



**Michigan Judges Retirement System**

**Comprehensive Annual Financial Report  
for the Fiscal Year Ended September 30, 1997**



**MJRS**

**Prepared by:  
Office of Retirement Systems  
Michigan Judges Retirement System  
7150 Harris Drive  
P.O. Box 30172  
Lansing, Michigan 48909-7526  
(517) 322-5103**

# INTRODUCTORY SECTION

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The cost of printing this report was \$XX, which was paid for by the retirement system at no cost to taxpayers.

# INTRODUCTORY SECTION

## Michigan Judges Retirement System

**Comprehensive Annual Financial Report  
for the Fiscal Year Ended September 30, 1997**

# INTRODUCTORY SECTION



**MJRS**

# INTRODUCTORY SECTION

## Letter of Transmittal

Michigan Judges Retirement System  
General Office Building, Third Floor  
P.O. Box 30172  
Lansing, Michigan 48909  
Telephone (517) 322-5103

### STATE OF MICHIGAN

JOHN ENGLER, Governor

### DEPARTMENT OF MANAGEMENT AND BUDGET

March 6, 1998

The Honorable John Engler  
Governor, State of Michigan,

Members of the Legislature  
State of Michigan  
Retirement Board Members  
and  
Members, Retirees and Beneficiaries

Ladies and Gentlemen:

We are pleased to present the annual report of the Michigan Judges' Employees Retirement System (MJRS or System) for fiscal year 1997.

Responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with the management of the System. To the best of our knowledge and belief, the enclosed data is accurate in all material respects and is reported in a manner designed to present fairly the financial position and results of operations of the System.

The Michigan Judges' Retirement System was established by legislation under Public Act 234 of 1992 which consolidated the Judges' and former Probate Judges' retirement system. The number of active and retired members and beneficiaries for the System is presented on page 14 of this report. The purpose of the System is to provide benefits for judges. The services provided by the staff are performed to facilitate benefits to members.

The 1997 annual report is presented in five sections. The introductory section contains the transmittal letter, the identification of the administrative organization and professional consultants used by the System. The financial section contains the independent auditors' report, the financial statements of the System and certain supplemental schedules. The investment section summarizes investment activities. The actuarial section contains the independent consulting actuary's certification, an outline of actuarial assumptions and methods, and other actuarial statistics. The statistical section contains statistical tables of significant data pertaining to the retirement System.

## Letter of Transmittal (Continued)

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### MAJOR INITIATIVES FOR THE YEAR

#### *Customer Information Center*

In fiscal 1997, the MJRS and the other systems within the Office of Retirement Systems took a major step toward addressing member concerns regarding telephone communications.

Beginning in the fall of 1997, MJRS joined forces with the Michigan State Employees' Retirement System, the Michigan Public School Employees' Retirement System and the Michigan State Police Retirement System to establish a Customer Information Center (CIC). This toll-free telephone call-in center will serve as a comprehensive clearinghouse for information for members of all four retirement systems.

The CIC staff, chosen from all four retirement systems, is cross-trained to allow any staff member to answer questions about any system. Questions that are too specialized for CIC staff to answer will be directed to staff of the appropriate retirement system. The goal is CIC will answer 60% of all calls during the first six months and 90% thereafter.

The CIC became operational in October 1997.

#### *Defined Contribution Plan*

New judges taking office after March 31, 1997, are not members of the Michigan Judges' Retirement System. Instead, they will be members of the new defined contribution retirement plan mandated by Public Act 523 of 1996. The defined contribution plan is administered by the Michigan Department of Treasury through State Street Bank. Active judges who were hired prior to March 31, 1997, have the opportunity to voluntarily switch to the defined contribution plan between January 2nd and April 30th of 1998.

#### *Automated Database*

A new automated database that became operational in August 1997 substantially increased retirement system staff's ability to access member data and administer member accounts.

The new system can:

- automatically track member contributions
- balance contributions and interest to the State's accounting system
- generate annual member statements, pension estimates and common pension payroll forms for new members
- give retirement staff a member information screen that displays all service, salary and beneficiary information necessary to counsel members

### FINANCIAL INFORMATION

#### *Additions to Plan Net Assets*

The reserves needed to finance retirement benefits are accumulated through the collection of employer and employee contributions and through earnings on investments. Contributions and investment income (including unrealized investment gains and losses) for fiscal year 1997 totaled approximately \$70.3 million (See Table 1).

# INTRODUCTORY SECTION

## Letter of Transmittal (Continued)

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The total contributions and investment income increased 59.0% from those of the prior year due primarily to increased investment earnings. Employer contributions decreased 8.2% and investment income increased 76.0% from the prior year. The investment section of this report reviews the results of investment activity for 1997.

	1997	1996	Increase (Decrease) Amount	Increase (Decrease) Percentage
Member contributions	\$ 3.0	\$ 3.0	\$ 0.0	0.0 %
Employer contributions	5.7	6.2	(0.5)	(8.2)
Investment Income	61.6	35.0	26.6	76.0
Total	\$ 70.3	\$ 44.2	\$ 26.1	59.0 %

### *Deductions From Net Plan Assets*

The primary expenses of the system include the payment of pension benefits to members and beneficiaries, the payments for health, dental and vision benefits, the refund of contributions to former members, and the cost of administering the retirement system. Health care expenditures during the year were approximately the same as 1996 expenditures. Total expenses for fiscal year 1997 were \$14.5 million, an increase of 8.2% from 1996 expenses (see Table 2). The increase in benefit expenses is due to the increase in the number of retirees and an increase in the retirement benefits. Average monthly retirement benefits increased 3%.

	1997	1996	Increase (Decrease) Amount	Increase (Decrease) Percentage
Pension benefits	\$ 13.8	\$ 12.8	\$ 1.0	7.8 %
Health care benefits	0.1	0.1	0.0	0.0
Refunds (less than \$100 thousand)	0.2	0.0	0.2	N/A
Administrative expenses	0.4	0.5	(0.1)	(20.0)
Total	\$ 14.5	\$ 13.4	\$ 1.1	8.2 %

### *Internal Control*

The management of the system is responsible for maintaining a system of adequate internal accounting control designed to provide reasonable assurance that transactions are executed in accordance with management's general or specific authorization, and are recorded as necessary to maintain accountability for assets and to permit preparation of financial

## Letter of Transmittal (Continued)

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statements in accordance with generally accepted accounting principles. The internal control structure is designed to provide reasonable assurance regarding the safekeeping of assets and reliability of all financial records.

### YEAR 2000

As the new millennium approaches, institutions throughout the world are faced with the problem that any system or business with a date component may fail or produce invalid results the first time a date in the new millennium is encountered. The System fully recognizes the significance and magnitude of this impending problem and is developing a comprehensive program to achieve Year 2000 compliance.

### INVESTMENT

The State Treasurer is the investment fiduciary and custodian of all investments of the system pursuant to state law. The primary investment objective is to maximize the rate of return on the total investment portfolio, consistent with a high degree of prudence and sufficient diversity to eliminate inordinate risks and to meet the actuarial assumption for the investment return rate. The investment activity for the year produced a total rate of return on the portfolio of 23.7%. For the last five years, the system has experienced an annualized dollar weighted rate of return of 13.7%. A summary of asset allocation and rates of return can be found on page 34 of this report.

### FUNDING

Funds are derived from the excess of revenue over expenses. Funds are accumulated by the system in order to meet future benefit obligations to retirees and beneficiaries. The percentage computed by dividing the actuarial value of assets over the actuarial accrued liability is referred to as the "funded ratio". This ratio provides an indication of the funding status of the system and, generally, the greater this percentage, the stronger the system. As of September 30, 1997, the actuarial value of the assets and actuarial accrued liability were \$271 million and \$230 million, respectively, resulting in a funded ratio of 117.8%. As of September 30, 1996, the amounts were \$243 million and \$211 million, respectively. A historical perspective of funding levels for the System is presented on page 23.

As of September 30, 1997, pension net assets were \$319.7 million. The ratio of pension plan net assets at market value to the actuarial accrued liability was 139%.

### PROFESSIONAL SERVICES

The financial statement is audited periodically by the Auditor General as part of his constitutional responsibility. A copy of the audit report can be obtained directly from the Office of the Auditor General.

Statute requires that an annual actuarial valuation be conducted. The purpose of the valuation is to evaluate the mortality, service, compensation and other financial experience of the retirement system and to recommend employer funding rates for the subsequent year. This annual actuarial valuation was completed for the fiscal years ended September 30, 1997 and 1996. Actuarial certification and supporting statistics are included in the actuarial section of this report.

### ACKNOWLEDGMENTS

The preparation of this report was accomplished with the dedication and cooperation of many people. It is intended to provide complete and reliable information as a basis for making management decisions, as a means of determining compliance with legal provisions, and as a means for determining responsible stewardship of the funds of the system.

# INTRODUCTORY SECTION

## Letter of Transmittal (Continued)

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We would, therefore, like to express our appreciation for the assistance given by staff, the advisors and many people who contributed to its preparation. We believe their combined efforts have produced a report that will enable the employer and plan members to better evaluate and understand the Michigan Judges' Retirement System. Their cooperation contributes significantly to the success of MJRS.

Sincerely,



Janet E. Phipps, Director  
Department of Management and Budget



Christopher M. DeRose, Director  
Office of Retirement Systems

## Administrative Organization

### Retirement Board Members

George M. Elworth  
Representing Attorney General  
Statutory Member

Roy Pentilla  
Representing State Treasurer  
Statutory Member

James S. Neubecker, C.P.A.  
Deputy Auditor General  
Statutory Member

Eric E. Doster  
Trustee  
Term Expires March 31, 1999

Lyle Van Houten  
Trustee  
Term Expires March 31, 1999

### Administrative Organization

Department of Management and Budget  
Office of Retirement Systems  
Third Floor, Wing A, General Office Building  
7150 Harris Drive  
P.O. Box 30172, Lansing, Michigan 48909-7526  
(517)322-5103

