

JUDGES RETIREMENT SYSTEM OF ILLINOIS

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JUDGES RETIREMENT SYSTEM OF ILLINOIS

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SECRETARY

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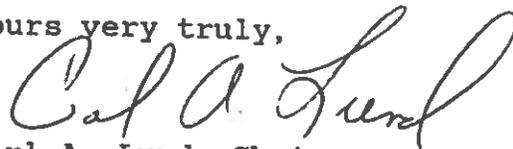
The Honorable James R. Thompson
Governor of the State of Illinois
Springfield, IL 62706

Dear Governor Thompson:

On behalf of the Board of Trustees of the Judges Retirement System of Illinois, I submit its 47th Annual Report covering operations of the System for the fiscal year ending June 30, 1988.

While the trustees continue to recognize the serious need for increased State contributions to the various retirement systems, we wish to state our appreciation for the cooperation received from both the executive and the legislative branches of government.

Yours very truly,



Carl A. Lund, Chairman
Board of Trustees of the
Judges Retirement System of
Illinois

FORTY-SEVENTH ANNUAL REPORT OF THE BOARD OF TRUSTEES

Covering the Fiscal Year Ended June 30, 1988

Presented herewith is the Forty-Seventh Annual Report of the Board of Trustees of the Judges Retirement System of Illinois for the Fiscal Year ended June 30, 1988. The report contains detailed figures on the results of operations for the year together with the external Auditor's Report and a report by the Actuary on an actuarial valuation of the assets and liabilities of the System as of the close of said year.

Membership Statistics

	<u>Participants</u>		<u>Retired</u>	<u>Survivor</u>	
	<u>Active</u>	<u>Inactive</u>	<u>Judges</u>	<u>Annuitants</u>	<u>Totals</u>
Number at July 1, 1987	794	15	337	223	1,369
Additions	58	5	39	33	135
Deductions	<u>(56)</u>	<u>(5)</u>	<u>(28)</u>	<u>(14)</u>	<u>(103)</u>
Number at June 30, 1988	<u>796*</u>	<u>15</u>	<u>348</u>	<u>242</u>	<u>1,401</u>

*Includes 8 who elected to discontinue contributions

Inactive participants consist of judges who have terminated service and decided to retain their accumulated pension credits in the System.

Retirement Annuitants. As of June 30, 1988, there were 348 judges on retirement and in receipt of annual pension payments totaling \$14,264,598. Statistics pertaining to these retirements are as follows:

1.	Average annual retirement annuity	\$40,990
2.	Average age at retirement	64.9
3.	Average age at June 30, 1988	72.0
4.	Average years of service	18.0
5.	Average annual salary at retirement	\$52,802
6.	Proportion of annuitants who are married	80.2%
7.	Average annual annuity to an eligible surviving spouse	\$28,117

Surviving Spouse Annuitants. Spouses in receipt of annuity payments at the close of the fiscal year totaled 227 with annual payments amounting to \$3,464,784 or an average of \$15,263 per year. At the end of the preceding fiscal year there were 208 spouses with annual payments totaling \$2,878,657. The average age of the spouses at the beginning date of their annuities was 64.8 years. Their average age at June 30, 1988, was 73.8 years.

Eligible Children. At the close of the year, 15 children of deceased members were in receipt of annuities totaling \$48,376 per year. The average age of these children was 14.1 years. At the beginning date of their annuities, their average age was 10.5 years.

Financial Review. The reserves of the System at June 30, 1988, totaled \$146,557,384. The increase in reserves for the year amounted to \$7,611,314. This increase compares with an amount in the preceding year of \$14,526,409. The net revenues were credited to the appropriate reserves of the System reflecting balances at the end of the year as follows:

Reserve for Retirement and Survivors'	
Annuity Contributions	\$ 43,294,783
Reserve for the Post-retirement	
Annuity Increases	6,770,997
Reserve for Future Operations	<u>96,491,604</u>
Total Reserves at June 30, 1988	<u>\$146,557,384</u>

The "Reserve for Future Operations" represents the balance remaining in the System from State contributions and revenues from investments after giving effect to payments made by the System. This reserve is below the amount recommended for governmental retirement systems.

Results of Operations. Total revenues accruing to the System for the year ended June 30, 1988, amounted to \$25,689,395 derived from the following sources:

Contributions by the Participants	\$ 6,885,511
Appropriations by State of Illinois	9,137,000
Interest Credited by the State	
Treasurer	176,693
Income from Investments - State	
Investment Board	8,121,347
Gain on Sales of Investments.	<u>1,368,844</u>
Total Revenues	<u>\$ 25,689,395</u>

Expenditures by the System for the year totaled \$18,078,076 for the following purposes:

Retirement annuities.	\$14,172,984
Survivors' annuities.	3,189,583
Refunds and death benefits.	551,263
Disability.	20,150
Administrative expenses	<u>144,096</u>
Total Expenditures	<u>\$18,078,076</u>

Investments. The investment of the net reserves of the System is under the management of the "Illinois State Board of Investment" which agency also manages the investments of the General Assembly Retirement System and the State Employees' Retirement System of Illinois.

Under Article 22A of the Illinois Pension Code governing the Illinois State Board of Investment, the Chairman of the Board of Trustees of each participating retirement system is, ex officio, a member of the State Investment Board.

The assets of the Judges Retirement System are part of the Commingled Fund managed by the Illinois State Board of Investment which had a market value of \$2.669 billion as of June 30, 1988. The assets of the Judges Retirement System were approximately 5.73% of the Commingled Fund and were diversified in the following manner:

<u>Investments at June 30, 1988</u>	<u>At Cost</u>	<u>At Market</u>
U.S. Government & Agency Obligations	\$ 23,543,497	\$ 23,548,356
Foreign Obligations	1,787,816	1,891,310
Corporate Obligations	30,442,430	32,168,096
Convertible Bonds	5,212,268	5,423,078
Common Stock and Equity Fund	57,262,225	59,512,995
Convertible Preferred Stock	1,349,903	1,452,574
Preferred Stock	329,372	180,480
Real Estate Pooled Funds	11,669,647	14,477,851
Venture Capital	3,129,278	3,300,754
Money Market Instruments	9,386,578	9,384,421
Other Assets, Less Liabilities	<u>1,499,092</u>	<u>1,504,641</u>
	<u>\$145,612,106</u>	<u>\$152,844,556</u>

The Commingled Fund produced a total rate of return (capital appreciation plus income) of 2.5% for the fiscal year 1988.

STATE BOARD OF INVESTMENTS ACCOUNT COMPARISONS

<u>Fiscal Report Ending</u>	<u>Market Value of Assets</u>	<u>Cost of Assets</u>	<u>Contributions Made By System</u>	<u>Net Investment Income</u>
6-30-80	54,659,535	\$ 59,903,961	\$4,000,000	\$4,880,358
6-30-81	59,711,396	70,763,377	5,000,000	5,859,416
6-30-82	62,333,556	77,095,569	-0-	6,333,194
6-30-83	92,203,169	88,180,913	2,000,000	6,233,392
6-30-84	88,935,165	99,193,192	1,500,000	6,664,887
6-30-85	109,952,133	107,132,974	1,500,000	7,386,583
6-30-86	137,026,106	122,130,096	-0-	7,888,490
6-30-87	149,120,475	136,121,916	-0-	7,418,253
6-30-88	152,844,556	145,612,106	-0-	8,121,347
			<u>\$14,000,000</u>	<u>\$60,785,920</u>

Financing. The Board of Trustees of the Judges Retirement System is mandated to submit to the Governor, prior to each regular session of the General Assembly, a report on the appropriation requirement of the System for the ensuing fiscal year. The appropriation consists of the amount of the reserve requirements for meeting the System's accruing obligations, as actuarially determined, under the method of funding specifically prescribed by the governing statute.

The appropriation requirements from the State of Illinois are determined and certified by the Actuary. For the 1988-1989 fiscal year, the Actuary had determined that these requirements will be \$21,373,468. The appropriation requirements have been increasing steadily due to: (1) a slightly larger membership; (2) increases in salaries to the members; and (3) the effect of compulsory retirement. The efforts of the Board of Trustees over the years have been directed towards bringing about a more adequate measure of funding for the System, at least to a level which would result in a security ratio of 66-2/3%, which has been the minimum rate recommended for State-supported plans in Illinois. The security ratio as of June 30, 1987, was 48.6% but fell to 47.2% for FY 88. The security ratio is obtained by taking the ratio of the "net present assets" (total present assets less current liabilities) to the total accrued liabilities.

