Teachers' Retirement System of the State of Illinois.
Springfield, III. : Teachers' Retirement System of the State of Illinois,
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## H I G H L I G H T S

|  | June 30, 1989 | June 30, 1988 |
| :---: | :---: | :---: |
| Membership |  |  |
| Active | 101,000* | 100,777 |
| Inactive | 27,196* | 25,996 |
| Benefit recipients | 45,718 | 43,396 |
| Total | 173,914 | 170,169 |
| Contributions |  |  |
| Member | \$ $268,253,000$ | $\$ 253,052,000$ |
| State of Illinois | \$ 232,438,000 | $\$ \quad 216,849,000$ |
| Unfunded pension benefit cost | \$ 4,641,888,000 | \$4,238,098,000 |
| Net assets | \& 7,272,071,000 | \$6,684,489,000 |
| Investment return | 14.4\% | . $9 \%$ |
| Benefits paid | \$ 477,256,000 | \$ 436,671,000 |

- Estimated

FOR THE YEAR ENDED
JUNE 30,1989

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1939-1989

Teachers' Retirement System of the State of Illinois


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區
Teachers' Retirement System
of the State of Illinois

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Investment Summary

## LETTER OF TRANSMITTAL

This report marks 50 years of service to members of the Teachers' Retirement System of the State of Illinois (TRS). Not only is this anniversary a time to reflect on the System's past, but it is also an appropriate time to note improvements experienced this year. On August 23, 1989, Governor Thompson signed legislation which improves retirement benefits for teachers. The legislation compounds the current 3 percent annual increase for retirees by basing it on current rather than original annuity. Further it provides this same increase to survivors, who, in the past received no increase in benefits. The legislative changes also expand TRS coverage to part-time and substitute teachers.

On July 1, 1939, TRS was created to provide Illinois teachers with a financially secure retirement. Recent legislative victories along with the other benefit changes which have been added over the years reflect an acknowledgement of changing times and a commitment to quality benefits for TRS members.

Management of the trust fund's investment portfolio helps ensure retirement security for members. Fiscal year 1989 investment income was up sharply over FY88 due, in part, to domestic and international equities which demonstrated a remarkable recovery from the October, 1987 stock market crash. The System's total fund time-weighted rate of return rose to $14.4 \%$ in FY89.

TRS provides retirement and other benefits for members whose numbers have grown from 38,500 in 1939 to 174,000 in 1989. The System's goal, however, has remained the same: to assure retirement security for members.
> "Not only is this anniversary a time to reflect on the System's past, but it is also an appropriate time to note improvements experienced this wort"."

## Funding

The System is funded through member contributions, employer contributions from the State of Illinois, and investment income. The System's active members paid $\$ 268.3$ million, or 8 percent of their salaries to the trust fund during FY89. Contributions from the State of Illinois were $\$ 232.4$ million.

The State's debt to the System, the unfunded pension benefit obligation, grew to over $\$ 4.6$ billion during FY89. The legislation which Governor Thompson signed on August 23, however, puts into effect a plan which averts the financial crisis projected under recent state funding methods. The plan requires the state to amortize the TRS unfunded liability over 40 years as a level percentage of teacher payroll. The amount the state contributes to TRS will increase each year as the payroll for teachers throughout the state increases. This plan will be phased in over seven years and the unfunded liability will be eliminated in 47 years.

The results of an actuarial valuation conducted by the System's actuaries as of June 30, 1989 are included in the "Actuarial Summary" section of this report. The System's audited financial statements with related footnotes for the fiscal year ending June 30,1989 are shown in the "Financial Statements" section.

## Investments

Investment strategy has come a long way in the last 50 years. While in 1939 the System's assets were managed by one bank and investment income consisted mainly of royalties from gas and oil rights, today TRS retains 28 investment managers and the System's strategy is diversified by investment in a broad range of vehicles ranging from bonds to real estate.

Investment income and realized gain on investments of $\$ 561.6$ million during FY89 were positive contributors to the fund's financial status. Investments totaled $\$ 8.0$ billion at market value at June 30,1989 , up significantly from $\$ 7.0$ billion at market value at June 30, 1988. As trustee for members' funds, the System is responsible for investment of the fund under the prudent person standard. This standard has permitted the System to allocate trust funds across a broad group of asset classes, including stocks, bonds, and real estate equity.

The $14.4 \%$ rate of return was primarily attributable to the resurgence of the equity markets. Annualized three-year and five-year total returns of $10.0 \%$ and $16.2 \%$, respectively, continue to outperform the rate of inflation for these periods, $4.3 \%$ and $3.6 \%$, respectively. The System's long-term objective, to exceed the rate of inflation by $3 \%$ has been achieved for both the three-year and five-year periods.

A summary of the System's investment activities during FY89 and historic performance results is presented in the "Investment Report" section which is followed by the investment listing.
'As TRS looks ahead to the
Letter of Transmittal

## Benefits

The System administers a defined benefit retirement program for all certificated public elementary and secondary education professionals in the State of Illinois outside the City of Chicago. Retirement benefits totaling $\$ 436.6$ million were paid to 39,751 annuitants at June 30, 1989. The average retirement benefit was $\$ 931$, up from the average benefit of $\$ 884$ in FY88. The average retired member was 73 years of age, had earned 26.9 years of service, and had been in retirement 12 years at June 30, 1989.
The compounded 3 percent annual increase which became law on August 23 represents a long-term benefit improvement for TRS members. Unlike ad hoc increases of the past which provided a one-time boost in benefits, compounding the annual increase will impact benefits each year. The longer an annuitant is in receipt of a benefit, the greater the impact of a compounded increase.
Approval of compounding for retirees and an annual increase for survivors came after years of work by active and retired teachers. Throughout Illinois TRS members and annuitants wrote and called their legislators and the Governor explaining the need for these changes. The compounded annual increase for retirees and survivors will slow the loss of purchasing power that has plagued TRS annuitants.

## Other Benefits

In addition to retirement benefits, the System offers a comprehensive health and prescription drug insurance plan for benefit recipients and eligible dependents. The System partially subsidized the premium cost for 15,670 annuitants who elected coverage during FY88.
Disability benefits are paid to System members who are disabled while employed in a TRS-covered position. During FY89, 1,268 members received disability benefits totaling $\$ 7.8$ million.
The System also provides death and survivor benefits. Dependents may be eligible for monthly benefits and/or a lump-sum payment. Monthly benefits were paid to 4,532 survivors. There were 1,233 new claims filed in FY89 with-428ccla ms (101) Moth Benefits.

## Member Services

TRS provides a number of services for contributing members. During FY89, 6,950 System members met with TRS retirement consultants around the state to learn more about their retirement benefits. System staff answered an average of 260 phone inquiries daily by members and annuitants. In addition, staff members sent out over 121,000 letters last year and conducted office consultations with an average of 155 members monthly concerning System benefits and operations

Due to a growing awareness of the aging of our society and its future implications, members are beginning their retirement planning earlier in their careers. In response to these growing concerns the System expanded its program designed to help members plan for retirement. TRS sponsors retirement planning seminars targeted toward members who are five to ten years away from retirement. The seminars are designed to help them identify and plan to attain their retirement goals. In FY89, 335 members attended these seminars. The overwhelming interest expressed by members has prompted TRS to again expand its seminar schedule in FY90.

The System provides a variety of publications aimed at meeting the information needs of members, annuitants, and employers. The Member Guide and Retired Member Guide describe benefits available from the System. The Employer Guide is a comprehensive resource on System procedures and reporting requirements for employers of TRS members. In addition to these publications, regular newsletters, brochures, and videotape presentations present information of interest to TRS members and annuitants.

TRS is proud of the benefits it offers Illinois teachers today. The legislative successes of the past year serve to better protect the economic health of TRS retirees. However, to maintain a modern system which meets the needs of its members, more improvements need to be made.

As TRS looks ahead to the '90s, the System will continue to work with the General Assembly to bring about changes that will keep retirement benefits for Illinois teachers comparable to those provided in other systems across the country.

In addition, TRS will continue to improve upon the operational structure currently in place to provide these improved benefits. In FY89, the System initiated a strategic plan which is designed to anticipate the future needs of TRS members and identify the challenges to meeting those goals. The System's mission statement appears on page 8 .

This component unit annual financial report will be distributed to all public school buildings and a summary will appear in the System's newsletters. The report is available to members on request.


[^0]TRS:A HISTORICALPERSPECTIVE

1939-1989:
TRS celebrates a half century of service

Fifty years ago, the Teachers' Retirement System of the State of Illinois was created to replace the early Teachers' Pension and Retirement Fund which served Illinois teachers from 1915-1939. This early fund made the statewide payment of retirement benefits to public school teachers possible - something many teachers take for granted today, but a novel and exciting idea in the preSocial Security era.

By 1939, the United States was a country on the mend. While the effects of the Great Depression still lingered, especially in public education where many schools operated with only the bare essentials, by 1939, the economy had begun to improve. The stock market soared and new schools were completed across the country.
It was in this era of economic improvement that the State of Illinois took a hard look at its severely underfunded and poorly designed pension plan for teachers. The decision was made to
start over with a plan which would provide a secure financial future for teachers.
The initial legislation creating the System passed overwhelmingly in 1939 and the original statutes which govern TRS today were enacted. The purpose of the legislation was to provide an incentive for teachers to stay in teaching and reward those teachers who had dedicated their careers to educating Illinois' children.

Since 1939, extensive amendments have been enacted to maintain the various benefit and funding provisions of the System at a level demanded by ever-changing social and economic conditions.

By the end of 1941, the winds of war had reached the United States. Pearl Harbor was destroyed and the country was thrown into World War II. Despite the nationwide upheaval, TRS membership, contributions and benefits remained largely unchanged.
Before the end of the war, President Roosevelt signed the GI Bill of Rights into law, which provided funds for housing and education for those who served in the war. In 1947, two years after the end of the war, the New York Times reported that 2.5 million students were enrolled in college - half of those students were ex-GIs.
"The surge in numbers puts a strain on teachers, classroom space and dormitories," the Times reported.

The time was ripe for

sweeping revisions in the TRS retirement plan. In 1947 the Illinois General Assembly enhanced benefits in an effort to attract this new crop of students to the teaching field. Instead of calculating benefits from accumulated contributions, annuities were now calculated by what is called the formula method - a fixed percentage of final average compensation was granted for each year of credited service. Under this new method, benefits were tied to changing economic conditions rather than fixed-dollar values. The legislation also established minimum disability and retirement benefit levels and enacted


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temporary disability and reciprocal programs. This flexibility had a profound effect on the System and its members in the years to come.

The 1947 legislation was the first of several major overhauls of the System. Each reflected an acknowledgment of changing times and a commitment to provide quality benefits to members.

The System continued to grow in the post-war years as school consolidation brought children in from rural areas to larger schools in town. Not only was membership growing, but the number of annuitants was also increasing. In just ten years, the number of annuitants had increased by almost 50 percent.

The '50s were years of increased attention to public education. The student population grew and increased demands were placed on teachers. When the baby boom generation hit the Origin
schools in 1953, the White House announced that 30 million children would enter school that year, 10 million more than the nation's school system was prepared to handle. Legislation passed that year increased the member's contribution rate from 5 to 6 percent of salary and improved the permanent disability benefit.

In October 1957, the Soviets launched Sputnik. In the midst of the Cold War, U.S. confidence was shaken by its own underdeveloped space program. Popular opinion laid much of the blame on public education. Shocked into action by the satellite's success, Congress passed the National Defense Education Act to provide funding for accelerated math, science, and language teaching.

In addition, Illinoisans were migrating in record numbers away from metropolitan areas - the suburban housing boom


These developments spurred a growing need for teachers, again motivating the General Assembly to enhance TRS benefits. Significant changes included the survivor benefits program, which was added in 1959. Previously upon death of a member, TRS refunded prior service contributions without interest. Under the new program, members contributed 1 percent to the fund. In return, survivors of members with over one year of service received larger lump-sum payments or a lump-sum payment and monthly benefits.

The turmoil and strife of the 1960's largely passed by the System. Instead the '60s saw TRS move into the age of computers. In 1963, the System received keypunch equipment which replaced manual posting of members' records. In 1967 the System installed its first computer which quickened response time and established more re-
liable record-keeping methods.

At the same time, the country was moving ahead. Medicare was created, supersonic flight became a reality and, in July 1969, the world watched as the first men walked on the moon.

Amid these achievements, TRS experienced great strides of its own. The TRS retirement plan began to take the shape it has today.

Age and service requirements for retirement were changed and, for the first time, all retirees received an automatic annual increase in annuity. The System was finally beginning to provide the type of benefits it had long been seeking.

Building on this wave advancement, TRS installed its first on-line data processing system which allowed TRS staff immediate access to a member's record via CRT screen. This technology was extremely important, because by the mid-'70s, System membership
soared to over 129,000 teachers and retirees.

Equally important, the System was coming of age in its recognition of the need to keep members informed of their rights, status, and benefits. TRS expanded its annual report, began to publish member and retired member guides, and established the field service program to provide personalized information to teachers.

The early 1980's brought the first major change in investment strategy since 1939. All of the fund's assets had been managed by one bank. In 1982, following extensive evaluation, a number of investment


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advisors were retained and the System's strategy was diversified by investment in real estate, venture capital and other vehicles which have improved investment income. Within the span of 50 years investment methods evolved from hand-written ledgers to satellite link-ups with worldwide financial market information.

## TRS Today

TRS's recent history in many ways mirrors the System's origin. Just as funding shortfalls and benefit levels prompted the creation of the 'Teachers' Retirement System in 1939, in 1989, the Illinois General Assembly again addressed serious deficiencies in these areas. Teachers in retirement for many years faced insufficient annual increases in benefits and a cost of living that had dramatically risen since their retirement. On June 30, 1989, as the Teachers' Retirement System celebrated it's 50-year anniversary, the Illinois General Assembly passed legislation which heralds a new era in retirement benefits for teachers. The legislation compounds the current 3 percent annual increase for retirees by basing it on current rather than original annuity. Further, it provides this same increase for survivors of teachers who, in the past, received no annual increase in benefits.

Over the past 50 years, TRS has remained a strong retirement plan, providing members with bene-
fits that reflect the progressive growth and development of the System. Because of the improved annual increase, the economic health of TRS retirees is better protected.

Today teachers use tools which weren't even imagined in 1939 - personal computers, calculators, and video cassette players. Nonetheless, teachers have remained committed to the same basic goal - to develop in students a love for learning and an understanding of the world in which we live.

In much the same way, although TRS has grown and changed, the System remains committed to its special partnership with Illinois teachers. A dedicated staff of over 100 people provide services to the System's current 128,000 members and 46,000 retired members. Total retirement benefits paid reached $\$ 437$ million last year.

This brief history honors the persistent efforts of educators, legislators, board members, and TRS staff who have made the System what it is today. Finally, it honors Illinois' teachers, both active and retired, who have devoted themselves to the education of children.

MISSION STATEMENT


## Mission Statement

As a fiduciary for our members, the Teachers' Retirement System of the State of Illinois strives to promote maximum possible financial security for members in a manner that reflects our commitment to excellent service and instills confidence in our integrity.

## FINANCIALSTATEMENTS



1939-1989

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# AUDITORS, 

## Ernst \& Young

150 South Wacker Drive Chicago, Illinois 60606
Telephone: (312) 368-1800

Honorable Robert G. Cronson
Auditor General
State of Illinois
Board of Trustees
Teachers' Retirement System
of the State of Illinois

We have audited the accompanying statement of financial position of the Teachers' Retirement System of the State of Illinois as of June 30, 1989, and the related statements of revenues, expenses and changes in net assets and changes in financial position for the year 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 audit. The statement of financial position of the Teachers' Retirement System of the State of Illinois and the related statement of revenues, expenses and changes in net assets as of and for the year ended June 30, 1988 were audited by other auditors whose report dated October 31, 1988 expressed an unqualified opinion on those statements.

We conducted our audit in accordance with generally accepted auditing standards. 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 audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Teachers' Retirement System of the State of Illinois at June 30, 1989, results of its operations and changes in its financial position for the year then ended in conformity with generally accepted accounting principles.

Our audit was made for the purpose of forming an opinion on the financial statements taken as a whole. The supplementary information listed in the table of contents is presented for purposes of additional analysis and is not a required part of the financial statements of the Teachers' Retirement System of the State of Illinois. Such information has been subject to the auditing procedures applied in the audit of the financial statements and, in our opinion, is fairly stated in all material respects in relation to the financial statements taken as a whole.

October 4, 1989

## Ernst + Young

## Statements of Financial Position

Teachers' Retirement System of the State of Illinois


See notes to financial statements.

## Statements of Revenue and Expense and Changes In Net Assets <br> Teachers' Retirement System of the State of Illinois

|  | Year End | e 30 |
| :---: | :---: | :---: |
|  | 1989 | 1988 |
| Revenue |  |  |
| Contributions - Note E: |  |  |
| * Members | \$ 268,253,000 | 253,052,000 |
| 2.2 State of Illinois | 232,438,000 | 216,849,000 |
| A. School districts: |  |  |
| \% 2 - Early retirement option | $17,266,000$ | $14,205,000$ |
| Federal and trust funds | $11,223,000$ | $10,606,000$ |
| Total contributions | 529,180,000 | 494,712,000 |
| Investment income - Note C: |  |  |
| Interest | 292,299,000 | 287,934,000 |
| Dividends | 93,088,000 | 87,497,000 |
| Other | 42,592,000 | 18,626,000 |
| Total investment income | 427,979,000 | 394,057,000 |
| Gain on sale of investments | 133,621,000 | 166,024,000 |
| Total revenue | 1,090,780,000 | 1,054,793,000 |
| Expense |  |  |
| Benefits: |  |  |
| Age retirement | 348,247,000 | 316,506,000 |
| Post-retirement | 88,381,000 | 83,333,000 |
| Survivor | 24,436,000 | 22,635,000 |
| Disability | 7,846,000 | 7,374,000 |
| Health insurance | 8,346,000 | 6,823,000 |
|  | 477,256,000 | 436,671,000 |
| Refunds | 20,394,000 | 20,886,000 |
| Administrative expenses | 5,548,000 | 4,942,000 |
| Total expense | 503,198,000 | 462,499,000 |
| Revenue in Excess of Expense | 587,582,000 | 592,294,000 |
| Net Assets Available for Benefits At Beginning of Year | 6,684,489,000 | 6,092,195,000 |
| Net Assets Available for Benefits At End of Year | 7,272,071,000 | 6,684,489,000 |
| See notes to financial statements. | Ha |  |
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|  | URBANA-CHAM |  |

## Financial Statements

## Statements of Changes in Financial Position

Teachers' Retirement System of the State of Illinois


See notes to financial statements.


## NOTES TO FINANCIAL STATEMENTS

Teachers' Retirement System of the State of Illinois
June 30, 1989

## NOTE A - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of accounting: The financial statements of the Teachers' Retirement System of the State of Illinois are prepared using the accrual basis of accounting.
Investments accounting: Investments are valued on the basis of cost. Gain or loss on the sale of investments is determined based on average cost for stocks and identified cost for debt securities.
Investments authorized: Through the Board of Trustees, as authorized in Article 16 of the Illinois Pension Code, the System serves as fiduciary for the members' trust funds and is responsible for investment of such funds under authority of the "prudent person rule." The prudent person rule establishes a standard for all fiduciaries by specifying fiduciary responsibility with regard to the members' trust funds.

Equipment: Equipment is stated on the basis of historical cost. Provisions for depreciation are computed by the straightline method, based upon the estimated useful lives of the assets. Equipment is assigned a useful life of from three to ten years while vehicles are assigned a five-year life.

## NOTE B - PLAN DESCRIPTION

The System is the administrator of a cost-sharing multiple-employer public employee retirement plan. Members of the System consist of all full-time teachers and teachers employed on a part-time basis in positions where services are expected to be rendered for a full and complete school term in the public common schools of illinois outside of Chicago. The System was established by the State of Illinois and is governed by Article 16 of the Illinois Pension Code. The System is a component unit of the State of Illinois and is included in the State's financial statements as a pension trust fund.
The System has developed criteria to determine whether other entities should be included within its financial reporting entity. The criteria include, but are not limited to, whether the System exercises oversight responsibility on financial interdependence, selection of governing authority, designation of management, ability to significantly influence operations and accountability for fiscal matters, scope of public service and special financing arrangements.

Based on this criteria the System has no other entities included in these financial statements.
Members are employed by 1,130 school districts and special districts. Member contributions are remitted by each employer district to the System. These employers are only responsible for employer contributions for teachers paid from federal and trust funds and for the employer's portion of the early retirement option. The State of Illinois provides employer contributions to fund the System. State contributions are based on annual appropriations which are less than statutory actuarial funding of normal cost and interest on the unfunded pension benefit obligation.

At June 30, 1989, the number of school district employers was:


At June 30, 1989, the System membership consisted of:
Retirees and beneficiaries currently
receiving benefits
Terminated members entitled to benefits
but not yet receiving them
Terminated members not entitled
to benefits

| Current members: |
| :--- |
| Vested |
| Nonvested |


|  |
| :---: | :---: |
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## Financial Statements

Terminated and current members are estimated based on the latest available data as of June 30, 1988.
The pension plan provides retirement benefits, health insurance, and death and disability benefits. A member qualifies for an age retirement annuity after attaining one of the following: age 62 with five years of service credit; age 60 with ten years; age 55 with 20 years. If retirement occurs between age 55 and 60 with less than 35 years of service, the annuity will be reduced at the rate of $1 / 2$ percent for each month the member is under age 60 . A member age 55 with less than 35 years of service credit may use the early retirement option to avoid a discount for early retirement if retirement occurs before July 1 , 1995 and within six months of the last day of service requiring contributions and if the member and employer both make a one-time contribution to the System.

The retirement benefit is determined by the average salary of the four highest consecutive salary rates within the last ten years of creditable service and the percentage of average salary to which the member is entitled. This percentage is determined by the following formula: 1.67 percent for each of the first ten years, plus 1.9 percent for each of the next ten years, plus 2.1 percent for each of the next ten years, plus 2.3 percent for each year over 30 . The maximum retirement benefit, 75 percent of average salary, is achieved with 38 years of service. Each annuitant who retired after 1969 or made a qualifying contribution receives an annual 3 percent increase in the original retirement benefit beginning January 1 following attainment of age 61 or following the first anniversary in retirement, whichever is later.

Member contributions, established by statute, are 8 percent of earnings allocated as follows: $61 / 2$ percent for retirement, $1 / 2$ percent for post-retirement increases and 1 percent for death benefits. If a member leaves covered employment, the System will refund a member's contributions upon request. The refund consists of actual contributions excluding the 1 percent death benefit contribution.

## NOTE C - CASH AND INVESTMENTS

At June 30, 1989, the bank balance and carrying amount of the system's deposits were $\$ 41,063,000$ and $\$ 1,437,000$, respectively. Of the bank balance, $\$ 39,322,000$ is on deposit with the State Treasurer and is included in a pool of deposits. The remaining balance is fully insured. The System's investments are categorized to give an indication of the level of risk at year end. Category 1 includes investments that are insured or registered or for which the securities are held by the System or its agent in the System's name. Category 2 includes uninsured and unregistered investments for which the securities are held by the broker's or dealer's trust department or agent in the System's name. Category 3 includes uninsured and unregistered investments for which the securities are held by the broker or dealer, or by its trust department or agent but not in the System's name.

Investments at June 30, 1989 and 1988 are summarized below:

| Category 1: | Cost |  | Market Value |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1989 | 1988 | 1989 | 1988 |
| Bonds, corporate notes and |  |  |  |  |
| preferred stock | \$2,426,270,000 | 2,029,912,000 | 2,489,394,000 | 2,029,633,000 |
| Short term investments | 219,115,000 | 608,688,000 | 218,855,000 | 608,695,000 |
| Common stock | 2,280,836,000 | 2,144,846,000 | 2,877,773,000 | 2,482,124,000 |
| Real estate equity | 711,492,000 | 341,540,000 | 732,834,000 | 350,416,000 |
| Venture capital | 65,522,000 | 12,272,000 | 65,522,000 | 12,272,000 |
| Accrued interest and dividends | 80,286,000 | 70,026,000 | 80,286,000 | 70,026,000 |
|  | 5,783,521,000 | 5,207,284,000 | 6,464,664,000 | 5,553,166,000 |
| Mutual funds (Not categorized) | 1,438,540,000 | 1,432,240,000 | 1,574,057,000 | $1,456,687,000$ |
| Total Investments | \$7,222,061,000 | $6,639,524,000$ | 8,038,721,000 | 7,009,853,000 |

The System has nonrecourse mortgages totaling $\$ 94,324,000$ and $\$ 37,683,000$ on real estate equities at June 30 , 1989 and 1988, respectively. The amount reported for real estate equity is net of these mortgages, which mature on various dates through the year 2011.
At June 30, 1989, the System had short-term and mutual fund investments with one organization (other than U.S. Government and U.S. Government guaranteed obligations) that exceed 5 percent of net assets available for benefits. The investments, reported at cost, are with Harris Bank of Chicago for $\$ 478,506,000$.
There are no investments in, loans to, or leases with parties related to the System.

## NOTED - FLNDING STATLS AND PROGRESS

The pension benefit obligation is a standardized disclosure of the present value of pension benefits, adjusted for the effects of projected salary increases, estimated to be payable in the future as a result of employee services to date. The measure is the actuarial present value of credited projected benefits and is intended to help users to assess the System's funding status on a going-concern basis, assess progress made in accumulating sufficient assets to pay benefits when due, and make comparisons with other public employee retirement systems.

The pension benefit obligation is determined as of June 30,1989 and 1988. Significant actuarial assumptions are summarized as follows:

- The present value of future pension payments is computed using a discount rate of 8 percent. The discount rate represents the estimated long-term rate of return on current and future investments.
- Future pension payments reflect an assumption of a 4 percent salary increase due to inflation and a 3 percent salary increase for merit adjustments.
- Future pension payments include post-retirement increases based on 3 percent of the pension payment at the time of retirement.

An experience analysis is required by statute to determine the adequacy of actuarial assumptions regarding mortality, service and compensation experience. The most recent experience analysis was performed using June 30,1988 data. Based on this analysis there were no changes in actuarial assumptions. During the period between experience analyses, the actuary develops annual actuarial estimates, based upon the most recent experience analysis performed.

At June 30, 1989 and 1988, the unfunded pension benefit obligation is as follows:

|  | 1989 | 1988 |
| :---: | :---: | :---: |
| Pension benefit obligation: |  |  |
| Retirees and beneficiaries currently receiving benefits | \$4,527,612,000 | 4,164,701,000 |
| Terminated members entitled to benefits but not yet receiving them | 240,658,000 | 158,655,000 |
| Current employees: |  |  |
| Accumulated employee contributions | 2,003,978,000 | 1,860,403,000 |
| (1) Employer-financed vested | 1,495,356,000 | 3,720,254,000 |
| (1) Employer-financed nonvested | 3,646,355,000 | 1,018,574,000 |
| Total pension benefit obligation | 11,913,959,000 | 10,922,587,000 |
| Net assets available for benefits, at cost |  |  |
| (market value 1989-\$8,088,484,000; 1988-\$7,054,818,000) | 7,272,071,000 | 6,684,489,000 |
| Unfunded pension benefit obligation | \$4,641,888,000 | 4,238,098,000 |

(1) Due to a change in actuarial allocation for fiscal 1989 the present value of the future accrued benefit costs of currently vested employees was reclassified to nonvested.

## Financial Statements

A reconciliation of the unfunded pension benefit obligation for the years ended June 30,1989 and 1988 is summarized below:

|  | 1989 | 1988 |
| :---: | :---: | :---: |
| Unfunded benefit obligation at beginning of year | \$4,238,098,000 | $3,857,766,000$ |
| Additions (deductions): |  |  |
| Employer cost in excess of contributions | 305,547,000 | 271,954,000 |
| Actuarial losses (gains) compared to assumptions |  |  |
| Salary increases | 16,271,000 | 30,712,000 |
| Investment income | 1,569,000 | $(37,237,000)$ |
| Other | 80,403,000 | $(49,377,000)$ |
| Plan amendments |  | 45,864,000 |
| Changes in actuarial assumptions |  | 118,416,000 |
| Net additions | 403,790,000 | 380,332,000 |
| Unfunded benefit obligation at end of year | \$4,641,888,000 | 4,238,098,000 |

## NOTE E-CONTRIBUTION REQUIREMENTS

Employer contributions made by the State of Illinois are based on annual appropriations and are not actuarially determined. The State appropriations are derived from three different sources. The largest appropriation is made from the Common School Fund ( $1989-\$ 216,216,000 ; 1988-\$ 194,480,000$ ) and is based on a percentage of benefits estimated to be paid The percentage of appropriations to benefits estimated to be paid was 44 percent.

The other two sources of State contributions are the General Revenue Fund and the State Pension Fund. The receipts from the General Revenue Fund appropriation (1989-\$10,571,000; 1988-\$17,015,000) reimburse the System for certain minimum retirement allowances and repays the System for reduced State appropriations from a previous fiscal year. The State Pension Fund appropriation (1989-\$5,651,000; 1988-\$5,354,000) represents a distribution to the System of money escheated to the State.

Total contributions from employers for 1989 and 1988 were $\$ 260,927,000$ and $\$ 241,660,000$ respectively which were 8.2 and 8.1 percent of annual covered payroll respectively.

In some instances the school districts and special districts are responsible for employer contributions. These contributions are required for teachers paid from federal and trust funds and for the employers' portion of the early retirement option.

The employer and employee actuarial contributions requirement for 1989 and 1988 are $\$ 811,399,000$ and $\$ 743,616,000$ respectively. The actual contribution for 1989 and 1988 was $\$ 529,180,000$ and $\$ 494,712,000$ respectively. The actuary's review of the 1989 deficiency indicates that the actuarially determined contribution requirement for 1990 will increase by $\$ 2,578,000$.

## NOTE F - HISTORICAL TREND INFORMATION

Supplemental schedules of historical trend information are presented on page 19. These are designed to provide information on the System's progress in accumulating assets to pay benefits when due.

## NOTE G - SUBSEQUENT EVENT

On August 23, 1989, the Governor signed into law Public Act 86-0273. This law will have significant impact on the Teachers' Retirement System of Illinois as relates to its Pension Benefit Obligation. The provision for compounded annual increases for annuitants and survivors will increase the Pension Benefit Obligation an estimated $\$ 642,000,000$. In addition this law provides for funding of the Teachers' Retirement System of Illinois on an actuarially sound basis over 40 years after a seven year phase in.

## REQUIREDSUPPLEMENTAL S C H E D U L E S

## Revenues by Source

| (In Millions of Dollars) |  | Employer Contributions |  |  |  | Investment Income | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Employee Contributions | Actual Amount | Percentage of Annual Covered Payroll | Actuarially Required Amount* | Percentage of Annual Covered Payroll |  |  |
| 1980 | \$151 | \$221 | 11.1\% | \$261 | 14.1\% | 8178 | \& 550 |
| 1981 | 166 | 246 | 11.3 | 266 | 13.2 | 226 | 638 |
| 1982 | 180 | 169 | 7.8 | 277 | 12.7 | 238 | 587 |
| 1983 | 189 | 161 | 7.0 | 373 | 16.3 | 132 | 482 |
| 1984 | 195 | 207 | 8.8 | 413 | 17.6 | 234 | 636 |
| 1985 | 207 | 238 | 9.6 | 446 | 18.0 | 445 | 890 |
| 1986 | 220 | 260 | 9.9 | 448 | 17.0 | 813 | 1,293 |
| 1987 | 238 | 280 | 9.9 | 448 | 15.8 | 835 | 1,353 |
| 1988 | 253 | 242 | 8.1 | 514 | 17.1 | 560 | 1,055 |
| 1989 | 268 | 261 | 8.2 | 566 | 17.8 | 562 | 1,088 |

- Changes in actuarial assumptions and actuarial method resulted in a $\$ 80.7$ million increase in the actuarially required amount for the year ended June 30, 1983. Changes in actuarial assumptions resulted in a 553.2 million increase in the actuarially required amount for the year ended June 30, 1988.
* Amounts shown for 1980-1981 were determined using the entry age normal actuarial cost method and do not comply u'ith the standardized measure prescribed by GASB Statement Number 5. The difference is estimated to be nonmaterial for comparison purposes.
Expense by Type


Supplemental Schedule of Funding Progress


Analysis of the dollar amounts of net assets available for benefits, pension obligation, and unfunded pension benefit obligation in isolation can be misleading. Expressing the net assets available for benefits as a percentage of the pension benefit obligation provides one indication of funding status on a going-concern basis. Analysis of this percentage over time indicates whether the System is becoming financially stronger or weaker. Generally, the greater this percentage, the stronger the system. Trends in unfunded pension benefit obligation and annual covered payroll are both affected by inflation. Expressing the unfunded pension benefit obligation as a percentage of annual covered payroll approximately adjusts for the effects of inflation and aids analysis of progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the system.