Christopher M. DeRose, Director

Deborah A. Gearhart, Director  
Finance & Administration

Virginia L. Bomar, Interim Director  
Michigan Judges' Retirement System

### Advisors and Consultants

#### Actuary

The Segal Company  
Michael J. Karlin, F.S.A., M.A.A.A.  
New York, New York

#### Auditors

Thomas H. McTavish, C.P.A.  
Auditor General  
State of Michigan

#### Investment Manager and Custodian

Douglas B. Roberts  
State Treasurer  
State of Michigan

#### Legal Advisor

Frank J. Kelley  
Attorney General  
State of Michigan

#### Medical Advisors

Preferred Medical Assoc.  
Marquette General Hospital

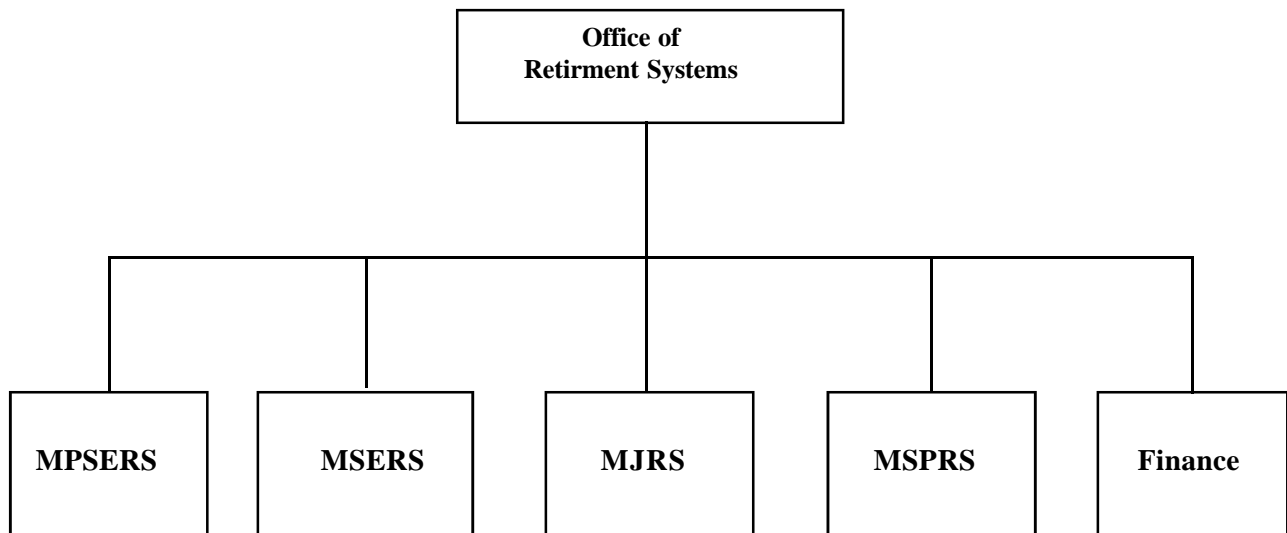
#### Investment Performance Measurement

S.E.I. Funds Evaluation  
Chicago, Illinois

# INTRODUCTORY SECTION

## Administrative Organization

### Organization Chart



- MPSERS - Michigan Public School Employees' Retirement System
- MSERS - Michigan State Employees' Retirement System
- MJRS - Michigan Judges' Retirement System
- MSPRS - Michigan State Police Retirement System

**Michigan Judges Retirement System**

**Comprehensive Annual Financial Report  
for the Fiscal Year Ended September 30, 1997**

**FINANCIAL  
SECTION**



**MJRS**

# FINANCIAL SECTION

## Statements of Pension Plan and Postemployment Healthcare Plan Net Assets

	September 30, 1997			September 30, 1996		
	Pension Plan	Health Plan	Total	Pension Plan	Health Plan	Total
<b>Assets:</b>						
Cash	\$ 2,504,114	\$ (343)	\$ 2,503,771	\$ 2,808,086	\$ (61)	\$ 2,808,024
Receivables:						
Amounts due from employee						
Amounts due from employer	201,676	(28)	201,648	182,836	(4)	182,832
Interest and dividends	1,543,756	(211)	1,543,545	1,435,040	(31)	1,435,009
Sale of investments	342,322	(47)	342,275	898,479	(20)	898,459
Total receivables	2,087,754	(286)	2,087,468	2,516,355	(55)	2,516,300
Investments:						
Short term investments	24,570,784	(3,364)	24,567,420	17,226,505	(376)	17,226,129
Bonds, notes mortgages and preferred stock	81,281,692	(11,132)	81,270,561	80,591,847	(1,759)	80,590,088
Common stock	153,133,035	(20,973)	153,112,062	116,902,155	(2,552)	116,899,603
Real estate	19,711,057	(2,700)	19,708,357	16,030,488	(350)	16,030,138
Alternative investments	20,252,714	(2,774)	20,249,939	17,705,782	(387)	17,705,395
International investments Collateral on loaned securities	16,775,917	(2,298)	16,773,619	11,141,275	(243)	11,141,032
	11,554,402	(1,582)	11,552,820	6,256,263	(137)	6,256,126
Total investments	327,279,601	(44,823)	327,234,778	265,854,315	(5,804)	265,848,511
<b>Total assets</b>	<b>331,871,469</b>	<b>(45,452)</b>	<b>331,826,017</b>	<b>271,178,756</b>	<b>(5,920)</b>	<b>271,172,835</b>
<b>Liabilities:</b>						
Warrants outstanding	(108,333)	15	(108,318)	(107,611)	2	(107,609)
Accounts payable and other accrued liabilities	(491,497)	68	(491,429)	(723,550)	16	(723,534)
Deferred revenue						
Obligations under securities lending	(11,554,402)	1,582	(11,552,820)	(6,256,263)	137	(6,256,126)
<b>Total liabilities</b>	<b>(12,154,232)</b>	<b>1,665</b>	<b>(12,152,567)</b>	<b>(7,087,424)</b>	<b>155</b>	<b>(7,087,269)</b>
<b>Net Assets Held in Trust for Pension and Healthcare Benefits*</b>	<b>\$ 319,717,237</b>	<b>\$ (43,787)</b>	<b>\$ 319,673,450</b>	<b>\$ 264,091,331</b>	<b>\$ (5,765)</b>	<b>\$ 264,085,566</b>

\*A schedule of funding progress is presented on page 23.

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

## Statements of Changes in Pension Plan and Postemployment Healthcare Plan Net Assets

	<u>September 30, 1997</u>			<u>September 30, 1996</u>		
	<u>Pension Plan</u>	<u>Health Benefits</u>	<u>Total</u>	<u>Pension Plan</u>	<u>Health Benefits</u>	<u>Total</u>
<b>Additions:</b>						
Member contributions:						
Other	\$ 2,928,906	\$ 75,859	\$ 3,004,765	\$ 2,905,265	\$ 69,974	\$ 2,975,239
Military						
Employer contributions						
Court fees	4,080,730		4,080,730	4,635,563		4,635,563
General fund financing	1,592,853		1,592,853	1,556,044		1,556,044
Investment income:						
Investment income (See Note 4)	61,569,933		61,569,933	34,979,307		34,979,307
Securities lending income	422,324		422,324	297,793		297,793
Less investment expenses						
Real estate operating expenses	(10,508)		(10,508)	(56,989)		(56,989)
Securities lending expenses	(408,348)		(408,348)	(287,775)		(287,775)
Other investment expenses	(79,223)		(79,223)	(65,295)		(65,295)
Miscellaneous	282		282			
<b>Total additions</b>	<u>70,096,949</u>	<u>75,859</u>	<u>70,172,808</u>	<u>43,963,913</u>	<u>69,974</u>	<u>44,033,887</u>
<b>Deductions:</b>						
Benefits and refunds paid to plan members and beneficiaries:						
Retirement benefits	13,839,289		13,839,289	12,759,261		12,759,261
Health insurance		113,881	113,881		118,267	118,267
Transfers to other systems						
Refunds of contributions	236,326		236,326	16,266		16,266
Administrative expenses	395,428		395,428	450,110		450,110
<b>Total deductions</b>	<u>14,471,043</u>	<u>113,881</u>	<u>14,584,924</u>	<u>13,225,637</u>	<u>118,267</u>	<u>13,343,904</u>
<b>Net increase</b>	<u>55,625,906</u>	<u>(38,022)</u>	<u>55,587,884</u>	<u>30,738,276</u>	<u>(48,293)</u>	<u>30,689,983</u>
<b>Other changes in net assets</b>						
Interest allocation				(550)	550	
<b>Net Increase (Decrease) After Other Changes</b>	<u>55,625,906</u>	<u>(38,022)</u>	<u>55,587,884</u>	<u>30,737,726</u>	<u>(47,743)</u>	<u>30,689,983</u>
<b>Net Assets Held in Trust for Pension and Healthcare Benefits:</b>						
<b>Beginning of year</b>	<u>264,091,331</u>	<u>(5,765)</u>	<u>264,085,566</u>	<u>233,353,605</u>	<u>41,978</u>	<u>233,395,583</u>
<b>End of year</b>	<u>\$ 319,717,237</u>	<u>\$ (43,787)</u>	<u>\$ 319,673,450</u>	<u>\$ 264,091,331</u>	<u>\$ (5,765)</u>	<u>\$ 264,085,566</u>

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

# FINANCIAL SECTION

## Notes to General Purpose Financial Statements

### NOTE 1 - PLAN DESCRIPTION

#### ORGANIZATION

The Michigan Judges' Retirement System (MJRS) is a multiple employer, state-wide, defined benefit public employee retirement plan governed by the State of Michigan (State). The Michigan Judges' Retirement System, created under Public Act 234 of 1992, consolidated the former Judges' and Probate Judges' Retirement Systems into one retirement system. MJRS was established by the State to provide retirement, survivor and disability benefits to judges in the judicial branch of state government. MJRS also includes the Governor of the State of Michigan, Lieutenant Governor, Secretary of State, Attorney General, Legislative Auditor General and the Constitutional Court Administrator.

MJRS' financial statements are included as a pension trust fund in the combined financial statements of the State of Michigan.

MJRS operates within the Michigan Department of Management and Budget, Office of Retirement Systems. The Department Director appoints the Office Director who serves as Executive Secretary to the MJRS Board, with whom the general oversight of the retirement system resides. The State Treasurer serves as the investment officer and custodian for the system.

#### MEMBERSHIP

At September 30, 1997, and 1996, the system's membership consisted of the following:

Retirees and beneficiaries currently receiving benefits:	<b>1997</b>	<b>1996</b>
Regular benefits .....	355	326
Survivor benefits .....	145	144
Disability benefits .....	12	11
<b>Total</b> .....	<u>512</u>	<u>481</u>
 Current employees:		
Vested .....	367	400
Non-vested .....	242	210
<b>Total</b> .....	<u>609</u>	<u>610</u>
 Inactive employees entitled to benefits and not yet receiving them .....	25	28
 <b>Total All Members</b> .....	<u>1,146</u>	<u>1,119</u>

#### BENEFIT PROVISIONS

Benefit provisions of the defined benefit pension plan are established by state statute, which may be amended. Public Act 234 of 1992, Michigan Judges' Retirement Act, as amended, establishes eligibility and benefit provisions for the defined benefit pension plan. Retirement benefits are determined by final compensation and years of service. Members are eligible to receive a monthly benefit when they meet certain age and service requirements. MJRS also provides disability and survivor benefits.

A member who leaves judicial service may request a refund of his or her member contribution account. A refund cancels a former member's rights to future benefits. Returning members who previously received a refund of their contributions may reinstate their service credit through repayment of the refund upon satisfaction of certain requirements.

## Notes to General Purpose Financial Statements

For salary, contribution and calculation of retirement benefit, the membership of the system is categorized into seven plans. The categories are based on the court to which the member was elected or appointed.

Public Act 523 of 1996, which was effective March 31, 1997, closed the plan to new entrants. Judges or state officials appointed or elected on or after March 31, 1997, become members of the defined contribution plan.

### ***Regular Retirement***

The retirement benefit or allowance is calculated in accordance with the formula of the plan which applies to the member. In all seven plans, the formula is based on a member's years of credited service (employment) and final compensation. The normal retirement benefit is payable monthly over the lifetime of a member.

A member may retire and receive a monthly benefit after attaining:

1. age 60 with 8 or more years of credited service; or
2. age 55 with 18 or more years of credited service (the last 6 years continuous); or
3. 25 or more years of service, the last 6 years continuous; no age requirement; or
4. age 60 with service of two full terms in the office of Governor, Lieutenant Governor, Secretary of State, or Attorney General, or one full term in the office of Legislative Auditor General.

### ***Early Retirement***

If a member leaves judicial service but has not met the age requirement for regular retirement benefits, the member may retire with a reduced retirement allowance. To be eligible for early retirement, the member must be age 55 or over, but less than 60, with 12 or more, but less than 18, years of service

### ***Deferred Retirement***

A member with 8 or more years of credited service who terminates judicial service before meeting the age requirements to receive a retirement allowance and who does not withdraw his or her contributions, is entitled to receive a monthly allowance upon reaching age 60 or age 55 with 18 years of service the last 6 of which were continuous service.

