

## Comprehensive Annual Financial Report



## Comprehensive Annual Financial Report

PREPARED BY THE DPSRS STAFF

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DENVER, COLORADO

## YEAR ENDED DECEMBER 31, 2007

80209-3172

DENVER PUBLIC SCHOOLS
RETIREMENT SYSTEM
DENVER, COLORADO

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## - Certificate of Achievement



## Per

## Public Pension Coordinating Council Public Pension Standards 2007 Award

Presented to

## Denver Public Schools Retirement System

In recognition of meeting professional standards for plan design and administration as set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of
National Association of State Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS) National Council on Teacher Retirement (NCTR)


Alan H. Winkle
Program Administrator

## - - Letter of Transmittal

June 12, 2008
TO THE MEMBERS
OF THE BOARD OF TRUSTEES AND THE BOARD OF EDUCATION:

I am pleased to present the Comprehensive Annual Financial Report (CAFR) of the Denver Public Schools Retirement System (System or DPSRS) for the year ended December 31, 2007.

The System is the successor of the Denver Public School Employees' Pension and Benefit Association, which was created by the Board of Education of School District No. 1 in the City and County of Denver, Colorado, on December 1, 1945, pursuant to state statute, that permitted first class school districts to establish an employees' retirement fund. Effective January 1, 2000, the state statute was rewritten, and the Association was renamed the Denver Public Schools Retirement System. The Retirement Board was replaced by an 11-member Board of Trustees having all fiduciary responsibilities for management of the System. The Board of Education retains responsibilities for funding and plan design.
School District No. 1 (DPS or School District), the System, and Charter Schools within the School District comprise the District. Membership in the System is required for full-time employees of the District.

## THE 2007 CAFR IS PRESENTED IN FIVE MAJOR SECTIONS:

- The Introductory Section contains the Letter of Transmittal, Message from the Chairperson, a listing of the Board of Trustee members, an administrative organization chart, and a listing of major consultants.
- The Financial Section presents the opinion of the System's independent auditors, Clifton Gunderson LLP, Management's Discussion and Analysis of financial activities, the financial statements, and the supporting schedules for the System.
- The Investment Section includes information pertaining to the System's investment policies, objectives, performance and detailed investment listings, and a summary schedule of fees and commissions paid to investment professionals who provide services to the System.
> - The Actuarial Section contains the certification of the System's independent consulting actuary, Gabriel, Roeder, Smith \& Company, and a review of the actuarial assumptions, valuation methods, funding progress and other statistics used in the actuarial valuation. Also included is a summary of the Denver Public Schools Retirement System Retirement and Benefit Plan (Plan) provisions. The Plan is the detailed statement of rights that one has as a member of the System and the statement of the procedures of operation and organization of the System.
> - The Statistical Section contains general statistical information regarding the System participants and finances.


## BENEFIT PLAN CHANGES AND OTHER INITIATIVES

The following changes to the Plan or administration of the System were made effective in 2007:

- The Plan was modified to allow appointed or reappointed employees up to two years to qualify past casual service by paying through installment payments, or through an initial lump sum plus installment payments.
- The employer contribution rate was changed in accordance with the funding policy of the Plan and the scheduled four year phase-in to achieve the full annual required contribution rate by July 1, 2008.

In late 2006 the Board of Trustees, staff of DPSRS and DPS, and a consultant finalized a comprehensive Strategic Plan for DPSRS. In 2007 numerous actions were taken pursuant to the Strategic Plan. They included an analysis of methods of communications used by DPSRS; efforts to strengthen the relationship between DPSRS and DPS; and analysis of benefit issues such as retiree health insurance, disability retirement administration, and portability of retirement benefits when members change employment.
The DPSRS Bylaws were revised. In addition, Travel Guidelines for the Board of Trustees and staff were adopted and implemented.

## FINANCIAL INFORMATION

The financial statements and reporting are the responsibility of the System's management. The financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America, and the System's auditor has so stated in its opinion. This CAFR was prepared to conform with the requirements of Governmental Accounting Standards Board (GASB) Statements applicable to governmental accounting for fiduciary funds.
In the opinion of the System's management, the financial information presented is accurate in all material respects, and presents fairly, the financial status at December 31, 2007. The management of the System is responsible for maintaining an internal control structure to provide reasonable assurance of asset accountability and the authorized and proper recording of transactions.
Additional financial information can be found in Management's Discussion and Analysis, which is included as required supplementary information and precedes the financial statements in the Financial Section of this report.
An audit of the System's financial statements is conducted on an annual basis. Clifton Gunderson LLP performed the System's external audit. It is noted that there were no disagreements between management and the auditors on any accounting or auditing related issues.

## FUNDING

There are several ways to appraise the funding condition of the System and progress toward the objective of preserving financial solvency. The employment of a qualified, independent actuary is essential to perform an actuarial review and valuation and to provide technical advice and assistance.
The System's actuary performs an annual actuarial review. In addition, the Plan requires an investigation of mortality and service experience at least once during each five-year period. In recent years, the experience analysis has been performed every three years. An experience investigation was performed for the period January 1, 2004 through December 31, 2006 to keep our actuarial assumptions accurately matched to our membership demographics and cash flow projections.

MISSION STATEMENT

The System exists in partnership with the District and its employees to provide career employees and their families with a primary source of lifetime income relative to service at retirement, disability or death, in a prudent, responsible and cost-effective manner.

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An adequate funding level provides assurance and security for payment of future benefits. One measure of funding status is the Solvency Test shown on page 57 . This test compares actuarial valuation assets to actuarial accrued liabilities categorized by active member contributions, liabilities for future benefits for present retirees and beneficiaries, and liabilities for service already performed by active members.

Another measure of funding progress is shown in the funding progress schedule on page 30 . This historical schedule indicates the actuarial value of assets as a percentage of actuarial accrued liabilities. The current actuarial funded ratio of the System is $87.7 \%$. This is consistent with $88.3 \%$ in the previous year. The System remains in a funded position sufficient to pay promised future benefits.

## INVESTMENTS AND ECONOMIC OVERVIEW

Investment policies and objectives for the System have been designed to enable the investment program of the retirement system to facilitate the long-term accomplishment of the System's mission. The program emphasizes long-term total returns and performance, recognizing the impact of inflation on benefit levels. Risk exposure is controlled by broad diversification related to asset mix and careful selection and evaluation of specialized investment managers.
The U.S. economy and financial markets finished with gains in 2007. Total return for the U.S. equity markets, as measured by the Russell 3000 Index, was $5.14 \%$ for 2007. Bonds, as measured by the Lehman Brothers Aggregate Index, returned 6.97\% in 2007.

The System's diversified portfolio produced a total return of $10.07 \%$ for 2007. This was the System's fifth consecutive year of double digit returns. Detailed investment performance results, policies, and strategies are presented by the Chief Investment Officer in the Investment Management section of this report.

## AWARDS

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the System for its CAFR for the fiscal year ended December 31, 2006. This was the fifteenth consecutive year that the System has received this prestigious award. In order to be awarded a Certificate of Achievement, a public employee retirement system must publish an easily readable and efficiently organized CAFR. This report must satisfy both generally accepted accounting principles and applicable legal requirements.
A Certificate of Achievement is valid for a period of one year only. We believe that our current CAFR continues to meet the Certificate of Achievement Program's requirements, and we are submitting the report to the GFOA to determine its eligibility for another certificate.

In addition, the System received the Public Pension Standards Award in 2007 for the second consecutive year. This award was given to the System by the Public Pension Coordinating Council in recognition of our meeting professional standards for plan design and administration.

## ACKNOWLEDGMENTS

The compilation of this report reflects the combined efforts of the staff of the accounting, investment, benefits and executive sections of the DPSRS Office. It is intended to provide comprehensive and reliable information as a basis for making management decisions, determining compliance with legal provisions and determining responsible stewardship for the assets contributed by the System's members and the District.

I would like to express my appreciation to the Board of Trustees, staff, consultants, Board of Education and all others who work to assure the successful administration, operation and financial soundness of the retirement plan. If you have questions about this report or need additional information, contact the DPSRS office.


Respectfully submitted,
Norman L. Ruggles
Executive Director

## - Message From the Chairperson

In keeping with past practices and generally accepted reporting standards, as Chairperson of the Board of Trustees for the DPSRS, I am pleased to present the Comprehensive Annual Financial Report for our 62nd year of operation, which ended on December 31, 2007. The report provides the reader with a review of the financial, actuarial, and investment status of the DPSRS.
The actuarial report for 2007 indicates that our plan continues to be financially sound as a result of continuing solid investment returns. In 2007, DPSRS had a very strong year with absolute investment returns of $10.1 \%$. An increase in employer contributions has improved further the soundness of the plan.
The primary responsibility of a Trustee is to ensure that member interests are safeguarded and to take action that protects these interests. This responsibility has been challenged by the School District this year. The District presented the Board of Trustees with a proposal, called EPOST, which would have leveraged the System's funds in order to generate income for the District. The risk to the Retirement System and our members' interests presented by this proposal was too uncertain and the Board voted to reject it. I commend the System staff for their thorough work on this issue.

After many years as Assistant Executive Director, Judy Shimono retired in November. Koren Holden, an experienced public pension plan actuary and consultant, was hired to replace Judy and is doing an excellent job of filling Judy's shoes. We wish Ms. Shimono well in her retirement, and we welcome Ms. Holden to the staff.
The Board of Trustees welcomes Monica Lobato-Fox, pupil contact representative, John MacPherson, retired employee representative and Robin Grey, with Level 3 Communications, Board of Education appointee. Ms Lobato-Fox and Mr. MacPherson were elected to the Board in November. They replace Kay Speer and Don Giseburt who both served on the Board for a number of years. Ms. Grey replaces Velma Rose, another long time Board member. Our thanks to them for their service and we wish them well in the future.
The Board of Trustees elected Andrew Raicevich II as Secretary, Darrell Allen as Vice-Chairperson, and Amy Grant as Chairperson. We will serve as the Executive Committee of the Board of Trustees for 2008.

I hope you find the Comprehensive Annual Financial Report informative and of value. The DPSRS Board of Trustees looks forward to our 63rd year of service to retirees and employees of the District.

Amy Grant<br>Board of Trustees Chairperson

## 



- 2008 Board of Trustees



MONICA LOBATO-FOX
Pupil Contact 2007-2011

DARRELL ALLEN Vice-Chairperson
Recognized Expert, Appointed by Board of Trustees 2007-2011


ANDREW RAICEVICH II

> Secretary

Administrators/
Pro-Tech
2006-2010

ROBIN GREY
Appointed by Board of Education 2007-2008


THERESA PEŃA Appointed by Board of Education 2005-2009



JOHN MACPHERSON
Retirees
2007-2011


PATRICK SMALDONE
Pupil Contact 2005-2009


DAWN PALUCH Pupil Contact 2005-2009


STEVEN WELLS Support Services 2006-2010


## BOARD OF TRUSTEES 2008

Standing, pictured left to right are: Norman Ruggles (Executive Director), Patrick Smaldone, Andrew Raicevich, Andrew Raicevich II (Secretary) and John MacPherson. Seated, pictured left to right are: Theresa Peña, Dawn Paluch, Monica Lobato-Fox, Amy Grant (Chairperson) and Robin Grey. Not pictured are: Darrell Allen (Vice-Chairperson) and Steven Wells.

## - 2008 DPS Board of Education

| DPS BOARD OF |  |
| :--- | :--- |
| EDUCATION | Jeannie Kaplan |
| Theresa K. Peña (President) | Kevin Patterson |
| Michelle Moss (Vice President) | Arturo Jimenez |
| Jill Conrad (Secretary) |  |
| Bruce L. Hoyt | DPS SUPERINTENDENT |
|  | Michael Bennet |

-     - Administrative Organization at January 1, 2008



## 2008 Board of Trustees Committee Assignments

EXECUTIVE COMMITTEE
Amy Grant, Chairperson
Darrell Allen, Vice-Chairperson
Andrew Raicevich II, Secretary

DISABILITY APPEAL COMMITTEE
John MacPherson, Chairperson Monica Lobato-Fox Andrew Raicevich II Steven Wells

AUDIT COMMITTEE
Andrew Raicevich II, Chairperson
Darrell Allen
Robin Grey
Dawn Paluch
Andrew Raicevich

## AD-HOC ELECTION COMMITTEE

Patrick Smaldone, Chairperson
Monica Lobato-Fox
Steven Wells

INVESTMENT COMMITTEE
Darrell Allen, Chairperson
Amy Grant
Robin Grey
Dawn Paluch
Andrew Raicevich

## - 2007 Primary Consultants

## ACTUARIAL SERVICES

Gabriel, Roeder, Smith \& Company
One Towne Square
Suite 800
Southfield, MI 48076

## COMPUTER SERVICES

Alfred Munksgard \& Associates
3617 Thousand Oaks Boulevard
Suite 120
Thousand Oaks, CA 91320
Hewlett Packard
PO Box 101149
Atlanta, GA 30392-1149

## INDEPENDENT AUDITORS

Clifton Gunderson LLP
370 Interlocken Boulevard
Suite 500
Broomfield, CO 80021

## INVESTMENT SERVICES

Callan Associates, Inc.
1660 Wynkoop Street
Suite 950
Denver, CO 80202

## MASTER CUSTODIAN

The Northern Trust Company
50 South LaSalle Street
Chicago, IL 60675

## LEGAL SERVICES

Victor Quinn, Esq.
Waggener \& Foster LLP
400 South Colorado Boulevard
Suite 900
Denver, CO 80246
Otten, Johnson, Robinson,
Neff \& Ragonetti, PC
1600 Colorado National
Bank Building
950 17th Street
Denver, CO 80202

A schedule of investment expenses and payments to consultants can be found on page 34 in the Financial Section. A summary schedule of investment fees and commissions can be found on page 42 in the Investment Section.


# - O Independent Auditor's Report 

## Independent Auditor's Report

The Board of Education of School District No. 1
in the City and County of Denver and Sate of Colorado
and the Board of Trustees of the Denver Public Schools Retirement System:
We have audited the accompanying statements of fiduciary net assets of the Denver Public Schools Retirement System (the "System") as of December 31, 2007 and 2006 and the related statements of changes in fiduciary net assets for the years then ended. 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, financial statements referred to above present fairly, in all material respects, the fiduciary net assets of the System as of December 31, 2007 and 2006 and the changes in fiduciary net assets for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

The Management's Discussion and Analysis ("MD\&A") and Required Supplementary Information are not a required part of the basic financial statements, but are supplementary information required by accounting principles generally accepted in the United States of America. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the MD\&A and the Required Supplementary Information. However, we did not audit the information and express no opinion on it.

Our audits were conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The Additional Supporting Schedules are presented for purposes of additional analysis and are not a required part of the basic financial statements. 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 in relation to the basic financial statements taken as a whole.

The introductory section, investment section, actuarial section and statistical section listed in the table of contents have not been subjected to the auditing procedures applied in the audits of the basic financial statements and, accordingly, we express no opinion on them.


Denver, Colorado
June 12, 2008

December 31, 2007 and 2006
Management is pleased to present this discussion and analysis of the financial activities of the System as of and for the years ended December 31, 2007 and 2006. The System administers the Retirement Plan for eligible, covered employees and retirees of School District No. 1 in the City and County of Denver and the State of Colorado (School District), the System, and charter schools within the School District (collectively, District). All assets of the Plan are invested in a single trust fund. The fund exists solely to pay for benefit promises made to retired and active members of the System.

## OVERVIEW OF THE FINANCIAL STATEMENTS

The Management's Discussion and Analysis is intended to serve as an introduction to the financial statements. The financial section consists of the basic financial statements and other supplementary information and schedules.
Two financial statements are presented for the System. The Statements of Fiduciary Net Assets present the net assets held in trust for pension benefits at a given point in time. The Statements of Changes in Fiduciary Net Assets indicate the additions and deductions to the plan assets during the specified periods.

The Notes to Financial Statements provide essential information for understanding the data provided in the financial statements by providing a description of the Plan, significant accounting policies, investment assets and liabilities, contributions, and benefit enhancements.

The Required Supplementary Information includes two schedules and related notes. The Schedule of Funding Progress provides historical trend information about the actuarially determined funded status of the Plan. The Schedule of Employer Contributions provides historical trend information about the annual required contributions (ARC) of the District and the contributions made by the District in relation to the ARC.

Additional Supporting Schedules include the Schedules of Administrative Expenses, the Schedules of Investment Expenses, and the Schedules of Payments to Consultants. These schedules provide additional analysis of the information provided in the financial statements.

