Highway Patrol RETIREMENT SYSTEM

Comprehensive Annual Financial Report

A Component Unit of the State of Ohio

Year Ending December 31, 2003

Richard A. Curtis, Executive Director

6161 Busch Boulevard, Suite 119
Columbus, Ohio 43229-2553

Auditor of State
Betty Montgomery

Board of Trustees
Highway Patrol Retirement System
6161 Busch Boulevard, Suite 119
Columbus, Ohio 43229-2553

We have reviewed the Independent Auditor's Report of the Highway Patrol Retirement System, Franklin County, prepared by Clark, Schaefer, Hackett & Co., for the audit period January 1, 2003 through December 31, 2003. Based upon this review, we have accepted these reports in lieu of the audit required by Section 117.11, Revised Code. The Auditor of State did not audit the accompanying financial statements and, accordingly, we are unable to express, and do not express an opinion on them.

Our review was made in reference to the applicable sections of legislative criteria, as reflected by the Ohio Constitution, and the Revised Code, policies, procedures and guidelines of the Auditor of State, regulations and grant requirements. The Highway Patrol Retirement System is responsible for compliance with these laws and regulations.

Betty Montgomery

BETTY MONTGOMERY
Auditor of State

August 12, 2004

88 E. Broad St. / P.O. Box 1140 / Columbus, OH 43216-1140
Telephone: (614) 466-4514 (800) 282-0370 Fax: (614) 466-4490
www.auditor.state.oh.us

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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, 2002

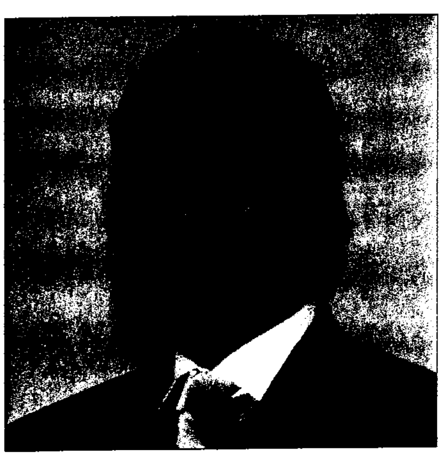
A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards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

President

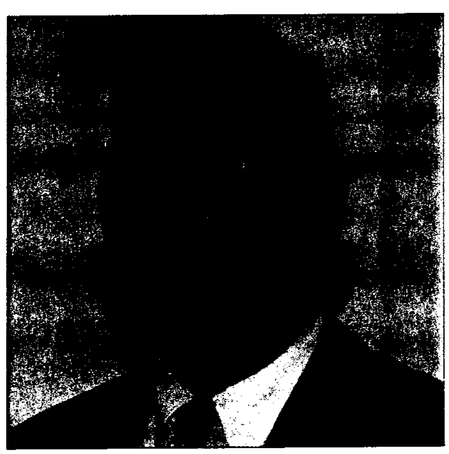
Executive Director

Highway Patrol Retirement System
Board of Trustees

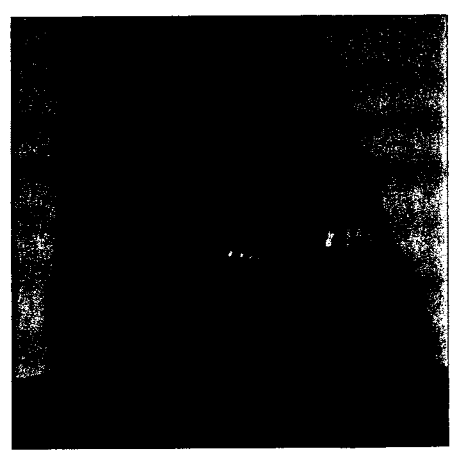
(Front row, left to right) Mary Beth Foley, Statutory Member, representing Betty Montgomery, Auditor of State; R. Dean Huffman, Elected Retired Member. (Back row, left to right) Sergeant Walter Davis, Elected Member; Lieutenant John Allard, Elected Member; Major J.P. Allen, Elected Member/Chair; Colonel Paul McClellan, Statutory Member; Trooper Dennis Gorski, Elected Member/Vice Chair



Ken Brunke, Jr.
Callan Associates
Investment Consultant

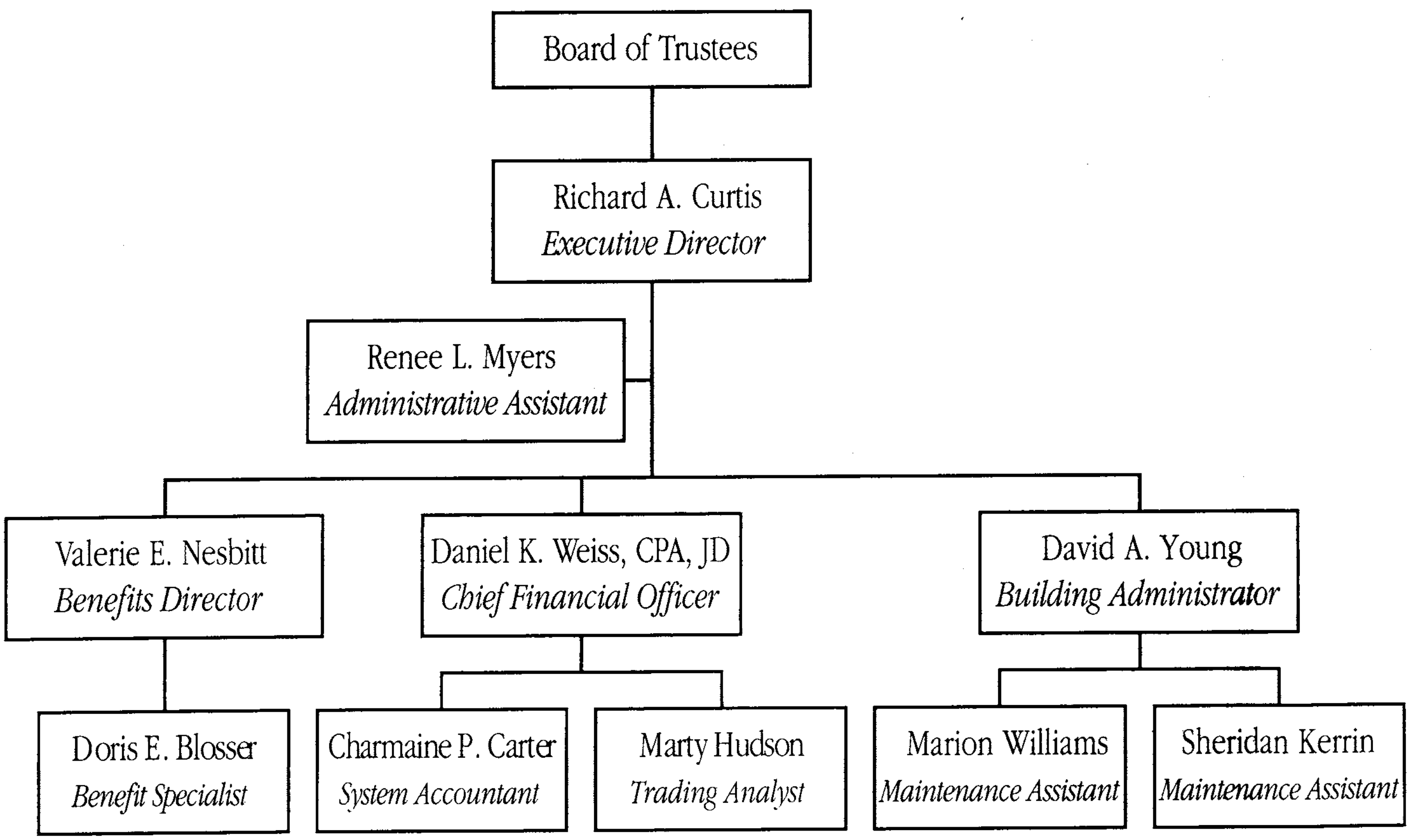


Richard A. Curtis
Executive Director



Cheryl Pokorny
Assistant Attorney General
Legal Counsel

Organizational Chart



Professional Consultants

Medical Advisor
Glenn Mohler, M.D.
Columbus, Ohio

Independent Auditor
Clark, Schaefer, 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

DePrince, Race & Zollo, Inc.
Orlando, Florida
Large Cap Value Equity

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

Fidelity Management Trust Company
Boston, Massachusetts
Real Estate Funds

INTECH
Palm Beach Gardens, Florida
Large Cap Growth Equity

JPMorgan Fleming Asset Management
New York, New York
International Equity Funds

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

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

TimberVest
Atlanta, Georgia
Timberland Real Estate

Western Asset
Pasadena, California
Fixed Income

Westfield Capital Management
Boston, MA
Small/Mid Cap Value Equity

World Asset Management
Birmingham, Michigan
Small-Mid Cap Indexed Funds

See page 41

Legislative Summary

The legislative process was very active during 2003 at the State level. Early in the year when potential financial abuses were publicized at some other systems, the Ohio House and Senate sought to introduce legislative remedies. Multiple bills were introduced, but eventually consolidated into a single House and Senate version. Both versions passed the respective chambers and became deadlocked in the opposite chamber. The year ended with much discussion but no agreement.

The U.S. Congress spent most of its time dealing with budget and national security issues. Some congressional committees and appointed groups considered status and operations of Social Security and Medicare/Medicaid. It is widely recognized that these programs cannot continue for the long term under the funding structures that currently exist. Discussions frequently addressed ways to increase short-term cash flow and reduce long-term liabilities. Most every discussion included some means of privatizing all or some of the investments. The discussions usually stalled at that point due to the disparate views held by the various committee members.

Recent discussions about the "windfall" and "offset" provisions of Social Security have returned the notion of mandatory coverage to the national discussion. The windfall and offset provisions impact state and local government employees when they receive pension benefits from non-Social Security covered wages. Several members of Congress are motivated to reduce the impact of these provisions on government workers, but the general state of the economy and the financial position of Social Security make these discussions ill-timed. In discussing these provisions, the issue of mandatory coverage for all state and local workers is always inserted in the agenda as a way to achieve "universal" coverage and eliminate the negative impacts of windfall and offset.

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Highway Patrol RETIREMENT SYSTEM

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May 31, 2004

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, 2003. 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 retirees.

The Ohio General Assembly established the 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 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 hired prior to November 2, 1989.

Benefits provided to plan participants include age and service 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 basic financial statements, Management's Discussion and 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 Highway Patrol Retirement System was created to provide quality benefits for members, retirees, and surviving dependents. Although health care benefits are not required by statute, HPRS has provided this coverage at no cost to retirees 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, co-payments, 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 five years, increases in prescription drug costs have far exceeded those of other health care costs. Plan design changes implemented in 2001, 2002, and 2003 have reduced the rate of increase but the rate is still well in excess of the actuarial projected rate of 5% per year. 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. Marketing efforts by drug manufacturing companies resulted in physicians changing prescriptions from older, but very effective, drugs to new and more expensive drugs, without appreciable improvement in treatment.

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 retirees 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 increased to $621.9 million (excluding collateral on loaned securities) as of December 31, 2003, representing a 21.6% increase from 2002. Investment returns for the total fund in 2003 were 25.34%, with a three-year total return of 3.63%, and a five-year return of 3.56%. A new asset allocation was implemented on January 1, 2002.

For a detailed analysis of financial operations, please refer to Management's Discussion and Analysis on pages 13 - 15.

