# Highway and Transportation Employees' and Highway Patrol Retirement System 

CompreRensive Annual Tinancial Report<br>Fiscal Year Ended June 30, 2001

Norm Robinson
Executive Director

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P.O. Box 1930

Jefferson City, MO 65102-1930

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## Intreductery Section



## LETTER OF TRANSMITTAL

## Highway and Transportation Employees' and Highway Patrol 

Norm Robinson, Executive Director

October 15, 2001

Board of Trustees Highway and
Transportation Employees' and
Highway Patrol Retirement System
Jefferson City, MO 65101
Dear Board Members:
It is again with great pleasure that I submit this year's annual report of the Highway and Transportation Employees' and Highway Patrol Retirement System (HTEHPRS).

## Fiscal Year 2001 Highlights

Last year, HTEHPRS' staff worked towards the successful implementation of the Year 2000 Plan and this year that effort continued as retired employees were given the option of staying in the Closed Plan or converting to the Year 2000 Plan. During the year, 630 retiree Year 2000 Plan conversion elections were processed.

The retirement system staff also began work on the implementation of legislation passed this year, which provides for a Deferred Retirement Option Provision (BackDROP) for general state employees. As of June 30, 2001, procedures were in place to provide benefit estimates to those who may want to consider utilizing the BackDROP option that will go into effect on January 1, 2002. Additional information regarding the BackDROP option is included in this annual report.

During the year, the state of Missouri implemented the human resource/payroll portion of their new financial accounting and reporting system (SAM II). With the implementation of SAM II, the state of Missouri converted from monthly anticipatory payroll cycles to semi-monthly lag payroll cycles. For the most part, the conversion has resulted in a faster and more efficient collection of payroll data and contributions from MoDOT and MSHP. HTEHPRS' staff continues to work with those in the Office of Administration on the remaining conversion issues.

## Report Contents and Structure

This Comprehensive Annual Financial Report of the Highway and Transportation Employees' and Highway Patrol Retirement System for the fiscal year ended June 30, 2001, has been prepared to enhance knowledge and understanding of the retirement system. The material has been prepared in a manner to be useful and informative to the members, to the management of the Missouri Department of Transportation and Missouri State Highway Patrol, and to the elected officials of the state of Missouri.

Management of the retirement system is responsible for the accuracy and completeness of the information in this report. To the best of our knowledge and belief, the information presented is accurate in all material respects and is reported in a manner designed to fairly present the financial position of the fund. The report is also designed to comply with the reporting requirements of Sections 104.190, 104.1006, and 105.661 of the Revised Statutes of Missouri (RSMo) as amended. The report is divided into the following five sections:

- The Introductory Section, which contains general information regarding the operations of HTEHPRS.
- The Financial Section, which contains an in-depth explanation of the financial position of the plan, as well as the auditor's opinion of the system's financial records.
- The Investment Section, which outlines the value of the system's assets and the historical returns of the portfolio.
- The Actuarial Section, which the actuary certifies the recommended contribution rates and presents the assumptions used to arrive at those rates.
- The Statistical Section, which provides a statistical profile of our active, terminated vested, and retired members.


## BACKGROUND INFORMATION

The Highway and Transportation Employees' and Highway Patrol Retirement System was established by state statute in 1955. Under that legislation, employees of the Missouri Department of Transportation and Missouri State Highway Patrol became members of the retirement system on September 1, 1955. The system initially provided only regular retirement and disability benefits and required the employees to share in the cost of the plan.

While the participating employers in the system, the Missouri Department of Transportation and the Missouri State Highway Patrol, have remained the same since 1955, the plan provisions have changed many times. Today, at no cost to the employees, the system offers not only enhanced retirement and disability benefits, but also benefits for survivors of active and retired members, benefits for qualified terminated vested members, and death benefits.

## FINANCIAL INFORMATION

## Accounting System

This report has been prepared in accordance with generally accepted accounting principles for governmental accounting and reporting. Assets, liabilities, revenues, and expenses are reported on the accrual basis. Internal controls have been established by management to reasonably protect the assets from loss, theft, or misuse.

## Revenues

Two sources of revenue are used to finance retirement, survivor, and long-term disability benefits: employer contributions and income on investments. During Fiscal Year 2001, revenues from these two sources totaled $\$ 51,523,810$. The Missouri Department of Transportation and the Missouri State Highway Patrol contributed $\$ 81,353,019$. Investment income for the year was ( $\$ 29,829,209$ ).

## Expenses

Expenses of the system totaled $\$ 115,947,646$ in Fiscal Year 2001. Benefit payments represent the major expense of the retirement system. Expenses incurred to administer the plan include personal services provided by the staff and professional services for (1) investing the system's funds, (2) monitoring the system's investment guidelines, (3) providing actuarial information, and (4) auditing.

During Fiscal Year 2001, benefit payments totaled $\$ 111,985,064$. Administrative expenses during this period were $\$ 835,215$. During fiscal year 2001, expenses exceeded contributions by ( $\$ 64,423,836$ ). Investment expenses during this period was $\$ 3,127,367$.

## INVESTMENTS

The state statutes allow the system to make investments using the same care, skill, and diligence that a prudent person acting in a similar capacity would use. In keeping with this prudent person rule, the Board of Trustees has established investment guidelines. The system's investment managers are allowed full discretion in investment decisions within the confines of those guidelines and the statutory investment authority.

The balanced stock and bond portfolio experienced a negative $3.51 \%$ time-weighted rate of return for the 2001 fiscal year. Over the last ten fiscal years through June 30, 2001, our balanced fund earned a timeweighted rate of $9.21 \%$.

## FUNDING

The Board of Trustees certifies to the Missouri Department of Transportation and the Missouri State Highway Patrol the actuarially determined percentages of payroll necessary to meet the system's obligations. Realizing the importance of maintaining a financially sound system, the participating employers have never failed to contribute the amounts certified by the Board of Trustees.

## REPORT CONCLUSION \& DISTRIBUTION

This report is a product of the combined efforts of the HTEHPRS' staff and advisors functioning under your leadership. It is intended to provide complete and reliable information, which will facilitate the management decision making process; serve as a means for determining compliance with legal requirements; and allow for the evaluation of responsible stewardship of the funds of the system.

Copies of this report are provided to the Governor, the State Auditor, and the Joint Committee on Public Employee Retirement. It is also being distributed to all Missouri Department of Transportation Division and District offices and Missouri State Highway Patrol General Headquarters and Troop offices. These offices form the link between HTEHPRS and its members, and their cooperation contributes significantly to the success of HTEHPRS. We hope all recipients of this report find it informative and useful. Copies to others will be furnished upon request.

## ACKNOWLEDGMENTS

I would like to take this opportunity to express my gratitude to you, the staff, the advisors, the Governor's Task Force on Total Compensation, and other people who have worked so diligently to assure the continued successful operation of the system.

Respectfully submitted,


Norm Robinson
Executive Director

## BOARD OF TRUSTEES

The Highway and Transportation Employees' and Highway Patrol Retirement System is governed by a Board of Trustees. As set out in Section 104.160 of the Revised Statutes of Missouri, the Board is comprised of the following ten members:


| Colonel Roger <br> Stottlemyre | Henry <br> Hungerbeeler | Larry <br> Thompson | Bill |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Shaw |  |  |  |

## CHAIRMAN'S LETTER

# Highway and Transportation Employees' and Highway Patrol $\mathbb{R E T I R E M E N T S Y S T E M}$ 

W.L. "Barry" Orscheln, Chairman William E. Gladden, Vice Chairman Edward D. Douglas, Member Sen. Steve Stoll, Member

Rep. James P. O'Toole, Member Larry Thompson, Member Bill Shaw, Member

Henry Hungerbeeler, Member Col. Roger Stottlenyre, Member Norm Robinson, Exec. Dir. Rich Tiemeyer, Counsel

July 16, 2001
To the Members of the Highway and Transportation Employees' and Highway Patrol Retirement System:

On behalf of the Board of Trustees, we are pleased to present the Comprehensive Annual Financial Report of the Highway and Transportation Employees' and Highway Patrol Retirement System for the fiscal year ended June 30, 2001. This report provides information on the financial status of your retirement system while also highlighting significant changes that occurred during the year.

A review of the report confirms that, though faced with a difficult investment environment this year, the system remains well funded. The preservation and long-term growth of system assets remains the primary focus of the board to ensure that future benefit obligations will be met. HTEHPRS is strong and will, through the guidance of the board and the dedication of an outstanding staff, weather the uncertain times we are facing. We will be here for our members in the years to come.

During the past year, the Board's membership changed with the departure of Representative Gracia Backer. She ended her service with the State Legislature and thereby vacated her position as the House of Representatives' Member for the Board of Trustees. Rep. Backer served on the Board for a period of 10 years. Representative James P. O'Toole filled this position by appointment by the Speaker of the House of Representatives. The position of Superintendent of the Missouri State Highway Patrol was vacated due to the retirement of Colonel Weldon Wilhoit. Colonel Wilhoit served on the Board for a period of 3 years. This position was filled by Colonel Roger Stottlemyre upon his appointment by the Governor to succeed Colonel Wilhoit. Colonel Stottlemyre then vacated his position as the Patrol employee representative. At the May 4, 2001 Retirement Board meeting, the Board called a special election to fill the vacated position. On behalf of the board, staff, and membership, I would like to express our collective thanks to these individuals for serving, and for their many valuable contributions to the system.

Perhaps the most important duty of trustees is that of prudent investment fiduciaries for the HTEHPRS' trust fund. The board has worked diligently to develop a diversified investment program that will allow the system to meet or exceed our actuarial requirements, ensuring that retirement benefits for our members are properly funded with the lowest possible cost to participants and, ultimately, Missouri's taxpayers. The trustees are constantly striving to better educate ourselves as to the prudent management of the assets to which we have been entrusted. The board policy of preserving system assets and maximizing the long-term growth of those assets through diversification will continue to be our primary focus as we move into the next fiscal year.

At the end of the fiscal year, our net asset value was $\$ 1,413,243,548$ with 9,106 active members and 6,192 benefit recipients.

I am proud of the HTEHPRS and would like to take this opportunity to thank the members, retirees, advisors, and staff who assist the board in the operation of our retirement system. On behalf of the Board of Trustees, we will continue to prudently manage the system so as to provide for a secure retirement future for each of our members.

In closing, I would like to thank the retirement system staff for continuing to maintain a high level of commitment and service to our plan participants. If you have any questions regarding this report, please contact the Retirement System office.

Sincerely,


Barry Orscheln
Chairman

## ADMINISTRATIVE ORGANIZATION

## PERSONAL SERVICES

The Executive Director of the Highway and Transportation Employees' and Highway Patrol Retirement System has charge of the offices and records of the system and hires such employees deemed necessary, subject to the direction of the Board of Trustees. The system employs four full-time staff.

The Chief Counsel of the Highway and Transportation Commission furnishes legal services and provides legal opinions of the retirement statutes as necessary for implementation.

Work assignments related to the Retirement System that are performed by Missouri Department of Transportation and Missouri State Highway Patrol personnel are considered duties in connection with their regular employment.

## DIRECTOR'S OFFICE

| Norm Robinson Executive Director | Lois Wankum Executive Secretary | Michel Au Buchon Retirement Clerk | Angel Meyer Retirement Clerk |
| :---: | :---: | :---: | :---: |
| MISSOURI DEPARTMENT OF TRANSPORTATION |  |  |  |



## MISSOURI STATE HIGHWAY PATROL



* Employees of the Missouri Department of Transportation. The Retirement System reimburses the department for time spent by these individuals in performing retirement related duties.
** Employees of the Missouri State Highway Patrol.


