

Comprehensive Annual Financial Report

A Component Unit of the State of Ohio Year Ending December 31, 2001

Richard A. Curtis, Executive Director

6161 Busch Boulevard, Suite 119 Columbus, Ohio 43229

Table of Contents

Introductory Section	Page
Certificate of Achievement	
Board of Trustees	
Organizational Chart	
Professional Consultants	
Legislative Summary	8
Letter of Transmittal	9
Financial Section	
Independent Auditors' Report	12
Management's Discussion and Analysis	13
Combining Statement of Plan Net Assets	15
Combining Statement of Changes in Plan Net Assets	
Notes to Financial Statements	17
Required Supplementary Schedules	
Schedule of Employer Contributions	
Schedule of Funding Progress	22
Notes to the Trend Data	
Notes to Required Supplementary Schedules	23
Additional Information	
Schedule of Administrative Expenses	
Schedule of Investment Expenses	
Payments to Consultants	
Independent Auditors' Report on Compliance and on Internal Control	26
Investment Section	
Investment Distribution	28
Ten-Year Investment Comparison	
Investment Review	
Schedule of Investment Performance	
Investment Summary	
Largest Equity Holdings	
Largest Fixed-Income Holdings	
Investment Portfolio	
Summary Schedule of Broker Fees	
Investment Objectives, Policies, and Guidelines	43
Actuarial Section	40
Actuary's Letter	
Summary of Assumptions	50
Accrued Liabilities and Assets Allocated to Retirement, Survivor, and Disability Allowances	
Postemployment Health Care and Medicare Reimbursement	
Active Member DataRetirant and Beneficiary Data	
Analysis of Financial Experience	
Plan Summary	
Fian Summary	34
Statistical Section	70
Revenue by Source	58
Expenses by Type	58
Average Monthly Benefit by Type	59
Number of Benefit Recipients by Type Benefit Expenses by Type	59 59
Мар	60



Introductory Section

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Ohio State Highway Patrol Retirement System

For its Comprehensive Annual Financial Report for the Fiscal Year Ended December 31, 2000

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



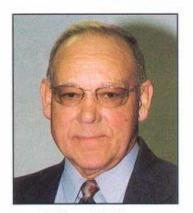
The Ohio State Highway Patrol Retirement System Board of Trustees



Major J.P. Allen Elected Member/Chair



Trooper Dennis Gorski Elected Member/Vice Chair



R. Dean Huffman Retired Member



Sergeant John Allard Elected Member



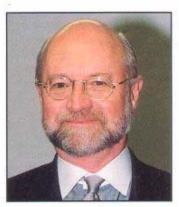
Lieutenant Cory Davies Elected Member



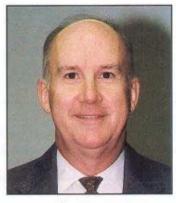
Colonel Kenneth Morckel Statutory Member



O'Neal Saunders Statutory Member representing Jim Petro, Auditor of State



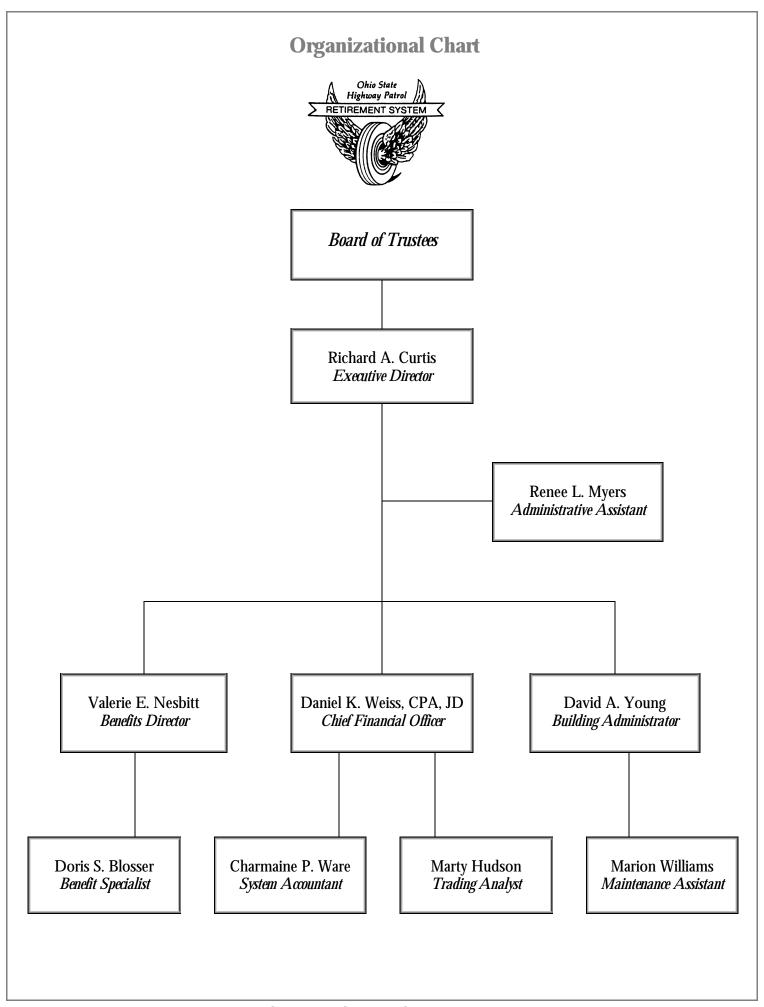
Ken Brunke, Jr. Callan Associates Investment Consultant



Richard A. Curtis Executive Director



Cheryl Pokorny Assistant Attorney General Legal Counsel



Professional Consultants

Medical Advisor

Glenn Mohler, M.D. Columbus, Ohio

Independent Auditor

Clark, Shaefer, Hackett & Company Columbus, Ohio

Actuary

Gabriel, Roeder, Smith & Company Southfield, Michigan

Investment Consultant

Callan Associates Inc. Chicago, Illinois

Investment Managers

Bank of Ireland Asset Management Greenwich, Connecticut International Equity Funds

Brandywine Asset Management Wilmington, Delaware Small/Mid Cap Value Equity

Dresdner RCM Global Investors San Francisco, California Large Cap Growth Equity

Eubel, Brady & Suttman
Dayton, Ohio
Small/Mid Cap Value Equity

Fidelity Management Trust Company Boston, Massachusetts Real Estate Funds

Fifth Third/Maxus Investment Group Cleveland, Ohio Micro Cap Equity

MacKay-Shields Financial Corporation New York, New York Large Cap Value Equity Metropolitan Life Insurance Company New York, New York Real Estate Funds

> Munder Capital Management Birmingham, Michigan Fixed Income

Navellier & Associates Reno, Nevada Small/Mid Cap Growth Equity

Oak Associates Akron, Ohio Large Cap Growth Equity

Pinnacle Associates LTD. New York, New York Small/Mid Cap Core Equity

State Street Global Advisors Boston, Massachusetts Large Cap Indexed Funds

Templeton Institutional Funds Fort Lauderdale, Florida International Equity Funds

> TimberVest Woodstock, Georgia Timberland Real Estate

Legislative Summary

The legislative agenda during 2001 contained very few pension-related issues. The U.S. Congress passed legislation making it possible to transfer funds between various defined contribution plans. For example, individuals may move money from one of the so-called "400" plans to another "400" plan. This legislation created greater portability for people changing jobs. In order to promote increased personal savings and reflect an appropriate inflationary increase, the maximum allowable pre-tax deduction was raised.

The Presidential Commission on Improving Social Security completed its report but did not recommend that all state and local government workers be mandated into Social Security. The Committee reasoned that the issue is too fraught with disagreement, and that this disagreement may delay the implementation of other needed actions.

There are bills pending in Congress that would reduce or eliminate the reduction in Social Security benefits that state and local government workers experience when they receive pension amounts from plans similar to the HPRS. No one expects quick action on any of these bills.

At the state level, there have been several notable legislative actions. The HPRS introduced a benefits enhancement bill during 2001 and very little action was taken on the bill by the end of the year. Because of declining investment returns and steep increases in the cost of health care, several provisions of the bill are likely to be withdrawn.

The process of implementing HB 535 was completed during 2001 in anticipation of a January 1, 2002 effective date. This bill creates a mechanism for the division of pension benefits in the event of a divorce. Procedures and forms were developed in conjunction with the other Ohio retirement systems and are ready for use.

The Ohio Senate introduced a bill that would require three of the Ohio pension plans to contribute to a venture capital fund. The purpose of this fund is to encourage business start-ups in Ohio. Since venture capital is now relatively scarce, some Senators believe that the three Ohio systems should assist in providing capital funds. Obviously, this bill causes any pension fund manager to be concerned because of the highrisk nature of these investments and the lack of underwriting offered by the State. This issue was discussed during several legislative meetings during 2001 in the context of having Ohio pension plans contribute to a technology venture capital fund. Naturally, the issues of risk and return are foremost in the minds of the Ohio pension fund managers. To date, no bill has been introduced addressing this issue. With the continuing contraction of federal and state budgets, pension fund managers may expect similar legislation to be introduced as elected officials attempt to address constituent issues in an environment of shrinking funds.

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May 31, 2002

Letter of Transmittal

Dear Members of the Board of Trustees:

It is our privilege to submit to you the *Comprehensive Annual Financial Report* for the Highway Patrol Retirement System (HPRS) for the fiscal year ending December 31, 2001. Responsibility for both the accuracy of the data, and the completeness and fairness of the presentation, rests with the management of the system. We believe this report reflects a careful stewardship of the system's assets and dedicated service to our members and our retirants.

The Ohio General Assembly established the Ohio Highway Patrol Retirement System in 1944 as a retirement system whose membership was limited to state troopers and communications personnel employed by the Highway Patrol. This creation of a statewide defined benefit plan followed eleven years of membership in the Public Employees Retirement System of Ohio. Today membership in the Ohio Highway Patrol Retirement System is limited to troopers with arrest authority, trooper cadets in training while at the Highway Patrol Training Academy, and members of the radio division.

Benefits provided to plan participants include age and service related pensions, disability retirement, survivor pensions, death benefits and health care coverage for pension benefit recipients and their eligible dependents. A more detailed pension and benefits description is provided in the Plan Summary.

The Comprehensive Annual Financial Report is divided into five sections -- (1) the Introductory Section including this letter of transmittal and information about the organization of HPRS, (2) the Financial Section containing the general purpose financial statements, a Management Discussion & Analysis of the financial data, and the Independent Auditor's Report, (3) the Investment Section containing portfolio listings, statistical charts, and the Investment Policy adopted by the Board, (4) the Actuarial Section detailing the results of annual actuarial valuations, the independent actuary's opinion as

to the financial stability of the system, and the system's Plan Summary, and (5) the Statistical Section including historical data to identify progress of the system.

Major Initiatives and Changes Enacted

The Ohio Highway Patrol Retirement System was created to provide quality benefits for members, retirants, and surviving dependents. Although health care benefits are not required by statute, HPRS has provided this coverage at no cost to retirants and surviving widows, and to eligible dependents at a modest premium, since July 1974. Providing quality health care coverage while controlling costs continues to be a major responsibility of the Board. HPRS health care benefits are pre-funded, and each year the Board evaluates the preceding year's health care expenditures and implements any needed changes in plan design, copayments, deductibles and premiums. In August 1999, the system began providing vision coverage to benefit recipients at no additional cost, and in January 2000, dental coverage was also added at no additional cost. The Board will continue to monitor the benefits and costs of health care and seek to provide the best coverage possible at an affordable cost.

In the past four years, increases in prescription drug costs have far exceeded those of other health care costs. Members are receiving prescription benefits at five times the rate of 1970. While there has been an accelerated trend toward drug therapy instead of clinical treatment, ostensibly to reduce hospitalizations and otherwise limit health care costs, the system's experience indicates that the increased costs of prescription drugs has far exceeded any savings offset.

Investments

The funds of the system are invested to maximize both current income yield and long-term appreciation. The HPRS investment policy objective is to assure that the system meets the responsibility of providing quality benefits for retirants and their surviving dependants. The portfolio is diversified to earn the highest possible rate of return while operating within the *prudent person* parameters of risk to protect the fund from severe depreciation during adverse market conditions.

The Highway Patrol Retirement System portfolio decreased to \$572.3 million (excluding collateral on loaned securities) as of December 31, 2001, representing a 5.3% decrease from 2000. Investment returns for the total fund in 2001 were -3.24%, with a three-year total return of 1.17%, and a five-year return of 4.37%. A new asset allocation was implemented on January 1, 2002.

Funding

HPRS funding is authorized by Ohio Revised Code Section 5505.15. The employee contribution is calculated as 9.50% of gross payroll, and deducted prior to the calculation of federal taxes. Every even-numbered year, the Board of HPRS certifies the employer contribution rate to the Ohio Office of Budget and Management for inclusion in the biennial budget beginning the first day of July of the following year. The current employer contribution rate is 23.50% of employee gross payroll.

The employer contribution rate includes contributions related to both pension benefits and postemployment health care. The portions of the employer contribution rate allocated to pension benefits and health care are 19.50% and 4.75%, respectively. Unfunded actuarial accrued pension liabilities are amortized over an eightyear period from December 31, 2000.

The goal of the Board has been to limit the period of unfunded liability to no more than 30 years. This has been accomplished since 1992. Since 1991, the unfunded liabilities for pension obligations and health care costs have been reported separately.

Certificate of Achievement for Excellence in Financial Reporting

The Governmental Finance Officers Association of the United State and Canada (GFOA) awarded a *Certificate of Achievement for Excellence in Financial Reporting* to the Highway Patrol Retirement System for its Comprehensive Annual Financial Report (CAFR) for the

year ending December 31, 2000. To be awarded a *Certificate of Achievement*, a governmental unit must publish an easily readable and efficiently organized report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A *Certificate of Achievement* is valid for one year. This 2001 report is expected to meet the *Certificate of Achievement* program requirements and will be submitted to the GFOA to determine its eligibility for an additional certificate.

Professional Services

To aid in efficient and effective management of the system, professional services are provided to the Highway Patrol Retirement System by consultants appointed by the Board. Gabriel, Roeder, Smith & Company of Southfield, Michigan provides actuarial services. The investment advisor to the Board is Callan Associates of San Francisco, California. Clark, Shaefer, Hackett & Company, Certified Public Accountants of Columbus, Ohio audited the financial records of the system, under contract with the Auditor of the State of Ohio.

Acknowledgments

The preparation of this report reflects the combined efforts of the system's staff under the direction of the Board of Trustees. It is intended to provide complete and reliable information as a basis for making management decisions, a means for determining compliance with legal provisions, and a means for determining responsible stewardship over the assets contributed by the members and their employer, the State of Ohio.

This report is being mailed to all Highway Patrol facilities where members are assigned, to professional services used by the Highway Patrol Retirement System, to legislative members in a leadership position, and to any person or agency who requests a copy.

Respectfully Submitted,

Richard A. Curtis, Executive Director

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Daniel K. Weiss, CPA, JD, Chief Financial Officer



Financial Section



Independent Auditors' Report

The Retirement Board Ohio State Highway Patrol Retirement System:

We have audited the accompanying combining statements of plan net assets of the Ohio State Highway Patrol Retirement System (HPRS), a component unit of the State of Ohio, as of December 31, 2001 and the related combining statement of changes in plan net assets for the year then ended. These financial statements are the responsibility of HPRS' management. Our responsibility is to express an opinion on these financial statements based on our audit.

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

In our opinion, the financial statements referred to above present fairly in all material respects the plan net assets of the Ohio State Highway Patrol Retirement System as of December 31, 2001 and the changes in plan net assets for the year then ended in conformity with accounting principles generally accepted in the United States of America.

