of prior government and withdrawn service purchase options and proposed the addition of appropriate language to the Act as well as the language needed to permit participants to purchase such service credits with 457 deferred compensation and 401(k) funds. The Board of Trustees and Charlotte City Council approved these recommended revisions and they were submitted to the North Carolina State Legislature for action which was completed in late Summer of 2002. Several members subsequently took advantage of the ability to transfer 457 deferred compensation funds for purchase of prior military and/or government service.

The Benefits Committee continued discussion of various aspects of the disability retirement process. The Committee, with the assistance of the Administrator and legal counsel, developed guidelines for use of surveillance services. These guidelines were presented to the Board of Trustees and approved. The Committee also had considerable discussion concerning the coordination of benefits provided by *Section* 22 of the Act. This section refers to payments of workers' compensation which may be made concurrently with pension benefit payments under certain circumstances. The Committee developed administrative procedures to implement enforcement of *Section* 22 and recommended approval to the Board. These procedures were approved by the Board.

Finally, the Internal Revenue Service (IRS) issued a new Letter of Determination for the CFRS in June, 2003 which confirms the retirement system's qualified status. The IRS requested two minor technical changes to language in the Act. These changes were submitted to the Charlotte City Council for approval during the first quarter of Fiscal 2004.

#### FINANCIAL INFORMATION

The CFRS'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 of Trustees, participants of the retirement 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 CFRS is a fiduciary fund and is therefore exempt from budgetary requirements. However, the Board of Trustees considers and adopts a budget for each current fiscal year of operations.

#### Accounting and Actuarial Systems

The financial reports of the CFRS 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 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 CFRS flow from three sources:

**Contributions by Members:** A CFRS 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. Employee contributions accounted for 31.14% of the system's revenues for the last fiscal year.

**Contributions by the City of Charlotte:** The City of Charlotte matches the payroll contributions of the members. The City of Charlotte contributions accounted for 29.15% of the system's revenues for the 2003 fiscal year.

**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 of Trustees and the City of Charlotte to provide for the future security of the system's participants. Statutorily, since 1947, the Board of Trustees has exercised responsibility for investing the system's portfolio 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 system assets in accordance with the Policy Statement of Investment Goals, Objectives, and Guidelines as established by the Board of Trustees.

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 not necessarily reflective of investment results.

The bottom line for a retirement system is the level of funding. The better the level of funding, the larger the ratio of assets to liabilities accumulated and the greater the level of investment income potential. In Fiscal 2003, investment income accounted for 39.71% of total revenue. A more complete discussion of the CFRS revenues and expenditures may be found in the *Financial Section* beginning on *Page xx*.

#### Expenses

The primary expense of the CFRS relates to the purpose for which it was created, namely, the payment of benefits. Benefit payments to retired participants and refunds to terminated members were responsible for 97.32% of all system expenses, compared to 97.45% for the prior year. Administrative costs and depreciation accounted for only 2.6% of system expenses for fiscal year 2003; nearly identical to the prior year. A more detailed discussion of CFRS expenses may be found in the *Financial Section* beginning on *Page 19*.

### OTHER INFORMATION

#### Independent Audit

The Charlotte Firefighters' Retirement System Act, a North Carolina statute, requires an annual audit by a certified public accountant. The independent certified public accounting firm of Deloitte & Touche LLP was selected by the Board of Trustees. The auditors' report on the financial statements and required supplementary information is included in the financial section of this report.

#### Acknowledgments

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 Charlotte Firefighters' Retirement System and the City of Charlotte.

Several individuals assisted with the preparation of this report and we wish to acknowledge their efforts and assistance. Patricia Adams, Retirement Analyst and Barbara B. Polson, Office Assistant for the CFRS; City Finance staff, Teresa Smith, General Accounting and Reporting Manager and Ann Marie Sullivan and Kathy Pond, City Finance Accountants, 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,

Kurt R. Hollar, Chairman of the Board

Barbara J. Avard, Administrator

# CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM CHARLOTTE, NORTH CAROLINA

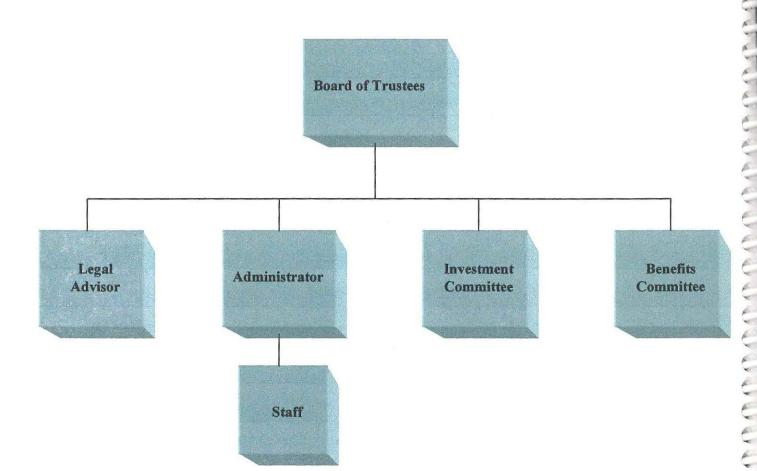
# **BOARD OF TRUSTEES**

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Allen J. Stewart, Trustee, Citizen Appointee

## STAFF

Barbara J. Avard, Administrator Patricia E. Adams, Retirement Analyst Barbara B. Polson, Office Assistant III

# CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM ORGANIZATIONAL CHART



# PROFESSIONAL SERVICE PROVIDERS TO THE CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM

## ACTUARY

Mellon Human Resources & Investor Solutions (formerly Buck Consultants)

CUSTODIAN BANK State Street Bank and Trust Company, NA

# **INDEPENDENT AUDITORS** Deloitte & Touche LLP, Charlotte, North Carolina

# INVESTMENT ADVISORS

AllianceBernstein Capital Management L.P., Domestic Equities Banc of America Capital Management, Inc., Domestic Equities & Fixed Income Baring Asset Management, Inc., Non-U.S. Fixed Income Barrow, Hanley, Mewhinney & Strauss, Inc., Core Plus Fixed Income Boston Partners Asset Management, L.P., Domestic Equities Cadence Capital Management, Domestic Equities Essex Investment Management Company, LLC, Domestic Equities Evergreen Investment Management Company, LLC, Domestic Equities Investment Counselors of Maryland, Domestic Equities Metropolitan Life Insurance Company, Real Estate MorganStanley, Non-U.S. Equities State Street Global Advisors, Domestic Fixed Income Index & Equities Index T. Rowe Price International, Inc., Non-U.S. Equities

INVESTMENT CONSULTANT

Callan Associates, Inc.

MEDICAL ADVISORS 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.

<u>Option 1</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.

#### Option 4 - 66 2/3% Joint & Survivor

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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 government service with another 50% of prior government employer. service may be purchased up to the maximum. The cost of such service is

# CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM SUMMARY OF PLAN PROVISIONS

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.



# FINANCIAL SECTION

The purpose of the Financial Section is to provide the reader the present financial position and condition of the system. This section includes the independent auditors' report, audited financial statements, notes to financial statements, and required supplementary information which includes Management's Discussion and Analysis.

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# Deloitte & Touche

# INDEPENDENT AUDITORS' REPORT

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

We have audited the accompanying statements of plan net assets of Charlotte Firefighters' Retirement System (the "System"), a component unit of the City of Charlotte, North Carolina, as of June 30, 2003 and 2002, and the related statements of changes in plan net assets for the years then ended, which collectively comprise the System's basic financial statements as listed in the table of contents. These financial statements are the responsibility of the System's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits 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 includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the System as of June 30, 2003 and 2002 and the results of its operations for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Management's Discussion and Analysis, the Schedule of Funding Progress, and the Schedule of Employee and Employer Contributions are not a required part of the basic financial statements but are supplementary information required by the GASB. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the supplementary information. However, we did not audit the information and express no opinion on it.

Our audits were made for the purpose of forming an opinion on the basic financial statements taken as a whole. The accompanying financial information, listed as Supplementary Schedules in the accompanying table of contents, is presented for purposes of additional analysis and is not a required part of the basic financial statements. This information is also the responsibility of the System's management. Such information has been subjected to the auditing procedures applied in the audits of the basic financial statements and, in our opinion, is fairly stated in all material respects, when considered in relation to the basic financial statements taken as a whole.

The introductory, investment, actuarial and statistical sections, as listed in the accompanying table of contents, are presented for purposes of additional analysis and are not a required part of the financial statements. Such information has not been subjected to auditing procedures applied in the audit of the System's basic financial statements and, accordingly, we express no opinion on it.

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) eloitte + Touche LLP

December 22, 2003

#### MANAGEMENT'S DISCUSSION AND ANALYSIS

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1924 1927 This section presents Management's Discussion and Analysis of the Charlotte Firefighters' Retirement System's (CFRS) financial statements and the significant events, conditions and decisions which affected the operations and performance of the CFRS during the years ended June 30, 2003 and 2002.

### **Overview of the Financial Statements and Accompanying Information**

- Fund Financial Statements. The CFRS presents Statements of Plan Net Assets as of June 30, 2003 and 2002 and Statements of Changes in Plan Net Assets 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.
- 2) <u>Notes to Financial Statements.</u> The notes to 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 CFRS 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 two schedules and related notes concerning the fund status of the CFRS, 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 CFRS, a schedule of investment manager fees by asset class and fees paid to consultants for professional services.

# Comparative Statements of Plan Net Assets (in thousands)

	Years ended June 30		
	<u>2003</u>	2002	
Cash and cash equivalents	\$ 7,419	\$ 5,880	
Investments	219,954	217,751	
Capital assets	356	374	
Other assets	566	527	
Total Assets	\$ <u>228,295</u>	\$ <u>224,532</u>	
Liabilities	( <u>1,158)</u>	<u>(520)</u>	
Net Assets	\$ <u>227,137</u>	\$ <u>224,012</u>	

Comparative Statements of Changes in Plan Net Assets

Contributions	Years Ended June 30 <u>2003</u> 2002 \$ 10,918\$\$10,176		
Net Investment Gain (Loss)	7,190	<u>(11,825)</u>	
Total Additions	\$ 18,108	\$(1,649)	
Benefits	(14,138)	(13,605)	
Other deductions	<u>(845)</u>	<u>(639)</u>	
Total Deductions	\$ (14,983)	\$(14,244)	
Increase (Decrease) in Net Assets	\$ <u>3,125</u>	\$ <u>(15,893)</u>	

### **Financial Analysis**

The CFRS provides retirement benefits to the uniformed firefighters of the City of Charlotte. The CFRS benefits are funded through member and employer contributions and investment income. The net assets of the CFRS increased approximately \$3.1 million and decreased \$15.9 million during the years ended June 30, 2003 and 2002, respectively, as reflected in the table on Page 21. These results reflect the prior three-year decline in global equity markets and the subsequent improved market environment during the last 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 CFRS is required to perform an annual actuarial valuation by the Act. The valuation as of July 1, 2003 showed the funded status of the CFRS declining to 93.9% at July 1, 2003 from 95.6% at July 1, 2002. The CFRS valuations use a 5-year smoothed market basis. The amount by which actuarially determined liabilities exceeded actuarially determined assets was \$16.8 million and \$11.7 million for the years ended June 30, 2003 and 2002, respectively. The decrease in the funded ratio was due to continued weak global equity markets. The funded ratio, although still at a very good level, may continue to decrease if investment returns fail to meet actuarial assumptions.