### ***Disability Benefit***

A member with 8 or more years of credited service who is totally disabled from physically or mentally performing his or her duties, is eligible for a disability pension. The disability benefit is computed in the same manner as an age and service allowance based upon service and final salary at the time of disability.

### ***Pension Payment Options***

A pension is payable monthly for the lifetime of a MJRS retiree and equals 3% of final salary times years of service for up to 12 years of service; or 50% of salary with 12 years, increased 2.5% for each additional year up to a maximum of 60% of salary. A former MJRS retiree receives 3% of salary times years of service, to a maximum of the greater of 40% of salary or \$15,000 but not to exceed 66 2/3% of final salary when added to a county pension; or 3.5% of salary times years of service with a maximum of two thirds of final salary, if elected.

Option A — Under this option, after the retiree's death, the beneficiary will receive 100% of the pension for the remainder of the beneficiary's lifetime. If this option is elected, the normal retirement benefit is reduced by a factor based upon the ages of the retiree and of the beneficiary.

Option B — Under this option, after the retiree's death, the beneficiary will receive 50% of the pension for the remainder of the beneficiary's lifetime. If this option is elected, the normal retirement benefit is reduced by a factor based upon the ages of the retiree and of the beneficiary. The reduction factor is smaller than the factor used in Option A above.

# FINANCIAL SECTION

## Notes to General Purpose Financial Statements

### *Survivor Benefit*

A survivor benefit may be paid if (i) a member who has 8 or more years of credited service dies while in office, (ii) a vested former member dies before retirement, or (iii) a retiree dies following retirement.

### *Contributions*

Member Contributions — Members currently participate in MJRS on a contributory basis. For contribution purposes, the membership of the system is categorized in seven plans, which are based on the court to which the judge was elected or appointed. Under certain circumstances, members may contribute to the system for the purchase of creditable service, such as military service or other public service. If a member terminates MJRS covered employment before a retirement benefit is payable, the member's contribution and interest on deposit may be refunded. If the member dies before being vested, the member's contribution and interest are refunded to the designated beneficiaries.

Publicly Financed Contributions — There are two public sources which fund retirement benefits: Court fees and State appropriations. The State contributes annually the greater of 3.5% of the aggregate annual compensation of State paid base salaries, or the difference between the total actuarial requirement of current service and unfunded accrued liabilities minus the revenues from court filing fees and member contributions. A chart showing the publicly financed contribution rates is included on page 23 of this report.

### *Other Post Employment Benefits*

Under the Michigan Judges' Retirement Act, plan 1 or 2, members may enroll in the State Health Plan when they retire. Five percent of the health insurance premium is deducted from the monthly pension check until age 65, at which time Medicare provides primary health insurance coverage. All other members may enroll in the State Health Plan during an open enrollment period. The total premium is deducted from the monthly pension check.

All retirees may enroll in the State Dental and/or Vision Plan during an open enrollment period. The cost of the premiums are deducted from the monthly pension check.

Retirees of plan 1 and 2 are provided with life insurance coverage equal to 25% of the active life insurance coverage and \$1,000 for each dependent. Premiums are fully paid by the State for plan 1 and 2 members. All others must pay the full premium.

## **NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

### *Basis of Accounting and Presentation*

MJRS financial statements are prepared using the accrual basis of accounting. Court filing fees are recognized as revenue in the period received. Contributions from the State are recognized as revenue in the period in which employees provide service and expenses are recorded when incurred regardless of when payment is made. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

### *Reserves*

Public Act 234 of 1992, as amended, created several reserve accounts. The reserves are described below.

Reserve for Member Contributions — This fund represents active member contributions, payments for the purchase of service credit, repayment of previously refunded contributions and interest less amounts transferred to the Reserve for Retirement Benefits for regular and disability retirement, amounts refunded to terminated members, and transferring inactive accounts. At September 30, 1997, and 1996, the balance in this account was \$46 million and \$45 million respectively.

## Notes to General Purpose Financial Statements

Reserve for Employer Contributions — Court fees, late fees, interest payments, employer contributions, and state appropriations. Amounts are transferred annually to the Reserve for Retirement Benefits to fully fund this reserve. In addition, the reserve transfers court fees to the Supreme Court in accordance with statutory requirements. At September 30, 1997, and 1996, the balance in this account was \$101 million and \$94 million respectively.

Reserve for Retirement Benefits — This reserve represents the reserves for payment of future retirement benefits to current retirees. At retirement, a member's accumulated contributions plus interest are transferred into this reserve from the Reserve for Member Contributions and the Reserve for Employer Contributions. Monthly benefits, which are paid to the member, reduce the reserve. At the end of each fiscal year, an amount is transferred from the Reserve for Employer Contributions to fully fund this reserve. At September 30, 1997, and 1996, the balance in this account was \$111.2 million and \$108 million respectively.

Reserve for Investment Income — This reserve is credited with all investment earnings, changes in fair values, gifts to the retirement system, and forfeited contributions. All administrative expenses are paid from this reserve and interest is transferred annually to the other reserves. At September 30, 1997, and 1996, the balance in this account was \$61.5 million and \$17 million respectively.

Reserve for Health Benefits — This reserve is credited with member contributions for health benefits. Health benefits are paid from this reserve. At September 30, 1997, and 1996, the balance in this account was negative \$44 thousand and negative \$5.7 million respectively.

### *Fair Value of Investments*

Plan investments are presented at fair value. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. Corporate bonds not traded on a national or international exchange are based on equivalent values of comparable securities with similar yield and risk. Real estate debt is valued on the basis of future principal and interest payments, and is discounted at prevailing interest rates for similar instruments. The fair value of real estate investments are based on independent appraisals. Other investments not having an established market are recorded at estimated fair value. Short-term investments are carried at cost, which approximates fair value.

### *Reporting Entity*

MJRS is a pension trust fund of the State of Michigan. As such, MJRS is considered part of the State and is included in the State's comprehensive annual financial report as a pension trust fund. MJRS and the MJRS' board are not financially accountable for any other entities. Accordingly, MJRS is the only entity included in this financial report.

### *Investment Income*

Dividend income is recognized based on the ex-dividend date and interest income is recognized on the accrual basis as earned. Fair value changes are recorded as investment income or loss. Purchases and sales of investments are recorded as of the trade date (the date upon which the transaction is initiated), except for purchase and sale of mortgages, real estate, and alternative investments which are recorded as of the settlement date (the date upon which the transaction is ultimately completed). The effect of recording such transactions as of the settlement date does not materially affect the financial statements.

### *Property and Equipment*

Office space is leased from the State on a year to year basis. Since fixed assets are immaterial in amount (less than \$5,000), they are not capitalized.

# FINANCIAL SECTION

## Notes to General Purpose Financial Statements

### Related Party Transactions

Leases and services — The retirement system leases operating space and purchases certain administrative, data processing, legal and investment services from the State. The space and services are not otherwise available by competitive bid. The following summarizes costs incurred by MJRS for such services.

	<u>1997</u>	<u>1996</u>
Building rentals .....	\$ 6,371	\$ 3,478
Administrative services .....	2,367	43,960
Data processing services .....	132,824	13,193
Legal .....	19,046	29,175
Investment .....	70,283	75,191

The cash account includes \$2,503,771 and \$2,808,024, on September 30, 1997 and 1996, respectively, which represents funds deposited in a common cash investment pool maintained for various State operating funds. The participating funds in the common cash pool earn interest at various rates depending upon prevailing short-term interest rates. Earnings from these activities amounted to \$114,447 and \$157,129 for the years ended September 30, 1997, and 1996, respectively.

### Effect of change in accounting principle

During fiscal year 1997, MJRS adopted the provisions of Governmental Accounting Standards Board (GASB) Statement No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans*, and Statement No. 26, *Financial Reporting for Postemployment Healthcare Plans Administered by Defined Benefit Pension Plans*. GASB Statements 25 and 26 establish the financial reporting framework for pension plans. The framework includes fair value accounting for investments (recognition of unrealized investment gains and losses), amortization of unfunded actuarial liabilities over 40 years, and requires certain additional disclosures regarding postemployment healthcare benefits.

The provisions of GASB Statement No. 25 and 26 require restatement of the prior year balances for the effect of changing from reporting investments at cost to reporting investments at fair value. The effect of the change in accounting principle on the net assets held in trust for pension benefits and postemployment healthcare benefits as of September 30, 1995, is shown below.

	<u>Pension</u>	<u>Health</u>	<u>Total</u>
September 30, 1995 Net assets held in trust for benefits, as previously reported .....	\$ 197,032,266	\$ 35,444	\$ 197,067,710
Cumulative effect of change in accounting principle .....	36,321,339	6,534	36,327,873
September 30, 1995, Net assets held in trust, for benefits as restated .....	<u>\$ 233,353,605</u>	<u>\$ 41,978</u>	<u>\$ 233,395,583</u>

### Reclassification of Prior Year Amounts

Certain amounts in the prior year financial statements have been reclassified to conform with the current year presentation.

### NOTE 3 - CONTRIBUTIONS

Members' contributions range from 3.5% to 7% of their salary depending on the plan (described in statute). Contributions are tax deferred under Section 414(h)(2) of the Internal Revenue Code, except for probate judges whose contributions are tax deferred only if the local unit of government has adopted a resolution to do so.

The State contributes annually the greater of 3.5% of the aggregate annual compensation or the difference between the sum of the contribution rates multiplied by the aggregate annual compensation and the estimated revenue from court

## Notes to General Purpose Financial Statements

fees. The calculation of the sum of the contribution rates is described in statute. Employer contributions are determined annually by the system's actuary and are based upon level-percent-of-payroll funding principles. Under this method, amortization payments are calculated so that they are a constant percentage of the projected payroll of active plan members over a given period of time.

Court fees are deposited in the court fee fund in the state treasury. The state treasurer transmits the money in the court fee fund, not exceeding \$2.2 million in any fiscal year, to the court equity fund for operational expenses of trial courts.

Employer contributions were \$5.7 million and \$6.2 million for fiscal year 1997 and 1996, respectively.

### NOTE 4 - INVESTMENTS

#### *Investment Authority*

Under Public Act 380 of 1965, as amended, the authority for the purchase and the sale of investments resides with the State Treasurer. Investments are made subject to the Michigan Public Pension Investment Act, Public Act 314 of 1965, as amended. The Michigan Public Pension Investment Act authorizes, with certain restrictions, the investment of pension fund assets in stock, corporate and government bonds and notes, mortgages, real estate, and certain short term and alternative investments. Investments must be made for the exclusive purposes of providing benefits to active members, retired members and beneficiaries, and of defraying the expenses of investing the assets.

Under Public Act 314 of 1995, as amended, up to 5% of the system's assets may be invested in alternative investments and up to 15% of the system's assets may be invested in investments not otherwise qualified under Act 315. Alternative investments include limited partnerships and distribution from these partnerships in the form of bonds, common stock and preferred stock.

#### *Derivatives*

The State Treasurer does not employ the use of derivatives in the investment of the Common Cash or the investment of trust funds other than the pension trust funds.

Derivatives are used for a small amount of the pension trust fund portfolios. However, derivatives are not used for speculation and they are not used to leverage the investment portfolios. Less than 6% of the total pension trust fund's portfolio has been invested from time to time in futures contracts, collateralized mortgages and swap agreements. Swap agreements represent the largest category of derivatives used and represent approximately 5.4% of the total portfolio at market values.