## DIRECTOR'S OFFICE

The goal of the Highway and Transportation Employees' and Highway Patrol Retirement System is to provide quality customer service to its members. The interests of the taxpayers of the state of Missouri are safeguarded by the staff's ongoing review of retirement policies, procedures, investments, and legislation--all in an effort to improve the day-to-day business of the system.


Norm Robinson
Executive Director


Michel Au Buchon
Retirement Clerk


Lois Wankum
Executive Secretary


Angel Meyer
Retirement Clerk

## Tntreductery Section

## MISSOURI DEPARTMENT OF TRANSPORTATION

## LEGAL SERVICES

Chief Counsel Rich Tiemeyer heads up the team handling legal matters affecting the Retirement System. The team reviews changes in retirement law and questions of interpretation affecting policy and procedure.


Dan Pritchard
Senior Assistant Counsel

## MISSOURI DEPARTMENT OF TRANSPORTATION

## FINANCIAL/BENEFIT SERVICES

The financial services section handles the payroll and accounting functions of the Retirement System in the Controller's Office of the Missouri Department of Transportation. Mary Sue Fontana performs the accounting duties for the system, and Mary Jordan, Ginger Miller, and Flo Schulte prepare and review the retirement payroll for accuracy and correctness.

The benefit services section processes retirement applications, handles retirement inquiries, and assists with pre-retirement seminars and new employee orientations. Marvin Klebba and Mariel Hale also work closely with the Executive Director to analyze and evaluate questions regarding prior service credit and eligibility for disability.


Mary Sue Fontana Senior
Business Specialist


Mary Jordan
Account Technician


Marvin Klebba
Senior Benefits
Specialist


Ginger Miller
Senior Account Technician


Mariel Hale
Senior Benefits
Specialist


Flo Schulte
Senior Account Technician

## MISSOURI STATE HIGHWAY PATROL

Human Resources employees of the Missouri State Highway Patrol assist retirement system staff in maintaining employment and prior service information for members of the system.


Captain Terry W. Moore
Director, Human
Resources Division


Brenda Thompson
Personnel Records
Clerk II


Theresa M. Backes
Special Assistant


Bev Mauzy
Personnel Records
Clerk III

## PROFESSIONAL SERVICES

The following firms are retained by the Board of Trustees to serve in professional capacities or provide consultant services.

## Actuary

Gabriel, Roeder, Smith \& Company
Southfield, Michigan

## Auditor

Evers \& Company, CPA's
Jefferson City, Missouri

## Investment Managers

Alliance Capital Management
New York, New York
Artisan Partners
Milwaukee, Wisconsin
Rockwood Capital Advisors, LLC
St. Louis, Missouri
Rothschild Asset Management
New York, New York
UMB Investment Advisors
Kansas City, Missouri
Wachovia Corporation
Winston-Salem, North Carolina
Wellington Management Co.
Boston, Massachusetts

Investment Counsultant
Randy Kirkland Asset Consulting Group

St. Louis, Missouri
Legislative Consultant
Jack Pierce
Jefferson City, Missouri

## Master Trustee/Custodian

UMB Bank
Kansas City, Missouri

## Finouncial Section

In This Section

Independent Auditors' Report
Statement of Plan Net Assets
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Schedule of Funding Progress
Schedule of Employer Contributions
Schedule of Administrative Expenses
Schedule of Investment Expenses

## INDEPENDENT AUDITORS' REPORT

Certified Public Accountants and Consultants
Elmer L. Evers
Jerome L. Kauffman Richard E. Elliott Dale A. Siebeneck

Keith L. Taylor Lynn J. Graves

To the Board of Trustees of the Highway and Transportation Employees' and Highway Patrol Retirement System Jefferson City, Missouri:

We have audited the accompanying statements of the plan net assets of the Highway and Transportation Employees' and Highway Patrol Retirement System (the Retirement System) as of June 30, 2001 and 2000, and the related statements of changes in plan net assets for the years ended. These financial statements are the responsibility of the Retirement System's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts of disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the plan net assets of the Highway and Transportation Employees' and Highway Patrol Retirement System as of June 30, 2001 and 2000, and the changes in the plan net assets for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Our audit was made for the purpose of forming an opinion on the financial statements taken as a whole. The supplementary schedules of funding progress and employer contributions on pages 13 through 16 are not a required part of the basic financial statements of the System, but are required by the Governmental Accounting Standards Board (GASB). The supplementary information included on page 17 is presented for purposes of additional analysis and is not a required part of the basic financial statements of the Retirement System. Such information, included on pages 13 through 17, have been subjected to the auditing procedures applied in the audit of the financial statements and, in our opinion, is fairly stated in all material respects in relation to the financial statements taken as a whole.


EVER \& COMPANY, CPA's, L.L.C. Jefferson City, Missouri

January 14, 2003

520 Dix Road • Jefferson City, Missouri 65109 - 573/635-0227 • FAX 573/634.3764<br>Village Green Shopping Center - 1021 W. Buchanan Street, Ste. 10 - California, Missouri 65018 - 573/796-3210 * FAX 573/796-3452<br>3938 Hwy, 54, Suite A - Osage Beach, Missouri 65065 - 573/348-4141 - FAX 573/348.0989

## STATEMENTOFPLAN NET ASSETS

YEARS ENDED JUNE 30, 2001 AND 2000

2001
2000

## ASSETS:

| Cash | 852,604 | 0 |
| :---: | :---: | :---: |
| Receivables |  |  |
| Contributions | 687 | 1,040,778 |
| Accrued interest and dividends | 7,429,812 | 8,318,046 |
| Investment sales | 4,788,155 | 868,925 |
| Total Receivables | 12,218,654 | 10,227,749 |
| Investments, at fair value (Note 2) |  |  |
| Common \& preferred stocks | 878,252,240 | 987,372,552 |
| Government and government agency securities | 318,596,790 | 253,151,774 |
| Corporate bonds | 114,310,861 | 137,428,109 |
| Timberland | 36,747,417 | 30,054,904 |
| Short term investments | 59,227,132 | 61,043,488 |
| Total Investments | 1,407,134,440 | 1,469,050,827 |
| Prepaid expenses | 0 | 343 |
| Fixed Assets, net of depreciation | 12,407 | 26,463 |
| TOTAL ASSETS | 1,420,218,105 | 1,479,305,382 |
| LIABILITIES: |  |  |
| Cash overdraft | 0 | 58,906 |
| Accounts payable | 1,164,956 | 690,869 |
| Investment purchases | 5,809,601 | 888,223 |
| TOTAL LIABILITIES | 6,974,557 | 1,637,998 |
| NET ASSETS HELD IN TRUST |  |  |
| FOR PENSION BENEFITS | \$ 1,413,243,548 | \$ 1,477,667,384 |

(A schedule of funding progress is presented in the Supplemental Information.)
See accompanying notes to financial statements.

## STATEMENT OF CHANGES IN PLAN NET ASSETS

## YEARS ENDED JUNE 30, 2001 AND 2000

|  | 2001 |  |  | 2000 |
| :---: | :---: | :---: | :---: | :---: |
| ADDITIONS |  |  |  |  |
| Contributions | \$ | 81,353,019 | \$ | 70,191,993 |
| Investment income |  |  |  |  |
| Net appreciation (depreciation) <br> (gains/losses and changes in market value) |  | $(74,163,327)$ |  | 7,838,751 |
| Interest and dividends |  | 44,253,447 |  | 46,754,868 |
| Securities lending net income |  | 80,671 |  | 94,899 |
| Total Investment Income |  | $(29,829,209)$ |  | 54,688,518 |
| Less Investment Expenses |  | 3,127,367 |  | 2,663,282 |
| Net Investment Income (loss) |  | $(32,956,576)$ |  | 52,025,236 |
| Total Additions |  | 48,396,443 |  | 122,217,229 |
| DEDUCTIONS |  |  |  |  |
| Monthly benefits |  | 111,985,064 |  | 95,402,854 |
| Administrative expenses |  | 835,215 |  | 665,941 |
| Total Deductions |  | 112,820,279 |  | 96,068,795 |
| NET INCREASE (DECREASE) |  | $(64,423,836)$ |  | 26,148,434 |
| Net Assets Held in Trust for Pension Benefits |  |  |  |  |
| Beginning of Year |  | 1,477,667,384 |  | 1,451,518,950 |
| End of Year | \$ | 1,413,243,548 | \$ | 1,477,667,384 |

See accompanying notes to financial statements.

# NOTES TO FINANCIAL STATEMENTS 

## FOR THE YEARS ENDED JUNE 30, 2001 AND 2000

## 1. PLAN DESCRIPTION:

## General

The Missouri Highway and Transportation Employees' and Highway Patrol Retirement System (the Retirement System) was established by, and is administered by, a Board of Trustees in accordance with the Revised Statutes of Missouri (RSMo). The Retirement System is a single-employer public employee retirement system which provides retirement, death, and disability benefits to full-time (defined as anticipating at least 1,000 hours to be worked annually) employees of the Missouri Department of Transportation and the Missouri State Highway Patrol. Due to the nature of the Retirement System, reliance on the funding from the State of Missouri and the overall control of policies by state officials, the Retirement System is considered a part of the State of Missouri financial reporting entity. The Retirement System is not subject to the provisions of the Employee Retirement Income Security Act of 1974.

Membership in the Retirement System at June 30, 2001 and 2000 consisted of the following:

|  | $\mathbf{2 0 0 1}$ | $\mathbf{2 0 0 0}$ |
| :--- | ---: | ---: |
| Retirees and beneficiaries currently receiving benefits | 6,011 | 5,857 |
| Disability recipients | 111 | 186 |
| Long-term disability recipients | 70 | 76 |
| Vested terminated employees | 1018 | 912 |
| Active with vested benefits | 6,196 | 6,328 |
| Active without vested benefits | 2,910 | 2,843 |
| Total | 16,316 | 16,202 |

## Benefits

Benefits in the Retirement System currently vest after five years of creditable service. For members retiring prior to August 28, 1994, normal retirement age is 65 with four years of creditable service (55 for members of the uniformed patrol), with the retirement annuity based on a formula which considers average final compensation and number of years of creditable service. Non-uniformed employees are eligible for an unreduced annuity at age 65 with four years of creditable service, or age 60 with fifteen years of creditable service, or age 50 with age and service equalling 80 or more. Non-uniformed employees may retire with a reduced annuity on or after age 55 with at least ten years of creditable service. Uniformed employees are eligible for an unreduced annuity at age 55 with four years of creditable service. See "Amendments to the Retirement System" for changes made in normal retirement age and other benefit changes effective August 18, 1994, or January 1, 1995.

State statutes provide for special consultant fees to be paid to certain retirees along with the normal retirement benefits. These retirees have been appointed by the Board of Trustees to serve as consultants on the problems of retirement, aging, and other state matters. For such services provided, special consultant fees are paid monthly in amounts equal to the incremental increases in retirement benefits that would have been received had those persons benefited from changes in the law that affected increases in the retirement formula enacted since their retirement. Benefit provisions are established by state statute and may be amended only by action of the Missouri State Legislature.

## Tinancial Section

The Retirement System also provides survivor, disability, and lump-sum death benefits. Survivor benefits are payable to a surviving spouse or minor children of active employees who die after earning three years of creditable service. The annuity paid to the survivor is based on a percentage of the accrued benefit at the time of death. All disability benefits are offset by any workers' compensation benefits. Duty-related disability benefits are $70 \%$ (not to exceed $90 \%$ ) of salary at the time of disability. Normal disability benefits are based on the accrued annuity at the date of disability. Long-term disability benefits are $60 \%$ of salary immediately prior to the disability, less any Social Security benefit. Those who retire from active employment subsequent to September 28,1985 , with an immediate pension, are provided a $\$ 5,000$ lump-sum death benefit to be paid to a designated beneficiary.