### Contributions and Income

Additions to Plan Net Assets include employer and member contributions and net income from investment activities. Member contributions were \$5.6 million and \$5.1 million for the years ended June 30, 2003 and 2002, respectively, an increase of approximately \$526,000. 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. Member contributions accounted for 31.1% and 43% of the CFRS revenues in fiscal 2003 and 2002, respectively. Employer contributions were \$5.3 million and \$5.1 million for the years ended June 30, 2003 and 2002, respectively.

Net investment income totaled approximately \$7.2 million during fiscal 2003 compared to net investment losses of \$11.8 million in fiscal 2002, resulting in returns of 4.07% and (4.16%) respectively. For the 5-year period ended June 30, 2003, the CFRS returns were 3.25% compared to its composite benchmark returns of 1.96%. The increase in investment income in 2003 and the decrease in 2002 was the result of the extreme period of volatility in global equity markets.

The most significant deduction from investment income is investment manager fees. The CFRS 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 also paid a base fee plus the possibility of performance incentive. Most of the managers were generally compensated

less than in prior years because of the effect of decreasing asset values. Investment expenses for the years ended June 30, 2003 and 2002 were \$1.30 million and \$1.26 million, respectively.

Prudent investment of the CFRS assets and diligent monitoring of investment advisors in addition to conservative administrative costs has enabled the CFRS to maintain a high funded status. The Board of Trustees is committed to maintaining the CFRS 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 Assets is benefit payments. During fiscal 2003 and fiscal 2002, the CFRS paid approximately \$14.6 million and \$13.9 million, respectively, in benefits and refunds, an increase of \$701,000 in 2003. These higher payments were due primarily to a number of new retirees and a larger number of refunds than in the prior year. The CFRS does not provide an automatic Cost of Living Adjustment (COLA). These are recommended to the Charlotte City Council on an ad hoc basis. The last COLA was implemented effective January 2000 and brought retirees to 1999 CPI levels. The CFRS does provide for a "bonus" payment to retirees and survivor beneficiaries based upon its funded status and only after consultation with the CFRS actuary. In January 2003, no bonus payment was paid to eligible retirees.

The administrative costs of the CFRS represented approximately 0.17% and 0.15% of the average assets in fiscal years 2003 and 2002, respectively.

#### **Plan Assets**

During fiscal years 2003 and 2002, investments allocated to domestic and international equity portfolios decreased approximately \$484,000 and \$19.2 million, respectively. The decrease is attributable to the decline in global equity markets. The CFRS does not invest in alternative classes of investments such as hedge funds, venture capital and private equity. The CFRS also does not have a securities lending program at this time.

The CFRS values its assets at "fair value" as discussed in accounting policies footnote 2(d) to the financial statements. Fair value is the value the CFRS 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 CFRS utilizes an open end fund for its real estate investment allocation.

## Contacting the CFRS Management

This financial report is designed to provide the City Council, members of the CFRS, citizens, taxpayers and other interested parties with an overview of the CFRS operations and financial position and to demonstrate its accountability. Questions concerning this report or requests for additional information should be directed to the Administrator, Charlotte Firefighters' Retirement System, 428 East 4<sup>th</sup> 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 ASSETS (In Thousands)

	June 30	
	2003	
ASSETS: Cash and cash equivalents	<u>\$ 7,419</u>	\$ 5,880
Receivables:		
Member contributions	122	57
Employer contributions	134	61
Interest and dividends	310	409
Total receivables	566	527
Investments, at fair value:		
Equity securities - stocks	88,414	88,898
Fixed income securities - bonds	24,279	27,609
Mutual funds	107,261	101,244
Total investments	219,954	217,751
Capital assets, at cost, net of accumulated depreciation		
of \$86 - 2003 and \$68 - 2002	356	374
Total assets	228,295	224,532
LIABILITIES:		
Accounts payable	1,158	520
NET ASSETS HELD IN TRUST FOR PENSION BENEFITS (SEE REQUIRED SUPPLEMENTARY INFORMATION	# 200 10 <b>5</b>	# 00 / 01 C
FOR SCHEDULE OF FUNDING PROGRESS)	<u>\$ 227,137</u>	<u>\$ 224,012</u>

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 ASSETS

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(In Thousands)

	Years Ended June 30	
	2003	2002
ADDITIONS:	······································	
Contributions:		
Member	\$ 5,640	\$ 5,114
Employer	5,278	5,062
Total contributions	10,918	10,176
Investment income (loss):		
Net appreciation (depreciation) in fair value of investments	6,073	(13,659)
Interest	1,211	1,661
Dividends	1,201	1,428
	8,485	(10,570)
Less investment expense	1,295	1,255
Net investment income (loss)	7,190	(11,825)
Total additions	18,108	(1,649)
DEDUCTIONS:		
Benefits	14,138	13,605
Refunds	443	275
Administration	384	352
Depreciation	18	12
Total deductions	14,983	14,244
Change in net assets	3,125	(15,893)
NET ASSETS HELD IN TRUST FOR PENSION BENEFITS:		
Beginning of year	224,012	239,905
End of year	<u>\$ 227,137</u>	\$ 224,012

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, 2003 and 2002 was \$41 million and \$40 million, respectively.

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

	<u>2003</u>	<u>2002</u>
Retired participants and beneficiaries		
currently receiving benefits	427	411
Terminated participants and beneficiaries		
entitled to benefits but not yet		
receiving benefits	2	2
Active participants	<u>    876  </u>	856
Total	1,305	1,269

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 five years 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 two consecutive years of membership which produces the highest average and is contained within the last five 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 five years of service credit, accumulated employee contributions are refunded to the employee or designated beneficiary. After five 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 Statement No. 25, <u>Financial Reporting for Defined Benefit Pension Plans and Note</u> <u>Disclosures for Defined Contribution Plans</u>, which establishes reporting standards for defined benefit pension plans of state and local government entities.

GASB Statement No. 9, <u>Reporting Cash Flows of Proprietary and Nonexpendable Trust Funds and</u> <u>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.

The System applies all applicable GASB pronouncements, as well as Financial Accounting Standards Board pronouncements, Accounting Principles Board opinions and Accounting Research Bulletins, issued on or before November 30, 1989, unless those pronouncements conflict with or contradict GASB pronouncements.

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 straight-line method over an estimated useful life of twenty-five years for buildings and five years for equipment. 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 amount of deposits and investments were \$7,419 and \$219,954 at June 30, 2003 and \$5,880 and \$217,751 at June 30, 2002, respectively.

#### Deposits

All deposits of the System are made in board-designated official depositories and are collateralized with securities held by the System or by the System's agent in the System's name. The bank balances at June 30, 2003 and 2002 were \$1,166 and \$70, 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 System has also 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.

All investments, other than mutual funds, are insured or registered, or are securities held by its agent in the System's name (category 1). Mutual funds are not categorized because they are not evidenced by securities that exist in physical or book entry form.

#### 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. 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. The Plan utilizes various investment instruments including U. S. Government Securities, corporate bonds, common stocks, and mutual funds. Investment securities, in general, are exposed to various risks, such as interest rate, credit, and overall market volatility. Due to the level of risk associated with certain investment securities, it is reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the financial statements.

#### f. Capital Assets

Capital asset activity for the year ended June 30, 2003, was as follows:

	-	ginning L <u>lance</u>	Incr	ease	Dec	rease		ding l <u>ance</u>
Capital assets, being depreciated:								
Buildings	\$	435	\$	-	\$	-	\$ ·	435
Equipment		7		_		-		. 7
Total capital assets being depreciated		442						442
Less accumulated depreciation for:								
Buildings		61		18		-		79
Equipment		7		-		-	. <u>.</u>	7
Total accumulated depreciation	<u> </u>	68		18				86
Capital assets, net	<u>\$</u>	374	\$	18	<u>\$</u>	-	\$	356

#### 3. CONTRIBUTIONS:

Pursuant to the Act that established the System, the City is required to match the member's contribution. The Act dictates that the member's contribution is equal to the member's compensation multiplied by the sum of the current social security contribution rate plus five percent. The current rate is 12.65 percent. The total contributions for the year ended June 30, 2003 were \$10.9 million, which consisted of \$5.3 million from the City and \$5.6 million from employees. For 2002 contributions were \$10.2 million, which consisted of \$5.1 million from the City and \$5.1 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	Covered
	<u>In Dollars</u>		<u>Payr</u>	<u>oll</u>
	<u>2003</u>	<u>2002</u>	<u>2003</u>	2002
Contributions made by -				
City	\$5,278	\$5,062	12.76%	12.70%
Members	5,640	5,114	13.64	12.84
Total	<u>\$10,918</u>	<u>\$10,176</u>	<u>26.40</u> %	<u>25.54</u> %
· · · · · · · · · · · · ·				
Actuarially determined contributions -	•			
Normal cost	\$10,317	\$9,560	24.95%	23.99%
Amortization of unfunded				
actuarial accrued liability	<u> </u>	<u> </u>	1.45	1.55
Total	<u>\$10,918</u>	<u>\$10,176</u>	<u>26.40</u> %	<u>25.54</u> %

#### 4. CONCENTRATIONS:

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

	<u>2003</u>	<u>2002</u>
Evergreen Investment Management	15%	14%
Morgan Stanley Dean Witter	14	15
Barrow, Hanley, McWhinney & Strauss	12	-
State Street Global Advisors	11	14
Alliance Capital Management	10	10
Boston Partners	8	8
Cadence Capital Management	8	7
Banc of America Capital Management	-	13
Baring Asset Management	-	6

#### 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)

		·		Sched	ule of	Funding Pr	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]	
7/1/1998	\$	187,387	\$	179,351	\$	(8,036)		.04.5%	\$	28,964	(27.7)%	)
7/1/1999		216,336		186,854		(29,482)		15.8		32,462	(90.8)	
7/1/2000		235,901		239,784		3,883		98.4		33,080	11.7	
7/1/2001		246,614		254,767		8,153		96.8		38,079	21.4	
7/1/2002		254,013		265,712		11,699		95.6		39,849	29.4	
7/1/2003		261,022		277,843		16,821		93.9		41,355	40.7	

# Schedule of Employee and Employer Contributions

Year Ended June 30	Re	nnual quired tributions	Percentage Contributed		
1998	\$	4,812	155.7%		
1999		3,694	210.0		
2000		4,446	193.5		
2001		9,100	100.0		
2002		10,176	100.0		
2003		10,918	100.0		

CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM, A COMPONENT UNIT OF THE CITY OF CHARLOTTE, NORTH CAROLINA **REQUIRED SUPPLEMENTARY INFORMATION - (Continued)** Notes to Required Supplementary Information (Dollar Amounts in Thousands)

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the date indicated. Additional information as of the latest actuarial valuation follows:

Valuation date	7/1/2003		
Actuarial cost method	Entry age		
Amortization method	Level dollar open		
Remaining amortization period	30 years		
Asset valuation method	5-year smoothed market		
Actuarial assumptions:			
Investment rate of return	7.75%		
Projected salary increases	4.75 to 7.75%		
Includes inflation at	3.75%		
Cost-of-living adjustments	None		