As described in the notes to financial statements, HPRS adopted the provisions of Governmental Accounting Standards Board Statement No. 33, Accounting and Financial Reporting for Nonexchange Transactions; Statement No. 34, Basic Financial Statements - and Management's Discussion and Analysis - for State and Local Governments: Omnibus, Statement No 38, Certain Financial Statement Note Disclosures; and Interpretation No. 6, Recognition and Measurement of Certain Liabilities and Expenditures in Governmental Fund Financial Statements, as of January 1, 2001. This results in a change to HPRS's method of accounting for certain nonexchange revenues and a change in the format and content of the basic financial statements.

In accordance with *Government Auditing Standards*, we have also issued our report dated March 28, 2002 on our consideration of the Ohio State Highway Patrol Retirement System's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations and contracts. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be read in conjunction with this report in considering the results of our audit.

The Management's Discussion and Analysis and the Required Supplementary Information on pages 22-23 are not a required part of the basic financial statements but are supplementary information required by the Governmental Accounting Standards Board. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the required supplementary information. However, we did not audit the information and express no opinion on it. Our audit was conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The accompanying financial information listed as Additional Supplementary Schedules in the table of contents is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information has been subjected to the auditing procedures applied in our audit of the basic financial statements and, in our opinion, is fairly presented in all material respects in relation to the basic financial statements taken as a whole.

Clark, Schaefer, Hackett ! Co.

Columbus, Ohio March 28, 2002

Crosswoods Center, 1 East Campus View Boulevard, Suite 200, Columbus, OH 43235-4600, 614/885-2208, FAX 614/885-8159
CINCINNATI COLUMBUS DAYTON MIDDLETOWN SPRINGFIELD

Management's Discussion and Analysis

Financial Highlights

- At December 31, 2001, the assets of HPRS exceeded liabilities by \$575,955,680. All of the net assets are held in trust for pension and health benefits, and are available to meet HPRS's ongoing obligation to plan participants and their beneficiaries.
- HPRS's total net assets decreased by \$32,362,492, or 5.3%, with 64.3% of this decline attributable to investment market losses.
- HPRS's funding objective is to meet long-term benefit obligations through contributions and investment income. At December 31, 2000, the date of the latest actuarial valuation, HPRS funds totaled 95.9% of projected obligations.
- Revenues (Additions to Plan Net Assets) for the year were \$4,644,062, which includes employee and employer contributions of \$25,464,402 and an investment loss of \$20,820,340.
- Expenses (Deductions in Plan Net Assets) increased from \$33,675,836 to \$37,006,554 over the prior year, or 9.9%. Of this amount, pension benefits increased by 8.9%, health care expenses increased by 30.9%, and administrative expenses decreased by 4.5%.

Overview of the Financial Statements

HPRS's financial statements consist of these components:

- 1. Combining Statement of Plan Net Assets.
- 2. Combining Statement of Changes in Plan Net Assets.
- 3. Notes to the Financial Statements.

This report also contains other supplementary information in addition to the basic financial statements themselves.

The *Combining Statement of Plan Net Assets* provides a snapshot of account balances at year-end, indicating the assets available for future payments to retirees, less any current liabilities of the system.

The *Combining Statement of Changes in Plan Net Assets* provides a summary of current year additions and deductions to the plan. At December 31, 2000, the date of the latest actuarial valuation, HPRS's current funding ratio was 95.9%. This means that HPRS's fund had approximately \$.96 available for each \$1.00 of projected pension liability.

The Combining Statement of Plan Net Assets and the Combining Statement of Changes in Plan Net Assets report information about HPRS's activities and financial position. These statements reflect the full accrual basis of accounting, which is similar to the accounting method used by most private sector companies. All of the current year's revenues and expenses are taken into account regardless of when cash is received or paid. All investment gains and losses are shown at trade date rather than settlement date. Investments are shown at fair value, reflecting both realized and unrealized gains and losses. Fixed assets are depreciated over their useful lives.

The difference between HPRS assets and liabilities is reported on these statements as *Net Assets Held in Trust for Pension and Postemployment Health Care Benefits.* Over time, increases and decreases in HPRS's net assets are one indicator of whether the fund's financial health is improving or deteriorating. Other factors, such as market conditions, should be considered in measuring HPRS's overall health (see HPRS's financial statements on pages 15-16 of this report).

The *Notes to the Financial Statements* provide additional information that is essential to a full understanding of the data provided in the financial statements (see *Notes to the Financial Statements* on pages 17-21 of this report).

Other Information

In addition to the financial statements and accompanying notes, this report presents certain required supplementary information concerning HPRS's progress in funding its obligations to provide pension benefits to members (see *Required Supplementary Schedules* on page 22 of this report).

The schedules of administrative expenses, investment expenses, and payments to consultants are presented immediately following the required supplementary information.

HPRS Activities

Revenues - **Additions to Plan Net Assets.** Employer and employee contributions, as well as income from investments, provide reserves needed to finance retirement benefits. In 2001, total contributions, less investment losses in an unfavorable market, totaled \$4.6 million. Employer and employee contributions increased by 5.1% and 1.3%, respectively.

Revenues - Additions to Plan Net Assets

(In 000's)			\$ Increase/	% Increase/
	<u>2001</u>	<u>2000</u>	(Decrease)	(Decrease)
Investment				
Losses	(\$20,820)	(\$17,235)	(\$3,585)	(20.8%)
Employer				
Contributions	17,423	16,579	844	5.1%
Employee				
Contributions	7,042	6,954	88	1.3%
Other	999	926	73	7.9%
Total Additions	\$4,644	\$7,224	(\$2,580)	(35.7%)

The investment section of this report reviews the result of investment activity for the year ended December 31, 2001.

Expenses - Deductions from Plan Net Assets. The HPRS was created to provide retirement, disability, and survivor benefits to qualified members and their beneficiaries. The cost of these programs includes benefit payments as designated by the plan, refunded contributions, and the administrative costs of the system. In 2001, total deductions from plan net assets increased 9.9%. Most of this increase was attributable to an increase in the number of benefit recipients, cost of living adjustments, and a 30.9% increase in health care costs.

Expenses - Deductions from Plan Net Assets

Pension 2001 2000 (Decrease) (Decrease) Benefits \$29,457 \$27,043 \$2,414 8.9% Refunds of Employee \$25,414 8.9% Contributions 307 363 (56) (15.4%) Health Care 6,179 4,720 1,459 30.9% Administrative Expenses 615 645 (30) (4.6%) Transfers to Other Ohio Systems 448 905 (457) (50.5%) Total Deductions \$37,006 \$33,676 \$3,330 9.9%	(In 000's)			\$ Increase/	% Increase/
Benefits \$29,457 \$27,043 \$2,414 8.9% Refunds of Employee Contributions 307 363 (56) (15.4%) Health Care 6,179 4,720 1,459 30.9% Administrative Expenses 615 645 (30) (4.6%) Transfers to Other Ohio Systems 448 905 (457) (50.5%) Total Total 70.5%		<u>2001</u>	<u>2000</u>	(Decrease)	(Decrease)
Refunds of Employee Contributions 307 363 (56) (15.4%) Health Care 6,179 4,720 1,459 30.9% Administrative Expenses 615 645 (30) (4.6%) Transfers to Other Ohio Systems 448 905 (457) (50.5%) Total	Pension				
Employee 307 363 (56) (15.4%) Health Care 6,179 4,720 1,459 30.9% Administrative Expenses 615 645 (30) (4.6%) Transfers to Other Ohio Systems 448 905 (457) (50.5%) Total	Benefits	\$29,457	\$27,043	\$2,414	8.9%
Contributions 307 363 (56) (15.4%) Health Care 6,179 4,720 1,459 30.9% Administrative Expenses 615 645 (30) (4.6%) Transfers to Other Ohio Other Ohio 5ystems 448 905 (457) (50.5%) Total Total Total Total 150	Refunds of				
Health Care 6,179 4,720 1,459 30.9% Administrative Expenses Expenses 615 645 (30) (4.6%) Transfers to Other Ohio Systems 448 905 (457) (50.5%) Total	Employee				
Care 6,179 4,720 1,459 30.9% Administrative Expenses 615 645 (30) (4.6%) Transfers to Other Ohio Systems 448 905 (457) (50.5%) Total Total Total 1,459 30.9%	Contributions	307	363	(56)	(15.4%)
Administrative Expenses 615 645 (30) (4.6%) Transfers to Other Ohio Systems 448 905 (457) (50.5%) Total Total Total 100.5%	Health				
Expenses 615 645 (30) (4.6%) Transfers to Other Ohio Systems 448 905 (457) (50.5%) Total	Care	6,179	4,720	1,459	30.9%
Transfers to Other Ohio Systems 448 905 (457) (50.5%) Total	Administrative				
Other Ohio Systems 448 905 (457) (50.5%) Total	Expenses	615	645	(30)	(4.6%)
Systems 448 905 (457) (50.5%) Total	Transfers to				
Total	Other Ohio				
	Systems	448	905	(457)	(50.5%)
Deductions \$37,006 \$33,676 \$3,330 9.9%	Total				
	Deductions	\$37,006	\$33,676	\$3,330	9.9%

Capital Assets

As of December 31, 2001, HPRS's investment in capital assets totaled \$186,727 (net of accumulated depreciation), an increase of \$15,976, or 9.4% over December 31, 2000. This investment in capital assets includes office equipment, software, and furniture for administrative use. The increase in HPRS's investment in capital assets for the current year was largely attributable to computer hardware and software enhancements.

Financial Analysis

From December 31, 2000 to December 31, 2001, *Net Assets Held in Trust for Pension and Postemployment Health Care Benefits* decreased 5.3% from \$608,318,172 to \$575,955,680. All of the net assets are available to meet HPRS's ongoing obligation to plan participants and their beneficiaries.

Despite variations in the securities markets that result in fluctuations in net asset values, management and HPRS's actuary concur that HPRS remains in a financial position to meet its obligations to the plan participants and beneficiaries. The current financial position of HPRS is the result of a very strong and successful investment program, risk management, and strategic planning.

Requests for Information

This financial report is designed to provide the retirees, members, trustees, and investment managers with a general overview of HPRS's finances and to show accountability for the money it receives. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Chief Financial Officer, HPRS, 6161 Busch Boulevard, Suite 119, Columbus, OH 43229-2553.

Combining Statement of Plan Net Assets

December 31, 2001

	Pension	Postemployment Health Care	Total
Assets			
Cash and Short-Term Investments	\$26,321,357	\$4,534,084	\$30,855,441
Receivables			
Accrued Investment Income	1,419,850	244,582	1,664,432
Employer Contributions Receivable	1,671,144	423,357	2,094,501
Employee Contributions Receivable	1,744,515		1,744,515
Commission Recapture Receivable	3,635	626	4,261
Tenant Rent Receivable	34,693	5,976	40,669
Total Receivables	4,873,837	674,541	5,548,378
Investments, at Fair Value			
Domestic Equity	241,489,024	41,598,598	283,087,622
Fixed Income	101,514,978	17,486,844	119,001,822
Real Estate	70,669,740	12,173,481	82,843,221
International Equity	48,219,360	8,306,207	56,525,567
Collateral on Loaned Securities	14,570,741	2,509,938	17,080,679
Total Investments	476,463,843	82,075,068	558,538,911
Prepaid Expenses	39,062	6,729	45,791
Property and Equipment, Net	159,288	27,439	186,727
Total Other Assets	198,350	34,168	232,518
Total Assets	507,857,387	87,317,861	595,175,248
Liabilities			
Accrued Health Care Benefits		881,217	881,217
Accounts Payable	967,836	166,718	1,134,554
Other Liabilities	30,993	5,339	36,332
Accrued Payroll and Withholdings	74,033	12,753	86,786
Obligations Under Securities Lending	14,570,741	2,509,938	17,080,679
Total Liabilities	15,643,603	3,575,965	19,219,568
Net Assets Held in Trust for Pension and			
Postemployment Health Care Benefits	\$492,213,784	\$83,741,896	\$575,955,680

(A *Schedule of Funding Progress* is presented on page 22.) See accompanying *Notes to Financial Statements*.

Combining Statement of Changes in Plan Net Assets Year Ending December 31, 2001

	Pension	Postemployment Health Care	Total
Additions			
Contributions			
Employer	\$13,901,313	\$3,521,665	\$17,422,978
Employees	7,042,044		7,042,044
Transfers from Other Systems	999,380		999,380
Total Contributions	21,942,737	3,521,665	25,464,402
Investment Activity			
Net Depreciation in Fair Value of Investments	(29,042,266)	(4,816,062)	(33,858,328)
Interest Income	7,099,322	1,222,920	8,322,242
Dividend Income	5,701,841	982,192	6,684,033
Security Lending, Gross	27,054	4,660	31,714
Real Estate Operating Income, Net	272,227	46,893	319,120
	(15,941,822)	(2,559,397)	(18,501,219)
Less Investment Expense	1,978,335	340,786	2,319,121
Net Investment Activity	(17,920,157)	(2,900,183)	(20,820,340)
Total Additions	4,022,580	621,482	4,644,062
Deductions			
Benefits Paid Directly to Participants	29,457,281		29,457,281
Refunds of Employee Contributions	306,452		306,452
Health Care Expenses		6,179,096	6,179,096
Administrative Expenses	524,922	90,422	615,344
Transfers to Other Systems	448,381		448,381
Total Deductions	30,737,036	6,269,518	37,006,554
Net Decrease	(26,714,456)	(5,648,036)	(32,362,492)
Net Assets Held in Trust for Pension and			
Postemployment Health Care Benefits	510 020 240	90 290 022	600 210 172
Balance, December 31, 2000	518,928,240	89,389,932	608,318,172
Balance, December 31, 2001	\$492,213,784	\$83,741,896	\$575,955,680

See accompanying Notes to Financial Statements.

Notes to Financial Statements

Year Ending December 31, 2001

Summary of Significant Accounting Policies

The following are the significant accounting principles and practices of the Ohio State Highway Patrol Retirement System (HPRS).

Organization - HPRS (the Plan) is a single-employer retirement system for uniformed and radio personnel of the Ohio State Highway Patrol. The plan was created by Chapter 5505 of the Ohio Revised Code (Revised Code) and is administered by a Board comprised of four active members, one retired member, and two voting ex-officio members. HPRS is a separate financial reporting entity in accordance with criteria established by Governmental Accounting Standards Board Statement No. 14, is a component unit of the State of Ohio and receives state appropriations.

HPRS administers both a defined benefit pension plan and a postemployment health care plan. All financial information for pensions and health care is presented separately in the combining financial statements.

Basis of Accounting - HPRS financial statements are prepared using the accrual basis of accounting, under which expenses are recorded when the liability is incurred and revenues are recorded when they are earned and become measurable. Investment purchases and sales are substantially recorded as of their trade date. Administrative expenses are financed exclusively with investment income. HPRS funding is determined on an actuarial basis using the entry age normal cost method.

Pursuant to GASB Statement No. 20, Accounting and Financial Reporting for Proprietary Funds and Other Governmental Entities that use Proprietary Fund Accounting the system follows GASB guidance as applicable to proprietary funds and Financial Accounting Standards Board Opinions and Accounting Research Bulletins issued on or before November 30, 1989 that do not conflict with or contradict GASB pronouncements.

HPRS adopted GASB Statement No. 34 Basic Financial Statements – and Management's Discussion and Analysis – for State and Local Governments, which

requires full accrual accounting. HPRS also adopted GASB Statement No. 33 Accounting and Financial Reporting for Nonexchange Transactions, Statement No. 36, Recipient Reporting for Certain Shared Nonexchange Revenues, Statement No. 37, Basic Financial Statements – and Management's Discussion and Analysis – For State and Local Governments: Omnibus, Statement No. 38, Certain Financial Statement Note Disclosures, and Interpretation No. 6, Recognition and Measurements of Certain Liabilities and Expenditures in Governmental Fund Financial Statements.

The accounting and reporting policies of HPRS conform to accounting principles generally accepted in the United States of America (GAAP). The preparation of financial statements in conformity with GAAP 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 revenue and expenses during the reporting period. Actual results could differ from these estimates.