* Includes increases of $\$ 55$ million due to plan amendments and $\$ 393$ million due to cBainges in factuarial assumptions.


## S U P P L E M E N T A L S C HED U L E S

## Supplemental Schedules


A CTUARIALSUMMARY


1939-1989


## BUG' <br> CONSULTANTS

## Xerox Centre

55 West Monroe Street Suite 1700
Chicago, Illinois 60603

## Board of Trustees

Teachers' Retirement System of the State of Illinois
2815 West Washington Street
P.O. Box 19253

Springfield, Illinois 62794

## Re: Actuarial Reserve Requirement as of June 30, 1989

Ladies and Gentlemen:
In accordance with the provisions of the Teachers' Retirement System of the State of Illinois, we have made an estimate of the actuarial reserve requirement of the System as of June 30, 1989.

This estimate is based on a census of retired members as of June 30, 1989 and a census of active and inactive members as of June 30, 1988. For actuarial purposes, net assets are based upon cost or amortized cost values less current liabilities as provided by the System. The estimate was based on the provisions of TRS in effect on June 30, 1989.

All costs, liabilities, and other factors under the System were determined in accordance with generally accepted actuarial principles and procedures, using the projected unit-credit actuarial cost method, and the actuarial assumptions adopted effective June 30, 1987.

As of July 1,1989 , the pension benefit obligation was determined to be $\$ 11,913,959,000$, based on the actuarial assumptions and provisions of TRS in effect on that date.

In our opinion, the amount of $\$ 11,913,959,000$ is a fair representation of the actuarial reserve requirement of the System as of June 30, 1989.

We should note that the pension benefit obligation of $\$ 11,913,959,000$ excludes the fiscal impact of Public Act $86-0273$ which was enacted on August 23,1989 . This Act will have the effect of increasing the pension benefit obligation by approximately $\$ 642$ million.

Respectfully submitted,


JWT:mta

## Buck Consultants, Inc.

312 | 332-2285 Fax 312 | 332-5245
Buck Consultants S. A. I Buck Paterson Consultants Limited । GBB Buck Consultants Limited

# ACTUARIALINFORMATION 

## Introduction

Aretirement plan can generally be described as a promise by the employer to provide for employees' pension in return for services provided by the employees; as such, a pension is a form of deferred compensation. Retirement plans generally provide for retirement benefits, post-retirement increases, disability benefits, survivor benefits and group health insurance.

Since 1939, the Teachers' Retirement System of the State of Illinois has provided pension and ancillary benefits to all public elementary and secondary teachers except for those employed by the city of Chicago. Funding of these benefits comes from employee contributions, employer contributions (principally State appropriations) and investment income. Employee contributions established by the Illinois Pension Code are currently 8 percent of salary. Investment income and employer funding are primary determinants of the System's financial status. Benefits are an obligation of the State of Illinois and are an enforceable contract right.

To assess the funding status of the System, annual estimates of the pension benefit obligation are obtained through annual actuarial valuations. To estimate the amount, actuaries use demographic data (such as employee age, salary and service credits), economic assumptions (such as estimated salary increases and interest rates) and decrement assumptions (such as mortality and disability rates). These estimates are known as actuarial assumptions.

Actuarial Assumptions

Actuarial assumptions are projections based on past experience of the group and other groups with similar attributes. Assumptions should project future experience over terms of at least 50 years. Experience never coincides exactly with these projections. Differences that occur between assumptions and experience are called actuarial gains and losses. A review of the assumptions (an experience analysis) is required by statute. The most recent experience analysis was conducted in 1989 using demographic and economic data for the three-year period ended June 30, 1988. The review did not result in changes in actuarial assumptions which were last amended in June 1987.

## Actuarial Valuation

An important step in an actuarial valuation is application of a cost method assigning portions of the total value of benefits to past, present and future periods of employee service. This allocation is accomplished by development of normal cost and pension benefit obligation. Normal cost is the annual cost of service earned by System members during the fiscal year. Pension benefit obligation is a standardized disclosure of the present value of pension benefits, adjusted for the effects of projected salary increases which are estimated to be payable in the future as a result of employee services to date.

There are several accepted actuarial cost methods. the actuarial cost method used by the System is the attained age normal cost method with unit credit past service. Based on the findings of the 1989 experience analysis, the actuarial cost method for determining normal cost will change for fiscal years after June 30 , 1989 from the attained age method to the projected unit credit method.

The current normal cost is 14.9 percent of payroll. Eight percent of this normal cost is paid by the members' contributions. The remaining 6.9 percent is the employers' portion of the normal cost.

## Actuarial Assumptions

- Inflation assumption: 4 percent per annum (included in investment returns and earnings progression assumption).
- Investment return: 8 percent per annum, compounded annually.
- Retirement age: Graduated rates for active members. Inactive members are assumed to retire at age 62. Sample annual rates of retirement per 1,000 participants for active members follow.

| Age | Male | Female |
| :---: | ---: | :---: |
| 55 | 97 | 97 |
| 60 | 270 | 180 |
| 65 | 365 | 330 |
| 70 | 1,000 | 1,000 |

- Mortality: Active participants - UP 1984 Table, set back two years; nondisabled pensioners - UP 1984 Table, set back five years.
- Disability: Sample annual rates per 1,000 participants follow.

| Age | Male | Female |
| :---: | :---: | :---: |
| 20 | .35 | .70 |
| 30 | .42 | .84 |
| 40 | .58 | 1.15 |
| 50 | 1.20 | 2.40 |

- Separation: Graduated rates based on age and sex variations,
- Earnings progression: Merit and longevity increases, adjusted for inflation. Approximates 7 percent per year to earliest date of retirement eligibility. Sample annual percentage increases follow.

| Age | Unisex |
| :---: | :---: |
| 20 | $9.7 \%$ |
| 30 | 8.6 |
| 40 | 7.5 |
| 50 | 6.9 |
| $60 \quad$ Original from | 6.7 |
| UUNMERSITY OF ILLIMOUS_AT |  |
| URBANA-CHAMPAIGN |  |

'Since 1939, the Teachers'
Retirement System of the
State of Illinois bas provided pension and ancillary benefits to all public elementary and secondary teachers except for those employed by the city of Cbicago."

GASB Statement Number 5

The System has adopted the reporting requirements of Statement Number 5 of the Governmental Accounting Standards Board,
Disclosure of Pension Information by Public Employee Retirement Systems and State and Local Governmental Employers. This statement prescribes financial disclosure requirements for public employee retirement systems including a standardized measure of the pension benefit obligation. The System uses this standardized measure for funding purposes as well as for financial reporting. The actuarial terminology used by Statement 5 is used consistently for all financial and funding exhibits.

## Actuarial Valuation

| (In Millions of Dollars) |  |  |
| :---: | :---: | :---: |
|  | June 30 |  |
|  | 1989* | 1988 |
| Pension benefit obligation: <br> Retirees and beneficiaries currently receiving benefits |  |  |
|  | \$4,528 | 4,165 |
| Terminated employees not yet receiving benefits | 241 | 159 |
| Current employees: |  |  |
| contributions | 2,004 | 1,860 |
| Employer-financed vested | 1,495 | 3,720 |
| Employer-financed nonvested | 3,646 | 1,018 |
| Total pension benefit obligation | 11,914 | 10,922 |
| Net assets available for benefits, |  |  |
| Unfunded pension benefit |  |  |
| obligation | \$4,642 | 4,238 |

[^1]
## Reconciliation of Unfunded

 Pension Benefit Obligation

Fiscal year 1989 actuarial losses resulted from the following: average salaries increased by 7.6 percent compared to the 7 percent assumption; and actuarial investment return (including interest, dividends, and related gains) was 7.5 percent, compared to the 8 percent assumption.

## Employer Cost in Excess of Contributions



Actuarial Funding
Current Funding Policy

On August 23, 1989 Public Act 86-0273 was enacted which provides for amortization of the System's unfunded pension benefit obligation over 40 years with a seven-year phase in. This legislation provides financial stability for the System by funding benefits on an actuarially sound basis.

## Advantages of Actuarial Funding

Retirement benefits earned during employment are part of the payroll expense for each employee. Sound financing of a retirement system requires that benefits accruing to each employee be paid for during the career of the employee by regular contributions to the retirement system based on a percentage of payroll. When an employee retires the accumulated funds should be sufficient to provide for the benefits payable to that employee. The cost of benefits for current employees should be borne by current taxpayers and should not become a liability for future taxpayers.
Sound actuarial funding practices also protect the employer. Current assessment of costs for both the employer and contributing employees protects the employer from the future impact of increasing contributions to pay for benefits that were under-funded. In addition, current funding protects against funding problems caused by changes in the work force.
Sound actuarial funding practices bolster membership confidence in retirement security. An individual's retirement security should not depend on future taxpayers or be subject to short-term employer distress caused by economic cycles. When sound actuarial funding practices are used, investment earnings may provide an appropriate method to pay for additional cost of living adjustments required by annuitants.
As a public pension plan, the Teachers' Retirement System is not covered by the Employee Retirement Income Security Act of 1974 (ERISA). That federal legislation did provide funding standards for private pension plans which the Teachers' Retirement System uses as a model. ERISA standards require annual funding to amortize the unfunded pension benefit obligation in the same manner as a home mortgage, with level annual payments of principal and interest over 30 years.
> ''Sound actuarial funding practices bolster membership confidence in retirement security."
> 'An individual's retirement security sbould not depend on future taxpayers or be subject to short-term employer distress caused by economic cycles."

The Percentage of Benefits Covered by Net Assets exhibit compares the plan's net assets with the member's contributions, the amount necessary to cover the present value of benefits currently being paid, and the employer's portion of future benefits for active members.
A test of financial soundness of a pension system is its ability to pay all promised benefits when due. Column 1 represents the value of members' accumulated contributions. Column 2 represents the amount necessary to pay participants currently receiving benefits. Column 3 represents the employer's portion of future benefits for active members. The columns are arranged in order of priority: that is, members' contributions would be covered first, then current benefit recipients, and finally the employer portion of the active member benefits.
For a System receiving actuarially determined contribution amounts, the total of actuarial values in Columns 1 and 2 should generally be fully covered by assets and the portion of the actuarial value of Column 3 covered by assets should increase over time.
The Payroll Percentages test compares member payroll to unfunded accrued benefit cost, normal cost plus interest. These percentages should decrease over the years if the System is growing stronger.

## Test of Financial Soundness

The following three charts show ten-year trends representing differing perspectives on the System's actuarial status.

Funding Ratios*

| (In Millions of Dollars) |  | Net Assets at Market | Pension | Funding Ratio |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| As of | Net Assets |  |  |  |  |
| June 30 | at Cost |  | Obligation** | Cost | at Market |
| 1980 | \$2,497 | 2,277 | 4,957 | 50.4\% | 45.9 |
| 1981 | 2,896 | 2,493 | 5,390 | 53.7 | 46.3 |
| 1982 | 3,215 | 2,734 | 6,109 | 52.6 | 44.8 |
| 1983 | 3,410 | 3,605 | 6,690 | 51.0 | 53.9 |
| 1984 | 3,728 | 3,630 | 7,349 | 50.7 | 49.4 |
| 1985 | 4,265 | 4,598 | 7,982 | 53.4 | 57.6 |
| 1986 | 5,168 | 5,952 | 8,687 | 59.5 | 68.5 |
| 1987 | 6,092 | 6,958 | 9,950 | 61.2 | 69.9 |
| 1988 | 6,684 | 7,055 | 10,923 | 61.2 | 64.6 |
| 1989 | 7,272 | 8,088 | 11,914 | 61.0 | 67.9 |

*As required by statute, the System's actuaries conducted an analysis of experience for the four-year periods ended June 30 , 1981 and June 30, 1985, and for the three-year period ended June 30, 1988. For actuarial purposes, the effects of each analysis were reflected in the pension benefit obligation for the years ended June 30, 1982 and June 30, 1987, respectively, there was no effect on pension benefit obligation resulting from the three-year period ended June 30, 1988.
**Amounts shown for 1980-1981 were determined using the entry age normal actuarial cost method and do not comply with the standardized measure prescribed by GASB Statement Number 5. The difference in methodology is estimated to be non-material for comparison purposes.

## Percentage of Pension Benefit Obligation*


*Amounts shown for 1980-1981 were determined using the entry age normal actuarial cost method and do not comply with the standardized measure prescribed by GASB Statement Number 5. The difference in methodology is estimated to be nonmaterial for comparison purposes.

## Payroll Percentages

| (In Millions of Dollars) <br> UNFUNDED PENSION BENEFIT OBLIGATION* |  |  |  | EMPLOYER'S COST |  |  |  |  | EMPLO CONTRIBU | ER TIONS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year <br> Ended <br> June 30 | Member Payroll (1) | Amount <br> (2) | Percent of Payroll (3) | Employer's Normal Cost <br> (4) | Percent of Payroll (5) | Interest on Unfunded Pension Benefit Obligation (6) | Total (7) | Percent of Payroll (8) | Employer Contribution (9) | Percent of Payroll (10) |
| 1980 | \$1,856 | 2,460 | 152.5\% | 125 | 6.7 | 129 | 254 | 13.7 | 221 | 11.9 |
| 1981 | 2,021 | 2,495 | 123.5 | 128 | 6.3 | 131 | 259 | 12.8 | 247 | 12.2 |
| 1982 | 2.177 | 2,894 | 132.9 | 158 | 6.3 | 133 | 271 | 12.5 | 169 | 7.8 |
| 1983 | 2,287 | 3,280 | 14.3 .4 | 164 | 7.2 | 203 | 367 | 16.1 | 161 | 7.0 |
| 1984 | 2,345 | 3,621 | 154.4 | 176 | 7.5 | 230 | 406 | 17.3 | 207 | 8.8 |
| 1985 | 2,472 | 3.716 | 150.3 | 184 | 7.4 | 253 | 437 | 17.7 | 238 | 9.6 |
| 1986 | 2,633 | 3,519 | 133.6 | 179 | 6.8 | 260 | 439 | 16.7 | 260 | 9.9 |
| 1987 | 2,834 | 3.838 | 135.4 | 194 | 6.9 | 246 | 440 | 15.5 | 280 | 9.9 |
| 1988 | 3,007 | 4,238 | 140.9 | 197 | 6.6 | 309 | 506 | 16.8 | 242 | 8.1 |
| 1989 | 3,172 | 4,642 | 146.3 | 220 | 6.9 | 359 | 559 | 17.6 | 260 | 8.2 |

*Amounts shown for 1980-1981 were determined using the entry age normal actuarial cost method and do not comply with the standardized measure prescribed by GASB Statement Number 5. The difference in methodology is estimated to be nonmaterial for comparison purposes.

## Actuarial Information

## State Funding Summary



NOTE A - 9.6 percent of member payroll - the appropriations amount required by Section 16-158 of the Illinois Pension Code.

NOTE B - Employer contributions divided by actuarial requirement required by Section 16-159 of the Illinois Pension Code (Col. $6 \div$ Col. 3 )

Summary of Funding


Fiscal year ending June 30


- Employer contribution

NOTE C - Employer contributions divided by minimum requirement. (Col. $6 \div$ Col. 4 )

NOTE D - Employer
contributions divided by System expense.
(Col. $6 \div$ Col. 5 )

## Employer Cost/Contribution



Fiscal year ending June 30

# MEMBERSHIPAND BENEFITS I N F ORMATION 



1939-1989

# M E M B ERS HIP INFORMATION 

## Membership Profile

AIl certificated Illinois public school employees outside the City of Chicago are members of TRS. These members include full and part-time employees, subject to certain limitations as outlined in the "Plan Summary" on page 35.
Members are employed by 1,130 employers including public school districts.
System members do not contribute to Social Security; however, many earn coverage by that system through non-TRS employment. All TRS members hired after March 31, 1986 are required to contribute to Medicare.
As of June 30, 1988 (the most current fiscal year statistics available), there were 100,777 active TRS members, up just under 1 percent from the 99,934 members on June 30, 1987.
The average TRS member on June 30, 1988 was 42 years old. The average age of the member population has remained the same for the last three years although active member age had been increasing since the early 1970s.
Forty-one percent of the active member population was in the 35-44 age group during FY88, compared to 26 percent of total membership in this same age group ten years ago. During FY79, 9 percent of the total membership were age 20 to 24 . In FY87, this age group composed only 1.3 percent of the total member population.
The number of active members who choose to work after age 55 has risen steadily in the past decade, from 8.7 percent during FY 79 to 12 percent in FY88.

## Contributions

Active members contributed $\$ 268.3$ million as their required 8 percent of salary to the System, up 6 percent from FY88.
The average annual salary for active members rose 5.5 percent from FY88 to FY89, from $\$ 28,085$ to $\$ 29,638$. Since FY79, this figure has increased by 78.2 percent, from $\$ 16,632$ in FY80. Generally, the more years of service the member accrues, the higher salary he or she earns. Peak salaries averaging $\$ 43,465$ during FY88 were earned by the 426 members in the

## Active Members by Age



36-40 years of service category, while those with under 6 years of servace averaged $\$ 20,987$ annually.

## Member Refunds

Members who withdraw from active service with the System may apply for a refund four months from the last day of teaching. The refund includes accumulated retirement contributions, exclusive of the 1 percent survivor benefit contribution and accumulated interest.
The System paid 3,393 former members $\$ 13.5$ million in refunds of retirement contributions during FY89. This is a decrease of 2 percent from the $\$ 13.8$ million in refunds in FY88. The total number of refunds decreased 21 percent, from 4,090 in FY88.
A refund of the 1 percent survivor benefit contribution was paid to 428 retired members, down slightly from 938 members who received this refund in FY88. A total of $\$ 1.5$ million was paid for this refund, which is granted to retired members who request the refund and who do not have a beneficiary deemed a dependent under the Illinois Pension Code. Acceptance of this refund terminates the retired member's eligibility for survivor benefit coverage from the System.

## Member Services

The System maintains two offices, in Springfield and Lisle, to serve members throughout the state. During FY89, the TRS offices received over 67,000 phone calls. In addition, staff members sent out over 121,000 letters and conducted office consultations with an average of 155 members monthly.
Individual retirement conferences are held around the state each year by the System's benefits consultants. During FY89, 6,950 members attended these conferences. An additional 10,397 members attended group meetings held by TRS around the state.

During FY88, the System initiated a program to help members plan for retirement. TRS retirement planning seminars are targeted toward members who are five to ten years away from retirement. The seminars are designed to help members identify and plan to attain retirement goals. In FY89, 335 members attended

## Average Annual Salary Active Members by Years of Service As of June 30, 1988



# BENEFITSINFORMATION 

> ''The System maintains two offices, in Springfield and in Lisle, to serve members throughout the state."

A$s$ a trust fund for its members and annuitants, the Teachers' Retirement System provides retirement annuities, disability and survivor benefits. The System also administers the TRS Health and Prescription Drug Insurance Plan. These benefits are in the System's plan as outlined in Article 16, Chapter $1081 / 2$ of the Illinois Revised Statutes.

## Plan Design

The TRS plan is designed to pay specific benefits in amounts that are set forth by Illinois law. This design may only be changed by action of the Illinois General Assembly and the Governor.
Benefits cannot be increased or reduced without a change in the TRS plan design. The General Assembly and the Governor passed legislation this year which dramatically improves the annual increase in annuity. Teachers in retirement for many years have been strapped with an insufficient annual increase in benefits and a cost of living that has dramatically risen since their retirement. The new legislation compounds the 3 percent annual increase for retirees by basing it on current rather than original annuity.

## Retirement Benefits

During FY89, the TRS plan provided retirement benefits for 39,751 annuitants. The average benefit of $\$ 931$ was up 5 percent from $\$ 884$ on June 30, 1988.

## TRS Annuitant Profile

| June 30, 1989 |  |
| :--- | ---: |
| Average Age: | 73 |
| Average Service: | 26.9 |
| Average Annuity: | $\$ 931$ |
| Average Original Annuity: | $\$ 732$ |
| Average Years in Retirement: | 12 |

Overall, the System paid $\$ 436.6$ million in retirement annuities in FY89, up 9 percent from FY88. The number of annuitants receiving benefits rose during FY89, up 1,728 from June 30, 1988. The System offers retired members direct deposit of TRS annuity payments with participating financial institutions. At the end of FY89, 25,681 of the total 45,718 benefit recipients were participating in the direct deposit program. This represents 56.1 percent of all benefit participants.

Although the annuity for those members in retirement less than five years is higher than average at $\$ 1,323$, this amount drops to below the overall average after ten years in retirement - members retired between 11 and 15 years receive an average benefit of only $\$ 830$, below the $\$ 931$ average.
Average annuity also decreases as the retired member's age increases. Retirees aged 55 through 59 receive an average annuity of $\$ 1,415$ monthly, while those aged 80 and over receive an average of only $\$ 634$.
Of the 2,044 TRS members who retired during FY89, the average age was 61 , average service, 25.7, and average monthly benefit, $\$ 1,463$. These members retired with an average salary of $\$ 32,970$.
Members who are 55 or older and have 20 or more years of service may choose the early retirement option to avoid a reduction in their annuity if they retire before earning 35 years of service. Enacted in 1980, this option allows the member and employer to make a one-time contribution to TRS and avoid a reduced annuity. Current law calls for an end to the early retirement option after June 30, 1995. A nondiscounted annuity is granted to members with 35 or more years of service with no contributions required from either the member or the employer.

## Use of Early Retirement Option

| Year | Total Retirements | ERO Retirements | ERO of Total | Average <br> Payment | Average Salary |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1980^{\circ}$ | 1,528 | 89 | 5.8 | \$3,197 | \$17,560 |
| 1981 | 1,750 | 419 | 23.9 | 4,924 | 21,092 |
| 1982 | 1,725 | 384 | 22.3 | 5,532 | 23,073 |
| 1983 | 1,946 | 468 | 24.0 | 5,801 | 24,889 |
| 1984 | 1,842 | 454 | 24.7 | 6,451 | 28,340 |
| 1985 | 2,336 | 645 | 27.6 | 5,924 | 28,331 |
| 1986 | 2,160 | 534 | 24.7 | 6,757 | 30,985 |
| 1987 | 2,093 | 552 | 26.4 | 7,191 | 32,202 |
| 1988 | 2,116 | 555 | 26.5 | 7,646 | 34,935 |
| 1989 | 2,044 | 630 | 30.8 | 7,798 | 37,141 |

-Legislation effective June 30, 1980.

## Disability Benefits

Disability payments of $\$ 7.8$ million were made by the System during FY89, up 5 percent from FY88. A total of 1,268 nonoccupational disability benefits were paid to members whose average age was 57 and average years of service was 16.2.

There were 340 new nonoccupational disability benefits paid during FY89 and the average benefit for these new recipients was $\$ 972$. Of these new claims, 23 percent were for pregnancy-related disabilities; 13 percent were for mental illness; 11 percent for cancer and tumors, with other disabilities accounting for the remainder of the claims.

Twelve members received accidental disability benefits in FY89, with total payments of $\$ 162,878$.

## Benefits Information

## Survivor Benefits

Atotal of 1,233 death and survivor benefit claims were paid in FY89. Total payments rose from $\$ 22.6$ million in FY88 to $\$ 24.4$ million in FY89.
Average monthly survivor benefits of $\$ 364$ were paid to 4,532 survivors of TRS members and annuitants in FY89. The average age of the deceased was 72. There were 428 new claims during the year for monthly benefits and average monthly benefit for FY89 claims was $\$ 443$.

## Health Insurance

Since 1981, the System has provided health and prescription drug insurance. The plan, administered by Blue Cross/Blue Shield, is available to annuitants electing coverage. Annuitants may also enroll their eligible dependents. On June 30, 1989 enrollment in the plan totaled 15,670 annuitants and 4,165 dependents.

## Coverage Options

For annuitants and their dependents who qualify for Medicare, TRS provides Medicare supplement coverage. After the $\$ 300$ yearly deductible, the plan pays the balance of all claims that are reasonable and customary that Medicare does not pay. As of June 30, 1989, 11,246 members and 2,611 dependents were enrolled in the $\$ 300$ deductible option.

Annuitants who do not qualify for free Medicare Part A coverage at age 65 may elect the Special Coverage Option. This option provides coverage for both hospital and physician services. It pays all claims that are reasonable and customary after a $\$ 300$ deductible and $80 \%-20 \%$ coinsurance of the next $\$ 10,000$ of covered expenses and 100 percent coverage thereafter. As of June 30, 1989, 865 annuitants and dependents were enrolled in this option.

Health Plan Enrollment 1981-1989

> "'The General Assembly and the Governor passed legislation this year which dramatically improves the annual increase in annuity.',

Annuitants and their dependents under 65 are offered the choice of two types of coverage. On June 30, 1989, 2,145 annuitants and 1,549 dependents were enrolled in these plans.

## Premiums

The System pays half the cost of the premium for participating annuitants, however, dependent premiums are the responsibility of the members.

The amounts which the System paid in premiums have been:

## TRS Subsidy Payments

| FY 1981 | $\$ 109,689$ |
| :--- | ---: |
| FY 1982 | 626,695 |
| FY 1983 | $1,502,799$ |
| FY 1984 | $2,412,284$ |
| FY 1985 | $3,427,819$ |
| FY 1986 | $4,466,057$ |
| FY 1987 | $5,409,299$ |
| FY 1988 | $6,822,664$ |
| FY 1989 | $8,345,871$ |

## Reserve Account

The System maintains a Health Insurance Reserve Account. On June 30, 1988 the reserve fund balance was $\$ 34,179,823$ million. During FY89 the account was credited with the required $\$ 20$ million plus $\$ 2.8$ million interest earned. Premium payments of $\$ 8.3$ million were charged to the account leaving a June 30,1989 reserve fund balance of $\$ 49,834,502$.

## Claims Experience

| $\begin{gathered} \text { Year } \\ \text { June } 30 \end{gathered}$ | Premiums <br> Paid | Retention* Fees | Claims Paid |
| :---: | :---: | :---: | :---: |
| 1981 | \$ 291,001 | 21,068 | 100,572 |
| 1982 | 1,597,841 | 115,684 | 1,207,864 |
| 1983 | 3,826,362 | 277,021 | 3,467,117 |
| 1984 | 6,242,236 | 368,008 | 5,962,159 |
| 1985 | 8,931,731 | 427,746 | 8,195,968 |
| 1986 | 11,640,732 | 539,458 | 9,859,427 |
| - 1987 | 13,932,201 | 617,300 | 13,163,179 |
| 1) 1988 | 17,066,035 | 735,546 | 17,714,923 |
| 1989 | 20,859,736 | 899,055 | 22,015,321 |

- Retention is the percentage of premiums paid to the insurance carrier to cover the administrative costs for processing claims and the risk involved in underwriting the contract. Because the claims paid exceeded the premiums paid this year, Blue Cross/Blue Sbield forfeits the retention fees in addition to taking $d$ foss on excess claims.


## TRS LEGISLATIVE ISSUES

In 1989, the Illinois General Assembly and the Governor addressed long-term retirement security issues through legislation which not only provided annual increase improvements for all annuitants but also instituted a plan for reducing the state's debt to the Teachers' Retirement System.

The annual increase in benefits will now be 3 percent of current gross benefits where in the past the increase was 3 percent of the initial benefit received by a retiree. In addition, survivors, for the first time, will receive an annual increase in annuity. This increase will also be 3 percent of current gross benefits.

The compounded 3 percent annual increase represents a long-term benefit improvement. Unlike ad hoc increases of the past which provided a onetime boost in benefits, compounding of the annual increase will impact benefit increases each year. The longer an annuitant is in receipt of a benefit, the greater the impact of a compounded annual increase.

For example, in 1990 the average annuitant in retirement for 10 years will receive an annual increase in monthly benefits that is $\$ 5$ greater than the amount that would have been received under the old method of computing the annual increase. However, after 5 years this annuitant's total monthly benefit will be $\$ 35$ greater. (See Table 1)

Table 1. Effect of compounding on the average TRS annuitant in retirement for 10 years. In FY89, the average monthly benefit for this group was $\$ 838$, with an average initial benefit of $\$ 659$ per month.

| Year | Monthly Benefit, <br> Non-compounded Annual Increase | Monthly Benefit, Compounded Annual Increase | Monthly Difference |
| :---: | :---: | :---: | :---: |
| 1989 | \$ 838 | \$ 838 | 30 |
| 1990 | 858 | 863 | 5 |
| 1991 | 878 | 889 | 11 |
| 1992 | 897 | 916 | 18 |
| 1993 | 917 | 943 | 26 |
| 1994 | 937 | 971 | 35 |
| 1995 | 957 | 1,001 | 44 |
| 1996 | 976 | 1,031 | 54 |
| 1997 | 996 | 1,062 | 65 |
| 1998 | 1.016 | 1,093 | 77 |
| 1999 | 1,036 | 1,126 | 91 |
| 2000 | 1,055 | 1,160 | 105 |
| 2001 | 1.075 | 1,195 | 120 |
| 2002 | 1,095 | 1,231 | 136 |
| 2003 | 1,115 | 1,268 | 153 |
| 2004 | 1,135 | 1,306 | 171 |

Annual increase improvements addressed needs created by health care advances and economic trends. Recognizing the need for benefits which reflected the needs of annuitants, the Teachers' Retirement System joined forces with active and retired teachers in support of this successful effort to modernize the TRS retirement plan.

Efforts to educate members of the General Assembly regarding the long-term danger of underfunding the Teachers' Retirement System were also successful. In 1989, legislators and the governor approved a plan to completely pay off the state's $\$ 4.6$ billion debt to TRS by the year 2036. Improved funding for the first year of the plan was included in FY90 appropriations.

These recent changes are consistent with the history of TRS. Throughout its 50 years the System has sought to provide members with benefits that reflect the progressive growth and development of the society in which teachers work and live. Correspondingly, the 1989 improvements in post-retirement benefits do not mark an end to the benefit improvements needed to maintain a modern retirement system which meets the needs of its members.

## Retirement Formula

In fact, recent comparisons of TRS with teacher retirement plans in other states show that the benefits Illinois teachers receive still fall behind those provided to teachers outside of Illinois.

All twelve other states that, like Illinois, have teachers' retirement plans which are not coordinated with Social Security provide teachers with better retirement formulas than TRS. Eight of these states provide a formula of 2 percent or greater per year of service.
For example, Colorado teachers, like teachers in Illinois, do not participate in Social Security. A teacher retiring in Colorado at age 60 with 25 years of service and a final average salary of $\$ 25,000$ would receive an initial monthly annuity of $\$ 1,145$. A teacher in Illinois retiring under identical conditions would receive only $\$ 962$ per month.