To further diversify the pension fund's portfolio into international equities, the State Treasurer has entered into swap agreements with AAA rated counterparties which are tied to stock market indices in seventeen foreign countries. The notional amounts of the swap agreements at September 30, 1997, and 1996, were \$13.9 million and \$10 million, respectively. One half of the notional amount is hedged against foreign currency fluctuations. The swap agreements provide that the retirement system will pay quarterly, over the term of the swap agreements, interest indexed to the three month London Inter Bank Offer Rate (LIBOR), adjusted for an interest rate spread, on the notional amount stated in the agreements. At the maturity of the swap agreements the pension fund will either receive the increase in the value of the international equity indices from the level of the indices at the inception of the agreements, or pay the decrease in the value of the indices. Swap agreement maturities range from January 1998 to December 2000.

U. S. domestic LIBOR based floating rate notes were purchased in the open market to correspond with the notional amount of the swap agreements. The State Treasurer maintains custody and control of these notes.

The value of these synthetic equity structures is a combination of the value of the swap agreements and the value of the notes. The book value represents the cost of the notes. The current value represents the current value of the notes and

# FINANCIAL SECTION

## Notes to General Purpose Financial Statements

the change in value of the underlying indices from the inception of the swap agreements. The current value is used as a representation of the fair value based upon the intention to hold all swap agreements until maturity.

The respective September 30, 1997 and 1996 values are as follows:

	<u>Notional Value</u>	<u>Book Value</u>	<u>Current Value</u>
9/30/97 (dollars in millions)	\$13.92	\$13.79	\$16.77
9/30/96 (dollars in millions)	9.96	9.92	11.14

### *Investments Exceeding 5% of Plan Net Assets*

MJRS did not hold an individual investment (other than U.S. Government securities) that exceeded 5% of net assets available for benefits at September 30, 1997 or 1996.

### *Securities Lending*

In May 1995, GASB issued Statement No. 28, *Accounting and Financial Reporting for Securities Lending Transactions*. The statement established accounting and financial reporting standards for recognizing assets and liabilities arising from collateralized securities' lending transactions in which governmental entities (lenders) transfer their securities to broker-dealers and other entities (borrowers). MJRS adopted the provisions of this standard for the year ended September 30, 1997. Comparative amounts for fiscal year 1996 have been restated to reflect this change. The effect of this change has increased the total assets and total liabilities of the system as of September 30, 1997 and 1996 by \$11,552,820 and \$6,256,126 respectively.

State statutes allow the retirement system to participate in securities lending transactions, and the retirement system has, via a Securities Lending Authorization Agreement, authorized its agent bank, State Street Bank & Trust Company (State Street), to lend its securities to broker-dealers and banks pursuant to a form of loan agreement.

During the fiscal year, the agent lent, at the direction of the retirement system, the retirement system's securities and received cash (United States and foreign currency), securities issued or guaranteed by the United States government, sovereign debt rated A or better, convertible bonds, and irrevocable bank letters of credit issued by a person other than the borrower or an affiliate of the borrower as collateral. The agent bank did not have the ability to pledge or sell collateral securities delivered absent a borrower default. Borrowers were required to deliver collateral for each loan equal to: (i) in the case of loaned securities denominated in United States dollars or whose primary trading market as located in the United States or sovereign debt issued by foreign governments, 102% of the market value of the loaned securities; and (ii) in the case of loaned securities not denominated in United States dollars or whose primary trading market was not located in the United States; 105% of the market value of the loaned securities.

The retirement system did not impose any restrictions during the fiscal year on the amount of the loans that the agent bank made on its behalf. There were no failures by any borrowers to return loaned securities or pay distributions thereon during the fiscal year. Moreover, there were no losses during the fiscal year resulting from a default of the borrowers or the agent bank. State Street is not liable for any losses unless there is negligence or willful misconduct on its part.

During the fiscal year, the retirement system and the borrowers maintained the right to terminate all securities lending transactions on demand. The cash collateral received on each loan was invested, together with the cash collateral of other qualified tax-exempt plan lenders, in a collective investment pool. As of September 30, 1997, such investment pool had an average duration of 53 days and an average weighted maturity of 55 days. Because the loans were terminable at will their duration did not generally match the duration of the investments made with cash collateral. On September 30, 1997, the retirement system had no credit risk exposure to borrowers. The collateral held and the market value of securities on loan for the retirement system as of September 30, 1997, were \$11,607,525 and \$11,282,149 respectively. The types of securities included in these amounts were as follows:

# FINANCIAL SECTION

## Notes to General Purpose Financial Statements

USD Market Value of	Cash	Securities	Letter of Credit	Total
Collateral	\$ 11,552,820	\$ 51,593	\$ 3,112	\$ 11,607,525
Loaned Securities	11,229,815	49,985	2,349	11,282,149

Gross income from security lending for the fiscal year was \$422,324. Expenses associated with this income amounted to \$401,446 for the borrower's rebate and \$6,901 for fees paid to the agent.

### *Categories of Investment Risk*

Investments made by the fund, including repurchase agreements and information concerning reverse repurchase agreements, are summarized below. The investments that are represented by specific identifiable investment securities are classified as to credit risk in three categories.

Category 1 includes investments that are insured, registered, or held by MJRS or its agent in MJRS name. Category 2 includes uninsured and unregistered investments that are held by the counterpart's trust department or agent in MJRS name. Category 3 includes uninsured and unregistered investments that are held by the counterparty, its trust department, or agent, but not in MJRS name.

At September 30, 1997, all investments of the pension trust fund were classified as Category 1, except for certain investments that were not categorized.

The following table summarizes the investments:

<b>Category 1</b>	
Prime Commercial Paper	\$ 19,090,856
Short Term Note	5,476,564
Government Securities	43,036,675
Corporate Bonds & Notes	30,260,206
Convertible Bonds	160,383
Preferred Stock	3,761
Equities	147,915,146
Real Estate	2,205,485
Alternative Investments	980,882
Derivatives (International)	16,773,619
<b>Total Category 1</b>	<b>\$ 265,903,577</b>
<b>Non-Categorized</b>	
Private Placements	\$ 1,248,946
Mortgages	527,692
Real Estate	17,502,872
Alternative Investments	19,269,057
Cash Collateral	11,552,820
Securities on Loan:	
Government Securities	5,991,661
Corporate Bonds & Notes	41,237
Equities	5,196,916
<b>Total Non-Categorized</b>	<b>\$ 61,331,201</b>
<b>Grand Total</b>	<b>\$ 327,234,778</b>

# **FINANCIAL SECTION**

## **Notes to General Purpose Financial Statements**

As of September 30, 1996, the market value of the Category 1 and Non-categorized investments was \$212,891,481 and \$53,082,549 respectively.

### **NOTE 5 - COMMITMENTS AND CONTINGENCIES**

The system is named as defendant in a case that alleges the statute discriminates against certain members as a result of differences in contribution rates and benefit allowances. It is possible the System will incur a loss; however, the amount cannot be estimated at this time.

## Required Supplementary Information

### Schedule of Funding Progress

Expressing the net assets available for benefits as a percentage of the actuarial accrued liability provides one indication of MJRS funding status. 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 actuarial accrued liability and annual covered payroll are both affected by inflation. Expressing the unfunded actuarial accrued liability as a percentage of annual covered payroll approximately adjusts for the effects of inflation and aids analysis of MJRS progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the system.

<b>Retirement Benefits</b>						
<b>Valuation Date Sept. 30</b>	<b>Actuarial Value of Assets (a)</b>	<b>Actuarial Accrued Liability (AAL) ** (b)</b>	<b>Unfunded (Overfunded) Actuarial Accrued Liability (b-a)</b>	<b>Funded Ratio (a/b)</b>	<b>Covered Payroll (c)</b>	<b>UAAL as a % of Covered Payroll ((b-a)/c)</b>
1990	\$ 150,024,407	\$ 163,107,674	\$ 13,083,267	92.0 %	\$ 43,081,777	30.4 %
1991	162,053,379	171,279,850	9,226,471	94.6	43,905,860	21.0
1992	171,969,030	179,495,676	7,526,646	95.8	43,840,733	17.2
1993	187,736,576	192,962,549	5,225,973	97.3	44,472,833	11.8
1993 <sup>+</sup>	189,133,980	192,426,903	3,292,923	98.3	44,472,833	7.4
1994	202,370,785	196,990,884	(5,379,901)	102.7	46,276,785	(11.6)
1995	222,229,865	204,326,966	(17,902,899)	108.8	48,195,528	(37.1)
1996	243,248,207	211,500,798	(31,747,409)	115.0	49,350,572	(64.3)
1997	271,457,805	230,511,070	(40,946,735)	117.8	49,000,856	(83.6)

<sup>+</sup> Revised actuarial assumptions and asset valuation method.

\*\*Under entry age actuarial cost method.

# FINANCIAL SECTION

## Required Supplementary Information (Continued)

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### Schedule of Employer Contributions

<u>Fiscal Year Ending Sept. 30</u>	<u>Annual Required Contribution (ARC)</u>	<u>Percentage Contributed</u>
1988	\$ 7,246,946	
1988*	6,713,147	
1988**	6,696,361	100.6 %
1989	7,111,349	102.2
1990	7,276,275	103.9
1991	7,566,113	104.7
1992	7,137,221	112.0
1993***	7,112,624	
1993	6,661,731	115.4
1994	6,638,110	99.1
1995	6,559,552	95.0
1996	5,992,698	103.3
1997	5,546,998	102.3

\* Revised asset valuation method.

\*\* Change in valuation date.

\*\*\* Revised actuarial assumptions.

## Notes to Required Supplemental Information

### NOTE A - DESCRIPTION

Ten year historical trend information designed to provide information about MJRS progress made in accumulating sufficient assets to pay benefits when due is presented in the preceeding schedules. Other ten year historical trend information related to the pension plan is presented in the statistical and actuarial sections of the report. This information is presented to enable the reader to assess the progress made by MJRS in accumulating sufficient assets to pay pension benefits as they become due.

The comparability of trend information is affected by changes in actuarial assumptions, benefit provisions, actuarial funding methods, accounting policies, and other changes. Those changes usually affect trends in contribution requirements and in ratios that use the pension benefit obligation as a factor.

The Schedule of Funding Progress and Schedule of Employer Contributions are reported as historical trend information. The Schedule of Funding Progress is presented to measure the progress being made to accumulate sufficient assets to pay benefits when due. The Schedule of Employer Contributions is presented to show the responsibility of the Employer in meeting the actuarial requirements to maintain the retirement system on a sound financial basis.