The employees of HPRS are members of the Public Employee Retirement System of Ohio (PERS).

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 Health Care Plans Administered by Defined Benefit Pension Plans, require that plan assets be split between pension benefits and health care. To meet this requirement, plan assets and liabilities not specifically identifiable to a plan were proportionately allocated to the pension and postemployment health care plans.

Investments - Section 5505.06 of the Ohio Revised Code authorizes HPRS to invest in various instruments (meeting various guidelines), including the following:

 commercial paper issued by a U. S. corporation and rated Prime-1 by Moody's Investor Service, A-1 by Standard and Poor's Corporation, and/or Duff-1 by Duff and Phelps Investment Management Company with the parent company's long-term debt being rated within the three highest classifications by Moody's, Standard and Poor's and/or Duff and Phelps,

- obligations of the U. S. Treasury, federal agencies, government sponsored corporations and government backed repurchase agreements,
- bonds, notes and other debt securities rated within the three highest classifications by at least two of the rating services (Moody's, Standard and Poor's, and Duff and Phelps),
- equities approved by an outside investment advisor,
- high quality money-market instruments, and
- real estate and related securities including improved or unimproved real property, mortgage collective investment funds, notes secured by real property, mortgage-backed bonds and passthrough securities backed by mortgages.

Income on all investments is recognized on the accrual basis. Gains and losses on sales and exchanges, recognized on the trade date, are determined using the average cost of the security sold for equity securities and the specific cost of securities sold for all other investments.

All investments are reported at fair value. Fair value is the amount that the plan can reasonably expect to receive for an investment in a current sale between a willing buyer and a willing seller -- that is, other than in a forced or liquidation sale. Short-term investments are reported at cost, which approximates fair value. Corporate bonds are valued at the median price by the brokerage firms. Securities traded on a national exchange are valued at the last reported sales price at current exchange rate. The fair value of real estate managed by HPRS is based upon independent appraisal.

Net Depreciation in Fair Value of Investments -

Net depreciation, or appreciation, is determined by calculating the change in the fair value of investments between the beginning of the year and the end of the year, less purchases of investments at cost, plus sales of investments at fair value. Investment expense consists of those expenses directly related to HPRS

investment operations, as well as a proportional amount of all other administrative expenses allocated based on a ratio of HPRS investment staff to total HPRS staff. HPRS has no individual investment that exceeds 5% of net assets available for benefits.

Accrued Health Care Benefits - Accrued health care benefits are based upon estimates furnished by the claims administrator. These estimates have been developed from prior claims experience.

Federal Income Tax Status - HPRS is a qualified entity under Section 501(a) of the Internal Revenue Code and is therefore exempt from federal income taxes.

Fixed Assets - Property and equipment are recorded at cost. Depreciation is computed using the straight-line method over the following useful lives of the assets:

Furniture and Fixtures 1 - 10 years Office Equipment 1 - 10 years

Plan Description

Purpose - HPRS was established in 1944 by the Ohio General Assembly as a single-employer, defined benefit pension and postemployment health care plan. HPRS is authorized to provide retirement and disability benefits, postemployment health care benefits, annual cost-of-living adjustments, and death benefits to retired members, as well as survivor benefits to qualified dependents of deceased members of the Ohio State Highway Patrol. Chapter 5505 of the Ohio Revised Code provides statutory authority to establish and amend benefits. HPRS is considered part of the State of Ohio financial reporting entity and is included in the State's Comprehensive Annual Financial Report as a pension trust fund.

Administration - The general administration and management of HPRS is vested in a seven-member Retirement Board consisting of four elected members, one elected retirant, and two statutory members. The Board appoints an executive director, actuary, investment consultant, and employees.

Membership - HPRS membership consisted of the following at December 31, 2000 (our latest available actuarial data):

Pension Benefits

Retirants & beneficiaries currently	
receiving benefits	1,174
Terminated employees not yet receiving	
benefits	4

Current employees

Vested 270 Nonvested 1,219

Contributions - The Ohio Revised Code requires contributions by active members and the Ohio State Highway Patrol. The employee contribution rate is established by the Ohio General Assembly and any change in the rate requires legislative action. The employer contribution rate is established by the Board of HPRS and certified by the State of Ohio every two years. By law, the employer rate may not exceed three times the employee contribution rate.

An Employee Savings Fund exists for member contributions. Contributions may be refunded to a member who terminates employment with the Ohio State Highway Patrol or to the member's beneficiary following the member's death, if no survivor benefits are payable.

Benefits - Members are eligible for normal retirement benefits upon reaching age 52 and accumulating at least 20 years of Ohio State Highway Patrol service credit. The benefit is a percentage of the member's final average salary, defined as the average of the member's three highest salaried years. The percentage is determined by multiplying 2.5% times the first 20 years of service, plus 2.25% for the next 5 years of service, plus 2.0% for each year in excess of 25 years of service. A member's pension may not exceed 79.25% of the final average salary. Early retirement with reduced benefits is available upon reaching age 48 with 20 years of service credit. Early retirement with normal benefits is available upon reaching age 48 with 25 years of service credit.

In addition to retirement benefits, HPRS also provides for disability, survivor, and health care benefits. Qualified dependents of a deceased member are eligible for monthly survivor benefits. All members receiving a benefit are eligible to receive medical insurance.

Members with credited service in Public Employees Retirement System (PERS), School Employees Retirement System (SERS), State Teachers Retirement System (STRS), Cincinnati Retirement System (CRS), or the military are eligible to receive transferred credited service from either or all of these systems. Any service, except for military service, that is not concurrent with service within HPRS will be included in the determination of retirement benefits. Similarly, a member with credited service and funds in HPRS may transfer such service to PERS, SERS, STRS, or CRS upon retirement.

Cash and Investments

Deposits - HPRS maintains cash and an investment pool. Cash and cash equivalents include investments in highly liquid debt instruments with an original maturity of three months or less. At December 31, 2001, the carrying value of all HPRS's book deposits was \$30,855,441 (which includes money market funds of \$30,001,381), as compared to bank balances of \$30,716,440. The differences in the carrying amount and the bank balances are caused by outstanding warrants/checks and deposits in transit. Of the bank balances, the Federal Deposit Insurance Corporation insured \$135,375. The remaining bank balance was covered by collateral held in the name of HPRS' pledging financial institution in a pooled collateral fund for all public funds, as required by state statue.

Investments - HPRS investments are categorized to give an indication of the level of risk assumed by HPRS at year-end. Category 1 includes investments that are insured, registered, or for which the securities are held by HPRS or its agent in the name of HPRS. Category 2 includes uninsured and unregistered investments for which the securities are held by the counterparty's trust department or agent, in the name of HPRS. Category 3 includes uninsured and unregistered investments for which the securities are held by the counterparty or by its trust department or agent, but not in the name of HPRS.

All investments of HPRS meet the criteria of Category 1, except for real estate investments totaling \$82,843,221 that, by their nature, are not required to be categorized.

Fair value of securities is based primarily on quotations from national security exchanges. Fair values of investments in real estate are based on information provided by the fund's managers or at the net present value of the projected net income stream for assets not managed independently.

Section 5505.06 of the Ohio Revised Code and the Board of Trustees authorizes HPRS to participate in a securities lending program. Under this program, administered by Victory Capital Management, securities are loaned to investment brokers/dealers (borrower); in return, HPRS receives cash collateral and agrees to return the collateral for the same securities in the future. Cash collateral from securities loaned is, simultaneous to the loan, reinvested in repurchasing agreements ("repo's"). Securities loaned and repo's are collateralized at a minimum of 102 percent of the fair value of loaned securities. Collateral is marked-to-market daily. If the fair value of the collateral held falls below 102 percent of the fair value of securities loaned, additional collateral is provided. The maturity of the repo's is always identical to the maturity of the securities loaned. Further, there is always a positive spread between the cost of funds raised from securities loaned and the income earned from the associated repo's. At yearend, HPRS had no credit risk exposure to borrowers because the fair value of collateral HPRS held exceeded the fair value of securities loaned. Either HPRS or the borrowers can terminate all loans on demand. The custodial bank and its affiliates are prohibited from borrowing HPRS securities. HPRS cannot pledge or sell collateral securities received unless the borrower defaults.

As of December 31, 2001, the fair values of loaned securities and associated collateral (repo agreements and short-term investments) were \$16,810,693 and \$17,080,679, respectively.

Gross income from securities lending was \$31,715 in 2001.

Investments at December 31, 2001

	<u> Fair Value</u>
Domestic Equity	\$283,087,622
U.S. Government Obligations	38,426,137
Mortgage Pass-Through Securities	4,899,068
Collateralized Mortgages	33,118,114
Corporate Bonds	27,356,810
Asset-Backed Securities	15,201,693
Collateral on Loaned Securities	17,080,679
Real Estate	82,843,221
International Equity	<u>56,525,567</u>
Total	\$558,538,911

Property and Equipment

The following is a summary of equipment, at cost, less accumulated depreciation, at December 31, 2001:

Furniture and fixtures	\$71,912
Equipment	<u>281,215</u>
	\$353,127
Accumulated depreciation	<u>(166,400)</u>
Total	\$186,727

Depreciation expense charged to the plan was \$51,955 for the year ending December 31, 2001.

Contributions

The Ohio Revised Code requires contributions by active members and the Ohio State Highway Patrol. The Retirement Board, within the allowable rates established by the Ohio Revised Code, establishes contribution rates. During 2001, active members and the Ohio State Highway Patrol were required to contribute the following percentages of active member payroll:

<u>Employee</u>	Employer
9.50%	23.50%

The Board of HPRS allocated the employer contribution rate to basic retirement benefits and health care benefits as follows:

Basic Retirement	Health Care	<u>Total</u>
18.75%	4.75%	23.50%

The allocation of the employer contribution rate to basic retirement benefits has been established as the rate necessary to cover normal cost, plus the amortization of the unfunded actuarial accrued liabilities based on an eight (8) year amortization schedule. The contribution rate allocated to health care benefits is sufficient to cover normal costs, and to provide level cost financing of the unfunded actuarial accrued liabilities. The adequacy of the employer contribution rate is determined using the entry age normal cost method.

Health Care

In addition to providing pension benefits, HPRS pays health insurance claims on behalf of all persons receiving monthly pension or survivor benefits and Medicare part B basic premiums for those eligible benefit recipients upon proof of coverage. In general,

costs of retirant health care benefits are recognized as claims are incurred and premiums are paid. Health care benefit expenses in 2001 of \$6,179,096 are shown on the accompanying *Combining Statement of Changes in Plan Net Assets*.

Pension Benefits

All employees of HPRS are eligible to participate in the Public Employees Retirement System of Ohio, a cost-sharing multiple employer defined benefit pension plan. PERS of Ohio provides retirement and disability benefits, annual cost-of-living adjustments and death benefits to plan members and beneficiaries. Chapter 145 of the Ohio Revised Code provides statutory authority to establish and amend benefits. The Public Employees Retirement System of Ohio issues a stand-alone financial report that includes financial statements and required supplementary information. Interested parties may obtain a copy from PERS, 277 East Town Street, Columbus, Ohio 43215-4642, Telephone (614) 466-2085.

The Ohio Revised Code provides statutory authority for employee and employer contributions. The employee contribution rate is 8.5%. The employer rate for local employers was 13.55% in 2001. HPRS employer contributions to PERS of Ohio for the years ending December 31, 2001, 2000 and 1999 were \$56,424, \$40,922, and \$50,242, respectively, which were equal to the required contributions for each year.

Postemployment Benefits Other Than Pension Benefits

Public Employment Retirement System of Ohio provides postretirement health care coverage to age and service retirants with ten or more years of qualified Ohio service credit. Health care coverage is available to recipients of disability and primary survivor pensions. The health care coverage provided by PERS is considered Other Postemployment Benefits (OPEB) as described in GASB 12. A portion of each employer's contribution to PERS is

set aside for the funding of postretirement health care. The portion of 2001 employer contributions that was used to fund health care for the year was 4.3% of the total 13.55% contribution, or 31.73% of the total employer contribution.

The Ohio Revised Code provides statutory authority requiring public employers to fund postretirement health care through their contributions to PERS.

OPEB are financed through employer contributions and investment earnings thereon. The contributions allocated to retirant health care, along with investment income on allocated assets and periodic adjustments in health care provisions are expected to be sufficient to sustain the program indefinitely.

At December 31, 2000, PERS had 411,076 active contributing participants. There were \$11,735.9 million in net assets available for OPEB. The actuarially accrued liability and the unfunded actuarial accrued liability, based on the actuarial cost method used, were \$14,364.6 million and \$2,628.7 million, respectively.

HPRS employer contributions for OPEB during 2001 totaled \$17,903, which equaled the required contribution for the year.

Risk Management

HPRS purchases insurance policies in varying amounts providing coverage for general liability, property damage, employee, and public official liability. No settlements exceeded insurance coverage over the past three years. Insurance coverage has not significantly been reduced.

Contingent Liabilities

HPRS is a party to various litigation actions. While the final outcome cannot be determined at this time, management is of the opinion that the liability, if any, for these legal actions will not have a material adverse effect on the financial position of HPRS.

Required Supplementary Schedules

Schedule of Employer Contributions

Years Ending December 31, 1996-2001

Annual Required

<u>Year</u>	Contribution	% Contributed
1996	12,176,108	100
1997	12,236,515	100
1998	13,101,039	100
1999	13,569,730	100
2000	13,210,189	100
2001	13,901,313	100

The amounts reported in this schedule do not include contributions for postemployment health care benefits.

Schedule of Funding Progress

Years Ending December 31, 1995-2000

	Actuarial		Unfunded		Active	UAAL as a
Valuation	Accrued	Valuation	Actuarial Accrued	Assets as a	Member	% of Active
<u>Year</u>	Liab. (AAL)	<u>Assets</u>	Liab. (UAAL)	% of AAL	<u>Payroll</u>	Member Payroll
1995 ▲▶	424,351,694	370,425,462	53,926,232	87.3	59,825,356	90.1
1996	454,514,187	411,316,254	43,197,933	90.5	59,239,349	72.9
1997 ▲	496,917,335	460,667,112	36,250,223	92.7	62,233,299	58.2
1998	532,956,745	509,859,924	23,096,821	95.7	65,153,864	35.4
1999 ▲	577,010,085	546,510,779	30,499,306	94.7	66,017,381	46.2
2000 ▶	594,222,603	570,039,631	24,182,972	95.9	69,028,285	35.0

The amounts reported in this schedule do not include assets or liabilities for postemployment health care benefits.

- ▲ Plan amendment.
- ► Assumption or method change.

Notes to the Trend Data

Information in the *Required Supplementary Schedules* is from the actuarial valuation for each year indicated.

Additional information from the latest actuarial valuation is as follows:

Valuation Date December 31, 2000

Actuarial cost method Entry Age

Amortization method Level percent closed

Remaining amortization period 8 years for retirement allowances

Asset valuation method 4 year smoothed market

Actuarial assumptions:

Investment rate of return 8.0%

Projected salary increases 4.8 - 8.2%, including wage inflation of 4.5%

Inflation 3% or more

Cost-of-living adjustments for retirants CPI increases for years after age 53 (maximum of 3%)

The Board adopted all contribution rates as recommended by the actuary.

Notes To Required Supplementary Schedules

Description of Schedule of Funding Progress

When a new benefit that applies to service already rendered is added, an "unfunded accrued liability" is created. Laws governing HPRS require that these additional liabilities be financed systematically over a period of future years. Also, if actual financial experiences are less favorable than assumed financial experiences, the difference is added to unfunded accrued liabilities.

