



**Comprehensive Annual Financial Report**  
*A Component Unit of the State of Ohio*  
**Year Ending December 31, 2010**

**Daniel K. Weiss, CPA, JD**  
**Executive Director/Chief Investment Officer**

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

# Table of Contents

	Page
<b>INTRODUCTORY SECTION</b>	
Certificate of Achievement .....	4
Board of Trustees and Senior Staff .....	5
Organizational Chart .....	6
Consultants and Investment Managers .....	7
Legislative Summary .....	8
Letter of Transmittal .....	9
 <b>FINANCIAL SECTION</b>	
Independent Auditors' Report .....	13
Management's Discussion and Analysis .....	15
Basic Financial Statements	
Combining Statement of Plan Net Assets .....	19
Combining Statement of Changes in Plan Net Assets .....	20
Notes to the Financial Statements .....	21
Required Supplementary Schedules	
Schedule of Employer Contributions - Pension .....	36
Schedule of Employer Contributions and Other Contributing Entities - OPEB .....	36
Schedule of Funding Progress - Pension .....	36
Schedule of Funding Progress - OPEB .....	36
Notes to the Trend Data .....	37
Notes to Required Supplementary Schedules .....	37
Supplementary Information	
Schedule of Administrative Expenses .....	38
Schedule of Investment Expenses .....	39
Payments to Consultants .....	39
Independent Auditors' Report on Internal Control and Compliance .....	40
 <b>INVESTMENT SECTION</b>	
Investment Summary .....	42
Asset Allocation .....	42
Ten-Year Investment Comparison .....	42
Report on Investment Activity .....	43
Schedule of Investment Results .....	45
Total Fund and Benchmark Returns .....	45
Investment Portfolio .....	46
Summary Schedule of Investment Manager Fees .....	49
Summary Schedule of Broker Fees .....	50
Investment Objectives, Policies, and Guidelines .....	51
 <b>ACTUARIAL SECTION</b>	
Actuary's Letter .....	58
Statement of Actuarial Assumptions and Methods .....	60
Short-Term Solvency Test .....	62
Active Member Valuation Data .....	62
Retiree and Beneficiary Added to and Removed from Rolls .....	63
Analysis of Financial Experience .....	63
Summary of Plan Provisions .....	64
 <b>STATISTICAL SECTION</b>	
Introduction .....	69
Changes in Net Assets, 2001-2010 .....	70
Benefit Deductions from Net Assets by Type, 2001-2010 .....	71
Principal Participating Employer, 2010 & 2001 .....	71
Retired Members by Type of Benefit, December 31, 2010 .....	72
Average Benefit Payments, 2001-2010 .....	73
Map .....	74