Funding

HPRS funding is authorized by Ohio Revised Code Section 5505.15. Member contributions are calculated as a percentage of gross wages and deducted prior to the calculation of federal taxes. Effective March 24, 2003, the member contribution rate increased from 9.5% to 10.0%.

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. Effective July 1, 2003, the employer contribution rate increased from 23.5% to 24.5% of gross wages.

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 18.75% and 4.75%, respectively, for the first half of 2003, and 21.00% and 3.50%, respectively, for the second half of 2003. Unfunded actuarial accrued pension liabilities are amortized over a thirty-two-year period from December 31, 2002. Based on IRS restrictions, no portion of the member contribution rate may be allocated to postemployment health care.

The goal of the Board has been to limit the period of unfunded liability to no more than 30 years. This has been accomplished every year since 1992; however, the soft financial markets of 2000 through 2002 resulted in the current 32-year unfunded liability. Based upon the system's strong investment performance in 2003, the HPRS is expected to see a minimal increase in the unfunded period for 2003 and then a return to a less than 30 year funding period in subsequent years. All of the losses of 2000, 2001, and 2002 will not be factored into the funding analysis until the close of 2004.

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, 2002. 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 2003 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, Schaefer, 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

Richard A. Curtis, Executive Director

Daniel K. Weiss

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

Highway Patrol

RETIREMENT SYSTEM

Financial Section

Clark, Schaefer, Hackett & Co.
CERTIFIED PUBLIC ACCOUNTANTS
BUSINESS CONSULTANTS

Independent Auditors' Report

The Retirement Board
Ohio State Highway Patrol Retirement System:

We have audited the accompanying combining statement 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, 2003 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, 2003 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.

In accordance with *Government Auditing Standards*, we have also issued our report dated March 31, 2004 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 on pages 13-15 and the Required Supplementary Information on pages 23-24 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.

The introductory section on pages 1 through 10, the investment section on pages 28 through 45, the actuarial section on pages 46 through 55, and the statistical section on pages 56 thorough 60 have not been subjected to the auditing procedures applied in the audit of the basic financial statements and accordingly, we express no opinion on them.

Clark, Schaefer, Hackett & Co.

Columbus, Ohio
March 31, 2004

Management's Discussion and Analysis

Financial Highlights

- At December 31, 2003, the assets of HPRS exceeded liabilities by $623,986,737. 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 increased by $110,570,807, or 21.5%, with 112.1% of this increase attributable to investment activity.
- HPRS's funding objective is to meet long-term benefit obligations through contributions and investment income. At December 31, 2002, the date of the latest actuarial valuation, HPRS funds totaled 79.6% of projected obligations.
- Revenues (Additions to Plan Net Assets) for the year were $152,655,928, which includes member and employer contributions of $28,657,481 and investment income of $123,998,447.
- Expenses (Deductions in Plan Net Assets) increased 4.7% over the prior year. Of this amount, pension benefits increased by 5.6%, health care expenses increased by 2.2%, and administrative expenses increased by 20.7%.

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, 2002, the date of the latest actuarial valuation, HPRS's current funding ratio was 79.6%. This means that HPRS's fund had approximately $0.80 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. Capital 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 16-17 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 18-22 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 23 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 member contributions, as well as income from investments, provide reserves needed to finance retirement benefits. In 2003, total contributions, plus investment gains in a favorable market, resulted in positive additions of $152.7 million. Employer and member contributions increased by 5.6% and 7.6%, respectively, primarily because of increases in the employer and member contribution rates.

Revenues - Additions to Plan Net Assets (In 000's)

	2003	2002	$ Change	% Change
Investment Income	$123,999	($49,595)	$173,594	350.0%
Employer Contributions	19,757	18,705	1,052	5.6%
Member Contributions	8,137	7,563	574	7.6%
Other	763	999	(236)	(23.6%)
Total Additions	$152,656	($22,328)	$174,984	783.7%

The investment section of this report summarizes the result of investment activity for the year ending December 31, 2003.

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 2003, total deductions from plan net assets increased 4.7%. This increase was attributable to an increase in the number of benefit recipients, cost of living adjustments, a 2.2% increase in health care costs, a 20.7% increase in administrative expenses, and a 45.5% increase in refunds of member contributions. Offsetting these increases, was a 25.1% decrease in transfers of contributions to other Ohio retirement systems.

Expenses - Deductions from Plan Net Assets (In 000's)

	2003	2002	$ Change	% Change
Pension Benefits	$33,075	$31,325	$1,750	5.6%
Refunds of Member Contributions	387	266	121	45.5%
Health Care	7,181	7,025	156	2.2%
Administrative Expenses	653	541	112	20.7%
Transfers to Other Ohio Systems	789	1,054	(265)	(25.1%)
Total Deductions	$42,085	$40,211	$1,874	4.7%

Changes in Net Assets

In 2003, *Net Assets Held in Trust for Pension and Postemployment Health Care Benefits* increased by $110,570,807, or 21.5%. Investment income attributable to the appreciation in fair values of investments equaled $112,899,103, or 102.1% of the increase in net assets. All of the net assets are available to meet HPRS's ongoing obligation to plan participants and their beneficiaries.

Changes in Net Assets (In 000's)

	2003	2002
Beginning Balance	$513,416	$575,956
Ending Balance	623,987	513,416
Total Change	$110,571	($62,540)
% Change	21.5%	(10.9%)

Capital Assets

As of December 31, 2003, HPRS's investment in capital assets totaled $41,391 (net of accumulated depreciation), a decrease of $93,431, or 69.3% from December 31, 2002. This investment in capital assets includes office equipment, software, and furniture for administrative use. The decrease in HPRS's investment in capital assets for the current year was largely attributable to the retirement of assets.

Total Assets

In 2003, total assets increased by $167,405,287, or 26.7%. The increase in total assets attributable to a higher level of securities lending activity was $56,761,473. Without this increase, total assets would have increased by $110,643,814, or 17.7%, primarily because of investment gains.

Assets (In 000's)

	2003	2002	$ Change	% Change
Cash & Short-Term Investments	$12,856	$12,793	$63	0.5%
Receivables	4,329	4,219	110	2.6%
Investments, at Fair Value	609,005	498,465	110,540	22.2%
Collateral on Loaned Securities	166,950	110,188	56,762	51.5%
Other Assets	109	178	(69)	(38.8%)
Total Assets	$793,249	$625,843	$167,406	26.7%

Total Liabilities

As with total assets, total liabilities increased by $56,834,480, or 50.6%, primarily as a result of an increase in securities lending activity. The increase in total liabilities attributable to a higher level of securities lending activity was $56,761,473. Without this increase, total liabilities would have increased by only $73,007, or 0.1%.

Liabilities (In 000's)

	2003	2002	$ Change	% Change
Current Liabilities	$169,262	$112,427	$56,835	50.6%
Total Liabilities	$169,262	$112,427	$56,835	50.6%

Summary

Despite three consecutive years of negative investment returns from 2000 through 2002, HPRS rebounded in 2003 to show strong gains in the securities markets. Both 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 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, 2003

	Pension	Postemployment Health Care	Total
Assets			
Cash and Short-Term Investments	$11,009,971	$1,846,137	$12,856,108
Receivables			
Accrued Investment Income	1,179,712	197,813	1,377,525
Employer Contributions Receivable	1,284,756	266,648	1,551,404
Member Contributions Receivable	1,328,934	---	1,328,934
Tenant Rent Receivable	60,630	10,166	70,796
Total Receivables	3,854,032	474,627	4,328,659
Investments, at Fair Value			
Domestic Equity	280,330,518	47,005,444	327,335,962
Fixed Income	110,559,250	18,538,426	129,097,676
Real Estate	54,724,744	9,176,171	63,900,915
International Equity	75,937,529	12,733,103	88,670,632
Total Investments	521,552,041	87,453,144	609,005,185
Collateral on Loaned Securities	142,975,734	23,973,979	166,949,713
Prepaid Expenses	57,839	9,698	67,537
Property and Equipment, Net	35,447	5,944	41,391
Total Other Assets	93,286	15,642	108,928
Total Assets	679,485,064	113,763,529	793,248,593
Liabilities			
Accrued Health Care Benefits	---	823,684	823,684
Accounts Payable	1,094,319	183,494	1,277,813
Other Liabilities	60,015	10,064	70,079
Accrued Payroll and Withholdings	120,382	20,185	140,567
Obligations Under Securities Lending	142,975,734	23,973,979	166,949,713
Total Liabilities	144,250,450	25,011,406	169,261,856
Net Assets Held in Trust for Pension and Postemployment Health Care Benefits	$535,234,614	$88,752,123	$623,986,737

(A *Schedule of Funding Progress* is presented on page 23.)

See accompanying *Notes to Financial Statements.*

Combining Statement of Changes in Plan Net Assets

December 31, 2003

	Pension	Postemployment Health Care	Total
Additions			
Contributions			
Employer	$16,361,339	$3,395,749	$19,757,088
Member	8,136,974	---	8,136,974
Transfers from Other Systems	763,419	---	763,419
Total Contributions	25,261,732	3,395,749	28,657,481
Investment Activity			
Net Appreciation in Fair Value of Investments	95,607,658	17,291,445	112,899,103
Interest Income	4,639,554	778,189	5,417,743
Dividend Income	6,875,824	1,153,276	8,029,100
Real Estate Operating Income, Net	196,634	32,981	229,615
	107,319,670	19,255,891	126,575,561
Less: Investment Expenses	2,370,693	397,635	2,768,328
Net Income from Investment Activity	104,948,977	18,858,256	123,807,233
Income from Security Lending Activity			
Gross Income	1,749,543	293,449	2,042,992
Less: Borrower Rebates	1,497,670	251,202	1,748,872
Less: Management Fees	88,125	14,781	102,906
Net Income from Security Lending Activity	163,748	27,466	191,214
Total Net Investment Income	105,112,725	18,885,722	123,998,447
Total Additions	130,374,457	22,281,471	152,655,928
Deductions			
Benefits Paid Directly to Participants	33,074,853	---	33,074,853
Refunds of Member Contributions	386,931	---	386,931
Health Care Expenses	---	7,181,129	7,181,129
Administrative Expenses	559,052	93,769	652,821
Transfers to Other Systems	789,387	---	789,387
Total Deductions	34,810,223	7,274,898	42,085,121
Net Increase	95,564,234	15,006,573	110,570,807
Net Assets Held in Trust for Pension and Postemployment Health Care Benefits			
Balance, December 31, 2002	439,670,380	73,745,550	513,415,930
Balance, December 31, 2003	$535,234,614	$88,752,123	$623,986,737

See accompanying *Notes to Financial Statements.*

Notes to Financial Statements

Year Ending December 31, 2003

Summary of Significant Accounting Policies

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

Organization - HPRS (the Plan) is a single-employer retirement system for uniformed and certain 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, 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.

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. Member and employer contributions are recognized in the period in which the contributions are due. Benefits and refunds are recognized when due and payable in accordance with the terms of the Plan. Investment purchases and sales are substantially recorded as of their trade date. Administrative expenses are financed by 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.

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 Ohio Public Employee Retirement System (OPERS).

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 four 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 four 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 pass-through 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.

Derivatives - Derivatives are instruments on which the cash flows or fair values are derived from the value of some other asset or index. HPRS uses a variety of derivatives in order to maximize yields and offset volatility from interest rate and currency fluctuations. The system is exposed to general credit, market, and legal risks associated with these types of investments. HPRS investment managers monitor these investments with extreme care and are not aware of any undue risks from them.