## Contributions

Contributions to the Retirement System are made by the State of Missouri. Employees do not contribute to the Retirement System. The Retirement System's funding policy provides for actuarially determined employer contributions using the entry-age normal cost method on a closed group basis (consisting of normal cost and amortization of any unfunded accrued liabilities over a 35 -year period). Actuarially determined rates, expressed as percentages of annual covered payroll, provide for amounts sufficient to fund those benefits designated by state statute to be funded in advance. Actuarial assumptions used to compute contribution requirements are the same as those used to compute the pension benefit obligation as discussed in Note 3. Contributions for the special consultant fees are being funded on an actuarial basis.

Contributions totaling $\$ 81,353,019$ and $\$ 70,191,993$ for Fiscal Years 2001 and 2000, respectively, represent funding of normal costs and amortization of the unfunded accrued liability. Contribution rates determined by the Retirement System's actuary for the years ended June 30, 2001, and 2000 are as follows:

20012000

|  | $\frac{\text { Non-uniformed }}{}$ | $\frac{\text { Uniformed }}{}$ | $\frac{\text { Non-uniformed }}{22.00 \%}$ | $\frac{\text { Uniformed }}{30.44 \%}$ |
| :--- | :---: | :---: | :---: | :---: |
| Normal cost <br> Amortization of unfunded <br> accrued liability | $10.68 \%$ | $12.73 \%$ |  |  |
| Expenses | 12.43 | 21.93 |  |  |
| LTD | .18 | .28 | .08 | .08 |
| Total contribution rate | $23.29 \%$ | $34.94 \%$ | $22.08 \%$ | $30.52 \%$ |

## Amendments to the Retirement System

Benefits of the Retirement System, as discussed above, were effected by House Bill 1149 (HB 1149) which was approved and made effective, for most provisions, August 28, 1994, with the remainder effective January 1, 1995. The Bill provides for the following changes:

- Normal Retirement--members 50 or older are entitled to retire with a normal annuity and elect any of the survivor benefits if the sum of their age and service totals 80 or more. This provision was effective August 28, 1994.
- Increase In Formula Multiplier-wthe multiplier utilized in the retirement benefit formula increased from $1.5 \%$ to $1.6 \%$ effective January 1,1995 . This increase is also retroactive to individuals whose retirement date is before January 1, 1995.
- Survivor's Cost of Living Adjustment (COLA)--beneficiaries receiving benefits qualify for the annual minimum $4 \%$ to a maximum $5 \%$ COLA. Those beneficiaries now receiving a benefit are limited to $65 \%$ of the benefit they are receiving in total COLAs. Those who begin receiving COLAs after the effective date are limited to $65 \%$ of their initial benefit.
- Pop-Up Provision--retired members and future retirees whose spouse precedes them in death who have chosen a spouse option that reduced their initial retirement benefit will have their monthly benefit adjusted to the amount they would be receiving if they had not chosen the option. This provision was effective August 28, 1994.
- Minimum Benefit-effective January 1, 1995, the minimum benefit increased to $\$ 15$ from the prior level of $\$ 12$. As a result, a member's normal annuity amount cannot be less than the total years of service multiplied by $\$ 15$.
- Purchase of service for uniformed patrol--effective August 28, 1994, uniformed patrol members who previously served in the police force of any city will be allowed to purchase creditable service time of up to four years maximum.

Benefits of the Retirement System were also affected by House Bill 356 effective August 28, 1997. The amended provisions are as follows:

- For current active and inactive employees, annual COLA's continue at $80 \%$ of the change in the CPI, limited to the $4 \%-5 \%$ range. After the $65 \%$ cap, COLA's will be $80 \%$ of the change in the CPI limited to a range of $0 \%-5 \%$.
- For employees hired after August 28, 1997, the COLA will be $80 \%$ of the change in the CPI, with a range of $0 \%-5 \%$.

On July 10, 1999, Governor Mel Carnahan signed into law Senate Bills 308 and 314 (SB308)-legislation that creates a new retirement plan for eligible state employees. The new retirement plan, effective July 1, 2000, is commonly referred to as the Year 2000 Plan.

This new plan is for employees hired on or after July 1, 2000, that would otherwise be participants in the existing Closed Plan that is administered by the Highway and Transportation Employees' and Highway Patrol Retirement System. All retired members prior to July 1, 2000, will be allowed to participate in the Year 2000 Plan. Furthermore, employees covered by the Closed Plan, who are active on the effective date of the new plan, and terminated-vested members will be able to elect which plan they wish to retire under at the time of retirement.

SB308 also makes the following changes to the Year 2000 Plan as well as the existing Closed Plan:

- Effective July 1, 2000, a member who is not married at retirement but marries thereafter will be allowed to designate a spouse as beneficiary upon completion of one year of marriage. In addition, the member can designate a new spouse as beneficiary upon completion of one year of marriage in the event of the death of a spouse the member was married to at the date of retirement. These designations, however, must occur within six months after the completion of one year of marriage;
- The definition of average compensation is modified to allow the system to consider the compensation an employee would have earned during a medical leave of absence just as if the employee had been able to work. Allows the Final Average Pay (FAP) to be calculated properly based on a state payroll system (lag payroll) adopted on or after January 1, 2000;
- Effective August 28, 1999, SB308 will provide a minimum annuity in the amount of $50 \%$ of a member's FAP to a survivor or unemancipated children under age 21 in the event of duty-related death. In such instances, there is no minimum length of service requirement.


## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

## Basis of Accounting

The financial statements were prepared using the accrual basis of accounting. Plan member contributions are recognized as revenues in the period in which employee services are performed. Expenses are recorded when the corresponding obligations are incurred.

## Method Used to Value Investments

Investments are reported at fair value on a trade date basis. Short-term investments are reported at cost, which approximates fair value. Bonds and stocks traded on a national or international exchange are valued at the reported sales price at current exchange rates. Mortgages are valued on the basis of future principal and interest payments, and are discounted at prevailing interest rates for similar instruments. The fair value of real estate investments is based on independent appraisals. Investments that do not have an established market are reported at estimated fair value.

Dividend income is recognized when dividends are declared. Interest income is recognized when earned.
Investments
20012000

|  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | Carrying |  | Market | Carrying | Market |
| Government and government | $\underline{\text { Amount }}$ |  | Amount | Amount | Amount |
| agency securities | $\$ 313,290,564$ | $\$$ | $318,596,790$ | $\$ 256,304,101$ | $\$$ |
| Corporate bonds | $113,082,946$ | $114,310,861$ | $140,511,417$ | $137,428,774$ |  |
| Common and preferred stocks | $851,132,311$ | $878,252,240$ | $723,488,252$ | $987,372,552$ |  |
| Timberland | $30,000,000$ | $36,747,417$ | $30,000,000$ | $30,054,904$ |  |
| Short-term investments | $58,957,794$ | $59,227,132$ | $60,944,858$ | $61,043,488$ |  |
| Total investments | $\$ 1,366,463,615$ | $\$ 1,407,134,440$ | $\$ 1,211,248,628$ | $\$ 1,469,050,827$ |  |

The timberland investments consist of forestland with trees suitable for harvesting timber.

## Cash

As of June 30, 2001, and 2000, the Retirement System had cash with a book balance of $\$ 852,604$ and ( $\$ 58,906$ ), respectively, and a bank balance of $\$ 317$ and $\$ 328$, respectively. The bank in which this cash is held is required to pledge securities sufficient to collateralize these accounts. As of June 30, 2001, and 2000 , the market value of this collateral was sufficient.

## Categories of Asset Risks

The investments of the Retirement System are governed primarily by an investment authority known as the "prudent person rule." The prudent person rule, as set forth by State statute, establishes a standard for all fiduciaries, which includes anyone that has authority with respect to the fund. The Retirement System's investments are categorized to give an indication of the level of risk assumed by the fund at year-end. Category 1 includes investments that are insured or registered or for which the securities are held by the Retirement System or its agent in the Retirement System's name. Category 2 includes uninsured and unregistered investments for which the securities are held by the counterparty's trust department or agent in the Retirement System's name. Category 3 includes uninsured and unregistered investments for which the securities are held by the counterparty, or by its trust department but not in the Retirement System's name. As of June 30, 2001, and 2000, all investments of the Retirement System, except real estate mortgages, are classified in Category 3. Real estate investments are not considered securities and, as such, are not categorized for credit risk.

## Related-Party Transactions

The Retirement System reimburses the Missouri Highway and Transportation Commission for accounting, management, legal, data processing services, office space, and utilities. This amounted to $\$ 437,156$ for June 30, 2001, and $\$ 343,971$ for June 30, 2000.

## Office Equipment and Fixtures

The office equipment and fixtures which are presented at cost, are depreciated on the straight-line method over the estimated useful lives of the related assets. The estimated useful lives are as follows:

$$
\text { furniture - } 10 \text { years, and equipment }-5 \text { years }
$$

## Receivables

Receivables consist primarily of contributions owed and yet to be remitted by the employer, pending investment trades and interest and dividends.

## Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

## 3. CONCENTRATIONS:

No investments in any one organization (other than those issued by the U.S. Government) represent five percent of plan net assets.

## 4. COMPENSATED DEFERRED ABSENCES:

Expenses for accumulated annual leave earned by employees are recorded when earned by the employee. The balance owed was $\$ 23,389$ and $\$ 17,342$ as of June 30,2001 , and 2000, respectively.

## 5. RETIREMENT PLAN:

The Retirement System employs six people, four full-time and two part-time. Four employees are covered by the Retirement System. Upon retirement, benefits paid to Retirement System employees are considered to be administrative expenses of the System.

## 6. SECURITIES LENDING PROGRAM:

Under the "prudent person" authority of the governing statutes and in accordance with the policies set by the Board of Trustees, the System lends its securities to broker-dealers and banks pursuant to a form of loan agreement. The System's custodial bank is authorized to lend available securities to approved broker-dealers and banks subject to the receipt of acceptable collateral.

During the fiscal year, the System lent securities and received cash, securities insured or guaranteed by the US government or its agencies, and irrevocable bank letters of credit as collateral. The System did not have the ability to pledge or sell collateral securities absent a borrower default. Borrowers were required to deliver collateral for each loan equal to: (1) in the case of loaned securities denominated in dollars or whose primary trading market was located in the United States, $102 \%$ of the market value of the loaned securities; and (2) in the case of loaned securities not denominated in US dollars or whose primary trading market was not located in the United States, $105 \%$ of the market value of the loaned securities.

The System did not impose any restrictions during the fiscal year on the amount of the loans that the custodial bank made on its behalf. There were no failures by any borrowers to return loaned securities or pay distributions thereon during the year. There were no losses during the year resulting from a default of the borrowers or the custodial bank.

The System and borrowers maintained the right to terminate all securities lending transactions on demand. The average duration of cash collateral in a collective investment pool was unavailable as of the report date. Because the loans were terminable at will, their duration did not match the duration of the investments made with the cash collateral. On June 30, 2001 and 2000, the System had no credit risk exposure to borrowers.

At June 30, 2001, and 2000, the System earned $\$ 80,671$ and $\$ 94,899$ respectively on the securities lending program.

## 7. SUBSEOUENT EVENTS:

## BackDROP

Legislation effective January 1, 2002 provides a Deferred Retirement Option Provision (BackDROP) to members of the System. It is available in both the Closed Plan and the Year 2000 Plan.