## CONDENSED FINANCIAL INFORMATION

Fiduciary Net Assets at December 31:

|  | 2007 | 2006 | 2005 | $\begin{gathered} 2007 \\ \text { \% Change } \end{gathered}$ | $\begin{gathered} 2006 \\ \text { \% Change } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Assets |  |  |  |  |  |
| Cash and short-term investments | \$ 60,190,183 | \$ 127,838,247 | \$ 127,194,472 | (52.9)\% | 0.5 \% |
| Investments, at fair value | 3,037,811,511 | 2,862,738,520 | 2,666,513,557 | 6.1 \% | 7.4 \% |
| Receivables | 5,829,557 | 8,113,232 | 9,130,477 | (28.2)\% | (11.1)\% |
| Prepaid expenses | 36,836 | 38,406 | 337,654 | (4.1)\% | (88.6)\% |
| Capital assets, net | 254,528 | 322,013 | 59,365 | (21.0)\% | 442.4 \% |
| Investment and other assets | 3,104,122,615 | 2,999,050,418 | 2,803,235,525 | 3.5 \% | 7.0 \% |
| Securities lending collateral | 198,060,616 | 224,220,362 | 177,662,816 | (11.7)\% | 26.2 \% |
| Total assets | 3,302,183,231 | 3,223,270,780 | 2,980,898,341 | 2.5 \% | 8.1 \% |
| Liabilities |  |  |  |  |  |
| Investment settlements and other liabilities | 97,151,294 | 144,746,079 | 135,384,862 | (32.9)\% | 6.9 \% |
| Securities lending obligations | 198,060,616 | 224,220,362 | 177,662,816 | (11.7)\% | 26.2 \% |
| Total liabilities | 295,211,910 | 368,966,441 | 313,047,678 | (20.0)\% | 17.9 \% |
| Net assets | \$ 3,006,971,321 | \$ 2,854,304,339 | \$ 2,667,850,663 | 5.4 \% | 7.0 \% |

Changes in Fiduciary Net Assets at December 31:

## Additions

Employer contributions
Member contributions
Net investment income
Security lending net income
Total additions

## Deductions

Benefit payments
Refunds
Administrative expenses
Total deductions
Net increase in net assets

| 2007 |  | 2006 |  | 2005 |  | $\begin{gathered} 2007 \\ \text { \% Change } \\ \hline \end{gathered}$ | $\begin{gathered} 2006 \\ \text { \% Change } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | 40,572,810 | \$ | 33,684,185 | \$ | 28,448,702 | 20.5 \% | 18.4 \% |
|  | 28,184,570 |  | 28,098,414 |  | 27,269,492 | 0.3 \% | 3.0 \% |
|  | 290,650,600 |  | 321,287,132 |  | 242,824,815 | (9.5)\% | 32.3 \% |
|  | 539,084 |  | 405,049 |  | 445,979 | 33.1 \% | (9.2)\% |
|  | 359,947,064 |  | 383,474,780 |  | 298,988,988 | (6.1)\% | 28.3 \% |
|  | (195,632,703) |  | $(186,215,600)$ |  | $(176,445,323)$ | 5.1 \% | 5.5 \% |
|  | $(8,234,446)$ |  | $(7,460,137)$ |  | $(7,194,798)$ | 10.4 \% | 3.7 \% |
|  | $(3,412,933)$ |  | $(3,345,367)$ |  | $(3,429,572)$ | 2.0 \% | (2.5)\% |
|  | (207,280,082) |  | $(197,021,104)$ |  | $(187,069,693)$ | 5.2 \% | 5.3 \% |
| \$ | 152,666,982 | \$ | 186,453,676 | \$ | 111,919,295 | (18.1)\% | 66.6 \% |

## FINANCIAL HIGHLIGHTS AND ANALYSES

The main purpose of the System is to provide its members a primary source of lifetime retirement income relative to service at the time of retirement. It is the objective of the System to provide benefits in a prudent, responsible, and cost-effective manner. Plan net assets are used to pay current and future benefits to Plan members. In 2007, plan net assets increased $5.4 \%$ from 2006 and $17.7 \%$ over the past three years. The increases in plan net assets primarily are due to strong investment returns and increased employer contributions.
The actuarial accrued liability (AAL) represents the present value of accrued benefits payable to current members as of the end of a plan year. Future service is not included in the AAL. The AAL increased $\$ 149.5$ million in 2007. The schedule below shows a comparison of the plan net assets and the AAL. The AAL for 2006 is restated for changes in actuarial assumptions and methodologies adopted in 2007.

| $(\$ 000)$ | 2007 | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 0 5}$ | 5 years | 10 years |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Plan net assets <br> $\%$ change | $\$ 3,006,971$ | $\$ 2,854,304$ | $\$ 2,667,850$ | $\$ 2,069,079$ | $\$ 2,042,102$ |
|  | $5.4 \%$ | $7.0 \%$ | $4.4 \%$ | $45.3 \%$ | $47.3 \%$ |
| Actuarial accrued liability $\$ 3,383,258$ | $\$ 3,233,713$ | $\$ 3,065,855$ | $\$ 2,712,293$ | $\$ 1,727,251$ |  |
| $\%$ change | $4.6 \%$ | $5.5 \%$ | $3.5 \%$ | $24.7 \%$ | $95.9 \%$ |

Benefit payments to retired members exceed contributions from contributing members and employers by $\$ 126.9$ million or a ratio of 2.8 to 1 . Investment earnings above the actuarial assumption rate are required over the long term in order for the System to remain in a sound financial condition. Asset allocation is an investment method used to achieve the higher than expected investment returns. The purpose of asset allocation is to reduce investment risk by diversifying the investment assets among several asset classes.

Net investment income of $\$ 291.2$ million represents a decrease $9.5 \%$ from 2006. The total investment return for 2007 is $10.1 \%$ primarily due to strong performance from the domestic and international equity markets. As of December 31, 2007, the total investment returns for the one, three, five, and ten-year periods exceed the actuarial assumed rate of investment return for each of the periods with the exception of the five-year return for 2005 . The assumed actuarial rate of return is $8.50 \%$ for the one and three-year periods and $8.75 \%$ for the five- and ten-year periods.

| Total returns | 1 year | 3 year | 5 year | 10 year |
| :--- | :--- | :--- | ---: | ---: |
| 2007 | $10.1 \%$ | $11.1 \%$ | $13.7 \%$ | $9.7 \%$ |
| 2006 | $12.6 \%$ | $12.0 \%$ | $10.4 \%$ | $10.3 \%$ |
| 2005 | $10.6 \%$ | $15.4 \%$ | $7.8 \%$ | $10.5 \%$ |



Shown below is an analysis of the components of the total investment return for 2007 versus a measurement benchmark return and the actual asset allocations and target ranges as of December 31, 2007.

| Asset <br> Class | Return | Benchmark | Portfolio <br> $\%$ | Target <br> Ranges |
| :--- | ---: | ---: | ---: | ---: |
| Domestic <br> stocks | $7.4 \%$ | $3.6 \%$ | $36 \%$ | $29 \%-39 \%$ |
| International <br> stocks | $17.1 \%$ | $11.2 \%$ | $19 \%$ | $13 \%-23 \%$ |
| Fixed income | $4.2 \%$ | $7.0 \%$ | $21 \%$ | $16 \%-22 \%$ |
| Mortgages | $5.4 \%$ | $5.1 \%$ | $8 \%$ | $8 \%-18 \%$ |
| Equity real <br> estate | $16.2 \%$ | $15.8 \%$ | $10 \%$ | $6 \%-12 \%$ |
| Alternative <br> assets | $40.6 \%$ | $1.4 \%$ | $5 \%$ | $2 \%-12 \%$ |
| Cash and <br> short-term <br> investments | $5.4 \%$ | $5.0 \%$ | $1 \%$ | $0 \%-0 \%$ |

The Board of Trustees, through the Investment Committee, has responsibility for the investment of plan assets. Plan assets are invested according to the Statement of Investment Objectives and Policies (SIOP) approved by the Trustees. The SIOP sets forth the guidelines for the strategic target allocation of investment assets. Each strategic asset class has an optimal target with high and low ranges. Net cash and debt in managed accounts are included in measuring the progress in reaching the targets. Investment allocations in all asset classes are within acceptable ranges for 2007. The Board of Trustees review the SIOP annually as required by Section 22-64-703(3) of the Colorado Revised Statutes.

Below is a schedule of the actuarial asset values and the actuarial accrued liabilities along with the respective funded ratios.

|  | 2007 | 2006 | 2005 |
| :--- | :---: | :---: | :---: |
| Funded ratio | $87.7 \%$ | $88.3 \%$ | $87.9 \%$ |
| $(\$ 000)$ | 2007 | 2006 | 2005 |
| Actuarial <br> accrued liability | $\$ 3,383,258$ | $\$ 3,233,713$ | $\$ 3,065,855$ |
| Actuarial <br> asset value | $2,968,794$ | $2,854,304$ | $2,693,686$ |
| UAAL |  |  |  |

The measure of the progress in accumulating sufficient assets to meet the long-term benefit obligations is the funded status or the funded ratio of the Plan. The funded ratio is the actuarial value of assets expressed as a percentage of the actuarial accrued liability. The funding policy is the method to provide benefits specified by the Plan through the amounts and timing of contributions from the employers and the contributing members. The excess of the actuarial accrued liability over the actuarial value of assets is the unfunded actuarial accrued liability or UAAL. The actuarial value of assets differs from the year-end fair value of plan net assets by smoothing the effects of market fluctuations. In the calculation of the actuarial value of assets, $25 \%$ of the difference between the actual and assumed investment returns is included in the actuarial value of assets. The smoothing method lessens the need to adjust the contribution rates based on the volatility in market conditions. During extended periods of market declines, the plan net assets usually will be less than the actuarial value of assets.
As of December 31, 2007, the actuarial value of assets increased $\$ 114.5$ million or $4.0 \%$ from 2006. The actuarial accrued liability increased $\$ 149.5$ million or $4.6 \%$ from 2006. The funded ratio decreased to $87.7 \%$ from $88.3 \%$. According to the System's actuary, the System remains in sound financial condition based on actuarial principles of level percent-of-payroll financing.

In addition to investment earnings and member contributions at $8 \%$, contributions at the ARC rate from employers of the Plan are required to maintain the sound financial condition of the Plan. The current funding policy rate for employer contributions has lagged behind the actuarially recommended contribution rate for the past six years. Until the funding policy rate is equal to the ARC, it is likely the funded status of the Plan will continue to decline in future years.

Effective July 1, 2005, the funding policy changed for employer contributions to achieve funding at the full ARC rate over a 4 -year period. The employer contribution rate will increase from $12.83 \%$ to $14.01 \%$ of covered payroll beginning July 1, 2008, as part of the funding policy change. Shown below is a schedule of adopted employer contribution rates, as of July 1 for each year.

| Beginning July 1, | 2008 | 2007 | 2006 |
| :--- | :---: | :---: | :---: |
| Recommended | $14.01 \%$ | $14.51 \%$ | $14.47 \%$ |
| Funding policy | $14.01 \%$ | $12.83 \%$ | $11.14 \%$ |

A required disclosure in the financial statements is a schedule of employer contributions. The purpose of this schedule is to provide information about the ARC compared to the employer contributions or funding policy. The ARC is the amount required to cover the normal pension cost and includes a provision for amortizing the UAAL. The amortization period for the UAAL is 30 years. Changes in the employer contribution rate are effective July 1 each year. Therefore, in the table shown below, the ARC and employer funding policy rates are blended rates or the average of the employer contribution rates for the year.

| Blended rates | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 0 5}$ |
| :--- | :---: | :---: | :---: |
| ARC | $14.49 \%$ | $14.01 \%$ | $13.10 \%$ |
| Funding policy | $11.99 \%$ | $10.31 \%$ | $8.80 \%$ |

The table below compares employer contributions and the change in the employer contributions to the ARC over a three-year period.

|  | 2007 | 2006 | 2005 |
| :--- | :---: | :---: | :---: |
| Employer |  |  |  |
| contributions | $\$ 40,572,810$ | $\$ 33,684,185$ | $\$ 28,448,702$ |
| \% change | $20.5 \%$ | $18.4 \%$ | $34.6 \%$ |
| \% of ARC | $82.9 \%$ | $73.3 \%$ | $67.2 \%$ |

Annual employer contributions, as a percentage of the ARC, steadily have increased over the previous six-year period, reflecting an increase in the employer contribution rate from $2.90 \%$ to $12.83 \%$. Employer contributions for this period were $\$ 73.2$ million less than the ARC.
Member contributions of $\$ 28.2$ million consist of normal $8 \%$ contributions, payments to qualify prior District service, and purchase of non-covered employment. Total contributions from members increased 0.3\% from 2006. Normal contributions increased $4.2 \%$ from 2006 primarily due to salary increases. The number of contributing members has increased $2.4 \%$ since 2006. Purchase of non-covered employment decreased 50.4\% from 2006.

|  | 2007 | 2006 | 2005 |
| :--- | :---: | :---: | :---: |
| Members <br> contributing <br> \% change | 7,303 | 7,130 | 7,212 |
|  | $2.4 \%$ | $(1.1) \%$ | $(0.2) \%$ |
| Member |  |  |  |
| contributions | 2007 | $\mathbf{2 0 0 6}$ | 2005 |
| Normal <br> Prior service | $\$ 26,623,746$ | $\$ 25,543,514$ | $\$ 24,997,276$ |
| Non-covered <br> employment | 520,801 | 456,566 | 687,857 |
|  | $1,040,023$ | $2,098,334$ | $1,584,359$ |

Benefit payments increased $5.1 \%$ in 2007 compared to $5.5 \%$ in 2006 and $7.9 \%$ in 2005 . The increase is a result of a $1.6 \%$ increase in the number of benefit recipients and a $3.5 \%$ increase in the average monthly benefit that includes an annual benefit increase of $3.25 \%$.

|  | 2007 | 2006 | $\mathbf{2 0 0 5}$ |
| :--- | ---: | ---: | ---: |
| Benefit recipients | 6,168 | 6,069 | 5,961 |
| \% change | $1.6 \%$ | $1.8 \%$ | $1.6 \%$ |
| Net increase | 99 | 108 | 92 |
| New recipients | 299 | 319 | 283 |
|  |  |  |  |
| Average benefit | $\$ 2,787$ | $\$ 2,694$ | $\$ 2,596$ |
| \% change | $3.5 \%$ | $3.8 \%$ | $4.9 \%$ |

The ratio of active members to retired members of the System is 1.18 to 1 compared to 1.29 to 1 in 1998. Over the past ten years, the number of members contributing into the System increased to 7,303 members from 6,345 members or an increase of $15.1 \%$. During the same period, the number of retired members increased by $22.5 \%$ to 6,168 from 5,037 . The number of contributing members increased by $21.7 \%$ for the five-year period ending in 2002, but declined by $5.4 \%$ from 2002 through 2007.
Administrative expenses of the System increased $2.0 \%$ from 2006. This compares to a $2.5 \%$ decrease in expenses in 2006. The administrative expenses represent $.11 \%$ of plan net assets (. $12 \%$ in 2006). The increase in 2007 primarily is due to a $30.0 \%$ increase in professional services and a $9.5 \%$ increase in other expenses. Personnel services costs decreased by $5.7 \%$ in 2007 primarily due to a change in the calculation of accrued paid leave. In addition, personnel services costs included one-time payments to retain certain staff members.

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Average benefit
\% change


-     - Basic Financial Statements


## STATEMENTS OF FIDUCIARY NET ASSETS

As of December 31, 2007 and 2006

|  | 2007 |  | 2006 |  |
| :---: | :---: | :---: | :---: | :---: |
| Assets |  |  |  |  |
| Cash and short-term investments | \$ | 60,190,183 | \$ | 127,838,247 |
| Receivables |  |  |  |  |
| Accrued interest and dividends |  | 3,849,044 |  | 3,014,815 |
| Contributions |  | 1,328,536 |  | 1,228,783 |
| Investment settlements |  | - |  | 2,247,374 |
| Other |  | 651,977 |  | 1,622,260 |
| Total receivables |  | 5,829,557 |  | 8,113,232 |
| Investments, at fair value |  |  |  |  |
| Domestic stocks |  | 1,047,690,088 |  | 1,005,912,235 |
| International stocks |  | 582,712,377 |  | 541,252,424 |
| Alternative assets |  | 138,014,219 |  | 116,816,616 |
| Corporate securities |  | 463,214,422 |  | 467,728,649 |
| Government securities |  | 237,804,994 |  | 272,758,521 |
| Mortgage investments |  | 256,343,443 |  | 197,100,997 |
| Equity real estate |  | 312,031,968 |  | 261,169,078 |
| Total investments |  | 3,037,811,511 |  | 2,862,738,520 |
| Securities lending collateral |  | 198,060,616 |  | 224,220,362 |
| Prepaid expenses |  | 36,836 |  | 38,406 |
| Capital assets, at cost, net of accumulated depreciation of $\$ 837,528$ ( $\$ 732,671$ in 2006) |  | 254,528 |  | 322,013 |
| Total assets |  | 3,302,183,231 |  | 3,223,270,780 |
| Liabilities |  |  |  |  |
| Accounts payable and accrued expenses |  | 9,857,586 |  | 10,363,788 |
| Investment settlements |  | 87,293,708 |  | 134,382,291 |
| Securities lending obligations |  | 198,060,616 |  | 224,220,362 |
| Total liabilities |  | 295,211,910 |  | 368,966,441 |
| Net assets held in trust for pension benefits (A schedule of funding progress for the Plan is presented on page 30.) | \$ | 3,006,971,321 | \$ | 2,854,304,339 |

See accompanying notes to financial statements.

## STATEMENTS OF CHANGES IN FIDUCIARY NET ASSETS

For the Years Ended December 31, 2007 and 2006

|  | 2007 | 2006 |  |
| :---: | :---: | :---: | :---: |
| Additions |  |  |  |
| Contributions |  |  |  |
| Employer | \$ 40,572,810 | \$ | 33,684,185 |
| Member | 28,184,570 |  | 28,098,414 |
| Total contributions | 68,757,380 |  | 61,782,599 |
| Investment income |  |  |  |
| Interest | 38,196,077 |  | 33,141,892 |
| Net appreciation in fair value of investments | 190,447,950 |  | 251,699,003 |
| Dividends | 29,181,290 |  | 27,803,031 |
| Equity real estate | 14,258,357 |  | 12,819,374 |
| Alternative assets | 29,918,697 |  | 5,686,579 |
| Other | 206,369 |  | 238,400 |
| Total investment income | 302,208,740 |  | 331,388,279 |
| Investment expense | $(11,558,140)$ |  | $(10,101,147)$ |
| Net investment income | 290,650,600 |  | 321,287,132 |
| Securities lending income | 11,081,318 |  | 10,799,180 |
| Securities lending expense | $(10,542,234)$ |  | $(10,394,131)$ |
| Net income from securities lending | 539,084 |  | 405,049 |
| Total additions | 359,947,064 |  | 383,474,780 |
| Deductions |  |  |  |
| Benefits paid to regular retirees | (187,655,763) |  | $(178,558,976)$ |
| Benefits paid to disability retirees | $(6,554,126)$ |  | $(6,223,321)$ |
| Benefits paid to survivors | $(1,422,814)$ |  | $(1,433,303)$ |
| Refunds of contributions | $(8,234,446)$ |  | $(7,460,137)$ |
| Administrative expenses | $(3,412,933)$ |  | $(3,345,367)$ |
| Total deductions | $(207,280,082)$ |  | $(197,021,104)$ |
| Net increase in net assets | 152,666,982 |  | 186,453,676 |
| Net assets held in trust for pension benefits |  |  |  |
| Beginning of year | 2,854,304,339 |  | 2,667,850,663 |
| End of year | \$ 3,006,971,321 | \$ | 2,854,304,339 |

See accompanying notes to financial statements.


## NOTES TO FINANCIAL STATEMENTS

December 31, 2007 and 2006

## (1) Description of the Plan

The Board of Education of School District No. 1 in the City and County of Denver and State of Colorado established the System on December 1, 1945, which is a cost-sharing multiple-employer defined benefit pension plan under Colorado law. The Board of Education adopted the Retirement and Benefit Plan, as amended, to provide defined retirement, death, and disability benefits to participating members. Participation in the Retirement Plan is mandatory for all full-time employees of the School District hired after December 1, 1945, and of the System, and of Charter Schools within the School District, established under the Colorado Charter Schools Act of 1993.

The Board of Trustees (Board) is an 11-member body with the exclusive authority to invest and manage the assets of the System, pay benefits, and otherwise administer the System. The Board is composed of six elected active members, two elected retired members of the System, two members appointed by the Board of Education of the School District, and one member, appointed by the other Board members, with demonstrated expertise in pension administration or in investment matters.

At December 31, 2007 and 2006, the System's membership consisted of the following:

Terminating members, electing to leave their accumulated contributions in the System, are eligible for deferred retirement provided they have a minimum of 5 years of service.