Net Appreciation in Fair Value of Investments - Net appreciation, or depreciation, 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.

Capital Assets - An item of property or equipment in excess of $5,000 is capitalized at cost when acquired. An improvement in excess of $5,000 that extends the useful life of an asset is capitalized. An expenditure for maintenance or repair of an asset is expensed as incurred. Depreciation is computed using the straight-line method over the following range of useful lives of the assets:

Furniture and Fixtures	3 - 10 years
Office Equipment	3 - 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 retiree, 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, 2002 (our latest available actuarial data):

<u>Pension Benefits</u>	
Retirees & beneficiaries currently receiving benefits	1,259
Terminated members not yet receiving benefits	6
<u>Current Members</u>	
Vested	283
Nonvested	1,265

Contributions - The Ohio Revised Code requires contributions by active members and the Ohio State Highway Patrol. The member 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 to the State of Ohio every two years. By law, the employer rate may not exceed three times the member 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 Ohio Public Employees Retirement System (OPERS), 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 any 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 OPERS, 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, 2003, the carrying value of all HPRS's book deposits was $12,856,108 (which includes money market funds of $6,968,513), as compared to bank balances of $12,466,332. 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 $136,995. 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 $63,900,915 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 by independent appraisal 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 year-end, 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, 2003, the fair values of loaned securities and associated collateral (repo agreements and short-term investments) were $163,129,951 and $166,949,713, respectively.

Total net proceeds from securities lending was $191,214 in 2003.

<u>Investments at December 31, 2003</u>

	Fair Value
Domestic Equity	$327,335,962
U.S. Government Obligations	26,885,115
Mortgage Pass-Through Securities	7,125,198
Collateralized Mortgages	21,174,764
Corporate Bonds	28,667,996
Asset-Backed Securities	15,773,220
Collateral on Loaned Securities	166,949,713
Fixed Income Funds	29,471,383
Real Estate	63,900,915
International Equity	88,670,632
Total	$775,954,898

Property and Equipment

The following is a summary of equipment, at cost, less accumulated depreciation, at December 31, 2003:

Office Equipment	$148,372
Accumulated depreciation	(106,981)
Total	$41,391

Depreciation expense charged to the plan was $33,411 for the year ending December 31, 2003.

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. In 2003, active members and the Ohio State Highway Patrol were required to contribute the following percentages of active member payroll:

<u>Member</u>	
January 1 to March 23	9.5%
March 24 to December 31	10.0%
<u>Employer</u>	
January 1 to June 30	23.5%
July 1 to December 31	24.5%

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

	Basic Retirement	Health Care	Total
January 1 to June 30	18.75%	4.75%	23.5%
July 1 to December 31	21.00%	3.50%	24.5%

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 a thirty-two (32) 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 retiree health care benefits are recognized as claims are incurred and premiums are paid. Health care benefit expenses in 2003 of $7,181,129 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 Ohio Public Employees Retirement System, a cost-sharing multiple employer defined benefit pension plan. OPERS 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 Ohio Public Employees Retirement System issues a stand-alone financial report that includes financial statements and required supplementary information. Interested parties may obtain a copy from OPERS, 277 East Town Street, Columbus, Ohio 43215-4642, Telephone (800) 222-7377.

The Ohio Revised Code provides statutory authority for member and employer contributions. In 2003, the member contribution rate was 8.5% and the employer rate for local employers was 13.55%. HPRS employer contributions to OPERS for the years ending December 31, 2003, 2002, and 2001 were $68,486, $62,664, and $56,424, respectively, which were equal to the required contributions for each year.

Postemployment Benefits Other Than Pension Benefits

Ohio Public Employment Retirement System provides postretirement health care coverage to age and service retirees with ten or more years of qualifying Ohio service credit; however, health care benefits are not statutorily guaranteed. Health care coverage is also available to recipients of disability and primary survivor pensions. The health care coverage provided by OPERS is considered Other Postemployment Benefits (OPEB) as described in GASB 12. A portion of each employer's contribution to OPERS is set aside for the funding of postretirement health care. The portion of employer contributions that was used to fund health care for the year 2003 was 5.0% of the total 13.55% contribution, or 36.90% of the total employer contribution.

The Ohio Revised Code provides the statutory authority to require public employers to fund postretirement health care through contributions to OPERS.

OPEB are financed through employer contributions and investment earnings on those contributions. The contributions allocated to retiree health care, investment income on allocated assets, and periodic revisions in health care coverage are expected to be sufficient to sustain the program for a ten-year solvency period.

At December 31, 2002, OPERS had 364,881 active contributing participants. There were $10.0 billion in net assets available for OPEB. The actuarially accrued liability and the unfunded actuarial accrued liability, based on the actuarial cost method used, were $18.7 billion and $8.7 billion, respectively.

HPRS employer contributions for OPEB in 2003 totaled $25,271, 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 and coverage has not been significantly 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, 1998-2003

Year	Annual Required Contribution	% Contributed
1998	$13,101,039	100
1999	13,569,730	100
2000	13,210,189	100
2001	13,901,313	100
2002	14,923,893	100
2003	16,361,339	100

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

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

Schedule of Funding Progress

Years Ending December 31, 1997-2002

Valuation Year	Actuarial Accrued Liab. (AAL)	Valuation Assets	Unfunded Actuarial Accrued Liab. (UAAL)	Assets as a % of AAL	Active Member Payroll	UAAL as a % of Active Member Payroll
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
2001	636,715,458	551,279,438	85,436,020	86.6	76,344,002	111.9
2002 ➤	663,069,805	527,604,456	135,465,349	79.6	78,997,065	171.5

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, 2002
Actuarial cost method	Entry Age
Amortization method	Level percent closed
Remaining amortization period	32 years for retirement allowances
Asset valuation method	4 year smoothed market
Actuarial assumptions:	
Investment rate of return	8.0%
Projected salary increases	4.3 - 7.7%, including wage inflation of 4.0%
Inflation	3% or more
Cost-of-living adjustments for retirees	CPI increases for years after age 53 (maximum of 3%)

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 member 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 member 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, 2002.

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:

- rate of return on investments of 8.0% as of December 31, 2002, compounded annually, net of administration expenses,
- projected salary increases of 4.0%, 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 4.0%, 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, member, and retiree data is from the latest actuarial valuation, dated December 31, 2002:

<u>Actuarial Value of Pension Benefits Payable</u>	
Retirees & beneficiaries currently receiving benefits & terminated members not yet receiving benefits	$391,098,788
<u>Current Members</u>	
Accumulated member contributions including allocated investment income	68,794,904

Additional Information

Schedule of Administrative Expenses

Year Ending December 31, 2003

Personnel	$249,341
Professional and Technical Services	
Computer services	18,043
Actuary	53,000
Training and seminars	18,204
Audit	14,324
Miscellaneous services by others	8,223
Medical services	6,425
Total Professional and Technical Services	118,219
Communications	
Printing	8,135
Postage	22,835
Telephone	13,464
Total Communications	44,434
Other Expenses	
Office Rent	65,923
Depreciation	33,411
Insurance	19,325
Equipment repairs and maintenance	5,235
Supplies	4,993
Miscellaneous	28,181
Loss on disposal of equipment	66,480
Retirement study commission	1,991
Travel	7,712
Membership and subscriptions	5,327
New equipment	2,249
Total Other Expenses	240,827
Total Administrative Expenses	$652,821

Above amounts do not include investment department administrative expenses.

Schedule of Investment Expenses

Year Ending December 31, 2003

Personnel	$239,563
Professional Services	
Investment services	2,316,763
Monitor services	178,609
Total Professional Services	2,495,372
Other Expenses	
Computer Services	18,042
Memberships and subscriptions	7,991
Printing and supplies	7,360
Total Other Expenses	33,393
Total Investment Expenses	$2,768,328

Payments to Consultants

Year Ending December 31, 2003

Consultant	Fee	Service
Gabriel, Roeder, Smith & Co.	$53,000	Actuarial
Clark, Schaefer, Hackett & Co.	13,485	Auditing
Callan Associates	180,359	Investment

Clark, Schaefer, Hackett & Co.
CERTIFIED PUBLIC ACCOUNTANTS
BUSINESS CONSULTANTS

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, 2003, and the related combining statement of changes in plan net assets for the year then ended, and have issued our report thereon dated March 31, 2004. 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 31, 2004.

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 31, 2004

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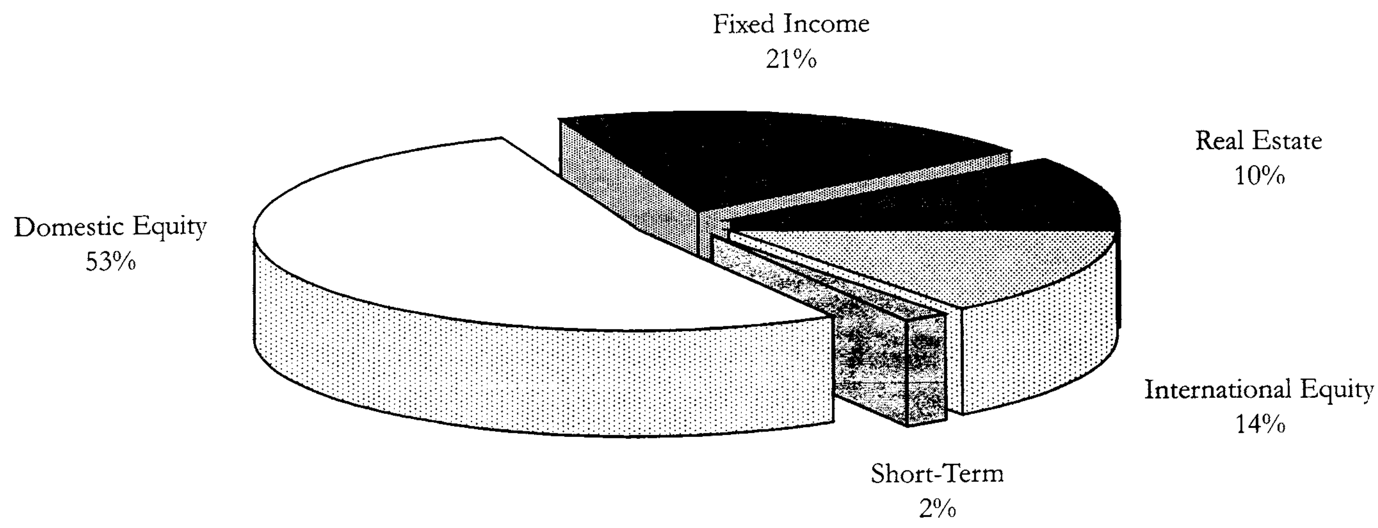
Highway Patrol
RETIREMENT SYSTEM