Generally, retirement formulas are calculated using final average salary and years of service. A member is entitled to a specified percentage of the final average salary for each year of service. In 1988, the average newly retired teacher in Illinois received 1.86 percent of their average salary for each year of service. Twelve states in which teachers receive both a Social Security benefit and a teacher pension provide a 2 percent or greater retirement formula for teachers.
The following chart compares the average TRS monthly benefit at retirement to the average monthly benefit of non-Social Security states. The chart assumes retirement at age 60 with an average salary of \$25,000.

## Benefit Comparison

TRS \& Non-Social Security States


TRS Legislative Issues

## "Annual increase improvements addressed needs created by bealth care advances and economic trends."

## TRS vs. Other Illinois Systems

When the TRS plan is compared with other Illinois public employee pension plans, again the TRS retirement formula falls behind many others. Until relatively recently, the benefits provided under the thirteen public employee retirement systems covered by the Illinois Retirement Systems Reciprocal Act were reasonably comparable, with the exception of the General Assembly and Judges Retirement Systems. However, in recent years, a considerable amount of legislation has been enacted increasing the benefits provided under a number of the retirement systems, particularly those in the Chicago area. These increases have not been uniform from system to system.
Thus, currently there is a sizable disparity in the benefits provided under these systems. For example, the percentage of the last year's salary received by those who retire at age 60 with 20 years of service ranges from a high of $85 \%$ for Judges and General Assembly members to a low of $32.77 \%$ for Illinois teachers (See Table 2).

Table 2. This table shows the retirement annuity expressed as a percentage of employee's final salary.

| Retirement Systems | Retirement$\text { Age: } 60$ |  | Retirement$\text { Age: } 55$ |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Years of Service |  | Years of Service |  |
|  | 20 | 30 | 20 | 30 |
| Judges (11\%)* | 85.00\% | 85.00\% | 59.50\% | 59.50\% |
| General Assembly ( $11.5 \%$ ) | 85.00 | 85.00 | 85.00 | 85.00 |
| 1.M.R.E. (4.5\%) | 32.18 | 50.54 | 27.35 | 42.96 |
| Chicago Water Reclamation District (9\%) | +1.80 | 62.69 | 29.26 | 62.69 |
| Cook County Employees (8.5\%) | +0.39 | 62.12 | 28.27 | 62.42 |
| Chicago Laborers (8.5\%) | 34.88 | 55.08 | 29.65 | 46.82 |
| Chicago Municipal (8.5\%) | 34.88 | 55.08 | 29.65 | 46.82 |
| Chicago Park Employees (8.5\%) | 33.97 | 56.00 | 23.78 | 39.20 |
| Chicago Teachers (8\%) | 32.77 | 52.05 | 22.94 | $36 .+4$ |
| state Employees (not |  |  |  |  |
| coordinated with Social Security) (8\%) | 32.77 | 52.05 | 22.94 | 36.4 |
| State Universities (8\%) | 32.77 | 52.05 | 22.94 | 36.44 |
| TRS (8\%) | 32.77 | 52.05 | 22.94 | 36.4 |

- Required employee contribution appears in parenthesis

However, contribution rates for members of the various systems also differ greatly. For example, General Assembly members contribute $11.5 \%$ of their salary to their system, TRS members contribute $8 \%$ and State Employees coordinated with Social Security contribute $4 \%$. To more accurately compare what members of the systems receive for each dollar contributed, total member contributions at retirement were compared to the value of retirement benefits. (See Table 3)

Table 3. This table compares the value of retirement benefit provided under the various systems*, expressed as a percentage of the accumulated value of employee contributions. Only the regular retirement benefit and the employee contributions ** for the retirement benefit were taken into account in making these calculations.

| Retirement Systems | Retirement$\text { Age: } 60$ |  | Retirement Age: 55 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Years of Service |  | Years of Service |  |
|  | 20 | 30 | 20 | 30 |
| Judges | 414.7\% | 249.9\% | 316.3\% | 190.7\% |
| General Assembly | 388.8 | 234.3 | 423.7 | 255.4 |
| I.M.R.E. | 314.0 | 297.2 | 290.8 | 275.3 |
| Chicago Water Reclamation District | 235.4 | 212.7 | 179.5 | 231.8 |
| Cook County Employees | 227.4 | 211.7 | 173.4 | 230.8 |
| State Employees (coordinated <br> $\begin{array}{llllll}\text { with Social Security) } & 201.6 & 196.6 & 153.7 & 150.0\end{array}$ |  |  |  |  |
| Chicago Laborers | 196.4 | 186.8 | 181.9 | 173.1 |
| Chicago Municipal | 191.4 | 186.8 | 181.9 | 173.1 |
| Chicago Park Employees | 191.2 | 190.0 | 145.9 | 14.4 |
| Chicago Teachers | 18.5 | 176.6 | 140.7 | 134.7 |
| State Employees (not coordinated with |  |  |  |  |
|  |  |  |  |  |
| Social Security) | 184.5 | 176.6 | 140.7 | 134.7 |
| State Universities | 184.5 | 176.6 | 140.7 | 134.7 |
| TRS | 184.5 | 176.6 | 140.7 | 134.7 |

- The retirement benefit value was determined using an interest rate of $8 \%$ per year and the UP-1984 Mortality Table.
* Employee contributions were determined using an interest rate of $8 \%$ per year and a salary increase assumption of $6 \%$ per year.

Under the Teachers' Retirement System, the value of a benefit at retirement for an employee who retires at age 60 with 20 years of service is $185.5 \%$ of the value of the employee's accumulated contributions. In other words, the employer (for TRS, the State of Illinois) contributes 84.5 cents for every dollar contributed by a teacher retiring at age 60 with 20 years of service while under I.M.R.F., for example, the employer (the city or school district) contributes $\$ 2.14$ for each dollar contributed by an I.M.R.F. member.

## Formula Improvements

A$s$ TRS looks to the future, the retirement benefit formula provided to Illinois teachers calls out for equity. Not only do teachers merit a better formula, but such a move makes good competitive sense.

The future of the State of Illinois is closely tied to Illinois teachers. In order to draw the best and the brightest as educators for the leaders of tomorrow Illinois must be prepared to provide competitive compensation for teachers. That compensation includes a strong retirement benefit package.

During the 1990 legislative session, the Teachers' Retirement System will support legislation to improve the retirement benefit formula for Illinois teachers by replacing the current graduated formula with one that will provide 2.2 percent of final average salary for each year of service credit. This improvement is necessary to provide TRS members with retirement benefits which compare favorably with both teacher retirement benefits across the country and with other public employee retirement benefits in the State of Illinois.

## PLAN S U M M A R Y

## Administration

The Teachers' Retirement System was created and is governed by Chapter $1081 / 2$, Article 16 of the Illinois Revised Statutes. A Board of Trustees, comprised of the State Superintendent of Education, four persons appointed by the Governor, four elected members of the System and one elected annuitant, is authorized to carry out provisions of the Article. This Board appoints an executive director responsible for the general administration of the System.

## Revenue

Three primary sources of revenue for the System are contributions from active members, appropriations from the State of Illinois, and investment income. The required member contribution rate is 8 percent of gross earnings, designated as follows: $61 / 2$ percent for retirement annuity, $1 / 2$ percent for post-retirement increases, and 1 percent for death benefits.

## Membership

Membership in the System
is mandatory for all indivi-
duals certified under the
provisions of The School Code and employed in the public schools of Illinois (except Chicago).

## Service Credit

A member is granted one year of credit for 170 paid days but not more than one year during a fiscal year ending June 30 . Subject to limitations, credit is granted for substitute teaching, out-ofsystem service, an official leave of absence, part-time teaching, and military service. Such service requires additional contributions. Credit is also added at retirement for up to one year for 170 unused sick leave days established with TRS employers.

## Disability Benefits

A member disabled while employed as a teacher or within 90 days of such employment may be eligible for benefits if two licensed physicians verify the disability; however, no benefit will be paid while the member is entitled to receive salary (regular or sick leave) from the employer. In the case of disability due to pregnancy, only one physician must verify the disability.

Disability benefits are available for members with three years of creditable service at 40 percent of current salary. The member continues to earn service credit while in receipt of disability benefits.

A disability retirement annuity is available for members who have received a disability benefit for the maximum period. This benefit pays the greater of 35 percent of the last salary or the amount computed by the retirement annuity formula.

Occupational disability benefits are available to members disabled due to a duty-related accident or illness. This benefit pays 60 percent of current salary reduced by any amounts payable under a worker's compensation program. Service credit is earned while this benefit is payable.

## Death Benefits

Benefits are available to survivors of members if death occurs while the member is employed as a teacher; during the first year following termination of employment; or during retirement with 20 years of service. These benefits consist of a return of the member's accumulated contributions and the payment of survivor benefits.

Accumulated contributions are a return of the member's
accumulated contributions to the System, plus the statu-torily-required interest. Survivors of active members receive a return of accumulated contributions. Survivors of annuitants receive accumulated contributions minus the amount the member received as retirement annuity.
Survivor benefits are payable in one of two forms. A lump sum settlement is available to dependent and nondependent beneficiaries. It consists of a cash settlement based on the final salary rate as a teacher (maximum $=$ the final salary rate: minimum = one-sixth the final salary rate or $\$ 3,000$, whichever is greater.) Monthly income is payable to dependent beneficiaries of a member with $11 / 2$ years of credit at the time of death. This benefit includes a $\$ 1,000$, one-time payment, plus monthly maximums of $\$ 400$ for one dependent; $\$ 600$ for two or more dependents; or 50 percent of the deceased member's earned monthly retirement annuity, whichever is greater. The System provides a 3 percent annual increase in the currently payable monthly survivor benefit.

Members who cease teaching for reasons other than retirement more than one year prior to death with at least 20 years of service have a vested interest in survivor benefits; however, survivors of inactive members with less than 20 years service will receive only a return of accumulated contributions. If a member retires after December 31, 1981, and has no spouse or eligible child, he or she may elect to take a refund of actual survivor benefit contributions, waiving all rights to survivor benefits; however, the survivors are eligible for a return of the member's excess accumulated contributions (if any). To restore eligibility for these benefits, the member must return to contributing service for at least one year and repay the refund with interest.

## Retirement Annuity

A member qualifies for a retirement annuity after attaining one of the following; age 62 with 5 years of service credit; age 60 with 10 years; age 55 with 20 years. If retirement occurs between ages 55 and 60 with less than 35 years of service, the annuity will be reduced at the rate of $1 / 2$ percent for each month the member is under age 60 . A member age 55 with less than 35 years may use the early retirement option to avoid a discount for early retirement if retirement occurs before June 30 , 1995 and within six months of the last day of service requiring contributions and if the member and the employer both make a one-time contribution to the System.
The annuity is determined by the average salary of the four highest consecutive salary rates within the last ten years of creditable service and the percentage of average salary to which the member is entitled. This percentage is determined by the following formuia: 1.67 percent for each of the first ten years, plus 1.9 percent for each of the next ten years, plus 2.1 percent for each of the next ten years, plus 2.3 percent for each year over 30. The maximum annuity, 75 percent of average salary, is achieved with 38 years of service.

## Post-retirement

Increase
The System provides 3 percent compounded annual increases in the age or disability retirement annuity for members age 61 or older

## Refunds

The System will refund a member's contributions provided the member has officially resigned from a position requiring System membership and the application is submitted not earlier than four months after termination of employment. The refund consists of all retirement contributions made by the member excluding interest and the 1 percent death benefit contribution. When the member accepts a refund, he or she forfeits all credit with the System. The credit may be re-established if the member returns to teaching in a position requiring contributions to the System for one year and repays the refund with interest.

## TRS Health and Prescription Drug Plan

Annuitants and beneficiaries of the System and their eligible dependents may enroll in the TRS Health and Prescription Drug Plan. This partially subsidized plan covers hospital and physicians' medical expenses and prescription drugs.

## Special Conditions

Any member convicted of a felony related or in connection with teaching is not eligible for TRS benefits; however, that member may receive a refund of contributions.

Conditions involving a claim for benefits may require further clarification. If any conflicts arise between material in this summary and that of the law, the law takes precedence.

## Continuity of Credit Within Illinois

TRS is one of 13 systems included in the provisions of the Retirement Systems Reciprocal Act which assures continuous pension credit for public employment in

E X H I B I T S

## Active Members by Years of Age and Years of Service

|  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Years of Age |  |  |  |  |  |  |  |  |



## Exhibits

## Average Annual Salary of Active Members by Years of Service*

| Years of |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Service |  | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 |
| Under 1 | Total \# | 2,065 | 1,880 | 1,481 | 1,170 | 808 | 950 | 1,129 | 1,740 | 1,338 | 1,462 |
|  | Average 8 | 11,170 | 11,972 | 13,156 | 14,165 | 14,638 | 15,192 | 16,107 | 9,126 | 9,484 | 9,029 |
| 1-5 | Total \# | 32,707 | 30,596 | 28,981 | 26,614 | 22,674 | 18,814 | 17,901 | 20,420 | 22,046 | 23,330 |
|  | Average s | 12,535 | 13,298 | 14,414 | 15,682 | 16,689 | 17,266 | 17,926 | 18,668 | 19,826 | 20,987 |
| 6-10 | Total \# | 29,682 | 28,266 | 26,319 | 24,732 | 23,433 | 22,047 | 21,157 | 19,698 | 19,819 | 17,129 |
|  | Average 8 | 15,760 | 16,694 | 17,971 | 19,446 | 20,338 | 20,915 | 21,841 | 23,005 | 24,320 | 25,780 |
| 11-15 | Total \# | 18,465 | 20,203 | 21,750 | 22,560 | 23,201 | 23,462 | 22,833 | 20,700 | 19,460 | 18,417 |
|  | Average s | 18,555 | 19,809 | 21,554 | 23,277 | 24,467 | 25,341 | 26,378 | 27,607 | 29,001 | 30,312 |
| 16-20 | Total \# | 12,974 | 12,844 | 12,566 | 12,666 | 13,920 | 15,481 | 17,419 | 18,528 | 19,163 | 19,689 |
|  | Average s | 20,498 | 21,838 | 23,678 | 25,580 | 22,165 | 28,309 | 29,976 | 31,056 | 33,144 | 34,771 |
| 21-25 | Total \# | 5,927 | 6,807 | 7,583 | 8,355 | 8,588 | 8,747 | 9,089 | 9,391 | 10,257 | 11,414 |
|  | Averages | 21,822 | 23,377 | 25,368 | 27,415 | 28,976 | 30,199 | 31,657 | 33,309 | 35,246 | 37,153 |
| 26-30 | Total \# | 3.266 | 3.594 | 3,877 | 4,199 | 4,494 | 5,053 | 5,479 | 5,864 | 6,245 | 6,456 |
|  | Average 8 | 22,867 | 24,384 | 26,367 | 28,473 | 30,396 | 31,960 | 34,026 | 35,740 | 37,666 | 39,474 |
| 31-35 | Total \# | 716 | 1,124 | 1,680 | 2,228 | 2,279 | 2,251 | 2,009 | 2,002 | 2,089 | 2,394 |
|  | Averages | 22,091 | 24,151 | 27,067 | 29,914 | 31,887 | 33,651 | 35,782 | 37,533 | 39,310 | 41,730 |
| Over 35 | Total \# | 195 | 244 | 317 | 455 | 436 | 421 | 430 | 483 | 517 | 426 |
|  | Average 8 | 20,312 | 22,280 | 24,347 | 26,889 | 30,042 | 31,494 | 33,930 | 37,533 | 40,492 | 43,465 |
| Total | Total \# | 105,997 | 105,558 | 104,554 | 102,979 | 99,833 | 97,226 | 97,446 | 98,826 | 99,934 | 100,777 |
|  | Average s | 16,351 | 17,621 | 19,361 | 21,281 | 22,877 | 24,141 | 25,454 | 26,522 | 28,085 | 29,638 |

-Statistical information on the System's active membership is not yet available for FY89.

Active Members by Age

| $\begin{gathered} 1979-19 \\ \text { Years } \end{gathered}$ |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| of Age | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 |
| 20-24 | 6,771 | 6,144 | 5,325 | 4,263 | 3,106 | 2,509 | 2,703 | 1,405 | 1,371 | 1,318 |
| 25-29 | 22,572 | 20,080 | 17,511 | 15,106 | 12,886 | 10,924 | 9.883 | 8,588 | 8,464 | 8,562 |
| 30-34 | 22,027 | 22,398 | 22,746 | 21,180 | 19,456 | 17,500 | 15,964 | 12,877 | 11,762 | 10,879 |
| 35-39 | 15,280 | 16,448 | 17,381 | 19,416 | 19,775 | 20,301 | 21,208 | 20,844 | 19,981 | 18,642 |
| 40-44 | 11,456 | 11,891 | 12,422 | 13,252 | 14,536 | 15,395 | 16,583 | 19,802 | 20,942 | 22,194 |
| 45-49 | 9,906 | 10,017 | 10,276 | 10,539 | 10,787 | 11,202 | 11,614. | 13,269 | 14,929 | 16,188 |
| 50-54 | 8,710 | 9,099 | 9,339 | 9,464 | 9,464 | 9,372 | 9,494 | 10,177 | 10,502 | 11,066 |
| 55-59 | 6,166 | 6,340 | 6,346 | 6,438 | 6,563 | 6,673 | 6,714 | 7,618 | 7,763 | 7,730 |
| 60-64 | 2,694 | 2,658 | 2,681 | 2,741 | 2,698 | 2,715 | 2,610 | 3,286 | 3,268 | 3,273 |
| 65-69 | 387 | 461 | 498 | 516 | 502 | 554 | 551 | 867 | 848 | 806 |
| -69 | 28 | 22 | 29 | 64 | 60 | 81 | 122 | 93 | 104 | 119 |
| Total | 105,997 | 105,558 | 104,554 | 102,979 | 99,833 | 97,226 | 97,446 | 98,826 | 99,934 | 100,777 |

## Average Monthly Annuity for New Retirees by Age



## New Retirees by Years of Service

| Service | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1-5 | 61 | 60 | 61 | 69 | 83 | 84 | 113 | 97 | 92 | 92 |
| 6-10 | 65 | 72 | 79 | 86 | 77 | 106 | 198 | 106 | 112 | 122 |
| 11-15 | 135 | 157 | 158 | 160 | 143 | 150 | 173 | 114 | 150 | 125 |
| 16-20 | 250 | 254 | 258 | 284 | 257 | 275 | 242 | 265 | 242 | 230 |
| 21-25 | 293 | 343 | 316 | 354 | 312 | 397 | 343 | 351 | 347 | 365 |
| 26-30 | 267 | 359 | 314 | 386 | 326 | 465 | 413 | 441 | 399 | 410 |
| 31-35 | 283 | 334 | 375 | 431 | 449 | 578 | 436 | 437 | 465 | 508 |
| 36-40 | 131 | 118 | 121 | 142 | 152 | 241 | 213 | 252 | 265 | 238 |
| - 40 | 43 | 53 | 43 | 44 | 43 | 40 | 29 | 30 | 44 | 37 |
| Total | 1,528 | 1,750 | 1,725 | 1,956 | 1,842 | 2,336 | 2,160 | 2,093 | 2,116 | 2,127 |
| Average |  |  |  |  |  |  |  |  |  |  |
| Service | 24.9 | 25.1 | 25.1 | 25.4 | 25.5 | 26.3 | 24.4 | 25.8 | 25.9 | 25.9 |

## Exbibits

Increases in Monthly Annuity for Retirees


| Years of Service |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 26-30 |  | 31-35 |  | 36-40 |  | 41-45 |  | 46-50 |  | $50+$ |  | Totals |  |
| 1,713 |  | 1,915 |  | 1,131 |  | 105 |  | 31 |  | 7 |  | 8,993 |  |
| 8 | 43 | \$ | 61 | \$ | 96 | \$ | 107 | 8 | 76 | \$ | 91 | \$ | 47 |
| $\begin{array}{r} 1,691 \\ \& \quad 181 \end{array}$ |  |  | - |  |  |  | 148 |  |  |  |  | \$ | 2 |
|  |  | 1,942 |  | 670 |  | \$ |  | 31 |  | \$ | 3 | 8,742 |  |
|  |  | \$ | 243 | \$ | 279 |  | 290 | \$ | 288 |  | 200 | \$ | 162 |
| 1,289 |  | 1,231 |  | 923 |  | \$ | 294 | 58 |  | $3$ |  | 7,641 |  |
|  | 220 |  | 291 | \$ | 358 |  | 364 |  |  | \$ | 32395 | \$ | $\begin{array}{r} 202 \\ 28 \end{array}$ |
|  |  | \$ | 28 |  | 36 | \$ | 45 | \$ | 61 |  |  |  |  |
|  | 1,210 |  | 1,194 | 1,424 |  |  | 864 |  | 171 | - 8 |  |  | 7,980 |
| $\$$ | 186 | 8 | 253 | \$ | 312 | \$ | 306 | 8 | 281 | \$ | 241 | \$ | 199 |
| 8 | 77 | 8 | 80 | \$ | 89 | \$ | 104 | 8 | 116 | \$ | 119 |  | 79 |
|  | 513 |  | 485 |  | 583 |  | 430 |  | 100 |  | 2 |  | 3,387 |
|  | 129 | \$ | 168 | $\$$ | 210 | 8 | 229 | 8 | 218 | \$ | 192 | \$ | 142 |
| 8 | 152 | s | 145 | 8 | 146 | \$ | 154 | 8 | 166 | \$ | 179 |  | $\begin{array}{r} 144 \\ 2,048 \end{array}$ |
|  | 340 |  | 389 |  | 384 |  | 225 |  | 44 |  | 1 |  |  |
| 8 | 113 | \$ | 142 | $\$$ | 185 | 8 | 210 | 8 | 211 | 8 | 199 | s | 130 |
| \$ |  | S | $193$ | 8 | 170 | \$ | 174 | \$ | 193 | \$ | 194 | \$ | 186646 |
|  | 161 |  | $126$ |  | 92 |  | 42 |  | 5 |  |  |  |  |
| 8 | 82 | 117 |  | \$ 141 |  | \$ | 173 | \$ | 188 |  | - | \$ | 95 |
|  | 300 | \$ | 262 | \$ | 231 | \$ | 209 | \$ | 212 |  | - |  | 259207 |
|  | 45 |  | 28 |  | 6 |  |  |  | - |  | - |  |  |
|  | 98 | 99 |  | 8123 |  |  | - | - |  |  | - | \$ | 68 |
|  | 329 | s | 338 |  | \$ 301 |  | - |  | - |  | - | \$ | 333 |
|  | 9 |  | 2 |  |  |  | - |  | - |  | - | 8 | 93 |
| \$ | 65 | $8 \quad 73$ |  | $58$ |  |  | - |  | - |  | - | 8 | 47 |
|  |  | \$ | 422 |  |  |  | - |  | - |  | - | \$ | 374 |
|  | 2 |  | \$ 71 |  | $455$ |  |  | - |  | - |  | - |  | 6 |
| \$ |  |  |  |  | $-$ |  |  | - |  | - |  | - | \$ | 51 |
|  |  |  |  | - |  |  | - |  | - |  | - | 8 | 339 |
|  |  |  |  |  |  |  | - |  | - |  | - |  | 2 |
|  |  |  |  | 5,237 |  |  | - |  | - |  | - | 8 |  |
|  |  |  |  |  |  |  |  |  | - |  | - | \$ |  |
| 7,010$\$ \quad 144$ |  | 7,337 |  |  |  | 2,115 |  |  | 440 |  | 24 | $39,745$ |  |
|  |  | 8 | 191 | \$ | 244 | § | 274 | \$ | 252 | \$ | 197 | 8 | 14651 |
| 8 |  |  | 44 | \$ | 65 | \$ | 104 | 8 | 113 | \$ | 74 | \$ |  |

Annuitants By Benefit Range

| Benefit Range | Total | Cumulative Total | \% of Total | Cumulative \% of Total |
| :---: | :---: | :---: | :---: | :---: |
| \$ 1-100 | 727 | 727 | 1.9 | 1.9 |
| 101-200 | 1,031 | 1,758 | 2.6 | 4.5 |
| 201-300 | 2,014 | 3,772 | 5.1 | 9.6 |
| 301-400 | 2,623 | 6,395 | 6.7 | 16.3 |
| 401-500 | 3,371 | 9,766 | 8.6 | 24.9 |
| 501-600 | 4,161 | 13,927 | 10.6 | 35.5 |
| 601-700 | 2,969 | 16,896 | 7.5 | 43.0 |
| 701-800 | 2,836 | 19,732 | 7.2 | 50.2 |
| 801-900 | 2,778 | 22,510 | 7.1 | 57.3 |
| 901-1,000 | 2,406 | 24,916 | 6.1 | 63.5 |
| 1,001-1,100 | 1,952 | 26,868 | 5.0 | 68.4 |
| 1,101-1,200 | 1,879 | 28,747 | 4.8 | 73.2 |
| 1,201-1,300 | 1,598 | 30,345 | 4.1 | 77.3 |
| 1,301-1,400 | 1,380 | 31,725 | 3.5 | 80.8 |
| 1,401-1,500 | 1,221 | 32,946 | 3.1 | 83.9 |
| 1,501-1,600 | 997 | 33,943 | 2.5 | 86.4 |
| 1,601-1,700 | 891 | 34,834 | 2.3 | 88.7 |
| 1,701-1,800 | 652 | 35,486 | 1.7 | 90.4 |
| 1,801-1,900 | 584 | 36,070 | 1.5 | 91.9 |
| 1,901-2,000 | 553 | 36,623 | 1.4 | 93.3 |
| 2,001-2,100 | 444 | 37,067 | 1.1 | 94.4 |
| 2,101-2,200 | 385 | 37,452 | 1.0 | 95.4 |
| 2,200+ | 1,816 | 39,268 | 4.6 | 100.0 |

Average Monthly Annuity


## Disability Benefits

| New Fiscal Year Recipients |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of |
| New |$\quad$| Near |
| :---: |
| Recipients |$\quad$| Average |
| :---: |
| Age |$\quad$| Average |
| :---: |
| Monthly |
| Benefit |$\quad$| Average |
| :---: |
| Service | | Average Years <br> in Receipt <br> of Benefit |
| :---: |
| 1980 |

Monthly Survivor Benefits

| New Fiscal Year Recipients |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Number |  | Average |
|  | of New | Average | Monthly |
| Year | Recipients | Age | Benefit |
| 1980 | 303 | 61 | \$318 |
| 1981 | 336 | 63 | 335 |
| 1982 | 369 | 65 | 355 |
| 1983 | 454 | 65 | 351 |
| 1984 | 384 | 75 | 361 |
| 1985 | 426 | 66 | 359 |
| 1986 | 410 | 66 | 387 |
| 1987 | 413 | 67 | 496 |
| 1988 | 485 | 68 | 442 |
| 1989 | 428 | 69 | 443 |

## Membership Profile



INVESTMMETREPORT


1939-1989

## Introduction

The mission of the Teachers' Retirement System, to provide retirement security for members, is facilitated by management of the trust fund's investment portfolio, which totaled $\$ 8.0$ billion at market value on June 30,1989 . The System serves as fiduciary for the members' trust fund and is responsible for investment of the fund under authority of the prudent person rule which establishes a standard that fiduciaries shall prudently discharge their duties solely in the interests of fund participants and beneficiaries. By permitting optimal diversification of assets within the fund, the prudent person standard has enabled the System to enhance control over fund risk and return parameters. The prudent person standard also permits the System to establish an investment policy based solely upon member characteristics, plan characteristics, financial requirements of the trust fund and a particular risk/reward tradeoff.

The System has established a long-range Statement of Investment Objectives and Policies for managing and monitoring the fund. The investment policy establishes the fund's investment objective, to provide the greatest possible long-term benefits to members of the System by maximizing the total rate of return on investments within prudent parameters of risk. The investment policy also defines the responsibilities of the fiduciaries with respect to the fund, the statutory investment authority under the prudent person rule, the level of acceptable risk, asset restrictions, investment performance objectives and the guidelines within which outside investment managers operate.

The System's investment performance objective is to achieve an annualized $3 \%$ total rate of return in excess of the rate of inflation over a long-term period of time. In addition, each asset class is expected to outperform various representative market indices.

The fund is managed by professional investment management firms based on statutory investment authority under the prudent person rule and investment policy guidelines adopted by the Board of Trustees. The System's staff assists the Board of Trustees in the formulation and implementation of investment policy and long-term investment strategy.

## Asset Class/Manager Composition

1he establishment of asset class allocations is the most important decision in the pension investment management process. The major portion of investment performance comes from the allocation of asset classes. Large institutional portfolios, such as the System's, tend to be well diversified within the asset classes utilized. Therefore, although most investment managers of specific asset classes focus on security selection, specific securities held will not have nearly as much impact on total performance as will the overall level of particular asset class commitments.

Management of asset class allocations and diversification of investment approaches (active core, active specialty, index funds) has enabled the System to more effectively control the fund's risk/reward parameters.

At June 30, 1989, the System's asset class allocations and diversification by investment approach were as follows:

| Asset Class | \% of Total Fund |  |  |
| :---: | :---: | :---: | :---: |
|  | Active | Index | Total |
| Common Stock - U.S. | 15.6 | 25.5 | 41.1 |
| Bonds | 27.2 | 5.5 | 32.7 |
| Short-Term Investments | 7.3 | 1.4 | 8.7 |
| Common Stock - |  |  |  |
| International | 0.6 | 5.5 | 6.1 |
| Real Estate Equity | 10.4 | 0.0 | 10.4 |
| Venture Capital | 1.0 | 0.0 | 1.0 |
| Total | 62.1 | 37.9 | 100.00 |

During FY89 the System's U.S. common stock holdings increased to $41.1 \%$ of the total fund from $40.0 \%$ a year earlier. International common stock allocations decreased to $6.1 \%$ of the total fund from $6.5 \%$ a year earlier, leaving fiscal year-end total common stock holdings at $47.2 \%$ of the total fund.

Bonds decreased to $32.7 \%$ of the total fund from $37.0 \%$ a year earlier. This was largely attributable to reallocating funds from bonds to real estate. Short-term investments decreased to $8.7 \%$ of the total fund from $9.6 \%$ a year earlier. Both equity and fixed income managers were holding lower levels of cash at year's end.

Diversification into real estate equities represented $10.1 \%$ of the total fund at fiscal year end. Real estate was up from $6.5 \%$ of the total fund from the previous fiscal year end. Diversification by asset class, investment approach, and investment manager style provides the System with a greater expected rate of return while minimizing the risk of negative returns from adverse short-term changes in the markets.

The fund's five-year asset class allocation history is represented below.

## Asset Allocation



The System has established relationships with investment management firms having a diversity of management approaches, which tends to complement the diversification of asset classes. The managers have discretionary authority in the selection and retention of investments, subject to the provisions of the statutory investment authority and the Statement of Investment Objectives and Policies.