It should be noted that the Board of Trustees has requested from the State each year, appropriations of amounts determined in accordance with the governing law. The pension law, by its specific directive, mandates the State of Illinois to contribute to the Judges Retirement System certain amounts to meet its share of the pension cost. Over the years, however, the appro-

priation requests of the Board of Trustees have been reduced by the State officials below the amounts specifically mandated in the law and required under the statute.

Conclusion. This report of the Board discusses all important matters pertaining to the operations of the System during the 1988 fiscal year.

Respectfully Submitted,

BOARD OF TRUSTEES
JUDGES RETIREMENT SYSTEM OF ILLINOIS

CARL A. LUND, Chairman
RICHARD J. FITZGERALD, Vice Chairman
THOMAS J. MORAN
CORNELIUS F. DORE
JERRY COSENTINO

NORMAN E. LENTZ,
Secretary

ARTHUR ANDERSEN & CO.

CHICAGO, ILLINOIS

REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS

Honorable Robert G. Cronson
Auditor General
State of Illinois

We have examined the balance sheets of the JUDGES RETIREMENT SYSTEM OF ILLINOIS--STATE OF ILLINOIS as of June 30, 1988 and 1987, and the related statements of revenues, expenses and changes in fund balance and changes in financial position for the years then ended. Our examinations were made in accordance with generally accepted auditing standards and the standards for financial audits contained in the U. S. General Accounting Office's Standards for Audits of Governmental Organizations, Programs, Activities and Functions and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

An actuarial study performed by the new actuary employed by the Judges Retirement System during fiscal year 1987 resulted in a significant reduction in accrued benefit costs as of June 30, 1987, due to changes in certain actuarial assumptions and other material but not identified reasons. Generally accepted accounting principles require disclosure of the effects, if significant, of certain factors affecting the year-to-year change in accrued benefit cost information. As explained in Note 2 to the financial statements, the Judges Retirement System has not identified or disclosed all significant factors affecting the change in accrued benefit cost.

In our opinion, except for the omission of information as discussed in the preceding paragraph, the financial statements referred to above present fairly the financial position of the Judges Retirement System of Illinois--State of Illinois as of June 30, 1988 and 1987, and the results of its operations and the changes in its financial position for the years then ended, in conformity with generally accepted accounting principles which, except for the change, with which we concur, in the method used to compute the accrued benefit cost as described in Note 2 to the financial statements, were applied on a basis consistent with that of the preceding year.

Our examinations were made for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplementary schedules (on Pages 38-42) listed in the table of contents are presented for purposes of additional analysis and are not a required part of the basic financial statements. This information has been subjected to the auditing procedures applied in our examinations of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements.


ARTHUR ANDERSEN & CO.

October 14, 1988

JUDGES RETIREMENT SYSTEM OF ILLINOIS--

STATE OF ILLINOIS

BALANCE SHEETS

JUNE 30, 1988 AND 1987

<u>A S S E T S</u>	<u>1988</u>	<u>1987</u>
Cash	\$ 935,712	\$ 2,960,362
Receivables-		
Participants' contributions	\$ 58,650	\$ 11,800
Refundable annuities	10,791	-
Interest	8,387	18,715
Due from General Assembly Retirement System	24,307	19,825
	\$ 102,135	\$ 50,340
Investments held in the Illinois State Board of Investment Commingled Fund--at cost (market value: 1988, \$152,844,556; 1987, \$149,120,475)	\$145,612,106	\$136,121,915
Office equipment--at cost, less accumulated depreciation (1988, \$8,663; 1987, \$8,419)	\$ 20,604	\$ 933
	\$146,670,557	\$139,133,550

LIABILITIES AND FUND BALANCE

Liabilities-		
Benefits payable	\$ 3,368	\$ 3,077
Refunds payable	104,589	183,066
Accounts payable	5,216	1,338
	\$ 113,173	\$ 187,481
Fund balance-		
Actuarially determined accrued benefit cost	\$335,307,458	\$307,064,068
Less- Unfunded accrued benefit cost requirement--representing an obligation of the State of Illinois	(188,750,074)	(168,117,999)
Fund balance--funded statutory reserves	\$146,557,384	\$138,946,069
	\$146,670,557	\$139,133,550

The accompanying notes to financial statements are an integral part of these statements.

JUDGES RETIREMENT SYSTEM OF ILLINOIS--

STATE OF ILLINOIS

STATEMENTS OF REVENUE, EXPENSE AND CHANGES IN FUND BALANCE

FOR THE YEARS ENDED JUNE 30, 1988 AND 1987

	<u>1988</u>	<u>1987</u>
Contributions revenue-		
Participants	\$ 6,885,514	\$ 6,248,636
State of Illinois	9,137,000	9,832,000
	-----	-----
	\$ 16,022,514	\$ 16,080,636
Net investment income	8,121,347	7,418,253
Interest earned on cash balances	176,693	249,015
Net realized gain on sale of investments	1,368,844	6,573,567
	-----	-----
	\$ 25,689,398	\$ 30,321,471
	-----	-----
Expenses-		
Benefits-		
Retirement annuities	\$ 12,630,509	\$ 11,206,422
Survivors' annuities	3,189,583	2,818,899
Automatic annuity increase	1,562,626	1,351,214
	-----	-----
	\$ 17,382,718	\$ 15,376,535
	-----	-----
Refunds	\$ 551,268	283,090
Administrative	144,097	135,438
	-----	-----
	\$ 18,078,083	\$ 15,795,063
	-----	-----
Excess of revenue over expenses	\$ 7,611,315	\$ 14,526,408
Fund balance at beginning of year	138,946,069	124,419,661
	-----	-----
Fund balance at end of year	\$146,557,384	\$138,946,069
	=====	=====

The accompanying notes to financial statements
are an integral part of these statements.

JUDGES RETIREMENT SYSTEM OF ILLINOIS--

STATE OF ILLINOIS

STATEMENTS OF CHANGES IN FINANCIAL POSITION

FOR THE YEARS ENDED JUNE 30, 1988 AND 1987

	<u>1988</u>	<u>1987</u>
Sources of working capital-		
Working capital provided by operations--excess of revenue over expense	\$ 7,611,315	\$14,526,408
Add- Item not requiring working capital--provision for depreciation	244	369
	-----	-----
Total sources of working capital	\$ 7,611,559	\$14,526,777
	-----	-----
Uses of working capital-		
Reinvested earnings	\$ 9,490,191	\$13,991,820
Acquisition of equipment	19,915	-
	-----	-----
Total uses of working capital	\$ 9,510,106	\$13,991,820
	-----	-----
Net increase (decrease) in working capital	\$(1,898,547)\$	534,957
	=====	=====
Elements of net increase (decrease) in working capital-		
Cash	\$(2,024,650)\$	608,588
Receivables	51,795	4,667
Benefits payable	(291)	7,940
Refunds payable	78,477	(87,340)
Accounts payable	(3,878)	1,102
	-----	-----
Net increase (decrease) in working capital	\$(1,898,547)\$	534,957
	=====	=====

The accompanying notes to financial statements are an integral part of these statements.

JUDGES RETIREMENT SYSTEM OF ILLINOIS--

STATE OF ILLINOIS

NOTES TO FINANCIAL STATEMENTS

JUNE 30, 1988 AND 1987

(1) DESCRIPTION OF SYSTEM:

General-

The Judges Retirement System of Illinois--State of Illinois (Judges Retirement System) was established in 1941 as a component unit of the State of Illinois and is governed by Chapter 108-1/2, Article 18 of the Illinois Pension Code. The Judges Retirement System covers judges, associate judges and, under certain conditions, the Administrative Director of the Illinois courts. Participation by judges, either appointed or elected, is mandatory unless the judge files an election not to participate within 30 days of receipt of notice of this option.

At June 30, 1988, the membership of the system was as follows:

Retirees and beneficiaries currently receiving benefits	560
Terminated members entitled to benefits but not yet receiving them	15
Current members-	
Vested	419
Nonvested	301
	===

Pension Benefits-

After 10 years of credited service, participants have vested rights to full retirement benefits beginning at age 60, or reduced retirement benefits beginning at age 55. Participants also have vested rights to benefits at age 62 upon attaining between 6 and 10 years of credit. The Judges Retirement System also provides annual automatic annuity increases after retirement, survivors' annuity benefits, temporary and/or total disability benefits and, under specified conditions, lump-sum death benefits.