Investment Section

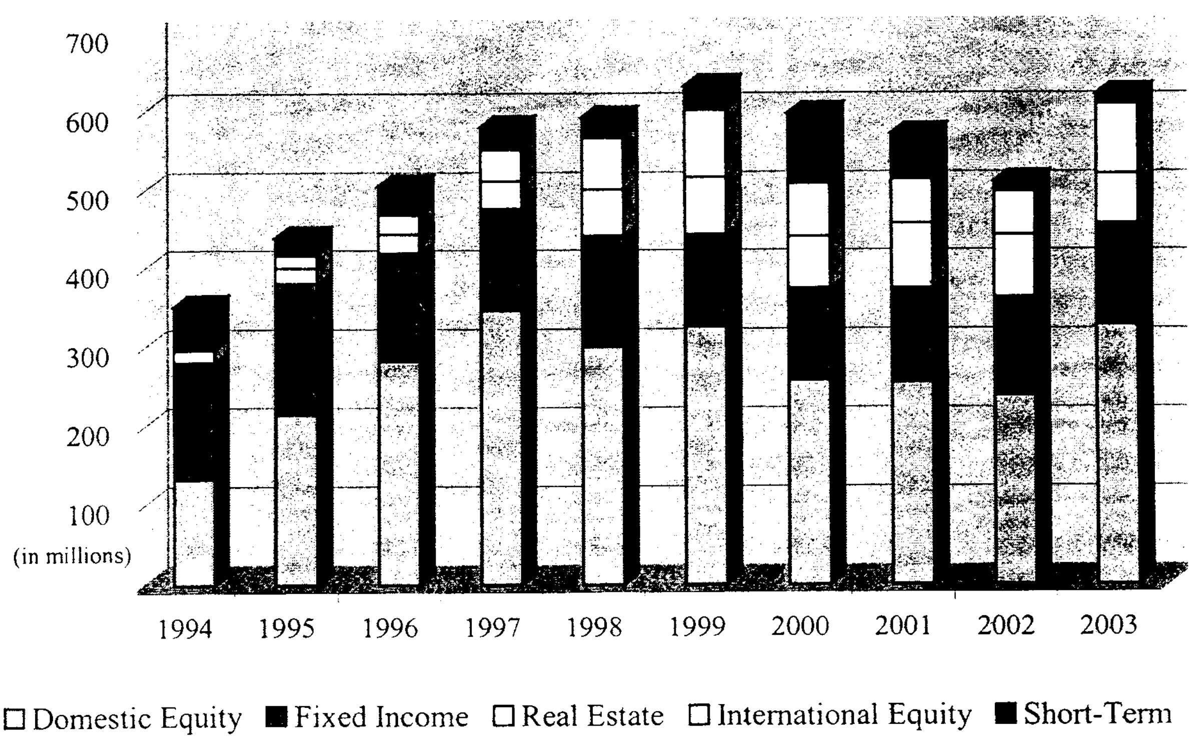
Investment Distribution

at Fair Value, December 31, 2003



Ten-Year Investment Comparison

at Fair Value, December 31, 2003



Investment Review

Year Ending December 31, 2003

General Market & Economic Conditions

A strong fourth quarter helped equity markets bury the bear in 2003. The quarter received a big boost from news that the economy grew at an annual rate of 8.2% in the previous quarter, the highest in nearly two decades. For the most recent quarter, the S&P 500 rose 12.18%, the Dow was up 13.36% and the NASDAQ jumped 12.29%. The double-digit returns in the fourth quarter propelled all three major indices to their first annual gains since 1999. Small stocks and technology especially shined. In fact, many stocks in the S&P 500 and Russell 2000 ended the year higher than they were when the indexes peaked in 2000. While the S&P 500 Barra Value (14.45%) trumped the S&P 500 Barra Growth (9.93%) in the most recent quarter, neither style dominated the year.

Looking back, the first three months of 2003 did not forecast the robust recovery to come. The year got off to a wobbly start over concerns of war with Iraq. However, the economy did stage a comeback, fueled by tax cuts, lean inventories, and the lowest interest rates in more than four decades. The economic rebound and a weak dollar provided the stimulus for the final missing piece -- corporate profits, which had its best year since 1999.

Within the fixed income market, the Lehman Aggregate eked out a 0.32% return for the fourth quarter and 4.10% for the year. Corporate bonds (+7.70%) led all sectors in 2003. Treasuries lagged as investors sought higher profits. In December, the Fed voted to keep interest rates unchanged for the fourth time since it lowered the Federal Funds rate to 1% in June. Not surprisingly, junk bonds outperformed, turning in their biggest yearly return since their record year in 1991.

The resurgence in the overseas stock markets that began in the second quarter continued through the year, besting domestic stock indices. MSCI EAFE advanced 17.08% in the fourth quarter and 38.59% for the year. Nearly every corner of the globe participated. Stocks in Japan and Argentina rebounded in 2003. In dollar terms, some emerging markets saw triple-digit gains, including Brazil, Turkey, and Thailand.

Source: Callan Associates

Investment Operations

The performance of the United States stock market over the last six years has added a great deal of uncertainty to the funding of public pension plans. During the period of 1995-1999, the stock market experienced the largest and longest run-up in its history. Investments in US stocks are typically expected to yield 10-12%, on average, but during this period the return averaged 20%. No sooner had the benefits of that bull market been realized, than the bottom dropped out of the market and three years of unprecedented negative returns followed. To put some specifics to this discussion, consider the impact on the HPRS.

The HPRS established an actuarial rate of return of 8% -- the investment return expected each year. Achieving that return would fund the HPRS, using current contribution rates and benefit structures, for an indefinite period. At the close of 1999, the HPRS fund was valued at $635 million. Applying the 8% expectation, the fund value at the end of 2000 should have been $686 million, but due to investment losses the fund value declined to $608 million. Again, in 2001 the expected 8% yield applied to expected value at the end of 2000 should have increased the total value of the fund to $741 million; but instead the fund value declined to $576 million. Finally, in 2002 the projected fund value should have been $800 million, assuming the 8% gain, but the actual fund value declined to $513 million. So after three years the HPRS fund stood at $287 million below what had been projected by using an annual investment return of 8%. Positive investment earnings returned in 2003, with the HPRS achieving a total return of 25.34%, adding $112 million in value and ending at $623 million, or approximately the same value of the fund before the three negative years.

Considering the three negative years (2000-02) and the very positive result achieved in 2003, the following observations can be made.

The HPRS met all of its financial obligations during this difficult period, with every monthly pension benefit being paid and access to affordable, quality healthcare being maintained.

All public pension funds in the U.S. suffered significant losses during the period of 2000-02, but the HPRS finished among the top 15% of public funds when considering the amount of loss during the period and among the top 10% of public funds when considering the amount of gain in 2003.

The fund value losses of 2000-02 will impact the contribution rates and benefits structure of the HPRS for many years to come.

The benefits of a conservative, diversified portfolio were demonstrated during the period of 2000-02.

The negative impact of rapidly increasing health care costs - upward of 15% each year since 1999 - could not have come at a more difficult time.

While no reasonable investment analyst expects future returns like those achieved in 2003, a return to a more traditional level of 8% is expected. Public pension funds are evaluated by calculating their unfunded accrued liability periods -- something similar to the number of years a person may have left to pay on a mortgage. Traditionally, an unfunded period of less than 30 years is desired. The HPRS currently has an unfunded period of 32 years, and recent legislation to increase the maximum retirement age to 60 will bring that period to less than 30 years.

During these difficult times many steps, ranging from cost shifting in health care to investment portfolio changes to legislation have been employed to keep the HPRS within reasonable and proper solvency parameters. Obviously, changes will need to be made going forward as the uncertainty of the investment markets continues.

Summary by Richard A. Curtis, Executive Director

Schedule of Investment Results

Year Ending December 31, 2003

	2003	2002	3-Year	5-Year
DomesticEquity	**37.58%**	**(18.77%)**	**0.66%**	**(0.13%)**
Standard & Poors 500 (large cap)	28.68	(22.10)	(4.05)	(0.57)
Russell 2500 (small/mid cap)	45.51	(17.80)	(4.62)	1.57
International Equity	**32.49**	**(16.66)**	**(2.61)**	**2.46**
MSCI EAFE Index	38.59	(15.94)	(2.91)	(0.06)
Fixed Income	**6.87**	**10.55**	**8.62**	**7.33**
Lehman Brothers Aggregate	4.10	10.26	7.57	6.62
Real Estate	**8.15**	**6.35**	**7.83**	**9.77**
NCREIF Classic Index	7.35	4.78	6.42	8.80
Domestic Short Term	**1.00**	**2.50**	**2.71**	**3.66**
Total Fund	**25.34**	**(8.36)**	**3.63**	**3.56**
Absolute Objective	8.00	8.00	8.00	7.90
Relative/Composite Benchmark ➤	23.82	(11.58)	2.61	4.25

➤ Relative/Composite Benchmark: 32% S&P 500, 16% Russell 2500, 25% L/B Aggregate, 15% MSCI EAFE and 12% NCREIF Index.

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.

Source: Callan Associates

Investment Summary

December 31, 2003

Portfolio Type	Fair Value	% of Total Fair Value	Policy %
Domestic Equity	$327,335,962	52.6	48.0
Fixed Income	129,097,676	20.8	25.0
Real Estate	63,900,915	10.3	12.0
International Equity	88,670,632	14.2	15.0
Short-Term	12,856,108	2.1	0.0
Total	$621,861,293	100.0	100.0

For a complete list of portfolio holdings, please contact the Chief Financial Officer, HPRS, 6161 Busch Boulevard, Suite 119, Columbus, OH 43229-2553.

Largest Equity Holdings (by Fair Value)

December 31, 2003

	Shares	Fair Value
Pfizer Inc	107,820	$3,809,281
Kerr McGee Corp	61,950	2,880,056
Citigroup Inc	56,000	2,718,240
ChevronTexaco Corporation	30,700	2,652,173
Microsoft Corp	96,900	2,652,153
International Paper Co	58,800	2,534,868
Bowater Inc	47,450	2,197,410
Amdocs LTD	93,300	2,097,384
United States Steel Corp	59,400	2,080,188
General Electric Co	65,000	2,013,700

Largest Fixed-Income Holdings (by Fair Value)

December 31, 2003

	Coupon %	Maturity	Rating	Par Value	Fair Value
Bank United (FHLB LOC)	5.40	02/02/04	AAA/AAA	$4,750,000	$4,765,281
US Treasury Bonds	7.50	11/15/16	AAA/AAA	2,590,000	3,297,394
US Treasury Bonds	6.50	11/15/26	AAA/AAA	2,800,000	3,294,375
Centex Home Equity	6.47	07/25/29	AAA/Aaa	3,000,000	3,129,480
US Treasury Bonds	8.00	11/15/21	AAA/AAA	2,000,000	2,701,250
FNMA 2002-70 PL	5.00	04/25/15	AAA/Aaa	2,000,000	2,057,320
Citibank Credit Card Issuance	4.10	12/07/06	AAA/Aaa	2,000,000	2,048,640
FHLMC Ser 2668 OX	4.00	06/15/22	AAA/Aaa	2,000,000	2,005,520
FHLMC	5.13	11/07/13	AAA/Aaa	2,000,000	1,992,500
FNMA Pool #684968	5.00	09/01/33	AAA/Aaa	1,985,718	1,966,039