The System achieved a higher level of risk management capability during FY89 by adopting a long-term strategic plan designed to achieve a specific set of investment objectives. A globally diversified, multiple asset class balanced fund portfolio was designed in order to construct the optimal long-term asset mix. Additionally, active management of the System's foreign currency exposure was allocated to two external investment management firms, Matuschka Moser Partners and N.M. Rothschild International Asset Management Limited. On the domestic equity side, seven new active specialty managers were retained to provide a new balance between active and passive investment approaches. On June 30, 1989 the following external investment management firms were employed by the System:

## Fixed Income (Bonds)

Bear Stearns Asset Management
Dreyfus Management, Inc.
Marine Investment Management Company
Pacific Investment Management Company
State Street Bank and Trust Company

## Equity (Common Stock)

Alliance Capital Management Corporation
American National Bank of Chicago
Ariel Capital Management
Brandywine Asset Management, Inc.
Cedar Hill Associates, Inc.
Eagle Asset Management, Inc.
Hotchkis and Wiley
Kemper-Murray Johnstone International (International)
Keystone Investment Management Corp.
Morgan Stanley Asset Management (The Chicago Group)
NCM Capital Management Group, Inc.
Oppenheimer Capital
State Street Bank and Trust Company (International)

## Real Estate Equity

Bennett \& Kahnweiler Realty Advisors
F.I.A. Associates

First Chicago Investment Advisors
JMB Institutional Realty Corporation
Jones Lang Wootton Realty Advisors
TCW Realty Advisors

## Venture Capital

Frontenac Company
Tactical Asset Allocation
First Chicago Investment Advisors

## Foreign Exchange Exposure Management

## Matuschka Moser Partners

N. M. Rothschild International Asset Management Limited

## Investment Results

Asset Class/Market Indices Returns

During FY89, U.S. common stock was the best performing asset class as represented by the S\&P 500 Index and the Wilshire 5000 Index which returned $20.5 \%$ and $19.5 \%$, respectively. Domestic bonds were the next best performing asset class as represented by the Shearson Lehman Government/Corporate Bond (SLG/C) Index which returned $12.3 \%$. International common stock, represented by the Europe, Australia and Far East (EAFE) Index, returned $9.4 \%$. Short-term investments, represented by 91 -day Treasury Bills, returned $8.8 \%$. Non-U.S. dollar bonds, represented by the Salomon Non-Dollar Bond Index, returned $-1.7 \%$. All major asset classes and market indices except Non-dollar bonds outperformed the $5.1 \%$ annual rate of inflation as represented by the Consumer Price Index (CPI), while domestic and international equities demonstrated a remarkable recovery from the October 1987 stock market crash.

## Asset Class Cumulative Return By Representative Indices



Source: Harris Trust and Savings Bank

## Total Fund Results

The System's total fund time-weighted rate of return for FY89 of $14.4 \%$ was primarily attributable to the resurgence of the equity markets. The System's total fund annualized three-year and five-year returns of $10.0 \%$ and $16.2 \%$, respectively, continue to outperform the rate of inflation for these periods, $4.3 \%$ and $3.6 \%$, respectively. The System's long-term objective, to exceed the rate of inflation by $3 \%$, has been achieved for both the three-year and five-year periods. The System's income rate of return during FY89 was $6.5 \%$ ginal from

## Investment Summary

U.S. Equity Results and Profile

U.S. equity manager objectives are to achieve a total investment return $6 \%$ in excess of the rate of inflation and in excess of the Standard \& Poor's (S\&P) 500 Stock Index on an annualized basis over a three- to five-year period or market cycle. In addition, the Wilshire 5000 Index is informally used as a benchmark since it is more representative of the aggregate U.S. equity market. The 5000 stocks within the Wilshire 5000 Index, as opposed to the 500 stocks within the S\&P 500 Index, are highly diversified across the various equity market sectors and industries, and have highly diversified financial characteristics and risk factors which ultimately influence the total return.
During FY89, the portfolio's U.S. common stocks returned $18.3 \%$ compared to the S\&P 500 return of $20.5 \%$ and the Wilshire 5000 return of $19.5 \%$. For three- and five-years, U.S. common stocks generated annualized returns of $11.1 \%$ and $19.2 \%$, respectively, below S\&P 500 returns of $12.0 \%$ and $20.1 \%$ for the three-year and five-year periods, respectively. The portfolio's U.S. common stocks performed more favorably when compared with the three- and five-year Wilshire 5000 returns of $10.6 \%$ and $19.1 \%$, respectively. Combined U.S. equity manager accounts, which include both common stock and short-term investments, returned $18.1 \%$ during FY89.
At fiscal year end, $43.6 \%$ of the System's investment portfolio was assigned to U.S. equity managers, including short-term investments, compared to $\mathbf{4 2 . 9 \%}$ the prior fiscal year end. Within the U.S. common stock asset class, $46.5 \%$ of the asset class was allocated to an S\&P 500 Index Fund and $12.7 \%$ to a Non-S\&P 500 Index Fund at fiscal year end. The remaining $40.8 \%$ of the U.S. common stock asset class was allocated to active and enhanced index fund relationships. During FY89, the market value of assets assigned to U.S. equity managers increased from $\$ 3.01$ billion to $\$ 3.51$ billion due to $\$ 540$ million of dividend income/ appreciation and $\$ 43$ million of reallocations from the U.S. equity asset class to other asset classes.
Major sector diversification changes took place during FY89 in the portfolio's U.S. common stocks. The following listing summarizes these changes and also provides a comparison with the $\mathrm{S} \& \mathrm{P} 500$ and the Wilshire 5000 Indices:

## Diversification by Industry Sector (\%)

| Sector | June 30, 1989 |  |  | June 30, 1988 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | TRS | $\begin{aligned} & 58 P \\ & 500 \end{aligned}$ | $\begin{aligned} & \text { WIL } \\ & 5000 \end{aligned}$ | TRS | $\begin{aligned} & \$ 8 P \\ & 500 \end{aligned}$ | $\begin{aligned} & \text { W1L. } \\ & 5000 \end{aligned}$ |
| Consumer |  |  |  |  |  |  |
| Non Durables | 27.8 | 30.9 | 28.1 | 27.4 | 30.5 | 26.9 |
| Technology | 14.3 | 11.8 | 10.8 | 17.0 | 13.4 | 12.5 |
| Materials and |  |  |  |  |  |  |
| Service | 13.6 | 11.4 | 12.9 | 11.5 | 13.7 | 13.9 |
| Utilities | 11.8 | 13.4 | 14.6 | 6.9 | 12.3 | 12.9 |
| Finance | 11.7 | 9.0 | 12.9 | 14.8 | 6.2 | 12.6 |
| Energy | 8.1 | 12.2 | 9.4 | 11.1 | 12.0 | 9.3 |
| Capital Goods | 6.4 | 5.4 | 5.3 | 5.6 | 5.3 | 5.2 |
| Consumer Durables | 3.3 | 3.5 | 3.3 | 3.1 | 3.6 | 4.0 |
| Transportation | 3.0 | 2.4 | 2.7 | 2.6 | 3.0 | 2.7 |



All S\&P 500 industry sectors except Technology provided positive rates of return during FY89, with Consumer Non-Durables (34.1\%), Utilities (28.4\%), and Finance (26.0\%) the leading industry sector performances.

## S\&P 500 Industry Sector Returns



Source: Harris Trust and Savings Bank
U.S. equity managers made major stock selection adjustments to their accounts during FY89, as evidenced by the following comparison of equity portfolio characteristics with the S\&P 500 and the Wilshire 5000 Indices:

## U.S. Equity Portfolio Profile

|  | June 30, 1989 |  |  | June 30, 1988 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | TRS | $\begin{aligned} & \text { S\&P } \\ & 500 \end{aligned}$ | $\begin{aligned} & \text { WIL } \\ & 5000 \end{aligned}$ | TRS | $\begin{aligned} & \text { S\&P } \\ & 500 \end{aligned}$ | $\begin{aligned} & \text { WIL } \\ & 5000 \end{aligned}$ |
| Capitalization (SBil) | 10.55 | 14.04 | 10.72 | 10.50 | 13.80 | 9.70 |
| Price/Earnings Ratio | 11.93 | 11.53 | 13.01 | 12.96 | 12.52 | 13.56 |
| Dividend Yield (\%) | 2.92 | 3.45 | 3.15 | 3.39 | 3.76 | 3.25 |
| Beta | 0.99 | 1.00 | 1.07 | 0.99 | 1.00 | 1.07 |
| Diversification (R-Squared) | 0.97 | 1.00 | 0.99 | 0.98 | 1.00 | 0.97 |
| Five-Year Earnings Growth Rate (\%) | 13.67 | 9.06 | 8.45 | 8.79 | 5.42 | 6.43 |
| Marke//Book Ratio | 2.80 | 2.82 | 2.58 | 2.30 | 2.62 | 2.38 |

International Equity Results

International equity manager objectives are to achieve a total investment return 6\% in excess of L the rate of inflation and in excess of the EAFE Index. During FY89, the portfolio's international common stocks returned $14.5 \%$, as compared to a return of $9.4 \%$ for the 18 country foreign equities market EAFE (Europe, Australia, Far East) Index. This outperformance is attributable primarily to the systematic underweighting of the Japan component of the international equity portfolio. The Japanese market underperformed EAFE both in local currency and in U.S. dollar terms. The strength of the U.S. dollar over most of the first six months of calendar 1989 contributed to a lower international equity return than was experienced over the 1985-1987 period. The baske of EAFE currencies declined by UNIVERSITY OF ILLINOIS AT

URBANA-CHAMPAIGN
$7.6 \%$ over the 12 months ended June 1989, which reduced a $17.8 \%$ EAFE return in local (foreign) currency terms to $9.5 \%$ in U.S. dollar terms. The System's new currency exposure managers also contributed to the excess return above the EAFE Index. Kemper-Murray Johnstone, the System's only active international equity manager, generated a $10.6 \%$ return for the year, $1.2 \%$ over the EAFE return.

At fiscal year end, $19.3 \%$ of the asset class was allocated to an EAFE Index Fund and $69.7 \%$ of the asset class was allocated to an EAFE ex-Japan Fund. In addition, $11.0 \%$ of the asset class was allocated to an active manager. During FY89, the market value of assets assigned to international equity increased from $\$ 432$ million to $\$ 472$ million due to $\$ 56$ million of market value appreciation and $\$ 16$ million of reallocations from the international asset class to other asset classes.

Venture Capital Results
T Tenture capital investments returned $6.9 \%$ dur-- ing FY89. A representative venture capital index is not available for relative performance comparison. Over the long term, however, and as a result of venture capital's higher risk orientation, venture capital is expected to provide annualized returns over $10 \%$ in excess of returns provided by the $S \& P$ 500 and Wilshire 5000 Indices. On June 30, 1989, the System had a market value of $\$ 87$ million invested in three venture capital limited partnerships.

Fixed Income Results and Profile

F$\checkmark$ ixed income manager objectives are to achieve a total investment return $2 \%$ in excess of the rate of inflation and in excess of the bond market, as measured by Shearson Lehman Government/Corporate Bond (SLG/C) Index, on an annualized basis over a three- to five-year period, or a market cycle. During FY89, the System's bond portfolio, including all fixed income instruments with maturities greater than one year, generated a $13.8 \%$ total return, compared to the $12.3 \%$ return of the SLG/C Index.

The total funds under management by fixed income managers, including short-term investments, generated a $12.3 \%$ total return during FY89. For a three- and five-year period, bonds generated $8.4 \%$ and $15.4 \%$ annualized returns, respectively, as compared to $8.1 \%$ and $14.4 \%$, respectively for the SLG/C Index. During FY89, the market value of total assets assigned to fixed income managers, including short-term investments, increased from $\$ 2.931$ billion to $\$ 2.950$ billion due to $\$ 326$ million in interest income/appreciation and reallocation of $\$ 307$ million from the bonds asset class to other asset classes.

Financial futures contracts controlling approximately $\$ 78$ million of underlying U.S. Treasury Bonds and U.S. Treasury Notes, are included within the $\$ 2.950$ billion market value of total assets assigned to fixed income managers at fiscal year end. The futures contracts contributed substantially to the superior performance of the System's fixed income portfolio. Futures contracts continue to serve as a cost effective tool for implementation of portfolio strategies.

The following exhibits reflect changes made within fixed income manager portfolios during FY89 with regard to diversification by issuer type and quality ratings, as well as the underlying bond portfolio characteristics (excluding short-term investments) primarily affecting total return.

## Diversification By Issuer Type For Fixed Income Manager Portfolios



Source: Harris Trust and Savings Bank

## Diversification By Quality Rating For Fixed Income Manager Portfolios



Bend Portfolio Profile


Real Estate Equity Investment Results

Real estate equity investments made by the System's four closed-end fund managers and three separate account managers returned $8.7 \%$ during FY89. The income component of the total return was $6.2 \%$, while capital appreciation accounted for $2.5 \%$. The separate accounts' total return of $9.0 \%$ outperformed the $7.2 \%$ total return of closed end funds. Over the long term, the real estate equity investment objective is to achieve a total investment return $6 \%$ in excess of the rate of inflation. During FY89, the market value of assets assigned to the System's real estate investment managers increased from $\$ 473$ million to $\$ 938$ million due to $\$ 20.8$ million of market value appreciation, $\$ 48.2$ million in income/ reinvested income, and $\$ 396$ million of reallocations from other asset classes to the real estate asset class. The System will continue to progress toward a $15 \%$ asset allocation target for the real estate equity asset class over the next two to three years.

## Short-Term Investment Results

The investment management firms use discretion in allocating funds to short-term investments within the respective asset classes. Managers confine portfolio investment to typical short-term investments, such as U.S. Treasury Bills, certificates of deposit, bankers acceptances and commercial paper, and commingled short-term investment funds.

As an asset class, the System's short-term investments generated a total return of $9.3 \%$, during FY89. For the five years, short-term investments returned $8.3 \%$, underperforming the $19.8 \%$ return of U.S. common stocks and the $15.4 \%$ of bonds. Total assets allocated to short-term investments increased from $\$ 678$ million to $\$ 699$ million during FY89.

Investment Portfolio Summary*

| June 30, 1989 | Book Value | \% of <br> Total <br> Book <br> Value | Market Value | \% of <br> Total <br> Market <br> Value | Yield at Market |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BONDS, CORPORATE NOTES AND PREFERRED STOCK |  |  |  |  |  |
| Government Obligations <br> U.S. Government Federal Agency Municipal Bonds | $\begin{array}{r} 8 \\ 1,331,530,920 \\ 401,421,620 \\ 978,283 \\ \hline \end{array}$ | $\begin{gathered} 18.4 \% \\ 5.6 \\ .0 \\ \hline \end{gathered}$ | $\begin{array}{r}8 \\ 1,363,597,122 \\ 413,772,208 \\ 991,959 \\ \hline\end{array}$ | $\begin{gathered} 17.0 \% \\ 5.1 \\ 0 \\ \hline \end{gathered}$ | $\begin{aligned} & 9.0 \% \\ & 8.4 \\ & 9.7 \end{aligned}$ |
| Total Government Obligations | 1,733,930,823 | 24.0 | 1,778,361,289 | 22.1 |  |
| Corporate Obligations Finance |  |  |  |  |  |
| Finance Industrial and Miscellaneous | $498,385,768$ $84,343,406$ | 6.9 1.1 | $\begin{array}{r} 509,923,314 \\ 86,115,474 \end{array}$ |  |  |
| Public Utilities | 47,136,140 | . 7 | 47,373,400 | . 6 | 11.0 |
| Telephone | 7,497,770 | 1 | 8,173,690 | . 1 | 9.9 |
| Transportation | 9,126,688 | 1 | 9,210,600 | . 1 | 10.0 |
| Total Corporate Obligations | 646,489,772 | 8.9 | 660,796,478 | 8.2 |  |
| International | 180,507,420 | 2.5 | 180,099,986 | 2.3 | 8.9 |
| Convertible issues and Preferred Stock | 4,303,224 |  | 7,850,096 | 1 | 3.5 |
| TOTAL BONDS, CORPORATE NOTES AND PREFERRED STOCK | 2,565,231,239 | 35.5 | 2,627,107,849 | 32.7 |  |
| COMMON STOCK - U.S. | 2,645,295,130 | 36.6 | 3,303,388,076 | 41.1 | 3.2 |
| SHORT TERM INVESTMENTS** | 699,433,900 | 9.7 | 699,606,144 | 8.7 | 9.6 |
| COMMON STOCK - INTERNATIONAL | 418,216,751 | 5.8 | 486,923,965 | 6.1 | 0.1 |
| REAL ESTATE EQUITY | 808,984,433 | 11.2 | 838,019,567 | 10.4 | 6.2 |
| VENTURE CAPITAL | 84,899,463 | 1.2 | 83,673,952 | 1.0 | 8.8 |
| TOTAL PORTFOLIO | \$ 7,222,060,916 | 100.0\% | (8,038,719,553 | 100.0\% | 5.9\% |

- For investment purposes, financial futures contracts in the net amount of $\$ 78,471,794$ were classified according to the type of security controlled and correspondingly removed from the classification as short-term investments as follows: U.S. Government Obligations - \$29,970,594 and Common Stock - U.S. - \$48,501,200.
- Includes accrued interest and dividends totaling \$80,285,149

Composition of Investments
(At Market Value)


Summary Statistics The following tables summarize the development and performance of the total investment portfolio, including accrued income and miscellaneous assets, during the last five years:

Book/Market Value Reconciliation

|  | Fiscal Years Ending June $\mathbf{3 0}$ (Millions) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1985 | 1986 | 1987 | 1988 | 1989 | Five Years 1985-1989 |
| Beginning Book Value | \$3,728 | \$4,265 | \$5,168 | \$6,092 | \$6,684 | \$3,728 |
| Net Contributions Added | 92 | 90 | 89 | 32 | 26 | 329 |
| Investment Income | 329 | 345 | 364 | 394 | 428 | 1,860 |
| Net Realized Gain (Loss) | 116 | 468 | 471 | 166 | 134 | 1,355 |
| Ending Book Value | 4,265 | 5,168 | 6,092 | 6,684 | 7,272 | 7,272 |
| Unrealized Gain (Loss) - |  |  |  |  |  |  |
| Beginning of Period | (102) | 329 | 780 | 866 | 371 | (102) |
| Unrealized Gain (Loss) - |  |  |  |  |  |  |
| During Period | 431 | 451 | 86 | (495) | 446 | 919 |
| Ending Market Value* | \$4,594 | \$5,948 | \$6,958 | \$7,055 | \$8,089 | \$8,089 |

*Includes miscellaneous assets.

## Performance Summary

Annualized Percent for Periods Ending June 30, 1989*

|  |  |  |  |  |  | Annualized |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1985 | 1986 | 1987 | 1988 | 1989 | 3 Years | 5 Years |
| Total Time-Weighted Return TRS Inflation (CPI) | $\begin{array}{r} 24.3 \\ 3.7 \end{array}$ | 27.7 1.5 | 15.4 3.8 | 0.9 4.0 | $\begin{array}{r} 14.4 \\ 5.1 \end{array}$ | $\begin{array}{r} 10.0 \\ 4.3 \end{array}$ | $\begin{array}{r} 16.2 \\ 3.6 \end{array}$ |
| Common Stock - U.S. Returns TRS S\&P 500 Wilshire 5000 | $\begin{array}{r} 28.7 \\ 31.0 \\ 31.2 \\ \hline \end{array}$ | $\begin{aligned} & 36.2 \\ & 35.9 \\ & 35.3 \\ & \hline \end{aligned}$ | $\begin{aligned} & 23.8 \\ & 25.1 \\ & 20.2 \\ & \hline \end{aligned}$ | -6.3 -6.8 -5.9 | $\begin{array}{r} 18.3 \\ 20.5 \\ 19.5 \\ \hline \end{array}$ | $\begin{aligned} & 11.1 \\ & 12.0 \\ & 10.6 \\ & \hline \end{aligned}$ | $\begin{aligned} & 19.2 \\ & 20.1 \\ & 19.1 \end{aligned}$ |
| Bond Returns TRS Shearson Lehman G/C Bond Index | $30.3$ <br> 28.7 | $23.3$ $20.6$ | 4.8 <br> 4.7 | 6.7 <br> 7.4 | $\begin{array}{r} 13.8 \\ 12.3 \\ \hline \end{array}$ | 8.4 <br> 8.1 | 15.4 14.4 |
| Common Stock International Returns TRS <br> EAFE Index | $\begin{array}{r} 7.9 \\ 23.8 \end{array}$ | $\begin{array}{r} 103.6 \\ 89.7 \end{array}$ | 56.5 58.8 | -7.7 3.9 | $\begin{array}{r} 14.5 \\ 9.4 \end{array}$ | $\begin{aligned} & 18.3 \\ & 21.8 \end{aligned}$ | $\begin{aligned} & 29.4 \\ & 33.5 \end{aligned}$ |
| Real Estate Equity Returns | 8.8 | 8.8 | 9.1 | 7.7 | 8.7 | 8.5 | 8.6 |
| Venture Capital Returns | 15.4 | 48.8 | 14.0 | 2.0 | 6.9 | 7.5 | 16.4 |
| Short-Term Returns TRS 91-Day Treasury Bills | 10.6 8.8 | 8.4 7.6 | $\begin{aligned} & 6.2 \\ & 5.5 \end{aligned}$ | $\begin{aligned} & 7.3 \\ & 6.4 \end{aligned}$ | 9.3 8.8 | 7.6 6.9 | $\begin{aligned} & 8.3 \\ & 7.4 \end{aligned}$ |
| Income Rate of Return** | 8.6 | 6.9 | 5.6 | 5.9 | 6.5 | 6.0 | 6.7 |
| Cash Return** | 11.9 | 19.1 | 16.2 | 9.5 | 9.4 | 11.7 | 13.2 |
| Asset Allocation <br> (Annual Average) <br> Bonds <br> Common Stock - U.S. <br> Short-Term <br> Other ${ }^{*}$... | $\begin{array}{r} 41.9 \\ 35.3 \\ 20.5 \\ 2.3 \end{array}$ |  | $\begin{array}{r} 42.1 \\ 41.1 \\ 8.3 \\ 8.5 \end{array}$ | 38.8 40.6 9.1 11.5 | $\begin{array}{r} 32.9 \\ 40.8 \\ 9.0 \\ 17.3 \end{array}$ | $\begin{array}{r} 37.9 \\ 40.9 \\ 8.8 \\ 12.4 \end{array}$ | $\begin{array}{r} 40.3 \\ 40.1 \\ 10.9 \\ 8.7 \end{array}$ |

- Performance calculations provided by Harris Trust and Savings Bank
- "Income return, based on average market value, includes real estate income, interest and dividends.
* Cash return, based on beginning book value, includes real estate income, interest, dividends and realized gains/losses.
. . - Includes Real Estate Equity. Common Stock-International, Bonds-International aind venture Capital.

INVESTMENTLISTING


## Investment Listing

\begin{tabular}{|c|c|c|c|c|c|c|}
\hline GOVERNMENT OBLIGATIONS \& \[
\begin{gathered}
\text { Moody's } \\
\text { Qually } \\
\text { Rating }
\end{gathered}
\] \& \[
\underset{\substack{\text { Coupon } \\ \text { Rate }}}{\text { coun }}
\] \& \(\underset{\substack{\text { Maturity } \\ \text { Date }}}{ }\) \& \(\mathrm{c}_{\text {Par }}^{\text {Patue }}\) \& \(\underset{\substack{\text { Book } \\ \text { Value }}}{ }\) \& Market \\
\hline \& AAA \& \({ }_{9}^{8.000 \%}\) \& \&  \& \({ }_{4}^{4} \mathbf{4}, 764.831 .21\) \& \%.408.675 \\
\hline \& AMA \& 9.9000 \& \&  \& 4,751.217 \& 3,471.545 \\
\hline \& AAA \& \({ }_{9}^{9.500}\) \& \& 3.500 .00
\(16.935,703\) \&  \&  \\
\hline \& AAA \& 10.000 \& \& +1,948.881 \& \(1,887,369\)
\(5.277,799\) \& \(1,970.182\)
\(5,187,568\) \\
\hline \& AMA \& 13.250 \& \& 399.046 \& 424,984 \& . 425.730 \\
\hline \& AAA \& 14,750
15.750 \& \& - \(\begin{aligned} \& 4.6359 .741 \\ \& \text { 3,6488 }\end{aligned}\) \& 4,669.042 \& 4,562.656 \\
\hline \& \({ }_{\text {ANA }}\) \& 16.000 \& \&  \& (1,832.680 \& (1,910.582 \\
\hline GNMA Pools ............... \& AAA \& 7.250 \& various \& 7.792 .372 \& 6.166.014 \& 7.127.526 \\
\hline \& AAA \& \({ }_{8}^{8.000}\) \& \& - \({ }_{\text {2, }}^{\text {2,546,182 }}\) \& 1.813 .289
\(9,021.538\) \& 1,960.756 \\
\hline \& AAA \& \({ }_{8}^{8.750}\) \& \& S,180,493 \& 9,947,146 \& \(\underset{\text { ¢,017,236 }}{ }\) \\
\hline \& AAA \& \({ }^{8.875}\) \& \& 3,000.000 \& 2,8888,438 \& 3,046,500 \\
\hline \& AAA \& 9.250 \& \& \begin{tabular}{l}
\(9,715,117\) \\
\(3,299,140\) \\
\hline
\end{tabular} \&  \& 9,502.551 \\
\hline \& AAA \& 9.400 \& \& 3,009.000 \& (2.932.500 \& 3.1999.500 \\
\hline \& AAA \& 9.500
9.625 \& \& 1,090.000 \& 948.586 \& 1,999.197 \\
\hline \& \({ }_{\text {AAA }}^{\text {AAA }}\) \& 10.000
11.000 \& \& 4.244.419 \& 4.0999.350 \& +i.330.575 \\
\hline \& AAA \& 11.500 \& \& 16.908.528 \& - 17.92898 .029 \& 18.134.400 \\
\hline \& AMA \& 12.000 \& \& 71,795
78.523 \& 72,778
86.032 \& 77,852
86.031 \\
\hline \& AMA \& 12.750 \& \& 1,702.654 \& 1.797.365 \& 1,885:842 \\
\hline \& AMA \& 13.000
13.250 \& \& \begin{tabular}{l} 
944.086 \\
\hline 35.039
\end{tabular} \& 1,010.650 \& (1,024,918 \\
\hline \& \({ }_{\text {AMA }}^{\text {AAA }}\) \& 13.500
16.000 \& \& 2,279,780 \& 2,452.571 \& 2.479.688 \\
\hline GNMA Pools Stripped Coupons \& AMA \& 16.000 \& \& 17,000.000 \& 4.445.300 \& 5,331.751 \\
\hline Guaranteed Morgage Corporation II \& \({ }_{\text {A3 }}\) \& 11.875
11.000 \& - 04.00 -2006 \({ }^{\text {12-01-2015 }}\) \&  \& 3,977.073 \& 3, \(\begin{aligned} \& 3,940.722 \\ \& 6.142778\end{aligned}\) \\
\hline Int'1 Bank for Recosstruction and Development \& AA \& 1.5800
13 \& \({ }_{0}^{06-26-2016}\) \& 3,00,000 \& - 2.509 .440 \& 2,852,820 \\
\hline  \& \({ }_{\text {AA }}^{4}\) \& 13.250
6.330 \& O815-1994
060011994 \& 5.000.000 \& 5,774.650 \& 5.932.150 \\
\hline \& A A A \& 6.330
8.100 \&  \& 5.500.000 \& 4.573.250 \&  \\
\hline Stipco 229 Mnc Govt GD Bond \& AAA \& 8.100
9.050 \& -02.27-2002 \& S

S,000.0000 \& 4.9299,219 \&  <br>
\hline \& AMA \& 8.450
9.050 \& - \&  \&  \& 2, 2.000 .240
F,000.000 <br>
\hline \& MAA \& ${ }_{8}^{8.800}$ \& - $12.03-1992$ \& \$,000.000 \& 5,075.000 \& S 5.112 .500 <br>
\hline Treasury Receipts \& AMA \& 10.500 \& -04.22-1993 \& 8,0000000
$4,041,250$ \& $8.547,879$
$2,596,043$ \& 8,
8, 570.00000
3,386 <br>
\hline Treasury Stripped Securities \& AAA \& \& - \&  \&  \&  <br>
\hline \& AAA \& 0 \& cos-15-2014 \& 550.000.000 \& 9,052.000
$3,836,000$ \& 9,551.000
$\mathbf{3 . 9 8 8 . 6 0 0}$ <br>
\hline \& AAA \& 0 \& 02-15-1999 \& \& 6,198,563 \& 6,937,200 <br>
\hline \& AAA \& 0 \& 11-15.1999 \& 21,0000000 \& 8,557.470 \& 9.146.760 <br>
\hline Washington D C Metropolitan Area Transit \& AMA \& 8. 150 \& 07.01-2014 \& 3,000.000 \& 2,730,000 \& ${ }_{2,823,750}^{1,180}$ <br>
\hline Total Federal Agency \& \& \& \& 525,311,444 \& 401,421,620 \& 413,772,208 <br>
\hline Municipal \& \& \& \& \& \& <br>
\hline Arkansas State Development Finance Authority \& NR \& 9.750 \& 11-15-2005 \& 983.198 \& 978,283 \& 991.959 <br>
\hline Total Municipal \& \& \& \& 983,198 \& 978,283 \& 991,959 <br>
\hline TOTAL GOVERNMENT OBLIGATIONS \& \& \& \& 31,798,950,236 \& 1,733,930,823 \& 1,778,361,289 <br>
\hline CORPORATE OBLIGATIONS \& \& \& \& \& \& <br>
\hline Finance \& \& \& \& \& \& <br>
\hline Alaska State Housing Finance Corporation \& ${ }^{13}$ \& 9.620\% \& 10.15-1994 \& \$ 5,000.000 \& 5,018,200 \& 5.177,400 <br>

\hline ${ }^{\text {Amerrican Express Company }}$ American General Finance Corporation \& $\wedge_{13}^{13}$ \& (11.950 \&  \&  \& cione \& | $1.098,780$ |
| :--- |
| 2.955 | <br>

\hline  \& ${ }^{13}$ \& 8.500
12.500
P. \& O6-15-1999 \& 3.000 .000

240.574 \& 2.952,381 \& | 2.955 .000 |
| :--- |
|  |
|  |
| 242.980 | <br>

\hline Associates Corporation of North America . \& | 13 |
| :--- |
| A3 | \& - ${ }_{\text {8, }}^{8.875}$ \& 11.01.1993

01.15 .1998 \& ${ }_{\text {2 }}^{2.5000 .000}$ \& 2.488.550 \& - <br>
\hline British Gas Finance Inc \& A3 \& 9.500 \& 03.15.2018 \& 2,500,000 \& 2,996,875 \& 3, 594,700 <br>
\hline Centrust savings Bank \& ${ }_{43}$ \& 9.400 \& 09.26-1993 \& 5.000,000 \& 4.994.100 \& 5.038.000 <br>
\hline Chase Manhatran Corporation
Chrssler Financial Corporation \& BAM \& 9.700 \& 02-10.1992 \& 30.000.000 \& 1,974.260 \& 30.058 .200
2.020 .000 <br>
\hline \& ${ }_{\text {A3 }}$ \& \% 7.813 \& 09.16-1992 \& 13.750000 \& 13.743.125 \& 13.743.125 <br>
\hline \& BAA1 \& 8.125 \& 02-15-1994 \& 1.300.0000

2, \& 2,157.975 \& ${ }^{2} 1.257,308$ <br>
\hline CIT Group Holdings Inc \& ${ }_{\text {basi }}{ }^{\text {a }}$ \& 9.500
9.100 \& 06.01.2008