### NOTE B - SUMMARY OF ACTUARIAL ASSUMPTIONS

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

Valuation Date	09/30/97
Actuarial Cost Method	Entry Age, Normal
Amortization Method	Level Percent, Closed
Remaining Amortization Period	39 Remaining
Asset Valuation Method	5-Year Smoothed Market
Actuarial Assumptions:	
Inflation Rate	5%
Investment Rate of Return	8%
Projected Salary Increases	5.5%
Cost-of-Living Adjustments	None

# FINANCIAL SECTION

## Supporting Schedules

### Comparative Summary Schedule of Pension Plan Administrative Expenses Year Ended September 30, 1997 and 1996

	<u>1997</u>	<u>1996</u>
<b>Personnel Services:</b>		
Staff salaries	108,212	92,655
Retirement and social security	25,278	21,870
Other fringe benefits	<u>14,151</u>	<u>13,430</u>
Total	<u>147,641</u>	<u>127,955</u>
<b>Professional Services:</b>		
Actuarial	18,505	18,000
Accounting, records mgt., and mail	2,772	124,416
Data processing	132,824	13,193
Attorney general	19,046	29,175
Audit	50,700	50,700
Medical	<u>125</u>	<u>9,351</u>
Total	<u>223,972</u>	<u>244,835</u>
<b>Building and Equipment:</b>		
Building rentals	6,371	3,478
Equipment purchase, maintenance and rentals	<u>772</u>	<u>2,384</u>
Total	<u>7,143</u>	<u>5,862</u>
<b>Miscellaneous:</b>		
Office administrative support	688	18,564
Department administrative support	2,367	43,960
Travel and meetings	249	743
Postage, telephone, and other	13,126	8,191
Customer Information Center	<u>242</u>	<u>          </u>
Total	<u>16,672</u>	<u>71,458</u>
<b>Total Administrative Expenses</b>	<u><u>395,428</u></u>	<u><u>450,110</u></u>

**Supporting Schedules (Continued)**

**Schedule of Investment Expenses**

	<u>1997</u>	<u>1996</u>
Real Estate	\$ 441,046	\$ 56,989
Securities Lending Expense	408,348	287,775
Other Investment Expense	<u>57,033</u>	<u>65,295</u>
<b>Total Investment Expenses</b>	<u>\$ 906,427</u>	<u>\$ 410,059</u>

**Payments to Consultants**

	<u>1997</u>	<u>1996</u>
Auditor General	\$ 50,700	\$ 50,700
Attorney General	19,046	29,175
Medical Advisor	125	9,351
Actuary	<u>18,505</u>	<u>18,000</u>
<b>Total Payments</b>	<u>\$ 88,376</u>	<u>\$ 107,226</u>

# FINANCIAL SECTION

## Supporting Schedules (continued)

### Detail of Changes in Plan Net Assets (Pension and Postemployment Healthcare Benefits)

	For Year Ending September 30, 1997					Total 1997
	Member Contributions	Employer Contributions	Retirement Benefits	Health Benefits	Investment Income	
<b>Additions:</b>						
Member contributions:						
Other	\$ 2,928,906			\$ 75,859		\$ 3,004,765
Military						
Employer contributions						
Court fees		\$ 4,080,730				4,080,730
General fund financing		1,592,853				1,592,853
Investment income:						
Investment income (See Note 4)					\$ 61,569,933	61,569,933
Securities lending income					422,324	422,324
Less investment expenses						
Real estate operating expenses					(10,508)	(10,508)
Securities lending expenses					(408,384)	(408,348)
Other investment expenses					(79,223)	(79,223)
Miscellaneous					282	282
<b>Total additions</b>	<u>2,928,906</u>	<u>5,673,583</u>		<u>75,859</u>	<u>61,494,460</u>	<u>70,172,808</u>
<b>Deductions:</b>						
Benefits and refunds paid to plan members and beneficiaries:						
Retirement benefits			\$ 13,839,289			13,839,289
Health insurance				113,881		113,881
Transfers to other systems						
Refunds of contributions	160,696	75,630				236,326
Administrative expenses					395,428	395,428
<b>Total deductions</b>	<u>160,696</u>	<u>75,630</u>	<u>13,839,289</u>	<u>113,881</u>	<u>395,428</u>	<u>14,584,924</u>
<b>Net increase</b>	<u>2,768,210</u>	<u>5,597,953</u>	<u>(13,839,289)</u>	<u>(38,022)</u>	<u>61,099,032</u>	<u>55,587,884</u>
<b>Other changes in net assets:</b>						
Interest allocation	2,886,177	6,244,437	7,496,352		(16,626,966)	
Transfers upon retirements	(4,783,715)		4,783,715			
Transfers of employer shares		(4,503,342)	4,503,342			
<b>Total other changes in net assets</b>	<u>(1,897,538)</u>	<u>1,741,095</u>	<u>16,783,409</u>		<u>(16,626,966)</u>	
<b>Net Increase (Decrease)</b>						
<b>After Other Changes</b>	870,672	7,339,048	2,944,120	(38,022)	44,472,066	55,587,884
<b>Net Assets Held in Trust for Pension and Healthcare Benefits:</b>						
<b>Beginning of year</b>	<u>45,099,879</u>	<u>93,710,142</u>	<u>108,233,216</u>	<u>(5,765)</u>	<u>17,048,094</u>	<u>264,085,566</u>
<b>End of year</b>	<u>\$ 45,970,551</u>	<u>\$ 101,049,190</u>	<u>\$ 111,177,336</u>	<u>\$ (43,787)</u>	<u>\$ 61,520,160</u>	<u>\$ 319,673,450</u>

# FINANCIAL SECTION

For Year Ending September 30, 1996					
Member Contributions	Employer Contributions	Retirement Benefits	Health Benefits	Investment Income	Total 1996
\$ 2,905,265			\$ 69,974		\$ 2,975,239
	\$ 4,635,563 1,556,044				4,635,563 1,556,044
				\$ 34,979,307 297,793	34,979,307 297,793
				(56,989) (287,775) (65,295)	(56,989) (287,775) (65,295)
2,905,265	6,191,607		69,974	34,867,041	44,033,887
		\$ 12,759,261			12,759,261
			118,267		118,267
16,266					16,266
				450,110	450,110
16,266		12,759,261	118,267	450,110	13,343,904
2,888,999	6,191,607	(12,759,261)	(48,293)	34,416,931	30,689,983
2,577,017 (1,058,081)	5,667,750 (9,216,466)	7,256,450 1,058,081 9,216,466	550	(15,501,767)	
(1,518,936)	(3,548,716)	17,530,997	550	(15,501,767)	
4,407,935	2,642,891	4,771,736	(47,743)	18,915,164	30,689,983
40,691,944	91,067,251	103,461,480	41,978	(1,867,070)	233,395,583
\$ 45,099,879	\$ 93,710,142	\$ 108,233,216	\$ (5,765)	\$ 17,048,094	\$ 264,085,566

# **INVESTMENT SECTION**

## **Michigan Judges Retirement System**

**Comprehensive Annual Financial Report  
for the Fiscal Year Ended September 30, 1997**

# **INVESTMENT SECTION**



**MJRS**

# INVESTMENT SECTION

## Report on Investment Activity

### INVESTMENT POLICY GOAL

The function of the MJRS is to provide retirement, survivor and disability benefits to its members. The State Treasurer is the sole investment fiduciary and custodian of the investments pursuant to State law. The primary investment objective is to maximize the rate of return on the total investment portfolio, consistent with a high degree of prudence and sufficient diversity to eliminate inordinate risks and to meet the actuarial assumption for the investment rate of return, at a reasonable cost achieved by cultivating a motivated team of dedicated professionals.

### STATE LAW

Pursuant to State Law (Section 91 of Act No. 380 of the Public Acts of 1965, as amended), the State Treasurer, State of Michigan, is the investment fiduciary for the following four State sponsored retirement systems: Michigan Public School Employees' Retirement System; Michigan State Employees' Retirement System; Michigan State Police Retirement System; and Michigan Judges' Retirement System.

The aforementioned State Law created an Investment Advisory Committee comprised of the Director of the Department of Consumer & Industry Services, the Director of the Department of Management & Budget, or their duly authorized representatives, and three public members appointed by the Governor with the advice and consent of the Senate. The committee meets quarterly and reviews investments, goals, and objectives, and may submit recommendations to the State Treasurer. The Investment Advisory Committee may also, by a majority vote, direct the State Treasurer to dispose of any holdings which, in the committee's judgement, are not suitable for the funds involved, and may, by unanimous vote, direct the State Treasurer to make specific investments.

Act No. 314 of the Public Act of 1965, as amended, authorizes the investment of assets of public employee retirement systems or plans created and established by the state or any political subdivision.

### PROXY VOTING POLICY

The MJRS Proxy Voting Policy sets forth directives on the following issues: Board of Directors, Corporate Governance, and Social Issues, corporate restructurings and defenses. All proxies are reviewed and voted in accordance with the above mentioned items.

### INVESTMENT RESULTS

#### *Total Portfolio Result*

For the fiscal year ended September 30, 1997, the total portfolio returned 23.7%, compared to the median of 22.7% of state plans including MJRS compiled by SEI Funds Evaluation. For the three year period the fund returned 18.5% and for the five year period the fund returned 13.7%. This compares with the median fund return of 17.2% for the three year period and 13.2% for the five year period.

During the fiscal year ending September 30, 1997, the nation's economy was characterized by full employment, low inflation, stable interest rates and moderate economic growth. The equity market again experienced excellent returns as the S&P 500 returned 40.5% with the Dow Jones Industrial average returning 37.7%. With a relatively stable interest rate environment, the Lehman Brothers Government/Corporate bond index experienced a return of 9.6% and the Salomon Brothers Broad Grade Index experienced a return of 9.7%.

The returns were calculated using a time-weighted rate of return in accordance with standards of the Association for Investment Management and Research (AIMR) unless a modification is described in the discussion of the return.

# INVESTMENT SECTION

## Report on Investment Activity

### *Domestic Stocks*

Domestic stock returns rose in fiscal year 1997 due to continued improvement in inflation coupled with rising corporate profitability. During this period, the domestic portfolio returned 39.7% compared with a return of 40.5% for the S&P 500 and a 37.7% return for the Dow Jones Industrial Average. For the most recent one year period, the market was paced by a 61.6% return on technology stocks followed by a 57.4% return on the financials and a 46.7% return on the energy sector.

Domestic equities currently represent 48.4% of the total portfolio with 37.5% of the total portfolio managed actively and 10.8% indexed. This compares with domestic equity exposure of 42.3% in 1995 and 35.2% in 1993.

### *International Equities*

Passive exposure to international equity returns is achieved by investing in a combination of fixed income notes and equity swap agreements on foreign stock indices in developed markets. Interest on the dedicated notes is exchanged for international stock index returns, and the notional amount of the equity swap agreements is held in the approximate proportions of the Salomon Broad Market Index (BMI) Europe and Pacific Composite (EPAC) country weightings for the larger component countries. The passive investment program using swap agreements was established in 1993. During 1997, \$4 million was invested in the combination structure, bringing international equity investments to 5.3% of the total fund.

The benchmark used to evaluate international equity returns is a custom version of the Salomon BMI-EPAC adjusted for net dividends. Fifty percent of the benchmark return is hedged to the U.S. dollar and the other 50% is impacted by local currency exchange rate changes. The composite international equity return of 18.1% in 1997, compared favorably with the Salomon BMI-EPAC return of 16.7%. The composite international equity return of 13.3% for 3 years, compared well with the Salomon BMI-EPAC return of 11.3% over the same period.

### *Fixed Income (Excluding Mortgages)*

For the fiscal year ending September 30, 1997, 25.4% of the portfolio was invested in fixed income compared to 26.5% and 30.8% for fiscal year ended 1995 and 1993, respectively. The asset allocation objective is to invest 30% of the total portfolio in fixed income. Two factors hampered the effort to achieve the 30% guideline.

With the decline in interest rates during the year, there was a substantial increase in the number of issues called. In addition, the continued dramatic growth in equity prices facilitated a further increase in the portfolio market value. While fixed income holdings grew by almost \$680 thousand in real terms during fiscal 1997, the relative proportion of the total portfolio remained constant due to the significant number of issues called and the overall increase in the fund's market value.