In an inflationary economy, the value of the dollar decreases over time. This environment results in employee pay increasing in dollar amounts resulting in unfunded accrued liabilities increasing in dollar amount, all at a time when the actual substance of these items may be decreasing. Looking at just dollar amounts of unfunded accrued liabilities can be misleading. Unfunded accrued liabilities divided by active employee payroll provides an index, which aids understanding. The smaller the ratio of unfunded liabilities to active member payroll, the stronger the system. Observation of this relative index over a period of years will give an indication of whether the system is becoming financially stronger or weaker.

Actuarial Assumptions and Methods

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at December 31, 2000.

An entry age normal actuarial cost method of valuation is used in determining benefit liabilities and normal cost. Differences in the past between assumed experience and actual experience ("actuarial gains and losses") become part of actuarial accrued liabilities. Unfunded actuarial accrued liabilities are amortized to produce payments (principal and interest) that are a level percent of payroll contributions.

The assets were valued on a market basis that recognizes each year's gain or loss between actual and assumed investment return over a closed four-year period.

Other actuarial assumptions and methods are as follows:

- a rate of return on investments of 8.0% as of December 31, 2000, compounded annually, net of administration expenses,
- projected salary increases of 4.5%, compounded annually, attributable to inflation,
- additional projected salary increases ranging from 0.3% to 3.7% per year, depending on service, attributable to seniority and merit,
- postretirement mortality life expectancies of members based on the 1983 Group Annuity Mortality Male and Female Tables,
- rates of withdrawal from active service before retirement for reasons other than death, rates of disability and expected retirement ages developed on the basis of actual plan experience,
- projected health care premium increases of 4.5%, compounded annually, attributable to inflation.
- health care benefit recipients are eligible for Medicare on attainment of age 65, or immediately, if retired for disability, and
- employer contributions paid in equal installments throughout the employer fiscal year.

The following employer, employee, and retirant data is from the latest actuarial valuation, dated December 31, 2000:

Pension Benefits

Retirants & beneficiaries currently receiving benefits & terminated employees not yet receiving benefits

\$358,422,165

Current employees

Accumulated employee contributions including allocated investment income 59,455,707 Employer-financed, vested 81,076,308 Employer-financed, nonvested 72,166,287

Additional Information

Schedule of Administrative Expenses Year Ending December 31, 2001

Personnel	\$256,240
Professional and Technical Services	
Computer services	18,452
Actuary	72,575
Training and seminars	26,260
Medical consulting	1,108
Audit	13,000
Miscellaneous services by others	7,630
Medical services	882
Total Professional and Technical Services	139,907
Communications	
Printing	9,774
Postage	18,603
Telephone	10,552
Total Communications	38,929
Other Expenses	
Office Rent	65,922
Depreciation	51,955
Insurance	22,379
Equipment repairs and maintenance	3,963
Shipping	840
Supplies	4,264
Miscellaneous	3,339
Loss on disposal of equipment	14,915
Retirement study commission	3,118
Travel	5,891
Membership and subscriptions	3,088
New equipment	594
Total Other Expenses	180,268
Total Administrative Expenses	\$615,344

Above amounts do not include investment department administrative expenses.

Schedule of Investment Expenses Year Ending December 31, 2001

Personnel	\$223,219
Professional Services	
Investment services	1,889,132
Monitor services	163,792
Security lending expense	11,039
Total Professional Services	2,063,963
Other Expenses	
Computer Services	18,451
Memberships and subscriptions	4,632
Printing and supplies	8,856
Total Other Expenses	31,939
Total Investment Expenses	\$2,319,121

Payments to Consultants Year Ending December 31, 2001

<u>Consultant</u>	<u>Fee</u>	<u>Service</u>
Gabriel, Roeder, Smith & Co.	\$72,575	Actuarial
Clark, Schaefer, Hackett & Co.	13,000	Auditing
Callan Associates	133,050	Investment



Independent Auditors' Report on Compliance and on Internal Control Over Financial Reporting Based on an Audit of Financial Statements Performed in Accordance with *Government Accounting Standards*

The Retirement Board Ohio State Highway Patrol Retirement System:

We have audited the combining statement of plan net assets of the Ohio State Highway Patrol Retirement System (HPRS), as of December 31, 2001, and the related combining statement of changes in plan net assets for the year then ended, and have issued our report thereon dated March 28, 2002. We conducted our audit in accordance with auditing standards generally accepted in the United States of America applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States.

Compliance

As part of obtaining reasonable assurance about whether the Ohio State Highway Patrol Retirement System's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations and contracts, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance that are required to be reported under *Government Auditing Standards*.

Internal Control Over Financial Reporting

In planning and performing our audit, we considered the Ohio State Highway Patrol Retirement System's internal control over financial reporting in order to determine our auditing procedures for the purpose of expressing our opinion on the financial statements and not to provide assurance on the internal control over financial reporting. Our consideration of the internal control over financial reporting would not necessarily disclose all matters in the internal control over financial reporting that might be material weaknesses. A material weakness is a condition in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that misstatements in amounts that would be material in relation to the financial statements being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. We noted no matters that we consider to be material weaknesses. However, we noted other matters involving the internal control over financial reporting that we have reported to management of the Ohio State Highway Patrol Retirement System, in a separate letter dated March 28, 2002.

This report is intended solely for the information and use of the audit committee, management and Auditor of the State of Ohio and is not intended to be and should not be used by anyone other these specified parties.

Clark, Schaefer Hackett ! Co.

Columbus, Ohio March 28, 2002

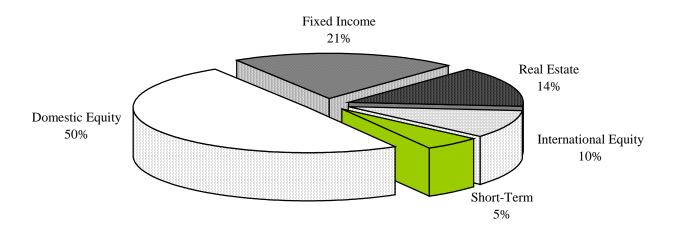
Crosswoods Center, 1 East Campus View Boulevard, Suite 200, Columbus, OH 43235-4600, 614/885-2208, FAX 614/885-8159
CINCINNATI COLUMBUS DAYTON MIDDLETOWN SPRINGFIELD



Investment Section

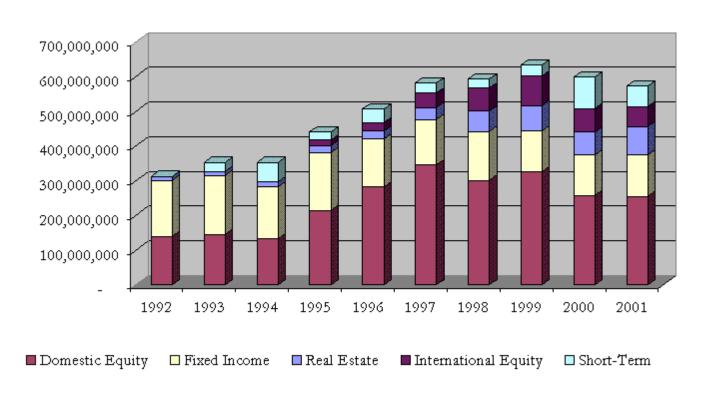
Investment Distribution

at Fair Value, December 31, 2001



Ten-Year Investment Comparison

at Fair Value, December 31, 2001



Investment Review

Year Ending December 31, 2001

U.S. Economy

The U.S. recession may already be over and the recovery underway. According to the National Bureau of Economic Research, which is charged with dating economic cycles, the longest expansion in U.S. history officially peaked in March 2001. The economy began to contract in April, and with the decline in GDP continuing through the third quarter, we officially entered recession (defined as two consecutive quarters of negative GDP growth) in the second quarter. The initial data for the fourth quarter are now suggesting that we may be out of the woods already, or at least able to see the clearing: GDP finished the year showing a decline, although closer to zero than the 1.3% drop in the third quarter.

The downside to any possible recovery scenario is the employment picture. The job market always lags the economy, both on the way down and on the way back up. The U.S. unemployment rate has risen from a generational low of 4% in 2000 to a seasonally adjusted rate of 5.7%, but this rate is likely to rise through 2002, peaking near 6.5%, even while GDP growth turns positive and the recession technically ends in the first quarter. It usually feels like the economy is still in recession for at least a year after economic growth has begun, primarily because people continue to lose jobs and face weak prospects for new work.

Manufacturing entered recession far ahead of the rest of the economy, and is likely to pull out sooner, if only because the shelves are bare. The U.S. economy underwent a massive inventory reduction during 2001 - the fourth quarter is likely to set a record - and production will have to pick up to serve any demand in 2002. Industrial production in December fell to a level 5.8% below a year earlier.

There is still no sign of price inflation, either at the producer or the consumer level, thanks in large part to declining energy prices. Core CPI (excluding food and energy) is up 2.7% for the year, while the overall rate is up only 1.6%, matching the low reached in 1998.

Domestic Stock Market

For the year 2001, the U.S. stock market was down 11.89% (S&P 500) with two out of four quarters resulting in double-digit losses. Across capitalizations, only the median small cap manager managed a positive 1.84% return while mid cap struggled to a -9.44% return with large cap bringing up the rear at -12.11%.

Technology (-23.72%) and Utilities (-30.82%) were the two worst performing sectors during the year. Consumer Cyclicals (12.48%) and Basic Materials (2.55%) were the best performing sectors for the year.

In a repeat of 2000, value managers outperformed their growth counterparts. For the year, the median small cap value manager returned 17.43% while the median small cap growth manager returned -12.61%. In the large cap arena, value managers returned -3.81% and growth managers returned -20.20%.

Domestic Bond Market

The Lehman Brothers Aggregate Index produced a calendar year return of 8.44% for the broad fixed income market index. The market sold-off securities purchased in the "flight to quality" that resulted from the deteriorating U.S. economy and the terrorist attacks. U.S. Treasuries performed the worst in the aggregate index, followed by U.S. Agencies and CMBS.

High yield spreads recovered from the post September 11 wide levels experienced by the sector. As a result, the Lehman Brothers High Yield Bond Index gained 5.78% for the fourth quarter and ended up returning 5.28% for the year.

Non-U.S. Equity Market

The MSCI EAFE rose in the fourth quarter 7.0%, finishing the year on a positive note and ending three consecutive quarters of negative returns. For the year, the market was down 21.2% with currency weakness once again magnifying the loss of 16.0% in local terms. Although the fourth quarter marked the first period since 1974 that the United States, Japan and Europe were all simultaneously in recession, market

behavior was noticeably different in all three economies. The "Nokia bounce" helped Finland (+49.0%) become the best performing market of the quarter, while currency weakness helped give Japan (-5.9%) the dubious honor as the only major market with negative return for the quarter.

Emerging Markets, even with a 26.60% fourth quarter, finished the year down 2.37%.

Source: Callan Associates

Investment Operations

The full impact of a recession was felt in the Year 2001. Partway through 2000, the United States economy headed downhill and throughout 2001 that trend continued. Every sector of the economy suffered from the effects of this recession. Yet, during these times the productivity of U.S. companies increased. Some credit that to enhanced technology applications, while others believe it resulted from cost-cutting actions taken during 2000. Whatever the reason, this productivity increase undoubtedly shortened the life of the recession and helped to keep inflation in check. The end of 2001 gave new hope to a bettering economy.

The HPRS had a negative investment return of 3.29% and yet finished first among the Ohio public pension plans. Any investment related to growth was punished in 2001. International equity holdings trailed the U.S. markets. Domestic bonds and real estate investments performed at or above expected levels. Investments in

smaller companies, especially those of a value orientation, were rewarded.

In November 2001 Callan Associates completed an asset allocation study and presented it to the Board. This study considers the investment return needed to meet the expense needs of the HPRS and tempers that need against the appropriate level of risk the system is prepared to take to achieve that return. This asset allocation study recommends shifting some money from domestic stock investments to international stock investments. The study also recommends increasing the allocation to bonds by reducing the allocation to real estate. These shifts are moderate in nature with about 2-5% of assets being moved. Additionally, Callan Associates recommended that more balance be achieved between value and growth stock investments. These moves will position the HPRS to participate in the economic recovery that is expected.

The next step in the asset allocation process is to complete a structure analysis in which Callan Associates will review each existing investment manager and recommend whether they should be retained, replaced or the investment funds shifted. This report is scheduled for presentation to the Board in February 2002.

The HPRS Board intends to continue to monitor the asset allocation during 2002 and will make adjustments when appropriate.

Summary by Richard A. Curtis, Executive Director

Schedule of Investment Performance

Year Ending December 31, 2001

DomesticEquity Standard & Poors 500 (large cap) Russell 2500 (small/mid cap)	2001 - 8.75% -11.89 1.22	2000 - 6.40% -9.11 -3.02	3-Year - 3.84% -1.03 9.42	5-Year 1.24% 10.70 10.34
International Equity MSCI EAFE Index	-16.34 -21.44	- 7.35 -14.17	.75 -5.05	4.12 .89
Fixed Income Lehman Brothers Aggregate	8.28 8.43	11.05 11.63	6.37 6.28	7.37 7.43
Real Estate NCREIF Classic Index	8.26 7.28	18.35 13.01	11.24 10.71	9.10 12.79
Domestic Short Term	4.67	5.66	4.95	5.20
Total Fund	-3.24	-0.29	1.17	4.37
Absolute Objective Relative/Composite Benchmark ▶	8.00 -3.80	7.75 -2.28	7.83 3.11	7.80 9.21

[▶] Relative/Composite Benchmark: 40% S&P 500, 20% Russell 2500, 20% L/B Aggregate, 10% MSCI EAFE and 10% NCREIF Index.

Source: Callan Associates

All returns are reported gross of fees, using time-weighted annualized rates of return, in accordance with the Association for Investment Management and Research (AIMR) standards.