# 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		
	2003	2002	
CASH RECEIPTS: Contributions:			
Member	\$ 5,575	\$ 5,110	
Employer	5,205	5,0 <u>54</u>	
Total contributions	10,780	10,164	
Investing activities:	10,700	10,101	
Sales of investments	262,556	231,834	
Interest	1,312	1,682	
Dividends	1,199	1,407	
Total investing activities	265,067	234,923	
Total cash receipts	275,847	245,087	
CASH DISBURSEMENTS:			
Benefits	14,091	13,543	
Refunds	81	274	
Administration	366	352	
Purchase of building and equipment	-	303	
Investing activities:			
Purchase of investments	258,686	230,969	
Investment expense	1,084	1.202	
Total investing activities	259,770	232.171	
Total cash disbursements	274,308	246,643	
Net increase (decrease) in cash and cash equivalents	1,539	(1,556)	
CASH AND CASH EQUIVALENTS, beginning of year	5,880	7,436	
CASH AND CASH EQUIVALENTS, end of year	<u>\$ 7,419</u>	<u>\$ 5,880</u>	

### CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM, A COMPONENT UNIT OF THE CITY OF CHARLOTTE, NORTH CAROLINA SCHEDULE OF ADMINISTRATIVE EXPENSES AND DEPRECIATION Year Ended June 30, 2003 (Dollar Amounts in Thousands)

PERSONAL SERVICES:				
Staff Salaries	\$	139		
Social Security		10		
Retirement		7		
Insurance		6		
401 (k) Contributions		4		
Total Personal Services			S	166
PROFESSIONAL SERVICES:				
Legal Counsel		42		
Other		28		
Actuarial Services		14		
Health Services		8		
Audit		5		
	<del></del> ,			
Total Professional Services				97
COMMUNICATION:				
Travel and Training		44		
Postage		7		
Printing		4		
Telecommunications		4		
Meetings		2		
Parking		1		
Books and Subscriptions		11		
Total Communication				63
MISCELLANEOUS:				
Office Condominium Fees		21		
Insurance	•	17		
Depreciation		18		
Office Furniture and Equipment		7		
Office and Computer Supplies		4		
Annual Retiree Reunion		4		
Office Equipment Maintenance		3		
Professional Memberships		2		
Total Miscellaneous				76
TOTAL ADMINISTRATIVE EXPE	NSES AND I	DEPRECIAT	ION \$	402
		70		

### CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM, A COMPONENT UNIT OF THE CITY OF CHARLOTTE, NORTH CAROLINA SCHEDULE OF INVESTMENT EXPENSES Year Ended June 30, 2003 (Dollar Amounts in Thousands)

### INVESTMENT MANAGEMENT FEES: Evergreen Investment Management Company LLC \$ 362 Morgan Stanley Dean Witter 304 Boston Partners Asset Management LP 209 Metropolitan Life Insurance Company 109 Baring Asset Management 72 Cadence Capital Management 57 AllianceBernstein Capital Management Corporation 51 Banc of America Capital Management 24 Barrow, Hanley, MeWhinney & Strauss 24 Essex Investment Management Company 13 State Street Global Advisors 2 Total Investment Management Fees 1,227 TRUST AND BANK FEES: State Street Bank and Trust Company NA 104 Bank of America 3 Litigation Settlement (1)Total Trust and Bank Fees 106 INVESTMENT CONSULTING FEES: Callan Associates Inc. 100 **Commission Recapture** (138)Total Investment Consulting Fees (38) TOTAL INVESTMENT EXPENSES \$ 1,295

### CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM, A COMPONENT UNIT OF THE CITY OF CHARLOTTE, NORTH CAROLINA SCHEDULE OF PROFESSIONAL SERVICE EXPENSES Year Ended June 30, 2003 (Dollar Amounts in Thousands)

	Official System Position	Pa	yments	Nature of Services
Evergreen Investment Management Co	Money Manager	\$	361	Money Management
Morgan Stanley Dean Witter	Money Manager		304	Money Management
Metropolitan Life Insurance Company	Money Manager		108	Money Management
State Street Bank and Trust Company NA	Custodian		107	Custodian
Callan Associates Inc.	Consultant		86	Consulting
Baring Asset Management	Money Manager		74	Money Management
Cadence Capital Management	Money Manager		58	Money Management
AllianceBernstein Capital Management Corp	Money Manager		51	Money Management
Boston Partners Asset Management	Money Manager		41	Money Management
Parker, Poe, Adams & Bernstein	Attorney		32	Legal
Ceridian Employer Services	Benefits Processor		22	Benefits Processing
Essex Investment Management	Money Manager		21	Money Management
Edwards, Church & Muse	Insurance		16	Insurance
Buck Consultants	Actuary		15	Actuarial Services
Banc of America Capital Management	Money Manager		10	Money Management
Dell Marketing LP	Computer Products		7	Computers
Deloitte & Touche LLP	Auditor		5	Audit
NorthEast Medical Center	Medical Board		5	Health Services
Bank of America	Banker		3	Banking Services
Womble, Carlyle, Sandridge & Rice	Attorney		3	Legal
KON Management	Printer		2	Printing
Pitney Bowes Credit Corporation	Telecommunication		2	Mail Machine Lease
SMS Catering	Caterer		2	Catering
The Travelers	Insurance		2	Insurance
All Type Graphics	Printer		1	Printing
American Photocopy	Copier		1	Copier Maintenance
Dash Courier Service	Courier		1	Delivery Services
Lowrance Reporting Services	Court Reporter		1	Transcription
Palmetto Productions	Product Supplier		1	Merchandise
Sunbelt Graphics	Printer		1	Printing
Subtotal			1,343	
Accrued at June 30, 2002 Accrued at June 30, 2003			(190) 412	

### CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM, A COMPONENT UNIT OF THE CITY OF CHARLOTTE, NORTH CAROLINA SCHEDULE OF INVESTMENTS Year Ended June 30, 2003 (Dollar Amounts in Thousands)

Type of Investment	Jun	ie 30, 2002 Fair Value	P	urchases	Re	Sales demptions		Net opreciation oreciation)	Ju	ne 30, 2003 Fair Value	Percentage Fair Value
FIXED INCOME:											
U. S. government securities	\$	16,206	\$	121.337	\$	125,006	\$	(71)	\$	12,466	5.48%
Corporate bonds	Ψ	11,403	9	26,446	Ψ	26,533	Ŷ	497	Ŷ	11,813	5.20%
Total fixed income		27,609		147,783		151,539		426		24,279	10.68%
COMMON AND PREFERRED STOCK:		88,898		89,382		98,950		9,084		88,414	38.89%
MUTUAL FUNDS:											
Domestic Equities		9,941		16,614		2,039		458		24,974	10.98%
Fixed Income Bond Index		31,327		3		7,560		300		24,070	10.59%
International Equities		37,796		2,400		543		(2,126)		37,527	16.50%
International Fixed Income		12,972		5		5,174		686		8,489	3.73%
Real Estate		9,208		2,500				493		12,201	5.37%
Total mutual funds		101,244		21,522		15,316		(189)		107,261	47.17%
SHORT-TERM INVESTMENTS:		5,880		110,778		118,952		9,713		7,419	3.26%
	\$	223,631	\$	369,465	\$	384,757	\$	19,034	\$	227,373	100.00%

Note: Short-term Investments are reflected as Cash and Cash Equivalents in the Statement of Plan Net Assets. A portfolio listing is available for review at the System's office.



# **INVESTMENT SECTION**

The purpose of the Investment Section is to provide the reader with data reflecting investment policy and the investment operations of the system. This section includes a consultant report, a list of investment goals for the system, an explanation of the investment performance analysis, a schedule of investment results and the system's return on investments. Also included is a schedule of largest assets held, schedule of fees and commissions, and a schedule of investment summary.

# **CALLANASSOCIATES**

November 17, 2003

JEANNE VALCIK, CPA, CFA SENIOR VICE PRESIDENT

CAI

SAV FRANCISCO

NEW YORK CHICAGO ATLANTA

DENVER

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 assets are managed on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the pension fund. While recognizing the importance of the "preservation of capital," CFRS also adheres to the principle that varying degrees of investment risk are generally rewarded with compensating returns in the long run. Consequently, prudent risk-taking is warranted within the context of overall portfolio diversification to meet this objective. These activities are executed in a manner that serves the best interests of CFRS' members and beneficiaries.

The Board has adopted an Investment Policy Statement, which provides a framework for the management of CFRS' investments. This Statement establishes CFRS' investment policies and objectives and defines the principal duties of the Board and the investment managers.

#### Asset Allocation

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A pension fund's strategic asset allocation policy implemented in a consistent and disciplined manner is generally recognized to have the most impact on a fund's investment performance. The asset allocation process determines a fund's optimal long-term asset class mix (target allocation) which is expected to achieve a specific set of investment objectives. During fiscal year 2002-2003 CFRS implemented a new asset allocation:

Domestic Equity	51%
Non-Domestic Equity	16%
Real Estate	6%
Domestic Fixed Income	23%
Non- Fixed Income	400

The asset allocation implemented by the Board is efficient – it generates the maximum level of expected return for the expected level of risk. The asset mix reflects the appropriate level of risk for the plan, based upon a balanced consideration of plan liabilities and the expected interaction of the liabilities with potential fund performance.

#### Performance

CFRS produced a positive return of 4.07% following two years of losses. The five-year annualized return of 3.25% exceeded the fund benchmark of 1.96%. The fund benchmark assumes a passive implementation of the strategic asset allocation policy. In the Callan Public Fund Universe, CFRS' total fund performance ranks at the 42<sup>nd</sup> percentile for five-years and 21<sup>st</sup> percentile since inception (15 years). The performance information in this report is fully compliant with the AIMR Performance Presentation Standards.

Very truly yours,

Janne Valeik

Jeanne Valcik, CFA

### 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 and actuarial and funding policies. 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:

<u>"Specialist" Managers</u> 4	<u>Target</u> Allocation	<u>Acceptable</u> <u>Range</u>
Domestic Equity	51%	+/-5%
Non-U.S. Equity	16%	+3/-2%
Real Estate	6%	+2/-3%
Domestic Fixed Income	23%	+/-4%
Non-U.S. Fixed	4%	+/-2%
Cash	0%	+2/-5%

# **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	<u>Market Valı</u>	<u>ie Exposure</u>
	<u>Maximum</u>	Minimum
_		
Domestic Equities	56%	46%
Non-U.S. Equities	19%	14%
Real Estate	8%	3%
Domestic Fixed Income	27%	19%
Non-U.S. Fixed	6%	2%
Internal Account	5%	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 (as of October 1, 2000), 51.5% in the Wilshire 5000 Stock Index, 13.5% in the Stanley Capital Morgan International (MSCI) Europe, Australia Far East Index, 2% MSCI Emerging Markets Free, 22.5% in the Lehman Brothers Aggregate Bond Index, 3% in the Callan Associates or comparable Real Estate Data Median, 1.5% in the Merrill Lynch (ML) 1-3 Government/Corporate vear Index and 6% in the Salomon Brothers Non-US Government 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 35% 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 Wilshire 5000 Stock Index by at least 200 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 35% 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 35% 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 Callan Associates, or comparable real estate database median 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 Lehman Brothers Aggregate Bond Index by at least 30 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.

# 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 Salomon Brothers Non-US Government Bond Index by at least 150 basis points per year measured over a period of five years.

### **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. universe which Incorporated is comprised of over 80% of the professionally managed investments in the United States. Evaluation for the various time periods ended June 30, 2003 are shown on subsequent pages. are "time weighted", All returns annualized "total" rates of return in accordance with AIMR performance presentation standards and are based on market values.