Employees who have attained either age 55 with a minimum of 25 years of civilian service in a tax-supported institution, of which 15 years must have been service qualified with the District, or age 65 with at least 5 years of earned service, or age 50 with at least 30 years of earned service, are entitled to regular

The Plan provides an Annual Retirement Allowance Adjustment (ARAA) increase in retired members' benefits. The annual percentage increase for each member is $3.25 \%$ of the member's retirement allowance. For individuals who, on or after July 1, 2005, become members or rejoin the retirement system after having withdrawn their contribution balances, the increase in their retired member benefits is equal to the lesser of $3 \%$ or the increase in the Consumer Price Index for urban wage earners and clerical workers for the preceding year compounded.
If a member resigns prior to retirement, the member is entitled to a refund of accumulated member contributions, which includes interest. Member accounts are credited with interest on the last day of each month based upon the member's balance as of the beginning of that month. The following is a table of the interest rates applied to member accounts:

| December 31, | Rate |
| :--- | :---: |
| 1986 and prior years | $3 \%$ |
| 1987 through 1990 | $9 \%$ |
| 1991 through present | $5 \%$ |

retirement benefits. Employees who meet the above criteria at retirement are entitled to regular retirement benefits, payable monthly for life, in an amount equal to $2.50 \%$ of their monthly highest average salaries (HAS) for each year of earned service to the date of retirement. The monthly HAS is defined as the average of the highest 36 months of compensation earned by the employee throughout employment with the District or career average salary, whichever is greater.
Beyond each full year of service, any full month(s) of service are credited proportionally. Optional early retirement with a reduction of benefits may be elected by a member at an age younger than 55 with 25 years of District service or at age 55 or beyond with 15 years of District service. The benefit reduces by $4 \%$ for each year of age or service the member lacks in fulfilling the minimum requirements for a regular retirement. A 6\% reduction is applied for an individual who, on or after July 1, 2005, becomes a member or rejoins the System after having taken a refund of contributions.

The Plan also provides for a disability retirement. Members with 5 or more years of earned service, who become permanently incapacitated from performing their duties, are eligible for disability retirement. The amount of the disability benefit is calculated in the same manner as for a regular retirement under the provisions of a single life annuity. Members with at least 25 years of earned and outside service at the date of retirement can elect at age 55 (age 50 with 30 years of earned service) to recalculate their benefits as a regular retirement. Otherwise, recalculation of a disability retirement occurs at age 65. Beginning with 1999 and under prescribed circumstances, disability retirees with fewer than 25 years of service can apply to qualify full years after retirement to be used when their disability benefits are recalculated to regular retirement benefits. The maximum number of earned and additional qualified years cannot exceed 25 at the date of recalculation, unless the total number of years of earned service at the effective date of disability retirement exceeds 25 , in which case such number of years is used to compute the recalculated benefit.
Liquidation of the System can be initiated by either the Board of Education or by vote of the members. In the event of liquidation, the assets would be distributed as specified in the Plan.

## REPORTING ENTITY

The Board is responsible for the general operations and fiscal matters of the System. These responsibilities include the ability to designate management, select the System's independent actuary and auditor, and determine investment policies.

The System is a body corporate and an instrumentality of the School District; it is not an agency of the School District. In addition, the System is not subject to administrative direction by the School District, and the assets of the System are not available to the School District. Accordingly, the financial statements of the System are not included in the financial statements of the School District or any other organization.

## PENSION PLAN DISCLOSURE FOR SYSTEM EMPLOYEES

The employees of the System are members of the Plan and accrue benefits as would any other member as described above. The System's employer contributions were \$175,214, \$148,074 and \$130,578 for the years ending December 31, 2007, 2006, and 2005, respectively. In addition, the System contributed $\$ 179,614, \$ 180,313$ and $\$ 177,626$, for the same periods, for the cost of the pension certificates of participation issued by the School District on July 17, 1997.

## (2) Significant

 Accounting Policies
## BASIS OF ACCOUNTING AND PRESENTATION

The financial statements of the System are prepared using the economic resources measurement focus and the accrual basis of accounting. Investment income is recorded when it is earned. Expenses are recorded when liabilities are incurred. Member and employer contributions are recorded in the period in which the contributions are due. Benefit and refund payments are recorded in the period in which the liabilities are due and payable.

The financial statements are presented in accordance with Governmental Accounting Standards Board (GASB) Statement Nos. 25, 28, 34, 37, and 40, and generally accepted accounting principles that apply to governmental accounting for fiduciary funds.

## INVESTMENTS

System investments are presented at fair value or estimated fair value. Securities traded on a national or international exchange are valued at the last reported sales price. Securities traded over-the-counter are valued at the last bid price. The values of corporate and government securities are based on comparable securities with similar yield and risk factors. The System's equity in real estate investments are stated at estimated fair value at the date of the financial statements. Generally, this value is determined periodically (usually annually) by the advisor or independent appraisers or more frequently if management of the applicable funds has determined that there has been a significant change in the economic circumstances related to the investment. The fair values of commercial mortgage investments are based upon current interest rates and prepayment assumptions. The value of alternative assets is determined by the manager based upon economic and market conditions of the underlying investments. For determining realized gains and losses, the costs of corporate stocks are calculated on the average cost basis. The costs of all other investments are determined based on specific identification.

## FEDERAL INCOME TAX STATUS

The System is qualified under Internal Revenue Code (IRC) Section 401(a). The System is a governmental plan as described in IRC Section 414(d). It therefore, is exempt from federal income taxation under IRC Section 501(c)(25)(C)(ii).

## CAPITAL ASSETS

Capital assets are recorded at cost, less accumulated depreciation. Costs of major additions and improvements in excess of \$500 are capitalized. Expenses for maintenance and repairs are charged as deductions as incurred. Depreciation is calculated using the straight-line method based on estimated useful lives of four and five years.

## COMPENSATED ABSENCES OF SYSTEM STAFF

Sick and personal leave and vacation allowances are combined into paid leave. Accumulated paid leave is payable upon termination or retirement and is based on the employees' salary at termination or retirement. At December 31, 2007, the liability for accumulated paid leave was $\$ 341,566$ (\$433,670 in 2006).

## RISK MANAGEMENT

The System is exposed to various risks related to theft, damage, and destruction of assets, errors and omissions, injuries to employees and court challenges to fiduciary decisions. To insure against such risks of losses, the System carries policies of fiduciary liability insurance, general liability insurance, property insurance, and a crime/fidelity bond. Employees of the System receive health, life, dental, and vision insurance coverage under the policies of the School District. There have been no insurance claims against the System for the past three years.

## USE OF ESTIMATES

Preparation of the financial statements, in conformity with accounting principles generally accepted in the United States of America, requires that management make certain estimates and assumptions. These estimates and assumptions affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of additions and deductions during the reporting period. Actual results could differ significantly from these estimates.

## (3) Deposits and Investments Risk Disclosures

## INVESTMENT AUTHORITY

The System is authorized to invest in a broad array of investments as described in the Statement of Investment Objectives and Policies, dated January 7, 2008. These include, but are not limited to the following:

- Equity securities, both domestic and international, of publicly traded companies and related derivative securities
- Fixed income securities and related derivative securities
- Equity and debt investments in income-producing real estate
- Alternative assets including private (not publicly traded) equity or debt investments
- Short-term investment funds with the custodian bank


## CONCENTRATIONS OF CREDIT RISK

The System's primary investment policy objective of the fixed income portfolio is to generate a rate of return from its investments in fixed income instruments that is greater than the U.S. fixed income market net of costs and fees over a complete market cycle.

Mortgage investments represent investments in real estate loans collateralized by the related properties, mortgage participation certificates, mortgage participation funds, and commercial mortgage-backed securities. Investments in corporate stocks and bonds are diversified by: (1) geographic area primarily within the United States for bonds and worldwide for corporate stocks, (2) industry group, and (3) sensitivity to general economic cycles. Generally, these investments represent non-collateralized ownership in, or lending to, publicly held corporations traded on domestic and international markets. U.S. government securities are composed of securities with varying maturities and interest rates and are backed by the full faith and credit of the U.S. government. The above limitations and the System's diversification over several asset classes are intended to reduce the overall investment risk exposure. Concentrations in the securities of a single entity are limited to not more than $5 \%$ of the fixed income securities at market value. Corporate securities of a single industry are limited to not more than $25 \%$ of the fixed income securities at market value. These limitations do not apply to U.S. Government and agency guaranteed securities. Individual manager contracts include specific guidelines regarding assets under management by the manager. In addition, margin and net short-sale positions are prohibited.

The use of derivative securities is permitted, but the use of derivatives should not increase the risk profile or leverage the manager's account.

## CASH AND SHORT-TERM INVESTMENTS

## Custodial Credit Risk

The custodial credit risk for cash and short-term deposits is the risk that, in the event of the failure of the System's depositary financial institution, the System will not be able to recover the deposits or will not be able to recover collateral securities that are in the possession of an outside third party. The System does not have a policy on custodial credit risk. The System's cash and short-term investments are not exposed to custodial credit risk.
Short-term government securities are registered in the System's name and are held by the System's custodial bank, the Northern Trust Company (NTC). Variable short-term accounts with the custodial bank are collateralized by underlying securities held by the custodial bank in an institutional trust.

The carrying amount of the System's cash deposits at December 31, 2007, was $\$ 239,692$ and the bank balance was $\$ 713,816$ ( $\$ 2,148,604$ and $\$ 2,776,423$ in 2006 , respectively). Of the bank balances at December 31, 2007, and 2006, $\$ 100,000$ is covered by federal depository insurance and $\$ 613,816$ ( $\$ 2,676,423$ in 2006) is covered by the provisions of the Colorado Public Deposit Protection Act and is collateralized in single institution pools with securities held by the pledging institution's trust department or agent, but not in the System's name. The table below summarizes the fair value of cash and short-term investments held by the System as of December 31.

|  | 2007 | 2006 |  |
| :--- | ---: | ---: | ---: | ---: |
| General operating bank accounts | $\$ r 239,692$ | $\$$ | $2,148,604$ |
| Short-term government securities | $1,744,162$ | 673,164 |  |
| Variable short-term account with |  |  |  |
| custodial bank | $58,206,329$ | $125,016,479$ |  |
| Total cash and short-term investments | $\mathbf{\$ 6 0 , 1 9 0 , 1 8 3}$ | $\mathbf{\$ 1 2 7 , 8 3 8 , 2 4 7}$ |  |

## INVESTMENTS

An objective for fixed income investments is to provide for potential above average long-term investment returns utilizing debt securities and derivative securities of various credit quality, sectors, currencies, and structures. There is no policy restricting these characteristics relative to debt-related securities unless otherwise restricted by the System in the investment manager's advisory agreement. The following table presents the fair value of the System's investments at December 31, 2007, by investment type.

| Investment type | Fair value |
| :--- | ---: | ---: |
| Domestic equity securities | $\$ 23,079,410$ |
| Domestic corporate securities | $181,359,472$ |
| U.S. Government and agency securities | $158,775,635$ |
| Mortgage investments | $136,903,345$ |
| Investments funds |  |
| $\quad$ Domestic equity securities | $357,821,227$ |
| International equity securities | $582,712,377$ |
| $\quad$ Domestic corporate securities | $272,520,354$ |
| U.S. Government and agency securities | $62,054,866$ |
| $\quad$ Mortgage investments | $119,440,098$ |
| $\quad$ Real estate | $312,031,968$ |
| $\quad$ Alternative assets | $138,014,219$ |
| Investments held under securities |  |
| lending agreements |  |
| $\quad$ Domestic corporate securities | $9,334,596$ |
| Domestic equity securities | $\mathbf{1 6 6 , 7 8 9 , 4 5 1}$ |
| U.S. Government and agency securities | $\mathbf{1 6 , 9 7 4 , 4 9 3}$ |
| Total investments | $\$ \mathbf{3 , 0 3 7 , 8 1 1 , 5 1 1}$ |
| Securities lending collateral pool | $198,060,616$ |

## Credit Risk Debt Securities

Credit risk is the risk that an issuer or other counterparty to an investment in debt securities will not fulfill its obligation. The following table lists the credit quality of investments according to Standard \& Poor's credit ratings. The System does not have a policy on credit risk.

| Quality Rating | Fair Value |
| :--- | ---: |
| AAA | $\$ 421,587,908$ |
| AA | $25,900,876$ |
| AA- | 333,823 |
| A+ | $2,266,069$ |
| A | $37,069,137$ |
| A- | $8,454,832$ |
| BBB+ | $14,064,359$ |
| BBB | $83,409,324$ |
| BBB- | $8,262,811$ |
| BB+ | 387,760 |
| BB | $19,687,464$ |
| BB- | 400,354 |
| B+ | 10,630 |
| B | $13,735,543$ |
| CCC | $6,647,462$ |
| D | 92,824 |
| Not rated | $58,708,240$ |

Total debt securities \$701,019,416

## Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of debt securities. One measurement of interest rate risk is the investment's duration. Duration is a measure of an investment's exposure to fair value changes from changing market interest rates using the present value of cash flows, weighted for those cash flows as a percentage of the investment's full price. The System does not have a policy on interest rate risk. The following table lists the effective weighted duration in years of investments by investment type.

| Investment Type | Fair Value | Effective Wgt. <br> Duration |
| :--- | ---: | :---: |
| Asset backed securities | $\$ 23,960,551$ | 0.81 |
| Commercial mortgage backed securities | $14,081,095$ | 5.03 |
| Corporate bonds | $95,342,011$ | 4.58 |
| Corporate convertible bonds | 96,012 | 1.04 |
| Non-government backed C.M.O.s | $48,552,319$ | 0.57 |
| Government agencies | $7,747,173$ | 2.75 |
| Government bonds | $3,502,557$ | 12.05 |
| Government mortgage backed securities | $145,729,148$ | 3.41 |
| Index linked government bonds | $18,767,249$ | 7.48 |
| Other | $7,226,077$ | 2.83 |
| Pooled investments | $\mathbf{3 6 5 , 0 0 4 , 1 9 2}$ | $\mathbf{3 . 4 9}$ |
| Other - not rated | $334,575,220$ | 4.58 |
| Total debt securities | $1,440,004$ | NA |

## Foreign Currency Rate Risk

Foreign currency risk is the risk that changes in monetary exchange rates will adversely affect the fair value of an investment or a deposit in terms of U.S. dollars. The System does not have a policy on foreign currency risk. The following table lists the foreign currency risk of international equity investments denominated by foreign currency.

| Currency | Equities | Alternatives | Total |
| :---: | :---: | :---: | :---: |
| Australian dollar | 23,572,109 | \$ | \$ 23,572,109 |
| Bermudian dollar | 71,935 |  | 71,935 |
| Brazilian real | 12,013,784 |  | 12,013,784 |
| British pound | 108,236,249 |  | 108,236,249 |
| Canadian dollar | 18,921,870 |  | 18,921,870 |
| Chinese yuan | 6,817,218 |  | 6,817,218 |
| Cyprus pound | 2,595,153 |  | 2,595,153 |
| Danish krone | 6,661,567 |  | 6,661,567 |
| Euro | 178,896,975 | 15,368,786 | 194,265,761 |
| Cayman Islands dollar | 462,442 |  | 462,442 |
| Hong Kong dollar | 9,891,207 |  | 9,891,207 |
| Indian rupee | 2,106,888 |  | 2,106,888 |
| Indonesian rupiah | 3,745,578 |  | 3,745,578 |
| Israeli new shekel | 4,514,759 |  | 4,514,759 |
| Japanese yen | 93,387,529 |  | 93,387,529 |
| Malaysian ringgit | 1,137,050 |  | 1,137,050 |
| Mexican peso | 3,678,693 |  | 3,678,693 |
| New Zealand dollar | 713,032 |  | 713,032 |
| Norwegian krone | 13,289,980 |  | 13,289,980 |
| Papua New Guinea kina | 195,253 |  | 195,253 |
| Russian rouble | 6,080,206 |  | 6,080,206 |
| Singapore dollar | 7,549,650 |  | 7,549,650 |
| South African rand | 1,922,953 |  | 1,922,953 |
| South Korean won | 3,002,930 |  | 3,002,930 |
| Swedish krona | 13,580,337 |  | 13,580,337 |
| Swiss franc | 41,731,083 |  | 41,731,083 |
| Turkish new lira | 5,718,695 |  | 5,718,695 |
| United Arab Emirates dirham | 4,457,025 |  | 4,457,025 |
| Total foreign currency risk | 574,952,150 | 15,368,786 | 590,320,936 |
| United States dollar | 7,760,227 |  | 7,760,227 |
| Total | \$ 582,712,377 | 15,368,786 | \$598,081,163 |

## DERIVATIVE FINANCIAL INSTRUMENTS

The System invests in derivative financial instruments as authorized in the Statement of Investment Objectives and Policies of the System. As of December 31, 2007 and 2006, the System had derivative financial instruments with off-balance sheet risk including options, futures, interest rate swaps, and credit default swaps. The System invests in derivative financial instruments principally for yield curve and interest rate risk management. Option contracts convey rights between contracting parties to buy or sell the underlying securities. The owner of a call option has the right to purchase the security, and the owner of a put option has the right to sell the security. The System buys and sells option contracts actively traded on major exchanges. The value of option contracts generally is based on the Black-Scholes model. As of December 31, the fair value of the option contracts was \$(392,931) in 2007 and $\$(35,046)$ in 2006.

Futures contracts represent commitments to purchase or sell securities at a future date and at a specified price. Futures are exchange traded, and the exchange assumes the risk of nonperformance by a counterparty.
Interest rate swaps represent contractual agreements between counterparties to exchange interest rate cash flows for a specified period and based upon notional amounts. One of the counterparties is obligated to make a net cash settlement at the maturity of the contract. The System is exposed to credit risk in the event of nonperformance of the counterparty to the contract. The value of swaps is determined by use of a swap calculator provided by Bloomberg. As of December 31, the fair value of these contracts was $\$(145,828)$ in 2007 and $\$(336,664)$ in 2006.

Index or total return swaps represent contractual agreements between counterparties to exchange cash flows by reference to specified indexes on notional principal amounts for a specified period. As of December 31, the fair value of these contracts was $\$ 44,844$ in 2007 and $\$ 0$ in 2006.

Credit default swaps (CDS) are over-the-counter contracts that transfer credit risk of a specified obligor between two counterparties. Participants in the CDS market are buying and selling default insurance at a negotiated price. As of December 31, the fair value of these contracts was $\$(889,366)$ in 2007 and \$701,583 in 2006.
As of December 31, 2007 and 2006, the System had investments in the following derivative financial instruments. The contract or notional amounts do not represent the exposure to market loss.

|  | 2007 |  | 2006 |  |
| :--- | :---: | :---: | :---: | :---: |
|  | $\begin{array}{c}\text { Contract or } \\ \text { Notional Value }\end{array}$ |  |  | Contracts | \(\left.\begin{array}{c}Contract or <br>

Notional Value\end{array}\right]\)

## SECURITIES LENDING COLLATERAL AND OBLIGATIONS

The System participates in a securities lending program in accordance with the provisions of a contract between the System (lender) and its custodial agent, NTC. NTC, acting as the lending agent, loans equity, fixed income, and short-term securities to independent brokers and dealers (borrower). The borrower exchanges collateral, in the form of cash, government securities, or irrevocable letters of credit, for the loaned securities equal to $102 \%$ and $105 \%$ of the market value, plus accrued income, of domestic and global securities, respectively. Collateral is marked to market daily with additional collateral required when the value of the collateral falls below the minimum requirements. The System retains all beneficial rights to the loaned securities except for the ability to vote proxies. NTC invests cash collateral in a short-term investment pool or in separate term loans with maturities equal to the terms of the security loans. These loans can be terminated on demand by either lender or borrower. Non-cash collateral cannot be pledged or sold unless the borrower defaults on the loan agreement. A portion of the earnings on the invested collateral is rebated to the borrower in accordance with the agreement between NTC and the borrower. The System receives revenue from the loaned securities, less the borrower rebate and loan fees or premiums and NTC lending fees. The lending fees are $30 \%$ of the loan premium for government securities and for U.S. corporate and global securities.