Investment Portfolio

December 31, 2003

Fixed Income

	Coupon %	Maturity	Par Value	Fair Value
Archer Daniels Midland	7.000	02/01/31	$900,000	$1,034,316
A T & T Wireless	7.875	03/01/11	500,000	578,573
Becton Dickinson	6.700	08/01/28	800,000	890,246
Cardinal Health Inc	6.750	02/15/11	1,425,000	1,627,924
Chevron Corp Trust Fund	8.110	12/01/04	160,000	164,598
Citigroup Inc	5.000	03/06/07	500,000	530,818
Coca Cola Enterprises	8.500	02/01/22	1,000,000	1,294,438
Deutsche Bank Financial Inc	6.700	12/13/06	1,115,000	1,239,783
Devon Financial Corp	6.875	09/30/11	550,000	623,659
First Data Corp	4.700	11/01/06	1,500,000	1,581,671
Ford Motor Credit Co MTN	9.030	12/30/09	1,000,000	1,036,126
General Electric Capital	6.000	06/15/12	1,000,000	1,084,453
General Motors Acceptance Corp	6.750	01/15/06	995,000	1,068,181
Goldman Sachs Group inc	6.125	02/15/33	750,000	755,283
Household Finance Corp	8.000	07/15/10	1,000,000	1,197,583
International Lease Financial Corp	5.875	05/01/13	1,000,000	1,053,550
International Paper Co	8.125	07/08/05	500,000	544,675
Knight Ridder Inc	6.875	03/15/29	1,000,000	1,115,625
Landesbank Baden NY	6.350	04/01/12	450,000	495,902
May Department Stores Co	6.875	11/01/05	1,500,000	1,615,670
National City Bank of IN	4.000	09/28/07	1,250,000	1,280,250
SLM Corp FRN	-	09/15/05	220,000	220,587
SLM Corp	5.125	08/27/12	260,000	263,892
SunTrust Capital II	7.900	06/15/27	1,000,000	1,136,685
Swiss Bank Corp NY	6.750	07/15/05	1,600,000	1,722,142
U S Bank NA MN	6.375	08/01/11	1,200,000	1,337,959
Unionbancal Corp	5.750	12/01/06	1,500,000	1,620,271
Valero Energy Corp	6.875	04/15/12	500,000	553,299
Virginia Electric & Power	4.100	12/15/08	1,000,000	999,837
Total Corporate Bonds			$26,175,000	$28,667,996
Banc of Amer Coml Mtg	7.109	11/15/31	$731,489	$805,063
FHLMC 1531-M	6.000	06/15/08	988,364	1,022,670
FHLMC 1617-PJ	6.200	01/15/23	800,000	818,992
FHLMC 1669-G	6.500	02/15/23	1,354,850	1,388,721
FHLMC 1675-H	6.375	10/15/22	792,928	801,721
FHLMC 2123-PE	6.000	12/15/27	679,004	701,499
FHLMC Struct T-53	3.776	10/15/09	1,011,432	1,009,763
FHLMC Ser 2668 OX	4.000	06/15/22	2,000,000	2,005,520
FHLMC 2587-WB	5.000	11/15/16	1,300,000	1,310,166
First Union National Bank 99-C4	7.390	11/15/09	1,240,000	1,436,614
FNMA 1993-149K	6.500	08/25/23	644,084	650,383
FNMA 1993-208J	6.250	02/25/23	1,475,000	1,504,766
FNMA 1993-223VD	6.150	08/25/06	370,641	377,302
FNMA 2002-70 PL	5.000	04/25/15	2,000,000	2,057,320
FNMA G1994-7PH PAC	7.500	02/17/23	207,745	208,992
FNMA Grantor Trust	4.717	08/25/12	1,500,000	1,513,485
FNMA Series 2003-32 C1 KB	5.000	03/25/17	1,000,000	1,007,010
GNMA	5.881	03/16/24	650,000	706,895
Merrill Lynch Mortgage	7.120	06/18/29	832,671	906,312
Wachovia Bank Commercial Mrtg	3.989	06/15/35	1,000,000	941,570
Total Collateralized Mortgages			$20,578,208	$21,174,764

Fixed Income (continued)

	Coupon %	Maturity	Par Value	Fair Value
Bank United (FHLB LOC)	5.400	02/02/04	$4,750,000	$4,765,281
Federal Home Loan Bank	5.800	09/02/08	1,500,000	1,651,875
FHLMC	5.125	11/07/13	2,000,000	1,992,500
FHLMC	4.750	12/08/10	1,500,000	1,515,938
FHLMC	6.250	03/05/12	1,500,000	1,609,687
FHLMC	5.125	07/15/12	1,250,000	1,305,859
FNMA	5.500	02/15/06	1,000,000	1,070,625
FNMA	7.125	01/15/30	825,000	993,609
US Treasury Bonds	7.500	11/15/16	2,590,000	3,297,394
US Treasury Bonds	6.250	05/15/30	1,500,000	1,731,094
US Treasury Bonds	6.500	11/15/26	2,800,000	3,294,375
US Treasury Bonds	8.000	11/15/21	2,000,000	2,701,250
US Treasury Inflation Index	3.875	01/15/09	846,068	955,628
Total US Government Obligations			$24,061,068	$26,885,115
FHLMC Gold Pool #00492	7.500	01/01/27	$84,955	$91,494
FHLMC Gold Pool #E00476	6.500	03/01/12	275,827	292,230
FNMA Pool #385278	6.110	07/01/12	986,871	1,083,131
FNMA Pool #313708	7.500	08/01/12	276,413	295,776
FNMA Pool #323406	5.993	11/01/08	731,984	798,814
FNMA Pool #525908	7.000	12/01/29	83,016	87,970
FNMA Pool #535466	7.000	08/01/30	51,430	54,455
FNMA Pool #684968	5.000	09/01/33	1,985,718	1,966,039
FNMA Pool #737646	3.138	09/01/33	1,430,158	1,437,538
GNMA Pool #423876	7.500	07/15/26	158,973	171,056
GNMA Pool #423906	7.500	07/15/26	171,326	184,349
GNMA Pool #575876	6.500	12/15/31	627,911	662,346
Total Mortgage Pass-Through Securities			$6,864,582	$7,125,198
Discover Credit Card Master	-	09/18/12	$1,000,000	$1,003,650
Distribution Financial Service	1.410	04/15/08	1,000,000	1,001,620
Capital Auto Rec Asst Trust	3.580	10/16/06	1,500,000	1,537,635
Capital One Multi Asst	2.950	08/17/09	975,000	982,059
Centex Home Equity	6.470	07/25/29	3,000,000	3,129,480
Champion Home Equity Loan	6.710	09/25/29	1,061,140	1,112,361
Citibank Credit Card Issuance	4.100	12/07/06	2,000,000	2,048,640
CPL Transition Funding	5.010	01/15/10	1,700,000	1,801,932
M & I Auto Loan Trust	3.450	02/21/11	500,000	500,900
Pacific Coast CDO	2.269	10/25/36	800,000	770,000
Standard Credit Card Master Trust	7.250	04/07/06	1,700,000	1,884,943
Total Asset-Backed Securities			$15,236,140	$15,773,220
Western Asset High Yield Portfolio				$7,265,600
Western Asset Strategic Emerging Markets				10,854,550
Western Asset Strategic Non-Hedged				11,351,233
Total Commingled Funds				$29,471,383
Total Fixed Income				**$129,097,676**

Domestic Equity

	Shares	Fair Value
3M CO	1,400	$119,042
99 Cents Only Stores	6,500	176,995
AAR Corp	33,600	502,320
Abbott Labs	27,200	1,267,520
Abercrombie & Fitch Co	41,300	1,020,523
Accredited Home Lenders	14,140	432,684
Activision Inc	17,050	310,481
Actuant Corp	9,400	340,280
Adaptec Inc	15,700	138,788
Adobe System Inc	7,600	297,008
Advanced Fibre Communications Inc	14,500	292,175
Advanced Micro Devices Inc	24,300	362,070
Affymetrix Inc	2,700	66,447
Agilent Technologies Inc	4,500	131,580
Air Products & Chemicals Inc	5,600	295,848
Alcoa Inc	36,100	1,371,800
Alexander & Baldwin Inc	20,000	675,000
Allegran Inc	11,400	875,634
Allstate Corp	20,950	901,269
Alltel Corp	36,300	1,690,854
Altera Corp	1,800	40,770
Altria Group Inc	6,700	364,614
Amdocs LTD	93,300	2,097,384
Amerada Hess Corp	18,600	988,962
American Electric Power	29,200	890,892
American Financial Realty Trust	46,400	791,120
American International Group Inc	15,000	994,200
American Power Conversion Corp	35,400	867,300
American Standard Cos	7,250	730,075
AmeriCredit Corp	39,350	626,846
Ametek Inc	8,400	405,384
Amgen Inc	15,700	970,103
Anheuser Busch Companies Inc	24,500	1,290,660
Apollo Group Inc Class A	18,800	1,274,828
Applied Materials Inc	44,800	1,005,312
Arch Chemicals Inc	28,600	733,876
Argosy Gaming Co	24,800	644,552
ArvinMeritor Inc	35,200	849,024
Ashford Hospitality Trust Inc	53,890	506,027
ASM International NV	14,700	297,528
Atmel Corp	29,900	179,699
Autodesk Inc	1,800	44,244
Autozone Inc	3,300	281,193
Avaya Inc	37,700	487,838
Avista Corp	22,700	411,324
Avon Products Inc	20,200	1,363,298
Aztar Corp	46,800	1,053,000
BJs Wholesale Club	37,500	861,000
BJ Services Co	6,900	247,710
BMC Software Inc	24,900	464,385
Ball Corp	26,500	1,578,605
Bank New York Inc	31,500	1,043,280
Bank of America Corp	15,850	1,274,816
Bank of Hawaii Corp	11,700	$493,740
BJ Services Co	6,900	247,710
BMC Software Inc	24,900	464,385
Ball Corp	26,500	1,578,605
Bank New York Inc	31,500	1,043,280
Bank of America Corp	15,850	1,274,816
Bank of Hawaii Corp	11,700	493,740
Bank One Corp	14,200	647,378
Bard, CR Inc	4,700	381,875
Baxter International Inc	36,100	1,101,772
BellSouth Corp	62,050	1,756,015
Bemis Inc	13,800	690,000
Best Buy Company Inc	17,300	903,752
Biomet Inc	5,000	181,100
Blockbuster Inc Class A	6,800	122,060
Blyth Inc	25,500	821,610
Boeing Co	25,250	1,064,035
Boise Cascade Corp	39,284	1,290,872
Borg Warner Inc	11,700	995,319
Boston Scientific Corp	40,300	1,481,428
Bowater Inc	47,450	2,197,410
Brinker International Inc	3,000	99,480
Bristol-Myers Squibb Co	25,900	740,740
Brocade Communications Systems Inc	35,000	202,300
Brooks Automation Inc	8,600	204,164
Brown Forman Corp Class B	4,100	383,145
Burlington Northern Santa Fe Corp	55,250	1,787,338
CAE Inc	12,800	58,112
CEC Entertainment Inc	23,600	1,118,404
CMS Energy Corp	10,100	86,052
CONSOL Energy Inc	38,000	984,200
CVS Corp	32,650	1,179,318
Cablevision Systems NY Group Class A	12,340	288,633
Cadence Design System Inc	8,400	151,032
Cameco Corp	8,000	460,800
Campbell Soup Co	11,700	313,560
CapitalSource Inc	5,300	114,904
Cardinal Health Inc	4,100	250,756
Career Education Corp	10,800	434,700
Caremark RX Inc	17,800	450,874
Celgene Corp	9,300	417,384
Centennial Cellular Corp	9,600	50,506
CenturyTel Inc	28,600	932,932
Ceridian Corp	18,200	381,108
CheckFree Corp	5,900	163,135
Chesapeake Energy Corop	29,900	406,042
Chevron Texaco Copor	30,700	2,652,173
Chiron Corp	3,100	176,638
Cimarex Energy Co	7,195	192,035
Citigroup Inc	56,000	2,718,240
Citizens Communications Co	9,900	122,958
Citrix Systems Inc	18,300	387,228
Clorox Co	31,100	1,510,216