11.04 .1990 \& | 2, |
| :--- |
| 3.0000 .0000 | \& (1,976.240 \&  <br>

\hline Citicorp ...... \& ${ }_{\text {A }}{ }^{\text {A }}$ \& 10.750 \& (10.15.1992 \& 2i.500.000 \& 2.496,025 \& 3, 2.542 .950 <br>
\hline Citicorp Homeowners Inc. \& ${ }_{\text {A. }}^{\text {A }}$ \& 8.450
9.500 \& - $03.15-2007$ \& 1.500 .000
3.519 .679 \& l ${ }^{1.3424 .24 .270}$ \& li,402,335 <br>
\hline Collateralizrd Mortgage Securities Corporation \&  \& $\begin{array}{r}11.450 \\ 8.000 \\ \hline\end{array}$ \& O9.01.20015 \& - \&  \& 15,689.901 <br>
\hline \& ${ }_{\text {A3 }}{ }^{\text {A3 }}$ \& 8.000 \& 08, 11.20 .2019 \& 5,0000.000 \& 3.373.200 \& 4,637,500 <br>
\hline College \& University Facility Loan Trust \& ${ }^{43}$ \& 9.200 \& 12.01-1991 \& 3.000,000 \& 2,943.281 \& 3.037.500 <br>
\hline Comfed Saving Bank
Cooperaive Utility Trust ceriificates \& ${ }_{\text {A3 }}$ \& 9.350
10.700 \& 11.15.1992 \& 1,000.000
7,0000000 \& - 7.090 .410 \& li.090.940 <br>
\hline CrC Beaver valley Puding Corporation \& ${ }_{\text {A3 }}$ \& 12.000 \& 06012017 \& 21,000.000 \& 21,063,750 \& 22,606.920 <br>
\hline Drexel Burnham Lambert CMO Trust Series \& 13
$\lambda^{3}$ \& ${ }_{8}^{8.0000}$ \& $\xrightarrow{07.01-2017} 0$ \& 8,688,802 \& 3,136,331 \& - <br>
\hline  \& ${ }^{13}$ \& 10.700 \& 10.06.2017 \&  \& 6,582,365 \& ¢ <br>
\hline Financing Corporation Coupons stripped . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \& A3
A3 \& ${ }_{0}^{0}$ \& - $11.11-1991$ \& 1,000,000 \& 2,953,560
$5.801,070$ \& $3.286,440$
$6,269,120$ <br>
\hline \& A3
A3 \& - \& O3.37.1999
$12.06-2004$ \&  \& 4,322,700
$\substack{\text { 3,60,150 }}$ \& ¢ <br>
\hline Firss Bank NA \& ${ }_{\text {A3 }}^{4}$ \& $8.75{ }^{\circ}$ \& - \& 15.000 .000
2.500 .000 \& 3,960.150
2,50,000 \& 4,052.550 <br>
\hline First Boston Stripped Mortg2ge Securities
First Home Mortyage Accepance Corporation \& ${ }_{\text {A A A }}$ \& 11.000 \& - \& (9,449.342 6 \& $21,417,746$
$7,095.218$ \& 27.197 .138
$6,854.652$ <br>
\hline  \& ${ }^{\text {A3 }}$ \& 8.750
10
10 \&  \& \% \& 7.095.218 \& 6,954,652 <br>
\hline First PV Funding Corporation
Fieet Financial Gioup Inc \& ${ }_{\text {A3 }}{ }^{\text {a }}$ \& 10.300
9.625 \& - \& 2,0000000
$1,500.000$ \& 2,005,000
$1,566,530$ \& $2,000,000$
$1,516,635$ <br>
\hline Ford Motor Credir Company \& ${ }_{\text {A3 }}$ \& 9.000 \&  \& S 5 S,000.000 \& +1,992.000 \& 5,039 5 S50 <br>

\hline Ford Motor Credit Company Floating Rate \& A3 \& 9, 11.825 \&  \& | 3.500.000 |
| :--- |
| 1.500 .000 | \& (1,484.250 \& (1, $\begin{aligned} & 3,78,015 \\ & 1.500 .000\end{aligned}$ <br>


\hline  \& | 13 |
| :--- |
| ${ }^{3}$ | \& 10.375

8.750 \& (0901-1993 \& 2,000,000
S,00000 \& 2,055.920
$5.054,973$ \& - <br>
\hline \& ${ }_{\text {A3 }}$ \& 8.000 \& 03-1.2002 \& 18,978.570 \& 18.810.274 \& 18.598.999 <br>
\hline General Motors Accepprance Corporation \& A3
A3 \& 10.150
8.375 \& 04.15 .1991
06.15 .1991 \& $7,000.000$
$1,300,000$ \&  \& 7.128.100 <br>
\hline \& A3

A3 \& | 8750 |
| :--- |
| 8.85 |
| 805 | \& 01-15.1992 \& 5 5,000.000 \& \$ 9.064 .450 \& 4.981.600 <br>

\hline \& A3 \& | 9250 |
| :--- |
| 8.000 | \& $\bigcirc$ \& 5,000,000 \& 4,986,250 \& 5,066,150 <br>

\hline Greal Western Federal Savings Bank. \& A3
A3 \& 9.250
10.370 \& 09-28.1990

$04-22.1991$ \& | $5.000,000$ |
| :--- |
| 8.000 .000 | \& 8,990,000 \& 5.011 .300

$8,180.000$ <br>
\hline \& ${ }_{\text {A3 }}$ \& 10.370
10
150 \& (0.22.1991 \& 8.000 .000
20.505000 \&  \& $8,180,000$
$21,051,868$ <br>
\hline Houschold Bank \& 13
43 \& 8.250
6890 \& 11-15.1990
$10.01-1992$ \& S. 5332.139
$6,000.000$
S \& S.538,740
$5,971.200$ \& $5,476,818$
$5,835.000$ <br>
\hline Houschold Pinance Corporation \& ${ }_{\text {A3 }}$ \& $\begin{array}{r}6850 \\ \hline 000\end{array}$ \& 04-011999 \& 5,000.000 \& \$ 9.8974 .300 \& S ${ }^{\text {5, 835,900 }}$ <br>
\hline Irving Bank Corporation \& A3

43 \& 6.125
9.250 \& ¢0.01.1992 \& 4.1000.000 \& - \& 3,787,170
$\mathbf{5 , 0 3 4 , 9 5 0}$ <br>
\hline Kidder Peabod Morrgaze Assets Trust
Lonk Term Credit Bank. \& A3 \& 8.940
9875 \& O4.0.1.2019
O2.2S. 1991 \& Sinom.000 \& 4.969.875 \& Si.97, <br>

\hline Long Term Credit Bank \& | A3 |
| :---: |
|  | \& 9875

10700 \& 02.25 .1991
07.012003 \& ${ }^{1} 10000000$ \& $\begin{array}{r}989,840 \\ \hline 3,698.688\end{array}$ \& $1,013.370$
$3,708.000$ <br>
\hline Marine Mididind Banks inc \& ${ }_{\text {NR }}$ \& 7.625
9
9 \& O3.01.2033 \& Or 8080000000 \&  \& \% <br>

\hline  \& | 13 |
| :---: |
| 43 | \& ce.

10250
10200 \& $09.01-2007$ \& ${ }^{4}$ S, 000000000000 \& $1 \|^{4.000 .000} 5$ \& - $\begin{aligned} & \text { 3,800,000 } \\ & 5,071,050\end{aligned}$ <br>
\hline Digitized by 0 ¢ \& ${ }^{13}$ \& 10.200 \& 03.034991 \& 13 l000000 \& IN 3,004.320 \& 3,067.560 <br>
\hline \& \& \& \& ANA-CH \& IPAIGN \& <br>
\hline
\end{tabular}

Investment Listing




## Investment Listing







This report is published in accordance with the laws governing the Teachers' Retirement System of the State of Illinois.

The 1989 Annual Financial Report was edited and prepared by Lisa Bossert. A copy of the report may be obtained by writing to:

Teachers' Retirement System
of the State of Illinois
P.O. Box 19253

2815 W . Washington
Springfield, IL 62794-9253

## HIGHLIGHTS

|  | June 30, 1990 | June 30, 1989 |
| :---: | :---: | :---: |
| Membership |  |  |
| Active | 101,000* | 100,857 |
| Inactive | 19,997* | 20,834 |
| Benefit recipients | 46,097 | 45,718 |
| Total | 167,094 | 167,409 |
| Contributions |  |  |
| Member | \$ 283,780,000 | \$ 268,253,000 |
| State of Illinois | \$ 263,507,000 | \$ 232,438,000 |
| Unfunded pension <br> benefit cost |  |  |
|  | \$ 5,582,611,000 | \$4,641,888,000 |
| Net assets (Book value) | \$8,079,898,000 | \$7,272,071,000 |
| Investment return | 10.4\% | 14.4\% |
| Benefits paid | \$ 519,597,000 | \$ 477,256,000 |
| Estimated |  |  |

# COMPONENT UNIT ANNUAL FINANCIAL REPORT 

FOR THE YEARENDED JUNE 30, 1990

Teachers' Retirement System of the State of Illinois


Robert Leininger Springfield


Bob Daniels Springfield


Gary K. Anderson Decatur


Anne Davis Harvey


Hugh R. Brown Evanston


Gary Elmen
Naperville


Judith Fitch Tucker Darien


Robert L. Barrow Carbondale

## ADMINISTRATIVE STAFF

## Fred Husmann

Executive Director

## Joan T. Hancock

General Counsel

William Brewer, Jr.
Benefits

Jo Ellen Keim
Member Records

## Curt Moore

Accounting
E. Darrell Elder

Member Services

William M. Stephens
Investments

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## Mission Statement

## As a fiduciary for our members, the

 Teachers' Retirement System of the State of Illinois strives to promote maximum possible financial security for members in a manner that reflects our commitment to excellent service and instills confidence in our integrity.As a trust fund for over 174,000 members, the Teachers' Retirement System of the State of Illinois (TRS) provides retirement and other benefits, offers a wide range of information services and is entrusted with the investment of member funds. The foremost goal of the System is providing retirement security for members.
Investment policy, which sets the standards for management of the trust fund assets, continued to evolve and mature over the course of fiscal year 1990. By June 30, 1990, the System's strategy of constructing a more highly diversified, globally balanced, multiple asset class portfolio had been nearly fully implemented. This structure provides additional risk management capabilities and optimal risk/reward portfolio characteristics.
A larger commitment to the international equity and non-dollar bond markets became a focal point of a dynamic, while risk-averse, asset allocation strategy. Seven international equity managers, along with one international fixed income manager, are now responsible for the 11.5 percent of the Total Fund which is invested in the major non-U.S. capital markets.
Enhancements to the fund's domestic portfolios were provided by the System's retention of nineteen active managers specializing in various investment approaches across the U.S. equity asset class. In fact, on a Total Fund level, the policy which provided for what was largely a passive or index fund approach has made the transition to what is now essentially an active approach to institutional portfolio management.

## Funding

The System is funded through member contributions, employer contributions from the State of Illinois, and investment income. The System's active members paid $\$ 283.8$ million, or 8 percent of their salaries to the trust fund during FY90. Contributions from the State of Illinois were $\$ 263.5$ million.
State funding of the employer cost as required by law would maintain the unfunded pension benefit obligation at a fixed dollar amount; however, the State has not funded the System on this basis. For a number of years prior to 1982 the State funded the System by reimbursement of benefit payments. Subsequent to 1982 the State
appropriations have ranged from 44 percent to 66 percent of benefit payments. As a result, the State's debt to the System, the unfunded pension benefit obligation, has grown dramatically in the last decade.
The unfunded pension benefit obligation grew to over $\$ 5.6$ billion during FY90 as a result of the continued State underfunding of the System.
The results of an actuarial valuation conducted by the System's actuaries as of June 30, 1990 are included in the "Actuarial Summary" section of this report. The System's audited financial statements with related footnotes for the fiscal year ending June 30, 1990 are shown in the "Financial Statements" section.

## Investments

Investment income and realized gain on investments of $\$ 813.9$ million during FY 90 were positive contributors to the fund's financial status. Investments totaled $\$ 8.9$ billion at market value at June 30, 1990, up significantly from $\$ 8.0$ billion at market value at June 30, 1989. As trustee for members' funds, the System is responsible for investment of the fund under the prudent person standard. This standard has permitted the System to allocate trust funds across a broad group of asset classes, including stocks, bonds, and real estate equity.
The System's total fund, time-weighted rate of return was 10.4 percent. Annualized three-year and five-year total returns of 8.4 percent and 13.4 percent, respectively, continue to outperform the rate of inflation for these periods, 4.6 percent and 3.8 percent, respectively. The System's long-term objective, to exceed the rate of inflation by 3 percent has been achieved for both the three-year and five-year periods.
A summary of the System's investment activities during FY90 and historic performance results is presented in the "Investment Report" section which is followed by the investment listing.

## Benefits

The System administers a defined benefit retirement program for all certificated public elementary and secondary education professionals in the State of lllinois outside the City of Chicago. On July 1, 1990, the benefits and services that the System offers were extended to part-time and substitute teachers.
> "The investment portfolio structure provides additional risk management capabilities and optimal risk/reward portfolio characteristics."

# "TRS is proud of the benefits and service it offers Illinois teachers today." 


#### Abstract

Retirement benefits totaling $\$ 474.8$ million were paid to 40,171 annuitants at June 30, 1990. The average retirement benefit was $\$ 1,015$ in FY90, up from the average benefit of $\$ 931$ in FY89. The average retired member was 72 years of age, had earned 26.3 years of service, and had been in retirement 13 years at June 30, 1990.

The 3 percent annual increase based on current rather than original benefits which became law in 1989 represents a long-term benefit improvement for TRS members. Compounding the annual increase provides an important shield against the decline in purchasing power brought about by increasing health care costs and other economic trends. The longer an annuitant is in receipt of a benefit. the greater the impact of a compounded increase.


## Other Benefits

In addition to retirement benefits, the System offers a comprehensive health and prescription drug insurance plan for benefit recipients and eligible dependents. The System partially subsidized the premium cost for 16,394 annuitants who elected coverage during FY90.

Disability benefits are paid to System members who are disabled while employed in a TRS-covered position. During FY90, 1,160 members received disability benefits totaling $\$ 8.2$ million.
The System also provides death and survivor benefits. Dependents may be eligible for monthly benefits and/or a lump-sum payment. Monthly benefits were paid to 4,766 survivors. There were 1,305 new claims filed in FY90 with 471 claims for monthly benefits.

## Member Services

TRS provides a number of services for contributing members. During FY90, 6,195 System members met with TRS retirement consultants around the state to learn more about their retirement benefits. System staff received over 33,500 phone inquiries by members and annuitants, sent out over 144,000 letters and talked with an average of 184 members monthly concerning System benefits and operations in FY90,

Due to a growing awareness of the aging of our society and its future implications, members are beginning their retirement planning earlier in their careers. In response to these growing concerns the System expanded its program designed to help members plan for retirement. The seminars are designed to help members identify and plan to attain their retirement goals. In FY90, 493 members attended these seminars.
The System provides a variety of publications aimed at meeting the information needs of members, annuitants, and employers. The Member Guide and Retired Member Guide describe benefits available from the System. The Employer Guide is a comprehensive resource on System procedures and reporting requirements for employers of TRS members. In addition to
these publications, regular newsletters, brochures, and videotape presentations present information of interest to TRS members and annuitants.

TRS is proud of the benefits it offers Illinois teachers today. However, to maintain a system which meets the needs of its members, more improvements need to be made. When the TRS plan is compared with other Illinois public employee pension plans, the System's retirement formula falls behind most others. When compared with teacher retirement plans in other states, again, the benefits that Illinois teachers receive fall behind those provided to teachers outside Illinois.

A recent survey of TRS members indicates that onehalf of all active and retired teachers have never been employed outside the teaching profession. Because of this fact, many teachers are not eligible for Social Security coverage in retirement. In addition, teachers are generally not highly compensated and are not able to set aside large sums during years of active employment. Retirement benefits for teachers are, in part, designed to compensate for those factors.

As TRS looks ahead to the '90s, the System will continue to work with the General Assembly to bring about changes that will keep retirement benefits for Illinois teachers comparable to those provided in other systems across the country. Members and retirees have a significant role in the legislative process as well. Collective action is needed to explain to Illinois legislators the need for improved retirement benefits for teachers.
In addition, TRS will continue to improve the variety of services offered. One improvement is TRS' new policy of sending a Member Guide and other membership forms to all new members. In FY89, the System initiated a strategic plan designed to anticipate the future needs of TRS members and identify the challenges to meeting those goals. The System's mission statement appears on page 3 .
This comprehensive annual financial report will be distributed to all public school buildings and a summary will appear in the System's newsletters. The report is available to members on request.


Fred Husmann
Executive Director
October 19, 1990

## Presented to

# Teachers' Retirement System of the State of Illinois 

For its Component Unit<br>Financial Report<br>for the Fiscal Year Ended<br>June 30, 1989

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose component unit financial reports (CUFR's) achieve the highest standards in government accounting and financial reporting.


President


## FINANCIAL STATEMENTS



## INDEPENDENT AUDITORS' REPORT

## Ernst \&Young

150 South Wacker Drive
Chicago. Illinous 60606
Telephone (312) 368-1800

Honorable Robert G. Cronson<br>Auditor General<br>State of Illinois<br>Board of Trustees<br>Teachers' Retirement System<br>of the State of Illinois

We have audited the accompanying statements of financial position of the Teachers' Retirement System of the State of Illinois as of June 30, 1990 and 1989, and the related statements of revenues, expenses and changes in 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 generally accepted auditing standards and government auditing standards issued by the Comptroller General of the United States. Those standards require that we plan and perform an audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Teachers' Retirement System of the State of Illinois at June 30, 1990 and 1989, and the results of its operations for the years then ended in conformity with generally accepted accounting principles.

Our audits were made for the purpose of forming an opinion on the financial statements taken as a whole. The supplementary information on page 15 and 16 is presented for purposes of additional analysis and is not a required part of the financial statements of the Teachers' Retirement System of the State of Illinois, but is required by the Governmental Accounting Standards Board. Such information, when considered in relation to the basic financial statements, in our opinion presents fairly, in all material respects, the information shown therein. Included in the related supplemental schedules is information for the years 1981 through 1988 that has been derived from financial statements audited by other auditors whose reports thereon expressed an unqualified opinion.

September 28, 1990


## Statements of Financial Position

Teachers' Retirement System of the State of Illinois

|  |  |  |
| :---: | :---: | :---: |
|  | 1990 | 1989 |
| Assets |  |  |
| Cash - Note C | \$ 4,058,000 | 1,437,000 |
| Receivables: |  |  |
| Contributions from school districts: |  |  |
| Salary deductions | 12,228,000 | 13,245,000 |
| Federal and trust funds | 2,101,000 | 2,332,000 |
| Members accounts | 90,000 | 35.172,000 |
| Total receivables | 14,419,000 | 50,749,000 |
| Investments - Notes C and G (Market value $1990 \$ 8.910,482,000$; $1989 \$ 8,038,721,000$ ) | $8,066,358,000$ | 7,222,061,000 |
| Property and equipment - Note A | 1,172,000 | 1,174,000 |
| Total assets | 8,086,007,000 | 7,275,421,000 |

## Liabilities

Payables:
Benefits
Refunds
Other

See notes to financial statements.

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| :--- | :--- |
| 10 | UNIVERSITY |
| URBANA-CH |  |

## Statements of Revenue and Expense and Changes In Net Assets <br> Teachers' Retirement System of the State of Illinois

|  | Year Ended June 30 |  |  |
| :---: | :---: | :---: | :---: |
|  |  | 1990 | 1989 |
| Revenue |  |  |  |
| Contributions - Note E: |  |  |  |
| Members | \$ | 283,780,000 | 268,253,000 |
| State of Illinois |  | 263,507,000 | 232,438,000 |
| School districts: |  |  |  |
| Early retirement option |  | 17,282,000 | 17,266,000 |
| Federal and trust funds |  | 12,235,000 | 11,223,000 |
| Total contributions |  | 576,804,000 | 529,180,000 |
| Investment income-Note C: |  |  |  |
| Interest |  | 315,940,000 | 292,299,000 |
| Dividends |  | 96,151,000 | 93,088,000 |
| Other |  | 53,440,000 | 42,592,000 |
| Total investment income |  | 465,531,000 | 427,979,000 |
| Gain on sale of investments |  | 348,398,000 | 133,621,000 |
| Total revenue |  | 1,390,733,000 | 1,090,780,000 |
| Expense |  |  |  |
| Benefits: |  |  |  |
| Age retirement |  | 378,827,000 | 348,247,000 |
| Post-retirement |  | 96,008,000 | $88,381,000$ |
| Survivor |  | 26,209,000 | 24,436,000 |
| Disability |  | 8,222,000 | 7,846,000 |
| Health insurance |  | 10,331,000 | 8,346,000 |
|  |  | 519,597,000 | 477,256,000 |
| Refunds |  | 21,662,000 | 20,394,000 |
| Administrative expenses |  | 6,175,000 | 5,548,000 |
| Prior service credit |  | 35,472,000 |  |
| Total expense |  | 582,906,000 | 503,198,000 |
| Revenue in Excess of Expense |  | 807,827,000 | 587,582,000 |
| Net Assets Available for Benefits At Beginning of Year |  | 7,272,071,000 | 6,684,489,000 |
| Net Assets Available for Benefits At End of Year | \$ | 8,079,898,000 | 7,272,071,000 |

## NOTES TO FINANCIAL STATEMENTS

Teachers' Retirement System of the State of Illinois
June 30, 1990

## NOTE A • SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of accounting: The financial statements of the Teachers Retirement System of the State of Illinois are prepared using the accrual basis of accounting.
Investments accounting: Investments are valued on the basis of cost. Gain or loss on the sale of investments is determined based on average cost for stocks and identified cost for debt securities.
Investments authorized: Through the Board of Trustees, as authorized in Article 16 of the Illinois Pension Code, the System serves as fiduciary for the members' trust funds and is responsible for investment of such funds under authority of the "prudent person rule." The prudent person rule establishes a standard for all fiduciaries by specifying fiduciary responsibility with regard to the members' trust funds.
Equipment: Equipment is stated on the basis of historical cost. Provisions for depreciation are computed by the straight-line method, based upon the estimated useful lives of the assets. Equipment is assigned a useful life of from three to ten years while vehicles are assigned a five-year life.

## NOTE B • PLAN DESCRIPTION

The System is the administrator of a cost-sharing multiple-employer public employee retirement plan. Members of the System consist of all full-time teachers and teachers employed on a part-time basis in positions where services are expected to be rendered for a full and complete school term in the public common schools of Illinois outside of Chicago. The System was established by the State of Illinois and is governed by Article 16 of the Illinois Pension Code. The System is a component unit of the State of Illinois and is included in the State's financial statements as a pension trust fund.
The System has developed criteria to determine whether other entities should be included within its financial reporting entity. The criteria include, but are not limited to, whether the System exercises oversight responsibility on financial interdependence. selection of governing authority, designation of management, ability to significantly influence operations and accountability for fiscal matters, scope of public service and special financing arrangements.

Based on this criteria the System has no other entities included in these financial statements.
Members are employed by 1,114 school districts and special districts. Member contributions are remitted by each employer district to the System. These employers are only responsible for employer contributions for teachers paid from federal and trust funds and for the employer's portion of the early retirement option. The State of Illinois provides employer contributions to fund the System. State contributions are based on annual appropriations which are less than statutory actuarial funding of normal cost and interest on the unfunded pension benefit obligation.

At June 30, 1990, the number of employers was:

| Local school districts | 954 |
| :--- | ---: |
| Special districts | 123 |
| State agencies | 37 |
| 1,114 |  |

At June 30, 1990, the System membership consisted of:

| Retirees and beneficiaries currently |  |
| :--- | ---: |
| receiving benefits |  |
| Terminated members entitled to benefits |  |
| but not yet receiving them | 46,097 |
| Current members: <br> Vested <br> Nonvested | 10,000 |

Terminated and current members are estimated based on the latest available data as of June 30, 1989.
The pension plan provides retirement benefits, health insurance, and death and disability benefits. A member qualifies for an age retirement annuity after attaining one of the following: age 62 with five years of service credit; age 60 with ten years: age 55 with 20 years. If retirement occurs between age 55 and 60 with less than 35 years of service, the annuity will be reduced at the rate of $1 / 2$ percent for each month the member is under age 60 . A member age 55 with less than 35 years of service credit may use the early retirement option to avoid a discount for early retirement if retirement occurs before July 1, 1995 and within six months of the last day of service requiring contributions and if the member and employer both make a one-time contribution to the System.

The retirement benefit is determined by the average salary of the four highest consecutive salary rates within the last ten years of creditable service and the percentage of average salary to which the member is entitled. This percentage is determined by the following formula: 1.67 percent for each of the first ten years, plus 1.9 percent for each of the next ten years, plus 2.1 percent for each of the next ten years. plus 2.3 percent for each year over 30 . The maximum retirement benefit. 75 percent of average salary. is achieved with 38 years of service. Each annuitant who retired after 1969 or made a qualifying contribution receives an annual 3 percent increase in the current retirement benefit beginning January 1 following attainment of age 61 or following the first anniversary in retirement, whichever is later.
Member contributions, established by statute, are 8 percent of earnings allocated as follows: $61 / 2$ percent for retirement. 1/2 percent for post-retirement increases and 1 percent for death benefits. If a member leaves covered employment, the System will refund a member's contributions upon request. The refund consists of actual contributions excluding the 1 percent death benefit contribution.

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## NOTE C - CASH AND INVESTMENTS

At June 30,1990 , the bank balance and carrying amount of the System's deposits were $\$ 44,933.000$ and $\$ 4,058,000$, respectively Of the bank balance, $\$ 42,890,000$ is on deposit with the State Treasurer. The System's investments are categorized to give an indication of the level of risk at year end. Category 1 includes investments that are insured or registered or for which the securities are held by the System or its agent in the System's name. Category 2 includes uninsured and unregistered investments for which the securities are held by the broker's or dealer's trust department or agent in the System's name. Category 3 includes uninsured and unregistered investments for which the securities are held by the broker or dealer, or by its trust department or agent but not in the System's name.

Investments at June 30,1990 and 1989 are summarized below:

| Category 1: | Cost |  | Market Value |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1990 | 1989 | 1990 | 1989 |
|  |  |  |  |  |
| preferred stock | \$2.625,412,000 | 2,426,270,000 | 2.618,087,000 | 2,489,394,000 |
| Short term investments | 196,011,000 | 219,115,000 | -196.245,000 | 218,855,000 |
| Common stock | 2,953,954,000 | 2,280,836,000 | 3,584,124,000 | 2,877.773,000 |
| Real estate equity | 824,867,000 | -711,492,000 | 822.811,000 | 732,834,000 |
| Venture capital | $97,074,000$ | 65,522,000 | 91,873,000 | 65,522,000 |
| Accrued interest and dividends | 77,980,000 | 80,286,000 | 77,980,000 | 80,286,000 |
|  | 6,775,298,000 | 5,783,521,000 | 7,391,120,000 | 6,464,664,000 |
| Mutual funds (Not categorized) | 1,291,060,000 | 1,438,540,000 | 1,519,362,000 | 1,574,057,000 |
| Total Investments | \$8,066,358,000 | 7.222,061,000 | $8,910,482,000$ | 8,038,721,000 |

The System has nonrecourse mortgages totaling $\$ 136,823,000$ and $\$ 94.324,000$ on real estate equities at June 30 , 1990 and 1989 , respectively. The amount reported for real estate equity is net of these mortgages, which mature on various dates through the year 2011.

At June 30, 1990, the System has investments with one organization (other than U.S. Government and U.S. Government guaranteed obligations) that exceed 5 percent of net assets available for benefits. The investments, reported at cost, are with Harris Bank of Chicago for $\$ 625,895,000$.

There are no investments in, loans to, or leases with parties related to the System.

## NOTE D - FUNDING STATUS AND PROGRESS

The pension benefit obligation is a standardized disclosure of the present value of pension benefits, adjusted for the effects of projected salary increases, estimated to be payable in the future as a result of employee services to date. The measure is the actuarial present value of credited projected benefits and is intended to help users to assess the System's funding status on a goingconcern basis, assess progress made in accumulating sufficient assets to pay benefits when due, and make comparisons with other public employee retirement systems.

The pension benefit obligation is determined as of June 30, 1990 and 1989. Significant actuarial assumptions are summarized as follows:

- The present value of future pension payments is computed using a discount rate of 8 percent. The discount rate represents the estimated long-term rate of return on current and future investments.
- Future pension payments reflect an assumption of a 4 percent salary increase due to inflation and a 3 percent salary increase for merit adjustments.
- Future pension payments include post-retirement increases based on 3 percent of the pension payment of the previous year. An experience analysis is required by statute to determine the adequacy of actuarial assumptions regarding mortality, service and compensation experience. The most recent experience analysis was performed using June 30, 1988 data. Based on this analysis there were no changes in actuarial assumptions. During the period between experience analyses, the actuary develops annual actuarial estimates, based upon the most recent experience analysis performed.

At June 30. 1990 and 1989, the unfunded pension benefit obligation is as follows:
Fension benefit obligation:
Petirees and beneficiaries currently receiving benefits
Terminated members entitled to benefits but not yet receiving them
Current employees:
$\quad$ Accumulated employee contributions
Employer-financed vested
Employer-financed nonvested
Total pension benefit obligation
Net assets available for benefits, at cost
(Market value 1990 - $\$ 8,924,022,000 ; 1989-\$ 8,088,484,000)$
Unfunded pension benefit obligation

A reconciliation of the unfunded pension benefit obligation for the years ended June 30. 1990 and 1989 is summarized below:

|  | 1990 | 1989 |
| :---: | :---: | :---: |
| Unfunded benefit obligation at beginning of year | \$4,641,888,000 | 4,238,098,000 |
| Additions (deductions): |  |  |
| Employer cost in excess of contributions | 330,532,000 | 305.547,000 |
| Increase for COLA 3\% compounding | 642,310,000 |  |
| Actuarial losses (gains) compared to assumptions |  |  |
| Salary increases | 11,143,000 | 16,271,000 |
| Investment income (loss) | (202,975,000) | 1,569,000 |
| Other | 159,713,000 | 80,403,000 |
| Net additions | 298,413,000 | 403,790,000 |
| Unfunded benefit obligation at end of year | \$5,582,611,000 | 4,641,888,000 |

## NOTE E - CONTRIBUTION REQUIREMENTS

Employer contributions made by the State of Illinois are based on annual appropriations and are not actuarially determined. The State appropriations are derived from three different sources. The largest appropriation is made from the Common School Fund (1990 - $\$ 234,300,000 ; 1989-\$ 216,216,000$ ) and is based on a percentage of benefits estimated to be paid. The percentage of appropriations to benefits estimated to be paid was 44 percent.
The other two sources of State contributions are the General Revenue Fund and the State Pension Fund. The General Revenue Fund appropriation (1990-\$22,637,000; 1989-\$10.571,000) reimburses the System for certain minimum retirement allowances and in fiscal year 1990 includes additional State funding. The State Pension Fund appropriation (1990-\$6.570,000; 1989-\$5,651,000) represents a distribution to the System of money escheated to the State.
Total contributions from employers for 1990 and 1989 were $\$ 293.024,000$ and $\$ 260.927 .000$ respectively which were 8.6 and 8.2 percent of annual covered payroll respectively.
In some instances the school districts and special districts are responsible for employer contributions. These contributions are required for teachers paid from federal and trust funds and for the employers' portion of the early retirement option
The employer and employee actuarial contributions requirement for 1990 and 1989 are $\$ 864,836,000$ and $\$ 811,399,000$ respectively. The actual contribution for 1990 and 1989 was $\$ 576.804,000$ and $\$ 529.180 .000$ respectively. The actuary's review of the 1990 deficiency indicates that the actuarially determined contribution requirement for 1991 will increase by $\$ 23.043 .000$.
Prior service credit primarily consists of an adjustment to reflect members' contributions for prior service credit on the cash basis to meet revenue recognition criteria.

## NOTE F - HISTORICAL TREND INFORMATION

Supplemental schedules of historical trend information are presented on page 15. These are designed to provide information on the System's progress in accumulating assets to pay benefits when due.