As the year progressed, rates declined and quality and maturity spreads narrowed. The fixed income focus was, therefore, on higher grade, shorter maturity issues. Even with the more defensive posture, the fixed income segment for bonds achieved a 10.4% return compared with a 9.7% return for the Salomon Brothers Broad Grade Index. This return ranked in the 27th percentile of the broad SEI universe. The three year compound rate was 10.5% compared to 9.5% for the index and a 15th percentile ranking. For five years the rates were 7.7% and 7.0% for a 23rd percentile ranking.

### *Real Estate Equity*

As of the year ending September 30, 1997, 6.2% of the total net assets were invested in equity real estate. This compares to 6.2% and 5.5% for the fiscal years ending September 30, 1995 and 1993, respectively. The asset allocation objective is to invest 7.5% of the total net assets in equity real estate. Due to the growth of the total pension fund size during the year, certain opportunistic timing of property sales and the receipt of funds from financed properties, the percentage of total equity real estate did not materially change from the 1995 levels.

The one-year, three-year and five-year total equity real estate net returns for the fiscal year ending September 30, 1997, were 15.3%, 11.4% and 6.1%, respectively. This compares to the National Council of Real Estate Investment Fiduciaries (NCREIF) Property Index returns of 10.9%, 9.3% and 6.1% relating to the same time periods.

# INVESTMENT SECTION

## Report on Investment Activity

The real estate investments are broadly diversified geographically, across the country, and by type of property to reduce risk. The properties are regularly valued by independent appraisers to establish market values. The market values established by the appraisers are utilized in computing the real estate portfolio appreciation return. The appreciation return coupled with the income return produced from the real estate holdings are utilized to derive the equity real estate portfolio total return.

### *Real Estate Debt (Mortgages)*

As of the year ending September 30, 1997, 0.2% of the total net assets were invested in mortgages. This compares to 3.2% and 3.9% for the fiscal years ending September 30, 1995 and 1993, respectively. The asset allocation objective is to reduce its mortgage holdings to 0% over time.

The one-year, three-year and five-year total returns for the mortgage portfolio, for the fiscal year ending September 30, 1997, were 0.4%, 6.6% and 6.3%, respectively. This compares to Salomon Brothers Broad Grade Index returns of 9.7%, 9.5% and 7.0% relating to the same time periods. Since the majority of the mortgage portfolio is federally insured mortgages, the returns generated by the mortgage portfolio are normally expected to be less than the index.

During the year, the majority of the mortgage portfolio was sold to take advantage of the favorable low interest rate environment the economy enjoyed and the resulting premium prices for the mortgages. The sale of the mortgages resulted in realized gains to the portfolio. Current mortgage holdings are mostly comprised of federally insured multifamily mortgages and a few multi-tenant commercial office buildings. The mortgage portfolio is geographically dispersed across the country and by property type to reduce risk. Mortgages are valued monthly based upon quotes obtained from Wall Street brokerage houses that buy and sell mortgages.

### *Alternative Investments Division*

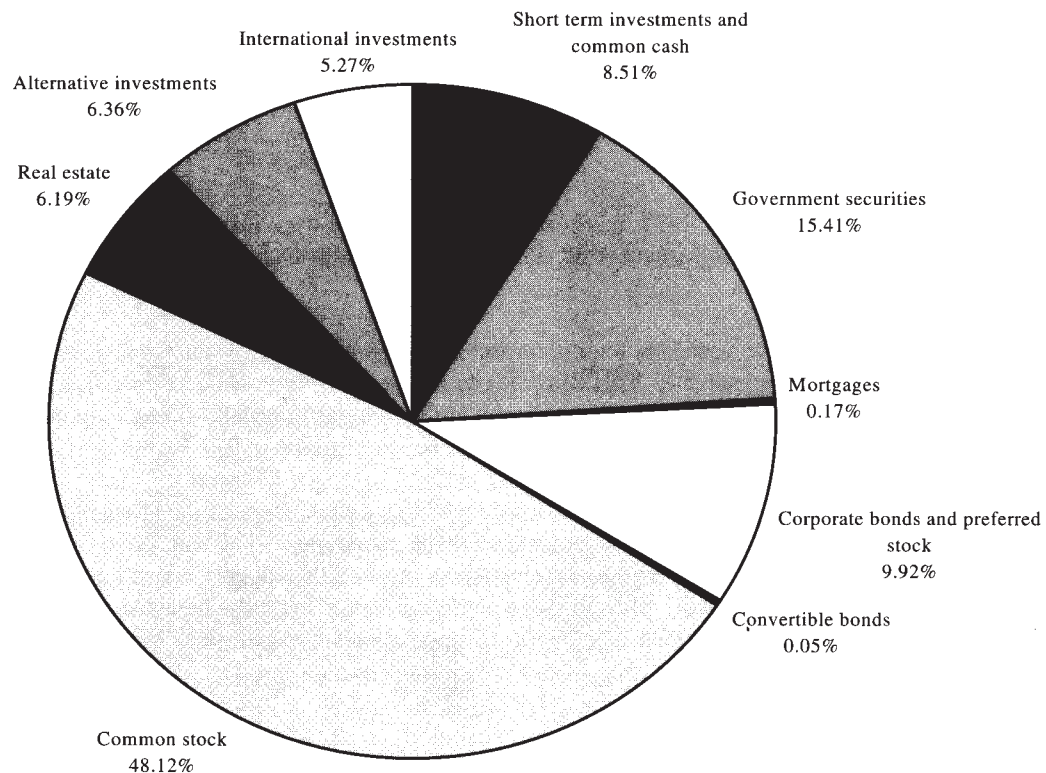
Alternative investments are investments in private equities. Through September 30, 1997, approximately 90% of those investments were limited partnerships. Of the investments in limited partnerships, approximately 7% were in partnerships investing internationally. The remaining 10% were direct private equity investments and public stock distributions received from the limited partnerships. The percentage of assets in alternative investments has consistently increased since 1993. As of September 30, 1997, 1995, and 1993, 6.4%, 5.6% and 4.4%, respectively, of total net assets were invested in alternative investments. The desired asset allocation for alternative investments for fiscal year 1997 was 7.5%. Due to the growth of the total pension fund's size during the year and the return of capital gains by the limited partnerships, the Alternative Investments Division was not able to meet this allocation target.

The one-year, three-year and five-year total alternative investments returns for the fiscal year ending September 30, 1997, were 16.5%, 21.9%, and 18.9%, respectively.

# INVESTMENT SECTION

## Report on Investment Activity

### Asset Allocation



### Investment Results Periods Ending September 30, 1997

Investment Category	Current Year	Annualized Rate of Return	
		3 Years	5 Years
Total Portfolio	23.7 %	18.5 %	13.7 %
Median	22.7	17.2	13.2
Domestic Equities Stock - Active/Convertible	39.7	28.6	21.9
Domestic Equities Stock - Passive	40.0	29.9	21.3
Standard & Poor's (S&P 500)	40.5	29.9	20.8
International Equities	18.1	13.3	N/A
Net Salomon BMI - EPAC 50/50	16.7	11.3	N/A
Fixed Income Bonds (U.S. Corp and Govt)	10.4	10.5	7.7
Salomon Brothers Broad Grade Index	9.7	9.5	7.0
Real Estate - Debt	0.4	6.6	6.3
Salomon Brothers Broad Grade Index	9.7	9.5	7.0
Real Estate - Equity	15.3	11.4	6.1
NCREIF	10.9	9.3	6.1
Alternative Investments	16.5	21.9	18.9

# INVESTMENT SECTION

## Report on Investment Activity

### Largest Assets Held

#### Largest Stock Holdings September 30, 1997

<u>Rank</u>	<u>Shares</u>	<u>Stocks</u>	<u>Market Value</u>
1	71,366	General Electric Corporation	\$ 4,857,384
2	27,632	Citicorp	3,700,975
3	26,912	Microsoft Corporation	3,560,807
4	46,153	Compaq Computer Corporation	3,449,937
5	35,266	Schlumberger Limited	2,968,974
6	70,821	Phillip Morris Companies	2,943,533
7	30,375	Amco Corporation	2,927,391
8	61,308	McDonald's Corporation	2,919,794
9	78,992	Chrysler Corporation	2,907,933
10	23,742	Chase Manhattan Corporation	2,801,556

#### Largest Bond Holdings September 30, 1997

<u>Rank</u>	<u>Par Amount</u>	<u>Bonds &amp; Notes</u>	<u>Market Value</u>
1	\$ 5,181,000	U.S. Treasury Bonds at 9.125% Due 5-15-2009	\$ 5,980,791
2	3,330,600	U.S. Treasury 0% Callable Principle Due 11-15-2011	1,895,578
3	1,560,000	Morgan, J.P. FRN Due 3-13-2000	1,519,050
4	2,496,780	U.S. Treasury 0% Callable Principle Due 5-15-2011	1,467,433
5	858,000	U.S. Treasury Bonds at 7.25% Due 5-15-2016	931,865
6	1,244,000	U.S. Treasury Tiger 14 0% Due 8-15-2004	815,778
7	780,000	FHLMC - Global 6.55% Due 11-13-2001	778,292
8	780,000	GMAC FRN Due 02-15-2000	777,699
9	780,000	First Union Corporation FRN Due 7-22-2003	776,264
10	780,000	FHLMC Debenture 6.51% Due 12-10-2001	776,100

A complete list of stock and bond holdings is available from the Michigan Department of Treasury.

# INVESTMENT SECTION

## Report on Investment Activity

### Schedule of Investment Advisors & Commissions

The State Treasurer is the investment fiduciary and custodian of the retirement system's funds pursuant to state law. Outside advisors are utilized to augment the State Treasurer's internal staff in the real estate and alternative investment markets. Only 6.7% of the total investment portfolio is managed by fully discretionary outside advisors. Outside advisor's fees are netted against the partnership or trust fund income. The Michigan Department of Treasury's cost of operations applicable to the retirement system for the fiscal year amounted to \$58 thousand or less than two basis points (.02%) of the average fair market value of the portfolio.

State law created an Investment Advisory Committee comprised of the directors of the Departments of Consumer and Industry Services and Management and Budget, or their duly authorized representatives, and three public members appointed by the Governor with the advice and consent of the Senate. The public members serve without pay, but are paid actual and necessary travel and other expenses. The committee meets quarterly to review investments, goals and objectives and may submit recommendations to the State Treasurer. The committee may also, by a majority vote, direct the State Treasurer to dispose of any holding which in the committee's judgment is not suitable for the fund involved, and may by unanimous vote direct the State Treasurer to make specific investments.