Domestic Equity

	Shares	Fair Value
CNF Transportation Inc	13,100	$444,090
Coca Cola Co	900	45,675
Colgate Palmolive Co	31,100	1,556,555
Comerica Inc	18,900	1,059,534
Commerce Bancshares Inc	11,025	540,446
Community Health Care	14,600	388,068
Computer Sciences Corp	28,400	1,256,132
Comverse Technology Inc	40,300	708,877
Concur Technologies Inc	21,400	207,794
ConcoPhillips	24,850	1,629,415
Cooper Cameron Corp	7,600	354,160
Cooper Industries LTD Class A	31,950	1,850,864
Corrections Corporation of America	41,000	1,182,030
Corus Bankshares Inc	21,000	651,420
Cost Plus Inc	9,200	377,200
Cox Communications Inc Class A	19,640	676,598
Crane Co	11,300	347,362
Crown Holdings Inc	99,700	903,282
Crown Media Holdings Inc	7,800	64,506
Cummins Inc	18,400	900,496
CV Therapeutics Inc	3,700	54,464
DPL Inc	28,800	601,344
D R Horton Inc	11,600	501,816
DTE Energy Co	6,950	273,830
Del Monte Foods Co	70,700	735,280
Dell Inc	100	3,398
Delphi Corp	57,550	587,586
Delta & Pine Land Co	15,400	391,160
Deluxe Corp	200	8,266
Deutsche Telekon AG (ADR)	1	18
Devon Energy Corp	5,368	307,372
Direct General Corp	6,200	205,220
Dobson Communications Corp Class A	8,800	57,816
Dollar General Corp	1,900	39,881
Dollar Tree Stores Inc	9,400	282,658
Dominion Resources Inc	14,400	919,152
Donnelley, R R & Sons Co	29,000	874,350
Dow Chemical Co	27,400	1,139,018
Dow Jones & Co Inc	18,500	922,225
Dress Barn Inc	24,500	367,255
E I Dupont de Nemours & Co	27,700	1,271,153
Dycom Industries Inc	65,800	1,764,756
Ebay Inc	24,300	1,570,023
EMC Corp	70,600	912,152
E*Trade Financial Corp	103,300	1,306,745
East West Bancorp Inc	7,400	397,232
Edwards, A G Inc	2,500	90,575
El Paso Electric Co	24,100	321,735
Electronic Arts Inc	5,500	262,240
Electronic for Imaging Inc	24,900	647,898
Eli Lilly & Co	9,400	661,102
EMCOR Group Inc	8,500	373,150
Emerson Group Co	16,500	1,068,375

	Shares	Fair Value
Emmis Communications Class A	10,000	$270,500
Endurance Specialty Holdings	8,900	298,595
Energen Corp	8,400	344,652
Energy East Corp	39,367	881,821
Entravision Communications Corp	15,200	168,720
Everest RE Group LTD	13,100	1,108,260
Express Scripts Inc Class A	5,100	338,793
Exxon Mobil Corp	43,150	1,769,150
Family Dollar Stores Inc	4,900	175,812
First Energy Corp	7,550	265,760
Fleet Boston Financial Corp	18,450	805,343
Flushing Financial Corp	4,725	86,373
Forest Labs Inc	8,400	519,120
Freeport-McMoran Copper & Gold Cl B	17,300	728,849
Friedman Billings Ramsey Group Inc	37,626	868,408
Fuller, H B Co	28,800	856,512
Gabelli Asset Management Inc Class A	10,000	398,000
Gap Inc	79,700	1,849,837
Gateway Inc	9,600	44,160
Gemstar TV Guide International Inc	187,500	951,188
General Electric Co	65,000	2,013,700
General Mills Inc	20,300	919,590
Genta Inc	10,600	110,558
Gilead Sciences Inc	3,000	174,840
Gillette Co	24,000	881,520
Goldman Sachs Group Inc	10,050	992,237
Goodrich Corp	7,000	207,830
Gray Television Inc	1,900	28,728
Guidant Corp	22,700	1,366,540
HCA Inc	23,050	990,228
Harsco Corp	16,900	740,558
Hartford Financial Services Group Inc	18,700	1,103,861
Hasbro Inc	12,300	261,744
Heidrick & Struggles International Inc	6,500	141,700
Heinz, H J Co	44,800	1,632,064
Helmerich & Payne Inc	23,700	661,941
Hershey Foods Corp	6,300	485,037
Hibernia Corp Class A	6,800	159,868
Hilfiger, Tommy Corp	77,100	1,141,851
Hollinger International Inc Class A	19,000	296,780
Honeywell International Inc	40,100	1,340,543
Host Marriott Corp	49,100	604,912
Human Genome Sciences Inc	3,200	42,400
Humana Inc	59,900	1,368,715
Hunt, J B Transport Services Inc	53,000	1,431,530
IMC Global Inc	42,600	423,018
IMS Health Inc	4,300	106,898
Imperial Chemical Industries PLC (ADR)	20,000	286,400
Insight Communications Inc Class A	31,800	328,812
Integrated Alarm Services	62,000	527,000
Intel Corp	48,900	1,567,245
International Business Machines Corp	15,500	1,436,540
International Flavors & Fragrances	20,500	715,860

Domestic Equity

	Shares	Fair Value
International Game Technology	33,600	$1,199,520
International Paper Co	58,800	2,534,868
Internet Security Systems Inc	7,000	131,810
ITLA Capital Corp	16,100	806,610
Johnson & Johnson	8,100	418,446
Jones Apparel Group Inc	9,400	331,162
Juniper Networks Inc	46,000	859,280
KLA-Tencor Corp	3,300	193,182
Keane Inc	27,000	395,280
Kellogg Co	23,700	902,496
Kerr McGee Corp	61,950	2,880,056
Key Energy Services Inc	22,000	226,820
KeyCorp	35,200	1,032,064
Kimberly Clark Corp	27,800	1,642,702
King Pharmaceuticals Inc	45,000	686,700
Knight Ridder Inc	9,500	735,015
Kraft Foods Inc Class A	49,300	1,588,446
Kroger Co	53,450	989,360
LaQuinta Properties Inc	151,300	969,833
Laboratory Corp of America	8,200	302,990
LaBranche & Co Inc	40,100	467,967
LaFarge North America Inc	9,000	364,680
Lam Research Corp	5,800	187,340
LeapFrog Enterprises Inc	12,800	339,584
LECG Corp	9,400	215,166
Lee Enterprises Inc	6,900	301,185
Leucadia National Corp	8,000	368,800
Lexmark International Inc	1,900	149,416
Liberty Media Corp	16,328	194,140
Limited Brands	46,000	829,380
Lincoln National Corp	19,500	787,215
Linear Technology Corp	17,800	748,846
Lockheed martin Corp	21,300	1,094,820
LodgeNet Entertainment Corp	9,700	177,316
Lone Star Steakhouse Saloon	29,900	694,278
Lowe's Companies Inc	1,200	66,468
Luminent Mortgage Capital Inc	22,950	323,595
Lyondell Chemical Co	26,400	447,480
M C G Capital Corop	21,800	427,062
Mair Holdings Inc	49,080	357,302
Manor Care Inc	17,700	611,889
Markel Holdings	1,500	380,265
Martin Marietta Materials Inc	21,600	1,014,552
Maxim Integrated Products Inc	14,100	699,078
May Department Stores Co	19,300	561,051
McCormick & Co Inc	13,500	406,350
Meadwestvaco Corp	59,150	1,759,713
Media General Inc	1,500	97,650
Mediacom Communications Corp	54,400	470,560
Medtronic Inc	16,200	787,482
Merck & Co Inc	29,100	1,344,420
Mercury General Corp	7,000	325,850
Mercury Interactive Corp	200	9,728

	Shares	Fair Value
Meredith Corp	1,300	$63,453
Merrill Lynch & Co Inc	12,500	733,125
MetLife Inc.	9,907	333,569
Microsoft Corp	96,900	2,652,153
Millennium Pharmaceuticals Inc	10,292	191,946
Millipore Corp	2,900	124,845
Monster Worldwide Inc	13,400	294,264
Moody's Corp	9,200	557,060
Moore Wallace Inc	27,600	516,948
Morgan Stanley	12,400	717,588
Motorola Inc	32,250	451,500
Murphy Oil Corp	16,900	1,103,739
Myriad Genetics Inc	6,800	87,448
NCI Building Systems Inc	30,100	719,390
NSTAR	9,600	465,600
NAACO Industries Inc Class A	16,600	1,485,368
National Commerce Financial Corp	36,200	987,536
National Semiconductor Corp	2,500	98,525
Nautilus Group Inc	17,600	247,280
Navistar International Corp	41,500	1,987,435
NDCHealth Corp	15,300	391,986
Netbank Inc	9,674	129,148
Network Appliance Inc	1,000	20,440
Newell Rubbermaid Inc	47,600	1,083,852
Nextel Communications Inc Class A	43,700	1,226,222
NiSource Inc	37,500	822,750
Nike Inc Class B	4,900	335,454
North Fork Bancorporation Inc	11,400	461,358
Northrop Grumman Corp	8,350	798,260
Novell Inc	3,100	32,643
Novellus Systems Inc	4,400	185,020
NVIDIA Corp	18,000	417,600
NVR Inc	1,090	507,940
Oneok Inc	23,600	521,088
OshKosh B'Gosh Inc Class A	1,000	21,460
PF Changs's China Bistro Inc	5,900	300,192
PMC-Sierra Inc	3,900	78,390
PNC Financial Services Group Inc	36,750	2,011,328
Pall Corp	6,400	171,712
Park Place Entertainment Corp	16,900	183,027
Paxar Corp	10,900	146,060
Paychex Inc	700	26,040
Peabody Energy Corp	10,100	421,271
Penton Media Inc	7,100	9,656
Pepco Holdings Inc	26,700	521,718
PepsiCo Inc	7,100	331,002
Pfizer Inc	107,820	3,809,281
Phelps Dodge Corp	20,100	1,529,409
Philadelphia Consolidated Holdings Corp	5,700	278,331
Power Intergrations Inc	6,300	210,798
Precision Castparts Corp	5,200	236,132
Pride International Inc	20,600	383,984
Procter & Gamble Co	11,700	1,168,596