# **PORTFOLIO DISTRIBUTION**

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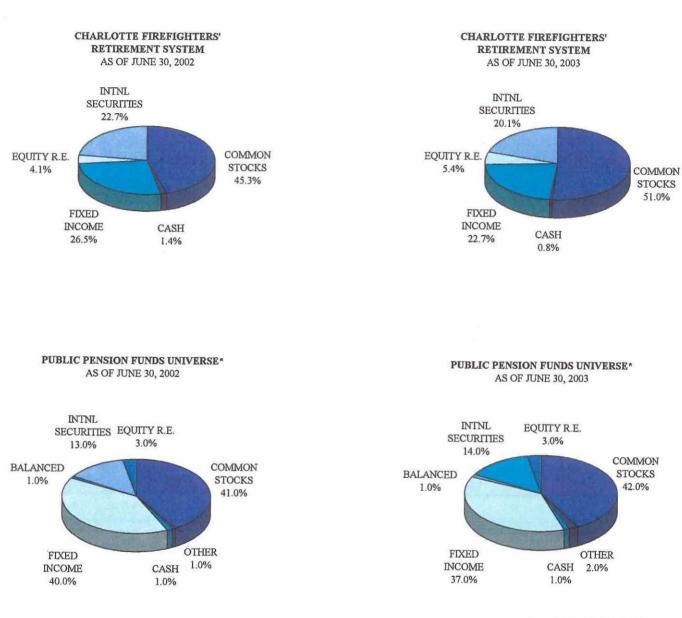
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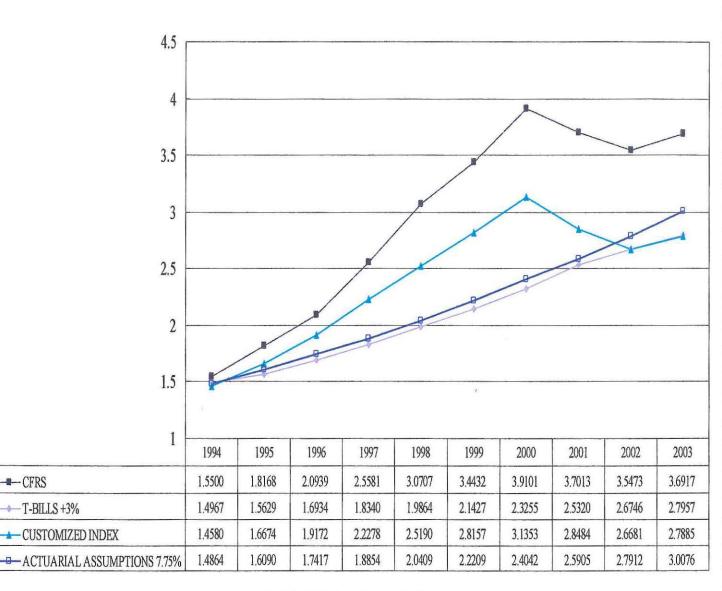
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\*Callan Associates, Inc. c2003



# TOTAL FUND INVESTMENTS GOALS – LAST TEN YEARS Years Ended June 30

Note: Actuarial assumption changed from 8.25% to 7.75% as of July 1, 2000.

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

						· · · · · ·						
	1994	1995	1996	1997		L YEAR					Rates Over	10-Year
<u>RATE OF RETURN</u>				1997	1998	1999	2000	2001	2002	2003	10 Years	Rate
CFRS	7.36%	17:33%	15.25%	22.17%	20.04%	12.13%	13.56%	-5.34%	-4.16%	4.07%	10.24%	102.41%
Consumer Price Index	2.39%	3.08%	2.81%	2.15%	1.60%	1.94%	3.87%	3.19%	0.74%	2.10%	2.39%	23.87%
Customized Index	2.10%	14.36%	14.98%	16.20%	13.07%	11.78%	11.35%	-9.15%	-6.33%	4.51%	7.29%	72.87%
Market Indicators												
* Callan Real Estate Median	2.58%	8.82%	6.67%	9.15%	16.75%	11.24%	9.54%	7.99%	5.88%	11.73%	9.04%	90.35%
* Custom Mid Value Index	0.67%	20.54%	22.16%	25.95%	26.22%	5.39%	-3.91%	28.37%	2.52%	-1.55%	12.64%	126.36%
* FRMS Stock Index	-2.22%	20.56%	23.66%	24.12%	20.28%	18.23%	***	***	***	***	17.44%	104.63%
* Lehman Aggregate Index	-1.30%	12.54%	5.02%	8.15%	10.54%	3.15%	4.57%	11.22%	8.63%	10.40%	7.29%	72.92%
* ML 1-3 Govt/Corp Bond	1.61%	7.81%	5.53%	6.64%	6.85%	5.18%	4.92%	9.43%	6.82%	5.63%	6.04%	60.42%
* MSCI EAFE Index	17.00%	1.66%	13.28%	12.84%	6.10%	2.54%	17.15%	-23.83%	-9.49%	-6.46%	3.08%	30.79%
* MSCI Emerging Mkts Free	37.16%	-0.03%	8.48%	12.82%	-39.09%	28.71%	9.48%	-25.93%	1.31%	6.96%	3.99%	39.87%
* Russell 2000 Stock Index	4.41%	20.06%	23.89%	16.33%	16.51%	1.50%	14.32%	0.57%	-8.60%	-1.64%	8.74%	87.35%
* S&P MidCap Index	-0.06%	22.35%	21.58%	23.33%	27.15%	17.19%	16.97%	8.87%	-4.72%	-0.71%	13.20%	131.95%
* SB EMB Market ex-US	16.48%	-4.58%	16.98%	1.27%	-1.68%	I.02%	12.68%	-19.45%	-0.98%	0.90%	2.26%	22.64%
* SB NON-US Bond Index	9.46%	22.71%	-1.69%	2.16%	0.89%	4.87%	2.42%	-7.43%	15.73%	17.90%	6.70%	67.02%
* Standard & Poor's 500 Index	1.41%	26.07%	26.00%	3*.70%	30.16%	22.76%	7.24%	-14.83%	-17.99%	0.25%	11.58%	115.77%
* Treasury Bills	3.40%	5.44%	5.35%	5.30%	5.31%	4.89%	5.53%	5.88%	2.63%	1.53%	4.53%	45.26%
* Wilshire 5000 Stock Index	1.19%	24.72%	26.22%	29.32%	28.86%	19.59%	9.53%	-15.28%	-16.62%	1.27%		108.80%

\*\*\*FRMS Stock Index discontinued in October 1999 and substituted by CFRS with the Wilshire 5000 Stock Index.

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

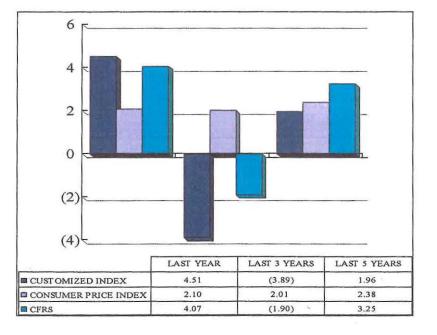
	Last Year	Last 3 Years	Last 5 Years
Domestic Equity	-0.67%	-8.90%	-0.35%
AllianceBernstein	-0.80%	-20.50%	-5.39%
Banc of America Capital Management	-	-	-
Boston Partners Asset Management	0.58%	6.79%	2.51%
Cadence Capital Management	-2.73%	-7.34%	1.86%
Evergreen Investment Management	1.03%	-5.96%	0.98%
ICM Small Company Portfolio	-2.03%	13.06%	7.49%
Wilshire 5000	1.27%	-10.56%	-1.29%
Standard & Poor's 500	0.25%	-11.20%	-1.61%
S&P MidCap Index	-0.71%	0.99%	7.14%
Custom MidCap Value Index*	-1.55%	9.02%	5.58%
Custom MidCap Index**	0.96%	-0.51%	5.27%
Russell 1000 Value	-1.02%	-0.19%	1.05%
Russell 1000 Growth	2.94%	-21.54%	-5.03%
Russell 2000	-1.64%	-3.30%	0.97%
Russell 2000 Value	-3.80%	10.93%	4.98%
Russell 2000 Growth	0.69%	-16.66%	-4.25%
Domestic Fixed-Income	10.24%	9.80%	7.28%
Barrow, Hanley, MeWhinney & Strauss	-	-	-
SSGA Bond Market Fund	10.62%	10.17%	-
Lehman Aggregate	10.40%	10.08%	7.54%
ML 1-3yr Govt/Corp	5.63%	7.28%	6.38%
International Equity	-0.92%	-4.11%	6.13%
Morgan Stanley International Equity	-2.61%	-1.32%	5.78%
Morgan Stanley Emerging Markets	5.16%	-10.91%	4.40%
T. Rowe Price Discovery Fund	5.38%	-15.92%	8.42%
MSCI EAFE Index	-6.46%	-13.52%	-4.00%
MSCI Emerging Markets Free	6.96%	-7.02%	2.52%
SB EMB ex-US	0.90%	-6.29%	-0.44%
International Fixed Income	18.90%	9.66%	5.95%
Baring International Fixed Income	17.79%	8.89%	4.87%
Baring Emerging Debt	30.37%	16.77%	12.58%
S/B Non-U.S. Govt Bond	17.90%	8.10%	6.29%
Emerging Markets Bond	35.38%	13.16%	11.30%
Real Estate	4.97%	6.45%	9.08%
SSR Realty Advisors	4.97%	6.45%	9.08%
Treasury Bills	1.53%	3.33%	4.08%
Consumer Price Index	2.10%	2.01%	2.38%
Total Fund	4.07%	-1.90%	3.25%
Composite Benchmark	4.51%	-3.89%	1.96%

Returns for periods longer than one year are annualized.

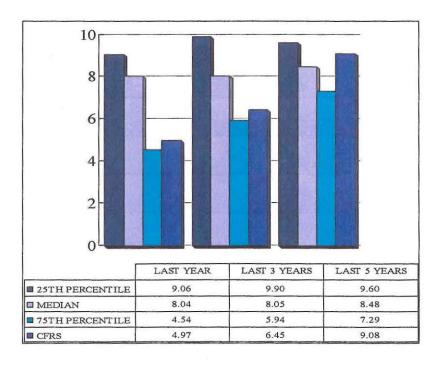
\*Custom Mid Cap Value Index = 50% S&P Mid Cap Value and 50% Russell Mid Cap Value.

\*\*Custom Mid Cap Index = 50% S&P Mid Cap and 50% Russell Mid Cap.

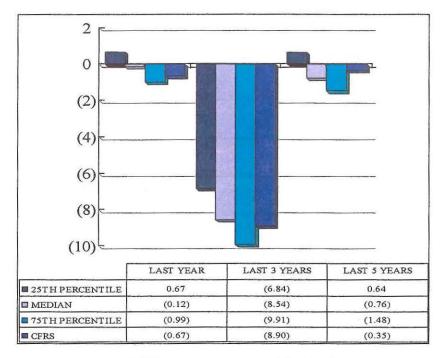
See Glossary for explanation of the Market Indices shown in this Table.