Investment Summary

December 31, 2001

		% of Total	
Portfolio Type	<u>Fair Value</u>	<u>Fair Value</u>	Policy %
Domestic Equity	\$283,087,622	49.5	48.0
Fixed Income	119,001,822	20.8	25.0
Real Estate	82,843,221	14.5	12.0
International Equity	56,525,567	9.9	15.0
Short-Term	30,855,441	5.4	0.0
Total	\$572,313,673	100.0	100.0

Largest Equity Holdings (by Fair Value)

December 31, 2001

<u>Rank</u>	<u>Shares</u>	<u>Description</u>	<u>Fair Value</u>
1.	117,633	Citigroup Inc	\$5,938,114
2.	59,400	American Std Cos	4,052,862
3.	56,800	Microsoft Corp	3,763,000
4.	83,437	El Paso Corporation	3,722,125
5.	93,000	Pfizer Inc	3,706,050
6.	28,100	International Business Machines Corp	3,398,976
7.	36,303	Chevron Texaco Corp	3,253,112
8.	53,780	Phillips Pete Co	3,240,783
9.	75,000	General Elec Co	3,006,000
10.	63,200	Verizon Communications	2,999,472

Largest Fixed-Income Holdings (by Fair Value)

December 31, 2001

<u>Rank</u>	<u>Par</u>	<u>Name</u>	<u>Coupon</u>	<u>Maturity</u>	<u>Rating</u>	<u>Fair Value</u>
1.	\$4,500,000	U.S. Treasury Bond	6.50%	11/15/26	AAA/AAA	\$4,928,895
2.	4,750,000	Bank United FSB Coral	5.40	02/02/04	AAA	4,895,398
3.	3,340,000	US Treasury Bond	7.50	11/15/16	AAA/Aaa	3,949,550
4.	3,200,000	US Treasury Bond	7.25	08/15/22	AAA/AAA	3,765,504
5.	3,000,000	FHLB Deb	5.80	09/02/08	AAA/Aaa	3,067,980
6.	3,000,000	Centex Home Equity	6.47	07/25/29	AAA/Aaa	3,045,000
7.	2,950,000	FHLB Cons Bnd	5.70	09/10/08	NR/Aaa	2,991,035
8.	2,500,000	Lowes Companies Inc	8.25	06/01/10	AAA/AAA	2,828,000
9.	2,600,000	FHLMC Deb	7.00	07/15/05	AAA/AAA	2,818,556
10.	2,500,000	FHLMC Mltcl Mtg	6.50	02/15/23	AAA/AAA	2,603,900

Investment Portfolio

December 31, 2001

Fixed Income

<u>Par</u>	Description	<u>Rate</u>	<u>Maturity</u>	<u>Fair Value</u>
\$2,000,000	Alltel Corp	7.500%	03/01/06	\$2,121,320
1,200,000	Bank One Tx Na Mtn	6.250	02/15/08	1,223,484
1,000,000	Cardinal Health Inc	6.750	02/15/11	1,036,290
300,000	Chevron Corp Tr Fund	8.110	12/01/04	314,994
1,500,000	Co Airls 1998-3 A2	6.320	11/01/08	1,315,650
1,115,000	Deutsche Bk Finl Inc	6.700	12/13/06	1,180,963
1,000,000	Bank One Corp FRN	4.250	07/28/03	1,030,280
1,000,000	Ford Mtr Cr Mtn	9.030	12/30/09	1,090,520
995,000	General Motors Accep	6.750	01/15/06	1,007,766
1,500,000	Household Fin Corp	6.400	06/17/08	1,497,750
1,000,000	Knight Rider	6.875	03/15/29	947,100
2,500,000	Lowes Companies Inc	8.250	06/01/10	2,828,000
1,500,000	May Dept Stores	6.875	11/01/05	1,576,785
1,600,000	Swiss Bk Corp Nt	6.750	07/15/05	1,677,280
1,500,000	Texaco Capital Inc	6.000	06/15/05	1,574,730
1,000,000	Tribune Co	7.450	10/15/09	1,054,600
750,000	Transamerica Fin	7.250	08/15/02	769,973
2,500,000	Unionbancal Corp	5.750	12/01/06	2,512,000
2,500,000	Wells Fargo Finl	6.125	02/15/06	2,597,325
\$26,460,000	Total Corp	orate Bonds		\$27,356,810
\$1 ,000,000	D. L.OCA	F 4640/	04/11/27	\$0.44 5 20
\$1,000,000	Bank Of America	5.464%	04/11/37	\$941,560
1,000,000	Credit Suisse First	5.435	09/15/34	936,890
304,414	Cit Rv Owner Tr	5.400	12/15/11	312,405
650,000	C S First Bost Mtg	6.400	06/15/34	661,031
1,500,000	FHLMCMI, 1M	6.000 6.500	06/15/08	1,545,465
2,500,000	F H L M C Mltcl Mtg		02/15/23	2,607,825
2,000,000	F H L M C Mltcl Mtg	6.500 6.37	12/15/21	2,071,860
2,500,000	F H L M C Mltcl Mtg		10/15/22 04/15/21	2,592,175
1,000,000	F H L M C Mltcl Mtg	6.000		1,027,180
1,600,000	F H L M C Mltcl Mtg	6.500	02/15/21 02/17/23	1,654,000
2,000,000 1,292,019	F N M A Gtd Remic F N M A Gtd Remic	7.500 6.500	02/17/23	2,100,000
582,732	F N M A Gtd Remic	6.00	09/25/20	1,321,890
1,431,000	F N M A Gtd Remic	6.500	09/25/20	589,468 1,437,253
2,300,000	F N M A Gtd Remic	6.750	07/25/25	2,374,014
2,000,000	F N M A Gtd Remic	6.500	08/25/23	2,041,240
1,475,000	F N M A Gtd Remic	6.250	08/25/23	
500,000	F N M A Gtd Remic	6.150	02/23/23	1,498,497 507,655
660,082	F N M A Gtd Remic	6.250	08/25/00	664,821
298,604	F N M A Gtd Remic	6.000	12/25/19	305,227
270,004	1 IN IN A GIU REIIIC	0.000	14/43/17	303,447

Fixed 1	Income	con	tinne	(be
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\$112,929,648	Total Fix	ed Income		\$119,001,822
\$14,807,517	Total Asset-Backe	ed Securities		\$15,201,693
540,835	The Money Store	8.925	06/15/22	549,867
2,000,000	Standard Cr Card Tr	7.250	04/07/06	2,161,000
800,000	Pacific Coast Cdo	3.03875	10/25/36	800,000
1,000,000	Merrill Lynch Mtg	7.120	06/18/29	1,054,180
1,000,000	Discover Card Mast	3.6475	07/15/06	1,002,180
2,000,000	Citibank Credit Card	4.100	12/07/04	1,989,360
2,147,271	Champion Home Eq Ln	6.710	0 9/25/29	2,212,548
3,000,000	Centex Home Equity	6.470	07/25/29	3,045,000
500,000	Capital Auto Recvs	7.000	01/17/05	506,650
\$1,819,412	Aames Mtg Tr	6.890%	11/15/27	\$1,880,908
\$4,742,805	Total Mortgage Pass-Throug	th Securities		\$4,899,068
853,317	GNMA Gtd 423906	7.500%	07/15/26	884,779
651,611	G N M A #423876	7.500%	07/15/26	675,636
432,575	F N M A #535466	7.000%	08/01/30	440,686
527,524	F N M A #525908	7.000%	12/01/29	537,416
888,762	F N M A #313708	7.500%	08/01/12	934,311
1,003,412	F H L M C Gd E00476	6.500%	03/01/12	1,026,300
\$385,604	F H L M C Gd C00492	7.500%	01/01/27	\$399,940
\$35,525,475	Total US Government	Obligations		\$38,426,137
990,000	US Treasury Note	6.500	02/28/02	997,425
1,065,000	US Treasury Bond	6.250	05/15/30	1,152,532
4,500,000	US Treasury Bond	6.500	11/15/26	4,928,895
1,500,000	US Treasury Note I P	3.875	01/15/09	1,663,890
3,200,000	US Treasury Bond	7.250	08/15/22	3,765,504
3,340,000	US Treasury Bond	7.500	11/15/16	3,949,550
2,000,000	US Treasury Bond	8.000	11/15/21	2,531,880
600,000	F N M A Deb	5.500	02/15/06	618,186
1,500,000	F N M A Deb	5.250	01/15/09	1,486,170
1,400,000	F H L M C Deb	6.875	09/15/10	1,510,908
2,005,000	F H L M C Deb	5.250	01/15/06	2,048,228
2,600,000	F H L M C Deb	7.000	07/15/05	2,818,556
3,000,000	F H L B Deb	5.800	09/02/08	3,067,980
2,950,000	F H L B Cons Bnd	5.700	09/10/08	2,991,035
\$4,750,000	Bank United FSB Coral	5.400%	02/02/04	\$4,895,398
\$31,393,851	Total Collateralized	l Mortgages		\$33,118,114
1,000,000	G N M A Gtd Remic	7.000	01/20/25	1,040,619
2,500,000	G M A C Comm Mtg	6.175	05/15/33	2,515,400
800,000	Federal Home Ln Mtg	6.200	01/15/23	817,744
1,500,000	Federal Home Ln Mtg	6.500	01/15/22	1,553,895

Domestic Equity

Shares	<u>Description</u>	Fair Value
18,000	21st Century Insurance Group	\$350,100
36,200	AAR Corp	326,162
31,300	AOL Time Warner Inc	1,004,730
53,900	AT&T Corp	977,746
4,200	Abbott Labs	234,150
26,400	Ace Ltd	1,059,960
15,900	Activision Inc	413,559
6,800	Actrade Financial Technologies Ltd	200,260
15,700	Adaptec Inc	227,650
6,000	Adelphia Communications Corp Cl A	187,080
66,800	Advanced Micro Devices Inc	1,059,448
22,500	Advanta Corp Cl B	204,750
6,400	Affiliated Computer Svcs Inc Cl A	679,232
12,400	Air Prods & Chems Inc	581,684
8,400	Alaska Communications System Group	66,948
59,424	Alcoa Inc	2,112,523
5,400	Alliant Techsystems Inc	416,880
63,000	Allstate Corp	2,123,100
32,100	Alltel Corp	1,981,533
20,000	Alpharma Inc Cl A	529,000
19,600	American Home Prods Corp	1,202,656
32,400	American Intl Group Inc	2,572,560
59,400	American Std Cos	4,052,862
9,400	Americredit Corp	296,570
1,500	Ameron Intl Corp Del	103,800
24,500	Amgen Inc	1,382,780
25,400	Anheuser Busch Cos Inc	1,148,334
19,500	Annaly Mtg Mgmt Inc	312,000
26,600	Annuity And Life Re Hldgs	667,926
30,000	Anthracite Cap Inc	329,700
19,000	Anworth Mortgage Asset Corp	172,900
10,200	Applied Matls Inc	409,020
28,600	Arch Chemicals Inc	663,520
30,900	Arvin Meritor Inc	606,876
10,000	Associated Estates Rlty Corp	91,800
43,400	Asyst Technology Corp	553,784
20,000	Atmel Corp	147,400
10,000	Ault Inc	41,000
9,500	Autozone Inc	682,100
62,400	Avant Corp	1,278,576
10,000	Aviall Inc New	75,500
22,700	Avista Corp	301,002
45,400	Aztar Corp	830,820
8,400	B J Services Company	272,580
19,500	Ball Corp	1,378,650
25,400	Bank Of America Corp	1,598,930
24,800	Becton Dickinson & Co	822,120
10,000	Bemis Inc	491,800
7,400	Bio Rad Labs Inc Cl A	468,420
19,600	Block H & R Inc	876,120
5,000	Blockbuster Inc Cl A	126,000
11,700	Borg Warner Inc	611,325
18,900	Boston Scientific Corp	455,868
10,000	Boykin Lodging Co	79,700
10,000	Brantley Cap Corp	108,900
6,500	Bristol-Myers Squibb Co	331,500
0,500		331,300

Domestic Equity (continued)

F 100	ъ 1 ' т	40.450
5,100	Broadwing Inc	48,450
19,200	Brocade Communications Sys Inc	635,904
3,900	Brooks Automation Inc	158,613
2,300	Brown Forman Corp Cl B	143,980
57,600	Burlington Northn Santa Fe Corp	1,643,328
41,600	CBRL Group Inc	1,224,704
12,900	CVS Corp	381,840
3,900	Cablevision Systems Ny Group Cl A	185,055
7,500	Cabot Corp	267,750
8,400	Cadence Design Sys Inc	184,128
4,000	Cameco Corp	99,040
12,000	Capital Automotive Reit	238,680
9,500	Centex Corp	542,355
51,700	Century Tel Inc	1,695,760
6,000	Check Point Software Tech Ltd Ord	239,340
36,303	Chevrontexaco Corp	3,253,112
5,800	Chiron Corp	254,272
28,300	Chubb Corp	1,952,700
18,200	Cigna Corp	1,686,230
88,700	Cisco Sys Inc	1,606,357
117,633	Citigroup Inc	5,938,114
9,900	Citizens Communications Company	105,534
31,400	Clayton Homes Inc	536,940
21,700	Clorox Co	858,235
19,000	CNF Transportation Inc	637,450
11,000	Coca Cola Co	518,650
15,400	Colgate Palmolive Co	889,350
6,500	Comcast Corporation Special Cl A	234,000
34,100	Commercial Fed Corp	801,350
500	*	22,750
	Commonwealth Tel Enterprises Inc	1,302,868
26,600	Computer Sciences Corp	
21,900	Concord E F S Inc	717,882
17,600	Copart Inc	640,112
8,500	Cor Therapeutics Inc	203,405
15,000	Corrpro Cos Inc	40,950
120,900	Covanta Energy Corporation	546,468
21,000	Crane Co	538,440
18,400	Cummins Inc.	709,136
18,000	CYTYC Corp	469,800
15,300	DTE Energy Co	641,682
4,000	Datum Inc	55,440
9,500	Dell Computer Corp	258,210
5,656	Deutsche Telekom Ag Sponsored Adr	95,586
6,200	Devon Energy Corporation	239,630
12,000	Dial Corp New	205,800
9,800	Diebold Inc	396,312
7,900	Dobson Communications Corp Cl A	67,466
37,900	Donnelley R R & Sons Co	1,125,251
20,000	EMC Corp Mass	268,800
16,200	ESS Technology Inc	344,412
83,437	El Paso Corporation	3,722,125
13,300	El Paso Elec Co	192,850
5,100	Electric Lightwave Inc	1,530
5,000	Electronic Data Sys Corp New	342,750
28,800	Electronics For Imaging Inc	642,528
10,000	Emmis Communications Corp Cl A	236,400
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2.460	E1 C-1ti I	2
2,468	Employee Solutions Inc	207.060
8,400	Energen Corp	207,060
43,200	Energy East Corp	820,368
10,100	Equifax Inc	243,915
16,500	Equus II Inc	128,535
35,000	Ethyl Corp	32,200
16,400	Everest Re Group Ltd	1,159,480
40,900	Exxon Mobil Corp	1,607,370
12,500	Fannie Mae	993,750
50,100	First Energy Corp	1,752,498
60,841	Fleet Boston Financial Corp	2,220,697
3,150	Flushing Financial Corporation	56,070
20,000	Friedman Billings Ramsey Group Inc A	103,800
32,6 00	Fuller HB Co	937,902
135,900	Gateway Inc	1,092,636
9,000	Genentech Inc	488,250
4,000	General Dynamics Corp	318,560
75,000	General Elec Co	3,006,000
6,200	Genesis Microchip Inc	409,944
30,000	Genuity Inc	47,400
5,200	Gilead Sciences Inc	341,744
11,300	Glaxo Smithkline P L C A D R	562,966
5,000	GLB Bancorp Inc	46,250
12,100	Goldman Sachs Group Inc	1,122,275
7,000	Gtech Hldgs Corp	317,030
30,500	Harken Energy Corporation	37,515
13,000	Harsco Corp	445,900
37,400	Hartford Financial Services Grp Inc	2,349,842
30,000	Hartmarx Corp	49,500
46,000	Hasbro Inc	746,580
25,500		
10,300	Heinz, HJ Co Helmerich & Payne Inc	1,048,560 343,814
6,800	Hibernia Corp Cl A	120,972
12,000	Hilfiger Tommy Corp Ord	165,000
19,000	Hollinger Intl Inc Cl A	222,300
15,000	Hologic Inc	139,350
20,000	Home Depot Inc	1,020,200
49,100	Host Marriott Corp	441,900
8,000	Human Genome Sciences Inc	269,760
46,700	Humana Inc	550,593
33,700	Hunt, JB Trans Svcs Inc	781,840
103,500	IMC Global Inc	1,345,500
3,100	IMS Health Inc	60,481
8,000	ITT Industries Inc	404,000
53,900	Ingersoll Rand Co	2,253,559
78,200	Intel Corp	2,459,390
28,100	International Business Machines Corp	3,398,976
70,300	International Paper Co	2,836,605
6,000	Iomega Corporation	50,100
21,000	ITLA Cap Corp	440,160
24,000	JDS Uniphase Corp	208,320
81,960	JP Morgan Chase & Co	2,979,246
20,300	Jack In The Box Inc	559,062
27,900	Jefferson Smurfit Group Plc Spon Adr	627,750
24,052	Johnson & Johnson	1,421,473
5,600	Johnson Ctls Inc	452,200