There were no significant violations of legal or contractual provisions, no borrower, or lending agent default losses known to the securities lending agent and no dividend or coupon payments owing on the loaned securities as of December 31, 2007 and 2006.

NTC provides loss indemnification to the extent NTC performs appropriate borrower and collateral investment credit analyses, by demanding adequate types and levels of collateral and complying with applicable Department of Labor and Federal Financial Institutions Examination Council regulations concerning securities lending. The System had no credit risk exposure at December 31, 2007 and 2006, because the amount the System owed the borrowers exceeded the amount the borrowers owed the System.
As of December 31, 2007, the fair value of loaned securities was $\$ 193,098,540(\$ 218,282,998$ in 2006). The fair value of the associated collateral was $\$ 198,060,616$ ( $\$ 224,220,362$ in 2006). Income from securities lending, net of borrower rebates and lending fees, was $\$ 539,084$ for the year ended December 31, 2007 ( $\$ 405,049$ in 2006).

## (4) Contributions

Employer contributions are based on the funding policy required by Plan provisions. The employer contribution rate was fixed at 2.90\% of covered salary for the period from July 1, 2000, through June 30, 2010. Should unfunded actuarial accrued liabilities (UAAL) accumulate during this period, the employer contribution rate each year would increase by the amount required to amortize the UAAL over 30 years. In 2005, this Plan provision was amended changing the contribution rate period to July 1, 2000, through June 30,2005 , and adding a provision for the phase-in of the employer contribution rate to be equal to the full annual required contribution rate by the beginning of the fourth year. The phase-in dates for the rate adjustments are July 1, 2005, July 1, 2006, July 1, 2007, and July 1, 2008.

The actuary of the System issues an annual report as of January 1 of each year. The School District adopts changes in the employer contribution rates for its fiscal year beginning 18 months after the date of the annual actuarial valuation report. Members are required to contribute $8 \%$ of gross covered salary to the System. These contributions are recorded in separate member accounts. Member contributions are tax-deferred for federal and state income tax purposes. In accordance with funding policy, the District contributions to the System totaled $\$ 40,572,810$ at $11.99 \%$ of current covered payroll ( $\$ 33,684,185$ at $10.31 \%$ in 2006). The ARC was $14.47 \%$ for the period January 1, 2007 through June 30, 2007 ( $13.55 \%$ for 2006), and $14.51 \%$ for the period July 1, 2007 through December 31, 2007 ( $14.47 \%$ for 2006). Member contributions totaled \$28,184,570 and $\$ 28,098,414$ for 2007 and 2006, respectively.

## (5) Future Benefit <br> Enbancements

Created in 1991, the Reserve for Future Benefit Enhancements (FBE) serves as an account within the System Retirement Trust Fund (SRTF) designated to provide for the payment of future improvements in Plan benefits. This account is funded annually in accordance with prescribed guidelines set forth in the Plan. The balance in the FBE is a component of net assets held in trust for pension benefits but excluded from the computation of the actuarial accrued liability of the System. The balance in the FBE at December 31, 2007 and 2006 was $\$ 0$.

## (6) Employee Defined Contribution Plan

The Board approved the establishment of a discretionary defined contribution plan (DC Plan) for employees of the System in 2003. The System maintained the DC Plan in compliance with the requirements of IRC Section 401(a). Contributions to the DC Plan were at the sole discretion of the System. The System contributed amounts equal to the amounts payable under a staff retention plan. For the year ended December 31, 2006, the System did not contribute to the DC Plan. The System terminated the DC Plan in 2006 and distributed the account balances to the Plan members.

## (7) Staff Retention Payments

Several key staff members of the System had indicated they would retire at the end of 2005 . In order to retain these staff members to assist in the transition period for replacement of their positions, the Board authorized the payment of an additional $\$ 225,000$ to retain seven key staff members beyond 2005. The System paid a total of $\$ 121,640$ to five staff members who retired in 2006.

## (8) Commitments

The System leases office space under an operating lease that expires June 30, 2011. Future minimum lease payments listed in the table below are as of December 31 of each year.

| Year | Amount |
| :--- | ---: |
| 2008 | $\$ 164,066$ |
| 2009 | 168,964 |
| 2010 | 173,862 |
| 2011 | 88,155 |
| Total | $\mathbf{\$ 5 9 5 , 0 4 7}$ |

Rent expense for the years ended December 31, 2007 and 2006 was $\$ 180,245$ and $\$ 137,991$, respectively.

As of December 31, 2007, the System had commitments for future investments in alternate assets and real estate of $\$ 155,846,095$ ( $\$ 106,231,932$ in 2006).

## (9) Administrative Expenses

Expenses for the administration of the Plan, including the System, are budgeted and approved by the Board. Plan assets, including investment income, are used to pay Plan expenses.

## (10) Subsequent Events

The System received $\$ 397.8$ million from the proceeds of the issuance of taxable variable rate certificates of participation (TVRCOP) by School District No. 1 on April 24, 2008. The proceeds equal the estimated UAAL of the Plan as of December 31, 2007, which effectively funded fully the UAAL of the Plan. Subsequent to receipt of the proceeds of the TVRCOP, the Board recommended a reduction in the employer contribution rate from the ARC of $14.01 \%$ to the employer normal cost element of the ARC of $7.58 \%$, effective July 1, 2008. The Board sent the recommendation to the Board of Education of School District No. 1.

House Bill 1403, introduced in the Colorado Legislature on April 21, 2008, modifies Section 22-64-220 of the Colorado Revised Statutes that authorizes a school district retirement system to enter into an agreement to merge into another public employee retirement system. The bill specifies January 1, 2009, as the effective date of the merger or a later date as agreed to by the parties. This legislation will allow, but does not require, the System, School District No. 1, and the Colorado Public Employees' Retirement Association (Colorado PERA) to enter into an agreement to merge the System into Colorado PERA. The Colorado House of Representatives and Senate both declared the bill passed. The Governor of Colorado signed the legislation into law on May 28, 2008.

## - - Required Supplementary Information

## SCHEDULE OF FUNDING PROGRESS (UNAUDITED)

(Dollars in Thousands)


## SCHEDULE OF EMPLOYER CONTRIBUTIONS (UNAUDITED)

| Year Ended | Annual <br> Required <br> Contribution | Employer <br> Contributions | Percentage <br> of ARC <br> Contributed | Annual <br> Required <br> Contribution <br> Percentage** |
| :--- | :---: | :---: | :---: | :---: |
| 2002 | $\$ 18,949,591$ | $\$ 9,473,361$ | $49.99 \%$ | $5.71 \%$ |
| 2003 | $28,709,754$ | $13,023,157$ | 45.36 | 8.67 |
| 2004 | $34,637,301$ | $21,142,815$ | 61.04 | 10.74 |
| 2005 | $42,308,047$ | $28,448,702$ | 67.24 | 13.10 |
| 2006 | $45,974,858$ | $33,684,185$ | 73.27 | 14.01 |
| 2007 | $48,967,382$ | $40,572,810$ | 82.86 | 14.49 |

* 2007 reflects actuarial assumptions and methodologies adopted in 2007 and applied retroactively to the beginning of the year.
** The ARC percentage is a blended rate. Employer contribution rates are adjusted effective July 1 of each year.
Unaudited - see accompanying notes to the required supplementary information.
Unaudited - see accompanying independent auditor's report.


## NOTES TO REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

December 31, 2007

## (1) Actuarial Assumptions and Methods

The required supplementary schedules provide information to help users assess the ability of the System to accumulate sufficient assets to pay benefits when due. The information includes funding status, funding progress and contribution rates and requirements. The Schedule of Funding Progress reports the unfunded actuarial accrued liability of the System and its significance relative to the capacity to pay for the liability. The Schedule of Employer Contributions provides information about the required contributions and the extent to which the employer makes those contributions.

The following schedule provides information regarding significant actuarial assumptions and methods as of the latest actuarial valuation date.

| Valuation date | January 1, 2008 |
| :---: | :---: |
| Actuarial cost method | Entry age |
| Amortization method. | Level percentage of increasing payroll |
| Amortization approach. | Open |
| Remaining amortization period | 30 years at each valuation date |
| Asset valuation method | Smoothing 25\% of difference between actual and assumed investment returns |
| Actuarial assumptions: |  |
| Investment rate of return | 8.50\% |
| Including inflation at | 4.50\% |
| Projected salary increases | Varies based upon service and age from $4.5 \%$ to $8.0 \%$ |
| Including inflation at | 4.50\% |
| Cost-of-living adjustments |  |
| Hired prior to 7/1/05 | 3.25\% compounded annually |
| Hired on or after 7/1/05 | Lesser of 3\% or CPI-W compounded annually |

## (2) Significant Factors Affecting Trends in Actuarial Information <br> 2007 CHANGES IN PLAN PROVISIONS AND ACTUARIAL ASSUMPTIONS

- The employer contribution rate changed in accord with the funding policy of the Plan and the scheduled four-year phase-in to achieve the full annual required contribution rate by July 1, 2008. Effective July 1, 2007, the employer contribution rate is $12.83 \%$.
- Effective January 1, 2007, the actuarial value of assets is re-set to the market value as of December 31, 2006.
- Effective January 1, 2007, the actuarial asset smoothing method changed to recognize $25 \%$ of the difference between actual and assumed investment returns in the funding value of assets. In prior years, the smoothing method used recognized $20 \%$ of the difference between the market and expected values of assets in the funding value of assets.
- Based on an actuarial experience study, salary increase, withdrawal, retirement, disability, and mortality assumptions are changed effective January 1, 2007.


## 2006 CHANGES IN PLAN PROVISIONS AND ACTUARIAL ASSUMPTIONS

- The employer contribution rate changed in accord with the funding policy of the Plan and the scheduled four-year phase-in to achieve the full annual required contribution rate by July 1, 2008. Effective July 1, 2006, the employer contribution rate is $11.14 \%$.


## 2005 CHANGES IN PLAN PROVISIONS AND ACTUARIAL ASSUMPTIONS

- Effective July 1, 2005, the provisions governing the employer contribution requirements were amended to allow for a phase in of the employer contribution rate to achieve the full annual required contribution rate by July 1, 2008.
- Effective January 1, 2005, the economic assumptions for investment return and wage inflation changed to $8.50 \%$ and $4.50 \%$ from $8.75 \%$ and $4.00 \%$, respectively.
- The actuarial reduction on optional early retirements increased to $6 \%$ from $4 \%$ for individuals who, on or after July 1, 2005, become members or rejoin the System after having withdrawn their contribution balances.
- For individuals who, on or after July 1, 2005, become members or rejoin the System after having withdrawn their contribution balances, the ARAA was changed from $3.25 \%$ compounded to the lesser of $3.00 \%$ or the increase in the Consumer Price Index for urban wage earners and clerical workers for the preceding year compounded. The calculation of the first ARAA, effective in the year immediately following the year of retirement, is calculated in a pro-rated manner based on the number of months retired.


## 2004 CHANGES IN PLAN PROVISIONS AND ACTUARIAL ASSUMPTIONS

- The Option A benefit is enhanced by adding a death benefit that provides the payment to the designated beneficiary(ies) of the remaining amount of an annuitant's account balance at the time of death, effective December 31, 2004.
- Effective December 31, 2004, joint and survivor annuity "pop-up" options P3 and P2 are added. In the event the joint survivor annuitant predeceases or divorces from the annuitant, the benefit amount generally will pop up to the Option A amount.
- The reference to the use of female mortality tables in establishing the option factors for the joint and survivor annuity options is deleted from the Plan, effective December 31, 2004.


## 2003 CHANGES IN PLAN PROVISIONS AND ACTUARIAL ASSUMPTIONS

- As of January 1, 2004, earned service is used both to determine the eligibility for retirement and the amount of the retirement benefit. Prior to this change, active service is used to determine retirement eligibility, and accredited service is used to determine the retirement benefit.
- Effective January 1, 2004, the calculation to determine credit for casual service changed from one based on hours of employment to a calculation based on the compensation of the member. One month of service credit is credited for each month the member's earnings equals or exceeds 80 times the hourly federal minimum wage in effect at the time of service.
- Effective January 1, 2004, the cost to purchase non-covered employment increased from $25 \%$ to $34 \%$ of HAS at the time of the purchase.


## 2002 CHANGES IN PLAN PROVISIONS AND ACTUARIAL ASSUMPTIONS

- Effective July 1, 2002, any changes in the employer contribution rate become effective on July 1 of the year that is 18 months after the end of the calendar year on which the actuarial valuation is based.
-     - Additional Supporting Schedules


## SCHEDULES OF ADMINISTRATIVE EXPENSES

For the Years Ended December 31, 2007 and 2006

|  | 2007 | 2006 |
| :---: | :---: | :---: |
| Personnel services |  |  |
| Salaries | \$ 1,568,294 | \$ 1,723,692 |
| Employee benefits | 540,365 | 512,841 |
| Total personnel services | 2,108,659 | 2,236,533 |
| Professional services |  |  |
| Legal fees | 72,487 | 82,856 |
| Actuarial fees | 156,992 | 60,801 |
| Audit fees | 59,000 | 49,000 |
| Consultants and outside services | 183,023 | 179,451 |
| Maintenance agreements | 101,469 | 68,715 |
| Total professional services | 572,971 | 440,823 |
| Miscellaneous expenses |  |  |
| Insurance | 161,782 | 160,082 |
| Subscriptions and research materials | 9,187 | 8,716 |
| Investment services | 36,000 | 36,000 |
| Computer system software | 10,029 | 3,364 |
| Computer supplies | 26,078 | 29,388 |
| Registrations, conferences and memberships | 21,342 | 18,869 |
| Planning and meeting | 9,745 | 6,235 |
| Telephone | 14,295 | 18,219 |
| Travel | 33,441 | 28,964 |
| Office rent | 180,245 | 137,991 |
| Office supplies | 17,366 | 33,351 |
| Advertising | 2,797 | 19,656 |
| Postage and printing | 101,118 | 85,014 |
| Equipment repair | 2,815 | 867 |
| Depreciation | 104,857 | 79,432 |
| Other | 206 | 1,863 |
| Total miscellaneous expenses | 731,303 | 668,011 |
| Total administrative expenses | \$ 3,412,933 | \$ 3,345,367 |

See accompanying independent auditor's report.

## SCHEDULES OF INVESTMENT EXPENSES

For the Years Ended December 31, 2007 and 2006

|  | Fees |  |
| :--- | ---: | ---: |
| Description | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 6}$ |
| Domestic equity | $\$ 4,512,776$ | $\$, 068,223$ |
| International equity | $3,777,810$ | $3,390,860$ |
| Domestic fixed income | $1,308,673$ | $1,201,476$ |
| Other investments | $1,915,381$ | $1,398,200$ |
| Total external manager fees | $\mathbf{1 1 , 5 1 4 , 6 4 0}$ | $\mathbf{1 0 , 0 5 8 , 7 5 9}$ |
| Custody fees | 43,500 | 42,388 |
| Total investment expense | $\mathbf{\$ 1 1 , 5 5 8 , 1 4 0}$ | $\mathbf{\$ 1 0 , 1 0 1 , 1 4 7}$ |

## SCHEDULES OF PAYMENTS TO CONSULTANTS

For the Years Ended December 31, 2007 and 2006

|  | Fees |  |  |
| :--- | ---: | ---: | :---: |
| Nature of Service | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 6}$ |  |
| Legal | $\$$ | 72,487 |  |
| Actuarial | 156,992 | $\$ 2,856$ |  |
| Management consulting | 219,023 | 60,801 |  |
| Audit | 59,000 | 215,451 |  |
| Information systems | 101,469 | 49,000 |  |
| Total payments to consultants | $\mathbf{\$}$ | $\mathbf{6 0 8 , 9 7 1}$ |  |

See accompanying independent auditor's report.


By Gary L. Ratliff, CFA
and Amy C. McGarrity

## ECONOMIC OVERVIEW

Following strong growth through most of 2007, the global economic expansion slowed markedly beginning in the fourth quarter of 2007. The causes of this slowdown will likely be debated for a long time. Economic contractions are a normal part of the business cycle, but many point to the U.S. subprime mortgage debacle as the catalyst for 2007's problems. Economic growth in the United States slowed noticeably in the fourth quarter of 2007, as real gross domestic product (GDP) increased by only $0.6 \%$ and the overall growth rate in year-over-year GDP was $2.2 \%$, the lowest rate since 2002. Although there were concerns that a slowdown in the U.S. would spillover into other markets, economic conditions outside of the U.S. were moderate to strong. Growth also slowed in Western Europe and Japan, but despite some decrease in export activity, emerging markets and developing economies continued to expand vigorously, led by China and India. For example, China's increase in real GDP was estimated at $11.4 \%$.

Global growth is expected to slow in 2008 , to $4.1 \%$, down from $4.9 \%$ in 2007 as consumption slows and energy and commodity prices remain high. During the year, the S\&P GSCI Energy Index increased $41.92 \%$, with crude oil ranging in price throughout the year between $\$ 50$ and $\$ 100$ per barrel. Global demand for oil is increasing, while supply is decreasing, causing pricing pressure. Slowing global growth is largely attributable to developed countries, as emerging economies are expected to continue experiencing above-average growth.

For example, China and India are expected to grow at $9.3 \%$ and $7.9 \%$, respectively, in 2008. Inflation also entered the picture during the latter part of 2007, in both developed and emerging market economies.
The year began cautiously, with concerns about the U.S. housing market and its potential impact on the overall economy. In the U.S., two sectors of the economy - housing and financial - experienced the most dramatic declines. The housing sector had one of its worst years in decades, as the collapse of mortgage industry financing, rising construction costs, and concerns over future mortgage rate "resets" on adjustable-rate mortgages all contributed to a decline in home selling and residential valuations. The resulting increase in home inventory levels and more stringent lending standards will likely depress housing activity for an extended period. Financial companies spent the latter part of 2007 writing down subprime losses, as well as losses associated with housing and creditrelated securities. Continued financial company write-downs, as well as resultant increasingly stringent lending standards, have crippled domestic credit markets in general into 2008, further deepening the residential housing turmoil. The U.S. unemployment rate stood at $5 \%$ as of the end of 2007 compared to $4.6 \%$ at the end of 2006 , and the manufacturing capacity utilization level was 79.7\%.
Developed market policy makers are balancing risks associated with a general economic slowdown, therefore needing to encourage growth, while controlling inflationary pressures. In the U.S., the Federal Reserve began lowering rates in August, attempting to ease the effects of the credit crisis.

They continued to lower the discount rate four times in 2007, ending the year at $4.75 \%$ from $6.25 \%$ at the end of 2006. Meanwhile emerging market central bankers considered tighter monetary policies to help combat inflation. Generally, emerging market economies spend a greater percentage of income on food and energy, which have seen significant price appreciation worldwide.