## NOTE G - SUBSEOUENT EVENT

Subsequent to June 30, 1990 the market value of investments began to decrease concurrent with the decline of the stock markets in July. August and September of 1990. The following schedule presents market value and cost of investments at September 28. 1990, compared to the June 30. 1990 values:


## REQUIRED SUPPLEMENTAL SCHEDULES

Revenues by Source

| (In Millions of Dollars) |  |  | Employer Contributions |  |  | Investment Income | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Employee Contributions | Employer Contributions | Percentage of Annual Covered Payroll | Actuarially Required Amount* | Percentage of Annual Covered Payroll |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| 1981 | \$166 | \$246 | 11.3\% | \$266 | 13.2\% | \$226 | \$ 638 |
| 1982 | 180 | 169 | 7.8 | 277 | 12.7 | 238 | 587 |
| 1983 | 189 | 161 | 7.0 | 373 | 16.3 | 132 | 482 |
| 1984 | 195 | 207 | 8.8 | 413 | 17.6 | 234 | 636 |
| 1985 | 207 | 238 | 9.6 | 446 | 18.0 | 445 | 890 |
| 1986 | 220 | 260 | 9.9 | 448 | 17.0 | 813 | 1,293 |
| 1987 | 238 | 280 | 9.9 | 448 | 15.8 | 835 | 1,353 |
| 1988 | 253 | 242 | 8.1 | 514 | 17.1 | 560 | 1,055 |
| 1989 | 268 | 260 | 8.2 | 566 | 17.8 | 560 | 1,088 |
| 1990 | 284 | 293 | 8.6 | 624 | 18.3 | 814 | 1,391 |

*Changes in actuarial assumptions and actuarial method resulted in a $\$ 80.7$ million increase in the actuarially required amount for the year ended June 30, 1983. Changes in actuarial assumptions resulted in a $\$ 53.2$ million increase in the actuarially required amount for the year ended June 30, 1988
*Amounts shown for 1981 were determined using the entry age normal actuarial cost method and do not comply with the standardized measure prescribed by GASB Statement Number 5. The difference is estimated to be nonmaterial for comparison purposes.

## Expense by Type



## Supplemental Schedule of Funding Progress

| (In Millions of Dollars) |  |  |  |  |  | (6) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| June 30 | (1) <br> Net Assets Available for Benefits | (2) <br> Pension <br> Benefit Obligation | (3) <br> Percentage Funded (1) - (2) | (4) Unfunded Pension Benefit Obligation (2) - (1) | (5) <br> Annual <br> Covered <br> Payroll | Unfunded Pension Benefit Obligation as a Percentage of Covered Payroll (4) - (5) |
| 1982 | \$3,215 | \$ 6,109 | 52.6\% | \$2,894 | \$2,177 | 132.9\% |
| 1983 | 3.410 | 6,690 | 51.0 | 3,280 | 2,287 | 143.4 |
| 1984 | 3,728 | 7,349 | 50.7 | 3.621 | 2.345 | 154.4 |
| 1985 | 4,265 | 7,982 | 53.4 | 3.717 | 2.472 | 150.3 |
| 1986 | 5,168 | 8,687 | 59.5 | 3.519 | 2,633 | 133.6 |
| 1987 | 6.092 | 9,950* | 61.2 | 3.858 | 2,834 | 136.1 |
| 1988 | 6.684 | 10,922 | 61.2 | 4,238 | 3.007 | 140.9 |
| 1989 | 7,272 | 11,914 | 61.0 | 4,642 | 3,172 | 146.3 |
| 1990 | 8,080 | 13,663** | 59.1 | 5.583 | 3,402 | 164.1 |

Analysis of the dollar amounts of net assets available for benefits, pension obligation, and unfunded pension benefit obligation in isolation can be misleading. Expressing the net assets available for benefits as a percentage of the pension benefit obligation provides one indication of funding status on a going-concern basis. Analysis of this percentage over time indicates whether the System is becoming financially stronger or weaker. Generally, the greater this percentage, the stronger the system. Trends in unfunded pension benefit obligation and annual covered payroll are both affected by inflation. Expressing the unfunded pension benefit obligation as a percentage of annual covered payroll approximately adjusts for the effects of inflation and aids analysis of progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the system.
*Includes increases of $\$ 55$ million due to plan amendments and $\$ 393$ million due to changes in actuarial assumptions.
**Includes effect of COLA of $3 \%$ compounded of $\$ 642$ million.

## SUPPLEMENTAL SCHEDULES

## Supplemental Schedules



## ACTUARIAL SUMMARY




## ACTUARY'S CERTIFICATION

## Buc <br> CONSULTANTS

Xerox Centre
55 West Monroe Street Suite 1700
Chicago, Illinois 60603

## Board of Trustees

Teachers' Retirement System
of the State of Illinois
2815 West Washington Street
P.O. Box 19253

Springfield, Illinois 62794
Re: Actuarial Reserve Requirement as of June 30, 1990
Ladies and Gentlemen:
In accordance with the provisions of the Teachers' Retirement System of the State of Illinois, we have made an estimate of the actuarial reserve requirement of the Fund as of June 30, 1990.

This estimate is based on a census of retired members as of June 30, 1990 and a census of active and inactive members as of June 30, 1989. For actuarial purposes, net assets are based upon cost or amortized cost values less current liabilities as provided by the System. The estimate was based on the provisions of TRS in effect on June 30, 1990.

The liabilities of the System were determined in accordance with generally accepted actuarial principles and procedures, using the projected unit-credit actuarial cost method.

As of July 1, 1990, the pension benefit obligation was determined to be $\$ 13,662,509,000$, based on the actuarial assumptions and provisions of TRS in effect on that date.

In our opinion, the amount of $\$ 13,662,509,000$ is a fair representation of the actuarial reserve requirement of the Fund as of June 30, 1990.


JWT:plg

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## Introduction

Aretirement plan can generally be described as a promise by the employer to provide for employees pensions in return for services provided by the employees; as such, a pension is a form of deferred compensation. Retirement plans generally provide for retirement benefits, post-retirement increases, disability benefits, survivor benefits and group health insurance.

Since 1939, the Teachers' Retirement System of the State of Illinois has provided pension and ancillary benefits to all public elementary and secondary teachers except for those employed by the city of Chicago. Funding of these benefits comes from employee contributions, employer contributions (principally State appropriations) and investment income. Employee contributions established by the Illinois Pension Code are currently 8 percent of salary. Investment income and employer funding are primary determinants of the System's financial status Benefits are an obligation of the State of Illinois and are an enforceable contract right.

To assess the funding status of the System, annual estimates of the pension benefit obligation are obtained through annual actuarial valuations. To estimate the amount, actuaries use demographic data (such as employee age, salary and service credits), economic assumptions (such as estimated salary increases and interest rates) and decrement assumptions (such as mortality and disability rates). These estimates are known as actuarial assumptions.

## Actuarial Assumptions

Actuarial assumptions are projections based on past experience of the group and other groups with similar attributes. Assumptions should project future experience over terms of at least 50 years. Experience never coincides exactly with these projections. Differences that occur between assumptions and experience are called actuarial gains and losses. A review of the assumptions (an experience analysis) is required by statute. The most recent experience analysis was conducted in 1989 using demographic and economic data for the three-year period ended June 30, 1988. The review resulted in a change to the projected unit credit method from the attained age method.

## Actuarial Valuation

 n important step in an actuarial valuation is application of a cost method assigning portions of the total value of benefits to past, present and future periods of employee service. This allocation is accomplished by development of normal cost and the pension benefit obligation. Normal cost is the annual cost of service earned by System members during thefiscal year. Pension benefit obligation is a standardized disclosure of the present value of pension benefits, adjusted for the effects of projected salary increases which are estimated to be payable in the future as a result of employee services to date.

There are several accepted actuarial cost methods. The actuarial cost method used by the System is the projected unit credit actuarial method. The current normal cost is 13.7 percent of payroll. Eight percent of normal cost is paid by the members' contributions. The remaining 5.7 percent is the employers' portion of the normal cost.

## Actuarial Assumptions

- Inflation assumption: 4 percent per annum (included in investment returns and earnings progression assumption).
- Investment return: 8 percent per annum, compounded annually.
- Retirement age: Graduated rates for active members. Inactive members are assumed to retire at age 62. Sample annual rates of retirement per 1,000 participants for active members follow.

| Age | Male | Female |
| :---: | ---: | :---: |
| 55 | 97 | 97 |
| 60 | 270 | 180 |
| 65 | 365 | 330 |
| 70 | 1,000 | 1,000 |

- Mortality: Active participants - UP 1984 Table, set back two years; nondisabled pensioners - UP 1984 Table, set back five years.
- Disability: Sample annual rates per 1,000 participants follow.

| Age | Male | Female |
| :---: | :---: | :---: |
| 20 | .35 | .70 |
| 30 | .42 | .84 |
| 40 | .58 | 1.15 |
| 50 | 1.20 | 2.40 |

- Separation: Graduated rates based on age and sex variations.
- Earnings progression: Merit and longevity increases, adjusted for inflation. Approximates 7 percent per year to earliest date of retirement eligibility. Sample annual percentage increases follow.

| Age | Unisex |  |
| :---: | :---: | :---: |
| 30 | $9.7 \%$ |  |
| 30 | 8.6 |  |
| 40 | 7.5 |  |
| 3 | 50 | 6.9 |
| 60 | 6.7 |  |

Original from
> "Sound financing of a retirement system requires that benefits accruing to each employee be paid for during the career of the employee by regular contributions to the retirement system based on a percentage of payroll."

GASB Statement Number 5

The System complies with the reported requirements of Statement Number 5 of the Governmental Accounting Standards Board. Disclosure of Pension Information by Public Employee Retirement Systems and State and Local Governmental Employers, November 1986. This statement prescribes financial disclosure requirements for public employee retirement systems including a standardized measure of the pension benefit obligation. The System uses this standardized measure for funding purposes as well as for financial reporting. The actuarial terminology used by Statement 5 is used consistently for all financial and funding exhibits.

## Actuarial Valuation



Reconciliation of Unfunded Pension Benefit Obligation


Fiscal year 1990 actuarial gains and losses resulted from the following: average salaries increased by 7.2 percent compared to the 7 percent assumption; and actuarial investment return (including interest, dividends, and realized gains) was 10.8 percent, compared to the 8 percent assumption.
The plan was amended to provide for compound annual increases for annuitants and survivors. This change increased the unfunded pension benefit obligation by $\$ 642$ million.

## Employer Cost in Excess of Contributions



# "A test of financial soundness of a pension system is its ability to pay all promised benefits when due." 

Actuarial Funding
Current Funding Policy

0n August 23, 1989 Public Act 86-0273 was enacted which provides for amortization of the System's unfunded pension benefit obligation over 40 years with a seven-year phase in. Implementation of this legislation will provide financial stability for the System by funding benefits on an actuarially sound basis. This legislation was not implemented in FY90 because State appropriations were insufficient to meet the funding requirements of Public Act 86-0273.

Advantages of Actuarial Funding
Retirement benefits earned during employment are part of the payroll expense for each employee. Sound financing of a retirement system requires that benefits accruing to each employee be paid for during the career of the employee by regular contributions to the retirement system based on a percentage of payroll. When an employee retires the accumulated funds should be sufficient to provide for the benefits payable to that employee. The cost of benefits for current employees should be borne by current taxpayers and should not become a liability for future taxpayers.

Sound actuarial funding practices also protect the employer. Current assessment of costs for both the employer and contributing employees protects the employer from the future impact of increasing contributions to pay for benefits that were underfunded. In addition, current funding protects against funding problems caused by changes in the work force.

Sound actuarial funding practices bolster membership confidence in retirement security. An individual's retirement security should not depend on future taxpayers or be subject to short-term employer distress caused by economic cycles. When sound actuarial funding practices are used, investment earnings may provide an appropriate method to pay for additional cost of living adjustments required by annuitants.

As a public pension plan, the Teachers' Retirement System is not covered by the Employee Retirement Income Security Act of 1974 (ERISA). That federal legislation did provide funding standards for private pension plans which the Teachers' Retirement System uses as a model. ERISA standards require annual funding to amortize the unfunded accrued benefit cost in the same manner as a home mortgage, with level annual payments of principal and interest over 30 years.

The Percentage of Benefits Covered by Net Assets exhibit compares the plan's net assets with the member's contributions, the amount necessary to cover the present value of benefits currently being paid, and the employer's portion of future benefits for active members.

A test of financial soundness of a pension system is its ability to pay all promised benefits when due. Column 1 represents the value of members' accumulated contributions. Column 2 represents the amount necessary to pay participants currently receiving benefits. Column 3 represents the employer's portion of future benefits for active members. The columns are arranged in order of priority: that is, members' contributions would be covered first, then current benefit recipients, and finally the employer portion of the active member benefits.

For a System receiving actuarially determined contribution amounts, the total of actuarial values in Columns 1 and 2 should generally be fully covered by assets and the portion of the actuarial value of Column 3 covered by assets should increase over time.

The Payroll Percentages test compares member payroll to unfunded pension benefit obligation, normal cost and normal cost plus interest. These percentages should decrease over the years if the System is growing stronger.

## Test of Financial Soundness

The following three charts show ten-year trends representing differing perspectives on the System's actuarial status.

## Funding Ratios*

(In Millions of Dollars)

| As of | Net Assets | Net Assets | Benefit | Funding Ratio |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| June 30 | at Cost | at Market | Obligation* * | Cost | at Market |
| 1981 | 2,896 | 2.493 | 5.390 | 53.7 | 46.3 |
| 1982 | 3,215 | 2,734 | 6,109 | 52.6 | 44.8 |
| 1983 | 3,410 | 3,605 | 6,690 | 51.0 | 53.9 |
| 1984 | 3.728 | 3,630 | 7.349 | 50.7 | 49.4 |
| 1985 | 4,265 | 4.598 | 7.982 | 53.4 | 57.6 |
| 1986 | 5.168 | 5,952 | 8,687 | 59.5 | 68.5 |
| 1987 | 6.092 | 6.958 | 9,950 | 61.2 | 69.9 |
| 1988 | 6,684 | 7.055 | 10,923 | 61.2 | 64.6 |
| 1989 | 7,271 | 8,088 | 11,914 | 61.0 | 67.9 |
| -1990 | 8,080 | 8,924 | 13,663 | 59.1 | 65.3 |

*As required by statute, the System's actuaries conducted an analysis of experience for the four-year periods ended June 30, 1981 and June 30. 1985, and for the three-year period ended June 30. 1988. For actuarial purposes, the effects of this analysis were reflected in the pension benefit obligation for the years ended June 30. 1982 and June 30, 1987, respectively: there was no effect on pension benefit obligation resulting from the three-year period ended June 30, 1988.

* *Amounts shown for 1981 were determined using the entry age normal actuarial cost method and do not comply with the standardized measure prescribed by GASB Statement Number 5. The difference in methodology is estimated to be non-material for comparison purposes.


## Percentage of Pension Benefit Obligation*


*Amounts shown for 1981 were determined using the entry age normal actuarial cost method and do not comply with the standardized measure prescribed by GASB Statement Number 5. The difference in methodology is estimated to be non-material for comparison purposes.

## Payroll Percentages



[^2]
## State Funding Summary

| (In Millions of Dollars) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FUNDING REQUIREMENTS |  |  |  |  | System Expense (5) | Employer Contributions (6) | COVERAGE PERCENTAGE |  |  |
| Fiscal Year Ended June 30 | Normal Costs <br> Plus Interest On <br> Unfunded Pension <br> Benefit Obligation <br> (1) | General Revenue Reimbursement Post-Retirement Increases (2) | Statutory Requirements |  |  |  |  |  |  |
|  |  |  | Actuarial (Columns 1 and 2) (3) | Minimum <br> (4) $[\mathrm{A}]$ |  |  |  |  |  |
|  |  |  |  |  |  |  | Requ | ents | System |
|  |  |  |  |  |  |  | Actuarial | Minimum | Expense |
|  |  |  |  |  |  |  | (7) [B] | (8) [C] | (9) [D] |
| 1981 | 259 | 7 | 266 | 188 | 240 | 247 | 92.9 | 131.4 | 102.9 |
| 1982 | 271 | 6 | 277 | 202 | 267 | 169 | 61.0 | 83.7 | 63.3 |
| 1983 | 367 | 6 | 373 | 213 | 288 | 161 | 43.2 | 75.6 | 55.9 |
| 1984 | 406 | 7 | 413 | 218 | 318 | 207 | 50.1 | 95.0 | 65.1 |
| 1985 | 437 | 9 | 446 | 237 | 352 | 237 | 53.1 | 100.0 | 67.3 |
| 1986 | 439 | 9 | 448 | 253 | 390 | 260 | 58.0 | 102.8 | 66.7 |
| 1987 | 440 | 8 | 448 | 272 | 429 | 280 | 62.5 | 102.9 | 65.3 |
| 1988 | 506 | 8 | 514 | 289 | 462 | 242 | 47.1 | 83.7 | 52.4 |
| 1989 | 559 | 7 | 566 | 305 | 503 | 260 | 45.9 | 85.2 | 51.7 |
| 1990 | 617 | 7 | 624 | 327 | 583 | 293 | 47.0 | 89.6 | 50.3 |

NOTE A - 9.6 percent of member payroll - the appropriations amount required by Section 16-158 of the Illinois Pension Code.

NOTE B - Employer contributions divided by actuarial requirement required by Section 16-159 of the Illinois Pension Code. (Col. $6 \div$ Col. 3)

NOTE C - Employer contributions divided by minimum requirement. (Col. 6 $\div$ Col. 4)

NOTE D - Employer contributions divided by System expense. (Col. $6 \div$ Col. 5 )

## Summary of Funding



Fiscal year ending June 30


## Employer Cost/Contribution



Fiscal year ending June 30
Employer cost
Employer contribution

## MEMBERSHIP AND BENEFITS INFORMATION



## MEMBERSHIP INFORMATION

## Membership Profile

AIl certificated Illinois public school employees outside the City of Chicago are members of TRS. These members include full and part-time employees, subject to certain limitations as outlined in the "Plan Summary" on page 31.

Members are employed by 1,114 employers including public school districts.
System members do not contribute to Social Security; however, many earn coverage by that system through non-TRS employment. All TRS members hired after March 31, 1986 are required to contribute to Medicare.

As of June 30, 1989 (the most current fiscal year statistics available), there were 100,857 TRS members, a slight increase from the 100,777 members on June 30 , 1988.

The average TRS member on June 30,1989 was 42 years old. The average age of the member population has remained stable for the past four years although active member age had increased steadily since the early 1970 s .
Fifty-seven percent of the active member population was in the 35-49 age group during FY89, compared to 38 percent of total membership in this same age group ten years ago. Despite this large percentage of educators moving toward retirement, there is a marked decrease in the number of teachers entering the field in the last ten years. During FY80, 6 percent of the total membership were age 20 to 24 . In FY89, this age group composed only 1.2 percent of the total member population.

The number of active members who choose to work after age 55 has risen steadily in the past decade, from 9 percent during FY80 to 12 percent in FY88 and FY89.

## Contributions

Aequired 8 percent of salary to the System, up 6 percent from FY89.
The average annual salary for active members rose 5.7 percent from FY88 to FY89, from $\$ 29,638$ to $\$ 31,318$. Since FY80, this figure has increased by 77 percent, from $\$ 17,621$. Generally, the more years of service the member accrues, the higher salary he or she earns. Peak salaries averaging $\$ 46,796$ during FY89 were earned by the 412 members in the 36-40 years of service category, while those with under 6 years of service averaged $\$ 22,270$ annually.

## Member Refunds

Members who withdraw from active service with the System may apply for a refund four months from the last day of teaching. The refund includes accumulated retirement contributions, exclusive of the 1 percent survivor benefit contribution and accumulated interest.

The System paid 2,703 former members $\$ 13.3$ million in refunds of retirement contributions during FY90. This is a decrease from the $\$ 13.5$ million in refunds in FY89.
The total number of refunds decreased 20 percent, from 3,393 in FY89.

A refund of the 1 percent survivor benefit contribution was paid to 532 retired members in FY90, up from 428 members who received this refund in FY89. A total of $\$ 1.99$ million was paid for this refund, which is granted to retired members who request the refund and who do not have a beneficiary deemed a dependent under the Illinois Pension Code. Acceptance of this refund terminates the retired member's eligibility for survivor benefit coverage from the System.

## Member Services

The System maintains two offices, in Springfield and Lisle, to serve members throughout the state. During FY90, the TRS offices received over 33,500 phone calls. In addition, staff members sent out over 144,000 letters and conducted office consultations with an average of 184 members monthly.
Individual retirement conferences are held around the state each year by the System's benefits consultants. During FY90, 6,195 members attended these conferences. An additional 10,531 members attended group meetings held by TRS around the state.
During FY88, the System initiated a program to help members plan for retirement. The seminars are designed to help members identify and plan to attain retirement goals. In FY90, 493 members attended these seminars.
A series of guides designed for members, retired members, and employers is published annually by the System. In addition, bulletins and newsletters are mailed to these audiences with current information concerning benefits, legislation, and System administration.
Individual member statements of account are mailed annually to all members. These present up-to-date information on each member's TRS contributions and service.

## Average Annual Salary

Active Members by Years of Service As of June 30, 1989

|  | Annual Salary (in thousands) |  |
| :--- | :--- | :--- |
|  | $\mathbf{5 0}$ |  |
|  | $\mathbf{4 5}$ |  |
|  |  | $\mathbf{4 0}$ |
|  |  | $\mathbf{3 0}$ |
|  |  | $\mathbf{2 5}$ |
|  |  | $\mathbf{2 0}$ |
|  |  | 15 |

AIs a trust fund for its members and annuitants, the Teachers' Retirement System provides retirement annuities, disability and survivor benefits. The System also administers the TRS Health and Prescription Drug Insurance Plan. These benefits are in the System's plan as outlined in Article 16, Chapter 108 1/2 of the Illinois Revised Statutes.

## Plan Design

The TRS plan is designed to pay specific benefits in amounts that are set forth by Illinois law. This design may only be changed by action of the Illinois General Assembly and the Governor. Benefits cannot be increased or reduced without a change in the TRS plan design.

## Retirement Benefits

$D$uring FY90, the TRS plan provided retirement benefits for 40,171 annuitants. The average benefit of $\$ 1,015$ was up 9 percent from $\$ 931$ on June 30, 1989.

## TRS Annuitant Profile

| June 30, 1990 |  |
| :--- | ---: |
| Average Age: |  |
| Average Service: | 73 |
| Average Annuity: | 26.8 |
| Average Original Annuity: | $\$ 1.015$ |
| Average Years in Retirement: | $\$ 791$ |

Overall, the System paid $\$ 474.8$ million in retirement annuities in FY90, up 9 percent from FY89. The number of annuitants receiving benefits rose during FY90, up 2,067 from June 30, 1989. The System offers retired members direct deposit of TRS annuity payments with participating financial institutions. At the end of FY90, 28,296 of the total 46,097 benefit recipients were participating in the direct deposit program. This represents 61.4 percent of all benefit participants.

Although the annuity for those members in retirement less than five years is higher than average at $\$ 1,413$, this amount drops to below the overall average after ten years in retirement - members retired between 11 and 15 years receive an average benefit of only $\$ 872$, below the $\$ 1,015$ average.

Average annuity also decreases as the retired member's age increases. Retirees aged 55 through 59 receive an average annuity of $\$ 1,557$ monthly, while those aged 80 and over receive an average of only $\$ 661$.

Of the 2,067 TRS members who retired during FY90. the average age was 60 , average service, 26.3 , and average monthly benefit, $\$ 1,570$. These members retired with an average salary of $\$ 34,690$.

Members who are 55 or older and have 20 or more years of service may choose the early retirement option to avoid a reduction in their annuity if they retire before earning 35 years of service. Enacted in 1980, this option allows the member and employer to make a one-time
> "Despite the large percentage of educators moving toward retirement, there is a marked decrease in the number of teachers entering the field in the last ten years."

contribution to TRS and avoid a reduced annuity. Current law calls for an end to the early retirement option after June 30, 1995. A nondiscounted annuity is granted to members with 35 or more years of service with no contributions required from either the member or the employer.

## Use of Early Retirement Option

| Year | Total Retirements | ERO <br> Retirements | $\begin{gathered} \text { ERO } \\ \% \\ \text { of Total } \end{gathered}$ | Average <br> Payment | Average Salary |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1981 | 1,750 | 419 | 23.9 | \$4.924 | \$21,092 |
| 1982 | 1.725 | 384 | 22.3 | 5,532 | 23.073 |
| 1983 | 1,946 | 468 | 24.0 | 5.801 | 24,889 |
| 1984 | 1,842 | 454 | 24.7 | 6,451 | 28,340 |
| 1985 | 2.336 | 645 | 27.6 | 5.924 | 28,331 |
| 1986 | 2,160 | 534 | 24.7 | 6,757 | 30,985 |
| 1987 | 2.093 | 552 | 26.4 | 7.191 | 32,202 |
| 1988 | 2,116 | 555 | 26.5 | 7,646 | 34,935 |
| 1989 | 2,044 | 630 | 30.8 | 7,798 | 37,141 |
| 1990 | 2.067 | 573 | 27.7 | 8,032 | 38,911 |

Disability Benefits

Disability payments of $\$ 8.2$ million were made by the System during FY90, up 5 percent from FY89. A total of 1,160 nonoccupational disability benefits were paid to members whose average age was 57 and average years of service was 16.6 .
There were 292 new nonoccupational disability benefits paid during FY90 and the average benefit for these new recipients was $\$ 1,016$. Of these new claims, 25 percent were for pregnancy-related disabilities; 11 percent were for mental illness; 10 percent for cancer and tumors, with other disabilities accounting for the remainder of the claims.

## Survivor Benefits

Atotal of 1,305 death and survivor benefit claims were paid in FY90. Total payments rose from $\$ 24.4$ million in FY89 to $\$ 26.2$ million in FY90.
Average monthly survivor benefits of $\$ 394$ were paid to 4,766 survivors of TRS members and annuitants in FY90. The average age of the deceased was 71. There were 471 new claims during the year for monthly benefits and average monthly benefit for FY90 claims was $\$ 477$.

## Health Insurance

Since 1981, the System has provided health and prescription drug insurance. The plan, administered by Blue Cross/Blue Shield, is available to annuitants electing coverage. Annuitants may also enroll their eligible dependents. On June 30, 1990 enrollment in the plan totaled 16,394 annuitants and 4,151 dependents.

## Coverage Options

For annuitants and their dependents who qualify for Medicare, TRS provides Medicare supplement coverage. After the $\$ 300$ yearly deductible, the plan pays the balance of all claims that are reasonable and customary that Medicare does not pay. As of June 30. 1990, 11,906 members and 2,753 dependents were enrolled in this option.
Annuitants who do not qualify for free Medicare Part A coverage at age 65 may elect the Special Coverage Option. This option provides coverage for both hospital and physician services. It pays all claims that are reasonable and customary after a $\$ 300$ deductible and $80 \%-20 \%$ coinsurance of the next $\$ 10,000$ of covered expenses and 100 percent coverage thereafter. As of June 30, 1990, 922 annuitants and dependents were enrolled in this option.
Annuitants and their dependents under 65 are offered the choice of two types of coverage. On June 30, 1990, 3.573 annuitants and 1,391 dependents were enrolled in these plans.

## Premiums

The System pays half the cost of the premium for participating annuitants, however, dependent premiums are the responsibility of the members.

Health Plan Enrollment
1981-1990

|  | 22000 |
| ---: | ---: |
|  | 19800 |
|  | 17600 |
|  | 15400 |
|  | 13200 |
|  | 11000 |
|  | 8800 |
|  | 6600 |
|  | 4400 |
|  |  |
|  |  |
|  |  |
|  |  |

The amounts which the System paid in premiums have been:

## TRS Subsidy Payments

| FY 1981 | F |
| :--- | ---: |
| FY 1982 | $\mathbf{1 0 9 , 6 8 9}$ |
| FY 1983 | 626,695 |
| FY 1984 | $1,502,799$ |
| FY 1985 | $2,412,284$ |
| FY 1986 | $3,427,819$ |
| FY 1987 | $4,466,057$ |
| FY 1988 | $5,409,299$ |
| FY 1989 | $6,822,664$ |
| FY 1990 | $8,322,849$ |

Reserve Account
The System maintains a Health Insurance Reserve Account. On June 30, 1989 the reserve fund balance was $\$ 49.8$ million. During FY90 the account was credited with the required $\$ 20$ million plus $\$ 5.2$ million interest earned. Premium payments of $\$ 10.3$ million were charged to the account leaving a June 30,1990 reserve fund balance of $\$ 64.7$ million.

## Claims Experience

| Year June 30 | Premiums Paid | Retention* Fees | Claims <br> Paid |
| :---: | :---: | :---: | :---: |
| 1981 | \$ 291,001 | 21.068 | 100.572 |
| 1982 | 1.597,841 | 115,684 | 1,207,864 |
| 1983 | 3,826,362 | 277.021 | 3,467,117 |
| 1984 | 6,242,236 | 368,008 | 5.962,159 |
| 1985 | 8,931,731 | 427.746 | 8,195,968 |
| 1986 | 11,640.732 | 539,458 | 9,859,427 |
| 1987 | 13,932,201 | 617,300 | 13,163,179 |
| 1988 | 17,066,035 | 735.546 | 17,714.923 |
| 1989 | 20,859,736 | 899,055 | 22.015,321 |
| 1990 | 26,048,490 | 1,122,690 | 24,921,796 |
| *Retention is carrier to co and the risk | percentage or the administr oleed in unde | miums pai costs for pror iting the con | he insurance sing claims |

## Health Insurance Reserve Account Fund Balance <br> June 30

|  | In millions of dollars |
| ---: | ---: |
|  | $\mathbf{7 0}$ |
|  | $\mathbf{6 0}$ |
|  | $\mathbf{5 0}$ |
| 1987 | $\mathbf{4 0}$ |

## TRS LEGISLATIVE ISSUES

The Teachers' Retirement System plays an important role in providing economic security for its members in retirement. The System is designed not only as a defined benefit plan which replaces a set percentage of teachers' income based on the number of years which a member works as a teacher but also as a replacement for Social Security. These complementary roles are taken seriously by the Teachers' Retirement System as it works in support of equitable benefits which improve the retirement security of its members.
A recent survey of TRS members indicates that onehalf of all active and retired teachers have never been employed outside the teaching profession. Those who have worked outside teaching average less than 10 years in other fields (see Table 1). Teachers' salaries and retirement benefits are the principal sources from which they must draw their lifetime income. Because teachers, most of whom are not highly compensated, are not able to set aside large sums during years of active employment, retirement benefits for teachers are, in part, designed to compensate for these lower salaries.

Table 1, TRS member employment outside teaching.

|  | Never Employed <br> Outside <br> Teaching | Employed <br> Outside <br> Teaching | Avg. " <br> of Yrs. |
| :---: | :---: | :---: | :---: |
| Retired members | $46 \%$ | $54 \%$ | 9.3 yrs. |
| Active members <br> Less than 45 years <br> old | $56 \%$ | $44 \%$ | 5 yrs |
| 45 or more years <br> old | $50 \%$ | $50 \%$ | 6.8 yrs. |

In recent years, several legislative changes have substantially improved retirement security for TRS members and their survivors. Legislation approved in 1989 provides for annual increases based on current rather than original benefits and annual increases in benefits for survivors. These changes provide an important shield against the decline in purchasing power brought about by increasing health care costs and other economic trends (see below).

## Medical Price Index, Consumer Price Index and TRS Annual Increases



Unfortunately, TRS members in retirement for many years and those with small pensions are not significantly protected by these benefit improvements. Inflation hit many of these individuals too hard for the annual increase improvements by themselves to meaningfully increase their economic security. Many of these retirees rely on the TRS minimum retirement benefit as their bottom line protection. The minimum retirement benefit provides protection for the lowest paid and those in retirement the longest.

## Minimum Retirement Benefits

The TRS minimum retirement annuity was instituted in 1974 at $\$ 10$ per month for each year of creditable service in order to protect against the shrinking buying power of TRS annuities. Currently, annuitants who make a qualifying contribution are guaranteed a minimum retirement benefit of $\$ 15$ per month for each year of creditable service up to a maximum of $\$ 450$ per month. Over 6000 TRS annuitants rely on the minimum retirement benefit to protect their annuities. However, for many, the standard of living that this minimum supports does not approach that of their original annuity at the time they retired.

Because minimum retirement levels are an important protection for long-term retirees, these levels need to be increased over time. Since 1974, when the minimum retirement levels were introduced at $\$ 10$ per month for each year of creditable service, the cost of living has risen significantly. In order to maintain the same buying power, the $\$ 10$ per month would need to be $\$ 25$ per month. Unfortunately, this level has only been increased to $\$ 15$ per month. The TRS minimum retirement level maintains a significantly lower standard of living today than it did in 1974 (see below).