The retirement annuity provided under the system is 3-1/2% for each of the first 10 years of service, plus 5% for each year of service in excess of 10, based upon the applicable final salary. The maximum retirement annuity is 85% of the applicable salary base. Annual automatic increases of 3% of the originally granted retirement annuity are provided.

Participants who terminate service and are not eligible for an immediate annuity may receive, upon application, a refund of their total contributions. Participants or annuitants who are no longer married are entitled to refunds of their contributions for survivors. Participants who are entitled to receive the maximum rate of annuity, have at least 20 years of service credit and have attained age 60 may elect to discontinue contributions and have their benefits (retirement and survivors) fixed.

The statutes governing the Judges Retirement System provide for optional contributions by participants, with interest at prescribed rates, to retroactively establish service credits for periods of prior creditable service. The Board of Trustees has adopted the policy that interest payments by a participant, included in optional contributions to retroactively establish service credits, shall be considered an integral part of the participant's investment in annuity expectancies and, as such, shall be included as a part of any refund payable.

Funding-

The Judges Retirement System is funded through contributions from participants, State of Illinois appropriations and investment income. Participants in the Judges Retirement System contribute 7-1/2% of their salaries for retirement annuities, 2-1/2% for survivors' annuities and 1% for an annual automatic increase in the retirement annuity.

(2) FUNDING STATUS AND PROGRESS:

The amount shown below as "pension benefit obligation" is a standardized disclosure measure 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 service to date. The measure is the actuarial present value of credited projected benefits and is intended to help users assess the Judges' Retirement System's funding status on a going-concern basis, assess progress made in accumulating sufficient assets to pay benefits when due and make comparisons among public employee retirement systems. The measure is independent of the actuarial funding method used to determine contributions to the system, as discussed in Note 3 below.

The pension benefit obligation was determined as part of an actuarial valuation as of June 30, 1988. Significant actuarial assumptions used include (a) a rate of return on the investment of present and future assets of 7.5% per year compounded annually, (b) projected salary increases of 6.0% per year and (c) mortality rates based on the UP-1984 Mortality Table.

At June 30, 1988, the unfunded pension benefit obligation was \$188,750,074 as follows:

Pension benefit obligation-	
Retirees and beneficiaries currently receiving benefits and terminated employees not yet receiving benefits	\$173,672,342
Current employees-	
Accumulated employee contributions	42,694,594
Employer financed-	
Vested	57,032,478
Nonvested	61,908,044

Total pension benefit obligation	\$335,307,458
Net assets available for benefits, at cost (market value is \$153,789,834)	146,557,384

Unfunded pension benefit obligation.	\$188,750,074
	=====

(3) CONTRIBUTIONS REQUIRED AND CONTRIBUTIONS MADE:

Employer contributions made by the State of Illinois are based on the payout requirements of the system and are not actuarially determined. Prior to fiscal year 1988, employer contributions had been at a level of approximately 60% of the payout requirements of the system. For fiscal years 1988 and 1989, employer contributions have been at a level of approximately 44% of the payout requirements of the system.

For each fiscal year, the system's actuary performs an actuarial valuation and computes actuarially determined contribution requirements for the system, using the projected unit credit actuarial cost method. The same actuarial assumptions are used to determine the contribution requirements as are used to compute the pension benefit obligation discussed in Note 2. For the year ended June 30, 1988, the system has adopted an actuarially determined contribution requirement of normal cost plus interest on the unfunded liability.

For the year ended June 30, 1988, employee contributions amounted to \$6,885,514, which is 11.0% of payroll. Employer contributions for the year amounted to \$9,137,000, which is 14.65% of current-year payroll. The actuarially determined employer contribution requirement of normal cost plus interest on the unfunded liability amounted to \$20,182,837. Thus, for the year ended June 30, 1988, employer contributions fell short of meeting the employer actuarially determined contribution requirement by \$11,045,837. Historical trend information designed to provide information about the system's progress is made in accumulating sufficient assets to pay benefits when due is presented on Page 40.

(4) SUMMARY OF SIGNIFICANT
ACCOUNTING POLICIES:

Basis of Accounting-

The accounting records of the Judges Retirement System are maintained on the accrual basis.

Investments-

Investments of the Judges Retirement System are managed by the Illinois State Board of Investment (ISBI) pursuant to Article 22A of the Illinois Pension Code and are held in the Commingled Fund of the ISBI. Investments of the Judges Retirement System are reported at the cost of its units of participation in the Commingled Fund of the ISBI.

Units of the Commingled Fund of the ISBI are issued to the member systems on the last day of the month based on the unit net asset value calculated as of that date. Net investment income of the Commingled Fund of the ISBI is allocated to each of the member systems on the last day of the month on the basis of percentage of accumulated units owned by the respective systems. Management expenses are deducted monthly from income before distribution. Investment income is recognized when earned.

The investment authority of the ISBI is provided in Illinois Revised Statutes Chapter 108-1/2 Article 22A-112. The ISBI investment authority includes investments in obligations of the U. S. Treasury and other agencies, notes secured by mortgages which are insured by the Federal Housing Commission, real estate, common and preferred stocks, convertible debt securities, deposits or certificates of deposit of Federally insured institutions and options. Such investment authority requires that all opportunities be undertaken with care, skill, prudence and diligence given prevailing circumstances that a prudent person acting in like capacity and experience would undertake.

Governmental Accounting Standards Board (GASB) Statement No. 3, entitled "Deposits with Financial Institutions, Investments (including Repurchase Agreements) and Reverse Repurchase Agreements," requires certain financial statement disclosure of deposits and investments, such as the disclosure of carrying amounts by type of investment and classification into one of three categories based upon credit risk. Investments in pools managed by other governmental agencies, in general, are to be disclosed but not categorized because they are not evidenced by securities that exist in physical or book-entry form.

The Judges Retirement System transfers money to the ISBI for investment in the Commingled Fund of the ISBI. This money is then allocated among various investment managers to pursue a specific investment strategy. All investment

transactions are initiated by the investment managers (either internal or external). The transaction settlement information is then forwarded to the agent bank's trust department under a master custodial agreement.

Custody of a majority of the actual physical securities is maintained at an agent of the agent bank's trust department using a book entry system.

The investments managed by the Commingled Fund of the ISBI are reported by the appropriate credit risk category in the annual financial report of the Illinois State Board of Investment.

Reference should be made to the 1988 annual financial report of the ISBI for additional information relating to the investments of the ISBI. The Judges Retirement System owns 5.7% of the ISBI commingled fund as of June 30, 1988.

Accrued Benefit Cost-

The accrued benefit cost amounts as of June 30, 1988 and 1987, were \$335,307,458 and \$307,064,068, respectively. The calculations of the accrued benefit cost are made by consulting actuaries as of the end of each fiscal year. The significant methods and assumptions underlying the actuarial computations for the calculations performed as of June 30, 1988, 1987 and 1986 are as follows:

	<u>1988 and 1987</u>	<u>1986</u>
Actuarial method	Projected unit credit cost	Entry age normal
Rate of return on investments	7.5%	6.0%
Rate of turnover	A moderate scale consistent with the Judges Retirement System's experience	A moderate scale consistent with the Judges Retirement System's experience

	1988 and 1987	1986
Mortality basis	Up-1984 Mortality Table	1971 Group Annuity Mortality Table (adjusted by the actuary to provide a margin for mortality increases)
Salary increase	6.0%	5.0%
Assumed average age at retirement	66 years	66 years

As shown in the table above, certain actuarial assumptions and the actuarial method were changed in 1987 based on an experience analysis performed by the Judges Retirement System's actuary. Together, the changes reduced the accrued benefit cost by \$39,310,833. The change in the assumed rate of return on investments from 6% to 7-1/2% together with the change in the assumed rate of annual salary increases from 5% to 6% reduced the accrued benefit cost by \$44,282,324. The change in actuarial cost method from entry age normal method to the alternatively acceptable projected unit credit method increased the accrued benefit cost by \$4,971,491.

The remaining decrease of \$268,727,215 in accrued benefit cost is attributable to a number of factors which have not been identified by the Judges Retirement System.

The Judges Retirement System and its actuary believe that the new actuarial method and assumptions are preferable taking into consideration the Judges Retirement System's funding and payout experience.