The U.S. dollar continued its protracted decline versus most major currencies. During 2007, the dollar lost $5.7 \%$ against the Japanese Yen and $10.4 \%$ versus the Euro. Continued dollar weakness has helped boost net exports, subsequently reducing the U.S. current account deficit to less than 5\% of GDP (down from $6.8 \%$ at the end of 2006). Because of the weak dollar, the price of U.S. goods abroad was relatively cheap, thereby increasing exports. As well foreign goods were more expensive to U.S. buyers, consequently lowering demand as U.S. consumers struggled with higher energy prices and lower home values. The run-up in global commodity prices is having an impact on consumers worldwide, as prices on everything from milk to gasoline continue to rise. The core CPI index (excluding food and energy) increased $2.4 \%$ for the year. The CPI including food and energy prices increased $4.1 \%$ for the year.
Following a generally favorable start to 2007, the year ended with unclear prospects for 2008. Slowing global growth, tight credit markets, increasing inflationary expectations and generally declining consumer confidence are creating uncertain economic conditions.

## MARKETS AND FUND PERFORMANCE

## Market Overview

2007 was a mixed year for equities. The year started out strong, but by August, the U.S. sub-prime crisis began to take its toll. Strong economic growth during the first half of the year was forgotten during the second half, as risk aversion and deleveraging took precedence in the U.S. Decreasing residential housing prices and general lack of liquidity hurt domestic markets in the second half of the year, muting 2007 returns. During 2007, the S\&P 500 Index rose $5.54 \%$, while small-cap stocks, as measured by the Russell 2000 Index, lost $1.55 \%$ for the year. This larger company outperformance reflected investors' preference for "safer" more stable companies at year-end. As summarized in the table below, "value" underperformed "growth" styles across the small and large-cap segments. Value indices are heavily weighted toward financial stocks, which struggled in the second half of the year.
Internationally, the MSCI-EAFE Index gained $11.18 \%$ (in dollar terms), and the MSCI-Emerging Markets Index surged 39.37\% (in dollar terms). In 2007, the weak dollar continued to contribute to international returns for U.S.based investors. For example, in local currency terms, the MSCIEAFE Index returned $3.55 \%$, actually underperforming the S\&P 500 Index for 2007.

## Global Equity Performance Scorecard

| Equity Index Returns (12/31/07) | 1-Year | 3-Year |
| :--- | :---: | :---: |
| U.S. Equity: |  |  |
| S\&P 500 Index | $5.54 \%$ | $8.63 \%$ |
| NASDAQ Composite | $9.81 \%$ | $6.86 \%$ |
| Russell 1000 Index | $5.77 \%$ | $9.08 \%$ |
| Russell 1000 Growth Index | $11.82 \%$ | $8.69 \%$ |
| Russell 1000 Value Index | $-0.17 \%$ | $9.30 \%$ |
| Russell 2000 Index | $-1.55 \%$ | $6.80 \%$ |
| Russell 2000 Growth Index | $7.05 \%$ | $8.11 \%$ |
| Russell 2000 Value Index | $-9.77 \%$ | $5.27 \%$ |
| International Equity: |  |  |
| MSCI-EAFE Index (\$U.S.) | $11.18 \%$ | $16.84 \%$ |
| MSCI-Emerging Markets Index (\$U.S.) | $39.37 \%$ | $35.14 \%$ |
| MSCI-Europe Index (\$U.S.) | $13.86 \%$ | $18.55 \%$ |
| MSCI-UK Index (\$U.S.) | $8.37 \%$ | $14.96 \%$ |
| MSCI-Japan Index (\$U.S.) | $-4.23 \%$ | $8.50 \%$ |

## Source: Wilshire Compass

Note: Periods longer than one year are annualized; data is in $\$$ terms.

Bonds had a very strong year, returning $6.97 \%$ as measured by the Lehman Brothers Aggregate Bond Index. Yields were generally lower at the end of 2007 than year-end 2006, and the yield curve was steeper. During the year there was a general flight-to-quality following the write-downs of asset-backed securities and sub-prime mortgages, pushing up prices for government bonds. The Lehman Brothers Government Bond Index returned $8.67 \%$ for the year. Short-term U.S. T-Bills returned a decent $5.01 \%$. U.S. TIPS, treasury-inflationprotection securities, were the best-performing fixed income segment during the year, returning $11.63 \%$ during 2007, reflecting investors' fears of increased inflation.
Other asset classes were mixed in 2007. Private equity real estate turned in another very strong year, producing a $15.84 \%$ return as measured by the NCREIF Index. U.S. public real estate securities (REITs) did not fare as well, losing $15.69 \%$ during 2007, as measured by the NAREIT Equity Index. Alternative investments such as private equity buyouts and venture capital continued their strong performance trend in the first half of the year, but performance stalled in the second half of 2007 when the credit markets tightened and there was a general slowdown in mergers and acquisitions activity.


## DPSRS Fund Performance

Despite a turbulent market environment in 2007, we look back favorably on (most of) 2007. The performance of the DPSRS portfolio continues to reflect an investment portfolio that is designed to perform well over the long-term, through a variety of market environments. The overall return for the System's total portfolio in 2007 was $10.07 \%$. This marks the fifth consecutive year of doubledigit returns for the fund. Like last year, the portfolio benefited from the superior absolute and relative performance of its international equity, alternative asset, and real estate portfolios. The longer-term performance trend also is favorable. The System's annualized performance for the most recent three and five years is $11.10 \%$ and $13.73 \%$, respectively.
The 2007 return for the aggregate domestic equity portfolio was $7.40 \%$. According to data compiled by Callan Associates, the System's investment consultant, this return was ahead of the domestic equity portfolio's custom benchmark, which was up $3.59 \%$ for the year. In general, our investment managers were able to outperform their respective benchmarks during the year. The System's $7.40 \%$ domestic equity portfolio return landed in the top quartile of comparable domestic equity portfolios for the year, as measured by Callan's Public Fund Universe.

The System's international equity portfolio had another strong year, returning $17.09 \%$ versus $11.17 \%$ for the MSCI EAFE Index. Many of the external international equity managers in the portfolio delivered very strong performance. Additionally, some exposure to the emerging markets aided relative performance.

The System's fixed income portfolio generated a $4.23 \%$ return in 2007, underperforming the Lehman Brothers Aggregate Bond Index return of $6.97 \%$. In addition, the System's high-quality commercial mortgage portfolio earned $5.41 \%$ for the year.
Real estate equity had another strong year for the DPSRS portfolio. The System's real estate portfolio produced a $16.23 \%$ return for the year. 2007 was the fourth consecutive year that the real estate portfolio experienced double-digit gains. During 2007, the commercial real estate market did not experience the same downturn as domestic residential housing markets.
Finally, alternative assets contributed significant value in 2007 . This portfolio, which consists of private equity, venture capital, mezzanine debt and distressed assets, earned $40.61 \%$ for the year.

## GOAL

The Statement of Investment Objectives and Policies is designed to enable the investment program of the retirement system to be a major contributor to the long-term accomplishment of the System's mission to provide career employees and their families with a primary source of lifetime income relative to service at retirement, disability or death. Summarized below are some of the major features of the Statement of Investment Objectives and Policies as well as recent investment results.

## INVESTMENT RESPONSIBILITIES

Colorado State Statutes designate the Board of Trustees as the ultimate fiduciary of the assets of the System. The Board must approve all decisions relating to the Statement of Investment Objectives and Policies. The Board has delegated the implementation of the Statement to the Investment Committee, a five-person subcommittee of the Board of Trustees. Responsibilities of the Investment Committee include, but are not limited to, recommending investment policy changes to the Board and appointing, monitoring and terminating investment managers.
The Chief Investment Officer supervises and reviews activities and performance of investment managers, recommends changes in the investment program, and monitors the day-to-day investment activities. The investment managers manage the assets and exercise complete investment discretion in accordance with policy statements and guidelines and specific restrictions stated in their Investment Management Agreements. The managers are responsible for communicating with the Chief Investment Officer regarding all significant matters pertaining to investments of the fund assets.

## ASSET ALLOCATION

The System's asset allocation is approved by the Board of Trustees as part of the Statement of Investment Objectives and Policies. The Statement was revised March 5, 2007, reflecting the results of an asset/liability modeling study that was conducted late in 2006. The revised asset allocation adopted in 2007 is reflected in this report.
The overall target asset allocation as of December 31, 2007, can be divided into $68 \%$ equity-type investments (domestic, international, real estate equity, and alternative assets) and $32 \%$ fixed income-type investments (fixed income and mortgages). These targets reflect a $4 \%$ increase in equity-type investments and a $4 \%$ decrease in fixed income-type investments from the target asset allocation reflected in last year's report. The target allocation ranges for specific asset classes are noted below; however, within the equity-type investment category, there are further constraints so that the total of the equity-type investments does not fall outside of the range of $60 \%$ to $76 \%$ of total investments.

## ASSET ALLOCATION AS OF DECEMBER 31, 2007

| Asset Class | Low | Target | High |
| :--- | :---: | :---: | :---: |
| Total Domestic Equities | $29 \%$ | $34 \%$ | $39 \%$ |
| Large Capitalization Equities | 12 | 17 | 22 |
| Small/Mid Capitalization Equities | 12 | 17 | 22 |
| International Equities | 13 | 18 | 23 |
| Alternative Assets | 2 | 7 | 12 |
| Equity Real Estate | 6 | 9 | 12 |
| Fixed Income | 24 | 32 | 40 |
| Fixed Income Securities | 16 | 19 | 22 |
| Real Estate Mortgages | 8 | 13 | 18 |

## INVESTMENT GUIDELINES

## Equity Investments

The portion of assets invested in publicly traded equity securities is diversified between domestic and international, by company capitalization, and by manager style. A portion of the domestic equity portfolio is managed passively (indexed), and a portion is actively managed.

The asset allocation provides for approximately $17 \%$ in large capitalization domestic issues, $17 \%$ in small/mid capitalization domestic issues, and $18 \%$ in international issues. As a general practice, equity holdings in a single company should not exceed $5 \%$ of a manager's portfolio at cost or $8 \%$ at market value. Also, as a general practice, holdings in any single industry sector should not exceed $40 \%$ of the total related portfolio, i.e., large capitalization domestic, $\mathrm{small} / \mathrm{mid}$ capitalization domestic, and international portfolio. In certain instances, these guidelines can be altered depending on a particular manager's style and expertise, if stated in the Investment Management Agreement.

## Fixed Income Investments

The fixed income asset class includes a broad array of debt securities, including U.S. Government and agency securities, corporate notes and bonds, short-term money market securities, such as certificates of deposit and commercial paper, mortgage and other asset-backed securities and securities issued by non-U.S. governments and corporations. The Board of Trustees recognizes that there are periods during economic and capital market cycles where utilization of debt securities and derivative securities of various sectors, currencies, and structures is appropriate in a well-diversified portfolio in order to manage risk and to provide the potential for above average long-term investment returns.
Except for U.S. Government and agency guaranteed securities, concentrations in the securities of a single entity are limited to not more than $5 \%$ of the fixed income securities at market value. Concentrations in the corporate securities of a single industry are limited to not more than $25 \%$ of fixed income securities at market value.

Deviations from the standard guidelines must be stated and approved in the Investment Management Agreement.

## Mortgage Investments

This asset class can include all mortgage investments (except residential mortgage-backed securities) such as mortgages on income-producing properties, mortgage pools, interests in commingled funds or co-investment vehicles which invest in mortgages, investment management separate accounts, Commercial Mortgage-Backed Securities, and interest in participating and convertible mortgages where it is intended to be primarily a debt rather than an equity investment.


In order to protect the overall performance and preservation of fund assets, mortgages that are secured by a single property are limited in size to not more than $5 \%$ of the total mortgage portfolio. Due to the broad diversification characteristics represented by mortgage pools and commingled mortgage funds, the $5 \%$ limitation does not apply to the System's participation in such investment vehicles.

## Equity Real Estate Investments

Investments in this asset class can include any of the following: direct ownership of real estate properties, ownership in commingled funds that invest primarily in equity real estate, interests in hybrid debt instruments where the investment is deemed to be more of an equity rather than a fixed income investment, investment management separate account, investments in real estate joint ventures, partnerships or similar vehicles or investments in Real Estate Investment Trusts.

Real estate assets are diversified geographically by property type and by property size. The System will, as a general practice, not own more than a $20 \%$ interest in any one commingled fund, nor will an initial investment in any one individual property be more than $10 \%$ of the total equity real estate portfolio.

## Alternative Assets

Alternative Assets is considered a distinct asset class in the DPSRS Statement of Investment Objectives and Policies and generally is defined as assets that are not publicly traded, lack liquidity, and are not subject to financial market regulations. Allocations to alternative assets typically serve one of two purposes: help enhance portfolio returns through higher-risk investment strategies or help diversify portfolios through investments that generate returns with very low correlation to traditional asset classes. For the purposes of DPSRS investment policy, the alternative assets asset class is divided into two separate


[^0]The objective of investment in mortgages is to maintain a portfolio of high quality mortgage investments that provide an alternative to other fixed income investments. With the mix of mortgage investments being so varied, there is no nationally recognized published index that would approximate the mix of investments in the mortgage portfolio. However, it is expected that the mortgage investment portfolio should produce returns that exceed the Lehman Intermediate Credit A Index over a three-to-five-year period.
Investments in equity real estate are structured to create a diversified real estate portfolio of high quality property assets to provide a hedge against inflation, diversify the fund's asset base and stabilize overall fund investment performance. Total return shall include income as well as appreciation or depreciation. It also is expected that the total return of the total equity real estate portfolio will at least match the total return of the NCREIF Property Index over a seven-to-ten-year time horizon.
Currently, all investments in the alternative assets asset class consist of private equity investments. The goal of private equity investing is to generate substantially greater returns than the long-term returns from the public equity markets, thereby enhancing overall portfolio returns. However, achieving such performance comes at a price: greater levels of risk and very little liquidity. Moreover, measuring and evaluating the performance of private equity investments is more complicated than for traditional asset classes for a variety of reasons. First, the illiquid nature of private equity investments makes it difficult to ascertain value on an ongoing basis. Not until all of a partnership's assets are liquidated at termination can the real return be calculated. Second, there is a wide variety of styles and strategies utilized by private equity managers, which makes it difficult to construct a reasonable benchmark. Third, private equity deals require a long holding period from investment through liquidation.

## SAFEGUARDING OF ASSETS

Marketable securities owned by the System are held under a custodial arrangement with The Northern Trust Company in Chicago, Illinois. In addition to safekeeping the assets, the custodian also is responsible for the timely and accurate settlement of securities transactions as well
 as the collection and accounting for all income receivable from the investments. Investments that are managed by outside managers using a commingled vehicle are held under similar custodial arrangements. The Northern Trust Company's securities lending operations generated additional income of approximately $\$ 539,084$ for the System during 2007.

The System's own internal accounting department verifies and reconciles the activity of the custodian and the investment managers while maintaining financial records according to governmental accounting standards. Annual audit and actuarial examinations also are performed by independent professional firms to provide assurance of the integrity of the System's financial statements and long-term actuarial funding.

## HISTORICAL PERFORMANCE

Presented on the following page, are the annual total returns from each asset class for the 2003-2007 period as well as the compounded three-year and five-year total returns. These results have been prepared by the System's outside investment performance consultant, Callan Associates, Inc., and are time-weighted returns computed in conformance with industry standards. Comparable indexes also are presented below each asset class.

## - Total Returns

|  | 2003 | 2004 | 2005 | 2006 | 2007 | 3-Year | 5-Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total DPSRS Fund * | 23.08\% | 12.71\% | 10.64\% | 12.61\% | 10.07\% | 11.10\% | 13.73\% |
| DPSRS Domestic Stock | 44.01 | 14.80 | 7.63 | 11.63 | 7.40 | 8.87 | 16.34 |
| Custom Benchmark ${ }^{* *}$ | 37.56 | 14.85 | 7.22 | 15.91 | 3.59 | 8.78 | 15.25 |
| DPSRS International Stock | 40.48 | 19.96 | 15.34 | 22.62 | 17.09 | 18.31 | 22.78 |
| MSCI EAFE Index | 38.59 | 20.24 | 13.54 | 26.34 | 11.17 | 16.83 | 21.59 |
| DPSRS Fixed Income | 8.05 | 6.16 | 3.33 | 5.79 | 4.23 | 4.49 | 5.52 |
| Lehman Brothers |  |  |  |  |  |  |  |
| Aggregate Index | 4.11 | 4.34 | 2.43 | 4.33 | 6.97 | 4.56 | 4.42 |
| DPSRS Mortgages | 7.96 | 8.09 | 8.08 | 6.60 | 5.41 | 6.71 | 7.23 |
| Lehman Brothers A Intermediate Credit Index | 7.14 | 4.01 | 1.88 | 4.44 | 5.06 | 3.78 | 4.31 |
| DPSRS Real Estate | 7.76 | 11.92 | 26.98 | 16.42 | 16.23 | 19.77 | 15.69 |
| NCREIF Property Index | 8.99 | 14.52 | 20.06 | 16.59 | 15.85 | 17.49 | 15.14 |
| DPSRS Short-Term Investments | 1.27 | 1.43 | 3.29 | 5.15 | 5.41 | 4.61 | 3.29 |
| 3-Month Treasury Bills | 1.15 | 1.33 | 3.07 | 4.85 | 5.00 | 4.30 | 3.07 |

* The 2003 through 2007 Total DPSRS Fund returns include the Alternative Asset Investments asset class (referred to as Private Equity prior to 2004). All returns are time-weighted based on industry standard computation methods.
** The benchmark returns presented for domestic stock represent a blend of 50\% Russell 1000 and 50\% Russell 2500.