	1.0	
9,400	Jones Apparel Group Inc	311,798
22,000	Juniper Networks Inc	416,900
3,700	KLA - Tencor Corp	183,372
27,000	Keane Inc	486,810
7,100	Kerr Mcgee Corp	389,080
22,000	Key Energy Services Inc	202,400
42,600	Kimberly Clark Corp	2,547,480
9,400	Knight Ridder Inc	610,342
63,600	Kraft Foods Inc Cl A	2,164,308
54,000	Kroger Co	1,126,980
125,000	* *	
125,000	La Quinta Properties Inc	718,750
12,400	Lafarge North America Inc	465,868
5,800	Lam Resh Corp	134,676
11,000	Lancaster Colony Corp	390,610
20,000	Lazare Kaplan Intl Inc	135,200
6,900	Lee Enterprises Inc	250,953
6,000	Lesco Inc Ohio	51,600
8,000	Liberty Media Corp A	112,000
9,400	Liberty Satellite & Technology Inc A	8,836
23,100	Lilly Eli & Co	1,814,274
29,400	Lincoln Natl Corp Ind	1,427,958
17,800	Linear Technology Corp	694,912
27,000	Local Financial Corp	377,730
6,200	Lodgenet Entmt Corp	105,958
22,000	Lone Star Steakhouse Saloon	
,		326,260
21,800	MCG Capital Corporation	388,040
20,000	Malaysia Fund	78,400
1,500	Markel Holdings	269,475
2,700	Marsh & McLennan Cos Inc	290,115
12,5 00	Martin Marietta Matls Inc	582,500
22,700	Mattel Inc	390,440
21,600	Maxim Integrated Prods Inc	1,134,216
5,000	Maxwell Technologies Inc	49,000
83,800	Mc Donald's Corp	2,218,186
3,800	McCormick & Co Inc	159,486
20,000	Media 100 Inc	29,800
2,000	Media Gen Inc Cl A	99,660
6,200	Medimmune Inc	287,370
19,800	Medtronic Inc	1,013,958
31,700	Merck & Co Inc	1,863,960
10,000	Mercury Air Group Inc	50,000
7,000	Mercury Gen Corp	305,620
7 , 700	Meredith Corp	274,505
21,700	Merrill Lynch & Co Inc	
53,680		1,131,004
	Mesaba Hldgs Inc	382,202
56,800	Microsoft Corp	3,763,000
22,500	Milacron Inc	355,725
12,600	Millennium Pharmaceuticals Inc	308,826
7,500	Mohawk Inds Inc	411,600
21,600	Morgan Stanley Dean Witter & Co	1,208,304
88,200	Motorola Inc	1,324,764
5,000	Movado Group Inc	96,000
6,700	Murphy Oil Corp	563,068
59,100	Mutual Risk Mgmt Ltd	431,430
9,600	NSTAR	430,560
17,900	Nacco Inds Inc Cl A	1,016,541
2,900	New York Times Co Cl A	125,425
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17,000	Nextel Communications Inc Cl A	186,320
57,900	Niagara Mohawk Hldgs Inc	1,026,567
8,700	Nike Inc Cl B	489,288
13,000	Nokia Corp Spsd Adr	318,890
12,000	North Fork Bancorporation Inc Ny	383,880
5,400	Novellus Sys Inc	213,030
21,500	Nvidia Corp	1,438,350
1,690	NVR Inc	344,760
15,800	Ocean Energy Inc	303,360
5,000		77,500
35,000	Oglebay Norton Co	
	Olympic Stl Inc	89,250
20,000	Oracle Corporation	276,200
15,000	Orthologic Corp	73,350
12,000	Overland Data Inc	98,400
9,300	PEC Solutions Inc	349,773
38,900	PNC Financial Services Group Inc	2,186,180
18,500	Pacific Centy Finl Corp	478,965
5,000	Pall Corp	120,300
10,900	Park Pl Entmt Corp	99,953
9,000	Park-Ohio Hldgs Corp	28,620
15,600	Paxar Corp	221,520
7,100	Penton Media Inc	44,446
23,800	Pepsico Inc	1,158,822
30,000	Perceptron Inc	39,600
123,100	Pfizer Inc	4,905,535
7,300	Pharmaceutical Res Inc	246,740
27,500	Pharmacia Corporation	1,172,875
28,600	Phelps Dodge Corp	926,640
32,600	Philip Morris Cos Inc	1,494,710
53,780	Phillips Pete Co	3,240,783
4,400	Pilgrims Pride Corp Cl A	42,240
33,500	Pilgrims Pride Corp Cl B	453,925
24,400	Pitney Bowes Inc	917,684
8,905	Plum Creek Timber Co Inc	252,457
5,200	Precision Castparts Corp	146,900
26,668	Price Legacy Corp	84,271
12,000	Priority Healthcare Corp Cl B	422,280
4,800	Pro Logis Tr	103,248
26,400	Procter & Gamble Co	2,089,032
20,200	Prudential Financial Inc	670,438
14,000	Public Storage Inc	
4,219	Pulte Homes Inc	467,600
		188,463
7,600	Qualcomm Inc	383,800
8,800	Qwest Communications Intl Inc	124,344
15,300	RGS Energy Group Inc	575,280
6,900	RH Donnelley Corp	200,445
13,300	RTI Intl Metals Inc	132,335
1,600	Rainbow Media Group	39,520
51,200	Raytheon Company	1,662,464
8,400	Regis Corp Minn	216,552
16,900	RenaissanceRE Holdings Ltd	1,612,260
10,600	Renal Care Group Inc	340,260
26,400	Rent A Ctr Inc	886,248
10,000	Resource Bancshares Mtg Group Inc	114,600
12,000	Reynolds & Reynolds Co Cl A	291,000
8,650	RLI Corp	389,250

65,200	Rockwell Collins Inc	1,271,400
25,000	Rocky Shoes & Boots Inc	144,250
7,400	Rollins Inc	148,000
12,000	Ross Stores Inc	384,960
2,566	Roxio Inc	42,467
1,300	Rural Cellular Corp Cl A	28,925
35,600	SBC Communications Inc	1,394,452
25,000	Safeguard Scientifics Inc	87,500
17,500	Schering Plough Corp	626,675
4,500	Schlumberger Ltd	247,275
31,800	Schwab Charles Corp	491,946
8,800		
59,700	Sealed Air Corp Sears Roebuck & Co	359,216 2,844,108
,	Senior Hsg Pptys Tr	
54,600		759,486
16,500	Sherwin Williams Co	453,750
13,000	Siebel Sys Inc	363,740
15,000	Snap On Inc	504,900
34,900	Solutia Inc	489,298
7,000	Southwestern Energy Co	72,800
37,900	Sovereign Bancorp Inc	463,896
10,000	Spacelabs Med Inc	121,500
31,000	Spherion Corporation	302,560
92,300	Sprint Corp	1,853,384
7,600	St Jude Med Inc	590,140
30,000	Storage Technology Corp	620,100
7,000	Strategic Distribution Inc	42,700
13,500	Sun Microsystems Inc	166,050
7,000	Sunoco Inc	261,380
60,600	Supervalu Inc	1,340,472
16,600	Swift Transn Inc	357,066
14,100	Sycamore Networks Inc	75,576
23,600	Symantec Corp	1,565,388
12,000	Sysco Corp	314,640
9,600	THQ Inc	465,312
14,800	TJX Cos Inc New	589,928
42,900	TRW Inc	1,589,016
8,900	Telephone & Data Sys Inc	798,775
67,300	Tellabs Inc Del	1,011,519
32,600	Temple-Inland Inc	1,849,398
21,100	Textron Inc	874,806
21,400	Torchmark Corp	841,662
5,000	Transocean Sedco Forex Inc	169,100
7,200	Tricon Global Restaurants Inc	354,240
12,000	Trigon Healthcare Inc	833,400
13,000	Trinity Inds Inc	353,210
8,100	Triquint Semiconductor Inc	99,306
35,200	Tyco Intl Ltd	2,073,280
4,200	USA Education Inc	352,884
18,900	US Freightways Corp	593,460
11,500	UST Inc	402,500
34,600	USX - US Steel Group	626,606
19,000	Unifi Inc	137,750
106,500	Unisys Corp	1,335,510
9,900	United Parcel Service Inc Cl B	539,550
3,900	United States Cellular Corp	176,475
17,900	United Technologies Corp	1,156,877
63,300	Unocal Corp	2,283,231
55,500	Chocar Gorp	2,200,201

1		
4,400	Valspar Corp	174,240
4,300	Verisign Inc	163,572
16,000	Veritas Software Corp	717,280
63,200	Verizon Communications	2,999,472
2,500	Viacom Inc Cl B	110,375
30,000	Vicinity Corporation	54,300
41,300	Vintage Pete Inc	596,785
37,300	Vishay Intertechnology Inc	727,350
21,000	Vodafone Group PLC ADR	539,280
11,200	Wackenhut Corp	213,248
25,000	Wal Mart Stores Inc	1,438,750
17,700	Walgreen Co	595,782
27,500	Washington Fed Inc	708,950
59,800	Washington Mut Inc	1,955,460
12,500	Waters Corp	484,375
5,600	Weatherford Intl Inc	208,656
47,000	Western Res Inc	808,400
3,200	Western Wireless Corp Cl A	90,400
5,000	Westvaco Corp	142,250
8,100	Whirlpool Corp	593,973
11,500	Whole Foods Mkt Inc	500,940
194,600	Worldcom Inc - Worldcom Group	2,739,968
6,500	Worldcom Inc M C I Group	82,550
20,800	Xoma Ltd	204,880
10,800	Zale Corp New	452,304
8,534,082	Total	\$254,449,920

Summary Schedule of Broker Fees Year Ending December 31, 2001

			<u>Average</u>
<u>Broker</u>	<u>Fees</u>	Shares	Cost
ABN Amro Chicago Group	\$490	9,800	0.050
Alpha Management Inc	2,260	45,200	0.050
Autranet	3,072	60,790	0.051
BB & T Capital Markets	515	21,000	0.025
Baird, Robert W	3,910	102,000	0.023
Banc/Amercian Securities	2,505	50,100	0.050
Bear Stearns	15,781	398,701	0.040
Beck, Ryan & Co	41	900	0.045
Boston Institutional Services	3,575	65,300	0.043
Bridge & Co	18,638	355,600	0.053
Brown Brothers Harriman	50	1,000	
B-Trade Services	45		0.050
		1,500	0.030
Buckingham Research	1,554	28,400	0.055
Canadian Imperial	7.562	32,200	0.000
Cantor Fitzgerald	7,562	295,700	0.026
Capital Institutional Services	9,908	173,100	0.057
CIBC Oppenheimer World	3,120	93,100	0.034
Conning & Co	100	2,000	0.050
CS First Boston	8,265	267,500	0.031
Dain Rauscher Wessels	295	5,900	0.050
Davidson, D A	420	12,600	0.033
Deutsche Bank Alex. Brown	7,004	150,800	0.046
Donaldson, Lufkin	477	31,800	0.015
Dowling and Partners	10	200	0.050
Edge Securities	1,685	33,700	0.050
Edwards, A G & Sons	175	3,500	0.050
Ernst & Co	630	82,200	0.008
Fidelity Capital Markets Co	765	15,300	0.050
First Analysis Security Corp	125	2,500	0.050
First Boston Corp	8,802	180,000	0.049
First Union Securities	455	76,100	0.006
FleetBoston	1,125	40,100	0.028
Fox-Pitt Kelton	3,200	78,500	0.041
Friedman Billings & Ramsey	2,174	99,900	0.022
Gerard Klauer Mattison	230	4,6 00	0.050
Goldman Sachs	6,757	261,350	0.026
Gordon Haskett	615	12,300	0.050
Helfin & Co	525	143,800	0.004
Herzog, Heine, Geduld	40	56,800	0.001
Instinet	4,547	217,148	0.021
Interstate Group	65	1,300	0.050
Interstate / Johnson	180	3,000	0.060
Jefferies Securities	9,099	245,330	0.037
Johnson Rice & Co	63	1,250	0.050
JSF Securities	600	30,000	0.020
Kaufman Brothers	760	15,200	0.050
Keefe, Bruyette & Woods	1,000	20,000	0.050
Knight Securities	0	164,200	0.000
King, C L & Associates	789	14,700	0.054
Langen McAlenney	165	3,300	0.050
Legg Mason Wood Walker	165	24,300	0.007

			Average
<u>Broker</u>	Fees	Shares	Cost
Lehman Brothers	7,233	249,315	0.029
Lynch, Jones, Ryan	205,627	3,717,187	0.055
McDonald & Co	3,852	77,000	0.050
Merrill Lynch	12,025	290,441	0.041
Miller, Johnson & Kuehn	100	2,000	0.050
Mogavero Incorp	6,044	129,555	0.047
Montgomery Securities	25	8,000	0.003
Morgan Keegan & Co	350	11,700	0.030
Morgan Stanley	8,316	245,781	0.034
Morgan Securities, J P	8,959	230,810	0.039
National Discount	0	8,500	0.000
National Securities Corp	0	67,200	0.000
NDB Capital Markets	0	27,100	0.000
Needham & Co	0	19,300	0.000
Nutmeg Securities	0	219,050	0.000
O'Neil, William & Co	1,040	20,800	0.050
OTA Limited Partnership	890	17,800	0.050
Pacific American Securities	900	15,000	0.060
Pacific Crest Securities	907	129,500	0.007
Pacific Growth Equities	100	2,000	0.050
Paine Webber	180	49,900	0.004
Prudential Securities	8,992	331,433	0.027
Pryor, McClendon, Counts	1,206	20,100	0.060
Putnam Lovell	385	7,700	0.050
Raymond James	3,256	85,514	0.038
Riley, B & Co Inc	100	2,000	0.050
Robinson Humphrey	400	11,800	0.034
Rochdale Securities Co	2,950	59,000	0.050
Roth Capital Partners	150	3,000	0.050
Salomon Smith Barney	5,953	324,660	0.018
Sanford C. Bernstein & Co.	3,235	64,700	0.050
SBC Warburg Dillon Read	350	16,300	0.021
Schwab, Charles	105	2,100	0.050
SG Cowen Securities Corp	4,821	120,900	0.040
Soundview Financial Group	555	11,100	0.050
Southwest Securities Inc	0	47,600	0.000
Spear, Leeds & Kellogg Cap	568	252,200	0.002
Spring St Securities	515	10,300	0.050
Stanford Group	929	15,490	0.060
Standard & Poors	780	15,600	0.050
Stephens Inc	395	7,900	0.050
Thomas Weisel Partners	0	7,300	0.000
Thomson Institutional Serv	2,025	40,500	0.050
UBS Warburg	4,672	114,100	0.041
US Bancorp	605	12,100	0.050
Wedbush Morgan Securities	85	1,700	0.050
Wells Fargo	0	12,300	0.000
Weeden & Co	3,104	55,300	0.056
Wheat First Securities	0	11,200	0.000
Winchester Group	2,063	34,700	0.059
Witt Soundview Financial	0	39,700	0.000

\$439,079 11,311,805 Total

Investment Objectives, Policies, and Guidelines

Objectives

- 1. The purpose of this Investment Policy statement is to comply with the directive of Ohio Revised Code Section 5505.06, wherein the Board of Trustees is to adopt public "policies, objectives or criteria for the operation of the investment program." As such, this statement is intended to provide general guidelines within which the Board may take full advantage of its investment authority pursuant to ORC Section 5505.06, while complying with its fiduciary responsibility. This statement is not to restrict the Board consideration of all lawful and legal investment opportunities.
- The primary objective of the Highway Patrol Retirement System is to provide eligible employees with scheduled pension benefits. Although the fund is not governed by the Employees Retirement Income Security Act of 1974 (ERISA), the basic provisions contained in that Act are recognized and will serve as guidance to the management of this fund. In particular, the *prudent person* guidelines are to be in regard to the followed investment management of the fund. These guidelines require that the Board and other system fiduciaries exercise the care, skill, prudence and under the circumstances prevailing, that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character with like aims.
- 3. A secondary objective of the fund is to maintain a sufficient degree of liquidity in order to meet unanticipated demands and changing environments.
- 4. Consistent with prudent standards for preservation of capital and maintenance of liquidity, the goal of the fund is to earn the highest possible rate of return consistent with the fund's tolerance for risk as determined

- periodically by the Board in its role as a fiduciary. This objective should ensure adequate funds to meet scheduled benefits while maintaining level contributions.
- 5. In meeting these objectives, the Board will give consideration to investments that enhance the welfare of the State of Ohio, and Ohio citizens, where such investments offer safety and quality of return comparable to other investments currently available. Equal consideration will be given to investments otherwise qualifying under this section that involve minority-owned and controlled firms, or firms owned and controlled by women, either alone or in joint venture with other firms.
- 6. The fund will be operated within the direction of Ohio Revised Code Section 5505.06.