To be eligible to participate in the BackDROP, a member must have been eligible to retire under normal age and/ or service conditions for at least two years. A retroactive starting date is established for BackDROP purposes which, at the earliest, is the later of: 1) the member's normal retirement date or 2 ) five years prior to the annuity starting date under the retirement plan selected by the member.

The BackDROP period for the accumulation of the BackDROP account is from the retroactive starting date to the annuity starting date. This results in a BackDROP period of two to five years depending upon the individual situation.

A theoretical BackDROP account is accumulated that includes $90 \%$ of the value of the benefit payments that would have been paid during the BackDROP period had the member retired at the retroaction starting date with their respective option election. These payments include applicable post-retirement benefit increases. The member is paid the resulting lump sum value of the BackDROP account as of the annuity starting date or as three equal installments beginning at the annuity starting date.

The annuity benefit payable from the actual retirement date is computed with years of service and average pay as of the retroactive starting date for the BackDROP. Post-retirement benefit increases that occurred during the BackDROP period are applicable in the calculation of the monthly annuity.

## SCHEDULE OF FUNDING PROGRESS

## REQUIRED SUPPLEMENTARY INFORMATION

| Date of Valuation | Actuarial <br> Asset <br> Value (a) | Actuarial Accrued Liability (AAL)Entry Age (b) | $\begin{gathered} \text { Unfunded } \\ \text { AAL (UAAL) (b-a) } \end{gathered}$ | Funded <br> Ratio (a/b) | Covered <br> Payroll (c) | UAAL as a Percentage of Covered Payroll [(b-a)/c] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 06/30/1992 | 622,018,133 | \$ 904,097,721 | \$ 282,079,588 | 68.80\% | \$ 220,919,382 | 127.68\% |
| 06/30/1993 | 688,963,225 | 1,000,704,491 | 311,741,266 | 68.85 | 228,032,159 | 136.71 |
| 06/30/1994 | 746,946,221 | 1,204,313,635 | 457,367,414 | 62.02 | 236,748,214 | 193.19 |
| 06/30/1995 | 831,031,253 | 1,330,909,279 | 499,878,026 | 69.95 | 243,561,510 | 205.24 |
| 06/30/1996 | 916,553,828 | 1,429,910,844 | 513,357,016 | 64.10 | 254,712,739 | 201.54 |
| 06/30/1997 | 1,015,906,708 | 1,651,811,690 | 635,904,982 | 61.50 | 271,070,643 | 234.59 |
| 06/30/1998 | 1,126,961,804 | 1,744,052,411 | 617,090,607 | 64.62 | 278,690,426 | 221.43 |
| $06 / 30 / 1999^{(3)}$ | 1,242,744,403 | 2,052,700,427 | 809,956,023 | 60.54 | 288,068,083 ${ }^{(2)}$ | 281.17 |
| 06/30/2000 ${ }^{(4)}$ | 1,339,228,528 | 2,180,963,695 | 841,735,167 | 61.41 | $301,421,805^{(2)}$ | 279.25 |
| 06/30/2000 ${ }^{(5)}$ | 1,422,796,011 | 2,188,826,322 | 766,030,311 | 65.00 | $301,421,805^{(2]}$ | 254.14 |
| 06/30/2001 | 1,520,800,409 | 2,301,402,527 | 780,602,118 | 66.08 | $323,400,023^{(2)}$ | 241.37 |
| Since the Long-Term Disability (LTD) Plan uses the aggregate funding method, this schedule is not required for the LTD Plan and the assets and liabilities have been excluded. |  |  |  |  |  |  |
| ${ }^{\text {2) }}$ Estimated. |  |  |  |  |  |  |
| ${ }^{(3)}$ Introduction of Year 2000 Plan; change in actuary. |  |  |  |  |  |  |
| ${ }^{4}$ ) Old assumptions. |  |  |  |  |  |  |
| ${ }^{(5)}$ New assumptions adopted. |  |  |  |  |  |  |

# SCHEDULE OF EMPLOYER CONTRIBUTIONS AND DEVELOPMENT OF NET PENSION OBLIGATIONS 

| YEAR ENDED JUNE 30, 2001 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Uniform |  |  |  |  |  |  |  |
| Fiscal Year Ending | Covered Payroll | Actual Employer Contributions | Actual Employer Contribution \% | $\begin{aligned} & \text { Required } \\ & \text { Contribution } \\ & \text { (ARC)\% } \end{aligned}$ | Annual Pension cost (APC) | Annual Percentage of APC Contributed | Net Pension Obligation |
| 06/30/1992 | \$ 30,606,601 | \$ 11,101,014 | 36.27\% | 36.27\% | \$ 11,101,014 | 100.00\% | 0 |
| 06/30/1993 | 31,004,803 | 9,868,829 | 31.83 | 31.83 | 9,868,829 | 100.00 | 0 |
| 06/30/1994 | 32,715,429 | 9,739,383 | 29.77 | 29.77 | 9,739,383 | 100.00 | 0 |
| 06/30/1995 | 35,232,287 | 14,462,854 | 41.05 | 41.05 | 14,462,854 | 100.00 | 0 |
| 06/30/1996 | 39,557,621 | 15,743,114 | $39.17{ }^{(3)}$ | 39.17 | 15,743,114 | 100.00 | 0 |
| 06/30/1997 | 42,242,106 | 16,546,233 | 39.17 | 39.17 | 16,546,233 | 100.00 | 0 |
| 06/30/1998 | 43,987,039 | 16,600,708 | 37.74 | 37.74 | 16,600,708 | 100.00 |  |
| 06/30/1999 ${ }^{(4)}$ | 43,882,573 ${ }^{(2)}$ | 13,901,999 | 31.68 | 31.68 | 13,901,999 | 100.00 | 0 |
| $06 / 30 / 2000{ }^{(5)}$ | 44,297,237 ${ }^{(2)}$ | 13,484,079 | 30.44 | 30.44 | 13,484,079 | 100.00 | 0 |
| 06/30/2001 | 50,088,675 ${ }^{(2)}$ | 17,500,983 | 34.94 | 34.94 | 17,500,983 | 100.00 |  |

(1) Contributions for the Long-Term Disability Plan are de minimus and are excluded from this schedule.
${ }^{(2)}$ Estimated.
(3) $41.05 \% \quad 7 / 1 / 95-10 / 31 / 95$
39.17\% 11/1/95-6/30/96
${ }^{(4)}$ Introduction of Year 2000 Plan; change in actuary.
${ }^{(5)}$ New assumptions adopted.
Non-Uniform

| Fiscal Year Ending | Covered Payroll | Actual Employer Contributions | Actual Employer Contribution \% | Annual Required Contribution <br> (ARC) \% | Annual Pension cost (APC) | $\begin{aligned} & \text { Percentage } \\ & \text { of APC } \\ & \text { Contributed } \end{aligned}$ | Net Pension Obligation |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 06/30/1992 | \$190,312,781 | \$37,929,337 | 19.93\% | 19.93\% | \$37,929,337 | 100.00\% | 0 |
| 06/30/1993 | 197,027,356 | 41,454,556 | 21.04 | 21.04 | 41,454,556 | 100.00 | 0 |
| 06/30/1994 | 204,032,785 | 40,949,380 | 20.07 | 20.07 | 40,949,380 | 100.00 | 0 |
| 06/30/1995 | 208,329,222 | 56,144,725 | 26.95 | 26.95 | 56,144,725 | 100.00 | 0 |
| 06/30/1996 | 215,155,118 | 56,842,321 | $26.15{ }^{(3)}$ | 26.15 | 56,842,321 | 100.00 | 0 |
| 06/30/1997 | 228,828,537 | 59,838,662 | 26.15 | 26.15 | 59,838,662 | 100.00 | 0 |
| 06/30/1998 | 234,703,387 | 61,140,232 | 26.05 | 26.05 | 61,140,232 | 100.00 | 0 |
| 06/30/1999 ${ }^{(4)}$ | 244,185,511 ${ }^{(2)}$ | 54,990,577 | 22.52 | 22.52 | 54,990,577 | 100.00 | 0 |
| 06/30/2000 ${ }^{(5)}$ | 257,124,568 ${ }^{(2)}$ | 56,567,405 | 22.00 | 22.00 | 56,567,405 | 100.00 | 0 |
| 06/30/2001 | 273,311,348 ${ }^{(2)}$ | 63,654,213 | 23.29 | 23.29 | 63,654,213 | 100.00 | 0 |

${ }^{(1)}$ Contributions for the Long-Term Disability Plan are de minimus and are excluded from this schedule.
${ }^{(2)}$ Estimated.
(3) $26.95 \% \quad 7 / 1 / 95-10 / 31 / 95$
26.15\% 11/1/95-6/30/96
${ }^{(4)}$ Introduction of Year 2000 Plan; change in actuary.
(5) New assumptions adopted.

## NOTES TO THE SCHEDULES OF TREND INFORMATION

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

Valuation Date $\qquad$ June 30, 2001
Actuarial Cost Method $\qquad$ Entry Age Normal Amortization Method $\qquad$ Level Percent, Closed
Remaining Amortization Period. $\qquad$ 35 Years
Asset Valuation Method $\qquad$ 3-Year Smooth Market Average

Actuarial Assumptions:
Investment Rate of Return $\qquad$ $8.25 \%$ Projected Salary Increases* $\qquad$ 4.3\% to 8.0\%
*Includes Inflation at $\qquad$ . $4.0 \%$
Cost-of-living Allowances

## SCHEDULE OF ADMINISTRATIVE EXPENSES

YEAR ENDED JUNE 30, 2001 REQUIRED SUPPLEMENTARY INFORMATION

|  | 2001 | 2000 |  |
| :---: | :---: | :---: | :---: |
| PERSONAL SERVICES |  |  |  |
| Salary | \$ 156,203 | \$ | 125,557 |
| Employee Fringe Benefits | 52,883 |  | 40,974 |
| Total Personal Services | 209,086 |  | 166,531 |
| PROFESSIONAL SERVICES |  |  |  |
| Actuary | 35,000 |  | 22,755 |
| Audit | 6,300 |  | 9,525 |
| Government Consultant | 15,000 |  | 15,000 |
| Total Professional Services | 56,300 |  | 47,280 |
| MISCELLANEOUS |  |  |  |
| Agency expense | 437,156 |  | 343,971 |
| Depreciation | 13,355 |  | 8,772 |
| Board \& Staff Development | 25,461 |  | 35,632 |
| Office supplies | 16,955 |  | 10,410 |
| Postage | 36,915 |  | 40,359 |
| Insurance premium | 343 |  | 343 |
| Bank service charge | 5,132 |  | 4,953 |
| Other | 34,512 |  | 7,790 |
| Total Miscellaneous | 569,829 |  | 452,130 |
| Total Administrative Expenses | \$ 835,215 | \$ | 665,941 |

## SCHEDULE OF INVESTMENT EXPENSES

YEAR ENDED JUNE 30, 2001

|  | Assets Under <br> Mgt. at 6/30/01 <br> (market value) | Fees Accrued <br> During FY01 |
| :--- | ---: | ---: |
| Investment Manager Fees: |  |  |
| UMB Investment Advisors | $\$ 747,017,047$ | $\$ 638,922.00$ |
| Rothschild Asset Management | $80,889,777$ | $446,112.79$ |
| Alliance Capital Management | $136,603,822$ | $499,907.01$ |
| Wachovia Corporation | $36,747,417$ | $284,169.48$ |
| Rockwood Capital Advisors | $181,204,887$ | $99,843.14$ |
| Artisan Partners | $70,780,660$ | $210,671.90$ |
| Wellington Management Company | $152,051,798$ | $\underline{262,133.50}$ |
| Total Investment Manager Fees |  | $2,441,759.00$ |
|  |  |  |
| Other Investment Fees: |  | $95,000.00$ |
| Asset Consulting Group |  | $340,682.00$ |
| Investment Expenses |  | $689,926.00$ |
| Investment Custodian (UMB) |  | $\$ 3,127,367.00$ |
| Total Other Investment Fees |  |  |
| Total Investment Expense |  |  |

## Tnuestment Section

In This Section<br>Letter from Consultants<br>Investment Summary

Time Weighted Percentage Rates of Return
Schedule of Brokerage Commissions

# LETTER FROM CONSULTANTS 

Asset Consulting Group, Inc.<br>7700 Bonhomme Avemue, Suite 650<br>St. Louis, Missouri 63105

September 30, 2001

Mr. Norman Robinson
Executive Director
Highway and Transportation Employees'
and Highway Patrol Retirement System
P.O. Box 1930

Jefferson City, MO 65102-1930
Dear Mr. Robinson:
As we conclude the fiscal year ending June 30, 2001, we would like to summarize the overall performance of the Highway Transportation Employees' and Highway Patrol Retirement System (HTEHPRS) investment portfolio.