Domestic Equity

	Shares	Fair Value
Protein Design Labs Inc	9,400	$168,260
Provident Financial Inc	24,370	460,593
Prudential Financial Inc	19,250	804,073
Pulte Homes Inc	3,019	282,639
QLT Inc	15,100	284,635
QUALCOMM Inc	2,200	118,646
R F Micro Devices Inc	14,700	147,882
R H Donnelley Corp	4,100	163,344
Radian Group Inc	6,200	302,250
RadioShack Corp	900	27,612
Raytheon Co	26,400	793,056
RC2 Corp	16,700	347,861
Renaissance RE Holdings LTD	32,300	1,584,315
Rent-A-Center Inc	18,700	561,000
Republic Services Inc	16,500	422,895
RLI Corp	11,500	430,790
Robert Half International Inc	5,700	133,038
Rockwell Collins Inc	1,600	48,048
Rohm & Haas Co	24,700	1,054,937
Rollins Inc	2,900	65,395
Royal Caribbean Cruises LTD	12,500	434,875
RSA Security Inc	33,800	481,650
SBC Communications Inc	58,700	1,530,309
Sanmina-SCI Corp	15,000	189,000
Sara Lee Corp	55,900	1,213,589
Saxon Capital Inc	31,000	649,450
Schering Plough Corp	34,900	606,911
Schlumberger LTD	2,500	136,800
Schwab, Charles Corp	55,000	651,200
Scripps, E W Co	3,800	357,732
Sealed Air Corp	8,400	454,776
Semtech Corp	15,400	350,504
Sherwin Williams Co	13,800	479,412
Sierra Pacific Resources	98,700	724,458
SLM Corp	31,400	1,183,152
Smurfit-Stone Container Corp	71,806	1,333,437
Sonoco Products Co	14,300	352,066
South Financial Group Inc	6,900	191,475
Southwest Bancorp	10,000	388,500
Sovereign bancorp Inc	34,400	817,000
Spherion Corp	31,000	303,490
Spinnaker Exploration Co	21,900	706,713
SRA International Class A	8,900	383,590
St Jude Medical Inc	17,300	1,061,355
St Paul Companies Inc	37,300	1,478,945
Stanley Works	35,500	1,344,385
Staples Inc	5,200	141,960
Starbucks Corp	26,200	868,792
Storage Technology Corp	6,700	172,525
Stryker Corp	11,200	952,112
Sunoco Inc	6,300	322,245
Sun Trust Banks Inc	13,400	958,100
SuperValu Inc	57,800	1,652,502

	Shares	Fair Value
Swift Transportation Inc	24,900	$523,398
Sycamore Networks Inc	14,100	73,602
Symantec Corp	10,000	345,000
Synopsys Inc	28,102	951,534
Synovus Financial Crop	3,200	92,544
T Rowe Price Group Inc	400	18,964
Target Corp	5,750	220,800
Telephone & Data Systems Inc	9,600	600,480
Temple-Inland Inc	13,900	871,113
Teradyne Inc	1,700	43,265
Texas Instruments Inc	17,400	511,212
The Medicines Co	14,000	412,440
The Topps Co	42,400	435,024
Thermo Electron Corp	18,600	468,720
Tidewater Inc	14,200	424,296
Tiffany & Co	11,700	528,840
Torchmark Corp	21,400	974,556
Transaction Systems Architects Inc	9,800	218,246
Transocean Inc	30,750	738,308
Travelers Property Casualty Co Class B	63,465	1,077,001
Triad Hospitals Inc	11,500	382,605
Trinity Industries Inc	13,000	400,920
Triquint Semiconductor Inc	19,400	137,158
UST Inc	14,100	503,229
Unifi Inc	18,000	116,100
Unisys Corp	1,600	23,760
UnitedGlobalCom Inc	19,400	164,512
United Health Group Inc	23,000	1,338,140
United Parcel Service Inc Class B	15,700	1,170,435
United States Cellular Corp	6,600	234,300
United States Steel Corp	59,400	2,080,188
United Technologies Corp	2,500	236,925
University of Phoenix Online	7,100	489,403
Unocal Corp	36,250	1,335,088
USF Corp	18,900	646,191
Vail Resorts Inc	19,400	329,800
Valero Energy Corp	12,050	558,397
Valspar Corp	4,400	217,448
Varco International Inc	17,800	367,214
Varian Semiconductor Equipment Assoc	10,500	459,900
Verita Software Corp	22,500	832,950
Verizon Communications Inc	56,900	1,996,052
Vishay Intertechnology Inc	10,800	247,320
Wabtec Corp	11,700	199,368
Wachovia Corp	19,950	929,471
Waddell & Reed Financial Inc	18,900	443,394
Wal-Mart Stores Inc	29,000	1,538,450
Washington Federal Inc	39,325	1,116,044
Washington Mutual Inc	16,400	657,968
Waste Connections Inc	7,500	283,275
Waters Corp	2,500	82,900
Watson Pharmaceuticals Inc	14,300	657,800
WestCorp Inc	15,700	573,835

Domestic Equity

	Shares	Fair Value
Western Wireless Corp Class A	10,200	$187,272
Westwood One Inc	15,400	526,834
Whirlpool Corp	1,900	138,035
Williams Sonoma Inc	11,900	413,763
Wintrust Financial Corp	3,000	135,300
Wrigley, William Jr Co	11,900	668,899
Wyeth	600	25,470
Xilinx Inc	25,000	965,750
XOMA Limited	20,800	137,280
Yahoo! Inc	27,800	1,251,834
Young Broadcasting Inc Class A	2,300	46,092
Yum! Brands Inc	19,200	660,480
Zale Corp	10,800	574,560
Zimmer Holdings Inc	18,900	1,330,560
Total Securities	9,410,079	$280,179,707

S&P 500	$36,654,231
Russell 2500	10,502,024
Total Indexed Funds	$47,156,255

Total Domestic Equity	$327,335,962

Summary Schedule of Investment Manager Fees

Year Ending December 31, 2003

Manager	Assets Managed, 12/31/03	Fees
Bank of Ireland Asset Management	$40,226,603	$215,329
Brandywine Asset Management	64,569,272	310,408
DePrince, Race & Zollo, Inc.	53,514,523	81,746
Eubel, Brady & Suttman	16,321,252	61,325
Fidelity Management Trust Company	21,335,551	214,779
HPRS Internal Staff (real estate)	6,600,000	--
INTECH	51,142,202	219,020
JPMorgan Fleming Asset Management	48,444,029	252,046
MacKay-Shields Financial Corporation	50,682,076	284,355
Mellon Investor Services	333,569	--
Metropolitan Life Insurance Company	15,912,799	196,314
Munder Capital Management	99,626,293	153,598
Oak Associates	12,735,236	37,208
Pinnacle Associates LTD.	11,219,542	47,779
State Street Global Advisors	36,642,470	14,899
TimberVest	20,052,566	148,979
Western Asset	29,471,384	107,592
Westfield Capital Management	19,673,794	16,038
World Asset Management	10,502,024	20,446
Total	$609,005,185	$2,381,861

Summary Schedule of Broker Fees

Year Ending December 31, 2003

Broker	Fees	Shares	Average Cost
Abel Noser	$36,955	3,547,932	$0.010
Bank of New York	1,566	78,300	0.020
Broadcourt Capital	1,557	103,800	0.015
Brown, Alex & Sons	1,786	86,000	0.021
Buckingham Research Group Inc	235	4,700	0.050
Capital Institutional Services	29,345	1,951,666	0.015
Donaldson & Co	13,772	1,048,120	0.013
Ernst & Co	356	17,800	0.020
Friedman, Billings & Ramsey	3,645	183,790	0.020
Gerard, Klauer, Mattison & Co	280	5,600	0.050
Goldman Sachs	2,930	151,600	0.019
Griswold Co	105	3,500	0.030
Guzman & Co	4,787	239,363	0.020
Instinet	2,354	117,700	0.020
Jefferies & Co	848	42,400	0.020
Montgomery Securities	392	9,800	0.040
Oppenheimer Corp	272	6,800	0.040
Pershing	45	3,000	0.015
Prudential Bache	27	1,800	0.015
Prudential Securities	2,424	121,200	0.020
Rosenblatt Securities Inc	774	38,700	0.020
Salomon Smith Barney	40,423	1,874,318	0.022
SBC Cap Markets	7,346	396,700	0.019
Wanter Stott & Co	303	12,100	0.025
Weeden & Co	3,812	190,600	0.020
Other	9,155	773,300	0.012
Total	$165,494	11,010,589	$0.015

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 intended to restrict the Board from consideration of all lawful and legal investment opportunities.

2. The primary objective of the Highway Patrol Retirement System is to provide eligible members 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 followed with regard to the investment management of the fund. These guidelines require that the Board and other system fiduciaries exercise the care, skill, prudence, and diligence -- under the circumstances then 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.

2. 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 43 to 53 percent of the market value of total fund assets with a targeted average of 48 percent. The term "equities" includes common stock, convertible bonds, and convertible stock.

2. Non-U.S. equities will represent from 10 to 20 percent of the market value of total fund assets with a targeted average of 15 percent.

3. Real estate may represent 7 to 17 percent of total fund assets with a targeted average of 12 percent.

4. U.S. fixed income obligations, including cash, will represent from 20 to 30 percent of the market value of total fund assets with a targeted average of 25 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, government-sponsored corporations, and government-backed 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 four 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 four 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 four 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, June 26, 2003
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

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Actuarial Section

GABRIEL, ROEDER, SMITH & COMPANY
Consultants & Actuaries

One Towne Square Suite 800 Southfield, Michigan 48076 248-799-9000 800-521-0498 fax 248-799-9020

June 2, 2004

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' 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, 2002.

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

June 2, 2004

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, 2002 valuation were based upon a study of experience during the years 1995-99.

Pension experience was unfavorable during 2002, and the amortization period for unfunded accrued liabilities exceeds 30 years by a small amount. Experience in the Retiree Health Plan continues to be cause for concern. Rapidly escalating health care costs, coupled with successive years of disappointing investment results are likely to lead to further restructuring of the Plan. Investment return was disappointing for HPRS as it was for most other retirement funds across the nation. The actuarial value of assets exceeds the market value of assets by $103 million. This difference will be phased in over the ensuing three years. As a result, the amortization period for pensions is expected to increase, and the solvency period for retiree health is expected to decrease in the near future.

Based upon the results of the December 31, 2002 valuations, we are pleased to report to the Board that the Highway Patrol Retirement System of Ohio is meeting its basic financial objective with respect to pensions and continues in sound condition in accordance with actuarial principles of level percent of payroll financing. It is, however, important for HPRS as well as for most other retirement systems in the country that investment markets return to more normal levels, and that retiree health costs begin to moderate. Continued cost containment efforts can have a positive effect on the Retiree Health Plan.

Respectfully submitted,

GABRIEL, ROEDER, SMITH & COMPANY

Brian B. Murphy

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

Mita Drazilov

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

BBM:mdd:lr

GABRIEL, ROEDER, SMITH & COMPANY

Summary of Assumptions

After consulting with the actuary, these assumptions have been adopted by the Highway Patrol Retirement System Board of Trustees, effective January 1, 2002.