#### Schedule of Investment Advisors

	<b>Assets Under Management at 9-30-97 (At Market)</b>
<b>Alternative Investments</b>	
Kohlberg, Kravis & Roberts	\$ 8,123,524
Hicks, Muse, Tate & Furst Inc.	1,522,605
Warburg, Pincus Counselors	659,858
Equity Institutional Investors, Inc.	576,007
Hancock Venture Partners	444,557
TPG Partners, L.P.	438,671
The Carlyle Group	320,730
Leonard Green & Partners, L.P.	293,531
The Foothill Groups	288,182
Kelso & Company	261,603
DLJ Merchant Banking Inc.	258,346
Accel Partners	255,373
Cyprèss Merchant Banking Partners	250,297
CIE Management II Limited	249,048
Advent International Corporation	239,296
Berkshire Parnters	235,191
Healthcare Investment Corporation	224,213
Menlo Ventures	186,286
Alternative Investments representing less than .05% of plan net assets	3,406,557
<b>Total Alternative Investments</b>	<b>\$ 18,233,875</b>
<b>Real Estate</b>	
Raymond James Realty Advisors*	\$ 4,766,012
Equitable Realty Portfolio Management*	2,675,612
L & B Real Estate Counsel*	1,857,531
Kensington Realty Advisors*	1,606,574
Aldrich, Eastman & Waltch, Inc.	1,207,121
KOLL Investment Management (dba KB Realty Advisors)*	790,654
Sentinel Realty Advisors	685,254
John Hancock Timber Resource Group	374,270
Real Estate representing less than .11% of plan net assets	887,925
<b>Total Real Estate</b>	<b>\$ 14,850,953</b>
<b>GRAND TOTAL</b>	<b>\$ 33,084,828</b>

\* Advisor does not have full discretion

# INVESTMENT SECTION

## Report on Investment Activity

### Schedule of Investment Advisors & Commissions (Continued)

#### Schedule of Commissions

	Number of Share Traded	Commissions Paid Fiscal Year Ended 9-30-97 <sup>(1)</sup>	Average Commissions per Shares
<b>Investment Performance Measurement Consultant:</b>			
SEI Capital Resources Company (Directed brokerage included below)	6,345	\$ 381	0.06
<b>Investment Brokerage Firms:</b>			
Paine Webber	91,465	\$ 5,231	0.06
Bear Stearns	87,260	4,941	0.06
Salomon Brothers	73,976	4,021	0.05
Merrill Lynch	56,943	3,359	0.06
Morgan Stanley	42,479	2,456	0.06
Capital Inst. Service	37,817	2,269	0.06
Shroeder-Wertheim	35,006	2,018	0.06
Bernstein, Sanford	32,651	1,974	0.06
Smith Barney	32,569	1,923	0.06
Cowen & Company	31,939	1,912	0.06
Prudential Bache	29,568	1,683	0.06
First Boston	28,106	1,599	0.06
Bridge Trading Company	26,492	1,590	0.06
Donaldson, Lufkin	27,482	1,526	0.06
Goldman Sachs	26,681	1,476	0.06
Lehman	24,376	1,460	0.06
Citation	23,825	1,430	0.06
S & P Securities	22,422	1,345	0.06
Oppenheimer & Company	17,431	1,046	0.06
Wilshire Associates	16,350	981	0.06
Everen Securities	17,065	949	0.06
Deutch/Morgan/Greenfell	14,551	808	0.06
Witter, Dean/Reynolds	13,343	760	0.06
Cantor Fitzgerald	18,019	755	0.04
Montgomery Securities	9,683	556	0.06
Subtotal (25 highest)	837,499	\$ 48,068	0.06 <sup>(2)</sup>
All Other Brokerage Firms	61,531	3,650	0.06 <sup>(3)</sup>
Total	899,030	\$ 51,718	0.06 <sup>(4)</sup>

<sup>(1)</sup> These amounts are included in purchase and sale prices of investments.

<sup>(2)</sup> The average commission rate per share for the top 25 brokerage firms.

<sup>(3)</sup> The average commission rate per share for all other brokerage firms, excluding the top 25 brokerage firm.

<sup>(4)</sup> The average commission rate per share for all brokerage firms.

# INVESTMENT SECTION

## Report on Investment Activity

### Investment Summary

	<u>1997</u>		<u>1996</u>	
	<u>Market Value*</u>	<u>Percent of Total Market Value</u>	<u>Market Value*</u>	<u>Percent of Total Market Value</u>
Fixed Income:				
Government Bonds	\$ 49,028,336	15.41 %	\$ 41,045,678	15.63 %
Corporate Bonds & Preferred Stocks	31,554,150	9.92	32,006,952	12.19
Convertible Bonds	160,383	0.05	153,951	0.06
Mortgages	527,692	0.17	7,383,507	2.81
Total Fixed Income	<u>\$ 81,270,561</u>	<u>25.55 %</u>	<u>\$ 80,590,088</u>	<u>29.58 %</u>
Common Stocks	153,112,062	48.12	116,899,603	44.53
Real Estate	19,708,357	6.19	16,030,138	6.11
Alternative	20,249,939	6.36	17,705,395	6.74
International Equity	16,773,619	5.27	11,141,032	6.74
Short-Term Investments**	<u>27,071,191</u>	<u>8.51</u>	<u>20,034,153</u>	<u>7.68</u>
<b>Total</b>	<u><u>\$ 318,185,729</u></u>	<u><u>100.00 %</u></u>	<u><u>\$ 262,400,409</u></u>	<u><u>100.00 %</u></u>

\* Amounts do not include non-cash collateral on loaned securities. Short term investments are at cost, which approximates market.

\*\* Includes equity in the State Treasurer's Common Cash Fund, but excludes amounts payable and receivable for sales and purchases of securities with a settlement date after September 30 for each fiscal year. Amount also excludes \$11,552,820 and \$6,256,126 in collateral for security lending for fiscal year 1997 and 1996 respectively.

**Michigan Judges' Retirement System**

**Comprehensive Annual Financial Report  
for the Fiscal Year Ended September 30, 1997**

**ACTUARIAL  
SECTION**



**MJRS**

# ACTUARIAL SECTION

## Actuary's Certification

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### THE SEGAL COMPANY

One Park Avenue  
New York, New York  
10016-5895  
212-251-5321  
FAX: 212-251-5490

Michael J. Karlin, F.S.A., M.A.A.A.  
Senior Vice President & Actuary

March 2, 1998

Ms. Janet E. Phipps  
Director  
Department of Management and Budget  
and  
Retirement Board  
Michigan Judges Retirement System  
P.O. Box 30172  
Lansing, Michigan 48909

Ladies and Gentlemen:

The Michigan Judges Retirement System (MJRS) is funded on an actuarial reserve basis. The basic financial objective of MJRS is to establish and receive contributions that remain approximately level as a percentage of active member payroll over a long period of years.

Actuarial valuations are prepared annually to determine MJRS's actuarial liabilities and the employer contributions required to fund the System in accordance with the actuarial reserve funding provisions of the governing State Statute. The most recent actuarial valuation as of September 30, 1997 included a total of 1,146 members of MJRS. The actuarial value of MJRS's assets amounted to approximately \$271 million on September 30, 1997. The actuarial assumptions used in the 1997 valuation are the same as those used in the previous annual actuarial valuation. These assumptions produce valuation results which we consider to be reasonably indicative of the plan's underlying cost.

Our actuarial valuation of MJRS as of September 30, 1997 was performed by qualified actuaries in accordance with accepted actuarial procedures. In our opinion, the calculated contribution rate meets the fundamental objectives of State law. Based on the 1997 valuation results, it is also our opinion that the Michigan Judges Retirement System continues in sound condition, in accordance with actuarial principles of level cost financing.

Sincerely,



---

Michael Karlin, F.S.A., M.A.A.A.  
Senior Vice President & Actuary

## **Summary of Actuarial Assumptions and Methods**

1. The investment return rate used in making the valuations was 8% per year, compounded annually. This rate of return is not the assumed real rate of return. Considering other financial assumptions, the 8% investment return rate translates to an assumed real rate of 3%. Adopted 1981.
2. The mortality table used in evaluating allowances to be paid was the 1971 Group Annuity Mortality Table, projected to the year 2010 using projection scale D, set back no years for men and 6 years for women. Adopted 1993.
3. Sample probabilities of retirement with an age and service allowance are shown in Schedule 1 on page 42.
4. Sample probabilities of withdrawal from service and disability, together with individual pay increase assumptions, are shown in Schedule 2 on page 42.
5. Total active member payroll is assumed to increase 5.0% per year, which is the portion of the individual pay increase assumptions attributable to inflation. In effect, this assumes no change in the number of active members. Adopted 1993.
6. An individual entry age actuarial cost method of valuation was used in determining age and service allowance actuarial liabilities and normal cost. Unfunded actuarial accrued liabilities, including actuarial gain and losses, are financed over a period of 40 years from October 1, 1996.
7. Valuation assets (cash and investment) were valued using a five year smoothed market value method. For the 1993 valuation and later, the excess (shortfall) of actual investment income (including interest, dividends, realized and unrealized gains or losses) over the imputed income at the valuation interest rate is considered the gain (loss), which is spread over five years. Adopted 1993.
8. The data about persons now covered and about present assets was furnished by the system's administrative staff. Although examined for general reasonableness, the data was not audited by the actuary.
9. The actuarial valuation computations were made by or under the supervision of a Member of the American Academy of Actuaries (MAAA). The assumptions used in the actuarial valuations were adopted by the retirement board after consulting with the actuary.

# ACTUARIAL SECTION

## Summary of Actuarial Assumptions and Methods (Continued)

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### SCHEDULE 1

#### Percent of Eligible Active Members Retiring Within Next Year

<u>Retirement Ages</u>	<u>Percent of Eligible Active Members Retiring Within Next Year</u>
55-59	10 %
60-64	10
65-69	10
70	100

### SCHEDULE 2

#### Separation From Active Employment Before Age & Service Retirement & Individual Pay Increase Assumptions

<u>Sample Ages</u>	<u>Percent of Active Members Withdrawing Within Next Year (Men and Women)</u>	<u>Percent of Active Members Becoming Disabled Within Next Year</u>		<u>Percent Increase In Pay During Next Year</u>
		<u>Men</u>	<u>Women</u>	
20		0.08 %	0.10 %	5.5 %
25		0.08	0.10	5.5
30	2.0 %	0.08	0.10	5.5
35	2.0	0.08	0.10	5.5
40	2.0	0.20	0.36	5.5
45	2.0	0.26	0.41	5.5
50	2.0	0.49	0.57	5.5
55	2.0	0.89	0.77	5.5
60	2.0	1.41	1.02	5.5

## Actuarial Valuation Data

### Schedule of Active Member Valuation Data

<u>Valuation Date Sept. 30</u>	<u>Inactive Members Number</u>	<u>Active Members Number</u>	<u>Reported Annual Payroll</u>	<u>Average Annual Pay</u>	<u>% Increase</u>	<u>Average Age</u>	<u>Average Service</u>
1988	23	574	\$ 39,480,632	\$ 68,782	5.9	52.9 years	10.7 years
1989	26	590	41,895,056	81,178	18.0	52.4	10.2
1990	26	590	43,081,777	73,020	(10.1)	53.0	10.8
1991	32	603	43,905,860	72,812	(0.3)	52.1	10.2
1992	28	604	43,840,733	72,584	(0.3)	52.8	10.6
1993	25	611	44,472,833	72,787	0.2	52.8	10.5
1994	26	608	46,276,785	76,113	4.5	53.4	10.5
1995	26	614	48,195,528	78,494	3.1	52.8	10.9
1996	28	610	49,350,572	80,903	3.1	53.6	11.7
1997	25	609	49,000,856	80,461	(0.5)	52.8	11.4

### Schedule of Changes in the Retirement Rolls

<u>Year Ended Sept. 30</u>	<u>Added to Rolls</u>		<u>Removed from Rolls</u>		<u>Rolls-End of Year</u>		<u>% Increase in Annual Allowances</u>	<u>Average Annual Allowances</u>
	<u>No.</u>	<u>Annual Allowances</u>	<u>No.</u>	<u>Annual Allowances</u>	<u>No.</u>	<u>Annual Allowances</u>		
1988	24	\$ 753,469	13	\$ 262,535	323	\$ 6,414,836	8.3 %	\$ 19,860
1989	43	1,354,584	10	164,559	356	7,604,861	18.6	21,362
1990	20	642,636	15	316,220	361	7,931,277	4.3	21,970
1991	45	1,616,652	17	322,898	389	9,225,031	16.3	23,715
1992	29	816,203	12	217,417	406	9,823,817	6.5	24,197
1993	29	1,023,871	1	16,135	434	10,831,553	10.3	24,957
1994	24	794,180	12	303,091	446	11,323,272	4.5	25,389
1995	50	1,700,945	15	409,064	481	12,615,153	11.4	26,227
1996	19	708,409	19	424,164	481	12,899,398	2.3	26,818
1997	40	1,663,656	9	359,441	512	14,203,613	10.1	27,741

# ACTUARIAL SECTION

## Prioritized Solvency Test

The MJRS funding objective is to meet long term benefit promises through contributions that remain approximately level from year to year as a percent of member payroll. If the contributions to the System are level in concept and soundly executed, the System will pay all promised benefits when due, the ultimate test of financial soundness. Testing for level contribution rates is the long term solvency test.