Fund Balance-

The funded statutory reserves of the Judges Retirement System are composed of three components as follows:

(a) Reserve for Participants' Contributions--This reserve consists of participants' accumulated contributions.

(b) Reserve for Automatic Annuity Increase--This reserve represents participants' accumulated contributions for the automatic annuity increase, plus an equal amount contributed by the State of Illinois, plus 4% interest credited on the beginning balance, less automatic annuity increased benefits and refunds paid.

(c) Reserve for Future Operations--This reserve is the balance remaining in the Judges Retirement System from State of Illinois contributions and revenue from

investments after consideration of charges for payouts by the Judges Retirement System.

Administrative Expenses-

Administrative expenses common to the Judges Retirement System and the General Assembly Retirement System are borne 60% by the Judges Retirement System and 40% by the General Assembly Retirement System. Invoices/vouchers covering common expenses incurred are paid by the Judges Retirement System and 40% thereof is allocated to and reimbursed by the General Assembly Retirement System. Administrative expenses allocated to and reimbursed by the General Assembly Retirement System were \$108,636 and \$91,421 for the years ended June 30, 1988 and 1987, respectively.

(5) PENSION DISCLOSURE:

All of the System's full-time employees who are not eligible for another State-sponsored retirement plan participate in the State Employees' Retirement System (SERS), which is a component unit of the State of Illinois reporting entity. The SERS is a single-employer public employee retirement system (PERS) in which the State's departments and agencies participate on a cost-sharing basis. The SERS issues a separate component unit financial report (CUFR). The financial position and results of operations of the SERS for fiscal year 1988 and GASB Statement No. 5 footnote disclosures are also included in the State's Comprehensive Annual Financial Report (CAFR) for the year ended June 30, 1988.

The System's covered payroll for fiscal year 1988 was \$110,248.

The SERS was established in 1944 and is governed by Article 14 of the Illinois Pension Code. Employees who retire at or after age 60 with 8 years of credited service (or at age 55 with at least 30 years of service with reduced benefits) are entitled to an annual retirement benefit payable monthly for life, in an amount based upon final average compensation (average salary for the 48 consecutive month period within the last 120 months of service in which total compensation was the highest) and credited service. The SERS provides for annuities of 1.0% to 1.67% of final average compensation for each of the first 10 years of service, 1.1% to 1.9% for each of the next 10 years, 1.3% to 2.1% for each of the third ten years and 1.5% to 2.3% for each year over 30 years of service. The maximum pension payable is 75% of final average compensation. Employees with 35 years of credited service may retire at any age with full benefits. The SERS also provides occupational, nonoccupational disability and death benefits.

Employees are obligated to contribute to the SERS based upon their compensation. Employees coordinated with Social Security generally contribute 4% while those not coordinated contribute 8%. The payments of required System contributions, all allowances, annuities, benefits granted under Article 14 of the Illinois Pension Code and all expenses of administration of the system are obligations of the State of Illinois to the extent specified in the Illinois Pension Code.

The System's actuarially determined contribution requirement for fiscal year 1988 was \$7,982, or 7.24% of the current year covered payroll. The System's and employee contributions actually made were \$3,126 and \$7,042, respectively, which represent 2.8% and 6.4%, respectively, of the current year covered payroll.

The pension benefit obligation (PBO) below is the actuarial present value of credited projected benefits for all members of the SERS including the Agencies. It is a standardized disclosure measure of the present value of pension benefits, adjusted for the effects of projected salary increases and any step-rate benefits, estimated to be payable in the future as a result of employee service to date. The measure is intended to help users assess the PERS funding status on a going-concern basis, assess progress made in accumulating sufficient assets to pay benefits when due and make comparisons among PERS. The SERS does not make separate measurement of assets and pension benefit obligations for individual departments and agencies (or systems).

The pension benefit obligation at June 30, 1988, for the SERS as a whole, determined through an actuarial valuation at that date, was \$3,490.6 million. The SERS net assets available for benefits on that date (valued at cost) was \$2,381.8 million, leaving an unfunded pension benefit obligation of \$1,108.8 million. The System's fiscal year 1988 contribution requirement represented 2/10,000% of total contributions required of all State agency/department employers participating in the SERS.

Ten-year historical trend information designed to provide information about the SERS progress made in accumulating sufficient assets to pay benefits when due is presented in its separately issued CUFR for the year ended June 30, 1988.

JUDGES RETIREMENT SYSTEM OF ILLINOIS--

STATE OF ILLINOIS

STATEMENTS OF CHANGES IN FUNDED STATUTORY RESERVES

FOR THE YEARS ENDED JUNE 30, 1988 AND 1987

	Total Funded Reserves	Reserve for Participants' Contributions		Reserve for Automatic Annuity Increase	Reserve for Future Operations
		Retirement Annuities	Survivors' Annuities		
Balance at June 30, 1986	\$124,419,661	\$26,071,825	\$11,151,757	\$6,718,637	\$80,477,442
Add (deduct)-					
Excess (deficiency) of revenues over expenses	14,526,408	4,308,703	1,065,003	(158,431)	9,311,133
Reserve transfers-					
Accumulated contributions of members who retired during the year	-	(2,003,671)	(259,260)	-	2,262,931
Reserve for automatic annuity increase credited with interest at 4% on the reserve balance at beginning of year	-	-	-	268,745	(268,745)
Balance at June 30, 1987	\$138,946,069	\$28,376,857	\$11,957,500	\$6,828,951	\$91,782,761
Add (deduct)-					
Excess (deficiency) of revenues over expenses	7,611,312	4,487,216	1,244,897	(325,470)	2,204,670
Reserve transfers-					
Accumulated contributions of members who retired during the year	-	(2,405,925)	(371,404)	-	2,777,329
Reserve for automatic annuity increase credited with interest at 4% on the reserve balance at beginning of year	-	-	-	273,158	(273,158)
Rounding	3	1	(1)	-	2
Balance at June 30, 1988	\$146,557,384	\$30,458,149	\$12,830,992	\$6,776,639	\$96,491,604

JUDGES RETIREMENT SYSTEM OF ILLINOIS--STATE OF ILLINOISSCHEDULE OF ADMINISTRATIVE EXPENSESFOR THE YEARS ENDED JUNE 30, 1988 AND 1987

	<u>1988</u>	<u>1987</u>
Personal services and related payroll costs	\$110,248	\$104,751
Contractual services-		
Rentals-		
Office equipment	1,022	1,407
Real property	10,121	9,750
Professional and technical services	8,000	10,750
Other	7,033	3,004
Travel	2,163	2,224
Commodities	2,127	1,819
Telecommunications	3,139	1,364
Provision for depreciation	244	369
	-----	-----
	\$144,097	\$135,438
	=====	=====

JUDGES RETIREMENT SYSTEM OF ILLINOIS--

STATE OF ILLINOIS

ANALYSIS OF FUNDING PROGRESS

FOR THE TWO YEARS ENDED JUNE 30, 1988

<u>Fiscal Year</u>	<u>(1) Net Assets Available for Benefits*</u>	<u>(2) Pension Benefit Obligation</u>	<u>(3) Percentage Funded (1)+(2)</u>	<u>(4) Unfunded Pension Benefit Obligation (2)-(1)</u>	<u>(5) Annual Covered Payroll</u>	<u>(6) Unfunded Obligation as a % Pension Benefit of Covered Payroll (4)+(5)</u>
1987	\$138,946,069	\$307,064,068	45.3%	\$168,117,999	\$59,266,115	283.7%
1988	146,557,384	335,307,458	43.7	188,750,074	62,366,208	302.7
	=====	=====	=====	=====	=====	=====

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 the System Trust Fund's 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 public employees' retirement system (PERS). 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 adjusted for the effects of inflation and aids analysis of the System Trust Fund's progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the PERS.

*At cost.