## Purchasing Power Reductions in the

 TRS Minimum Retirement Annuity

If the TRS minimum retirement level were increased to $\$ 25$ per month for each year of creditable service up to a maximum of $\$ 750$ per month, 10.405 TRS members would see an increase in monthly benefits averaging $\$ 54$ per month. This new floor for TRS benefits would significantly aid retirees hit hard by inflation. The annual increase based on current benefits will then protect these retirees from once again experiencing a dramatic loss in purchasing power.

## Retirement Formula

In addition to a floor below which benefits will not fall, retirement security also flows from adequate benefits at retirement. The Teachers' Retirement System supports legislation to improve the retirement benefit formula for Illinois teachers by replacing the current graduated formula with one that will provide 2.2 percent of final average salary for each year of service credit (see Table 2). This improvement is necessary to provide TRS members with retirement benefits which compare favorably with not only teacher retirement benefits across the country, but also with other public employee retirement benefits in the State of Illinois.

| Table 2. Percent of final average salary <br> retirement age. |  |  |
| :---: | :---: | :---: |
| at normal |  |  |
| Creditable | Current | Proposed <br> Service |
| Formula | Formula |  |
| 5 | $8.35 \%$ | $11.00 \%$ |
| 10 | $16.7 \%$ | $22.00 \%$ |
| 15 | $26.2 \%$ | $33.00 \%$ |
| 20 | $35.7 \%$ | $44.00 \%$ |
| 25 | $46.2 \%$ | $55.00 \%$ |
| 30 | $56.7 \%$ | $66.00 \%$ |
| 35 | $68.2 \%$ | $75.00 \%$ |
| 38 or more | $75.00 \%$ | $75.00 \%$ |

Comparisons of TRS with teacher retirement plans in other states show that the benefits Illinois teachers receive still fall behind those provided to teachers outside of Illinois. All twelve other states that, like Illinois, have teachers' retirement plans which are not coordinated with Social Security provide teachers with better retirement formulas than TRS. Eight of these states provide a formula of 2 percent or greater per year of service. In 1990, the average newly retired TRS member received 1.86 percent of their final average salary for each year of service.

When the TRS plan is compared with other Illinois public employee plans, again the TRS retirement formula falls behind most others. Because the required employee contribution rates of the various systems differ greatly, the best method for comparison is to examine what members of the systems receive for each dollar they contribute. When the value of retirement benefits is expressed as a percentage of the accumu-
> "The Teachers' Retirement System supports legislation to improve the retirement benefit formula for Illinois teachers by replacing the current graduated formula with one that will provide 2.2 percent of final average salary for each year of service credit."

lated value of a member's contributions, TRS comes in far behind most other public employee plans in Illinois.
In fact, retirement benefits for educators in Illinois are lower than benefits offered to any other group of public employees. For example, under the Teachers' Retirement System, the value of a benefit at retirement for an employee who retires at age 60 with 20 years of service is 184.5 percent of the value of the employee's accumulated contributions. In other words, the employer (for TRS, the State of Illinois) contributes 85.5 cents for every dollar contributed by a teacher retiring at age 60 with 20 years of service. At the same time, the employer of a member retiring under these conditions under the Illinois Municipal Retirement Fund (I.M.R.F.), contributes $\$ 2.14$ for each dollar contributed by an I.M.R.F. member.

## 1991 Legislative Session

In 1991, the Teachers' Retirement System will support legislation to improve the minimum retirement benefit and the TRS retirement formula. While TRS works closely with the Illinois General Assembly and the Governor in support of benefit improvements which increase retirement security for TRS members, the success of the System's benefit improvements is directly related to the involvement of TRS members and retirees.
In recent years. TRS members and retirees have increased their role in the legislative process by subscribing to the TRS Legislative Update and by contacting their elected officials regarding issues of interest to them. This active participation will help advance legislative efforts aimed at improving the retirement security of teachers throughout the State of Illinois.

## Administration

The Teachers' Retirement System was created and is governed by Chapter 108 1/2. Article 16 of the Illinois Recised Statutes. A Board of Trustees, comprised of the State Superintendent of Education, four persons appointed by the Governor, four elected members of the System and one elected annuitant, is authorized to carry out provisions of the Article. This Board appoints an executive director responsible for the general administration of the System.

## Revenue

Three primary sources of revenue for the System are contributions from active members, appropriations from the State of Illinois, and investment income. The required member contribution rate is 8 percent of gross earnings, designated as follows: $61 / 2$ percent for retirement annuity. $1 / 2$ percent for post-retirement increases, and 1 percent for death benefits.

## Membership

Membership in the System is mandatory for all individuals certified under the provisions of The School Code and employed in the public schools of Illinois (except Chicago).

## Service Credit

A member is granted one year of credit for 170 paid days but not more than one year during a fiscal year ending June 30. Subject to limitations, credit is granted for substitute teaching, out-ofsystem service, an official leave of absence, part-time teaching, and military service. Such service requires additional contributions. Credit is also added at retirement for up to one year for 170 unused sick leave days established with TRS employers.

Accumulated contributions are a return of the member's accumulated contributions to the System, plus the statutorily required interest. Survivors of active members receive a return of accumulated contributions. Survivors of annuitants receive accumulated contributions minus the amount the member received as retirement annuity.
Survivor benefits are payable in one of two forms. A lump-sum settlement is available to dependent and nondependent beneficiaries. It consists of a cash settlement based on the final salary rate as a teacher (maximum $=$ the final salary rate: minimum $=$ one-sixth the final salary rate or $\$ 3,000$, whichever is greater.) Monthly income is payable to dependent beneficiaries of a member with $11 / 2$ years of credit at the time of death. This benefit includes a $\$ 1,000$. one-time payment, plus monthly maximums of $\$ 400$ for one dependent: $\$ 600$ for two or more dependents; or 50 percent of the deceased member's earned monthly retirement annuity, whichever is greater. The System provides a 3 percent annual increase in the currently payable monthly survivor benefit.
Members who cease teaching for reasons other than retirement more than one year prior to death with at least 20 years of service have a vested interest in survivor benefits; however, survivors of inactive members with less than 20 years service will receive only a return of accumulated contributions.
If a member retires after December 31, 1981, and has no spouse or eligible child, he or she may elect to take a refund of actual survivor benefit contributions, waiving all rights to survivor benefits: however. the survivors are eligible for a return of the member's excess accumulated contributions (if any). To restore eligibility for these benefits. the member must return to contributing service for at least one year and repay the refund with interest.

Retirement Annuity
A member qualifies for a retirement annuity after attaining one of the following: age 62 with 5 years of service credit; age 60 with 10 years; age 55 with 20 years. If retirement occurs between ages 55 and 60 with less than 35 years of service, the annuity will be reduced at the rate of $1 / 2$ percent for each month the member is under age 60. A member age 55 with less than 35 years may use the early retirement option to avoid a discount for early retirement if retirement occurs before June 30, 1995 and within six months of the last day of service requiring contributions and if the member and the employer both make a one-time contribution to the System.
The annuity is determined by the average salary of the four highest consecutive salary rates within the last ten years of creditable service and the percentage of average salary to which the member is entitled. This percentage is determined by the following formula: 1.67 percent for each of the first ten years, plus 1.9 percent for each of the next ten years, plus 2.1 percent for each of the next ten years, plus 2.3 percent for each year over 30. The maximum annuity, 75 percent of average salary, is achieved with 38 years of service.

## Post-retirement

 IncreaseThe System provides 3 percent compounded annual increases in the age or disability retirement annuity for members age 61 or older with one year in retirement

## Refunds

The System will refund a member's contributions provided the member has officially resigned from a position requiring System membership and the application is submitted not earlier than four months after termination of employment. The refund consists of all retirement contributions made by the member excluding interest and the 1 percent death benefit contribution. When the member accepts a refund, he or she forfeits all credit with the System. The credit may be re-established if the member returns to teaching in a position requiring contributions to the System for one year and repays the refund with interest.

## TRS Health and Prescription Drug Plan

Annuitants and beneficiaries of the System and their eligible dependents may enroll in the TRS Health and Prescription Drug Plan. This partially subsidized plan covers hospital and physicians' medical expenses and prescription drugs.

## Special Conditions

Any member convicted of a felony related or in connection with teaching is not eligible for TRS benefits; however. that member may receive a refund of contributions. Conditions involving a claim for benefits may require further clarification. If any conflicts arise between material in this summary and that of the law, the law takes precedence.

## Continuity of Credit Within Illinois

TRS is one of 13 systems included in the provisions of the Retirement Systems Reciprocal Act which assures continuous pension credit for public employment in Illinois.

## EXHIBITS

## Active Members by Years of Age and Years of Service

| Years |  | 41 | 1.5 | 6-10 | 11-15 | 16-20 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 20-24 | Total \# | 197 | 1,043 | - | - |  |
|  | Average \$ | 8,378 | 18,496 | - | - |  |
| 25-29 | Total \# | 308 | 7,536 | 506 | - |  |
|  | Average \$ | 9,186 | 20,864 | 24,117 | - |  |
| 30-34 | Total \# | 169 | 3,837 | 5,090 | 819 | - |
|  | Average \$ | 8,671 | 22,076 | 25,172 | 28,451 | - |
| 35-39 | Total ${ }^{\text {\% }}$ | 246 | 3,825 | 3,463 | 7,961 | 1,520 |
|  | Average \$ | 8,288 | 22,573 | 27,114 | 30,428 | 33,998 |
| 40-44 | Total * | 294 | 4,231 | 2,882 | 4,171 | 10,270 |
|  | Average \$ | 9,151 | 23,529 | 28,110 | 32,911 | 36,147 |
| 45-49 | Total \# | 149 | 2,201 | 1,930 | 2,257 | 3,731 |
|  | Average \$ | 9,380 | 24,451 | 29,207 | 32,999 | 37.568 |
| 50-54 | Total \#, | 59 8 | 793 | 928 | 1,393 | 2,102 |
|  | Average \$ | 8,650 | 25,422 | 30,320 | 32,959 | 36,325 |
| 55-59 | Total \# | 30 | 257 | 357 | 714 | 1,399 |
|  | Average \$ | 8,352 | 26,301 | 30,178 | 32,314 | 36,574 |
| 60-64 | Total \# | 9 | 93 | 128 | 288 | 700 |
|  | Average \$ | 11.598 | 26,361 | 31,012 | 33,698 | 36,696 |
| 65-69 | Total \#, | 2 | 15 | 25 | 60 | 132 |
| 70-74 | Average \$ | 5,032 | 26,975 | 30,126 | 31,013 | 35,743 |
|  | Average \$ | - | - | 2 | 7 | 13 |
| -74 | Total \# |  | 2 | 19,737 | 27,635 | 36,497 |
|  | Average \$ |  | 25,174 | 33,559 | 34,425 | - |
| Total | Total * | 1,463 | 23,833 | 15,314 | 17,671 | 19,867 |
|  | Average \$ | 8,850 | 22,270 | 27,124 | 31,581 | 36,315 |


| Years of Service |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | - | - | - | - | - | - | 1,240 |
| - | - | - | - | - | - | - | \$ 16,889 |
| - | - | - | - | - | - | - | 8,350 |
| - | - | - | - | - | - | - | \$ 20,631 |
| - | - | - | - | - | - | - | 9,915 |
| - | - | - | - | - | - | - | \$ 23,970 |
| - | - | - - | - | - | - | - | 17,015 |
|  |  | \% - | - | - | - | - | \$ 27,986 |
| 1,362 | - | - | - | - | - | - | 23,210 |
| 39,422 | - | - | - | - | - | - | \$ 32,118 |
| 6,468 | 682 | - | - | - | - | - | 17,418 |
| 39,688 | 41,381 | $\overline{-}$ | - | - | - | - | \$ 35,087 |
| 2,403 | 3,426 | 449 | - | - | - | - | 11,553 |
| 38,867 | 41,676 | 42,474 | - | - | - | - | \$ 36,902 |
| 1,573 | 1,812 | 1,618 | 75 | - | - | - | 7,835 |
| 38,277 | 41,672 | 44,398 | 45,851 | - | - | - | \$ 38,674 |
| 794 | 577 | 559 | 247 | 9 | 1 | - | 3,405 |
| 37,172 | 39,868 | 43,690 | 47,879 | 38,610 | 36,506 | - | \$ 38,493 |
| 203 | 138 | 106 | 76 | 22 | 8 | - | 787 |
| 37,673 | 38,907 | 41,372 | 44,848 | 41,254 | 31,772 | - | \$ 37,763 |
| 26 | 24 | 26 | 14 | 4 | 6 | - | 122 |
| 37,067 | 41,091 | 36,369 | 43,308 | 41,968 | 41,425 | - | \$ 37.915 |
| 1 | - | - | - | - | - - | - | 7 |
| 37,496 | 二 | - | - | - | - | - | \$ 31,849 |
| 12,830 | 6,659 | 2,758 | 412 | 35 | 15 | - | 100,857 |
| 39,141 | 41,429 | 43,749 | 46,796 | 40,656 | 35,949 | - | \$ 31,318 |

## Average Annual Salary of Active Members by Years of Service*

| Years of Service |  | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Under 11.5 | Total ${ }^{\text {a }}$ | 1.880 | 1,481 | 1,170 | 808 | 950 | 1,129 | 1.740 | 1,338 | 1,462 | 1.463 |
|  | Average \$ | 11,972 | 13,156 | 14.165 | 14.638 | 15.192 | 16.107 | 9.126 | 9.484 | 9.029 | 8.850 |
|  | Total ${ }^{\text {\% }}$ | 30.596 | 28,981 | 26,614 | 22,674 | 18,814 | 17,901 | 20,420 | 22,046 | 23,330 | 23,833 |
|  | Average \$ | 13,298 | 14,414 | 15,682 | 16,689 | 17,266 | 17,926 | 18,668 | 19,826 | 20,987 | 22,270 |
|  | Total * | 28,266 | 26,319 | 24,732 | 23,433 | 22.047 | 21.157 | 19,698 | 19.819 | 17.129 | 15,314 |
|  | Average \$ | 16,694 | 17,971 | 19.446 | 20.338 | 20.915 | 21.841 | 23.005 | 24,320 | 25.780 | 27.124 |
| 11-15 | Total ${ }^{\text {" }}$ | 20,203 | 21,750 | 22,560 | 23,201 | 23,462 | 22,833 | 20,700 | 19,460 | 18,417 | 17,671 |
|  | Average 8 | 19,809 | 21,554 | 23,277 | 24,467 | 25,341 | 26,378 | 27,607 | 29,001 | 30,312 | 31,581 |
| 16-20 | Total * | 12,844 | 12,566 | 12.666 | 13,920 | 15,481 | 17.419 | 18,528 | 19,163 | 19,689 | 19,867 |
|  | Average \$ | 21,838 | 23,678 | 25,580 | 22.165 | 28,309 | 29,976 | 31,056 | 33,144 | 34.771 | 36,315 |
| 21.25 | Total * | 6,807 | 7,583 | 8,355 | 8,588 | 8,747 | 9,089 | 9,391 | 10,257 | 11,414 | 12,830 |
|  | Average \$ | 23,377 | 25,368 | 27,415 | 28,976 | 30,199 | 31,657 | 33,309 | 35,246 | 37,153 | 39,141 |
| 26-30 | Total | 3.594 | 3.877 | 4,199 | 4.494 | 5,053 | 5,479 | 5,864 | 6.245 | 6.456 | 6.659 |
|  | Average \$ | 24,384 | 26.367 | 28.473 | 30,396 | 31.960 | 34.026 | 35,740 | 37,666 | 39,474 | 41,429 |
| 31-35 | Total * | 1,124 | 1,680 | 2,228 | 2,279 | 2,251 | 2,009 | 2,002 | 2,089 | 2,394 | 2,758 |
|  | Average \$ | 24,151 | 27.067 | 29,914 | 31,887 | 33,651 | 35,782 | 37,533 | 39,310 | 41,730 | 43,749 |
| Over 35 | Total * | 244 | 317 | 455 | 436 | 421 | 430 | 483 | 517 | 426 | 462 |
|  | Average S | 22.280 | 24,347 | 26,889 | 30,042 | 31,494 | 33,930 | 37,533 | 40,492 | 43,465 | 45,979 |
| Total | Total * | 105,558 | 104,554 | 102,979 | 99,833 | 97,226 | 97,446 | 98,826 | 99,934 | 100,777 | 100,857 |
|  | Average \$ | 17,621 | 19,361 | 21,281 | 22,877 | 24,141 | 25,454 | 26,522 | 28,085 | 29,638 | 31,318 |

"Statistical information on the Svstem's active membership is not yet available for FY90.

## Active Members by Age



Average Monthly Annuity for New Retirees by Age

| Age |  | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 455 | Total " | - | - | - | - | - | - | - | - |  | - |
|  | Average \$ | - | - | - | - | - | - | - |  |  |  |
| 55 | Total * | 116 | 126 | 148 | 164 | 176 | 169 | 173 | 167 | 171 | 178 |
|  | Average \$ | 674 | 821 | 879 | 934 | 1.160 | 1,082 | 1,258 | 1,351 | 1,373 | 1,525 |
| 56 | Total * | 133 | 123 | 149 | 159 | 216 | 183 | 204 | 206 | 209 | 216 |
|  | Average \$ | 922 | 1,021 | 1,068 | 1.220 | 1,252 | 1,407 | 1,537 | 1,533 | 1.797 | 1,754 |
| 57 | Total * | 105 | 89 | 98 | 128 | 174 | 143 | 134 | 134 | 141 | 140 |
|  | Average \$ | 903 | 1,038 | 1.164 | 1,285 | 1.431 | 1,467 | 1.563 | 1,565 | 1,534 | 1,723 |
| 58 | Total \# | 106 | 95 | 110 | 117 | 159 | 141 | 136 | 137 | 141 | 131 |
|  | Average \$ | 880 | 1,068 | 1,204 | 1.353 | 1,457 | 1,438 | 1,465 | 1,630 | 1,730 | 1.725 |
| 59 | Total \# | 130 | 101 | 126 | 133 | 187 | 174 | 168 | 136 | 143 | 163 |
|  | Average \$ | 971 | 1,087 | 1,075 | 1,241 | 1.415 | 1,498 | 1,566 | 1,621 | 1,786 | 1,893 |
| 60 | Total * | 332 | 322 | 340 | 282 | 372 | 334 | 333 | 343 | 337 | 366 |
|  | Average \$ | 673 | 718 | 820 | 858 | 1.030 | 1,036 | 1,080 | 1,165 | 1,303 | 1,385 |
| 61 | Total " | 153 | 173 | 183 | 164 | 207 | 155 | 175 | 186 | 180 | 192 |
|  | Average \$ | 740 | 817 | 956 | 1,108 | 1,326 | 1.264 | 1,337 | 1.367 | 1,475 | 1,667 |
| 62 | Total * | 142 | 158 | 183 | 162 | 175 | 151 | 169 | 154 | 162 | 159 |
|  | Average \$ | 641 | 701 | 799 | 955 | 977 | 950 | 1,161 | 1,337 | 1,376 | 1,300 |
| 63 | Total ${ }^{\text {\% }}$ | 110 | 120 | 114 | 121 | 151 | 121 | 120 | 129 | 118 | 111 |
|  | Average \$ | 732 | 770 | 995 | 971 | 1,053 | 1.100 | 1,233 | 1,304 | 1,522 | 1,558 |
| 64 | Total * | 111 | 103 | 115 | 115 | 122 | 103 | 130 | 117 | 88 | 98 |
|  | Average \$ | 741 | 833 | 915 | 979 | 1,032 | 1,098 | 1,150 | 1,401 | 1,383 | 1,489 |
| 65 | Total * | 141 | 120 | 129 | 104 | 114 | 121 | 126 | 125 | 109 | 100 |
|  | Average \$ | 833 | 855 | 870 | 882 | 1,015 | 1,061 | 1,274 | 1,239 | 1,302 | 1.471 |
| 66 | Total ${ }^{\text {\% }}$ | 93 | 88 | 97 | 79 | 84 | 74 | 79 | 95 | 92 | 81 |
|  | Average \$ | 818 | 834 | 871 | 820 | 1,065 | 1,186 | 1,295 | 1,150 | 1,318 | 1,452 |
| 67 | Total " | 35 | 30 | 43 | -29 | 56 | 52 | 37 | 42 | 41 | 35 |
|  | Average \$ | 797 | 912 | 789 | 1.020 | 1,062 | 861 | 1,114 | 1,406 | 1.483 | 1,495 |
| 68 | Total * | 14 | 34 | 37 | 28 | 32 | 36 | 33 | 40 | 24 | 30 |
|  | Average \$ | 776 | 734 | 820 | 1,109 | 865 | 740 | 1,116 | 1,481 | 1,372 | 1,538 |
| 69 | Total * | 14 | 21 | 33 | 21 | 28 | 24 | 17 | 34 | 17 | 16 |
|  | Average \$ | 399 | 605 | 862 | 946 | 949 | 696 | 1,273 | 1,262 | 1.099 | 1,470 |
| 70 | Total * | 6 | 5 | 21 | 19 | 36 | 38 | - 30 | 20 | 25 | 19 |
|  | Average \$ | 306 | 788 | 862 | 1,217 | 938 | 903 | 1,107 | 1,234 | 1,170 | 1.432 |
| -70 | Total | 9 | 17 | 20 | 17 | 47 | 141 | 29 | 50 | 45 | 32 |
|  | Average | 384 | 193 | 337 | 1,077 | 581 | 236 | 758 | 606 | 671 | 1,631 |
| Total | Total ${ }^{\prime \prime}$ | 1,750 | 1,725 | 1,946 | 1,842 | 2,336 | 2,160 | 2,093 | 2,116 | 2,044 | 2,067 |
|  | Average \$ | 771 | 836 | 927 | 1,043 | 1,162 | 1.119 | 1,294 | 1,355 | 1.463 | 1,570 |
|  | Average Age | 61 | 61 | 61 | 61 | 61 | 61 | 61 | 61 | 61 | 60 |

## New Retirees by Years of Service

| Years of Service | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1-5 | 60 | 61 | 69 | 83 | 84 | 113 | 97 | 92 | 92 | 89 |
| 6-10 | 72 | 79 | 86 | 77 | 106 | 198 | 106 | 112 | 117 | 112 |
| 11-15 | 157 | 158 | 160 | 143 | 150 | 173 | 114 | 150 | 120 | 103 |
| 16-20 | 254 | 258 | 284 | 257 | 275 | 242 | 265 | 242 | 212 | 190 |
| 21-25 | 343 | 316 | 354 | 312 | 397 | 343 | 351 | 347 | 334 | 358 |
| 26-30 | 359 | 314 | 376 | 326 | 465 | 413 | 441 | 399 | 410 | 414 |
| 31-35 | 334 | 375 | 431 | 449 | 578 | 436 | 437 | 465 | 509 | 515 |
| 36-40 | 118 | 121 | 142 | 152 | 241 | 213 | 252 | 265 | 221 | 286 |
| - 40 | 53 | 43 | 44 | 43 | 40 | 29 | 30 | 44 | 29 | 35 |
| Total | 1,750 | 1,725 | 1,946 | 1,842 | 2,336 | 2,160 | 2,093 | 2,116 | 2,044 | 2,067 |
| Service | 25.1 | 25.1 | 25.4 | 25.5 | 26.3 | 24.4 | 25.8 | 25.9 | 25.7 | 26.3 |

Retired Members by Years of Service and Years in Retirement

| Years in Retirement |  | 1.5 |  | 6-10 |  | 11.15 |  | 16-20 |  | 21-25 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1.5 | Total * |  | 444 |  | 581 |  | 608 |  | 1,061 |  | 1,584 |
|  | Average Benefit | \$ | 124 | \$ | 297 | \$ | 502 | \$ | 840 |  | 1,117 |
|  | Original Benefit | \$ | 113 | \$ | 269 | \$ | 469 | \$ | 802 |  | 1,080 |
| 6-10 | Total \# |  | 335 |  | 403 |  | 729 |  | 1,251 |  | 1,644 |
|  | Average Benefit | \$ | 111 | \$ | 244 | \$ | 440 | \$ | 717 | \$ | 930 |
|  | Original Benefit | \$ | 87 | \$ | 186 | \$ | 355 | \$ | 596 | \$ | 784 |
| 11-15 | Total * |  | 241 |  | 351 |  | 642 |  | ,127 |  | 1,447 |
|  | Average Benefit | \$ | 98 | \$ | 228 | \$ | 365 | \$ | 552 | \$ | 719 |
|  | Original Benefit | \$ | 66 | \$ | 145 | \$ | 250 | \$ | 395 | \$ | 519 |
| 16-20 | Total * |  | 184 |  | 276 |  | 523 |  | 962 |  | 1,137 |
|  | Average Benefit | \$ | 34 | \$ | 167 | \$ | 302 | \$ | 452 | \$ | 586 |
|  | Original Benefit | \$ | 11 | \$ | 85 | \$ | 167 | \$ | 267 | \$ | 358 |
| 21.25 | Total ${ }^{\text {\# }}$ |  | 48 |  | 75 |  | 211 |  | 424 |  | 593 |
|  | Average Benefit | \$ | 42 | \$ | 166 | \$ | 252 | \$ | 357 | \$ | 465 |
|  | Original Benefit | \$ | 1 | \$ | 53 | \$ | 78 | \$ | 139 | \$ | 219 |
| 26-30 | Total * |  | 19 |  | 11 |  | 56 |  | 202 |  | 367 |
|  | Average Benefit | \$ | 56 | \$ | 146 | \$ | 251 | \$ | 358 | \$ | 439 |
|  | Original Benefit | \$ | 4 | \$ | 26 | \$ | 53 | \$ | 110 | \$ | 153 |
| 31-35 | Total * |  | 5 |  | 3 |  | 9 |  | 55 |  | 134 |
|  | Average Benefit | \$ | 76 | \$ | 180 | \$ | 272 | \$ | 364 | \$ | 434 |
|  | Original Benefit | \$ | 6 | \$ | 21 | \$ | 33 | \$ | 81 | \$ | 96 |
| 36-40 | Total \# |  | - |  | - |  | - |  | 17 |  | 36 |
|  | Average Benefit |  | - |  | - |  | - | \$ | 353 | \$ | 438 |
|  | Original Benefit |  | T |  | - |  | - | \$ | 48 | \$ | 65 |
| 41.45 | Total \# |  | - |  | - |  | - |  | 11 |  | 23 |
|  | Average Benefit |  | - |  | - |  | - | \$ | 351 | \$ | 460 |
|  | Original Benefit |  | - |  | - |  | - | \$ | 21 | \$ | 45 |
| 46-50 | Total \# |  | - |  | - |  | - |  | - |  | 4 |
|  | Average Benefit |  | - |  | - |  | - |  | - | \$ | 464 |
|  | Original Benefit |  | - |  | - |  | - |  | - | \$ | 48 |
| TOTALS | Total * |  | ,276 |  | . 700 |  | ,778 |  | 5,110 |  | 6,969 |
|  | Average Benefit | \$ | 98 | \$ | 242 | \$ | 392 | \$ | 606 | \$ | 793 |
|  | Original Benefit | \$ | 76 | \$ | 182 | \$ | 292 | \$ | 467 |  | 626 |





## Annuitants By Benefit Range

| Benefit Range | Total | Cumulative Total | $\%$ of Total | Cumulative \% of Total |
| :---: | :---: | :---: | :---: | :---: |
| \$ 1-100 | 710 | 710 | 1.8 | 1.8 |
| 101-200 | 1,079 | 1,789 | 2.7 | 4.5 |
| 201-300 | 1,820 | 3,609 | 4.6 | 9.1 |
| 301-400 | 2,302 | 5,911 | 5.8 | 14.9 |
| 401-500 | 3,009 | 8,920 | 7.6 | 22.4 |
| 501-600 | 3,734 | 12,654 | 9.4 | 31.8 |
| 601-700 | 2,782 | 15,436 | 7.0 | 38.8 |
| 701-800 | 2,634 | 18,070 | 6.6 | 45.4 |
| 801-900 | 2,594 | 20,664 | 6.5 | 60.0 |
| 901-1,000 | 2,468 | 23,132 | 6.2 | 58.2 |
| 1,001-1,100 | 2,099 | 25,231 | 5.3 | 63.5 |
| 1,101-1,200 | 1,908 | 27,139 | 4.8 | 68.3 |
| 1,201-1,300 | 1,762 | 28,901 | 4.4 | 72.7 |
| 1,301-1,400 | 1,469 | 30,370 | 3.7 | 76.4 |
| 1,401-1,500 | 1,337 | 31,707 | 3.4 | 79.7 |
| 1,501-1,600 | 1,155 | 32,862 | 2.9 | 82.6 |
| 1,601-1,700 | 999 | 33,861 | 2.5 | 85.2 |
| 1,701-1,800 | 845 | 34,706 | 2.1 | 87.3 |
| $1,801-1,900$ $1,901-2,000$ | 703 | 35,409 | 1.8 | 89.1 |
| 1,901-2,000 | 628 | 36,037 | 1.6 | 90.6 |
| 2,001-2,100 | 590 | 36,627 | 1.5 | 92.1 |
| 2,101-2,200 | 496 | 37,123 | 1.2 | 93.4 |
| $2,200+$ | 2,638 | 39,761 | 6.6 | 100.0 |

Average Monthly Annuity

| Years of Age | Number of Annuitants | Percent of Total | Average <br> Annuity |
| :---: | :---: | :---: | :---: |
| ¢ 55 | 22 | 0.1 | \$ 764 |
| 55-59 | 2,524 | 6.3 | 1,557 |
| 60-64 | 6,820 | 17.0 | 1,415 |
| 65-69 | 7,594 | 18.9 | 1,169 |
| 70-74 | 6,887 | 17.1 | 932 |
| 75-79 | 6,375 | 15.9 | 829 |
| 80-84 | 5,631 | 14.0 | 707 |
| 85-89 | 3,121 | 7.8 | 617 |
| -89 | 1,197 | 3.0 | 561 |
| Total | 40,171 | 100.0 | 1,015 |
| verage A | ge: 72 |  |  |

## Disability Benefits

| Year | Number of New <br> Recipients | Average Age | Average Monthly Benefit | Average Service | Average Years in Receipt of Benefit |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1981 | 319 | 39 | \$ 580 | 10.82 | . 19 |
| 1982 | 332 | 41 | 649 | 11.83 | . 12 |
| 1983 | 382 | 42 | 690 | 12.57 | . 11 |
| 1984 | 366 | 43 | 747 | 13.07 | . 04 |
| 1985 | 337 | 43 | 759 | 13.00 | 12 |
| 1986 | 356 | 42 | 829 | 13.45 | . 26 |
| 1987 | 343 | 43 | 884 | 14.23 | . 08 |
| 1988 | 339 | 44 | 904 | 14.10 | . 11 |
| 1989 | 340 | 45 | 972 | 14.41 | . 11 |
| 1990 | 292 | 44 | \$1,016 | 14.56 | . 09 |

## Monthly Survivor Benefits



## Membership Profile

| As of June 30 | Benefit Recipients | Inactive <br> Members | Active Members | Total <br> Members | Active Members Per Benefit Recipient |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1981 | 34,690 | 31,719 | 104,554 | 170,963 | 3.01 |
| 1982 | 36,121 | 31,566 | 102,979 | 170,666 | 2.85 |
| 1983 | 37,505 | 32,385 | 99,833 | 169,723 | 2.66 |
| 1984 | 38,533 | 32,542 | 97,226 | 168,301 | 2.52 |
| 1985 | 40,113 | 29,991 | 97,446 | 167,550 | 2.43 |
| 1986 | 41,417 | 30,600 | 98,826 | 170,843 | 2.39 |
| 1987 | 42,659 | 28,400 | 99,934 | 170,993 | 2.34 |
| 1988 | 43,396 | 25,996 | 100,777 | 170,169 | 2.32 |
| 1989 | 45,718 | 20,834 | 100,857 | 167,409 | 2.21 |
| 1990 | 46,097 | 19,997* | 101,000* | 167,094* | 2.19 |



Introduction

The mission of the Teachers' Retirement System, to provide retirement security for members, is facilitated by management of the trust fund's investment portfolio, which totaled $\$ 8.9$ billion at market value on June 30, 1990. The System serves as fiduciary for the members' trust fund and is responsible for investment of the fund under authority of the prudent person rule which establishes a standard that fiduciaries shall prudently discharge their duties solely in the interests of fund participants and beneficiaries. By permitting optimal diversification of assets within the fund, the prudent person standard has enabled the System to enhance control over fund risk and return parameters. The prudent person standard also permits the System to establish an investment policy based solely upon member characteristics, plan characteristics, financial requirements of the trust fund and a particular risk/reward tradeoff.
The System has established a long-range Statement of Investment Objectives and Policies for managing and monitoring the fund. The investment policy establishes the fund's investment objective, to provide the greatest possible long-term benefits to members of the System by maximizing the total rate of return on investments within prudent parameters of risk. The investment policy also defines the responsibilities of the fiduciaries with respect to the fund, the statutory investment authority under the prudent person rule, the level of acceptable risk, asset restrictions, investment performance objectives and the guidelines within which outside investment managers operate.
The System's investment performance objective is to achieve an annualized $3 \%$ total rate of return in excess of the rate of inflation over a long-term period of time. In addition, each asset class is expected to outperform various representative market indices.
The fund is managed by professional investment management firms based on statutory investment authority under the prudent person rule and investment policy guidelines adopted by the Board of Trustees. The System's staff coordinates and monitors the investments of the trust fund's assets and assists the Board of Trustees in the formulation and implementation of investment policy and long-term investment strategy.