Policies

1. Diversification of assets will ensure that adverse or unexpected results from a security class will not have a detrimental impact on the entire portfolio. Diversification is interpreted to include diversification by asset type, performance and risk characteristic, number of investments, and by investment style of management organizations.

These guidelines may be implemented through specific directions or instructions to investment managers, and those directions or instructions may contain other more specific restrictions on diversification of assets by percentage holdings, by quality, or other factors.

- Asset classes and ranges considered appropriate for investment of fund assets are to be determined by the Board in accordance with these investment guidelines.
- 3. Assignment of responsibilities for each asset category (components of each asset category) may be assigned to one or more management

firms that may be "specialty" managers (i.e., managing only one type of asset class).

Investment Guidelines for Specific Asset Classes

In order to achieve the return objectives, the fund will employ the following investment strategies:

- 1. U.S. equities will represent from 50 to 70 percent of the market value of total fund assets with a targeted average of 60 percent. The term "equities" includes common stock, convertible bonds and convertible stock.
- 2. Non-U.S. equities will represent from 0 to 15 percent of the market value of total fund assets with a targeted average of 10 percent.
- 3. Real estate may represent 5 to 15 percent of total fund assets with a targeted average of 10 percent.
- 4. U.S. fixed income obligations, including cash, will represent from 15 to 25 percent of the market value of total fund assets with a targeted average of 20 percent. Intermediate-term bonds may include contractual payments, preferred stocks, and bonds with a maturity date greater than one year and less than or equal to ten years. Long-term bonds have a maturity date greater than ten years.

Asset Allocation

As the result of an asset allocation study, the following was adopted as part of the system's overall Investment Policy in November 2001:

1. Short-Term Investments.

When investing cash balances in order to provide effective cash management, emphasis will be placed on the protection of principal through the purchase of high-quality money market instruments, including money market open-end mutual funds, while attempting to achieve the highest available return.

The investment staff may invest cash balances in commercial paper, obligations of the U.S. Treasury, federal agencies, governmentsponsored corporations, and governmentbacked repurchase agreements. Qualifying commercial paper must be issued by U.S. corporations, and must be rated Prime-1 by Moody's Investor Service, A-1 by Standard and Poor's Corporation, or Duff-1 by Duff and Phelps Investment Management Company, with the parent company's long-term debt being rated within the three highest classifications by Moody's, Standard and Poor's, or Duff and Phelps Investment Management Company. All commercial paper purchased will mature in ninety-five days or less, and at no time will the total amount of commercial paper outstanding exceed five percent of the total value of all funds at cost. All instruments of the U.S. government, federal agencies, or government-sponsored corporations will mature in two years or less from the date of purchase.

2. Fixed Income Investments.

The bond portfolio will be diversified as to type of security, issuer, coupon, and maturity. Qualifying bonds, at the time of purchase, must be rated within the three highest classifications by at least two of the rating services (Standard and Poor's Corporation, Moody's Investor Service, and Duff and Phelps Investment Management Company). Generally, the average maturity of the fixed income portfolio will be ten years or less, although individual securities may be longer.

No more than ten percent of the fixed income portfolio is to be invested in the securities of any one issuer, and no more than five percent in any one issue, with the exception of U.S. government securities. Diversification of the bond portfolio will be accomplished by investing in U.S. government bonds and U.S. agency bonds, and/or domestic corporate bonds.

3. Equities.

Equities may include common stock, preferred stock, and securities convertible into common stock. Equities must comply with the *prudent person* standard.

4. Real Estate.

Real estate and related securities permitted under Ohio Revised Code Section 5505.06 include improved or unimproved real property, mortgage collective investment funds (Real Estate Investment Trusts or Real Estate Funds), notes secured by real property, mortgage-backed bonds, and pass-through securities backed by mortgages.

The real estate portfolio will be constructed and managed to

- provide sufficient diversity to protect against adverse conditions in any single market sector,
- provide diversity among geographical locations, property types, and property sizes,
- provide relatively stable returns consistent with the overall U.S. commercial real estate market,
- provide a strong current income stream with the potential for long-term principal growth,
- primarily contain fully developed, fully leased properties, and
- minimize the use of debt financing.

5. International Securities.

Pursuant to Ohio Revised Code Section 5505.06, both equity and fixed international securities are permitted investments. The fund may invest in fixed income securities issued by (1) sovereign governments or (2) rated

corporations that are in investment classes similar to the top three domestic investment classes.

Performance

Comparative performance measurement of the total fund and its components will be conducted quarterly to insure that fund managers are providing added value to the general market values. Total equity returns are expected to exceed the S&P 500 benchmark (generally accepted as the "market") by 1% annually over a market cycle (generally three to five years). In addition, equity managers will be expected to exceed the median of their peer group as measured by style and capitalization. Small/mid capitalization managers are expected to exceed the Russell 2500 benchmark or some comparable benchmark by 1% annually over a market cycle. Fixed income returns are expected to exceed their individual benchmark, such as the Lehman Government Corporate or Lehman Aggregate for long duration managers, and Lehman Intermediate Government Corporate for intermediate duration managers, or short benchmarks as appropriate.

International managers will be measured against suitable international benchmarks such as EAFE (Europe, Australia, and the Far East). Real estate managers will be compared to suitable real estate benchmarks such as the NCREIF.

Over a market cycle, the total fund return is expected to exceed the following benchmarks:

- A minimum return target of 8 percent, representing the fund's actuarial assumption, and also representing the long-term inflation rate of 3 percent plus a risk premium of 5 percent.
- A composite reference fund comprised of 40 percent S&P 500 Index, 20 percent Russell 2500 Index, 20 percent Lehman Brothers Aggregate Index, 10 percent MSCI EAFE Index, and 10 percent NCREIF Classic Index. Results of each asset class will also be compared to the relevant market index.

Investment Responsibilities

The Board recognizes that its role is supervisory, and that discretion is delegated to the investment managers who must adhere to the general guidelines established by the Board. The primary role of the Board is to

- establish performance goals,
- identify and review appropriate investment policy and guidelines,
- retain outside investment and actuarial counsel, and
- review the results of the fund on a regular basis, and implement changes in the investment policies, objectives, asset allocation, and investment managers as needed.

Annual Review

In light of rapid changes in the capital markets and in investment management techniques, these guidelines will be reviewed by the Board on an annual basis. Changes and exceptions to these guidelines may be made at any time with the approval of the Board.

Revised, November 15, 2001 Revised, June 22, 1999 Revised, March 13, 1997 Adopted and approved, September 7, 1994 Revised, June 29, 1994 Revised, September 5, 1990 Revised, June 1, 1988 Adopted and approved, June 11, 1986



Actuarial Section



1000 Town Center . Suite 1000 . Southfield, Michigan 48075 . 248-799-9000 . 800-521-0498 fax 248-799-9020

April 30, 2002

The Retirement Board Ohio State Highway Patrol Retirement System 6161 Busch Boulevard, Suite 119 Columbus, Ohio 43229

Dear Board Members:

The basic financial objective of the Highway Patrol Retirement System (HPRS) is to establish and receive contributions which:

- when expressed in terms of percents of active member payroll will remain approximately level from generation to generation, and
- when combined with present assets and future investment return will be sufficient to meet the financial obligations of HPRS to present and future retirees and beneficiaries.

The financial objective is addressed within the annual actuarial valuation. The valuation process develops contribution rates that are sufficient to fund the plan's current cost (i.e. the costs assigned by the valuation method to the year of service about to be rendered), as well as to fund unfunded actuarial accrued liabilities as a level percent of active member payroll over a finite period. The most recent valuations were completed based upon population data, asset data, and plan provisions as of December 31, 2000.

The plan administrative staff provides the actuary with data for the actuarial valuation. The actuary relies on the data after reviewing it for internal and year to year consistency. The actuary summarizes and tabulates population data in order to analyze longer term trends. The plan's external auditor also audits the actuarial data annually.

The actuary prepared the following supporting schedules for the Comprehensive Annual Financial Report:

Actuarial Section

Summary of Assumptions

Funding Method, Asset Valuation Method, Interest Rate

Payroll Growth

Probabilities of Age & Service Retirement

Probabilities of Separation from Active Employment Before Age & Service Retirement

Health Care and Medicare

Short-Term Solvency Test

Recent Experience in the Health Care Fund

Membership Data

Analysis of Financial Experience

Supplementary Schedules

Schedule of Funding Progress

Schedule of Employer Contributions

Notes to Trend Data

Assets are valued on a market related basis that recognizes each year's difference between actual and assumed investment return over a closed four year period.

Actuarial valuations are based upon assumptions regarding future activity in specific risk areas including the rates of investment return and payroll growth, eligibility for the various classes of benefits, and longevity among retired lives. These assumptions are adopted by the Board after considering the advice of the actuary and other professionals. The assumptions and the methods comply with the requirements of Statement 25 of the Governmental Accounting Standards Board. Each actuarial valuation takes into account all prior differences between actual and assumed experience in each risk area and adjusts the contribution rates as needed. The assumptions used in the December 31, 2000 valuation were based upon a study of experience during the years 1995-99.

Pension and health experience during 2000 was poor. The primary reason for the poor pension experience was lower than assumed investment return. For pension valuation purposes, smaller pay increases than assumed produced a significant actuarial gain. Retirement, death, disability, and turnover produced a small loss.

Based upon the results of the December 31, 2000 valuations, we are pleased to report to the Board that the Highway Patrol Retirement System of Ohio is meeting its basic financial objective and continues in sound condition in accordance with actuarial principles of level percent of payroll financing.

Respectfully submitted,

GABRIEL, ROEDER, SMITH & COMPANY

Brian B. Murphy, F.S.A., M.A.A.A.

Brian B. Muply

Mita D. Drazilov, A.S.A., M.A.A.A.

Mite Drazilor

BBM:mdd

GABRIEL, ROEDER, SMITH & COMPANY

Summary of Assumptions

After consulting with the actuary, these assumptions have been adopted by the Ohio State Highway Patrol Retirement System Board of Trustees, effective January 1, 2001.

Funding Method. An entry age normal actuarial cost method of valuation is used in determining liabilities and normal cost. Differences between assumed and actual experience (i.e., actuarial gains and losses) become part of actuarial accrued liabilities. Unfunded actuarial accrued liabilities are amortized to produce payments (principal and interest), which are level percent of payroll contributions.

Asset Valuation Method. The asset valuation method recognizes assumed investment income fully each year. Differences between actual and expected investment income are phased in over a closed four-year period.

Interest Rate. The investment return rate used in making valuations was 8.0% per year, compounded annually (net after administration expenses).

Payroll Growth. Base pay increases are assumed to be 4.5% annually, attributable to broad economic effects such as inflation and real wage growth. Additional merit and seniority increases are assumed as follows:

Service	Merit &	Base	
<u>Years</u>	Seniority	(Economic)	<u>Total</u>
0-4	3.7%	4.5%	8.2%
5-9	2.0	4.5	6.5
10-14	1.5	4.5	6.0
15 +	0.3	4.5	4.8

Health Care. Premiums are assumed to increase 4.5% annually. All retirants are assumed to receive a joint and survivor pension benefit. Medicare reimbursement is assumed to remain constant at \$50 per month.

Medicare. Benefit recipients were assumed to be eligible for Medicare at age 65.

Other Assumptions.

Probabilities of Age & Service Retirement

Percentage of Eligible Members

Retiring Within Next Year

Unreduced	Reduced
<u>Benefit</u>	<u>Benefit</u>
40%	2%
35	2
· 25	· 2
30	2
25	
25	
40	
100	
	Benefit 40% 35 · 25 30 25 25 25 40

Post-Retirement mortality is based on the 1983 Group Annuity Mortality Male and Female Tables.

Rates of separation from active service before retirement are developed on the basis of actual plan experience.

Probabilities of Separation from Active Employment before Age & Service Retirement

Percentage of Active Members Separating Within Next Year

Sample	<u>Death</u>					
<u>Age</u>	<u>Disability</u>	<u>Men</u>	<u>Women</u>	<u>Other</u>		
20	0.08%	0.02%	0.01%	2.57%		
25	0.08	0.02	0.01	2.24		
30	0.23	0.03	0.02	1.91		
35	0.42	0.04	0.02	1.56		
40	0.70	0.06	0.03	0.84		
45	0.85	0.11	0.05	0.41		
50	1.13	0.20	0.08	0.15		
55	1.32	0.31	0.13	0.00		

Short-Term Solvency Test. The HPRS financing objective is to pay for benefits through contributions that remain approximately level from year to year as a percentage 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.

A short-term solvency test is one means of checking a system's progress under its funding program. In a short-term solvency 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 financing, the liabilities for active member contributions on deposit (1) and the liabilities for future benefits to present retired lives (2) will be fully covered by present assets,

except in rare circumstances. In addition, the liabilities for service already rendered by active members will be partially covered by the remainder of present assets. Generally, if the system has been using level cost financing, the funded portion of column 3 will increase over time.

Accrued Liabilities and Assets Allocated to Retirement, Survivor, and Disability Allowances

	(1)	(2)	(3)		Porti	on of Accru	aed
	Active	Retirants,	Active Members		Liab	ilities Cover	red
	Member	Beneficiaries &	(Employer Financed	Valuation	<u>by R</u>	eported Ass	sets .
<u>Year</u>	Contributions	Vested Deferreds	Portion)	<u>Assets</u>	<u>(1)</u>	<u>(2)</u>	<u>(3)</u>
1991	37,105,492	108,596,896	143,521,590	222,109,351	100	100	53
1992	40,347,533	120,178,654	148,746,295	258,609,387	100	100	66
1993▲	44,494,424	137,111,461	169,850,540	297,050,305	100	100	68
1994▶	47,947,979	156,363,745	169,695,043	330,787,044	100	100	75
1995▲▶	50,547,938	189,010,261	184,793,495	370,425,462	100	100	71
1996	52,297,873	218,164,080	184,052,234	411,316,254	100	100	77
1997▲	53,264,614	260,095,357	183,557,364	460,667,112	100	100	80
1998	53,797,385	291,066,407	188,092,953	509,859,924	100	100	88
1999▲	55,558,145	333,340,728	188,111,212	546,510,779	100	100	84
2000▶	59,455,707	358,422,165	176,344,731	570,039,631	100	100	86

- ▲ Plan Amendment
- ► Assumption or method change

Postemployment Health Care and Medicare Reimbursement

							Cost per		
	Covered	Med. B				Total	Covered		% of
<u>Year</u>	<u>Lives</u>	Reimb.	<u>Medical</u>	<u>Prescriptions</u>	Unallocated	<u>Costs</u>	<u>Life</u>	<u>Payroll</u>	<u>Payroll</u>
1991	976	86,740	1,267,327	251,004	180,583	1,785,654	1,830	48,488,406	3.7
1992	1,045	97,117	1,643,276	298,493	76,046	2,114,932	2,024	50,235,996	4.2
1993	1,081	118,109	1,553,628	299,410	(90,525)	1,880,622	1,740	55,781,585	3.4
1994	1,133	141,384	1,239,008	320,360	3,314	1,704,066	1,504	58,116,787	2.9
1995	1,225	149,440	1,512,523	364,096	(66,834)	1,959,225	1,599	59,825,356	3.3
1996	1,379	155,769	1,353,932	491,525	21,382	2,022,608	1,467	59,239,349	3.4
1997	1,499	166,743	1,623,640	849,321	(140,526)	2,499,178	1,667	62,233,299	4.0
1998	1,602	171,223	2,147,334	1,122,248	(311,917)	3,128,888	1,953	65,153,864	4.8
1999	1,772	197,606	3,315,914	1,364,990	619,894	5,498,404	3,103	66,017,381	8.3
2000	1,848	203,157	3,190,885	1,684,300	(358,082)	4,720,260	2,554	69,028,285	6.8