## - Ochedule of Fees and Commissions

For the Year Ended December 31, 2007

|  | Assets under management |  | Fees |  | Commissions |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Shares | Amount | Per Share |
| Investment manager fees |  |  |  |  |  |  |  |
| Fixed income managers | \$ | 761,209,599 |  |  | \$ | 1,308,673 | - | \$ | \$ |
| Equity managers |  | 1,630,402,465 |  | 8,290,586 | 45,473,621 | 1,125,675 | 0.02 |
| Other investments |  | 706,389,630 |  | 1,915,381 | - | - | - |
| Total investment manager fees | \$ | 3,098,001,694 |  | \$ 11,514,640 | 45,473,621 | 1,125,675 | 0.02 |
| Other investment service fees |  |  |  |  |  |  |  |
| Custodian fees |  |  |  | 43,500 | - | - | - |
| Securities lending fees |  |  |  | 10,542,234 | - | - | - |
| Commission recapture income |  |  |  | - | - | $(183,274)$ | - |
| Total investment service fees |  |  |  | 22,100,374 | 45,473,621 | \$ 942,401 | \$ 0.02 |

## - List of Largest Assets Held

December 31, 2007

## LARGEST STOCK HOLDINGS

|  | Shares | Stock | Fair Value |
| ---: | ---: | :--- | ---: |
| 1 | 423,663 | Amphenol | $\$ 19,645,253$ |
| 2 | 531,450 | Clear Channel Outdoor Holdings | $14,699,907$ |
| 3 | 191,400 | Raytheon | $11,617,980$ |
| 4 | 302,816 | Tyco Electronics | $11,243,558$ |
| 5 | 285,300 | Qualcomm | $11,226,555$ |
| 6 | 177,900 | salesforce.com | $11,152,551$ |
| 7 | 248,800 | Verizon Communications | $10,870,072$ |
| 8 | 141,041 | Parker Hannifin | $10,621,798$ |
| 9 | 104,290 | Schlumberger | $10,259,007$ |
| 10 | 14,745 | Google | $10,195,873$ |

## LARGEST BOND HOLDINGS

|  | Par | Description | Coupon | Maturity | Rating | Fair Value |
| ---: | ---: | :--- | :--- | :--- | :--- | ---: |
| 1 | $\$ 41,770,000$ | FNMA 30 Year Pass-Through | $5.000 \%$ | $01 / 01 / 2038$ | AAA | $\$ 40,751,856$ |
| 2 | $14,040,000$ | FNMA 30 Year Pass-Through | 6.500 | $01 / 01 / 2038$ | AAA | $14,430,480$ |
| 3 | $13,140,000$ | GNMA 30 Year Pass-Through | 6.000 | $01 / 01 / 2038$ | AAA | $13,452,075$ |
| 4 | $10,400,000$ | FHLMC 30 Year Pool | 5.500 | $01 / 01 / 2038$ | AAA | $10,378,534$ |
| 5 | $9,095,000$ | FHLMC 30 Year Pool | 6.000 | $12 / 01 / 2037$ | AAA | $9,230,825$ |
| 6 | $7,800,000$ | FNMA 30 Year Pass-Through | 5.500 | $01 / 01 / 2023$ | AAA | $7,899,934$ |
| 7 | $5,800,000$ | FHLMC 30 Year Pool | 5.500 | $11 / 01 / 2037$ | AAA | $5,788,754$ |
| 8 | $3,440,000$ | U.S. Treasury Inflation Bond | 3.625 | $04 / 15 / 2028$ | AAA | $5,629,337$ |
| 9 | $5,000,000$ | FNMA 30 Year Pass-Through | 5.500 | $01 / 01 / 2038$ | AAA | $4,993,750$ |
| 10 | $3,810,435$ | CMO Thornburg Mortgage | 5.035 | $01 / 25 / 2036$ | AAA | $3,685,941$ |

A complete list of portfolio holdings is available upon request.

| - O Investment Summary <br> December 31, 20 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type of investment |  | Assets | Adjustment |  | Assets | Actual | Target |
| Cash | \$ | 60,190,183 | \$ (44,005,047) | \$ | 16,185,136 | 1\% | 0\% |
| Fixed income: |  |  |  |  |  |  |  |
| Corporate securities |  | 463,214,422 |  |  | 463,214,422 |  |  |
| Government securities |  | 237,804,994 | $(72,209,673)$ |  | 165,595,321 |  |  |
| Total fixed income |  | 701,019,416 | $(72,209,673)$ |  | 628,809,743 | 21 | 19 |
| Mortgage investments |  | 256,343,443 | 65,148 |  | 256,408,591 | 8 | 13 |
| Domestic stocks |  | 1,047,690,088 | 28,855,864 |  | 1,076,545,952 | 36 | 34 |
| International stocks |  | 582,712,377 |  |  | 582,712,377 | 19 | 18 |
| Equity real estate |  | 312,031,968 |  |  | 312,031,968 | 10 | 9 |
| Alternative assets |  | 138,014,219 |  |  | 138,014,219 | 5 | 7 |
| Investments and cash | \$ | 3,098,001,694 | \$ (87,293,708) | \$ | 3,010,707,986 | 100\% | 100\% |
| Net unsettled trades |  |  |  |  | 87,293,708 |  |  |
| Total investments and cash | \$ | 3,098,001,694 |  | \$ | 3,098,001,694 |  |  |

In measuring the progress in reaching target asset allocation goals, investment assets are classified differently from the classification for financial reporting purposes. Investment manager performance is measured on the total account value, including cash retained by the manager and excluding debt placed on investment assets. In addition, the cash due or payable on unsettled transactions is reflected as an asset or liability for financial reporting purposes, but it is considered settled in determining the value of the managed account.

DIVERSIFICATION OF ASSETS AT DECEMBER 31, 2007



Gabriel Roeder Smith \& Company<br>Consultants $\mathbb{\&}$ Actuaries

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May 14, 2008
Board of Trustees
Denver Public Schools Retirement System
3700 East Almeda Ave., Suite 400
Denver, CO 80209-3172

Dear Board Members:

The basic funding objective of the Denver Public Schools Retirement System (DPSRS) is to establish and receive contributions which, when expressed in terms of a percentage of active member payroll, will remain approximately level from generation to generation, and when combined with present assets and future investment return will be sufficient to meet the financial obligations of DPSRS to present and future retirees and beneficiaries.

The annual actuarial valuation process develops contribution rates that are sufficient to fund the current cost (i.e., the costs assigned by the valuation method to the year of service about to be rendered), as well as to fund unfunded actuarial accrued liabilities as a level percent of active member payroll. The most recent annual valuation was completed based upon census data, asset data, and plan provisions as of December 31, 2007. The valuation is performed in accordance with standards of practice prescribed by the Actuarial Standards Board. Each of the actuaries involved is a member of the American Academy of Actuaries and works exclusively in the public sector arena.

The System's administrative staff provides the actuary with data for the actuarial valuations. The actuary relies on the census data after reviewing it for internal and year-to-year consistency. Asset information was accepted without further audit. Assets are valued on a market-related basis that recognizes the difference between actual and assumed investment return over an open five-year period.

Schedules in the Financial Section prepared by the actuary were:

- Schedule of funding progress
- Schedule of employer contributions

Schedules in the Actuarial Section prepared by the actuary were:

- Percent of members separating before retirement
- Percent of eligible members retiring next year
- Individual pay increase assumptions
- Schedule of contributing, affiliate and deferred member valuation data
- Schedule of retirees and beneficiaries added to and removed from benefit payroll
- Solvency test
- Analysis of financial experience

Schedules in the Statistical Section prepared by the actuary were:

- Schedule of average benefit payments
- Schedule of retired members by type of benefit

The assumptions and methods used are internally consistent and comply with the requirements of Statement No. 25 of the Governmental Accounting Standards Board (GASB). The valuation assumptions were based on a study of DPSRS experience covering the 2004-2006 period.

The annual required contribution (ARC) under GASB 25 is equal to $13.92 \%$ of compensation for the 2009-2010 fiscal year. The DPSRS was $87.7 \%$ funded as of December 31, 2007 based on the DPSRS market related value of assets.

Based upon the results of the December 31, 2007 valuations, the Denver Public Schools Retirement System has achieved full level percent of payroll financing based on actuarial principles. In order to maintain the current funding level, receipt of recommended contribution amounts is necessary.

Respectfully submitted,


Kenneth G. Alberts



# - o Summary of Principal Plan Provisions and Organization 

## BACKGROUND

The System was established by the Board of Education of School District No. 1 on December 1, 1945, to provide defined retirement, death and disability benefits to participating employees. The organization and amendments of the Plan have been carried out in accordance with the provisions of Colorado law. The System Retirement Trust Fund is designated as a trust fund established to accomplish the objectives set forth in the Plan.

The responsibility for the general administration, investment of assets, and proper operation of the System is vested in an 11-member board of managers known as the Board of Trustees.

The daily administration of the retirement plan is the responsibility of the Executive Director of the System who is appointed by the Board of Trustees. The retirement organization consists of four major divisions. The Retirement Administration Office has the responsibility for administrative operations, including contribution, service and salary maintenance, retirement estimate preparation and finalization, and administration of the retirement payroll. The Accounting Office generally is responsible for the processing of the retirement payroll and all financial accounting and reporting for the retirement plan. The Chief Investment Officer is the custodian of the funds held on behalf of the System and directs the activities of the third division, the Investment Office. All of the offices are provided with data processing support by the Information Systems Department.

## CONTRIBUTIONS AND MEMBERSHIP

Contributing members receive benefits based upon years of earned service and their highest average salaries. Prior to retirement, members are required to contribute $8 \%$ of regular compensation. Contributions currently accumulate interest monthly at the effective annual rate of $5 \%$. Interest crediting will continue at $5 \%$ in future years unless changed by action of the Board of Education. The contributions and the interest are returned to the member's beneficiary or to the member upon his or her death or termination of employment prior to retirement, respectively. In the event of the member's death prior to retirement, his or her beneficiary may elect to have survivor benefits paid to the eligible survivors in lieu of the return of the member's contributions with interest.

Affiliate members are part-time or temporary employees of the District who have applied and been accepted for affiliate membership. Generally, continuously-employed employees contribute $6 \%$ of compensation paid prior to July 1, 1998, and $8 \%$ of compensation paid on or after July 1, 1998. Affiliate members receive a benefit determined in the same manner as provided for contributing members, except that career average salary is substituted for highest average salary in computing such benefit. Upon termination of affiliate membership or death prior to retirement, all of the member's contributions, together with interest, are returned to the member or in the event of the member's death, to his or her beneficiary.

Disability retirement may be granted to either classification of membership in case of disability prior to eligibility for normal retirement. The amount of such benefits depends upon the type of membership and earned service.
Optional forms of retirement allowance, which provide a continuance or a lump-sum death benefit to a member's beneficiary, are available to all members upon retirement.

## SERVICE RETIREMENT BENEFITS

## I. ELIGIBILITY

A. Regular Retirement

1. Attained age 55 with 25 or more years of earned and outside service of which 10 may be outside service
2. Attained age 65 with 5 or more years of earned service
3. Attained age 50 with 30 or more years of earned service
B. Optional Early Retirement
4. Attained age 55 with 15 or more years of earned service
5. Attained age younger than 55 with 25 or more years of earned service

## II. BENEFITS

(Pension and Annuity)
A. Regular Retirement

Single Life Annuity
2.5\% of Highest Average Salary is given for every year of earned service. Highest Average Salary is the average monthly compensation of the 36 months of earned service having the highest rates multiplied by twelve.

B. Optional Early Retirement Single Life Annuity

Generally, the same provisions exist as for regular retirement with a $4 \%$ reduction in allowance applied for each year a member lacks eligibility for regular retirement if such person became a contributing or affiliate member prior to July 1, 2005, and his or her contribution balance remains with the retirement system until retirement. Proration on a monthly basis is applied for partial years. A 6\% reduction is applied for a person who, on or after July 1, 2005, becomes a member or rejoins the retirement system after having withdrawn his or her contribution balance.
C. Minimum Benefits

A minimum pension portion of the benefit equal to $\$ 15$ per year for each of the first 10 years of earned service and $\$ 20$ per year thereafter is guaranteed by the provisions of the Plan.

## DEFERRED

RETIREMENT BENEFITS
I. ELIGIBILITY - Five or more years of earned service
II. BENEFITS
(Pension and Annuity)
Determination of benefits is the same as for regular retirement. Benefits are payable at attained age 55 with 25 years of earned and outside service, at age 65 with fewer than 25 years of service, and for members who terminate on or after January 1, 2001, at attained age 50 with 30 years of earned service.

Also available at the time a member who resigns on or after January 1, 2001, becomes eligible to draw a deferred benefit is a choice of a refund of $200 \%$ of accumulated contributions, a money purchase retirement benefit based on $200 \%$ of accumulated contributions plus the minimum employer-provided benefit, or the existing defined benefit provided by the Plan.

## "AUTOMATIC" RETIREMENT BENEFITS

In case of the death of any affiliate or contributing member who was eligible for retirement, the Retirement Plan provides for an automatic retirement as of the day after the date of death.

## DISABILITY <br> RETIREMENT BENEFITS

I. ELIGIBILITY - Five or
more years of earned service with the District

## II. BENEFITS

(Pension and Annuity)
Determination of benefits is the same as for regular retirees who retire under the provisions of a "Single Life Annuity." Recalculation occurs at age 55 if earned and outside service at the time of disability is 25 years or more or at age 50 if earned service at the time of disability is 30 years or more. Otherwise, recalculation occurs at age 65 .

## RETIREMENT OPTIONS AS OF DECEMBER 31, 2007

## Option A

Option A is a single life annuity defined as a specified sum of money payable monthly to an annuitant from the time of retirement until death. If, at the annuitant's death, retirement benefits received is less than the total amount of accumulated contributions at the time of retirement, the balance is paid to the designated beneficiary(ies) in a lump sum.

## Option B

Option B is an installment refund annuity defined as a smaller sum of money than the amount payable under Option A but which is the actuarial equivalent thereof, payable monthly to an annuitant from the time of retirement until death. Additionally, if the annuitant dies before receiving an amount equal to the total of the reserve, the payments continue to the designated beneficiary(ies) or estate until the total amount paid equals to the total amount of reserve allocated to the annuitant's retirement allowance.

## Option C

Option C is a joint-survivorship annuity defined as a smaller sum of money than the amount payable under Option A but which is the actuarial equivalent thereof, payable monthly to an annuitant from the time of retirement until death and thereafter to the designated coannuitant for his or her life. If the designated co-annuitant is someone other than the member's spouse and is more than 10 years younger than the member, the amount that continues to the co-annuitant at the member's death will be reduced, if appropriate, in accordance with defined percentages required by the Internal Revenue Code and Regulations. The designation of the co-annuitant is effective upon the member's date of retirement and subsequently may not be changed.

In addition to designating a coannuitant, the member designates a contingent beneficiary(ies) and has the right to change designation of contingent beneficiary(ies) at any time prior to the member's death. If upon the death of both the annuitant and the designated co-annuitant, the total number of monthly payments made is less than 120 full months, the remainder necessary to equal 120 full monthly payments is paid in equal shares monthly to the member's contingent beneficiary(ies).

In the event of the deaths of all contingent beneficiaries prior to the deaths of the annuitant or the co-annuitant, the remaining amount due upon the death of both the annuitant and co-annuitant, is commuted and paid in a single lump sum to the estate of the annuitant or the co-annuitant, whoever dies later. In the event any contingent beneficiary survives both the annuitant and co-annuitant and thereafter dies before all payments are made, the remainder of payments due that beneficiary is commuted and paid to his or her estate.

In case of the death of the designated co-annuitant under Option C after the date of application for retirement and before the effective date of retirement, the member may make a change of option or designate a new co-annuitant within 30 days after the death of the previously designated co-annuitant and is subject to the appropriate recalculation of the retirement allowance.

## Option P3

Option P3 is a joint-survivorship option defined as a smaller sum of money than the amount payable under Option A but which is the actuarial equivalent thereof, payable monthly to an annuitant from the time of retirement until death and thereafter to the designated co-annuitant for his or her life. If the designated co-annuitant is someone other than the member's spouse and is more than 10 years younger than the member, the amount that continues to the co-annuitant at the member's death will be reduced, if appropriate, in accordance with defined percentages required by the Internal Revenue Code and Regulations. The designation of the co-annuitant is effective upon the member's date of retirement and subsequently may not be changed.

If the annuitant and co-annuitant should die prior to having received in retirement benefits the total amount of accumulated contributions at the time of retirement, the balance is paid to the designated beneficiary(ies) in a lump sum. If the co-annuitant should pre-decease the annuitant, the benefit will recalculate (or "pop-up") to an Option A benefit amount. If the annuitant should divorce from the co-annuitant, the district courts have jurisdiction to allow the annuitant to remove the prior spouse as the named co-annuitant at which point the benefit will recalculate to an Option A benefit amount.

## Option D

Option D is a reduced single life annuity defined as a smaller sum of money than the amount payable under Option A, the portion thereof attributable to the pension share of retirement allowance being the same as under Option A and the annuity share of the retirement allowance being the actuarial equivalent of such share under Option A. The benefit is payable monthly to an annuitant from the time of retirement until death, with a cash refund to the designated beneficiary(ies) or estate, of any excess of the accumulated contributions of the member at date of retirement over the total amount of the annuity share of the retirement allowance paid to the annuitant up to and including the date of death.


## Option E

Option E is a joint-survivorship annuity defined as a smaller sum of money than the amount payable under Option A but which is the actuarial equivalent thereof, payable monthly to an annuitant from the time of retirement until death. Thereafter, an amount equal to one-half of the monthly amount paid to the annuitant is payable monthly to the designated co-annuitant for his or her life. The designation of the co-annuitant is effective upon the member's date of retirement and subsequently may not be changed.
In addition to designating a coannuitant, the member designates a contingent beneficiary(ies) and has the right to change designation of contingent beneficiary(ies) at any time prior to the member's death. If upon the death of both the annuitant and the designated co-annuitant, the total number of monthly payments made is less than 120 full months, the remainder necessary to equal 120 full monthly payments is paid in equal shares monthly to the member's contingent beneficiary(ies), using the same amount payable to the designated co-annuitant.

In the event of the deaths of all contingent beneficiaries prior to the deaths of the annuitant or the coannuitant, the remaining amount due upon the death of both the annuitant and co-annuitant, is commuted and paid in a single lump sum to the estate of the annuitant or the co-annuitant, whoever dies later. In the event any contingent beneficiary survives both the annuitant and co-annuitant and thereafter dies before all payments are made, the remainder of payments due that beneficiary is commuted and paid to his or her estate.

In case of the death of the designated co-annuitant under Option E after the date of application for retirement and before the effective date of retirement, the member may make a change of option or designate a new co-annuitant within 30 days after the death of the previously designated co-annuitant and is subject to the appropriate recalculation of the retirement allowance.

## Option P2

Option P2 is a joint-survivorship annuity defined as a smaller sum of money than the amount payable under Option A but which is the actuarial equivalent thereof, payable monthly to an annuitant from the time of retirement until death. Thereafter, an amount equal to one-half of the monthly amount paid to the annuitant is payable monthly to the designated co-annuitant for his or her life. The designation of the co-annuitant is effective upon the member's date of retirement and subsequently may not be changed.

If the annuitant and co-annuitant should die prior to having received in retirement benefits the total amount of accumulated contributions at the time of retirement, the balance is paid to the designated beneficiary(ies) in a lump sum. If the co-annuitant should pre-decease the annuitant, the benefit will recalculate (or "pop-up") to an Option A benefit amount. If the annuitant should divorce from the co-annuitant, the district courts have jurisdiction to allow the annuitant to remove the prior spouse as the named co-annuitant at which point the benefit will recalculate to an Option A benefit amount.

- Retirement benefits are subject to the limits set forth in the United States Internal Revenue Code.
- This summary generally describes the basic benefits available under the Plan as it existed December 31, 2007, and shall in no way be taken as the basis of, or creating, any contractual rights between the District or the System and any person or employee.