A prioritized solvency test is another means of checking a system's progress under its funding program. In a short condition test, the plan's present assets (cash and investments) are compared with: (1) active member contributions on deposit; (2) the liabilities for future benefits to present retired lives; and (3) the liabilities for service already rendered by active members. In a system that has been following the discipline of level percent of payroll financing, the liabilities for active member contributions on deposit (liability 1) and the liabilities for future benefits to present retired lives (liability 2) will be fully covered by present assets (except in rare circumstances). In addition, the liabilities for service already rendered by active members (liability 3) is normally partially covered by the remainder of present assets. Generally, if the System has been using level-cost financing, the funded portion of liability 3 will increase over time. Liability 3 being fully funded is not necessarily a byproduct of level percent of payroll funding methods.

The schedule below illustrates the history of the liabilities of the System and is indicative of the MJRS policy of following the discipline of level percent of payroll financing.

Valuation Date Sept. 30	Actuarial Present Value of Accrued Liabilities (\$ in Millions)			Valuation Assets	Portion of Present Value Covered by Assets			
	(1)	(2)	(3)		(1)	(2)	(3)	(4)**
	Active Member Contributions	Retirants and Beneficiaries	Active Members (Employer Financed Portion)					
1988	\$17,338	\$56,588	\$ 71,253	\$124,941	100%	100%	72.0%	86.0%
1989	18,995	65,824	70,598	139,436	100	100	77.0	90.0
1990	21,760	67,449	73,898	150,024	100	100	82.3	92.0
1991	23,422	78,438	69,420	162,053	100	100	86.7	94.6
1992	26,364	82,451	70,681	171,969	100	100	89.4	95.8
1993	28,922	89,163	74,878	187,737	100	100	93.0	97.3
1993*	28,922	89,163	74,342	189,134	100	100	95.6	98.3
1994	32,364	89,649	74,978	202,371	100	100	107.2	102.7
1995	34,358	96,574	73,395	222,230	100	100	124.4	108.8
1996	38,766	96,633	76,102	243,248	100	100	141.7	115.0
1997	39,637	118,717	72,157	271,458	100	100	156.7	117.8

# Revised actuarial assumptions and asset valuation method.

\*\* Percents funded on a total valuation asset and total actuarial accrued liability basis.

## Summary Of Plan Provisions

Our actuarial valuation of MJRS as of September 30, 1997 is based on the present provision of Public Act No. 234 of 1992.

### ***Regular Retirement***

Eligibility — Age 60 with 8 years credited service; or age 55 with 18 years credited service, or 25 years with no age requirement.

Annual Amount — If less than 12 years of credited service, 3% of final annual compensation times years of credited service; for 12 or more years of credited service, 50% of final annual compensation plus 2.5% of such compensation for each year of credited service in excess of 12 years to a maximum of 60%. Former MJRS members receive 3% of final annual compensation times years of credited service to a maximum of the greater of 40% of final annual compensation or \$15,000, but not to exceed 66 2/3% of final annual compensation when added to a local retirement system benefit; or 3.5% of final annual compensation times years of credited service to a maximum of 66 2/3% of final annual compensation if elected.

Final Annual Compensation — Annual state salary at time of retirement plus state salary standardization, if any. For former MJRS members, final annual compensation is member's certified salary at time of retirement. For 36th District Court judges, final annual compensation is total state and district control unit salary at time of retirement. For probate judges serving in a single county of less than 15,000 population, final annual compensation is total judicial salary at the time of retirement.

### ***Early Retirement (age reduction factor used)***

Eligibility — Age 55 with 12 but less than 18 years credited service.

Annual Amount — Regular retirement benefit, reduced by 1/2% for each month by which the commencement age is less than 60.

### ***Deferred Retirement (vested benefit)***

Eligibility — 8 years of credited service.

Annual Amount — Regular retirement benefit. If less than 12 years of credited service, payable at age 60; if 18 or more years of credited service payable at age 55; if more than 12 but less than 18 years of credited service reduced amount payable at age 55.

### ***Disability Retirement***

Eligibility — 8 years of credited service.

Annual Amount — Regular retirement benefit, based upon member's credited service and final salary at time of disability.

### ***Death Before or After Retirement (Spouse or Dependent Children)***

Eligibility — 8 years of credited service.

Annual Amount — 50% of the members accrued pension.

# ACTUARIAL SECTION

## Summary Of Plan Provisions (Continued)

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### *Post Retirement Cost-of-Living Adjustments*

None, except judges who were active judges prior to September 8, 1961 (and their survivors) have their benefits adjusted as active judges' salaries change.

### *Member Contributions*

Non-Trial Judges: 5% of salary (1.5% for health benefits).

Trial Judges with Full Standardization: 7% of salary.

Trial Judges without Full Standardization: 3.5% of salary.

Probate Judges under 3% Formula: 7% of salary to maximum of \$980.00

Probate Judges under 3.5% Formula: 7% of salary (no maximum).

District Court Judges of the Thirty-sixth District: 3.5% of salary.

### *Defined Contribution Legislation -- SB 248 of 1996*

New employees hired on or after March 31, 1997 become participants in Tier 2 (i.e. a defined contribution plan) rather than Tier 1 (i.e. the above described defined benefit plan).

Active members on March 30, 1997 may irrevocably elect to terminate membership in Tier 1 and become participants in Tier 2. Elections must be in writing and submitted between January 2, 1998 and April 30, 1998. Such members will become Tier 2 participants on June 1, 1998, and will have the actuarial present value of their Tier 1 accrued benefit transferred into Tier 2 by September 30, 1998.

Michigan Judges Retirement System

**Comprehensive Annual Financial Report  
for the Fiscal Year Ended September 30, 1997**

**STATISTICAL  
SECTION**



**MJRS**

# STATISTICAL SECTION

## Schedule of Revenues by Source

Fiscal Year Ended Sept. 30	Member Contributions	Net Court Fees	Employer Contributions		Net Investment & Other Income	Total
			Dollars	% of Annual Covered Payroll		
1988	\$ 2,157,041	\$ 4,675,058	\$ 1,310,728	3.32 %	\$ (3,912,914)	\$ 4,229,913
1989	2,334,803	5,149,672	1,386,123	3.31	17,193,911	26,064,509
1990	2,450,879	5,329,496	1,486,911	3.45	(5,522,705)	3,744,581
1991	2,705,409	5,661,204	1,505,192	3.43	22,486,378	32,358,183
1992	2,447,047	5,719,623	1,519,483	3.47	13,718,217	23,404,370
1993	2,833,083	6,101,841	1,588,274	3.57	21,551,382	32,074,580
1994	2,811,231	4,926,397	1,650,598	3.57	4,598,657	13,986,883
1995	2,915,335	5,263,144	1,614,633	3.35	23,803,055	33,596,166
1996	2,975,239	4,635,563	1,556,044	3.15	34,867,041	44,033,887
1997	3,004,765	4,080,730	1,592,853	3.25	61,494,460	70,172,808

## Schedule of Expenses by Type

Fiscal Year Ended Sept. 30	Benefits Payments*	Refunds and Transfers	Administrative Expenses	Total
1988	\$ 6,299,084	\$ 53,318	\$ 282,923	\$ 6,645,325
1989	7,277,062	101,563	322,201	7,710,826
1990	7,884,438	72,319	381,684	8,338,441
1991	8,987,239	117,115	450,426	9,554,780
1992	9,631,114	18,085	458,623	9,999,963
1993	10,733,285	25,639	533,900	11,292,824
1994	11,173,171	28,444	568,180	11,769,795
1995	12,404,307	91,861	470,760	12,966,929
1996	12,877,528	16,266	450,110	13,343,904
1997	13,953,170	236,326	395,428	14,584,924

\* Includes health insurance premiums and benefits.

**Schedule of Benefit Expenses by Type**

<b>Fiscal Year Ended Sept. 30</b>	<b>Regular Benefits</b>	<b>Disability Benefits</b>	<b>Health Insurance</b>	<b>Total</b>
1988	\$ 6,275,614	*	\$ 23,470	\$ 6,299,084
1989	7,236,904	*	40,158	7,277,062
1990	7,811,812	*	72,626	7,884,438
1991	8,905,532	*	81,707	8,987,239
1992	9,522,704	*	108,707	9,631,411
1993	10,598,515	*	134,370	10,732,885
1994	11,041,755	*	131,416	11,173,171
1995	11,363,455	\$ 273,424	118,457	11,755,336
1996	12,464,285	294,976	118,267	12,877,528
1997	13,491,097	348,192	113,881	13,953,170

\* Disability benefits included with regular benefits.

# STATISTICAL SECTION

## Schedule of Retired Members by Type of Benefit September 30, 1997

Amount Monthly Benefit	Number of Retirees	Type of Retirement *					Selected Option #		
		1	2	3	4	5	Opt. 1	Opt. 2	Opt. 3
\$ 1 - 400	8	3	2	3	0	0	8	0	0
401 - 800	61	15	35	10	0	1	57	4	0
801 - 1,200	48	27	14	5	0	2	34	12	2
1,201 - 1,600	73	32	27	13	0	1	62	10	1
1,601 - 2,000	48	27	14	7	0	0	43	5	0
2,001 - 2,400	33	22	7	2	0	2	17	16	0
2,401 - 2,800	47	42	3	0	1	1	38	8	1
2,801 - 3,200	41	39	1	0	1	0	31	10	0
3,201 - 3,600	59	58	1	0	0	0	47	11	1
3,601 - 4,000	58	56	1	0	0	1	54	4	0
Over 4,000	36	34	0	0	2	0	35	1	0
Totals	512	355	105	40	4	8	426	81	5

\* Type of Retirement

- 1 - Normal retirement for age & service
- 2 - Survivor payment - normal retirement
- 3 - Survivor payment - death in service
- 4 - Non-duty disability retirement
- 5 - Survivor payment - disability retirement

Selected Option #

- Opt. 1 - Straight life allowance
- Opt. 2 - 100% joint and survivor option
- Opt. 3 - 50% joint and survivor option

**Schedule of Average Benefit Payments**

<u>Retirement Effective Dates</u>	<u>Average Monthly Benefit</u>	<u>Number of Active Retirants</u>
Period 10/01/91 to 09/30/92	\$ 2,016	406
Period 10/10/92 to 09/30/93	2,080	434
Period 10/01/93 to 09/30/94	2,116	446
Period 10/01/94 to 09/30/95	2,186	481
Period 10/01/95 to 09/30/96	2,235	481
Period 10/01/96 to 09/30/97	2,312	512

**Ten Year History of Membership  
Fiscal Years Ended September 30**