JUDGES RETIREMENT SYSTEM OF ILLINOIS--STATE OF ILLINOISREVENUES BY SOURCE AND EXPENSE BY TYPEFOR THE YEARS ENDED 1985 THROUGH 1988REVENUES BY SOURCE

<u>Fiscal Year Ended Year June 30</u>	<u>Member Contribution</u>	<u>State Contributions</u>	<u>Investment Income</u>	<u>Total</u>
1985	\$5,147,228	\$8,527,500	\$ 6,621,882	\$20,296,610
1986	5,983,871	9,345,100	15,225,759	30,554,730
1987	6,248,636	9,832,000	14,240,835	30,321,471
1988	6,885,514	9,137,000	9,666,884	25,689,398
	=====	=====	=====	=====

EXPENSES BY TYPE

<u>Fiscal Year Ended June 30</u>	<u>Benefits</u>	<u>Contribution Refunds</u>	<u>Administrative Expenses</u>	<u>Total</u>
1985	\$12,352,558	\$263,219	\$118,866	\$12,734,643
1986	13,616,195	600,279	128,558	14,345,032
1987	15,376,535	283,090	135,438	15,795,063
1988	17,382,718	551,268	144,097	18,078,083
	=====	=====	=====	=====

JUDGES RETIREMENT SYSTEM OF ILLINOIS--STATE OF ILLINOISANALYSIS OF EMPLOYER CONTRIBUTIONSFOR THE YEAR ENDED JUNE 30, 1988

Employer funding requirement of normal cost plus interest on the unfunded liability, as calculated by the actuary	\$20,182,837
Employer contribution made	9,137,000 -----
Deficiency of contribution made over normal cost plus interest on the unfunded liability, as calculated by the actuary	\$11,453,837 =====



S. Goldstein and Associates
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One North LaSalle Street
Suite 4220
Chicago, Illinois 60602
(312) 726-5877

October 28, 1988

Board of Trustees
Judges Retirement System of Illinois
415 Iles Park Place
Springfield, Illinois 62718

Re: Actuarial Valuation As Of June 30, 1988

I am pleased to submit my actuarial report on the financial position and funding requirements of the Judges Retirement System of Illinois based on the actuarial valuation as of June 30, 1988, consisting of the following:

Section A	- Purpose And Summary
Section B	- Data Used For Valuation
Section C	- Retirement System Provisions
Section D	- Actuarial Assumptions and Cost Method
Section E	- Actuarial Liability
Section F	- Employer's Normal Cost
Section G	- Employer's Funding Requirement For FY 89
Section H	- State Appropriation Requirements For FY 90
Section I	- Reconciliation of Change in Unfunded Liability
Section J	- Present Value of Credited Projected Benefits
Section K	- Certification

I would be pleased to discuss any aspects of this report with you at your convenience.

Respectfully submitted,

Sandor Goldstein
Fellow of the Society of Actuaries
Enrolled Actuary No. 3402

A. PURPOSE AND SUMMARY

We have carried out an actuarial valuation of the Judges Retirement System of Illinois as of June 30, 1988. The purpose of the valuation was to determine the financial position and funding requirements of the retirement system. This report is intended to present the results of the valuation. The results are summarized below:

1. Total actuarial liability	\$ 335,307,458
2. Actuarial value of assets	158,328,456
3. Unfunded actuarial liability	176,979,002
4. Funded Ratio	47.2%
5. Employer FY 89 funding requirement of normal cost plus interest on the unfunded liability	\$ 21,990,938
6. Employer FY 89 funding requirement of normal cost plus amount required to pay off unfunded liability over 40 years as a level percent of payroll	16,721,214
7. Estimated total employer contribution for FY 89	9,918,700
8. Employer FY 90 funding requirement of normal cost plus interest on the unfunded liability	23,275,228
9. Employer FY 90 funding requirement of normal cost plus amount required to pay off unfunded liability over 40 years as a level percent of payroll	17,646,040
10. Actuarial present value of credited projected benefits	\$ 335,307,458

B. DATA USED FOR THE VALUATION

Participant Data. The participant data required to carry out the valuation was supplied by the retirement system. The membership of the system as of June 30, 1988 on which the valuation was based is summarized in Exhibit 1. It can be seen that there were 796 active members, 348 members receiving retirement annuities, 227 members receiving surviving spouse's annuities, and 15 members receiving children's annuities included in the valuation. The total active payroll as of June 30, 1988 was \$62,366,208.



Exhibit 1

Summary of Membership Data

1. Number of Members.	
(a) Active Members	796
(b) Members Receiving	
(i) Retirement Annuities	348
(ii) Surviving Spouse's Annuities	227
(iii) Children's annuities	15
(c) Inactive Members	15
2. Annual Salaries	
(a) Total salary	\$ 62,366,208
(b) Average Salary	78,349
3. Total accumulated employee contributions	\$ 42,694,594
4. Annual Annuity Payments	
(a) Retirement Annuities	\$ 14,264,598
(b) Surviving Spouse's Annuities	3,464,784
(c) Children's Annuities	48,376

Assets. The asset values used for the valuation were based on the asset information contained in the unaudited statement of assets as of June 30, 1988 prepared by the system. For purposes of the valuation, the book value of the assets of the system less the amount of current liabilities was increased by the average excess of the market value of assets over the book value of assets of the system as of the last three year ends. The resulting actuarial value of assets was \$158,328,456. The development of this value is outlined in Exhibit 2.

Exhibit 2

Actuarial Value of Assets

1. Total book value of assets	\$146,670,557
2. Current liabilities	51,108
3. Net assets at book value (1-2)	\$146,619,449
4. Average excess of market value of assets over book value of assets over the last three years	11,709,007
5. Actuarial value of assets	<u>\$158,328,456</u>

C. RETIREMENT SYSTEM PROVISIONS

The actuarial valuation was based on the provisions of the retirement system in effect as of June 30, 1988 as provided in Article 18 of the Illinois Pension Code.

D. ACTUARIAL ASSUMPTIONS AND COST METHOD

Actuarial Assumptions

The same actuarial assumptions were used for the June 30, 1988 actuarial valuation as were used for the June 30, 1987 valuation. These actuarial assumptions were based on an experience analysis of the retirement system for the period 1984 through 1987. The major actuarial assumptions used for the valuation are summarized below:

Mortality Rates The UP-1984 Mortality Table was used for the valuation.

Termination Rates. Termination rates based on the recent experience of the system were used. The following is a sample of the termination rates that were used:

<u>Age</u>	<u>Rate of Termination</u>
30	.054
35	.030
40	.012
45	.045
50	.003
55	.000

Disability Rates. Disability rates based on the recent experience of the system as well as on published disability rate tables were used. The following is a sample of the disability rates that were used for the valuation:

<u>Age</u>	<u>Rate of Disability</u>
30	.00057
35	.00064
40	.00083
45	.00115
50	.00170

Retirement Rates. Rates of retirement for each age from 55 to 75 based on the recent experience of the system were used. The following are samples of the rates of retirement that were used:

<u>Age</u>	<u>Rate of Retirement</u>
55	.04
60	.10
65	.05
70	.10
75	1.00

The above retirement rates are equivalent to an average retirement age of approximately 66.

Salary Increase. A salary increase assumption of 6.0% per year, compounded annually, was used.

Interest Rate. An interest rate assumption of 7.5% per year, compounded annually, was used.

Marital Status. It was assumed that 75% of active members will be married at the time of retirement.

Spouse's Age. The age of the spouse was assumed to be 4 years younger than the age of the employee.

Actuarial Cost Method

The projected unit credit actuarial cost method was used for the June 30, 1988 valuation. This is the same actuarial cost method that was used for the June 30, 1987 valuation.

E. ACTUARIAL LIABILITY

The actuarial liability as determined under the valuation for the various classes of members is summarized in Exhibit 3. The total actuarial liability is then compared with the actuarial value of assets in order to arrive at the unfunded actuarial liability.

As of June 30, 1988, the total actuarial liability is \$335,307,458, the actuarial value of assets is \$158,328,456, and the unfunded actuarial liability is \$176,979,002. The ratio of the actuarial value of assets to the actuarial liability, or funded ratio, is 47.2%.

Exhibit 3

Actuarial Liability As Of June 30, 1988

1. Actuarial Liability For Active Members

(a) Basic retirement annuity	\$100,230,138
(b) Annual increase in retirement annuity	16,762,699
(c) Pre-retirement survivor's annuity	19,208,711
(d) Post-retirement survivor's annuity	23,454,747
(e) Withdrawal benefits	943,857
(f) Disability benefits	1,034,964
(g) Total	<u>\$161,635,116</u>

2. Actuarial Liability For Members Receiving Benefits

(a) Retirement annuities	\$144,220,117
(b) Survivor annuities	27,292,930
(c) Total	<u>\$171,513,047</u>

3. Actuarial Liability For Inactive Members

2,159,295

4. Total Actuarial Liability

\$335,307,458

5. Actuarial Value of Assets

\$158,328,456

6. Unfunded Actuarial Liability

\$176,979,002

7. Funded Ratio

47.2%

F. Employer's Normal Cost

The employer's share of the normal cost for the year beginning July 1, 1988 is developed in Exhibit 4. For the year beginning July 1, 1988, the total normal cost is determined to be \$16,049,193, employee contributions are estimated to be \$6,860,283, resulting in the employer's share of the normal cost of \$9,188,911.