Active Member Data

Year Ending December 31	Active Members	Annual Payroll	Average Annual <u>Salary</u>	% Increase in Average Pay
1991	1,326	48,488,406	36,567	4.1
1992	1,371	50,235,996	36,642	0.2
1993	1,467	55,781,585	38,024	3.8
1994	1,465	58,116,787	39,670	4.3
1995	1,455	59,825,356	41,117	3.6
1996	1,375	59,239,349	43,083	4.8
1997	1,445	62,233,299	43,068	0.0
1998	1,446	65,153,864	45,058	4.6
1999	1,445	66,017,381	45,687	1.4
2000	1,489	69,028,285	46,359	1.5

Retirant and Beneficiary Data

	Addec	d to Rolls	Removed	<u>l from Rolls</u>	Rolls at I	End of Year	Increase in	Average
Year Ending		Annual		Annual		Annual	Annual	Annual
December 31	<u>Number</u>	<u>Allowances</u>	<u>Number</u>	<u>Allowances</u>	<u>Number</u>	<u>Allowances</u>	<u>Allowances</u>	<u>Allowances</u>
1991	40		19		675	\$8,790,912	11.0%	\$13,024
1992	50		19		706	9,838,428	11.9	13,935
1993	27		10		723	11,126,016	13.1	15,389
1994	48		7		764	12,690,924	14.1	16,611
1995	68		6		826	14,212,860	12.0	17,207
1996	113	\$2,231,904	28	\$150,029	911	16,834,908	18.4	18,480
1997	96	2,596,853	23	281,688	984	19,747,356	17.3	20,068
1998	96	2,535,173	20	205,641	1,060	22,969,092	16.3	21,669
1999	89	2,318,166	26	417,782	1,123	25,481,652	10.9	22,691
2000	80	2,051,070	29	516,382	1,174	27,605,568	8.3	23,514

Analysis of Financial Experience Year Ending December 31, 2001

Gains and Losses in Pension Accrued Liabilities Resulting from Differences Between Assumed Experience and Actual Experience

Type of Activity	Gain (or L	Gain (or Loss) for Year		
	2000	1999		
Age & Service Retirements. If members retire at older ages or with lower final average pay than assumed, there is a gain. If younger ages or higher average pays, a loss.	\$16,470	\$352,470		
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(916,851)	(1,169,222)		
Death-in-Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, a loss.	(71,889)	(197,970)		
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	519,559	854,241		
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	5,536,124	6,857,260		
Contribution Income. If more contributions are received than expected, there is a gain. If less, a loss.	0	0		
Investment Income. If there is greater investment income than assumed, there is a gain. If less income, a loss.	(11,344,115)	1,632,154		
Death After Retirement. If retirants live longer than assumed, there is a loss. If not as long, a gain.	Not Available	Not Available		
Other. Miscellaneous gains and losses resulting from data adjustments, timing of financial transactions, valuation methods, and other events.	(1,019,538)	(5,316,545)		
Gain (or Loss) During Year From Financial Experience	(7,280,240)	3,012,388		
Non-Recurring Items. Adjustments for plan amendments and other adjustments.	13,188,717	(12,337,525)		
Composite Gain (or Loss) During Year	\$5,908,477	(\$9,325,137)		

Plan Summary

Purpose

The Ohio State Highway Patrol Retirement System (HPRS) was created by the Ohio General Assembly in 1944 for the purpose of providing retirement and survivor benefits for its participants and beneficiaries.

Administration

The general administration and management of the Ohio State Highway Patrol Retirement System are vested in the State Highway Patrol Retirement System Board of Trustees under Ohio Revised Code Chapter 5505. The seven-member Board consists of the Superintendent of the State Highway Patrol, the Auditor of State, four elected employee members, and one elected retirant member.

The employee members are elected to four-year terms by members of the plan. Any contributing member is eligible to become an employee member candidate, and all contributing members are eligible to vote in the employee member election process. Any retirant who is an Ohio resident, and who was not an employee member of the Board at retirement, is eligible to become a retirant member candidate. All retirants are eligible to vote in the retirant member election process.

The Superintendent of the State Highway Patrol and the Auditor of State serve by virtue of their office. The legal advisor of the Retirement Board is the Attorney General of the State of Ohio. A chairperson and vice chairperson are elected by the Board annually. All regular Board meetings are considered to be public meetings. The members of the Board serve without compensation, but are not expected to suffer any loss because of absence from regular employment while engaged in official Board duties, and are reimbursed for actual and necessary expenses.

Employer Contributions

State statute requires that the employer contribution rate be certified by the Board to the Director of Budget and Management on even-numbered years. The employer rate may not be lower than the employee rate, nor may it exceed three times the employee rate.

Member Contributions

All members of the HPRS, through payroll deductions, must contribute the percentage of their regular salary established by law. Individual member accounts are maintained by the HPRS and the amount contributed is refundable upon termination of employment.

Service Credit

Additional service credit may be purchased at any time prior to retirement if the service is (1) prior Highway Patrol Service, (2) military service, (3) prior full-time service as a contributing member of the Police and Firemen's Disability and Pension Fund, the State Teachers Retirement System, School Employees Retirement System, Public Employees Retirement System, or the Cincinnati Retirement System. Prior full-time contributing service credit and member contributions may also be transferred directly from Public Employees Retirement System to HPRS. The following types of service credit may be used to meet the maximum number of years of service necessary to qualify for unreduced pension benefits: (1) military service pursuant to the Employment Uniformed Services and Reemployment Rights Act of 1994, (2) Ohio Police and Firemen's Disability and Pension Fund, and (3) contributing service in Public Employees Retirement System as a cadet at the Highway Patrol Training Academy.

Retirement

Service Retirement. A member is eligible to receive a service pension upon retirement from active service by (1) attaining age 52 and accumulating at least 20 years of Highway Patrol service credit or (2) attaining age 48 and accumulating at least 25 years of service credit. Benefit payments become effective the day following the last day of employment and are payable monthly throughout the retirant's lifetime.

Reduced Retirement. From ages 48 through 51, a member who has accumulated at least 20 but less than 25 years of service credit, may retire and be eligible to receive a lifetime reduced pension based on the following schedule:

Age	Reduced Pension
48	75 percent of normal service pension
49	80 percent of normal service pension
50	86 percent of normal service pension
51	93 percent of normal service pension

The election to receive a reduced pension may not be changed once a retirant has received a payment.

Deferred Retirement. In order to maximize pension benefits, a member who becomes eligible to receive a pension may elect deferred retirement benefits.

Resignation or Discharge. A member who voluntarily resigns or is discharged from the State Highway Patrol for any reason other than dishonesty, cowardice, intemperate habits, or conviction of a felony, and who has accumulated at least 15 but less than 20 years of total service credit, receives a pension equal to one and one-half percent of the final average salary, multiplied by the number of years of service. This pension becomes payable at age 55.

Disability Retirement. A member who retires as the result of a disability incurred in the line of duty receives a pension of not less than 61.25 percent, nor more than 79.25 percent, of the final average salary. A member who retires as the result of a disability that was not incurred in the line of duty receives a pension of not less than 50 percent, nor more than 79.25 percent, of the final average salary.

Payment Plans

Benefit payments vary in amount depending on the member's age, length of service, final average salary, and payment plan selection. The final average salary, which includes base pay, longevity, hazard duty, shift differential, and professional achievement pay, is determined by computing the average of the member's three highest years of salary.

Each member may select from the following three retirement payment plans:

Plan 1 -- Single Life Annuity. This plan pays the highest monthly amount; however, it is limited to the lifetime of the retirant. The pension benefit is calculated by multiplying the computed pension factor by the final average salary. The pension factor is computed by multiplying the number of years of service for years 1 through 20 by 2.5 percent, for

years 21 through 25 by 2.25 percent, and for years 26 through 34 by 2.0 percent. A pension may not exceed 79.25 percent of the member's final average salary. Members approved for disability retirement may only receive the single life annuity.

Plan 2 -- Joint and Survivor Annuity. This plan is the actuarial equivalent of a single life annuity and is likewise limited to the lifetime of the retirant; however, the payment is reduced because it is based on the combined life expectancies of the retirant and the designated beneficiary. Survivor benefits are paid in addition to the amounts under this plan.

Plan 3 -- Life Annuity Certain and Continuous.

This plan is an annuity, payable for a guaranteed period. If the retirant dies before the end of the guaranteed period, the pension amount is paid to the designated beneficiary for the remainder of the specified period. Survivor benefits are paid in addition to the amounts under this plan.

Survivor Benefits

Survivor benefits are paid to eligible survivors of deceased members and retirants of the Highway Patrol Retirement System.

If a member was not eligible for a retirement pension at the time of death, the surviving spouse receives a monthly survivor benefit of \$900.

The surviving spouse of a deceased retirant, or of a member who was eligible to receive a retirement pension at the time of death, receives a monthly benefit of \$900 or one-half the monthly pension, whichever is greater.

Each surviving dependent child receives \$150 monthly until age 18, or if a full-time college student, until age 23.

Health Care

A comprehensive Preferred Provider medical health care plan is currently offered to all benefit recipients and their dependents. Benefit recipients have the choice of selecting one of two offered networks. In addition, benefit recipients may elect to cover spouses and dependent children by authorizing the appropriate premium deduction.

Medicare

Benefit recipients who submit proof of Medicare Part B coverage are reimbursed for their basic Part B premium, up to \$50 monthly.

Cost of Living

At age 53 and thereafter, retirants receive an annual cost of living adjustment (COLA) equal to the increase in the Consumer Price Index for the year, plus the retirant's banked points, up to a maximum

adjustment of 3.0%. Survivor benefit recipients are eligible for a COLA increase after receiving benefits for twelve months. Disability benefit recipients are eligible for a COLA increase after receiving benefits for sixty months, or at age 53, whichever occurs first.

Death After Retirement

Upon the death of a retirant, a lump sum payment of \$5,000 is paid to the surviving spouse, or to the retirant's estate if there is no surviving spouse.



Statistical Section

Revenues by Source

			Employer Contribution	Net		
	Employee	Employer	Rate as a % of	Investment	Other	
<u>Year</u>	Contribution	<u>Contribution</u>	Covered Payroll	Income ▼ ◀	<u>Income</u> ▶	<u>Total</u>
1992	5,355,985	12,312,378	24.5	19,390,741	129,534	37,188,638
1993	5,755,510	13,405,126	24.5	25,646,009	820,951	45,627,596
1994	6,178,165	14,329,203	24.5	61,260,626	191,007	81,959,001
1995	7,303,832	13,889,107	24.5	81,951,492	356,435	103,500,866
1996	6,223,468	14,706,925	24.0	61,852,801	494,651	83,277,845
1997	6,146,774	14,779,887	24.0	77,695,690	330,119	98,952,470
1998	6,573,762	15,788,189	24.0	14,425,885	503,509	37,291,345
1999▲	6,708,497	16,353,264	23.5	40,491,324	444,135	63,997,220
2000	6,954,301	16,579,300	23.5	(17,235,267)	925,998	7,224,332
2001	7,042,044	17,422,978	23.5	(20,820,340)	999,380	4,644,062

Expenses by Type

<u>Year</u>	<u>Administrative</u> ▼	Benefits	<u>Refunds</u>	<u>Transfers</u> ►	<u>Total</u>
1992	952,752	11,540,409	133,206		12,626,367
1993	1,343,946	12,141,793	162,564	\$134,135	13,782,438
1994	1,499,291	14,189,938	45,387	13,908	15,748,524
1995	1,948,308	15,565,242	207,795	127,478	17,848,823
1996	730,844	17,942,756	67,323	140,376	18,881,299
1997	828,229	21,181,593	231,705	98,810	22,340,337
1998	762,523	24,659,523	164,054	281,606	25,867,706
1999	528,021	29,822,440	529,654	196,414	31,076,529
2000	644,592	31,763,206	363,067	904,972	33,675,837
2001	615,344	29,457,281	306,452	448,381	30,827,458

- ▲ Rate changed by Board, effective July 1, 1999.
- ▶ Prior to 1993, transfers to other Ohio Retirement Systems were shown as deductions from Other Income.
- ▼ Effective 1996, investment expenses are reflected in net investment income rather than in administrative expenses.
- ■Effective 1997, net investment income reflects adjustments to fair value.

Average Monthly Benefit by Type

<u>Year</u>	<u>Service</u>	<u>Disability</u>	<u>Survivor</u>	<u>Total</u>
1992	1,363	933	576	1,161
1993	1,502	1,158	587	1,282
1994	1,614	1,210	610	1,384
1995	1,672	1,265	605	1,434
1996	1,785	1,364	776	1,540
1997	1,941	1,438	808	1,672
1998	2,086	1,583	841	1,806
1999	2,183	1,757	858	1,891
2000 ◘	2,254	1,862	861	1,960

^{■ 2000} is the latest actuarial evaluation.

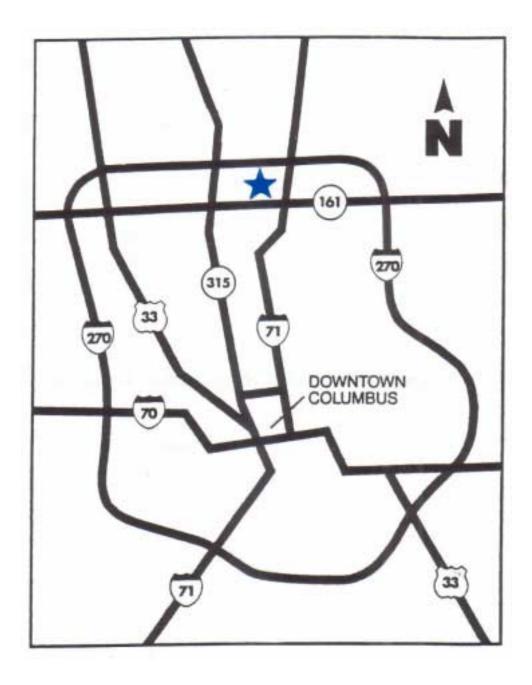
Number of Benefit Recipients by Type

	Service	Disability	Deferred	Survivor	
<u>Year</u>	Retirement	Retirement	<u>Retirement</u>	Benefits	<u>Total</u>
1992	509	35	10	162	716
1993	527	36	12	160	735
1994	568	35	12	161	776
1995	617	39	12	170	838
1996	664	44	8	203	919
1997	725	44	9	215	993
1998	793	45	6	219	1,063
1999	833	57	4	230	1,124
2000	858	65	3	249	1,175
2001	877	73	7	255	1,212

Benefit Expenses by Type

Year	Health Care	Service ◊	Disability	Survivor	<u>Total</u>
1992	2,114,932	7,960,373	399,013	1,066,091	11,540,409
1993	1,880,622	8,741,102	405,983	1,114,086	12,141,793
1994	1,704,066	10,814,350	473,131	1,198,390	14,189,937
1995	1,959,225	11,771,088	533,619	1,301,310	15,565,242
1996	2,022,608	13,596,871	633,663	1,689,614	17,942,756
1997	2,499,178	15,830,921	785,875	2,065,619	21,181,593
1998	3,128,888	18,497,476	855,775	2,177,384	24,659,523
1999	5,498,404	22,094,306	1,139,917	1,089,813	29,822,440
2000	4,720,260	23,015,278	1,407,201	2,620,466	31,763,206
2001	6,179,096	24,891,330	1,605,426	2,961,525	35,637,377

[♦] Includes reduced, early retirement, & death benefits.



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Office Hours: 8:00 am to 4:30 pm

One block west of Interstate 71 on State Route 161, drive north on Busch Boulevard. Turn left at the first traffic light, Shapter Avenue. Turn right into the entrance.