## SURVIVOR BENEFITS

(The deceased member was an active, contributing member or a contributing member retired for disability who died prior to eligibility for benefit recalculation.)
I. ELIGIBILITY - Five or more years of continuous earned service with the District

## II. BENEFITS

## SURVIVOR

## MONTHLY BENEFIT

1. Child/Children
$10 \%$ of Highest Average Salary for each child up to a limit of $30 \%$ or $\$ 160$ for each child up to a limit of $\$ 480$, whichever is greater.
2. Spouse with eligible child/children

The difference between (1) above and $30 \%$ of Highest (fewer than 15 years of member earned service)

Average Salary or $\$ 480$, whichever is greater
3. Spouse with eligible child/children (at least The difference between (1) above and $40 \%$ of Highest 15 years of member earned service but fewer Average Salary, or $\$ 480$, whichever is greater than 25 years of service)
4. Spouse with eligible child/children ( 25 years of member earned service or more)

The difference between (1) above and $40 \%$ of Highest Average Salary plus an additional 2\% for each year of service beyond 25 years, or $\$ 480$, whichever is greater
5. Dependent Parent
$10 \%$ of Highest Average Salary for each parent or $\$ 240$ for each parent, whichever is greater
6. Spouse (fewer than 15 years of member earned service, payable at age 60)
$30 \%$ of Highest Average Salary or $\$ 480$, whichever is less
7. Spouse (at least 15 years, but fewer than 25 years of member earned service, payable at age 50)
$30 \%$ of Highest Average Salary plus an additional $1 \%$ for each year of service beyond 15 years, or $\$ 480$, whichever is greater
8. Spouse (at least 25 years of member earned service, payable at age 50)
$40 \%$ of Highest Average Salary plus an additional $1 \%$ for each year of service beyond 25 years, or $\$ 480$, whichever is greater

Unmarried children are eligible for survivor benefits to age 18. Unmarried children enrolled in an accredited school full time are eligible until age 23 . Disabled children of any age who are unmarried and were financially dependent upon the member are eligible. Spouse/children's benefits are payable as long as there is an eligible child.

## ANNUAL RETIREMENT ALLOWANCE ADJUSTMENT (ARAA)

Effective on January 1 of each year, for persons who became contributing or affiliate members prior to July 1, 2005, and whose contribution balances remain with the retirement system until retirement, an increase in retirement or survivor benefits becomes payable based on $3.25 \%$ of the previous year's retirement or survivor benefit.

For persons who, on or after July 1, 2005, become contributing or affiliate members or rejoin the retirement system after having withdrawn their contribution balances, the increase in retirement or survivor benefits is equal to the lesser of $3.00 \%$ or the increase in the Consumer Price Index for urban wage earners and clerical workers for the preceding year, compounded. The effective date for the ARAA is March 1 of each year following the year of retirement. The first ARAA effective in the year immediately following the year of retirement is calculated in a pro-rated manner based on the number of months retired.


-     - Summary of Actuarial Assumptions and Methods

ASSUMPTIONS AS
OF JANUARY 1, 2008
a. The investment return used in the valuation is $8.50 \%$ per annum, compounded annually (net after expenses), and was adopted in 2004.
b. The post-retirement mortality tables used in evaluating the liabilities of service retirement and disability benefits to be paid under the Plan are based on the 2004-2006 DPSRS Experience Study. These assumptions were adopted in 2007, retroactive to the beginning of the year.
c. The probabilities of pre-retirement death, disability, superannuation, and nonvested withdrawal are based on the Plan's experience. Probabilities for sample ages are shown below and were adopted in 2007, retroactive to the beginning of the year.
d. Individual salaries are assumed to increase by merit and longevity plus $4.50 \%$ for inflation per year. These increases are shown for sample ages below. Active membership is assumed to remain constant. These assumptions were adopted in 2007, retroactive to the beginning of the year.
e. The actuarial value of assets was set equal to the market value as of December 31, 2006, prospectively phasing into a four-year smoothing method that increases the actuarial value by the assumed investment return plus $25 \%$ of the difference between the expected and the actual market value investment income.
f. The retirement Plan's liabilities are funded on the Entry Age Normal Actuarial Cost method. Beginning July 17, 1997, the employer contribution rate was decreased to $4.26 \%$ from $15.75 \%$ as a result of the issuance of Pension Certificates of Participation and full funding of the unfunded actuarial accrued liability. Actuarial liabilities or surpluses are amortized over 30 years as a level percentage of
increasing payroll subsequent to each annual valuation.
g. Annual benefits are assumed to increase $3.25 \%$ of the previous year's retirement benefit, $3.00 \%$ if the individual became a member on or after July 1, 2005.
h. The assumptions and methods are specified by the System upon recommendation of the actuary, a qualified member of the American Academy of Actuaries and ratification by the Board of Education. The information for the schedules in this section is provided by the actuary.
i. Assumptions and methods used for funding purposes meet the parameters set for the disclosures presented in the financial section by GASB Statement No. 25.
j. A study of the Plan's experience took place in 2007 reflecting experience from January 1, 2004 through December 31, 2006. As a result of the study, the recommended changes in actuarial assumptions and methods were adopted in 2007, retroactive to the beginning of the year.

## PERCENT OF MEMBERS SEPARATING BEFORE RETIREMENT

For Reasons Other Than Death or Disability
$\%$ of Active Members

| Sample | Years of <br> Ages | Separating Within Next Year |  |
| :--- | :---: | :---: | :---: |
| Service | Male | Female |  |
| All | 0 | $23.00 \%$ | $23.00 \%$ |
|  | 1 | 20.00 | 20.00 |
|  | 2 | 16.00 | 16.00 |
|  | 3 | 14.00 | 14.00 |
|  | 4 | 12.00 | 12.00 |
| 25 | 5 \& over | 7.36 | 9.89 |
| 30 |  | 6.09 | 8.85 |
| 35 |  | 5.12 | 7.36 |
| 40 |  | 4.43 | 5.82 |
| 45 |  | 3.91 | 3.93 |
| 50 |  | 3.39 | 2.76 |
| 55 |  | 3.11 | 2.53 |
| 60 |  | 2.88 | 2.53 |
| 65 |  | 2.30 | 2.53 |


| Sample | Death |  | Disability |  |
| :---: | :--- | :--- | :--- | :--- |
| Ages | Male | Female | Male | Female |
| 20 | $0.01 \%$ | $0.01 \%$ | $0.00 \%$ | $0.00 \%$ |
| 25 | 0.01 | 0.01 | 0.06 | 0.05 |
| 30 | 0.02 | 0.01 | 0.06 | 0.05 |
| 35 | 0.02 | 0.02 | 0.07 | 0.06 |
| 40 | 0.04 | 0.03 | 0.10 | 0.09 |
| 45 | 0.09 | 0.05 | 0.17 | 0.15 |
| 50 | 0.19 | 0.09 | 0.31 | 0.28 |
| 55 | 0.27 | 0.13 | 0.56 | 0.50 |
| 60 | 0.34 | 0.19 | 1.19 | 1.07 |
| 65 | 0.53 | 0.34 | 0.00 | 0.00 |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

## PERCENT OF ELIGIBLE MEMBERS RETIRING NEXT YEAR

Retirement Eligible for Reduced Benefits Eligible for Unreduced Benefits

| Age | Male | Female | Male | Female |
| :--- | :--- | :---: | :---: | :---: |
| 50 | $10.00 \%$ | $5.00 \%$ | $30.00 \%$ | $30.00 \%$ |
| 51 | 10.00 | 5.00 | 30.00 | 30.00 |
| 52 | 10.00 | 6.00 | 30.00 | 30.00 |
| 53 | 10.00 | 7.00 | 30.00 | 30.00 |
| 54 | 10.00 | 8.00 | 35.00 | 35.00 |
| 55 | 10.00 | 8.00 | 35.00 | 35.00 |
| 56 | 10.00 | 9.00 | 35.00 | 25.00 |
| 57 | 10.00 | 10.00 | 35.00 | 25.00 |
| 58 | 11.00 | 10.00 | 30.00 | 25.00 |
| 59 | 12.00 | 10.00 | 30.00 | 25.00 |
| 60 | 13.00 | 11.00 | 30.00 | 20.00 |
| 61 | 14.00 | 12.00 | 35.00 | 20.00 |
| 62 | 15.00 | 13.00 | 40.00 | 30.00 |
| 63 | 15.00 | 14.00 | 35.00 | 20.00 |
| 64 | 15.00 | 15.00 | 35.00 | 30.00 |
| 65 |  |  | 35.00 | 35.00 |
| 66 |  |  | 30.00 | 30.00 |
| 67 |  |  | 25.00 | 25.00 |
| 68 |  |  | 25.00 | 25.00 |
| 69 |  |  | 100.00 | 25.00 |
| 70 |  |  |  | 100.00 |

INDIVIDUAL PAY INCREASE ASSUMPTIONS

| Sample <br> Age | Merit and <br> Longevity | Base (Wage <br> Inflation) | Increase <br> Next Year |
| :--- | :---: | :---: | :---: |
| 20 | $3.50 \%$ | $4.50 \%$ | $8.00 \%$ |
| 25 | 3.50 | 4.50 | 8.00 |
| 30 | 3.20 | 4.50 | 7.70 |
| 35 | 2.80 | 4.50 | 7.30 |
| 40 | 2.10 | 4.50 | 6.60 |
| 45 | 1.30 | 4.50 | 5.80 |
| 50 | 0.80 | 4.50 | 5.30 |
| 55 | 0.40 | 4.50 | 4.90 |
| 60 | 0.20 | 4.50 | 4.70 |
| 65 | 0.00 | 4.50 | 4.50 |

## - - Summary of Member Data

ACTIVE MEMBERS


Active Member
Years of Service
Total Number of Contributing Members: 7,282 Average Years of Service: 9.5


## Active

Member Ages
Average Contributing Member Age: 44.5 Years


Active<br>Member Salaries<br>Average Contributing Member Salary: \$49,032

SCHEDULE OF CONTRIBUTING, AFFILIATE AND DEFERRED MEMBER VALUATION DATA

| Calendar <br> Year <br> Ending | Number of Contributing Members | Payroll at Valuation Date |  | \% Increase in Average Salary | Number of Affiliate Members | Number of Deferred Members |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2002 | 7,691 | \$ 331,607,000 | \$ 43,116 | 4.57\% | 31 | 187 |
| 2003 | 7,311 | 318,122,000 | 43,513 | 0.92 | 28 | 219 |
| 2004 | 7,192 | 315,157,000 | 43,820 | 0.71 | 31 | 276 |
| 2005 | 7,179 | 318,405,000 | 44,352 | 1.21 | 33 | 344 |
| 2006 | 7,102 | 328,608,500 | 46,270 | 4.32 | 28 | 408 |
| 2007 | 7,282 | 357,049,000 | 49,032 | 5.97 | 21 | 451 |

## SCHEDULE OF RETIREES AND BENEFICIARIES

| Calendar <br> Year <br> Ending | Added to Payroll |  | Removed from Payroll |  | Payroll at End of Year |  | Average Annualized Monthly Benefit | $\begin{gathered} \text { \% Increase } \\ \text { in } \\ \text { Annualized } \\ \text { Benefit } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Annualized Monthly Benefit | Number | Annualized Monthly Benefit | Number | Annualized Monthly Benefit |  |  |
| 2002 | 303 | \$ 781,834 | 207 | \$ 333,511 | 5,610 | \$ 12,606,923 | \$ 2,247 | 5.15\% |
| 2003 | 260 | 665,284 | 171 | 283,937 | 5,699 | 13,397,013 | 2,351 | 4.63 |
| 2004 | 367 | 1,161,788 | 197 | 355,372 | 5,869 | 14,555,722 | 2,480 | 5.49 |
| 2005 | 283 | 765,968 | 191 | 366,657 | 5,961 | 15,418,044 | 2,586 | 4.27 |
| 2006 | 319 | 1,136,456 | 211 | 330,221 | 6,069 | 16,224,279 | 2,673 | 3.36 |
| 2007 | 299 | 1,245,009 | 200 | 405,941 | 6,168 | 17,063,347 | 2,766 | 3.48 |

## RETIRED MEMBERS



## Average <br> Years Since <br> Retirement: 12.4* <br> * Includes regular and optional early retirements only.

Total recipients: 5,177


Average Retiree Age: 71.6*

* Includes regular
and optional early
retivements only.

Total recipients: 5,177


MEMBER AND EMPLOYER CONTRIBUTION RATES
\(\left.$$
\begin{array}{lccc}\text { Year } & \begin{array}{c}\text { Member } \\
\text { Rate }\end{array} & \begin{array}{c}\text { Funding Policy } \\
\text { Employer Rate }\end{array} & \begin{array}{c}\text { Actual } \\
\text { Employer Rate }\end{array}
$$ <br>

\hline 1998 \& 6.0 / 7.0 / 8.0 \% \& (1) \& 3.47 \%^{(2)}\end{array}\right]\)| (1) |
| :--- |
| 1999 |

(1) The employee contribution rate increased to $8 \%$ on 7/1/98 for all active members.
(2) The rate was $4.26 \%$ from $1 / 1 / 98-$ 6/30/98 and $2.68 \%$ from 7/1/9812/31/98.
(3) The rate was $2.68 \%$ from $1 / 1 / 99$ 6/30/99 and 2.90\% from 7/1/9912/31/99.
${ }^{(4)}$ The funding policy was amended so that changes in the required employer rate become effective on the July 1 that is 18 months after the end of the calendar year on which the actuarial valuation is based.
(5) The rate was $2.90 \%$ from 1/1/036/30/03 and $4.98 \%$ from 7/1/0312/31/03.
(6) The rate was $4.98 \%$ from 1/1/046/30/04 and 8.12\% from 7/1/0412/31/04.
(7) The funding policy was amended to allow for a phase in of the employer contribution rate to achieve the full annual required contribution rate by July 1, 2008. The rate was $8.12 \%$ from 1/1/05-6/30/05 and 9.48\% from 7/1/05-12/31/05.
${ }^{(8)}$ The rate was $9.48 \%$ from 1/1/066/30/06 and $11.14 \%$ from 7/1/0612/31/06.
(9) The rate was $11.14 \%$ from 1/1/076/30/07 and 12.83\% from 7/1/0712/31/07.

## SOLVENCY TEST

The solvency test is used to test a system's funding progress. In this test, the actuarial valuation assets are compared to the total actuarial accrued liabilities relative to:

1. active member contributions on deposit
2. liabilities for future benefits to present retirees and beneficiaries
3. liabilities for service already rendered by active members

If the contributions to the System are level in concept and soundly contributed, and if the System continues in its present operational pattern for the indefinite future, the System will pay all promised benefits when due.

Dollars are expressed in thousands

|  | Aggre | ccrued Lia | for |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) |  |  |  |  |
|  | Active | Retirees | Employer- |  |  | Liabil |  |
| Valuation | Member | and | Financed | Valuation |  | $d$ by As |  |
| Date | Contributions | Beneficiaries | Portion | Assets | (1) | (2) | (3) |
| 1/1/2003 | \$ 212,403 | \$ 1,742,486 | \$ 757,404 | \$ 2,465,049 | 100\% | 100\% | 67\% |
| 1/1/2004 | 229,828 | 1,841,065 | 722,895 | 2,531,746 | 100 | 100 | 64 |
| 1/1/2005 | 226,554 | 2,029,799 | 704,637 | 2,611,524 | 100 | 100 | 50 |
| 1/1/2006 | 233,032 | 2,132,638 | 700,185 | 2,693,686 | 100 | 100 | 47 |
| 1/1/2007* | 240,040 | 2,255,016 | 738,657 | 2,854,304 | 100 | 100 | 49 |
| 1/1/2008 | 247,305 | 2,363,997 | 771,956 | 2,968,794 | 100 | 100 | 46 |

[^1]
## - Analysis of Financial Experience

Gains and Losses In Accrued Liabilities
During the Years Ended December 31, 2007 and 2006
Resulting From Differences Between
Assumed Experience and Actual Experience

|  | Gain (or Loss) | the Year |
| :---: | :---: | :---: |
| Type of Activity | 2007 | 2006 |
| Age \& Service Retirements. Members retired at younger ages or with higher final average pay than assumed, causing a loss. | \$ (1,479,602) | \$ (2,773, 646$)$ |
| Disability Retirements. Disability claims were more or less than assumed, causing a loss or a gain. | 803,176 | $(176,692)$ |
| Death-in-Service Benefits. Survivor claims were less than assumed, causing a gain. | 88,378 | 18,863 |
| Withdrawal from Employment. More liabilities were released by withdrawals than assumed, causing a gain. | 6,305,553 | 9,143,829 |
| New Entrants. New members entered the plan with some past service, causing a loss. | $(7,023,679)$ | $(8,833,637)$ |
| Pay Increases. There were higher pay increases than assumed, causing a loss. | $(15,544,911)$ | $(6,456,897)$ |
| Investment income. Recognized investment income was more than assumed, causing a gain. | 12,725,762 | 13,830,758 |
| Death After Retirement. Retirees lived for a shorter period than assumed, causing a gain. | 6,543,934 | 6,056,846 |
| Other. Miscellaneous gains and losses resulting from data adjustments, recognizing additional outside and non-qualified service for eligibility, timing of financial transactions, subsidized service purchases, etc. | $(22,729,820)$ | $(12,980,232)$ |
| Gain (or Loss) During the Year from Financial Experience | \$ (20,311,209) | \$ (2,170,808) |

Pay Increases. There were higher pay increases than assumed, causing a loss.

Investment income. Recognized investment income was more than assumed, causing a gain.

Death After Retirement. Retirees lived for a shorter period than assumed, causing a gain.

Other. Miscellaneous gains and losses resulting from data adjustments, recognizing additional outside and non-qualified service for eligibility, timing of financial transactions, subsidized service purchases, etc.