#### TOTAL PORTFOLIO

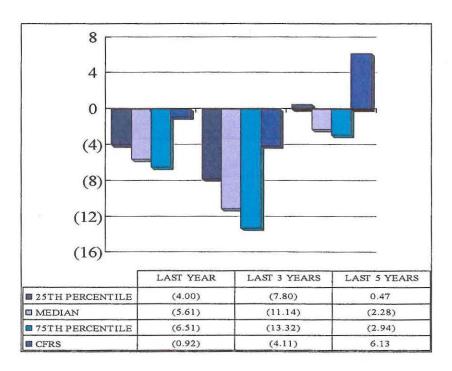


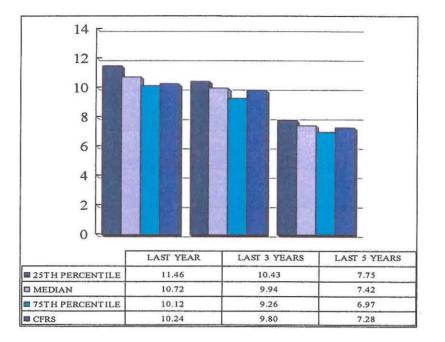
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EQUITY

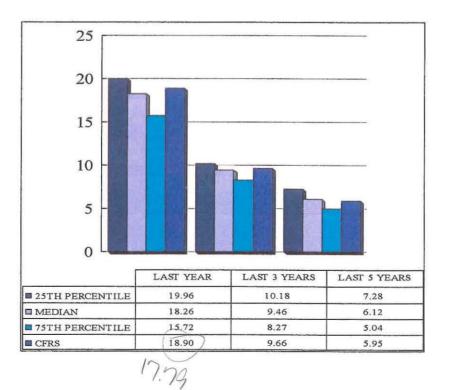
### INTERNATIONAL EQUITY





### FIXED INCOME

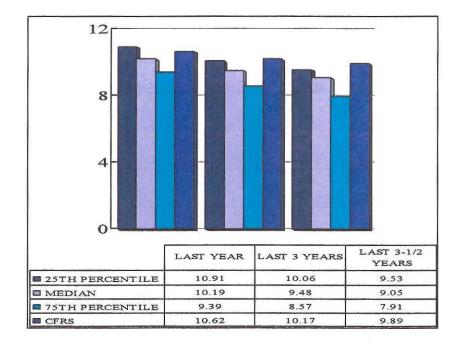
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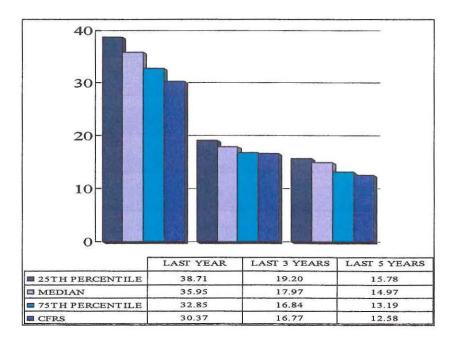
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### BOND MARKET FUND

### INTERNATIONAL EMERGING DEBT FUND



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

	Shares	Stock	Fai	r Value
1)	293	Morgan Stanley Pooled International Equity Trust	\$	27,748
2)	19	Metropolitan Life Insurance Tower Fund		12,201
3)	59	SSgA S&P 500 Flagship Fund		10,133
4)	276	UAM Small Co/Advisors Inner Circle Fund		7,508
5)	7	Banc of America Small Cap Growth Fund		7,333
6)	307	T Rowe Price International Discovery Fund		5,954
7)	243	Morgan Stanley Emerging Markets Trust		3,824
8)	67	Pfizer Inc		2,297
9)	47	Citigroup Inc		1,995
10)	40	Dell Computer Corp		1,264

### Largest Stock Holdings (By Fair Value) June 30, 2003

### Largest Bond Holdings (By Fair Value) June 30, 2003

		Par	Bond	Fa	air Value
1)	\$	1,414	State Street Global Advisors Fixed Income Index Fund	\$	24,070
2)		37	Baring International Trust Fund F - Non-Dollar Fixed Income		7,423
3)		1,274	FNMA #580156 6.000% due 8/01/2016 Rating AGY		1,333
4)		1,191	FNMA #555170 6.000% due 11/01/2017 Rating AGY		1,245
5)		6	Baring International Trust Fund G - Emerging Debt		1,066
6)		785	US Treasury Notes 3.875% due 2/15/2013 Rating Aaa		808
7)		688	FNMA #665380 7.000% due 10/01/2032 Rating AGY		726
8)		500	US Treasury Bonds 8.125% due 8/15/2019 Rating GOV		723
9)		648	FNMA #701936 5.500% due 4/01/2033 Rating AGY		671
10) A portfolio I	listing	623 s is availabl	GNMA #606438 5.500% due 2/01/2033 Rating AGY e for review at the System's office.		650

### CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM, A COMPONENT UNIT OF THE CITY OF CHARLOTTE, NORTH CAROLINA SCHEDULE OF FEES AND COMMISSIONS Year Ended June 30, 2003

(Dollar Amounts in Thousands)

	Assets under management		Fees	
INVESTMENT MANAGERS' FEES:				
Equity managers	\$ 154,641	\$	1,020	
Fixed income managers	60,531		98	
Real estate managers	12,201		109	
Total investment managers' fees	\$ 227,373	_	1,227	
OTHER INVESTMENT SERVICE FEES:				
Custodian fees			104	
Investment consultant fees			100	·
Banking fees			3	
Commission Recapture			(138)	
Litigation Settlement			(1)	
Total investment service fees		_	68	
TOTAL INVESTMENT FEES		\$_	1,295	

	Number			
	of Shares	Total	Percentage Cost	
Brokerage Firm	Traded	Commissions	of Transactions	
Lynch Jones & Ryan Inc	2,969	166	0.06	
Merrill Lynch Pierce Fenner & Smith	346	17	0.05	
Credit Suisse First Boston Corporation	186	9	0.05	
BNY-ESI Transition Management	184	8	0.04	
Lehman Brothers Inc	160	8	0.05	
BNY Brokerage Inc	158	8	0.05	
Morgan Stanley Co Incorporated	146	7	0.05	
Banc America Security LLC	137	7	0.05	
Bear Stearns Securities Corp	132	6	0.05	
UBS Warburg LLC	131	6	0.05	
State Street Brokerage Services	125	4	0.03	
Goldman Sachs & Co	125	6	0.05	
Deutsche Bank Securities Inc	112	6	0.05	
Jefferies Company Inc	111	5	0.05	
Janney Montgomery Scott Inc	106	4	0.04	
Lazard Freres & co	102	5	0.05	
Pulse Trading LLC	98	3	0.03	
Bear Stearns & Co Inc	93	5	0.05	
F P Maglio & Co Inc	92	1	0.01	
La Branche Financial Services Inc	92	4	0.04	
SG Cowen Securities Corp	91	5	0.05	
Salomon Smith Barney Inc	85	4	0.05	
Weeden & Co	80	4	0.05	
CIBC World Markets Corp	73	4	0.05	
JP Morgan Securities Inc	62	3	0.05	
Sandler O'Neill & Partners LP	60	3	0.05	

### CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM, A COMPONENT UNIT OF THE CITY OF CHARLOTTE, NORTH CAROLINA SCHEDULE OF FEES AND COMMISSIONS - (continued) Year Ended June 30, 2003 (Dollar Amounts in Thousands)

	Number			
Brokerage Firm	of Shares	Total	Percentage Cost	
Thomas Weisel Partners	Traded	Commissions	of Transactions	
Prudential Securities Incorporated	60	3	0.05	
First Union Capital Markets	54	3	0.06	
Cantor Fitzgerald & Co	52	3	0.06	
RBC Dain Rauscher Inc	52	3	0.06	
Jones & Associates Inc	46	2	0.04	
· · · · · · · · · · · · · · · · · · ·	46	I	0.02	
Wit Soundview Corp	45	2	0.04	
Leerink Swann & Company	44	2	0.05	
Fulcrum Global Partners LLC	41	2	0.05	
Sanford C Bernstein Co LLC	40	2	0.05	
Citigroup Global Markts Inc	37	2	0.05	
Keefe Bruyette & Woods Inc	29	I	0.03	
Heflin & Co LLC	27	. 1	0.04	
Adams Harkness & Hill Inc	27	- 1	0.04	
Charles Schwab Co Inc	26	1	0.04	
Merrill Lynch Professional Clearing Corp	23	1	0.04	
Midwest Research Securities	23	1	0.04	
U S Clearing Institutional Trading	21	1	0.05	
Suntrust Capital Markets Inc	19	I	0.05	
U S Bancorp Piper Jaffray Inc	19	1	0.05	
First Albany Corp	17	1	0.06	
Bridge Trading	16	1	0.06	
Instinet Clearing Services Inc	15	1	0.07	
Legg Mason Wood Walker Inc	15	- T	0.07	
First Tennessee Securities Corp	14	1	0.07	
Raymond James & Associates Inc	14	I	0.07	
Fox Pitt Kelton Inc	14	1	0.07	
Gerard Klauer Mattison & Co	13	1	0.07	
Baird, Robert W. & Co Inc	13	. I	0.08	
BHC Securites Inc	13	1		
Simmons & Company International	13	1	0.08	
	12	l	0.08	

The CFRS participates in commission recapture programs with BNY Brokerage and Lynch, Jones & Ryan, Inc. Pursuant to these agreements, BNY Brokerage and Lynch, Jones & Ryan agree to refund \$1 to the System for every \$2 of the total brokerage commissions that may be paid to them in connection with such transactions.

### CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM, A COMPONENT UNIT OF THE CITY OF CHARLOTTE, NORTH CAROLINA SCHEDULE OF INVESTMENT SUMMARY Year Ended June 30, 2003 (Dollar Amounts in Thousands)

TYPE OF INVESTMENT		Fair Value	Percent of total Fair Value
FIXED INCOME:			
Government and Agencies	\$	12,466	5.48%
Corporate Obligations		11,813	5.20%
Total Fixed Income		24,279	10.68%
COMMON STOCK:			
Consumer Discretionary		13,857	
Consumer Staples		6,443	
Energy		4,620	
Financials		18,720	
Health Care		13,331	
Industrials		9,961	
Information Technology		13,358	
Materials		4,588	
Telecommunication Services		1,864	
Utilities		1,672	
Total Common Stock		88,414	38.89%
MUTUAL FUNDS:		107,261	47.17%
CASH AND CASH EQUIVALENTS:	_	7,419	3.26%
TOTAL	\$	227,373	100.00%



# **ACTUARIAL SECTION**

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The purpose of the Actuarial Section is to provide the reader with the results of the actuarial valuation at July 1, 2003 and various other actuarial information related to the Charlotte Firefighters' Retirement System. This section includes an actuarial certification, valuation results, asset and contribution information, actuarial assumptions, a summary of plan provisions, long-range funding adequacy information and membership data. The reader of this component unit financial report may note differences between the actuarial valuation of assets contained in this section and the valuation of assets contained in the financial section. The financial statements value assets at the fair value which conforms with generally accepted accounting principles. The actuarial long term yield asset valuation method values assets through a smoothing process of the actual market values for the prior five fiscal years.

# 🕅 Mellon

**Human Resources & Investor Solutions** 

October 30, 2003

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, 2003. The purpose of this report is to provide a summary of the funded status of the System as of July 1, 2003, to recommend rates of contribution and to provide accounting information under Governmental Accounting Standards Board Statements No. 25 and 27 (GASB 25 and 27). While not verifying the data at source, the actuary performed tests for consistency and reasonability.