## Asset Class/Manager Composition

Asset allocation is a risk management process designed to construct the optimal long term asset mix which achieves a specific set of investment objectives. Of all the components of investment policy formulation, asset allocation on a secular basis will have the most impact on long term total rate of return. Consequently, the establishment of allocations across the major asset classes is the most important decision in the pension investment management process.
Diversification is the key to effective risk management. Large institutional portfolios, such as the System's, tend to be well diversified within the asset classes utilized. Therefore, although most investment managers of specific asset classes focus on security selection, specific securities held will not have nearly as much impact on total performance as will the overall level of particular
asset class commitments.
Management of asset class allocations and diversification of investment approaches (active core, active specialty, index funds) has enabled the System to more effectively control the fund's risk/reward parameters.
Diversification by asset class, investment approach, and investment manager style provides the System with a greater expected rate of return while minimizing the risk of negative returns from adverse short-term changes in the capital markets.

At June 30, 1990, the System's asset class allocations and diversification by investment approach were as follows:

|  | \% of Total Fund |  |  |
| :--- | :---: | ---: | ---: |
|  | Active | Index | Total |
| Asset Class | 26.1 | 14.1 | 40.2 |
| Common Stock U.S | 24.3 | 8.9 | 33.2 |
| Bonds | 5.1 | 1.5 | 6.6 |
| Short-Term Investments |  |  |  |
| Common Stock | 3.5 | 4.8 | 8.3 |
| $\quad$ International | 10.4 | 0.0 | 10.4 |
| Real Estate Equity | 70.3 | 0.0 | 1.3 |
| Venture Capital | 29.3 | 100.00 |  |
| Total |  |  |  |

During FY90 the System's U.S. common stock holdings decreased to $40.2 \%$ of the total fund from $41.2 \%$ a year earlier. International common stock allocations increased to $8.3 \%$ of the total fund from $6.7 \%$ a year earlier, leaving fiscal year-end total common stock holdings at 48.5\% of the total fund.
Bonds increased to $33.2 \%$ of the total fund from $32.7 \%$ a year earlier. Short-term investments decreased to $6.6 \%$ of the total fund from $8.7 \%$ a year earlier. Both equity and fixed income managers were holding lower levels of cash at year's end.
Real estate equities represented $10.4 \%$ of the total fund at fiscal year end. This is unchanged from the previous fiscal year end.
The fund's five-year asset class allocation history is represented below.

## Asset Allocation


*Includes Common Stock (International), Real Estate Equity: and Venture Capital

Original from

The System has established relationships with investment management firms which utilize a diversity of management approaches. The policy tends to complement the diversification of asset classes. The managers have discretionary authority in the selection and retention of investments, subject to the provisions of the statutory investment authority and the Statement of Investment Objectives and Policies.
The System achieved a higher level of risk management capability during FY90 by implementing a longterm strategic plan designed to achieve a specific set of investment objectives. A globally diversified, multiple asset class, balanced-fund portfolio was constructed in order to achieve the optimal long-term asset mix. In implementing this strategy, five active international equity managers were hired. Additionally, ten new active specialty managers in the U.S. equity asset class were retained to provide a new balance between active and passive investment approaches for domestic equities. On June 30, 1990 the following external investment management firms were employed by the System:

## Fixed Income (Bonds)

Bear Stearns Asset Management
Pacific Investment Management Company
State Street Bank and Trust Company
Equity (Common Stock) - U.S.
American National Bank of Chicago
Ariel Capital Management
Brandywine Asset Management, Inc.
Brinson Partners, Inc.
Cedar Hill Associates, Inc.
Chase Investors Management Corp.
Cozad Asset Management
Eagle Asset Management, Inc.
Hotchkis and Wiley
Husic Capital Management, Inc.
Keystone Investment Management Corp.
Lazard Freres Asset Management
Lehman Ark Management Co., Inc.
Lincoln Capital Management Co.
Morgan Stanley Asset Management (The Chicago Group)
Munder Capital Management, Inc.
NCM Capital Management Group, Inc.
Oppenheimer Capital
RCM Capital Management
Denis Wong \& Associates
Equity (Common Stock) - International
Bankers Trust Investment Management, Limited
Burgess Capital Corporation
Hill Samuel/Investment Advisors, Limited
Murray Johnstone International, Inc.
PCM International
Scudder, Stevens \& Clark, Inc.
State Street Bank and Trust Company

## Real Estate Equity

Alex Brown/Kleinwort Benson Realty Advisors
Bear Stearns/Capital Associates
Bennett \& Kahnweiler Realty Advisors
Brinson Partners, Inc.
JMB Institutional Realty Corporation
Jones Lang Wootton Realty Advisors
MacFarlane Realty Advisors, Inc.
TCW Realty Advisors

## Venture Capital

Frontenac Company
Weiss, Peck \& Greer

## Tactical Asset Allocation

Brinson Partners, Inc.
Foreign Exchange Exposure Management
Matuschka and Co.
N. M. Rothschild International Asset Management Limited

Investment Results
Asset Class/Market Indices Returns

During FY90, U.S. common stock was the best performing asset class as represented by the S\&P 500 Index and the Wilshire 5000 Index which returned $16.4 \%$ and $13.3 \%$, respectively. Shortterm investments were the next best performing asset class as represented by 91 -day Treasury Bills, which returned $8.4 \%$. Non-U.S. dollar bonds, represented by the Salomon Non-Dollar Bond Index, returned 7.3\%. Domestic bonds, represented by the Salomon Broad Investment Grade (Salomon BIG) Index, returned 7.7\%. International common stock, represented by the Europe, Australia and Far East (EAFE) Index, returned 3.2\%. All major asset classes and market indices except EAFE Index outperformed the $4.7 \%$ annual rate of inflation as represented by the Consumer Price Index (CPI), while the U.S. equity market rebounded after a sharp January downturn in the market.

## Asset Class Cumulative Return By Representative Indices



Source: Harris Trust and Savings Bank

## Total Fund Results

The System's total fund time-weighted rate of return for FY90 of $10.4 \%$ was primarily attributable to the continued strong performance across its equity portfolios. The System's total fund annualized three-year and fiveyear returns of $8.4 \%$ and $13.4 \%$, respectively, continue to outperform the rate of inflation for these periods, $4.6 \%$ and $3.8 \%$, respectively. The System's long-term objective, to exceed the rate of inflation by $3 \%$, has been achieved for the one-, three-, and five-year periods. The System's income rate of return during FY90 was $5.8 \%$.nal from

## U.S. Equity Results and Profile

U.S. equity manager objectives are to achieve a total investment return $6 \%$ in excess of the rate of inflation and in excess of the Standard \& Poor's (S\&P) 500 Stock Index on an annualized basis over a three- to five-year period or market cycle. In addition, the Wilshire 5000 Index is informally used as a total equity portfolio benchmark since it is more representative of the aggregate U.S. equity market. The 5000 stocks within the Wilshire 5000 Index, more so than the 500 stocks within the S\&P 500 Index, are highly diversified across the various equity market sectors and industries, and have highly diversified financial characteristics and risk factors which ultimately influence the total return.
During FY90, the System's portfolio of U.S. common stocks returned $14.3 \%$ compared to the S\&P 500 return of $16.4 \%$ and the Wilshire 5000 return of $13.3 \%$. For three- and five-year periods, the System's U.S. common stocks generated annualized returns of $8.1 \%$ and $16.3 \%$, respectively, below S\&P 500 returns of $9.3 \%$ and $17.3 \%$ for the three- and five-year periods, respectively. The portfolio's U.S. common stocks performed more favorably when compared with the three- and five-year Wilshire 5000 returns of $8.4 \%$ and $15.7 \%$, respectively. Combined U.S. equity manager accounts, which include both common stock and short-term investments, returned 13.9\% during FY90.

At fiscal year end, $43.2 \%$ of the System's investment portfolio was assigned to U.S. equity managers, including short-term investments, compared to $43.6 \%$ the prior fiscal year end. Within the U.S. common stock asset class, $30.6 \%$ of the asset class was allocated to an S\&P 500 Index Fund and $3.9 \%$ to a Non-S\&P 500 Index Fund at fiscal year end. The remaining $65.5 \%$ of the U.S. common stock asset class was allocated to active and enhanced index fund investment manager relationships. During FY90, the market value of assets assigned to U.S. equity managers increased from $\$ 3.506$ billion to $\$ 3.852$ billion due to $\$ 491$ million of dividend income/appreciation and $\$ 145$ million of reallocations from the U.S. equity asset class to other asset classes.
Major sector diversification changes took place during FY90 in the portfolio's U.S. common stocks. The following listing summarizes these changes and also provides a comparison with the S\&P 500 and the Wilshire 5000 Indices:

## Diversification by Industry Sector (\%)

| Sector | June 30, 1990 |  |  | June 30, 1989 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | TRS | $\begin{gathered} \text { S\&P } \\ 500 \end{gathered}$ | $\begin{aligned} & \text { WIL } \\ & 5000 \end{aligned}$ | TRS | $\begin{aligned} & \text { S\&P } \\ & 500 \end{aligned}$ | $\begin{aligned} & \text { WIL } \\ & \mathbf{5 0 0 0} \end{aligned}$ |
| Consumer |  |  |  |  |  |  |
| Non Durables | 30.0 | 31.5 | 30.1 | 27.8 | 30.9 | 28.1 |
| Technology | 13.7 | 10.9 | 10.6 | 14.3 | 11.8 | 10.8 |
| Materials and |  |  |  |  |  |  |
| Service | 12.1 | 10.7 | 12.4 | 13.6 | 11.4 | 12.9 |
| Utilities | 11.5 | 14.5 | 14.4 | 11.8 | 13.4 | 14.6 |
| Finance | 12.8 | 8.2 | 11.7 | 11.7 | 9.0 | 12.9 |
| Energy | 8.2 | 13.2 | 10.2 | 8.1 | 12.2 | 9.4 |
| Capital Goods | 6.4 | 5.9 | 5.5 | 6.4 | 5.4 | 5.3 |
| Consumer Durables | 3.0 | 3.1 | 3.0 | 3.3 | 3.5 | 3.3 |
| Transportation | 2.3 | 2.0 | 2.1 | 3.0 | 2.4 | 2.7 |

All S\&P 500 industry sectors except Consumer Durables provided positive rates of return during FY90, with Consumer Non-Durables ( $45.4 \%$ ), Utilities ( $39.7 \%$ ), and Capital Goods ( $33.7 \%$ ) the leading industry sector performances.

## S\&P 500 Industry Sector Returns

|  | Percent |
| :--- | ---: |
|  | 50 |
|  | 45 |
|  | 40 |
|  | 35 |
|  | 30 |
|  | 25 |

Source: Harris Trust and Savings Bank
U.S. equity managers made major stock selection adjustments to their accounts during FY90, as evidenced by the following comparison of equity portfolio characteristics with the S\&P 500 and the Wilshire 5000 Indices:

## U.S. Equity Portfolio Profile

|  | June 30, 1990 |  |  | June 30, 1989 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | TRS | $\begin{array}{r} \text { S\&P } \\ 500 \end{array}$ | $\begin{gathered} \text { WIL } \\ \mathbf{5 0 0 0} \end{gathered}$ | TRS | $\begin{array}{r} \text { S\&P } \\ \mathbf{5 0 0} \end{array}$ | $\begin{aligned} & \text { WIL } \\ & \mathbf{5 0 0 0} \end{aligned}$ |
| Capitalization (\$Bil) | 7.93 | 16.03 | 12.10 | 10.55 | 14.04 | 10.72 |
| Price/Earnings Ratio | 6.94 | 13.06 | 16.56 | 11.93 | 11.53 | 13.01 |
| Dividend Yield (\%) | 1.57 | 3.37 | 3.11 | 2.92 | 3.45 | 3.15 |
| Beta | 1.00 | 1.00 | 1.04 | 0.99 | 1.00 | 1.07 |
| Diversification (R-Squared) | 0.99 | 1.00 | 0.98 | 0.97 | 1.00 | 0.99 |
| Five-Year Earnings |  |  |  |  |  |  |
| Growth Rate (\%) | 6.31 | 9.24 | 10.02 | 13.67 | 9.06 | 8.45 |
| Market/Book Ratio | 1.51 | 2.73 | 3.24 | 2.80 | 2.82 | 2.58 |

International Equity Results
International equity manager objectives are to achieve a total annual investment return $6 \%$ in excess of the rate of inflation and in excess of the EAFE Index over longer time periods. During FY90, the portfolio's international common stocks returned $20.9 \%$, as compared to a return of $3.2 \%$ for the 18 country foreign equity market EAFE Index (Europe, Australia, Far East).

The System's wide margin of outperformance over the benchmark EAFE Index is attributable primarily to the systematic underweighting of the Japan component of the international equity portfolio. The Japanese market substantially underperformed EAFE both in local currency and in U.S. dollar terms over the one-year period, while the TRS fund, maintaining its cautious view on Japanese equities, held only $17.1 \%$ of its foreign equities in Japan as compared to a $51.5 \%$ Japan weightinginithe from

EAFE Index. The System's patient, valuation based underweighting of Japan has been rewarded in the longer run also, as the five-year average annual return to the Fund's combined international equity portfolio of $31.2 \%$ ranks in the first percentile in the TUCS Universe of active international portfolios. This $31.2 \%$ five-year average annual return compares very favorably also to the EAFE Index return of $28.7 \%$ over the same period.
The basket of EAFE currencies appreciated by $3.3 \%$ over the 12 months ended June 1990, which increased a $0.1 \%$ EAFE return in local (foreign) currency terms to $3.2 \%$ in U.S. dollar terms. Murray Johnstone International generated a $31.5 \%$ return for the year as compared to $3.2 \%$ for the EAFE return.
At fiscal year end, $10.6 \%$ of the asset class was allocated to an EAFE Index Fund and $34.5 \%$ of the asset class was allocated to an EAFE ex-Japan Fund. The remaining $54.9 \%$ of the asset class was allocated to active managers. During FY90, the market value of assets assigned to international equity increased from $\$ 472$ million to $\$ 885$ million due to $\$ 113$ million of market value appreciation and $\$ 300$ million of reallocations from other asset classes.

## Venture Capital Results

Venture capital investments returned $-.3 \%$ during FY90. A representative venture capital index is not available for relative performance comparison. Over the long term, however, and as a result of venture capital's higher risk orientation, venture capital is expected to provide annualized returns over $10 \%$ in excess of returns provided by the S\&P 500 and Wilshire 5000 Indices. On June 30, 1990, the System had a market value of $\$ 124$ million invested in four venture capital limited partnerships.

## Fixed Income Results and Profile

Fixed income manager objectives are to achieve a total investment return $2 \%$ in excess of the rate of inflation and in excess of the bond market, as measured by Salomon Broad Investment Grade (Salomon BIG) Index, on an annualized basis over a three- to five-year period, or a market cycle. During FY90, the System's bond portfolio, including all fixed income instruments with maturities greater than one year, generated a $7.3 \%$ total return, compared to the $7.7 \%$ return of the Salomon BIG Index.
The total funds under management by fixed income managers, including short-term investments, generated a $7.3 \%$ total return during FY90. For a three- and fiveyear period, bonds generated $9.2 \%$ and $11.0 \%$ annualized returns, respectively, as compared to $9.3 \%$ and $10.7 \%$, respectively for the Salomon BIG Index. During FY90, the market value of total assets assigned to fixed income managers, including short-term investments, increased from $\$ 2.950$ billion to $\$ 2.996$ billion due to $\$ 209$ million in interest income/appreciation and reallocation of $\$ 163$ million from the bonds asset class to other asset classes.

Financial futures contracts controlling approximately $\$ 169$ million of underlying U.S. Treasury Bonds and U.S. Treasury Notes, are included within the $\$ 2.996$ billion market value of total assets assigned to fixed income
managers at fiscal year end. The futures contracts contributed substantially to the superior performance of the System's fixed income portfolio. Futures contracts continue to serve as a cost effective tool for implementation of portfolio strategies.
The following exhibits reflect changes made within fixed income manager portfolios during FY90 with regard to diversification by issuer type and quality ratings, as well as the underlying bond portfolio characteristics (excluding short-term investments) primarily affecting total return.

## Diversification By Issuer Type For Fixed Income Manager Portfolios



Source: Harris Trust and Savings Bank
Diversification By Quality Rating
For Fixed Income Manager Portfolios


Source: Harris Trust and Savings Bank

## Bond Portfolio Profile

|  | 6/30/90 |  | 6/30/89 |  |
| :---: | :---: | :---: | :---: | :---: |
| Characteristic | TRS | alomon BIG | TRS | Salomon BIG |
| Maturity (years) | 8.91 | 9.26 | 8.28 | 9.74 |
| Duration (years) | 4.52 | 4.61 | 4.69 | 4.46 |
| Coupon (\%) | 9.48 | 9.04 | 9.02 | 9.42 |
| Yield to Maturity (\%) | 8.89 | 8.94 | 8.28 | 8.68 |
| Current Yield (\%) | 9.10 | 9.05 | 8.70 | 8.95 |

Real Estate Equity Investment Results
Real estate equity investments made by the System's five closed-end fund managers and four separate account managers returned $3.7 \%$ during FY90. The income component of the total return was $6.1 \%$, while capital appreciation accounted for $-2.2 \%$. Unrealized depreciation reported due to property appraisals performed for fiscal year end reflect the current over-supply of office and industrial space which has resulted in increased vacancy rates and lower effective rents.
The closed-end funds' total return of $5.4 \%$ outperformed the 3.5\% total return of the separate accounts. Over the long term, the real estate equity investment objective is to achieve a total investment return $6 \%$ in excess of the rate of inflation. During FY90, the market value of assets assigned to the System's real estate investment managers increased from $\$ 938$ million to $\$ 990$ million. This increase resulted from $\$ 56$ million in income reinvested income, $\$ 18$ million of reallocations from
other asset classes to the real estate asset class, and a reduction of $\$ 22$ million for market value depreciation. The System will continue to progress toward a $15 \%$ asset allocation target for the real estate equity asset class over the next two to three years.

## Short-Term Investment Results

The investment management firms use discretion in shifting funds to short-term investments as part of their asset allocation strategies within the respective asset classes. Managers confine portfolio investment to typical short-term investments, such as U.S. Treasury Bills, certificates of deposit, bankers acceptances and commercial paper, and commingled short-term investment funds.
As an asset class, the System's short-term investments generated a total return of $8.5 \%$, during FY90. For the five years, short-term investments returned $7.9 \%$, underperforming the $16.3 \%$ return of U.S. common stocks and the $11.0 \%$ of bonds. Total assets allocated to short-term investments decreased from $\$ 699$ million to $\$ 584$ million during FY90.

## Investment Portfolio Summary*

|  | Book Value |  | \% of <br> Total <br> Book <br> Value | Market Value |  | \% of <br> Total <br> Market <br> Value | Yield at Market |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BONDS, CORPORATE NOTES AND PREFERRED STOCK |  |  |  |  |  |  |  |
| Government Obligations |  |  |  |  |  |  |  |
| U.S. Government | s | 1.151.065,757 | 14.3\% | 5 | 1,143,655,109 | 12.8\% | 9.3\% |
| Federal Agency |  | 745.532,030 | 9.2 |  | 747,154,710 | 8.4 | 9.1 |
| Municipal Bonds |  |  | . 0 |  | 963.419 | . 0 | 9.7 |
| Total Government Obligations |  | 1,897.548.734 | 23,5 |  | 1,891,773,238 | 21.2 |  |
| Corporate Obligations |  |  |  |  |  |  |  |
| Finance |  | 597.725.613 | 7.4 |  | 600,983,110 | 6.8 | 9.7 |
| Industrial and Miscellaneous |  | 109,272,793 | 1.3 |  | 106.134,582 | 1.2 | 10.6 |
| Public Utilities |  | 37,862,219 | . 5 |  | 37,790,703 | 4 | 10.6 |
| Telephone |  | 15,006,581 | 2 |  | 15,482,623 | 2 | 9.3 |
| Transportation |  | 9,126,688 | 1 |  | 9.013 .275 | 1 | 10.3 |
| Total Corporate Obligations |  | 768.993,894 | 9.5 |  | 769.404.293 | 8.7 |  |
| International |  | 286,631,923 | 3.6 |  | 286,310.360 | 3.2 | 9.7 |
| Preferred Stock |  | 7,203,384 | 1 |  | 7,200,664 | 1 | 7.2 |
| TOTAL BONDS, CORPORATE NOTES |  |  |  |  |  |  |  |
| AND PREFERRED STOCK |  | 2.960.377,935 | 36.7 |  | 2,954,688.555 | 33.2 |  |
| COMMON STOCK - U.S. |  | 2,864,732,858 | 35.5 |  | 3,582.211,786 | 40.2 | 2.9 |
| SHORT TERM INVESTMENTS** |  | 583,288,652 | 7.3 |  | 583,955,006 | 6.6 | 8.4 |
| COMMON STOCK - INTERNATIONAL |  | 606,259,026 | 7.5 |  | 741,774.692 | 8.3 | 0.1 |
| REAL ESTATE EQUITY |  | 922,748.197 | 11.4 |  | 928.654,236 | 10.4 | 6.1 |
| VENTURE CAPITAL |  | 128,951,244 | 1.6 |  | 119.197 .860 | 1.3 | 8.1 |
| TOTAL PORTFOLIO | S | 8,066,357,912 | 100.0\% | 8 | 8,910,482,135 | 100.0\% | 5.5\% |

[^3]**Includes accrued interest and dividends totaling \$77,979,929.

Composition of Investments
(At Market Value)
$\frac{\text { June 30, } 1990}{\text { Venture Capital (1.3\%) }}$
Real Estate Equity ( $\mathbf{1 0 . 4 \%}$ )
Short Term Investments (6.6\%)
$4.6 \%$ Investment Reserve Fund (\% of Total)
64.0\% Commercial Paper
19.6\% Time Deposits
9.8\% Certificates of Deposit
3.7\% Guaranteed Insurance Contracts
2.9\% Demand Notes
2.0\% Commercial Paper

Common Stock - U.S. (40.2\%)
$12.1 \%$ Consumer Non-Durables
5.5\% Technology
5.2 Finance
4.8\% Materials \& Service
4.6\% Utilities
3.3\% Energy
2.6\% Capital Goods
1.2\% Consumer Durables
$0.9 \%$ Transportation
Common Stock - International ( $8.3 \%$ )
Preferred Stock and Convertibles ( $\mathbf{0 . 1 \%}$ )
Corporate Obligations - U.S. (8.7\%)

## 6.8\% Finance

1.2\% Industrial
$0.4 \%$ Utilities
0.2\% Telephone
0.1\% Transportation

Corporate Obligations - International (3.2\%)
Government Obligations (21.2\%)
$12.8 \%$ U.S. Government
$8.4 \%$ Federal Agency
$7.2 \%$ Mortgage-Backed
$1.2 \%$ Non-Mortgage

Summary Statistics
The following tables summarize the development and performance of the total investment portfolio, including accrued income and miscellaneous assets, during the last five years:

Book/Market Value Reconciliation

|  | Fiscal Years Ending June $\mathbf{3 0}$ (Millions) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1986 | 1987 | 1988 | 1989 | 1990 | Five Years 1986-1990 |
| Beginning Book Value | \$4,265 | \$5,168 | \$6,092 | \$6,684 | \$7,272 | \$4,265 |
| Net Contributions Added | 90 | 89 | 32 | 26 | (6) | 231 |
| Investment Income | 345 | 364 | 394 | 428 | 466 | 1,997 |
| Net Realized Gain (Loss) | 468 | 471 | 166 | 134 | 348 | 1,587 |
| Ending Book Value | 5,168 | 6.092 | 6,684 | 7,272 | 8,080 | 8,080 |
| Unrealized Gain (Loss) |  |  |  |  |  |  |
| Beginning of Period Unrealized Gain (Loss) | 329 | 780 | 866 | 371 | 817 | 329 |
| Unrealized Gain (Loss) - <br> During Period | 451 | 86 | (495) | 446 | 27 | 515 |
| Ending Market Value | \$5,948 | \$6,958 | \$7,055 | \$8,089 | \$8,924 | \$8,92 |

*Includes miscellaneous assets.

## Performance Summary

Annualized Percent for Periods Ending June 30, 1990*


[^4]
## INVESTMENT LISTING





Investment Listing


Investment Listing

COMMON STOCK-U.S.


COMMON STOCK-U.S.


## COMMON STOCK－U．S．



| 新年 |  <br>  |  |  <br>  | nging |
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## COMMON STOCK-U.S.



## COMMON STOCK-U.S



COMMON STOCK-U.S.



## COMMON STOCK-INTERNATIONAL





| Shares | Book Value | $\begin{aligned} & \text { Market } \\ & \text { Value } \end{aligned}$ |
| :---: | :---: | :---: |
| 73.000 | 874.619 | 852.309 |
| 3.500 | 1.258 | 76.685 |
| 94,000 | 682,812 | 1,029.288 |
| 117,000 | 1,309.54] | 1.281 .135 |
| 82,000 | 559.194 | 546.306 |
| 43,000 | 957,300 | 1.168 .310 |
| 65.200 | 1,077,203 | 1,042,649 |
| 900.000 | 1,089,658 | 1.062.087 |
| 3,600,000 | 557,962 | 648.000 |
| 2.200 | 1,483.128 | 1,434.922 |
| 200,000 | 282.596 | 450.000 |
| 48.000 | 201,027 | 205,016 |
| 10.500 | 568.543 | 896.438 |
| 150,000 | 175,026 | 179.348 |
| 111,500 | 2,281,877 | 2,416.190 |
| 7.600 | 1,951,297 | 2,049,243 |
| 32,000 | 947,353 | 1,038,459 |
| 2.400 | 436.414 | 444.899 |
| 1,200 | 412.058 | 542,701 |
| 285,000 | 1,037,025 | 1.024,233 |
| 700,000 | 626,096 | 658,000 |
| 600000 | 610,809 | 600,000 |
| 26,000 | 521,500 | 500,792 |
|  | \$606,259,026 | 741.774,692 |

## real estate



| $\$ 22,173,381$ | $20,108,02$ |
| ---: | ---: |
| $24,875,000$ | $24,498,05$ |
| $25,832,490$ | $32,016,564$ |
| $25,000,000$ | $29,220,54$ |
| $\mathbf{9 7 , 8 8 0 , 8 7 1}$ | $\mathbf{1 0 5 , 8 4 3 , 1 7 4}$ |


| 7,117,258 | 6,050,000 |
| :---: | :---: |
| 3,730,820 | 3,130,000 |
| 300,000 | 300,000 |
| 34,711.258 | 36.514.098 |
| 2,964,182 | 3.850,000 |
| 23,794,856 | 21.200 .000 |
| 3,018.898 | 3,180,000 |
| 39.123.826 | 39,123,836 |
| 26.443,933 | 18.400,000 |
| 7.994.285 | 6.200.000 |
| 29,949,461 | 29.800,000 |
| 3.622 .050 | 6.747.720 |
| 2,727.467 | 0 |
| 21.165.555 | 21.065 .249 |
| 4.321,802 | 4.320,000 |
| 9,770.604 | 8.010.634 |
| 7.537.500 | 7.800 .000 |
| 23,516,797 | 20,000.000 |
| 12,540,891 | 9.400,000 |
| 54.270,270 | 54.270,270 |
| 13,676,183 | 18,200,000 |
| 14,409.079 | 11.105.000 |
| 18,291,000 | 18.291,000 |
| 8.429 .355 | 8.930.000 |
| 13,818,750 | 15,900,000 |
| 44.469,575 | 44,800,000 |
| 11,933,305 | 10,500.000 |
| 7,336.500 | 7.700 .090 |
| 4,166.112 | 5.550,000 |
| 28,515,217 | 27,000,000 |
| 62,271,274 | 73,761.653 |
| 23.017,457 | 23,017,457 |
| 8.706 .727 | 5,800,000 |
| 5.096.576 | 4.875,000 |
| 10.882. 521 | 8.400 .000 |
| 5,997.045 | 5.800 .000 |
| 6.742,689 | 6.700.000 |
| 14.351.181 | 20,175.488 |
| 5,214.837 | 5,400,000 |
| 26.167.022 | 25.500,000 |
| 14,763.619 | 16.100,000 |
| 52,563,006 | 58,370,000 |
| 16,945,821 | 17.020,000 |
| 9,329,399 | 8,800,000 |
| $8.040,000$ | 8.580 .000 |
| 4.704.507 | 4.704.507 |
| 5,705.934 | 4.148.007 |
| 27,027.078 | 24.700.000 |
| 19,112,411 | 19,112.411 |
| 14,561,933 | 14,530.000 |
| 824,867,326 | 821,098,488 |
| 8922,748,197 | 926,941,662 |

## VENTURE CAPITAL



This report is published in accordance with the laws governing the Teachers' Retirement System of the State of Illinois.
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Springfield, IL 62794-9253

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(217) 753-0311


[^0]:    Fred Husmann Executive Director October 10, 1989

[^1]:    - The pension benefit obligation does not include $\mathbf{S} 642$ million as the cost for Public Act 86-0273 which was enacted on August 23, 1989.

[^2]:    *Amounts shown for 1981 were determined using the entry age normal actuarial cost method and do not comply with the standardized measure prescribed by GASB Statement Number 5. The difference in methodology is estimated to be non-material for comparison purposes.

[^3]:    *For investment purposes, financial futures contracts in the net amount of \$169,207.850 were classified according to the type of security controlled and correspondingly removed from the classification as short-term investments as follow s: U.S. Government Obligations - \$242,068,125, Common Stock - U.S. - (\$32,450,675) and Euro Dollar - (\$40.40.9, 600()).

[^4]:    *Performance calculations provided by Harris Trust and Sacings Bank.

    * *Income return, based on average market value. includes real estate income. interest and dividends.
    ** Cash return. based on beginning book value. includes real estate income. interest, dividends and realized gains/losses
    ****Includes Real Estate Equity. Common Stock-International. Bonds-International andfinnturg Cabital.