As of June 30, 2001 the total investment portfolio had a market value of $\$ 1,413,407,336$. Equities represented $62.2 \%$ of the total investment portfolio, with the balance of the portfolio being comprised of domestic fixed-income ( $32.5 \%$ ), timber ( $2.6 \%$ ) and cash equivalents ( $2.7 \%$ ).

During the 12 months ending June 30, the Fund had a total return (comprised of both income and price change) of $-2.6 \%$, compared to an overall pension fund median return of $-1.5 \%$ over the same interval. By comparison, an allocation index consisting of unmanaged index returns comprising the same asset allocation as the overall Fund returned $-4.4 \%$ over the same 12 months. During this interval, large cap US stocks suffered setbacks in a difficult market environment significantly lagging the excellent returns from bonds. The S\&P 500 posted a $-14.8 \%$ return, compared to the Lehman Aggregate bond index at $11.2 \%$. Unlike the prior fiscal year, the Fund's large cap domestic equity portfolio outpaced the overall US stock market $(-8.1 \%$, compared to the S\&P 500 at $-14.8 \%)$. During the trailing 12 month period, the Board restructured the overall equity portfolio, which resulted in what we believe will be a better diversified structure leading to more competitive returns.

International equities lagged US equities during this 12 month period, with the MSCI EAFE index posting a return of $-23.3 \%$. Fortunately, the Fund's international equity manager outperformed the EAFE index by a wide margin, with a return of $-15.8 \%$. Although the international equity component detracted from overall equity results, the active management of this allocation provided better than market results during this difficult period.

The Fund's fixed income allocation was diversified among different styles this year and, as with the equity component, a new manager was added to the team of advisors. Since several accounts were transitioned to new management during this 12 month period, including some fixed income allocations, results are mixed over the last fiscal year. In general, the overall fixed income composite posted returns of $10.1 \%$, compared to bond index returns for intermediate to core duration accounts slightly in excess of $11 \%$

Overall Fund returns for the trailing 3 and 5 year periods ending June 30 were $4.1 \%$ and $8.1 \%$, respectively, on an annualized basis. These returns lag the median returns of other pension funds ( $5.8 \%$ and $10.3 \%$, respectively over the 3 and 5 year intervals ).

We appreciate the opportunity to be of service to the HTEHPRS and look forward to working with you and your colleagues.

Sincerely,


Randall L. Kirkland, CFA
Managing Director

# INVESTMENT SUMMARY 

YEAR ENDED JUNE 30, 2001


This Schedule uses book and market values as shown on the financial statement. Short term purchases are increased by the amount bonds becoming less than 1 year; sales represent sales of bonds due in 1 year. Similar adjustments have been made to the respective Bond categories.

# TIME WEIGHTED PERCENTAGE RATES OF RETURN 

FISCAL YEAR ENDED JUNE 30, 2001

Long-Term Averages

|  | 5-Year | 10-Year | $\mathbf{1 9 9 7}$ | $\mathbf{1 9 9 8}$ | $\mathbf{1 9 9 9}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 1}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Fund | $\mathbf{8 . 1 3} \%$ | $\mathbf{9 . 2 1} \%$ | $\mathbf{1 5 . 0 6 \%}$ | $\mathbf{1 4 . 0 7 \%}$ | $\mathbf{1 1 . 7 2 \%}$ | $\mathbf{4 . 4 9 \%}$ | $(\mathbf{3 . 5 1 )} \%$ |
| Equities | 15.45 | 14.25 | 22.97 | 19.80 | 14.83 | 3.71 | $(15.64)$ |
| Fixed Income | 8.16 | 11.17 | 7.58 | 8.51 | 5.04 | 4.96 | 10.56 |
| Short Term | 7.31 | 7.39 | 5.51 | 5.62 | 5.14 | 4.95 | 5.50 |
| MO/Small Business | N/A | N/A | 0.01 | 26.02 | N/A | N/A | N/A |

## LARGEST INVESTMENT HOLDINGS

FISCAL YEAR ENDED JUNE 30, 2001

## Largest Equity Securities

| Shares | Security | Market Value |
| :--- | :--- | ---: |
| 468,760 | Citigroup Inc. | $\$ 24,769,278$ |
| 409,500 | General Electric Co. | $19,963,125$ |
| 185,177 | Exxon Mobil | $16,175,211$ |
| 218,30 | Microsoft Corp. | $15,953,000$ |
| 274,000 | AOL Time Warner Inc. | $14,564,400$ |
| 359,525 | Pfizer Inc. | $14,398,976$ |
| 144,650 | American International Group | $12,296,697$ |
| 183,060 | Verizon Communications | $9,793,710$ |
| 105,700 | Federal National Mortgage Association | $8,987,671$ |
| 185,310 | J.P. Morgan Chase Co. | $8,264,826$ |

## Largest Fixed Income Securities

| Par | Security | Market Value |
| :--- | :--- | ---: |
| $21,743,320$ | Gov't. National Mtg. Assn., $7.50 \%, 12 / 15 / 2028$ | $\$ 22,386,922$ |
| $21,000,000$ | US Treasury Note, 4.25\%, 11/15/2003 | $20,901,510$ |
| $18,785,000$ | Federal Home Loan Mortgage Corp., $5.75 \%, 7 / 15 / 2003$ | $19,154,877$ |
| $11,500,000$ | U.S. Treasury Note, 6\%, 8/15/2009 | $11,960,000$ |
| $11,150,000$ | Federal Home Loan Mortgage Corp., $6.25 \%, 7 / 15 / 2004$ | $11,501,894$ |
| $10,091,504$ | Federal Home Loan Mortgage Corp., $7 \%, 1 / 1 / 2030$ | $10,163,356$ |
| $9,470,000$ | U.S. Treasury Note, 5.75\%, 11/15/2005 | $9,751,164$ |
| $6,700,000$ | Federal Home Loan Mortgage Corp., $6.875 \%, 1 / 15 / 2005$ | $7,041,298$ |
| $6,403,671$ | Federal Home Loan Mortgage Corp., $7.50 \%, 10 / 1 / 2029$ | $6,538,148$ |
| $5,969,715$ | Fed. National Mtg. Assn., 7.50\%, $10 / 1 / 2029$ | $6,097,049$ |

Space and cost restrictions make it impractical to print the entire investment portfolio in this report. However, a portfolio listing is available for review in the office of the Executive Director of the Highway and Transportation Employees' and Highway Patrol Retirement System.

## SCHEDULE OF BROKERAGE COMMISSIONS

| Investment Brokerage Firm | Units | Commission | Commission Rate |
| :---: | :---: | :---: | :---: |
| ABN AMRO Incorporated | 156,525 | \$ 9,119.17 | \$ 0.058 |
| Adams, Harkness \& Hill, Inc. | 13,100 | 252.00 | 0.019 |
| Allen \& Company | 2,600 | 130.00 | 0.050 |
| Arnhold \& S. Bleichroeder, Inc. | 11,700 | 585.00 | 0.050 |
| Autranet A Division of BNY ESI \& Co. | 2,100 | 86.00 | 0.041 |
| Baird, Robert W., \& Company Incorporated | 122,700 | 5,383.00 | 0.044 |
| Banc/America Secur.LLC, Montgomery DI | 282,098 | 10,883.90 | 0.039 |
| Bear Stearns | 8,500 | 425.00 | 0.050 |
| Bear Stearns \& Co Inc. | 728,578 | 30,370.48 | 0.042 |
| Bernard Herold \& Co., Inc. | 7,800 | 390.00 | 0.050 |
| BNY Brokerage Inc. | 100 | 3.00 | 0.030 |
| BNY ESI \& Co - Alpha Division | 453,800 | 6,807.00 | 0.015 |
| Boston Institutional Services, Inc. | 324,799 | 11,093.95 | 0.034 |
| Bridge Trading Company | 167,100 | 4,483.00 | 0.027 |
| Broadcort Cap Corp./Sub of MLPF \& S | 9,900 | 495.00 | 0.050 |
| Brown Brothers Harriman \& Co. | 32,734 | 1,636.70 | 0.050 |
| B-Trade Services LLC | 13,700 | 205.50 | 0.015 |
| Buckingham Research Group, Inc. | 135,400 | 7,548.00 | 0.056 |
| Cantor Fitzgerald \& Co. | 457,600 | 6,518.00 | 0.014 |
| Capital Asset Advisors | 12,700 | 635.00 | 0.050 |
| Capital Institutional Services, Inc. | 806,675 | 24,310.75 | 0.030 |
| Chapman Company (The) | 9,600 | 414.00 | 0.043 |
| Charles Schwab \& Co., Inc. | 14,700 | 735,00 | 0.050 |
| CIBC World Markets Corp | 148,500 | 7,686.00 | 0.052 |
| Citation Group/BCC CLRG | 59,900 | 3,062.00 | 0.051 |
| Conning \& Co/BCC CLRG | 50,200 | 2,534.00 | 0.050 |
| Correspondent Services Corporation | 27,400 | 1,382.00 | 0.050 |
| Credit Suisse First Boston Corporation | 653,789 | 17,576.25 | 0.027 |
| Davidson, D.A., \& Co. Incorporated | 51,600 | 2,248.00 | 0.044 |
| DB Clearing Services | 101,300 | 3,739.00 | 0.037 |
| Deutsche Bank Securities, Inc. | 537,489 | 19,468.45 | 0.036 |
| Devon Securities | 2,400 | 120.00 | 0.050 |
| Direct | 200 | 6.00 | 0.030 |
| Donaldson Lufkin \& Jenrette Sec Corp | 421,800 | 17,018.00 | 0.040 |
| Dowling \& Partners Securities, LLC. | 19,100 | 955.00 | 0.050 |
| Dresdner Kleinwort Wasserstein Sec. | 76,200 | 3,804.00 | 0.050 |
| Edwards, A.G., \& Sons, Inc. | 114,700 | 5,953.00 | 0.052 |
| Factset Data Systems (thru Bear Stearns) | 78,400 | 3,875.00 | 0.049 |
| First Tennessee Securities Corp. | 43,900 | 2,082.00 | 0.047 |
| First Union Capital Markets | 227,200 | 12,412.00 | 0.055 |
| Fox-Pitt Kelton Inc. | 37,600 | 2,132.00 | 0.057 |
| Frank Russell Securities, Inc. | 50,000 | 2,500.00 | 0.050 |
| Gerard Klauer Mattison \& Company | 29,900 | 989.00 | 0.033 |
| Glazer, C.L., \& Company | 53,300 | 2,714.00 | 0.051 |
| Goldman, Sachs \& Co. | 887,713 | 27,416.80 | 0.031 |
| Gordon, Haskett \& Company | 5,800 | 290.00 | 0.050 |
| Heflin \& Co., LLC | 2,500 | 100.00 | 0.040 |
| Hoak Breedlove Wesneski \& Co. | 4,000 | 174.00 | 0.044 |
| Hoenig \& Company Inc. | 121,800 | 5,994.50 | 0.049 |
| Howard Weil Division - Legg Mason | 17,200 | 860.00 | 0.050 |
| Ingalls \& Snyder | 15,200 | 760.00 | 0.050 |
| Instinet | 174,700 | 3,132.00 | 0.018 |
| Invemed Associates Inc. (Thru 352) | 11,600 | 580.00 | 0.050 |
| Investec Ernst \& Company | 75,750 | 2,290.50 | 0.030 |
| Investment Technology Group, Inc. | 211,800 | 4,236.00 | 0.020 |
| ISI Group Inc. | 8,700 | 522.00 | 0.060 |
| J.P. Morgan Securities, Inc. | 217,800 | 9,304.00 | 0.043 |
| Janney Montgomery Scott Inc. | 131,700 | 7,902.00 | 0.060 |
| Jefferies \& Company | 272,250 | 4,898.00 | 0.018 |
| Johnson Rice \& Co. | 2,500 | 125.00 | 0.050 |
| Jones \& Associates | 174,200 | 7,226.00 | 0.041 |
| Josephthal Lyon \& Ross | 21,400 | 1,070.00 | 0.050 |