Gain (or Loss) During the Year from Financial Experience


## AVERAGE BENEFIT PAYMENTS

| Retirement Effective Dates | Years of Earned Service |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1/1/1998 to 12/31/2007 | 5-10 | 10-15 | 15-20 | 20-25 | 25-30 | 30+ |
| 1998 |  |  |  |  |  |  |
| Average Monthly Benefit | \$ 251.82 | \$ 886.28 | \$ 898.33 | \$ 1,654.16 | \$ 2,125.99 | \$ 2,940.24 |
| Average Highest Average Salary | \$ 1,766.66 | \$ 3,335.07 | \$ 2,273.19 | \$ 3,424.96 | \$ 3,641.50 | \$ 4,258.35 |
| Number of Active Retirees | 10 | 16 | 26 | 34 | 59 | 62 |
| 1999 |  |  |  |  |  |  |
| Average Monthly Benefit | 357.56 | 754.60 | 1,286.11 | 1,671.21 | 2,350.92 | 3,202.92 |
| Average Highest Average Salary | 2,275.74 | 2,549.87 | 3,191.19 | 3,178.43 | 3,668.41 | 4,199.02 |
| Number of Active Retirees | 4 | 14 | 22 | 30 | 60 | 79 |
| 2000 |  |  |  |  |  |  |
| Average Monthly Benefit | 462.05 | 860.44 | 1,013.11 | 1,496.16 | 2,459.44 | 3,295.19 |
| Average Highest Average Salary | 2,677.47 | 2,955.91 | 2,486.83 | 2,712.81 | 3,725.52 | 4,254.75 |
| Number of Active Retirees | 6 | 7 | 20 | 16 | 46 | 64 |
| 2001 |  |  |  |  |  |  |
| Average Monthly Benefit | 467.71 | 899.42 | 1,262.10 | 1,905.44 | 2,813.95 | 3,628.69 |
| Average Highest Average Salary | 2,697.14 | 2,877.47 | 2,987.44 | 3,345.98 | 4,032.72 | 4,381.01 |
| Number of Active Retirees | 5 | 20 | 29 | 40 | 117 | 187 |
| 2002 |  |  |  |  |  |  |
| Average Monthly Benefit | 521.62 | 751.59 | 1,637.54 | 2,225.31 | 3,057.29 | 3,832.07 |
| Average Highest Average Salary | 3,128.32 | 2,329.31 | 3,901.55 | 3,900.38 | 4,335.07 | 4,550.10 |
| Number of Active Retirees | 9 | 10 | 30 | 31 | 53 | 95 |
| 2003 |  |  |  |  |  |  |
| Average Monthly Benefit | 466.79 | 1,118.94 | 1,775.46 | 2,577.55 | 2,854.19 | 4,118.90 |
| Average Highest Average Salary | 2,692.13 | 3,492.59 | 3,964.47 | 4,466.57 | 4,060.62 | 4,821.75 |
| Number of Active Retirees | 9 | 19 | 30 | 28 | 62 | 59 |
| 2004 |  |  |  |  |  |  |
| Average Monthly Benefit | 470.83 | 1,365.12 | 1,884.94 | 2,349.34 | 3,176.39 | 4,376.09 |
| Average Highest Average Salary | 2,370.10 | 4,276.25 | 4,295.87 | 4,146.06 | 4,515.08 | 5,203.43 |
| Number of Active Retirees | 6 | 16 | 44 | 28 | 90 | 112 |
| 2005 |  |  |  |  |  |  |
| Average Monthly Benefit | 742.38 | 1,099.06 | 1,994.59 | 2,584.64 | 3,043.00 | 4,179.45 |
| Average Highest Average Salary | 4,306.11 | 3,488.67 | 4,538.31 | 4,641.57 | 4,427.18 | 5,026.23 |
| Number of Active Retirees | 5 | 20 | 44 | 31 | 58 | 60 |
| 2006 |  |  |  |  |  |  |
| Average Monthly Benefit | 622.55 | 1,307.77 | 1,736.78 | 2,776.00 | 3,110.05 | 3,822.49 |
| Average Highest Average Salary | 3,619.14 | 4,122.32 | 4,024.88 | 4,944.41 | 4,498.28 | 4,568.51 |
| Number of Active Retirees | 20 | 18 | 50 | 29 | 48 | 64 |
| 2007 |  |  |  |  |  |  |
| Average Monthly Benefit | 623.75 | 1,066.26 | 1,830.60 | 2,486.38 | 3,293.99 | 4,405.92 |
| Average Highest Average Salary | 4,026.84 | 3,329.78 | 4,210.98 | 4,406.89 | 4,650.91 | 5,218.25 |
| Number of Active Retirees | 20 | 20 | 45 | 45 | 43 | 50 |

CHANGES IN PLAN NET ASSETS

| Last Ten Fiscal Years |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1998 |  | 1999 | 2000 |  | 2001 |  | 2002 |  | 2003 |  | 2004 |  | 2005 |  | 2006 |  | 2007 |
| Additions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Member |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Employer contributions |  | 8,494,670 |  | 7,140,565 | 8,007,508 |  | 8,735,015 |  | 9,473,361 |  | 13,023,157 |  | 21,142,815 |  | 28,448,702 |  | 33,684,185 |  | 40,572,810 |
| Investment income (net of expense) |  | 238,307,934 |  | 384,749,549 | 185,639,527 |  | $(140,078,546)$ |  | (166,488,447) |  | 449,742,992 |  | 278,447,116 |  | 243,270,794 |  | 321,692,181 |  | 291,189,684 |
| Total additions to plan net assets |  | 265,367,091 |  | 412,540,600 | 216,516,646 |  | (105,494,746) |  | (128,739,916) |  | 495,432,094 |  | 325,582,319 |  | 298,988,988 |  | 383,474,780 |  | 359,947,064 |
| Deductions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Benefit payments |  | 103,011,282 |  | 110,488,088 | 117,179,246 |  | 131,749,235 |  | 143,604,377 |  | 152,838,651 |  | 163,473,489 |  | 176,445,323 |  | 186,215,600 |  | 195,632,703 |
| Refunds |  | 2,882,464 |  | 3,369,172 | 4,355,309 |  | 3,974,835 |  | 3,346,228 |  | 4,893,891 |  | 6,154,132 |  | 7,194,798 |  | 7,460,137 |  | 8,234,446 |
| Administrative expenses |  | 1,585,249 |  | 1,641,347 | 1,648,464 |  | 2,075,416 |  | 2,301,329 |  | 3,233,847 |  | 3,568,221 |  | 3,429,572 |  | 3,345,367 |  | 3,412,933 |
| Total deductions from plan net assets |  | 107,478,995 |  | 115,498,607 | 123,183,019 |  | 137,799,486 |  | 149,251,934 |  | 160,966,389 |  | 173,195,842 |  | 187,069,693 |  | 197,021,104 |  | 207,280,082 |
| Change in plan net asserts |  | 157,888,096 |  | 297,041,993 | \$ 93,333,627 |  | (243,294,232) |  | $(277,991,850)$ |  | 334,465,705 |  | 152,386,477 |  | 111,919,295 |  | 186,453,676 |  | 152,666,982 |



- Benefit Payments


suo!!!! W \$ Last Ten Fiscal Years
BENEFIT AND REFUND DEDUCTIONS FROM NET ASSETS BY TYPE

| Last Ten Fiscal Years |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1998 |  | 1999 |  | 2000 |  | 2001 |  | 2002 |  | 2003 |  | 2004 |  | 2005 |  | 2006 |  | 2007 |
| Type of benefit |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Age and service benefits: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Retirees | \$ | 92,412,657 | \$ | \$ 98,833,347 |  | \$ 104,508,402 | \$ | 117,451,007 | \$ | 127,835,046 | \$ | 136,082,760 | \$ | 145,425,714 | \$ | 156,855,526 | \$ | 165,224,179 | \$ | 173,525,666 |
| Beneficiaries |  | 5,920,607 |  | 6,559,845 |  | 7,216,526 |  | 8,268,715 |  | 9,291,564 |  | 10,114,247 |  | 11,125,383 |  | 12,327,133 |  | 13,334,797 |  | 14,130,097 |
| Death in service benefits |  | 1,039,401 |  | 1,129,879 |  | 1,161,674 |  | 1,273,183 |  | 1,298,875 |  | 1,338,715 |  | 1,339,824 |  | 1,380,060 |  | 1,433,303 |  | 1,422,814 |
| Disability benefits: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Retirees |  | 3,411,171 |  | 3,744,061 |  | 4,041,610 |  | 4,455,273 |  | 4,740,119 |  | 4,887,851 |  | 5,157,222 |  | 5,377,745 |  | 5,568,278 |  | 5,867,997 |
| Beneficiaries |  | 227,446 |  | 220,956 |  | 251,034 |  | 301,057 |  | 438,773 |  | 415,078 |  | 425,346 |  | 504,859 |  | 655,043 |  | 686,129 |
| Total benefits |  | 103,011,282 |  | 110,488,088 |  | 117,179,246 |  | 131,749,235 |  | 143,604,377 |  | 152,838,651 |  | 163,473,489 |  | 176,445,323 |  | 186,215,600 |  | 195,632,703 |
| Type of refund |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Separation |  | 2,799,435 |  | 3,257,281 |  | 4,274,833 |  | 3,959,655 |  | 3,270,872 |  | 4,845,097 |  | 5,921,406 |  | 7,007,955 |  | 7,402,934 |  | 8,224,690 |
| Death |  | 83,029 |  | 111,891 |  | 80,476 |  | 15,180 |  | 75,356 |  | 48,794 |  | 232,726 |  | 186,843 |  | 57,203 |  | 9,756 |
| Total refunds | \$ | 2,882,464 | \$ | \$ 3,369,172 | \$ | \$ 4,355,309 | \$ | 3,974,835 | \$ | 3,346,228 | \$ | 4,893,891 | \$ | 6,154,132 | \$ | 7,194,798 | \$ | 7,460,137 | \$ | 8,234,446 |

RETIRED MEMBERS BY TYPE OF BENEFIT


RETIREES AND BENEFICIARIES BY OPTION at December 31, 2007



## PRINCIPAL PARTICIPATING EMPLOYERS

Current Year and Nine Years Ago

| Participating Employer | 2007 |  |  | 1998 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Covered <br> Employees | Rank | Percentage of Total System | Covered <br> Employees | Rank | Percentage of Total System |
| School District No. 1 | 6,800 | 1 | 93.1\% | 6,377 | 1 | 98.5\% |
| Challenges, Choices, \& Images | 67 | 2 | 0.9 |  |  |  |
| Omar D. Blair Edison Charter | 53 | 3 | 0.7 |  |  |  |
| Wyatt-Edison Charter | 52 | 4 | 0.7 | 44 | 2 | 0.7 |
| Highline Academy | 37 | 5 | 0.5 |  |  |  |
| Urban Learning Communities, Inc. | 34 | 6 | 0.5 | 23 | 3 | 0.4 |
| KIPP Sunshine Peak Academy | 29 | 7 | 0.4 |  |  |  |
| Northeast Academy | 27 | 8 | 0.4 |  |  |  |
| Pioneer Charter | 25 | 9 | 0.3 | 23 | 3 | 0.4 |
| Denver Arts and Technology Academy | 25 | 10 | 0.3 |  |  |  |
| Southwest Early College | 25 | 11 | 0.3 |  |  |  |
| Odyssey Charter | 22 | 12 | 0.3 | 6 | 4 | 0.1 |
| Denver Public Schools Retirement System | 20 | 13 | 0.3 |  |  |  |
| West Denver Preparatory | 18 | 14 | 0.3 |  |  |  |
| Life Skills Center of Denver | 16 | 15 | 0.2 |  |  |  |
| Community Challenge School | 16 | 16 | 0.2 |  |  |  |
| Colorado High School Charter | 16 | 17 | 0.2 |  |  |  |
| Big Picture High School \#1 | 12 | 18 | 0.2 |  |  |  |
| Academy of Urban Learning Charter | 9 | 19 | 0.1 |  |  |  |
|  | 7,303 |  | 100.0\% | 6,473 |  | 100.0\% |

## - - System-Covered Employers

As of December 31, 2007

Academy of Urban Learning Charter
835 East 18th Avenue
Denver, CO 80218-1024
Big Picture High School \#1
Skyland Community High School
3240 Humboldt Street
Second Floor
Denver, CO 80205-3934
Challenges, Choices, \& Images
1537 Alton Street
Aurora, CO 80010-1712
Colorado High School Charter
1175 Osage Street \#100
Denver, CO 80204-3443
Community Challenge School
948 Santa Fe Drive
Denver, CO 80204-3937
Denver Arts and Technology Academy 3752 Tennyson Street
Denver, CO 80212-1914
Denver Public School District No. 1
900 Grant Street
Denver, CO 80203-2907
Denver Public Schools Retirement System 3700 East Alameda Avenue
Suite 400
Denver, CO 80209-3172
Highline Academy
7808 Cherry Creek Drive South
Suite 304
Denver, CO 80231-3222
KIPP Sunshine Peak Academy
375 South Tejon Street
Denver, CO 80223-1961

Life Skills Center of Denver
1000 Cherokee Street
Denver, CO 80204-4039
Northeast Academy
4895 Peoria Street
Denver, CO 80239-2847
Odyssey Charter
8750 East 28th Avenue
Suite C
Denver, CO 80238-2412
Omar D. Blair Edison Charter
4905 Cathay Street
Denver, CO 80249-8376
Pioneer Charter
3230 East 38th Avenue
Denver, CO 80205-3726
Southwest Early College
3001 South Federal Boulevard
Box 114
Denver, CO 80236-2711
Urban Learning Communities, Inc.
P.S. 1 Charter

1062 Delaware Street
Denver, CO 80204-4033
West Denver Preparatory
1825 South Federal Boulevard
Denver, CO 80219-4905
Wyatt-Edison Charter
3620 Franklin Street
Denver, CO 80205-3325

|  | - History of Contributions 1945-2007 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Year | Employee Contribution | \% of <br> Salary | Employer Contribution | \% of <br> Salary | Year | Employee Contribution | \% of <br> Salary | Employer Contribution | \% of <br> Salary |
|  | 1945 | \$ 20,970 | 6.00\% | \$ - | 0.00\% | 1977 | \$ 6,761,325 | 6.00\% | \$ 10,597,741 | 9.40\% |
|  | 1946 | 252,306 | 6.00 | 357,572 | 8.50 | 1978 | 7,051,761 | 6.00 | 11,318,077 | 9.63 |
|  | 1947 | 293,841 | 6.00 | 524,000 | 10.70 | 1979 | 7,322,772 | 6.00 | 12,168,251 | 9.97 |
|  | 1948 | 419,941 | 6.00 | 738,101 | 10.55 | 1980 | 7,749,670 | 6.00 | 13,600,671 | 10.53 |
|  | 1949 | 506,202 | 6.00 | 1,168,423 | 13.85 | 1981 | 8,251,053 | 6.00 | 17,120,274 | 12.45 |
|  | 1950 | 569,934 | 6.00 | 1,257,920 | 13.24 | 1982 | 8,603,848 | 6.00 | 20,774,584 | 14.49 |
|  | 1951 | 635,309 | 6.00 | 1,436,528 | 13.57 | 1983 | 9,060,315 | 6.00 | 22,989,125 | 15.22 |
|  | 1952 | 723,415 | 6.00 | 1,582,645 | 13.13 | 1984 | 9,382,871 | 6.00 | 23,451,590 | 14.99 |
|  | 1953 | 793,869 | 6.00 | 1,709,244 | 12.92 | 1985 | 10,015,452 | 6.00 | 24,775,279 | 14.85 |
|  | 1954 | 950,743 | 6.00 | 2,290,531 | 14.46 | 1986 | 10,502,019 | 6.00 | 26,565,337 | 15.19 |
|  | 1955 | 1,068,710 | 6.00 | 2,335,859 | 13.11 | 1987 | 10,722,718 | 6.00 | 27,089,048 | 15.17 |
|  | 1956 | 1,192,281 | 6.00 | 2,517,771 | 12.67 | 1988 | 11,279,373 | 6.00 | 22,412,768 | 11.93 |
|  | 1957 | 1,297,257 | 6.00 | 2,638,519 | 12.20 | 1989 | 11,523,630 | 6.00 | 22,386,804 | 11.68 |
|  | 1958 | 1,405,086 | 6.00 | 2,700,863 | 11.53 | 1990 | 11,484,060 | 6.00 | 22,589,146 | 11.80 |
|  | 1959 | 1,512,280 | 6.00 | 2,884,664 | 11.44 | 1991 | 12,155,118 | 6.00 | 23,855,023 | 11.77 |
|  | 1960 | 1,657,213 | 6.00 | 3,140,426 | 11.37 | 1992 | 12,857,937 | 6.00 | 26,787,862 | 12.50 |
|  | 1961 | 1,794,234 | 6.00 | 3,389,182 | 11.33 | 1993 | 12,149,351 | 6.00 | 32,690,548 | 16.39 |
|  | 1962 | 1,942,689 | 6.00 | 3,666,565 | 11.32 | 1994 | 11,943,024 | 6.00 | 32,358,200 | 16.27 |
|  | 1963 | 2,170,253 | 6.00 | 4,129,051 | 11.42 | 1995 | 12,604,734 | 6.00/7.00 | 33,672,809 | 16.27 |
|  | 1964 | 2,296,928 | 6.00 | 4,565,531 | 11.93 | 1996 | 13,170,061 | 6.00/7.00 | 34,395,941 | 16.01 |
|  | 1965 | 2,405,285 | 6.00 | 3,623,247 | 9.04 | 1997 | 15,305,167 | 6.00/7.00 | 22,540,381 | 10.01 |
|  | 1966 | 2,542,358 | 6.00 | 3,778,176 | 8.92 | 1998 | 18,555,336 | 6.00/7.00/8.00 | 8,494,670 | 3.47 |
|  | 1967 | 2,794,250 | 6.00 | 4,101,055 | 8.81 | 1999 | 20,649,845 | 8.00 | 7,140,565 | 2.79 |
|  | 1968 | 3,037,008 | 6.00 | 4,413,826 | 8.72 | 2000 | 22,869,611 | 8.00 | 8,007,508 | 2.90 |
|  | 1969 | 3,344,069 | 6.00 | 4,790,185 | 8.59 | 2001 | 25,848,785 | 8.00 | 8,735,015 | 2.90 |
|  | 1970 | 3,683,017 | 6.00 | 5,184,773 | 8.45 | 2002 | 28,275,170 | 8.00 | 9,473,361 | 2.90 |
| $\begin{aligned} & \sum \\ & n \\ & \sqrt[n]{2} \\ & 5 \\ & E \end{aligned}$ | 1971 | 4,249,617 | 6.00 | 6,116,256 | 8.64 | 2003 | 32,665,945 | 8.00 | 13,023,157 | 3.94 |
|  | 1972 | 4,498,354 | 6.00 | 6,627,970 | 8.84 | 2004 | 25,992,388 | 8.00 | 21,142,815 | 6.55 |
|  | 1973 | 4,657,945 | 6.00 | 6,992,933 | 9.01 | 2005 | 27,269,492 | 8.00 | 28,448,702 | 8.80 |
|  | 1974 | 5,051,951 | 6.00 | 7,565,764 | 8.99 | 2006 | 28,098,414 | 8.00 | 33,684,185 | 10.31 |
|  | 1975 | 5,787,021 | 6.00 | 8,699,367 | 9.02 | 2007 | 28,184,570 | 8.00 | 40,572,810 | 11.99 |
|  | 1976 | 6,540,784 | 6.00 | 9,806,004 | 9.00 |  |  |  |  |  |

## - Otatistical Charts

AVERAGE MONTHLY BENEFIT
Service Retirements
1998-2007


|  | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - Benefit Increases | \$428 | \$456 | \$506 | \$513 | \$551 | \$601 | \$647 | \$692 | \$744 | \$797 |
| - Basic | \$1,407 | \$1,449 | \$1,567 | \$1,621 | \$1,702 | \$1,764 | \$1,827 | \$1,904 | \$1,950 | \$1,990 |

## - Continued

STATISTICAL CHARTS

CONTRIBUTIONS
1998-2007


DENVER PUBLIC SCHOOLS RETIREMENT SYSTEM

3700 E. ALAMEDA AVE.
SUITE 400
DENVER, COLORADO
80209-3172
303.398.7699

WWW.DPSRS.ORG


[^0]:    ${ }^{1}$ Includes 7\% allocation to Alternative Assets

[^1]:    * Reflects actuarial assumptions and methodologies adopted during 2007, applied retroactively, effective January 1, 2007.