The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method. Actuarial value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 3.75% annually. As indicated in last year's valuation report, recent asset losses and a previous amortization period that exceeded 30 years, have resulted in an increase in the annual required employer contribution rate under GASB, from 12.65% to 13.27% of payroll. Due to the current amortization period of 30 years and unrecognized asset losses of approximately \$34 million, it is likely that the annual required employer contribution rate will increase in subsequent valuations until the \$34 million is fully recognized. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the System.

The valuation has been prepared in accordance with the parameters set forth in Statement Nos. 25 and 27 of the Governmental Accounting Standards Board. The annual required contribution (ARC) of the City under GASB for the fiscal year ending June 30, 2005 is 13.27% of payroll, which will liquidate the unfunded accrued liability over a 30-year period.

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

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A Mellon Financial Company.<sup>SM</sup>

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

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

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

Respectfully submitted,

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

a Hurine G. Turcot

Catherine G. Turcot Senior Consultant, Actuary

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### CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM REPORT OF ACTUARY ON THE VALUATION PREPARED AS OF JULY 1, 2003

### 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, 2003	July 1, 2002
Number of active members	876	856
Annualized compensation	\$ 41,354,976	\$ 39,848,691
Retired members and beneficiaries: Number Annual allowances	427 \$ 14,512,752	411 \$ 13,754,421
Number of terminated vested members	2	2
Assets: Market Value Actuarial Value Unfunded actuarial accrued liability Amortization Period	\$ 227,136,805 261,022,319 \$ 16,821,205 30 years	\$ 224,011,606 254,012,864 \$ 11,699,052 33 years
Fiscal Year Ending*	June 30, 2005	June 30, 2003
City annual required contribution rate (ARC): Normal (including expenses of 0.75%) Accrued liability Total Member contribution rate	11.17% <u>2.10</u> 13.27% 12.65%	11.21% <u>1.44</u> 12.65% 12.65%

\*In order to facilitate the determination of the ARC prior to the budget process, the July 1, 2002 valuation will determine the ARC for the fiscal years ending June 30, 2003 and June 30, 2004. The valuation as of July 1, 2003 will determine the ARC for the fiscal year ending June 30, 2005.

- 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.  Comments on the valuation results as of July 1, 2003 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 Retirement System office. The valuation included 876 active members with annualized compensation totaling \$41,354,976.
- The following table shows the number of retired members and beneficiaries as of July 1, 2003 together with the amount of their annual retirement benefits payable under the System as of that date.

NUMBER*	ANNUAL RETIREMENT BENEFITS
351	\$ 12,931,188
61	1,345,620
<u>_15</u>	235.944
427	\$ 14,512,752
	351 61 <u>15</u>

### THE NUMBER AND ANNUAL BENEFITS OF RETIRED MEMBERS AND BENEFICIARIES AS OF JULY 1, 2003

In addition, there are two terminated members entitled to deferred vested benefits.

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

#### SECTION III - ASSETS

As of July 1, 2003, the total market value of assets amounted to \$227,136,805. The actuarial value of assets used for the current valuation was \$261,022,319. Schedule C shows the development of the actuarial value of assets as of July 1, 2003. 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, 2003. 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.

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- 2. The valuation balance sheet shows that the System has total prospective liabilities of \$383,703,357 of which \$137,294,600 is for the prospective benefits payable on account of present retired members, beneficiaries of deceased members, and terminated members entitled to deferred benefits, and \$246,408,757 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 \$261,022,319 as of July 1, 2003. The difference of \$122,681,038 between the total liabilities and the total present assets represents the present value of future contributions.
- 3. The contributions to the System consist of normal contributions and accrued liability contributions. The valuation indicates that normal contributions at the rate of 23.07% of payroll are required under the entry age method. Of this amount, 12.65% is paid by the members and the remaining 10.42% is required by the City.
- 4. Prospective normal contributions at the rate of 23.07% have a present value of \$105,859,833. When this amount is subtracted from \$122,681,038, which is the present value of the total future contributions to be made, there remains \$16,821,205 as the amount of unfunded accrued liability contributions. The development of the unfunded accrued liability is shown in Schedule A.

#### SECTION V - CONTRIBUTIONS PAYABLE

- 1. The contributions consist of a normal contribution and an accrued liability contribution as determined by actuarial valuation.
- 2. The normal contribution rate is calculated as the level percentage of payroll which, if applied for the average new member during the entire period of his anticipated covered service, would be required to meet the cost of all benefits payable on his behalf. On the basis of the valuation the normal contribution rate was determined to be 23.07%.
- 3. Section 24 of Title V of the Charlotte Firefighters' Retirement System Act states that each member shall contribute an amount equal to the Member's Compensation multiplied by 12.65%.
- 4. The City normal contribution rate is equal to the difference between the normal contribution rate of 23.07% and the member contribution rate of 12.65%, or 10.42% of payroll. An additional 0.75% is required for expenses, making the total City normal rate 11.17% of payroll.
- Section 25 of Title V of the Charlotte Firefighters Retirement System Act states that the City of Charlotte shall contribute an amount equal to the Member's Compensation multiplied by 12.65%. Beginning in the fiscal year ending June 30, 2005, these contributions will no longer be sufficient to fund the System in an actuarially sound manner. The required employer contribution rate beginning July 1, 2004, will be 13.27% of payroll.
- 6. Based on a total employer rate of 13.27%, the annual accrued liability contribution rate is determined to be 2.10% of payroll. This rate will be sufficient to amortize the unfunded actuarial accrued liability within approximately 30 years following the valuation date, on the assumption that the payroll will increase 3.75% each year.

The following table summarizes the employer contributions which were determined by the July 1, 2003 valuation and are recommended for use.

CONTRIBUTION	PERCENTAGE OF ACTIVE MEMBERS' COMPENSATION
Normal (including expenses of 0.75%)	11.17%
Accrued Liability	_2.10
Total	13.27%

### CITY ANNUAL REQUIRED CONTRIBUTIONS (ARC) FOR FISCAL YEAR ENDING JUNE 30, 2005

### 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, 2003

GROUP	NUMBER
Retired participants and beneficiaries currently receiving benefits	427
Terminated participants and beneficiaries entitled to benefits but not yet receiving	
benefits	2
Active Participants	<u>    876</u>
Total	1,305

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### 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 <u>((b-a)/c)</u>
7/1/98	\$187,387	\$179,351	\$ (8,036)	104.5%	\$28,964	(27.7)%
7/1/99	216,336	186,854	(29,482)	115.8	32,462	(90.8)
7/1/00*	235,901	239,784	3,883	98.4	33,080	11.7
7/1/01	246,614	254,767	8,153	96.8	38,079	21.4
7/1/02	254,013	265,712	11,699	95.6	39,849	29.4
7/1/03	261,022	277,843	16,821	93.9	41,355	40.7

# SCHEDULE OF FUNDING PROGRESS Dollar Amounts in Thousands

All figures prior to 7/1/99 are from July 1, 1998 actuarial valuation report prepared by the prior actuary.

- \* Economic and demographic assumptions were changed as of July 1, 2000 due to an experience review. In addition, the asset valuation method was changed.
- 3. Following is the calculation of the annual pension cost and net pension obligation for the fiscal

year ending June 30, 2003.

# Annual Pension Cost and Net Pension Obligation for Fiscal Year Ending 6/30/03

(a)	Employer annual required contribution	\$ 5,278,000
(b)	Interest on net pension obligation	(533,000)
(C)	Adjustment to annual required contribution	 (338,000)
(d)	Annual pension cost (a) + (b) – (c)	\$ 5,083,000
(e)	Employer contributions made for fiscal year ending 6/30/03	 <u>5,278,000</u>
(f)	Increase (decrease) in net pension obligation (d) – (e)	\$ (195,000)
(g)	Net pension obligation beginning of fiscal year	 (6,883,000)
(h)	Net pension obligation end of fiscal year (f) + (g)	\$ (7,078,000)

### TREND INFORMATION Dollar Amounts in Thousands

Year <u>Ending</u>	Annual Pension Cost <u>(APC)</u>	Percentage Of APC <u>Contributed</u>	Net Pension Obligation <u>(NPO)</u>
June 30, 2001	\$5,540	81.9%	\$(6,845)
June 30, 2002	5,024	100.8	(6,883)
June 30, 2003	5,083	103.8	(7,078)

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	Fiscal Year		
REQUIRED CONTRIBUTION (ARC)	Ending June 30 <sup>th</sup>		
	2004	2005	
Normal (includes expenses)	11.21%	11.17%	
Accrued liability	<u>1.44</u>	<u>2.10</u>	
Total	12.65%	13.27%	

# EMPLOYER ANNUAL REQUIRED CONTRIBUTION (ARC)

In order to facilitate the determination of the ARC prior to the budget process, the July 1, 2002 valuation will determine the ARC for the fiscal years ending June 30, 2003 and June 30, 2004. The valuation as of July 1, 2003 will determine the ARC for the fiscal year ending June 30, 2005.

5. Additional information as of July 1, 2003 follows.

Valuation date	7/1/03
Actuarial cost method	Entry age
Amortization method	Level dollar open
Remaining amortization period	30 years
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Investment rate of return*	7.75%
Projected salary increases*	4.75-7.75%
*Includes inflation at	3.75%
Cost-of-living adjustments	N/A

### SECTION VII - EXPERIENCE

- 1. As an aid to the Board in adopting service and mortality tables, the actuary prepared an experience investigation for the five-year period ending June 30, 1999. The valuation was based on the assumptions adopted by the Board at the April 27, 2000 Board meeting as a result of that investigation.
- The following table shows the estimated change in the unfunded accrued liability from various factors that resulted in an increase of \$5,122,000 in the unfunded accrued liability from \$11,699,000 to \$16,821,000 during the fiscal year ending July 1, 2003.

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

Item	Amount of Increase/ (Decrease)
Interest (7.75%) added to previous	
unfunded accrued liability	907
Accrued Liability Contribution	(601)
Recognized Asset Loss	8,471
Liability (Gain)/ Loss	536
Salary Increases	(4,191)
Amendments	0
Asset Method Change	0
Assumption Changes	0
Increase In Unfunded Accrued Liability	5,122

# SCHEDULE A

# DEVELOPMENT OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY AS OF JULY 1, 2003

(1)	Presen			
	(a)	Present active members	\$	246,408,757
	(C)	Present retired members, beneficiaries and former members entitled to deferred		
		vested benefits	_	137,294,600
	(C)	Total	\$	383,703,357
(2)	Present value of future System and member normal contributions			
	before expenses			105,859,833
(3)	Actuarial accrued liabilities 1(c) – (2)		\$	277,843,524
(4)	Actuarial value of assets			261,022,319
(5)	Unfunded actuarial accrued liability (3) – (4)			16,821,205

### SCHEDULE B - VALUATION BALANCE SHEET AND SOLVENCY TEST

### VALUATION BALANCE SHEET

### RESULTS OF THE VALUATION AS OF JULY 1, 2003 SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES OF THE CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM

ACTUARIAL LIABILITIES					
Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, and					
terminated members entitled to deferred benefits	\$ 137,294,600				
Present value of prospective benefits payable on account of present active members	<u>\$ 246,408,757</u>				
Total liabilities	<u>\$383,703,357</u>				
PRESENT AND PROSPECTIVE ASSETS					
Actuarial value of assets	\$ 261,022,319				
Present value of future contributions					
City and member normal contributions 105,859,833					
Unfunded accrued liability contributions					
Total prospective contributions	\$ 122,681,038				
Total assets	<u>\$ 383,703,357</u>				