Based on a payroll of \$62,366,208, the employer's share of the normal cost can be expressed as 14.73% of payroll.

Exhibit 4

Employer's Normal Cost For Year Beginning July 1, 1988

	<u>Dollar Amount</u>	<u>Per Cent Of Payroll</u>
1. Basic retirement annuity	\$ 9,669,887	15.51%
2. Annual increase in retirement annuity	1,620,658	2.60
3. Pre-retirement survivor's annuity	2,116,763	3.39
4. Post-retirement survivor's annuity	2,198,756	3.53
5. Withdrawal benefits	159,448	.26
6. Disability benefits	132,380	.21
7. Administrative expenses	151,301	.24
8. Total normal cost	<u>\$16,049,193</u>	<u>25.73%</u>
9. Employee contributions	6,860,283	11.00
10. Employer's share of normal cost	<u>\$ 9,188,911</u>	<u>14.73%</u>

Note. The above figures are based on a total active payroll of \$62,366,208 as of June 30, 1988.

G. EMPLOYER'S FUNDING REQUIREMENT FOR YEAR BEGINNING JULY 1, 1988

I. Employer's Actuarial Funding Requirement Of Normal Cost
Plus Interest On The Unfunded Liability

The funding policy adopted by the board is to have the State make contributions at least equal to "normal cost plus interest on the unfunded liability". By paying the normal cost each year, the accruing cost of pensions is met as service is rendered by employees. By paying interest on the unfunded actuarial liability, the unfunded actuarial liability is stabilized. Although no attempt is made to pay off the unfunded actuarial liability, this approach is nevertheless considered acceptable for public retirement systems where permanence can be taken for granted and full funding is not regarded as essential.

The employer's funding requirement of normal cost plus interest on the unfunded liability for the year beginning July 1, 1988 is developed in Exhibit 5.

It can be seen from Exhibit 5 that for the year beginning July 1, 1988, the employer funding requirement of normal cost plus interest on the unfunded actuarial liability amounts to \$21,990,938. Total state appropriations for the year are estimated to amount to \$9,918,700. Thus, employer contributions for the year are expected to fall short of the employer funding requirement by \$12,072,238. This deficiency in employer contributions can be expressed as 19.36% of payroll.

Exhibit 5

Funding Requirement For Year Beginning July 1, 1988

1. Employer's share of normal cost	\$ 9,188,911
2. Interest on the unfunded actuarial liability	<u>12,802,027</u>
3. Employer's funding requirement of normal cost plus interest on the unfunded actuarial liability	\$21,990,938
4. Estimated employer contribution for the year	<u>9,918,700</u>
5. Estimate of amount by which employer contributions are expected to fall short of the funding requirement of normal cost plus interest on the unfunded liability	<u>\$12,072,238</u>

II. Employer's Actuarial Funding Requirement Of Normal Cost Plus Amount Required To Pay Off Unfunded Liability Over 40 Years As A Level Percent Of Payroll

Paying interest on the unfunded liability is one approach for controlling a retirement system's unfunded liability. There is an alternative to this approach under which contributions toward the unfunded liability are initially somewhat lower but which in the long run can still be considered to be a fiscally sound approach for funding public retirement systems. Under this alternative approach, the unfunded liability is amortized by payments which represent a level percentage of active membership payroll. This is sometimes referred to as the level percentage of payroll amortization approach.

Since the active payroll can be expected to increase over time, the level percentage of payroll amortization approach will require a lower contribution toward the unfunded liability in the earlier years than the "interest only" approach and will require greater contributions in the later years. However, the contribution as a percentage of payroll is expected to remain level over time.

In the early years, the level percentage of payroll payment toward the unfunded liability is less than an amount equal to interest on the unfunded liability, resulting in increases in the unfunded liability for a period of time. Eventually the payroll base will increase to a point where the level percentage of payroll approach should pay off the unfunded liability over the amortization period. A potential risk associated with this approach is that payroll increases that are assumed may not materialize. Nevertheless, the level percentage of payroll amortization approach can represent a fiscally sound approach for funding public retirement systems.

The employer's funding requirement of normal cost plus the amount required to amortize the unfunded liability over 40 years as a level percent of payroll is developed in Exhibit 6.

It can be seen from Exhibit 6 that for the year beginning July 1, 1988, the employer funding requirement of normal cost plus the amount required to amortize the unfunded liability over 40 years as a level percent of payroll

amounts to \$16,721,214. Actual employer contributions for the year are estimated to amount to \$9,918,700. Thus, employer contributions for the year are expected to fall short of meeting the employer funding requirement determined under this basis by \$6,802,514. This deficiency in employer contributions can be expressed as 10.91% of payroll.

Exhibit 6

Funding Requirement For Year Beginning July 1, 1988

1. Employer's share of normal cost	\$ 9,188,911
2. Amount required to amortize the unfunded liability over 40 years as a level percent of payroll	<u>7,532,303</u>
3. Employer's total funding requirement (1. + 2.)	\$16,721,214
4. Estimated employer contribution for the year	<u>9,918,700</u>
5. Estimate of amount by which employer contributions are expected to fall short of meeting the funding requirement (3. - 4.)	<u>\$6,802,514</u>

H. STATE APPROPRIATION REQUIREMENTS FOR FISCAL YEAR BEGINNING JULY 1, 1989

The June 30, 1988 actuarial valuation is used to develop the actuarial funding requirements of the system for the year beginning July 1, 1988. For State budgeting purposes, it is necessary to make a projection of the system's actuarial funding requirement for the fiscal year beginning July 1, 1989. Under Section 22-1001 of the Illinois Pension Code, the retirement system is required to submit to the Illinois Economic and Fiscal Commission information regarding the amount required to meet the State's share of the normal cost plus interest on the unfunded liability for the fiscal year commencing July 1, 1989.

We have therefore made some projections to estimate the amount of State appropriations required to meet the system's actuarial funding requirements for the fiscal year commencing July 1, 1989. This has been done under both of the approaches for controlling the system's unfunded liability that were outlined in Section I.

<u>Actuarial Funding Requirement</u>	<u>Required State Appropriations For</u>	
	<u>FY 90</u>	
	<u>Dollar Amount</u>	<u>% of Payroll</u>
Normal Cost Plus Interest On The Unfunded Liability	\$23,275,228	35.7%
Normal Cost Plus Amount Required To Amortize Unfunded Liability Over 40 Years As A Level Percent Of Payroll	\$17,646,040	27.08%

Note. The above figures are based on a projected payroll of \$65,172,687 for the fiscal year commencing July 1, 1989.

I. RECONCILIATION OF CHANGE IN UNFUNDED LIABILITY

The net actuarial experience during the period July 1, 1987 to June 30, 1988 resulted in an increase in the system's unfunded actuarial liability of \$19,098,913. This increase in unfunded liability is a result of several kinds of gains and losses. The financial effect of the most significant gains and losses is illustrated in Exhibit 7.

The employer funding requirement for the year of normal cost plus interest on the unfunded actuarial liability amounted to \$20,182,837, whereas the actual employer contribution for the year amounted to \$9,137,000. Thus, the employer contribution for the year fell short of meeting normal cost plus interest on the unfunded liability by \$11,045,837. Had all aspects of the system's experience been in line with the actuarial assumptions, the unfunded liability would have increased by this amount.

The net rate of investment return earned by the system was slightly in excess of the assumed rate of 7.5%. This resulted in a decrease in the unfunded liability of \$69,000. Salaries increased at an average rate of 5.0% per year in comparison with an assumed rate of 6.0% per year, resulting in a decrease in the unfunded liability of \$1,616,000.

The various other aspects of the system's experience resulted in a net increase in the unfunded liability of \$9,738,076.

The aggregate financial experience of the system resulted in an increase in the unfunded liability of \$19,098,913.