## SCHEDULE OF BROKERAGE COMMISSIONS

 (continued)| Investment Brokerage Firm | Units | Commission | Commission Rate |
| :---: | :---: | :---: | :---: |
| Keefe Bruyette and Woods Inc. | 18,200 | \$ 1,061.00 | \$ 0.058 |
| King, CL, \& Associates Inc. | 49,060 | 2,877.60 | 0.059 |
| Knight Securities Broadcort Cap Clea | 28,500 | 289.00 | 0.010 |
| KV Execution Services LLC | 6,100 | 122.00 | 0.020 |
| Leerink Swann \& Co./IPO | 1,100 | 55.00 | 0.050 |
| Legg Mason Wood Walker, Inc. | 27,900 | 1,329.00 | 0.048 |
| Lelman Brothers Inc. | 997,343 | 40,123.11 | 0.040 |
| Lewco Securities Agent/Chase H \& Q | 31,000 | 1,218.00 | 0.039 |
| Lewco Securities Agt/BNY Clear Serv | 6,000 | 300.00 | 0.050 |
| Lynch Jones \& Ryan Inc | 343,488 | 16,836.96 | 0.049 |
| M. Ramsey King Securities Inc. | 12,000 | 600.00 | 0.050 |
| Maxus Corp. | 3,000 | 180.00 | 0.060 |
| McDonald \& Company Securities, Inc, | 109,900 | 4,496.00 | 0.041 |
| McMahan Securities Co., L.P. | 6,100 | 305.00 | 0.050 |
| Merrill Lynch Professional Clearing | 12,800 | 768.00 | 0.060 |
| Merrill Lynch, Pierce, Fenner \& Smith | 2,219,939 | 73,383.26 | 0.033 |
| Moors \& Cabot, Inc./IPO Tracking | 40,500 | 1,215.00 | 0.030 |
| Morgan Keegan \& Company Inc. | 10,000 | 569.00 | 0.057 |
| Morgan Stanley \& Co., Incorporated | 756,730 | 21,816.80 | 0.029 |
| Neuberger and Berman | 10,800 | 540.00 | 0.050 |
| Northeast Securities, Inc. | 8,100 | 405.00 | 0.050 |
| Pacific Crest Securities | 12,500 | 625,00 | 0.050 |
| Pacific Growth Equities | 2,700 | 135.00 | 0.050 |
| Pennsylvania Merchant Group Limited | 34,200 | 1,710.00 | 0.050 |
| Precursor Group Inc. (the) | 14,600 | 730.00 | 0.050 |
| Prudential Securities Incorporated | 717,975 | 24,200.36 | 0.034 |
| Punk, Ziegel \& Knoell/IPO Tracking | 19,200 | 960.00 | 0.050 |
| Raymond James \& Associates Inc. | 75,200 | 4,056.00 | 0.054 |
| RBC Dain Rauscher Inc. | 22,600 | 110.00 | 0.005 |
| Robertson Stephens, Inc. | 160,500 | 5,082.00 | 0.032 |
| Salomon Smith Barney Inc. | 832,277 | 37,367.50 | 0.045 |
| Sanders Morris Mundy | 6,400 | 320.00 | 0.050 |
| Sanford C. Bernstein \& Co., LLC | 153,100 | 8,562.00 | 0.056 |
| Scotia Capital (USA) Inc. | 1,900 | 95.00 | 0.050 |
| Scott \& Stringfellow, Inc. | 49,200 | 1,534.00 | 0.031 |
| SG Cowen Securities Corp. | 383,600 | 20,711.00 | 0.054 |
| Sidoti and Company, LLC | 13,800 | 804.00 | 0.058 |
| Soundview Technology Group Inc. | 44,000 | 2,200.00 | 0.050 |
| Standard \& Poors Securities Inc | 130,400 | 5,099.50 | 0.039 |
| Stephens, Inc. | 13,900 | 557.00 | 0.040 |
| Stifel, Nicolaus \& Co., Inc. | 3,200 | 160.00 | 0.050 |
| Sturdivant \& Co., Inc. | 5,500 | 275.00 | 0.050 |
| Suntrust Capital Markets, Inc. | 74,100 | 3,458.00 | 0.047 |
| Suntrust Equitable Securities | 8,500 | 510.00 | 0.060 |
| Thomas Weisel Partners, LLC | 80,500 | 1,586.00 | 0.020 |
| Thomson Institutional Services, Inc. | 7,000 | 350.00 | 0.050 |
| Tucker Anthony Cleary Gull | 13,500 | 565.00 | 0.042 |
| U.S. Bancorp Piper Jaffray Inc | 110,600 | 3,523.00 | 0.032 |
| UBS Painewebber Inc. | 54,400 | 3,050.00 | 0.056 |
| UBS Warburg LLC | 469,300 | 21,202.00 | 0.045 |
| US Clearing Institutional Trading | 69,400 | 3,491.00 | 0.050 |
| Van Der Moolen Spec USA, LLC Retail | 1,900 | 95.00 | 0.050 |
| Veritas Securities | 63,300 | 2,338.00 | 0.037 |
| Wachovia Securities Inc. | 4,900 | 245.00 | 0.050 |
| Weiss, Peck \& Greer L.L.C. | 14,200 | 741.00 | 0.052 |
| Wells Fargo Van Kasper, LLC | 7,900 | 474.00 | 0.060 |
| Westminster RES ASOC/Broadcort Capt | 20,300 | 1,015.00 | 0.050 |
| William Blair \& Company, LLC | 7,400 | 391.00 | 0.053 |
| Wilshire Associates Incorporated | 708,206 | 22,399.21 | 0.032 |
| Total Brokerage Fees | 18,026,718 | 660,862.25 | 0.037 |

## Actuarial Section

In This Section<br>Actuary's Certification Letter<br>Summary of Actuarial Methods and Assumptions<br>Schedule of Active Member Valuation Data<br>Summary of Plan Provisions<br>Legislative Changes

# ACTUARY'S CERTIFICATION LETTER 



GABRIEL, ROEDER, SMITH \& COMPANY Consultants \& Actuaries

One Towns Square • Suite $800 \bullet$ Southfield, Michigan $48076 \bullet 248-799-9000 \bullet 800-521-0498 \bullet$ lax 248-799-9020

February 19, 2003

The Retirement Board
Highway and Transportation Employees
and Highway Patrol Retirement System
P.O Box 1930

Jefferson City, Missouri 65102-1930
Dear Board Members:
The basic financial objective of the Highway and Transportation Employee's and Highway Patrol Retirement System (HTEHPRS) is to establish and receive contributions that:
(1) when expressed in terms of percents of active member payroll will remain approximately level from generation to generation of Missouri citizens, and which
(2) when combined with present assets and future investment return will be sufficient to meet the present and future financial obligations of HTEHPRS.

In order to measure progress toward this fundamental objective, HTEHPRS has annual actuarial valuations performed. The valuations (i) measure present financial position, and (ii) establish contribution rates that provide for the current cost and level percent of payroll amortization of unfunded actuarial accrued liabilities over a reasonable period. An actuarial valuation was performed based upon data and assumptions as of June 30, 2001. This valuation indicates that the contribution rates, established by the Board of Trustees for the benefits scheduled to be in effect on July 1, 2002, meet the basic financial objective. The calculated contribution rates are $22.67 \%$ of payroll for the 8,010 non-uniformed employees and $32.56 \%$ of payroll for the 1,077 uniformed patrol employees.

The actuarial valuations are based upon financial and participant data that is prepared by retirement system staff. The valuations are based on assumptions regarding future rates of investment return and inflation, rates of retirement, turnover, death, and disability among members and their beneficiaries. We review the data for internal and year-to-year consistency as well as general reasonableness prior to its use in the actuarial valuations. It is also summarized and tabulated for the purpose of analyzing trends. The assumptions were adopted by the Board of Trustees and were based upon actual experience of HTEHPRS during the period July 1, 1994 to June 30, 1999. Assets were valued using the three-year smoothing method. The assumptions and methods utilized in this valuation, in our opinion, meet the parameters established by Governmental Accounting Standards Board Statement No. 25.

The current benefit structure is outlined in the introductory section. We provided the information used in the supporting schedules in the actuarial section and the Schedules of Funding Progress in the financial section, as well as the employer contribution rates shown in the Schedule of Employer Contributions in the financial section.

Based upon the valuation results, it is our opinion that the Highway and Transportation Employees' and Highway Patrol Retirement System for the State of Missouri continues in sound condition in accordance with actuarial principles of level percent of payroll financing.


Brian B. Mürphy, F.S.A.

Senior Consultant \& Actuary

## SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS

## METHODS

## Asset Valuation Method

Valuation assets were determined using a three-year smoothed market value method. This method recognizes assumed investment return fully each year. Differences between actual and assumed investment return are phased in over a closed three-year period.

## Actuarial Cost Method

The Entry Age Normal actuarial cost method was used for determining liabilities and normal cost. Normal costs were computed as a level percent of pay and were based on the Year 2000 Plan. Unfunded Actuarial Accrued Liabilities were amortized as a level percent of payroll over 35 years. For this purpose, covered payroll is assumed to increase 4\% per year. Continued yearly reductions in the amortization period will result in a 30 -year period being used for the June 30,2006 valuation. This is consistent with GASB amortization period requirements.

## ASSUMPTIONS


$8.25 \%$ per annum, net of administrative fees.
$0.21 \%$ of payroll.
$90 \%$ of employees dying in-service will have an eligible beneficiary.

The annual Consumer Price Index is assumed to be $3.5 \%$.

All future disabilities are assumed covered by LTD benefits.
It was assumed Workers Compensation Indemnity Benefits would be zero and that Social Security Disability PIA benefits would always apply.

Rates used in evaluating allowances to be paid to non-disabled pensioners were the 1971 Group Annuity Mortality (GAM) tables projected to the year 2000 set back one year for males and seven years for females. Pre-retirement mortality used was $50 \%$ of the 71GAM2000 tables set back one year for males and seven years for females. Disabled pension mortality was based on PBGC Disabled Mortality tables.

## SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS

Salary Increase Assumptions for an Individual Member

|  | Non-Uniform |  |  |  | Uniformed |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Age |  <br> Seniority | Base <br> (Economic) | Increase <br> Next Year |  |  <br> Seniority |  | Base <br> (Economic) |
| 20 | $3.00 \%$ | $4.00 \%$ | $7.00 \%$ |  | Increase <br> Next Year |  |  |
| 25 | 3.00 | 4.00 | 7.00 |  | 3.50 | $4.00 \%$ | $8.00 \%$ |
| 30 | 2.85 | 4.00 | 6.85 |  | 2.60 | 4.00 | 7.50 |
| 35 | 2.20 | 4.00 | 6.20 |  | 4.70 | 4.00 | 6.60 |
| 40 | 1.70 | 4.00 | 5.70 |  | 0.90 | 4.00 | 5.70 |
| 45 | 1.30 | 4.00 | 5.30 |  | 0.40 | 4.00 | 4.90 |
| 50 | 0.80 | 4.00 | 4.80 |  | 0.30 | 4.00 | 4.40 |
| 55 | 0.60 | 4.00 | 4.60 |  | 0.30 | 4.00 | 4.30 |
| 60 | 0.30 | 4.00 | 4.30 |  | 0.30 | 4.00 | 4.30 |
|  |  |  |  |  |  | 4.00 | 4.30 |

Serverance Assumptions Annual Terminations Per 100 Employees

Less Than 5 Years of Service

|  | Number <br> Service |
| :---: | :---: |
| Terminating |  |

More Than 5 Years of Service

| Sample | Number |
| :---: | :---: |
| Age | Terminating |

m基






| Non-Uniformed Females | $0-1$ | 16 | 25 | 5.5 |
| :---: | :---: | :---: | :---: | :---: |
|  | $1-2$ | 9 | 35 | 4.6 |
|  | $2-3$ | 8 | 45 | 3.0 |
|  | $3-4$ | 7 | 55 | 1.4 |
|  | $4-5$ | 6 | - | - |

[^0]
# SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS 



## SCHEDULE OF ACTIVE MEMBER VALUATION DATA

| Actuarial <br> Valuation Date | Number | Covered <br> Payroll | Average <br> Pay | \% Change <br> in Average Pay <br> from Prior Year |
| :---: | :---: | :---: | :---: | :---: |
| $06 / 30 / 1992$ | 8,591 | $228,503,592$ | 26,598 | $0.1 \%$ |
| $06 / 30 / 1993$ | 8,658 | $236,236,082$ | 27,285 | 2.6 |
| $06 / 30 / 1994$ | 8,849 | $242,864,780$ | 27,445 | 0.6 |
| $06 / 30 / 1995$ | 8,904 | $250,529,253$ | 28,137 | 2.5 |
| $06 / 30 / 1996$ | 9,023 | $264,196,115$ | 29,280 | 4.1 |
| $06 / 30 / 1997$ | 8,997 | $280,209,116$ | 31,145 | 6.4 |
| $06 / 30 / 1998$ | 8,871 | $284,889,796$ | 32,115 | 3.1 |
| $06 / 30 / 1999$ | 9,140 | $298,673,247$ | 32,678 | 1.8 |
| $06 / 30 / 2000$ | 9,171 | $312,532,009$ | 34,078 | 4.3 |
| $06 / 30 / 2001$ | 9,087 | $327,049,257$ | 35,991 | 5.6 |
|  |  |  | Ten Year Average | $3.1 \%$ |

## SUMMARYOFPLAN PROVISIONS *

## AS OF JUNE 30, 2001

Comparison of the Closed Plan and the Year 2000 Plan

| Plan Provision | Closed Plan | Year 2000 Plan |
| :---: | :---: | :---: |
|  | Members who work in a position normally requiring at least 1,000 hours of work a year. | Members hired for the first time on or after July 1, 2000, in a position requiring at least 1,000 hours of work a year. <br> Members who left state employment prior to becoming vested and return to work on or after July 1, 2000, in a position normally requiring at least 1,000 hours of work a year. |
| Nomal Retirement Eligibility <br>  <br>  fand <br>  | Age 65 \& active with 4 years of service. Age 65 with 5 years of service. Age 60 with 15 years of service. "Rule of 80 "/minimum age 50 . Age 55 with 4 years of service. (uniform members only) | Age 62 with 5 years of service. "Rule of 80 "/minimum age 50 . Mandatory retirement at age 60 with 5 or more years credited service (uniform members only). |
| Early Retirement Eligibility | Age 55 with 10 years of creditable service. | Age 57 with 5 years creditable service. |
|  | $1.6 \%$ x FAP ${ }^{* *}$ x service. <br> (Base benefit is increased by $331 / 3 \%$ for uniform patrol members only.) <br> Not available. | $1.7 \%$ x FAP** x service <br> $0.8 \% \times$ FAP** x service (until age 62 - only if retiring under "Rule of 80 "). |
| Vesting , \% W Wayk | 5 years of service. | 5 years of service. |
|  | If hired before August 28, 1997, annual COLA is a minimum of $4 \%$, maximum $5 \%$. Based on $80 \%$ of the increase in the CPI over the previous year, up to a maximum of $65 \%$ of original benefit. After $65 \%$ cap is reached, annual COLA increases will be equal to $80 \%$ of the change in the CPI, with a maximum of $5 \%$. If hired after the above date, annual COLAs will be equal to $80 \%$ of the increase in the CPI, maximum $5 \%$, with no guaranteed minimum. | $80 \%$ of increase in CPI with a maximum of $5 \%$. |
|  | A survivor benefit is payable to eligible spouse or children if member has 3 years service calculated using $25 \%$ of the base benefit and increased $5 / 12$ of $1 \%$ for each month of service in excess of 5 years to a maximum of $50 \%$ of the base benefit. <br> The spouse of an active employee who dies after accruing 5 years of creditable service may elect to receive an annuity as if the employee had retired on the date of death and elected a Joint and $100 \%$ survivor annuity. If the spouse dies, leaving eligible children, the payment shall continue until the children reach 21 years of age. <br> Survivor benefit to eligible spouse or children equal to $50 \%$ of final average compensation (no service requirement). | Survivor benefit to eligible spouse calculated using the Joint \& $100 \%$ survivor option or $80 \%$ of the member's life income annuity paid to eligible children. <br> Same |
| Optional Forms of Payment (Death affer retirement) $\qquad$ | Survivor benefit to eligible spouse based on payment option elected at retirement. <br> Payment options include: Life Income Annuity, Unreduced Joint \& $50 \%$ Survivor, Joint \& $100 \%$ Survivor, and 60 or 120 Guaranteed Payments. | Survivor benefit to eligible spouse based on payment option elected at retirement. <br> Payment options include: Life Income Annuity, Joint \& $50 \%$ Survivor, Joint \& $100 \%$ Survivor, and 120 or 180 Guaranteed Payments. |
| Disability | Long-Term Disability, Work Related and Normal Disability | Long-Term Disability, Work Related and Normal Disability |

[^1]
## LEGISLATIVE CHANGES

On July 13, 2001, Governor Bob Holden signed into law Senate Bill 371 (SB 371). Most of the provisions contained in SB 371 consisted of minor modifications to and clarifications of The Closed Plan and The Year 2000 Plan. Two of the more substantive changes contained in the legislation, however, create a BackDROP option for MoDOT and Patrol employees (effective January 1, 2002).

A member may elect a BackDROP option at retirement that would allow for a benefit to be calculated as if the member had retired at a previous date. To be eligible to participate in the BackDROP, a member must have been eligible to retire under normal age and/or service conditions for at least two years. A retroactive starting date is established, which is the later of the member's normal retirement date or five years prior to the annuity starting date. This results in a BackDROP period of two to five years depending on the member's situation. A theoretical BackDROP account is accumulated that includes $90 \%$ of the value of the benefit payments that would have been paid during the BackDROP period. These payments include applicable post-retirement benefit increases, however, no interest is paid. The member is paid the resulting lump sum value of the BackDROP account as of the annuity starting date or as three equal annual installments beginning at the annuity starting date.

## Statistical Section

In This Section

Active Member Data
Terminated Vested Member Data
Schedule of Retired Members by Type of Benefit Schedule of Average Monthly Benefit Payments

Retired Members Data (Ten-Year Averages)
Benefit Recipients
Membership Distribution

## ACTIVE MEMBERDATA

BY AGE

| Age | Total | Department of <br> Transportation | Civilian <br> Patrol | Uniformed <br> Patrol | Retirement <br> System |
| :---: | ---: | ---: | :---: | ---: | :---: |
| $<21$ | 87 | 79 | 7 | - | 1 |
| $21-25$ | 584 | 451 | 58 | 75 | - |
| $26-30$ | 1,062 | 745 | 96 | 221 | - |
| $31-35$ | 1,301 | 907 | 125 | 267 | 2 |
| $36-40$ | 1,491 | 1,169 | 147 | 175 | - |
| $41-45$ | 1,571 | 1,261 | 185 | 125 | - |
| $46-50$ | 1,383 | 1,066 | 193 | 124 | - |
| $51-55$ | 963 | 743 | 143 | 77 | - |
| $56-60$ | 505 | 117 | 74 | 15 | $\mathbf{1}$ |
| $61-65$ | 138 | 16 | 21 | - | - |
| $>65$ | 21 | 6,969 | 1,054 | 1,079 | - |
| Total | 9,106 | 41 | 42 | 37 | $\mathbf{3 6}$ |

BY YEARS OF SERVICE

| Years of <br> Service | Total | Department of <br> Transportation | Civilian <br> Patrol | Uniformed <br> Patrol | Retirement <br> System |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $<\mathbf{1}$ | 1,061 | 931 | 77 | 52 | - |
| $1-5$ | 2,216 | 1,676 | 277 | 262 | 2 |
| $6-10$ | 1,720 | 1,278 | 184 | 258 | - |
| $11-15$ | 1,295 | 930 | 163 | 201 | 1 |
| $16-20$ | 952 | 764 | 120 | 68 | - |
| $21-25$ | 936 | 710 | 110 | 116 | - |
| $26-30$ | 534 | 370 | 86 | 78 | - |
| $31-35$ | 273 | 206 | 29 | 37 | 1 |
| $36-40$ | 94 | 79 | 8 | 7 | - |
| $41-45$ | 23 | 23 | - | - | - |
| $>45$ | 2 | 2,969 | 1,054 | 1,079 | - |
|  |  | $\mathbf{1 1}$ | $\mathbf{1 2}$ | $\mathbf{1 2}$ | $\mathbf{4}$ |

## TERMINATED VESTED MEMBERDATA

BY AGE

| Age | Total | Department of <br> Transportation | Civilian <br> Patrol | Uniformed <br> Patrol |
| :---: | ---: | :---: | :---: | :---: |
| $<21$ | - | - | - | - |
| $21-25$ | 1 | 1 | - | - |
| $26-30$ | 43 | 30 | 5 | 8 |
| $31-35$ | 162 | 121 | 20 | 21 |
| $36-40$ | 230 | 183 | 29 | 18 |
| $41-45$ | 210 | 168 | 28 | 14 |
| $46-50$ | 171 | 118 | 36 | 17 |
| $51-55$ | 144 | 39 | 17 | 13 |
| $56-60$ | 49 | 6 | 2 | - |
| $61-65$ | 8 | - | - | - |
| $>65$ | - | 780 | 147 | 91 |
| Total | 1,018 | 43 | 44 | $\mathbf{4 1}$ |