#### SCHEDULE B (cont'd)

	Aggre	gate Accrued Lia		Portion of Accrued Liabilities <u>Cover</u> ed by Reported Assets			
Valuation Date	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Reported Assets	(1)	(2)	(3)
7/1/03	\$42.5	\$137.3	\$98.0	\$261.0	100%	100%	82.9%
7/1/02	39.7	130.5	95.5	φ201.0 254.0	100 %	100 %	o∠.97₀ 87.7
7/1/01	37.7	121.1	96.0	246.6	100	100	91.5
7/1/00*	34.0	123.8	82.0	235.9	100	100	95.2
7/1/99	32.3	87.9	66.7	216.3	100	100	100.0
7/1/98	31.1	79.6	68.7	187.4	100	100	100.0
7/1/97	29.4	73.6	65.1	161.7	100	100	90.2
7/1/96	28.1	68.3	64.8	142.9	100	100	71.7
7/1/95	26.1	63.7	61.9	129.0	100	100	63.4
7/1/94	24.8	59.3	58.7	117.4	100	100	56.8

# SOLVENCY TEST (\$ millions)

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

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

# SCHEDULE C

# DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

(1)	Actuarial Value of Assets as of July 1, 2002	\$ 254,012,864
(2)	<ul> <li>2002/2003 Net Cash Flow</li> <li>(a) Contributions</li> <li>(b) Disbursements</li> <li>(c) Net Cash Flow <ul> <li>(2)a - (2)b</li> </ul> </li> </ul>	10,917,902 <u>14,966,195</u> (4,048,293)
(3)	Expected Investment Return [(1) x .0775] + [(2)c x .03875]	19,529,126
(4)	Expected Actuarial Value of Assets as of July 1, 2003 (1) + (2)c + (3)	269,493,697
(5)	Market Value of Assets as of July 1, 2003	227,136,805
(6)	Excess of Market Over Expected (5) – (4)	(42,356,892)
(7)	20% Adjustment Towards Market .20 x (6)	(8,471,378)
(8)	Actuarial Value of Assets as of July 1, 2003 (4) + (7)	\$ 261,022,319
(9)	Rate of Return on Market Value	3.23%
(10)	Rate of Return on Actuarial Value	4.39%

# SCHEDULE D

# ASSET INFORMATION

Investment Managers	Type of Investment	Percent Allocation
Evergreen Investment Management Company	Value Equity – Large Capitalization	14.7%
Boston Partners Asset Management	Value Equity – Mid Capitalization	8.0%
Investment Counselors of Maryland	Value Equity – Small Capitalization	3.3%
Alliance Capital Management	Growth Equity – Large Capitalization	9.8%
Cadence Capital Management	Growth Equity – Mid Capitalization	7.5%
Banc of America Capital Management	Growth Equity - Small Capitalization	3.2%
SSgA S&P 500 Flagship Fund	Large Capitalization	4.5%
Morgan Stanley Dean Witter	International Equity Fund Emerging Markets Equity Fund	12.2% 1.7%
T. Rowe Price International, Inc.	International Equity Fund	2.6%
Metropolitan Life Insurance Company	Real Estate Equity Fund	5.4%
Barrow, Hanley, McWhinney & Strauss	Fixed Income	12.1%
State Street Global Advisors	Fixed Income Index Fund	10.6%
Baring Asset Management	International Fixed Income Fund Emerging Debt Fund	3.3% 0.5%
Internal Management	Money Market	0.8%

	June 30, 2003	June 30, 2002	June 30, 2001
Cash	\$526,430	\$ (9,186,275)	\$ 457,131
Cash Equivalents	6,892,425	15,066,403	6,978,547
Fixed Income Investments	48,349,199	58,935,800	55,837,070
Equity Investments	171,604,466	158,815,054	176,437,942
Other	355,927	373,334	83,678
Accrued Income	310,373	409,094	408,997
Accrued Contributions	256,099	118,234	105,933
Accrued Liabilities/Expenses	(1,158,115)	(520,037)	(404,413)
Total Market Value	\$227,136,805	\$ 224,011,606	\$ 239,904,885

#### SCHEDULE E

#### OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

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

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

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

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

\* Includes inflation of 3.75%

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

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

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

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

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

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

EXPENSES: 0.75% of payroll.

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

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

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

#### SCHEDULE F

#### ACTUARIAL COST METHOD

- 1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (currently 7.75 per cent), of each member's expected benefits at retirement or death is determined, based on age, service and sex. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.
- 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.

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#### SCHEDULE G

# SUMMARY OF MAIN SYSTEM PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES

Member

Membership Service Credit

Final Average Salary

Accrued Benefit

Service Retirement Benefit

Eligibility

Benefit

Early Retirement Benefit

Eligibility

Benefit

In the Line of Duty Disability Retirement Benefit

Eligibility

Benefit

Not in the Line of Duty Disability Retirement Benefit

Eligibility

Benefit

An employee of the Charlotte Fire Department who is subject to the provisions of the Civil Service Act.

Service for all periods of employment with the Charlotte Fire Department for which contributions have been paid.

A member's average monthly compensation for any 2 consecutive years within the last 5 years of membership service.

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.

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.

Monthly benefit is 2.6% of final average salary multiplied by years of membership service credit. Salary in the final year includes cashed-in vacation and sick days. The minimum monthly benefit is \$902.75.

25 years of membership service credit.

Accrued benefit reduced by 3% for each year member is under age 50.

No requirements.

78% of final average salary or normal retirement benefit if greater.

10 years of service.

39% of final average salary plus 1.95% of such salary for each year of membership service credit in excess of 10 years, not less than \$902.75 per month.

Deferred Vested **Retirement Benefit** Eligibility 5 years of service. Member contributions not withdrawn. Benefit Accrued benefit payable at age 60. A member may choose a refund of contributions with 4% interest in lieu of this benefit. **Termination Benefit** If a member is terminated with less than 5 years of membership service credit, he is entitled to a return of his accumulated contributions. Death Benefit If a member dies in service, his beneficiary is entitled to a return of the member's accumulated contributions, plus those contributions made by the City on his behalf, plus interest of 4% per year. May elect to receive actuarial equivalent monthly benefit under the 66-2/3% Joint and Survivor Option. (1) **Optional Forms of Benefit** 10 year certain and life annuity. (2)100%, 75%, 66-2/3% or 50% joint and survivorship annuity. Joint and survivorship annuity with a pop-up (3)provision. Contributions The City and the members each contribute 12.65%.

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# SCHEDULE H

# TABLE 1

# AGE - SERVICE TABLE

Distribution of Active Members as of July 1, 2003 by Age and Service Groups

Attained Age					Completed Yea	rs of Service				
	0	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	> 35	Total
24 & under	16	27	1							44
Total Pay	486,668	885,092	36,400		Ì					1,408,160
Avg. Pay	30,417	32,781	36,400							32,004
25 to 29	21	75	36							132
Total Pay	651,924	2,550,652	1,481,428	)						4,684,004
Avg, Pay	31,044	34,009	41,151							35,485
30 to 34	9	39	80	. 27	1					156
Total Pay	272,636	1,310,608	3,538,028	1,400,412	63,700					6,585,384
Avg. Pay	30,293	33,605	44,225	51,867	63,700					42,214
35 to 39	1	19	49	54	52					175
Total Pay	29,952	661,492	2,078,388	2,926,716	2,880,176					8,576,724
Avg. Pay	29,952	34,815	42,416	54,198	55,388					49,010
40 to 44	1	7	17	33	96	16				170
Total Pay	31,408	241,592	748,020	1,663,116	5,285,384	916,552				8,886,072
Avg. Pay	31,408	34,513	44,001	50,397	55,056	57,285				52,271
45 to 49	1	2	6	16	50	46	17			138
Total Pay	33,020	71,500	253,968	881,296	2,734,316	2,672,072	999,336			7,645,508
Avg. Pay	33,020	35,750	42,328	55,081	54,686	58,089	58,784			55,402
50 to 54			1	2	8	18	17	4		50
Total Pay			46,436	110,136	406,432	985,192	1,053,416	264,472		2,866,084
Avg. Pay			46,436	55,068	50,804	54,733	61,966	66,118		57,322
55 to 59				1	5		1			7
Total Pay				44,200	249,756		73,372			367,328
Avg. Pay				44,200	49,951		73,372			52,475
60 to 64					1			1	2	4
Total Pay					44,200			93,080	198,432	335,712
Avg. Pay					44,200			93,080	99,216	83,928
Total	49	169	190	133	213	80	35	5	2	876
Total Pay	1,505,608	5,720,936	8,182,668	7,025,876	11,663,964	4,573,816	2,126,124	357,552	198,432	41,354,976
Avg. Pay	30,727	33,852	43,067	52,826	54,760	57,173	60,746	71,510	99,216	47,209

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### TABLE 2

Attained <u>Age</u>	Number Of <u>Members</u>	Total Annual <u>Benefits</u>	Average Annual <u>Benefit</u>
50 & Under	18	\$ 468,024	\$ 26,001
51-55	86	3,206,532	37,285
56-60	99	3,535,776	35,715
61-65	65	2,475,696	38,088
66-70	70	2,560,884	36,584
71-75	37	1,074,192	29,032
76-80	31	750,876	24,222
Over 80	_21	440,772	20,989
Total	427	\$ 14,512,752	\$ 33,988

#### NUMBER OF RETIRED MEMBERS AND BENEFICIARIES AND THEIR BENEFITS BY AGE

#### TABLE 3

# SCHEDULE OF ACTIVE MEMBER VALUATION DATA

Valuation <u>Date</u>	Number Prior <u>Year</u>	<u>Exits</u>	New <u>Entrants</u>	Number Current <u>Year</u>	Annual Payroll	Annual Average <u>Pay</u>	% Increase in Average <u>Pay</u>
7/1/03	856	29	49	876	\$41,354,976	\$47,209	1.4%
7/1/02	853	31	34	856	39,848,691	46,552	4.3
7/1/01	780	15	88	853	38,079,024	44,641	5.3
7/1/00	783	35	32	780	33,079,899	42,410	2.3
7/1/99	778	31	36	783	32,462,456*	41,459	11.4
7/1/98	749	30	59	778	28,963,868	37,229	3.6
7/1/97	721	29	57	749	26,922,035	35,944	-0.6
7/1/96	709	25	37	721	26,072,828	36,162	3.7
7/1/95	N/A	N/A	N/A	709	24,723,956	34,872	4.7
7/1/94	N/A	N/A	N/A	724	24,120,362	33,315	2.4

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

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

#### TABLE 4

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

	Rol	Rolls – Beginning of Year		Added to Rolls		Removed from Rolls		s – End of Year	4 F J	
Year <u>Ended</u>	<u>No.</u>	Annual <u>Allowances</u>	<u>No.</u>	Annual <u>Allowances</u>	<u>No.</u>	Annual <u>Allowances</u>	<u>No.</u>	Annual <u>Allowances</u>	% Increase in Annual <u>Allowances</u>	Average Annual <u>Allowances</u>
7/1/03	411	\$13,754,121	23	\$ 970,560	7	\$211,929	427	\$14,512,752	5.5	\$33,988
7/1/02	389	12,824,893	29	1,202,320	7	273,092	411	13,754,121	7.2	33,466
7/1/01	394	13,000,973**	11	287,966	16	464,046	389	12,824,893	(1.4)	32,969
7/1/00	377	9,946,747*	28	3,260,650**	11	206,424	394	13,000,973**	30.7	32,997
7/1/99	358	8,882,634	26	950,857	7	119,640	377	9,946,747*	12.0	26,384
7/1/98	337	8,199,997	24	762,314	3	79,677	358	8,882,634	8.3	24,812
7/1/97	321	7,602,561	22	698,791	6	101,335	337	8,199,997	7.9	24,332
7/1/96	307	7,046,272	19	616,589	5	60,300	321	7,602,561	7.9	23,684
7/1/95	298	6,552,767	18	613,085	9	119,580	307	7,046,272	7.5	22,952
7/1/94	N/A	N/A	N/A	N/A	N/A	N/A	298	6,552,767	0.4	21,989

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

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



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# STATISTICAL SECTION

The purpose of the Statistical Section is to provide the reader with additional data reflecting financial and demographic trends. This section includes a schedule of average benefit payments, a schedule of retired members by type of benefit and a schedule of benefit expenses by type. It also includes information on certain participant activity during the year being reported.