Exhibit 7

Reconciliation of Change in Unfunded Liability
Over the Period July 1, 1987 to June 30, 1988

1. Unfunded actuarial liability as of 7/1/87	\$157,880,089
2. Employer contribution requirement of normal cost plus interest on the unfunded liability for the period 7/1/87 to 6/30/88	20,182,837
3. Actual employer contribution for the year	<u>9,137,000</u>
4. Increase in unfunded liability due to employer contributions being less than normal cost plus interest on unfunded liability	11,045,837
5. Decrease in unfunded liability due to investment return greater than assumed	69,000
6. Decrease in unfunded liability due to salary increases less than assumed	1,616,000
7. Increase in unfunded liability due to other sources	<u>9,738,076</u>
8. Net increase in unfunded liability for the year (4+7-5-6)	\$ 19,098,913
9. Unfunded actuarial liability as of 6/30/88 (1+8)	\$176,979,002

J. Actuarial Present Value of Credited Projected Benefits

In November 1986, the Governmental Accounting Standards Board (GASB) issued Statement No. 5 entitled Disclosure of Pension Information by Public Employee Retirement Systems and State and Local Governmental Employers. The statement established standards of disclosure of pension information by public employee retirement systems.

GASB Statement No. 5 requires the disclosure of the actuarial present value of credited projected benefits as the standardized measure of the accrued pension obligation. This measure represents the discounted value of the amount of benefits estimated to be payable in the future as a result of employee service to date, computed by attributing an equal benefit amount to each year of service of the employee.

It should be noted that the actuarial present value of credited projected benefits is equal to the actuarial liability computed under the projected unit credit actuarial cost method. Thus, since the projected unit credit actuarial cost method was used for the valuation, the total actuarial liability of

\$335,307,458 as developed in Section E of this report is also the actuarial present value of credited projected benefits that is required to be disclosed under GASB Statement No. 5.

In Exhibit 8 we have shown the actuarial present value of credited projected benefits in the format prescribed in GASB Statement No. 5. It can be seen that the total actuarial present value of credited projected benefits of \$335,307,458 is the same as the total actuarial liability under the projected unit credit actuarial cost method.

Exhibit 8.

Actuarial Present Value of Credited Projected Benefits

1. For members in receipt of benefits and for inactive members	\$173,672,342
2. For current employees	
Accumulated employee contributions	42,694,594
Employer-financed vested	57,032,478
Employer-financed nonvested	<u>61,908,044</u>
3. Total actuarial present value of credited projected benefits	\$335,307,458
4. Net assets available for benefits, at cost (Market value is \$153,903,007)	<u>\$146,670,557</u>
5. Unfunded actuarial present value of credited projected benefits	<u>\$188,636,901</u>

K. CERTIFICATION

This actuarial report has been prepared in accordance with generally accepted actuarial principles and practices and to the best of my knowledge, fairly represents the financial condition of the Judges Retirement System of Illinois as of June 30, 1988.

Respectfully submitted



Sandor Goldstein
Fellow of the Society of Actuaries
Enrolled Actuary No. 3402

SUMMARY OF PROVISIONS OF THE JUDGES RETIREMENT SYSTEM

(Includes amendments enacted at the 1986 session of the 84th General Assembly. This summary should not be considered as a substitute for the applicable law.)

1. PARTICIPATION AND CONTRIBUTIONS OF MEMBERS

Participation. When a person first becomes a Judge, participation in the System is mandatory unless an "Election Not to Participate" is filed by the Judge within 30 days of the date of notification of this option.

Contributions. Currently members must contribute for the following purposes, by payroll deductions, at the rates indicated:

Retirement Annuity	7.5%
Automatic Annuity Increase	1.0
Survivors' Annuity	<u>2.5</u>
	11.0%

A married Judge who files an "Election Not to Participate in the Survivors' Annuity Benefit" or an unmarried Judge is not required to contribute for that benefit, in which case the total contributions would be 8.5% of salary. Contributions for survivors' annuity are not required for an eligible child to qualify for a child's annuity.

Refund of Contributions. A participant who terminates service as a Judge may apply for and receive a refund of total contributions, without interest, provided immediate eligibility to receive a retirement annuity has not been established and the Judge has no immediate plans for returning to service as a Judge.

A member who becomes unmarried, either before or after retirement, is entitled to a refund of contributions made for survivors' annuity.

Discontinuance of Contributions. A participant who has become eligible to receive the maximum rate of annuity (at least 20 years of service credit and is age 60 or over) may elect to discontinue contributions and have benefits (retirement and survivors) "fixed" based upon the applicable salary measure as a Judge immediately prior to the effective date of such election. This election, once made, is irrevocable.

Member Contributions Not Subject to Federal or State Income Tax Until Distributed. Member contributions on earnings received after January 1, 1982 are picked up as employer contributions and, therefore, that amount of salary is not considered as taxable income for Federal or State Income Tax purposes in the year the compensation is received. However, these retirement contributions will be subject to Federal Income Tax when such amounts are distributed as a retirement annuity, survivor's annuity, lump-sum death benefit or refund.

2. RETIREMENT ANNUITY

Formula. Effective January 1, 1983, the retirement annuity is determined according to the following formula based upon the applicable salary. (See footnote to Estimate Chart No. 1 on following page)

3½% for each of the first 10 years of pension credit;
5% for each year of credit above 10 years;
MAXIMUM is 85% of such average salary after 20 years of credit.

Age and Service Requirements for Retirement.

- (a) Vesting of Pension Credit. Vesting in an annuity occurs after 10 years of credit with the deferred annuity payable beginning at age 60; or between 6 and 10 years of service with the deferred annuity payable beginning at age 62.
- (b) Conditions for Retirement. A member may retire at age 55 with at least 10 years of credit. In such a case the annuity is reduced 1/2 of 1% for each month the member is under age 60; or at age 60 after at least 10 years of credit on an unreduced retirement annuity; or at age 62 after at least 6 years of service credit.

Temporary Total Disability. A member with at least 2 years of service as a Judge who becomes totally disabled and unable to perform the duties as a Judge is entitled to a temporary disability benefit equal to 50% of salary payable during disability but not beyond the end of the term of office.

Total and Permanent Disability. A member who becomes totally and permanently disabled while serving as a Judge having at least 10 years of pension credit is eligible for an unreduced retirement annuity regardless of age.

If disability is service-connected, the annuity is subject to reduction by the amounts received by a participant under the Workmen's Compensation Act and the Workmen's Occupational Diseases Act.

Automatic Annuity Increase. Judges who are covered by this benefit are eligible for an annual increase of 3% in their base retirement annuity. This annual increase is based upon the original grant of annuity and is not compounded. The initial increase is effective in the month of January of the year next following the year in which the first anniversary of retirement occurs.

Suspension of Retirement Annuity. The annuity to any Judge shall be suspended during any period such annuitant is employed for compensation by the State of Illinois or by any County in Illinois.

If the provisions of the Retirement Systems' Reciprocal Act are elected at retirement, any employment which would result in the suspension of benefits under any of the retirement systems being considered would also cause the annuity payable by the Judges Retirement System to be suspended.

ESTIMATE CHART NO. 1

For judges with at least 6 but less than 10 years of service.
Benefits payable at 62 or over.

<u>YEARS OF SERVICE</u>	<u>PER CENT OF SALARY</u>	<u>SALARY BASE*</u>			
		<u>\$75,113</u>	<u>\$80,599</u>	<u>\$87,780</u>	<u>\$93,266</u>
		<u>(Salaries effective July 1, 1987)</u>			
		<u>MONTHLY RETIREMENT ANNUITY</u>			
6	21%	\$1,314	\$1,410	\$1,536	\$1,632
6.5	22.75	1,424	1,528	1,664	1,768
7	24.50	1,533	1,645	1,792	1,904
7.5	26.25	1,643	1,763	1,920	2,040
8	28	1,752	1,880	2,048	2,176
8.5	29.75	1,862	1,998	2,176	2,312
9	31.5	1,971	2,115	2,304	2,448
9.5	33.25	2,081	2,233	2,432	2,584

*For judges who became members of the System prior to January 1, 1983, the salary base for benefits is the final rate of salary.

*For judges who became members of the System on and after January 1, 1983, the salary base is the member's average salary during the last year of service.