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 4.0% annually, attributable to broad economic effects such as inflation and real wage growth. Additional merit and seniority increases are assumed as follows:

Service Years	Merit & Seniority	Base (Economic)	Total
0-4	3.7%	4.0%	7.7%
5-9	2.0	4.0	6.0
10-14	1.5	4.0	5.5
15+	0.3	4.0	4.3

Health Care. Premiums are assumed to increase 4.0% annually. All retirees are assumed to receive a joint and survivor pension benefit. Medicare reimbursement is assumed to remain constant at $58.70 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

Retirement Ages	Unreduced Benefit	Reduced Benefit
48	40%	2%
49	35	2
50	25	2
51	30	2
52	25	--
53	25	--
54	40	--
55+	100	--

Postemployment 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 Age	Disability	Death Men	Death Women	Other
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

Year	(1) Active Member Contributions	(2) Retirees, Beneficiaries & Vested Deferreds	(3) Active Members (Employer Financed Portion)	Valuation Assets	Percentage of Accrued Liabilities Covered by Reported Assets (1)	(2)	(3)
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
2001	63,969,216	374,228,361	198,517,881	551,279,438	100	100	57
2002➤	68,794,904	391,098,788	203,176,113	527,604,456	100	100	33

▲ Plan Amendment

➤ Assumption or method change

Postemployment Health Care and Medicare Reimbursement

Year	Covered Lives	Med. B Reimb.	Medical	Prescriptions	Unallocated	Total Costs	Cost per Covered Life	Payroll	% of Payroll
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
2001	1,900	231,045	3,730,167	1,960,825	257,059	6,179,096	3,252	76,344,002	8.1
2002	1,943	260,772	4,147,534	2,431,297	185,440	7,025,043	3,616	78,997,065	8.9

Active Member Data

Year Ending December 31	Active Members	Annual Payroll	Average Annual Salary	% Increase in Average Pay
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
2001	1,520	76,344,002	50,226	8.3
2002	1,548	78,997,065	51,032	1.6

Retiree and Beneficiary Data

	Added to Rolls		Removed from Rolls		Rolls at End of Year		Increase in	Average
Year Ending December 31	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances	Annual Allowances	Annual Allowances
1997	96	3,194,136	23	281,688	984	19,747,356	17.3	20,068
1998	96	3,427,377	20	205,641	1,060	22,969,092	16.3	21,669
1999	82	2,930,342	19	417,782	1,123	25,481,652	10.9	22,691
2000	78	2,640,298	27	516,382	1,174	27,605,568	8.3	23,514
2001	53	2,177,124	20	258,996	1,207	29,523,696	6.9	24,460
2002	55	2,211,612	31	498,012	1,231	31,237,296	5.8	25,376

Analysis of Financial Experience

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

Type of Activity	Gain (or Loss) for Year 2002	Gain (or Loss) for Year 2001
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.	$231,811	$202,278
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	886,041	(121,688)
Death-in-Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, a loss.	(61,175)	(228,887)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	(135,024)	(56,856)
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	2,461,513	(12,023,972)
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.	(58,251,719)	(55,763,211)
Other. Miscellaneous gains and losses resulting from data adjustments, timing of financial transactions, valuation methods, and other events.	1,946,039	3,607,454
Gain (or Loss) During Year From Financial Experience	($52,922,514)	($64,384,882)
Non-Recurring Items. Adjustments for benefit and assumption changes.	5,536,127	0
Composite Gain (or Loss) During Year	($47,386,387)	($64,384,882)

Plan Summary

Purpose

The 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 Highway Patrol Retirement System are vested in the 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 active members, and one elected retired member.

The active members are elected to four-year terms by members of the plan. Any contributing member is eligible to become an active member candidate, and all contributing members are eligible to vote in the active member election process. Any retiree who is an Ohio resident, and who was not an active member of the Board at retirement, is eligible to become a retired member candidate. All retirees are eligible to vote in the retired 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 Board certify the employer contribution rate to the Office of Budget and Management on even-numbered years. The employer rate may not be lower than the member rate, nor may it exceed three times the member 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 Ohio Police & Fire Pension Fund, State Teachers Retirement System of Ohio, School Employees Retirement System of Ohio, Ohio Public Employees Retirement System, or the Cincinnati Retirement System. Prior full-time contributing service credit and member contributions may also be transferred directly from Ohio 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 Uniformed Services Employment and Re-employment Rights Act of 1994, (2) Ohio Police & Fire Pension Fund, and (3) contributing service in Ohio 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 retiree'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 retiree 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 retiree. 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 retiree; however, the payment is reduced because it is based on the combined life expectancies of the retiree 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 retiree 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 retirees 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 retiree, 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 $58.70 monthly.

Cost of Living

At age 53 and thereafter, retirees receive an annual cost of living adjustment (COLA) equal to 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 retiree, a lump sum payment of $5,000 is paid to the surviving spouse, or to the retiree's estate if there is no surviving spouse.

Highway Patrol
RETIREMENT SYSTEM

Statistical Section

Additions by Source

Pension Benefits

Year	Member Contributions	Employer Contributions	Net Investment Income ▲▼	Transfers from Other Systems	Total
1996	$6,223,468	$12,176,108	$54,183,754	$494,651	$73,077,981
1997	6,146,774	12,236,515	66,159,004	330,119	84,872,412
1998	6,573,762	13,101,039	13,029,413	503,509	33,207,723
1999	6,708,497	13,569,730	33,612,434	444,135	54,334,796
2000	6,954,301	13,210,189	(14,120,288)	925,998	6,970,200
2001	7,042,044	13,901,313	(17,920,157)	999,380	4,022,580
2002	7,563,173	14,923,893	(42,921,956)	999,176	(19,435,714)
2003	8,136,974	16,361,339	105,112,725	763,419	130,374,457

Other Postemployment Benefits

Year	Employer Contributions	Net Income ▲▼	Investment Total
1996	$2,530,817	$9,444,391	$11,975,208
1997	2,543,372	11,536,686	14,080,058
1998	2,687,150	1,396,472	4,083,622
1999	2,783,534	6,878,890	9,662,424
2000	3,346,581	(3,114,980)	231,601
2001	3,521,665	(2,900,183)	621,482
2002	3,780,715	(6,673,383)	(2,892,668)
2003	3,395,749	18,885,722	22,281,471

Deductions by Type

Pension Benefits

Year	Benefits	Refunds	Transfers to Other Systems	Administrative ▼	Total
1996	$15,920,148	$67,323	$140,376	$2,134,192	$18,262,039
1997	18,683,246	231,705	98,810	704,542	19,718,303
1998	21,539,636	164,054	281,606	648,144	22,633,440
1999	24,324,038	529,654	196,414	449,167	25,499,273
2000	27,042,946	363,067	904,972	549,168	28,860,153
2001	29,457,281	306,452	448,381	524,922	30,737,036
2002	31,325,089	266,137	1,054,264	462,200	33,107,690
2003	33,074,853	386,931	789,387	559,052	34,810,223

Other Postemployment Benefits

Year	Health Care	Administrative ▼	Total
1996	$2,022,608	$371,996	$2,394,604
1997	2,499,178	122,856	2,622,034
1998	3,128,888	114,378	3,243,266
1999	5,498,402	78,854	5,577,256
2000	4,720,260	95,423	4,815,683
2001	6,179,096	90,422	6,269,518
2002	7,025,043	78,635	7,103,678
2003	7,181,129	93,769	7,274,898

▼ 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

Year	Service	Disability	Survivor	Total
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
2001	2,379	1,984	880	2,038
2002 ■	2,475	2,037	906	2,115

■ 2002 is the latest actuarial evaluation.

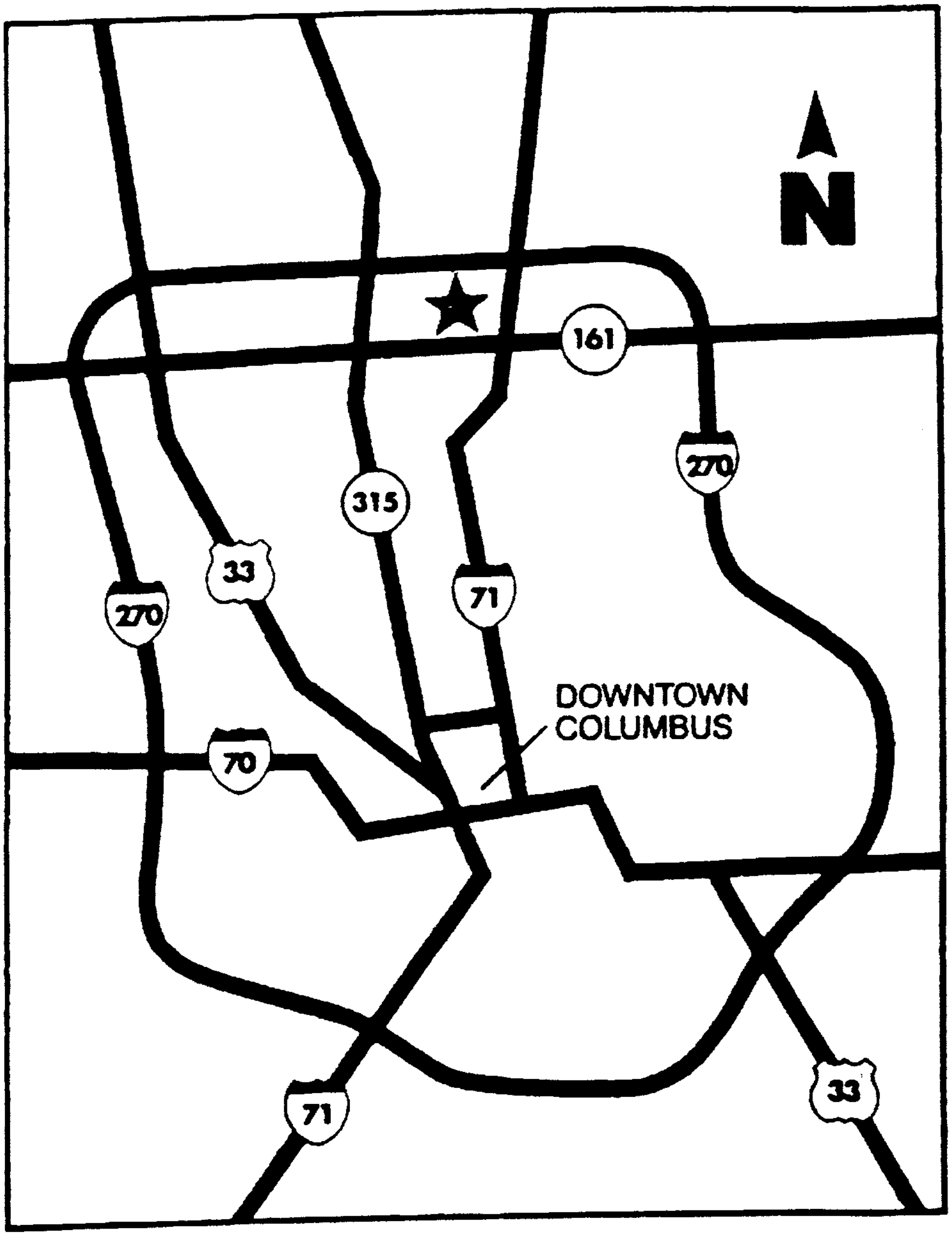
Number of Benefit Recipients by Type

Year	Service Retirement	Disability Retirement	Deferred Retirement	Survivor Benefits	Total
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	879	73	7	255	1,214
2002	891	74	6	262	1,233
2003	913	78	4	257	1,252

Benefit Expenses by Type

Year	Health Care	Service ◇	Disability	Survivor	Total
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	31,763,205
2001	6,179,096	24,891,330	1,605,426	2,961,525	35,637,377
2002	7,025,043	26,354,819	1,828,394	3,141,877	38,350,133
2003	7,181,129	27,826,812	1,875,919	3,186,291	40,070,152

◇ Includes reduced, early retirement, & death benefits.



Highway Patrol Retirement System
6161 Busch Boulevard, Suite 119
Columbus, Ohio 43229-2553
Telephone 614-431-0781
Fax 614-431-9204
e-mail system@ohprs.org
www.ohprs.org

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.

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Betty Montgomery

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Facsimile 614-466-4490

HIGHWAY PATROL RETIREMENT SYSTEM

FRANKLIN COUNTY

CLERK'S CERTIFICATION

This is a true and correct copy of the report which is required to be filed in the Office of the Auditor of State pursuant to Section 117.26, Revised Code, and which is filed in Columbus, Ohio.

Susan Babbitt

CLERK OF THE BUREAU

CERTIFIED
AUGUST 31, 2004