# CHARLOTTE FIREFIGHTERS' RETIREMENT SYSTEM, A COMPONENT UNIT OF THE CITY OF CHARLOTTE, NORTH CAROLINA PARTICIPANT INFORMATION Year Ended June 30, 2003

#### SERVICE RETIREMENTS

Name Archie, Fred B. Berryhill III, Charles P. Black, David J. Collins, Robert J. Fink, Calvin L. Funderburk, Edward R. Kirkpatrick, Charles R. Moragne, Calvin C. Mullis, Charles E. Oliver, Michael S. Reynolds, Robert Rhom, James E. Tench, Roger D. Vincent, John G. Washam Jr., Robert V. Westbrook, Barry E.

# 12/21/2002 05/03/2003 12/21/2002 11/16/2002 12/28/2002 12/28/2002 12/28/2002 12/28/2002 12/07/2002 12/21/2002 12/21/2002 12/21/2002 12/21/2002 06/28/2003 10/12/2002 10/26/2002

Date of Retirement

#### EARLY RETIREMENTS

Date of Retirement

12/21/2002 12/28/2002 11/30/2002 03/01/2003 12/21/2002

#### **DISABILITY RETIREMENTS**

Name Estes, Steven D.

#### IN MEMORIAM Active Deaths

# IN MEMORIAM

**Retiree Deaths** 

Date of Death

**Date of Retirement** 

01/25/2003

10/03/2002

Date of Death

12/15/2002 01/23/2003 08/24/2002 05/12/2003 08/02/2002 10/12/2002 07/21/2002

# Copeland, Michael W.

Name

Name

Baker, Alan G.

Bittikofer, Michael J.

Williams, Furman L.

Charles, David G.

Fuller, David L.

#### Name

Baker, James F. Davis, James O. Love, Ronald E. Morgan, Connie W. Poplin, Donald P. Propst, Albert J. Reid, Thomas J. Thomas, J. Reid

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

Revenues by Source						Expense	Employer Contributions		
Fiscal	Employee	Employer	Investment	Total		Administrati	ve	Total	as a Percentage of
Year	Contributions	Contributions	Income	Revenues	Benefits	Expenses	Refunds	Expenses	Covered Payroll
1994	\$ 3,095	\$ 3,093	\$ 9,458	\$ 15,646	\$ 7,079	\$ 658	\$ 208	\$ 7,945	12.65
1995	3,221	3,219	5,396	11,836	6,530	689	597	7,816	12.65
1996	3,374	3,372	13,481	20,227	7,456	753	438	8,647	12.65
1997	3,489	3,488	31,079	38,056	8,278	222	167	8,667	12.65
1998	3,758	3,734	35,641	43,133	9,217	232	420	9,869	12.65
1999	3,886	3,870	20,665	28,421	10,284	253	165	10,702	12.65
2000	4,325	4,276	29,233	37,834	12,406	304	85	12,795	12.65
2001	4,563	4,537	(14,630)	(5,530)	14,060	327	391	14,778	12.65
2002	5,114	5,062	(11,825)	(1,649)	13,605	364	275	14,244	12.65
2003	5,640	5,278	7,190	18,108	14,138	402	443	14,983	12.65

Revenues by Source and Expenses by Type

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

Fiscal Death in Service Year Age & Service Benefits Retiree Disability Benefits Refunds Refunds Ending Retirees Survivors QDROs Benefits Duty Non-duty Survivor Death Separation Total \$94 \$467 \$5,605 \$0 \$914 \$0 \$208 \$7,288 \$0 5,662 7,127 6,592 7,894 7,298 8,446 8,121 9,638 9,044 10,449 10,931 12,491 12,440 14,451 12,076 13,880 12,545 14,581

#### 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, 2003

Amount of	Normh an af		Type of Retirement							Option Selected						
Monthly Benefit	Number of Retirees	1	2	3	4 rype	5	6	7	8	9	Basic Opt.1				Opt.5	Opt.6
Deferred	2								2		2					
\$ 1 - 500	1						I								1	
501 - 600	2						1			1	2					
601 - 700	1									1	1					
701 - 800																
801 - 900	2							2			2					
901-1000	3			1				2			3					
Over 1000	418	280	71	7		24	35			1	324 9	9	3	I	59	13
Totals	429	280	71	8	0	24	37	4	2	3	334 9	9	3	1	60	13

Type of Retirement

I - 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

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

	Γ		N	Membership Service Credit					 		
		<u>5-10</u>		10-15		15-20		20-25		25-30	 30 +
Period 7/1/1993 to 6/30/1994 Average Monthly Benefit Average Final Average Salary Number of Active Retirants	\$	1,261 1,688 2	\$	911 1,446 9	\$		\$		\$	1,603 2,345 152	\$ 
Period 7/1/1994 to 6/30/1995 Average Monthly Benefit Average Final Average Salary Number of Active Retirants	\$	1,458 2,025 I	\$	993 1,495 10	\$	967 1,535 8	\$	1,280 2,056 25	\$	1,701 2,479 152	\$
Period 7/1/1995 to 6/30/1996 Average Monthly Benefit Average Final Average Salary Number of Active Retirants	\$	1,458 2,025 1	\$	993 1,495 10	\$	1,046 1,736 9	\$	1,280 2,056 25	\$	1,817 2,667 165	\$ 2,531 3,094 111
Period 7/1/1996 to 6/30/1997 Average Monthly Benefit Average Final Average Salary Number of Active Retirants	\$	1,458 2,025 1	.\$	1,053 1,578 11	\$	1,182 2,123 11	\$	1,303 2,112 25	\$	1,902 2,790 179	\$ 2,585 3,178 110
Period 7/1/1997 to 6/30/1998 Average Monthly Benefit Average Final Average Salary Number of Active Retirants	\$	1,458 2,025	\$	1,056 1,696 12	\$	1,268 2,321 12	\$	1,413 2,362 30	\$	1,975 2,925 192	\$ 2,602 3,203 111
Period 7/1/1998 to 6/30/1999 Average Monthly Benefit Average Final Average Salary Number of Active Retirants	\$	1,579 2,025 1	\$	1,137 1,779 13	\$	1,374 2,321 12	\$	1,498 2,362 30	\$	2,119 3,095 207	\$ 2,735 3,322 114
Period 7/1/1999 to 6/30/2000 Average Monthly Benefit Average Final Average Salary Number of Active Retirants	\$	0	\$	1,428 1,945 15	\$	1,616 2,395 13	\$	1,856 2,282 27	\$	2,611 3,229 224	\$ 3,508 3,401 116
Period 7/1/2000 to 6/30/2001 Average Monthly Benefit Average Final Average Salary Number of Active Retirants	\$	. 0	\$	1,389 2,049 16	\$	1,669 2,684 13	\$	1,826 2,386 28	\$	2,621 3,277 223	\$ 3,531 3,439 111
Period 7/1/2001 to 6/30/2002 Average Monthly Benefit Average Final Average Salary Number of Active Retirants	\$	2,291 3,112 1	\$	1,389 2,049 16	\$	1,669 2,684 13	\$	2,017 2,761 33	\$	2,621 3,277 237	\$ 3,531 3,439 113
Period 7/1/2002 to 6/30/2003 Average Monthly Benefit Average Final Average Salary Number of Active Retirants	\$	2,291 3,112 1	\$	1,343 2,049 16	\$	2,595 2,684 13	\$	2,026 2,793 34	\$	2,759 3,571 253	\$ 3,571 3,621 112

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

Year	Bonus Distribution		Annual Benefits		Retirees	Bonus Percentage	Consumer Price Index*		
1991	\$	115	\$	4,236	237	2.71%	6.1%		
1992		90		4,892	255	1.84%	3.1%		
1993		69		6,339	292	1.10%	2.9%		
1994		65		6,429	292	1.01%	2.7%		
1995		109		6,641	294	1.65%	2.7%		
1996		366		7,388	312	4.95%	2.5%		
1997		600		7,948	331	7.55%	3.3%		
1998		734		8,753	357	8.33%	1.6%		
1999		808		9,733	371	8.33%	1.9%		
2000		1,070		12,998	398	8.33%	3.2%		
2001		197		13,064	395	1.50%	1.3%		
**2002		-		-	-	-	0.7%		
**2003		-		-	-	-	2.1%		

Average Percentage of Bonus Amount Per Retiree over 5-year Period : 3.63%

\*Source: Callan Associates, Inc.

\*\*Pursuant to the Actuary's recommendations, the Board of Trustees did not approve bonuses for 2002 and 2003.



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# **GLOSSARY OF TERMS**

This section is to provide the reader with definitions and/or explanations of key financial, actuarial and investment terms used or referenced throughout the report.

#### 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

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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, salaries, rate of turnover by death or termination. The actuary can then determine whether contributions are sufficient to fund liabilities earned.

# 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.

#### **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.

#### **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. Currently based in Norwalk, Connecticut.

#### **INVESTMENT POLICY**

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

#### LEHMAN BROTHERS AGGREGATE BOND INDEX

An index that is a combinations of the Mortgage Backed Securities Index and the intermediate and long-term components of the Government/Corporate Bond Index. The Government/Corporate Index, in turn, is a composite of all publicly issued, fixed rate, nonconvertible, domestic bonds. The issues are rated at least BBB, have a minimum outstanding principal of \$100 million for U.S. Government issues or \$50 million for other bonds and have a maturity of at least one year. The index is capitalization-weighted.

# LEVEL-COST FINANCING

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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 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.

## MORGAN STANLEY CAPITAL INTERNATIONAL EMERING MARKETS FREE INDEX

An index composed of about 549 equity securities representing the stock exchanges of 13 countries in Central Asia and the Far East, Latin America, Europe, and the Middle East. Only 20 percent of Korea's market capitalization is included in the index. The index is market capitalization-weighted and is expressed in terms of U.S. dollars.

# **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 for determinations

# 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 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.

## SALOMON BROTHERS EXTENDED MARKET BOND (EMB) MARKET EX-US

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

# SALOMON BROTHERS NON-US DOLLAR WORLD BOND INDEX

An index that is composed of the 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.

# **SECTION 415**

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

#### STANDARD AND POOR'S 500 INDEX

An index that is a composite of 400 industrial, 40 financial, 40 utility and 20 transportation common stocks. The index is capitalizationweighted with each stock weighted by its proportion of the total market value of all 500 issues. Thus, larger companies have a greater effect on the index.

#### 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. 9

# 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.