ESTIMATE CHART NO. 2

For judges with 10 or more years of service.
Benefits payable at age 60 or over.*

<u>YEARS OF SERVICE</u>	<u>PER CENT OF SALARY</u>	<u>SALARY BASE**</u>			
		<u>\$75,113</u>	<u>\$80,599</u>	<u>\$87,780</u>	<u>\$93,266</u>
		<u>(Salaries effective July 1, 1987)</u>			
		<u>MONTHLY RETIREMENT ANNUITY</u>			
10	35%	\$2,190	\$2,350	\$2,560	\$2,720
10.5	37.5	2,347	2,518	2,743	2,914
11	40	2,503	2,686	2,926	3,108
11.5	42.5	2,660	2,854	3,108	3,303
12	45	2,816	3,022	3,291	3,497
12.5	47.5	2,973	3,190	3,474	3,691
13	50	3,129	3,358	3,657	3,886
13.5	52.5	3,286	3,526	3,840	4,080
14	55	3,442	3,694	4,023	4,274
14.5	57.5	3,599	3,862	4,206	4,468
15	60	3,755	4,029	4,389	4,663
15.5	62.5	3,912	4,197	4,571	4,857
16	65	4,068	4,365	4,754	5,051
16.5	67.5	4,225	4,533	4,937	5,246
17	70	4,381	4,701	5,120	5,440
17.5	72.5	4,538	4,869	5,303	5,634
18	75	4,694	5,037	5,486	5,829
18.5	77.5	4,851	5,205	5,669	6,023
19	80	5,007	5,373	5,852	6,217
19.5	82.5	5,164	5,541	6,034	6,412
20 and over	85 (Max.)	5,320	5,709	6,217	6,606

*A member with 10 or more years of service may claim an annuity as early as age 55 in which case the above amounts would be reduced 1/2 of 1% for each month under age 60.

**See footnote on Chart No. 1 (previous page)

3. SURVIVORS ANNUITY BENEFIT

Qualifying Provisions. A surviving spouse without children, eligible for benefits consideration, may be considered for this benefit at age 50 or over.

A surviving spouse with unmarried eligible children of the member may be considered for a survivor's annuity benefit at any age. When all children are disqualified because of death, marriage or attainment of age 18, the spouse's benefit is suspended if the spouse is under age 50 until attainment of such age.

A surviving spouse who remarried prior to attainment of age 50 shall be disqualified for any future benefit payments.

Eligible children of the member under age 18 or who are dependent because of a physical or mental disability may be considered for benefits. Children adopted by the member at least 6 months prior to death have the same status as natural children. A child's annuity can be considered for an eligible child even though the member did not participate in and contribute for the survivor's annuity benefit.

Service Requirement. If the member dies in service as a Judge, the Judge must have at least 1-1/2 years of service credit for the survivors annuity eligibility. If death occurs after termination of service and prior to retirement on a retirement annuity the deceased member must have at least 10 years of service credit to qualify the spouse for survivor's annuity.

Amount of Survivors Annuity. The annuities payable to survivors in the several categories depending on whether the member dies in service or after termination of service, provided qualifying conditions and other requirements have been fulfilled, are as follows:

	<u>DEATH IN SERVICE</u>	<u>DEATH AFTER TERMINATION OR RETIREMENT</u>
(a) Spouse	7-1/2% of salary or 66-2/3% of earned retirement annuity, whichever is greater	66-2/3% of earned retirement annuity
(b) Eligible Children of the member	5% of salary for each child with maximum for all children of 20% of salary or 66-2/3% of earned pension, whichever is greater	Same as "Death in Service"

Offset by Workmen's Compensation. The survivor's annuity is subject to reduction by any amounts received by a survivor under the Workmen's Compensation Act or the Workmen's Occupational Diseases Act.

4. LUMP SUM DEATH BENEFITS

Lump sum death benefits are considered only if there are no eligible "survivor's annuity" beneficiaries surviving the deceased member.

<u>Conditions for Payment</u>	<u>Benefits Payable</u>
(a) Death before retirement with no survivors eligible to a survivor's annuity	Refund of total contribution credits to nominated beneficiary or estate.
(b) Death after retirement with no survivors eligible to a survivor's annuity	Refund of excess of (a) contributions over, (b) annuity payments. Payable to the nominated beneficiary or estate. If the total of annuities paid equal or exceed contributions, no death benefits are payable.
(c) Death of survivor annuitant with no further survivor's annuity payable.	Refund of excess of (a) contributions over, (b) total retirement and survivors payments. The refund is payable to the nominated beneficiary or the estate of the last survivor. If total benefits equal or exceed contributions, no death benefits are payable.

5. TAXATION OF BENEFITS

Retirement and survivor's annuity benefits paid by the Judges Retirement System are subject to Federal Income Tax. The Tax Reform Act of 1986 made several changes in the tax treatment of pension payments. The three-year recovery rule was eliminated for any individual whose benefit commences after July 1, 1986, and a portion of the monthly annuity may be excluded as income for tax purposes with the balance considered as taxable income beginning with the first payment. The nontaxable amount of the benefit is determined from the member's tax free cost and the expected return based on the life expectancy of the pensioner at the beginning date of the benefit. Under the Judges Retirement System the member's cost would normally represent contributions prior to January 1, 1982. When benefits become payable, the member or survivor will be provided with information regarding the Federal Income Tax treatment of the benefit and the amount the recipient is to consider as the cost of annuity.

Benefits paid by the Judges Retirement System are not subject to Illinois State Income Tax.

6. RECIPROCITY

The Retirement Systems' Reciprocal Act (Chapter 108½, Article 20, Illinois Revised Statutes) provides the means of giving effect to pension credits in certain other public retirement systems in Illinois by considering such credits together with credits in the Judges Retirement System for the purpose of determining eligibility to annuities and for computing the annuities that may be payable to participants and their dependents.

Under the "Retirement Systems' Reciprocal Act," each retirement system must consider the provisions of its law in effect on the last date of the last termination of service of the member under any of the systems involved. Earnings under all systems are considered by each system in establishing the salary base on which benefits are to be computed. Public employment is considered in sequence by each system in arriving at the proper graded percentage rate of annuity applicable to the member under its graduated annuity rate schedule. Each system is to pay its proportionate annuity to the annuitant but the total payments by all systems cannot exceed the highest maximum annuity of any of the systems being considered if all of the member's public employment had been credited in that system. No additional contributions are required for this provision to be applicable.

The option of transferring and converting pension credit in another system in terms of the Judges Retirement System formula is still available to any Judge in service on September 5, 1975. This does not mean "a year for year" conversion but consists of the ratio of the benefit rates for the system from which the transfer is being made to the benefit rates of the Judges Retirement System. Since the Judges Retirement System rates are higher than in the case of the other public retirement systems in Illinois, this means, for example, that 4 years of pension credit in another system may result in only 1-1/2 or 2 years of converted pension credit in the Judges Retirement System. An additional contribution may be required from the member.

It is possible the revisions made by amendments to the regular formula of the Reciprocal Act, which became effective in 1975, may result in comparable or greater benefits than those that would be available if the pension credits from another system or systems were transferred and converted into reduced credits in the Judges Retirement System. Furthermore, for the regular formula, no additional payment from the member is required, whereas the transfer and conversion process calls for a substantial contribution, in most cases, on the part of the member.

7. STATE EMPLOYEES GROUP INSURANCE PROGRAM

Annuitants (retirement and survivor) receiving benefits from the Judges Retirement System are eligible to coverage under the State Employees Group Insurance Program. Basic health and life premiums for the retired judge are paid by the State and premiums for any dependent health or optional life coverage are deducted from the monthly benefit. A judge who begins to receive benefits within one year of the date of removal from the payroll is considered an "immediate annuitant" and is eligible to the same health coverage which the judge had under the State program as an employee. A large majority of the retirement annuitants fall in this category and claim the retirement annuity effective the day following termination of service in which case the insurance enrollment is merely transferred from the payroll to the Judges Retirement System.

Although health coverage would remain the same, the member's life insurance coverage could be reduced at retirement since the maximum basic life coverage is \$2,000 for a retirement system annuitant at age 60 or over and optional life coverage which had been elected would be in multiples of up to four times that basic amount.

Cook County judges who are paid a portion of their salary by the County and who have health insurance on their dependents with Cook County rather than with the State Group Plan would not have health coverage for those dependents upon retirement. Such dependents can only be added to the State Group Program through the submission of evidence of insurability which is subject to approval by the carrier or during an open enrollment period.

Survivors who qualify for monthly benefits upon the death of an active member or retired judge then become the annuitant and premiums for that survivor's basic health insurance coverage are paid by the State. A survivor annuitant may elect \$2,000 of life insurance coverage with premiums deducted from the monthly benefit.