BY YEARS OF SERVICE

| Years of <br> Service | Total | Department of <br> Transportation | Civilian <br> Patrol | Uniformed <br> Patrol |
| ---: | ---: | ---: | :---: | :---: |
| $<\mathbf{1}$ | 1 | 1 | - | - |
| $1-5$ | 166 | 123 | 23 | 20 |
| $6-10$ | 446 | 356 | 56 | 34 |
| $11-15$ | 259 | 189 | 45 | 25 |
| $16-20$ | 107 | 83 | 16 | 8 |
| $21-25$ | 34 | 25 | 6 | 3 |
| $26-30$ | 5 | - | 1 | 1 |
| $31-35$ | - | 780 | 147 | - |
| Total | $\mathbf{1 , 0 1 8}$ | $\mathbf{1 0}$ | $\mathbf{1 1}$ | $\mathbf{1 0}$ |

## SCHEDULEOF RETIREDMEMBERS <br> BY TYPE OF BENEFIT

## ALL MEMBERS

Type of Benefit

| Amount of Monthly Benefit | Retirement |  | Disability |  | Survivor | Total Recipients |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Normal | Early | Normal | Long-Term |  |  |
| 1-200 | 22 | 19 | 9 | 3 | 366 | 419 |
| 201-400 | 78 | 70 | 17 | 23 | 393 | 581 |
| 401-600 | 194 | 60 | 20 | 16 | 259 | 549 |
| 601-800 | 243 | 32 | 17 | 10 | 167 | 469 |
| 801-1000 | 258 | 18 | 14 | 8 | 117 | 415 |
| 1001-1200 | 301 | 8 | 11 | 5 | 64 | 389 |
| 1201-1400 | 309 | 7 | 10 | 5 | 45 | 376 |
| 1401-1600 | 303 | 7 | 3 | - | 50 | 363 |
| 1601-1800 | 277 | 3 | 5 | - | 43 | 328 |
| 1801-2000 | 295 | 2 | 1 | - | 24 | 322 |
| 2001-2200 | 266 | 1 | 2 | - | 31 | 300 |
| 2201-2400 | 241 | 1 | 1 | - | 22 | 265 |
| 2401-2600 | 231 | - | - | - | 14 | 245 |
| 2601-2800 | 200 | - | 1 | - | 13 | 214 |
| 2801-3000 | 179 | - | - | - | 12 | 191 |
| >3000 | 749 | - | - | - | 17 | 766 |
| TOTALS | 4,146 | 228 | 111 | 70 | 1,637 | 6,192 |

MISSOURI DEPARTMENT OF TRANSPORTATION

| Amount of Monthly Benefit | Type of Benefit |  |  |  | Survivor | Total Recipients |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Retirement |  | Disability |  |  |  |
|  | Normal | Early | Normal | Long-Term |  |  |
| 1-200 | 17 | 16 | 9 | 1 | 347 | 390 |
| 201-400 | 62 | 61 | 15 | 23 | 367 | 528 |
| 401-600 | 165 | 53 | 18 | 11 | 230 | 477 |
| 601-800 | 209 | 26 | 17 | 9 | 143 | 404 |
| 801-1000 | 232 | 17 | 14 | 8 | 93 | 364 |
| 1001-1200 | 270 | 7 | 10 | 3 | 46 | 336 |
| 1201-1400 | 278 | 6 | 9 | 5 | 33 | 331 |
| 1401-1600 | 257 | 7 | 3 | - | 41 | 308 |
| 1601-1800 | 231 | 3 | 3 | - | 25 | 262 |
| 1801-2000 | 260 | 2 | 1 | - | 18 | 281 |
| 2001-2200 | 238 | 1 | 1 | - | 23 | 263 |
| 2201-2400 | 209 | 1 | - | - | 16 | 226 |
| 2401-2600 | 200 | - | - | - | 11 | 211 |
| 2601-2800 | 173 | - | - | - | 12 | 185 |
| 2801-3000 | 140 | - | - | - | 11 | 151 |
| $>3000$ | 329 | - | - | - | 7 | 336 |
| TOTALS | 3,270 | 200 | 100 | 60 | 1,423 | 5,053 |

## SCHEDULE OF RETIRED MEMBERS <br> BY TYPE OF BENEFIT

## CIVILIAN PATROL

Type of Benefit

| Amount of Monthly Benefit | Retirement |  | Disability |  | Survivor | Total <br> Recipients |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Normal | Early | Normal | Long-Terin |  |  |
| 1-200 | 4 | 3 | - | 2 | 16 | 25 |
| 201-400 | 14 | 9 | 1 | - | 14 | 38 |
| 401-600 | 24 | 7 | 2 | 5 | 16 | 54 |
| 601-800 | 31 | 6 | - | 1 | 10 | 48 |
| 801-1000 | 25 | 1 | - | - | 14 | 40 |
| 1001-1200 | 27 | 1 | 1 | 2 | 8 | 39 |
| 1201-1400 | 28 | 1 | 1 | - | 2 | 32 |
| 1401-1600 | 38 | - | - | - | 1 | 39 |
| 1601-1800 | 41 | - | 1 | - | 2 | 44 |
| 1801-2000 | 32 | - | - | - | 2 | 34 |
| 2001-2200 | 22 | - | - | - | . | 22 |
| 2201-2400 | 19 | - | - | - | - | 19 |
| 2401-2600 | 15 | - | - | - | 1 | 16 |
| 2601-2800 | 4 | . | - | - | - | 4 |
| 2801-3000 | 7 | - | - | - | - | 7 |
| $>3000$ | 40 | - | - | - | 2 | 42 |
| TOTALS | 371 | 28 | 6 | 10 | 88 | 503 |

## UNIFORMED PATROL

Type of Benefit

| Amount of | Retirement |  | Disability |  | Survivor | Total <br> Recipients |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Monthly Benefit | Normal | Early | Normal | Long-Term |  |  |


| 1-200 | - | - | - | - | 3 | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 201-400 | 2 | - | 1 | - | 12 | 15 |
| 401-600 | 5 | - | - | - | 13 | 18 |
| 601-800 | 3 | - | - | - | 14 | 17 |
| 801-1000 | 1 | - | - | - | 10 | 11 |
| 1001-1200 | 4 | - | - | - | 10 | 14 |
| 1201-1400 | 3 | - | - | - | 10 | 13 |
| 1401-1600 | 8 | - | - | - | 8 | 16 |
| 1601-1800 | 5 | - | 1 | - | 16 | 22 |
| 1801-2000 | 3 | - | - | - | 4 | 7 |
| 2001-2200 | 6 | - | 1 | - | 8 | 15 |
| 2201-2400 | 13 | - | 1 | - | 6 | 20 |
| 2401-2600 | 16 | - | - | - | 2 | 18 |
| 2601-2800 | 23 | - | 1 | - | 1 | 25 |
| 2801-3000 | 32 | - | - | - | 1 | 33 |
| $>3000$ | 380 | - | - | - | 8 | 388 |
| TOTALS | 504 | - | 5 | 0 | 126 | 635 |

# SCHEDULEOF AVERAGE <br> MONTHLY BENEFIT PAYMENTS 

BY YEARS OF SERVICE



## CIVILIAN PATROL

| 1997 | Average Benefit | 273 | 463 | 602 | 1,066 | 1,536 | 1,954 | 2,086 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Current Retirees | 3 | 2 | 4 | 1 | 4 | 7 | 8 | 0 |
| 1998 | Average Benefit | 0 | 542 | 569 | 1,319 | 1,538 | 1,975 | 2,216 | 2,830 |
|  | Current Retirees | 0 | 3 | 4 | 1 | 6 | 7 | 3 | 2 |
| 1999 | Average Benefit | 0 | 386 | 431 | 1,105 | 1,010 | 2,376 | 2,138 | 0 |
|  | Current Retirees | 0 | 3 | 1 | 3 | 4 | 12 | 5 | 0 |
| 2000 | Average Benefit | 237 | 488 | 561 | 1,079 | 1,696 | 2,470 | 2,938 | 1,895 |
|  | Current Retirees | 2 | 1 | 2 | 6 | 7 | 10 | 5 | 2 |
| 2001 | Average Benefit | 302 | 78 | 647 | 1,179 | 2,141 | 2,058 | 2,926 | 1,591 |
|  | Current Retirees | 3 | 1 | 1 | 4 | 20 | 19 | 12 | 2 |



## RETIRED MEMBERS DATA (TEN-YEAR AVERAGES)

## RETIREMENT AGE / YEARS OF SERVICE / BENEFIT INFORMATION <br> (The information contained in this tabulation relates to current retirees who retired in the years indicated)

| Retired in <br> Fiscal <br> Year | Current <br> Retirees | Average <br> Retirement | Average <br> Service | Average <br> Initial <br> Benefit | Average <br> Benefit on <br> June 30,2001 | Percent <br> of |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Increase |  |  |  |  |  |  |

## CIVILIAN PATROL

| 1992 | 10 | 59.00 | 33.10 | $\$ 1,409.63$ | $\$ 2,221.52$ | 57.60 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1993 | 19 | 60.68 | 28.05 | 988.03 | $1,470.33$ | 48.81 |
| 1994 | 20 | 61.50 | 26.95 | $1,028.41$ | $1,471.23$ | 43.06 |
| 1995 | 30 | 58.87 | 27.23 | 991.81 | $1,423.35$ | 43.51 |
| 1996 | 25 | 60.96 | 26.28 | 953.58 | $1,293.15$ | 35.61 |
| 1997 | 29 | 60.34 | 28.07 | $1,139.47$ | $1,438.69$ | 26.26 |
| 1998 | 26 | 59.46 | 28.54 | $1,273.80$ | $1,560.94$ | 22.54 |
| 1999 | 28 | 58.75 | 29.39 | $1,320.16$ | $1,719.36$ | 30.24 |
| 2000 | 35 | 58.91 | 29.09 | $1,375.81$ | $1,817.39$ | 32.10 |
| 2001 | 62 | 58.23 | 30.92 | $1,986.61$ | $2,041.37$ | 2.76 |



NOTE: Annual cost-of-living adjustments range between $4 \%$ and $5 \%$. The Benefit formula increase of $6.7 \%$ on January 1, 1995, was retroactive.

BENEFITRECIPIENTS


|  | 81 | 69 | 79 | 59 | 62 | 71 | 79 | 77 | 76 | 70 |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| LTD | 81 | 236 | 224 | 218 | 207 | 201 | 196 | 186 | 186 | 111 |
| Disabilities | 245 | 699 | 1,269 | 1,307 | 1,365 | 1,405 | 1,486 | 1,549 | 1,590 | 1,641 |
| Survivors | 2,663 | 2,811 | 2,932 | 3,201 | 3,329 | 3,445 | 3,585 | 3,747 | 2,954 | 4,374 |
| Retirees |  |  |  |  |  |  |  |  |  |  |

MEMBERSHIP DISTRIBUTION


| 園 | Terminated Vested Members | 299 | 311 | 372 | 416 | 498 | 574 | 660 | 762 | 912 |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Benefit Recipients | 3,688 | 4,385 | 4,542 | 4,843 | 5,003 | 5,203 | 5,409 | 5,600 | 5,857 | 6,192 |
| Active Members | 8,891 | 8,658 | $8,849$. | 8,904 | 9,023 | 8,997 | 8,849 | 9,172 | 9,171 | 9,106 |


[^0]:    
    
    
    
    

[^1]:    * This summary describes the plan provisions of the Revised Statutes of Missouri (RSMo.), as amended, that governed the programs, which HTEHPRS administered during the period covered by this report. It does not overrule any applicable statute or administrative rule and, in the event of a conflict, the applicable statute or rule would apply. The Year 2000 Plan is effective July 1, 2000.
    ** Final Average Pay - highest 36 consecutive months of pay.