# **Introductory Section**

# Certificate of Achievement for Excellence in Financial Reporting

Presented to

## Highway Patrol Retirement System, Ohio

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended  
December 31, 2009

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

## Introductory Section

### Board of Trustees and Senior Staff



Col. John T. Born  
*Statutory Trustee/Chair*



Cpt. Cory D. Davies  
*Employee Trustee/  
Vice-Chair*



Cpt. Carl Roark  
*Employee Trustee*



S/Lt. Anthony C. Bradshaw  
*Employee Trustee*



Lt. Rudolph L. Zupanc  
*Employee Trustee*



Sgt. Heidi A. Marshall  
*Employee Trustee*



Lt. (ret.) Larry A. Davis  
*Retiree Trustee*



Maj. (ret.) Darryl L. Anderson  
*Retiree Trustee*



Joseph H. Thomas  
*General Assembly's Investment  
Expert*



Kenneth C. Boyer  
*Treasurer of State's Investment  
Designee*



Keith McCarthy  
*Assistant Attorney General,  
Legal Advisor*



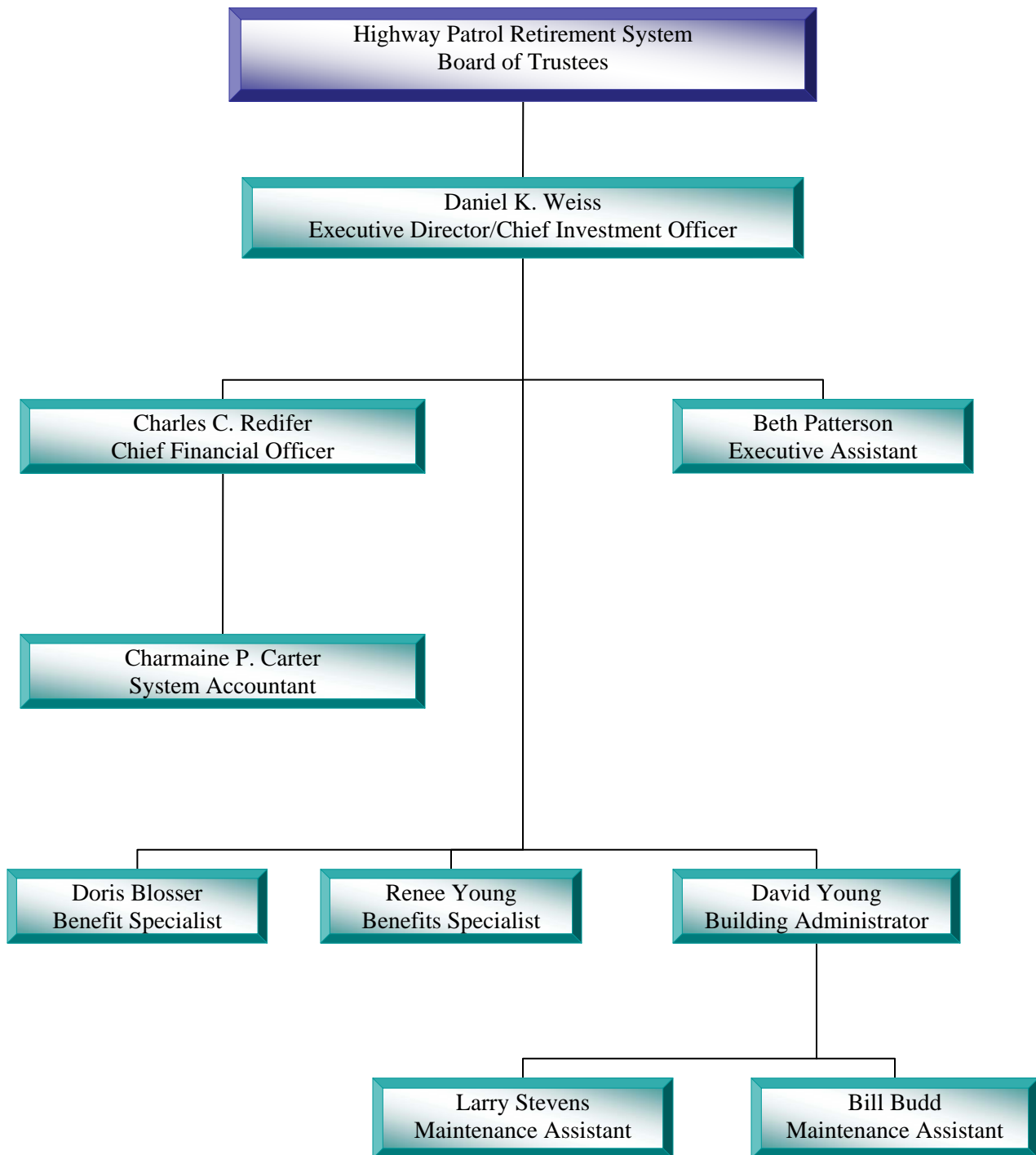
Keith O'Korn  
*Assistant Attorney General,  
Legal Advisor*



Daniel K. Weiss, CPA, JD  
*Executive Director/  
Chief Investment Officer*



Charles C. Redifer, CPA  
*Chief Financial Officer*



See page 7 for a list of consultants and investment managers.

## Consultants

### Medical Advisor

Earl N. Metz, M.D.  
Columbus, Ohio

### Independent Auditor

Kennedy, Cottrell, Richards  
Columbus, Ohio

### Actuary

Gabriel, Roeder, Smith &  
Company  
Southfield, Michigan

### Investment Consultant

Hartland & Co.  
Cleveland, Ohio

## Investment Managers

Ancora Advisors  
Beachwood, Ohio  
*Micro Cap Equity*

Artio Global Investors  
New York, New York  
*International Equity*

Brandywine Global Investment  
Management  
Philadelphia, Pennsylvania  
*Small/Mid Cap Value Equity*

Credit Suisse Alternative Investments  
New York, New York  
*Private Equity*

DePrince, Race & Zollo  
Winter Park, Florida  
*Large Cap Value Equity*

Dimensional Fund Advisors  
Austin, Texas  
*Small Cap Blend Equity &  
International Equity*

Driehaus Capital Management  
Providence, Rhode Island  
*International Small Cap Growth Equity*

Evanston Capital Management  
Evanston, Illinois  
*Fund of Hedge Funds*

Feingold O'Keeffe Capital  
Boston, Massachusetts  
*Distressed Debt*

Fred Alger Management  
Jersey City, New Jersey  
*Small Cap Growth Equity*

GAM Fund Management Ltd.  
New York, New York  
*Fund of Hedge Funds*

Henderson Global Investors  
Hartford, CT  
*Real Estate*

James Investment Research  
Alpha, Ohio  
*Micro Cap Equity*

Johnson Institutional Management  
Cincinnati, Ohio  
*Core/Short-Term Fixed Income*

J.P.Morgan Asset Management  
New York, New York  
*Intermediate-Term Fixed Income*

Kayne Anderson Capital Advisors  
Los Angeles, California  
*Energy/Mezzanine Private Equity*

Western Asset Management  
New York, New York  
*High Yield Fixed Income*

Loomis, Sayles & Company  
Boston, Massachusetts  
*Small/Mid Cap Core Equity*

LSV Asset Management  
Chicago, Illinois  
*Large Cap Value Equity*

Manning & Napier Fund  
Dublin, Ohio  
*International Equity*

NB Alternative Investment  
Management  
New York, New York  
*Fund of Hedge Funds*

Oaktree Capital Management  
New York, New York  
*Real Estate Private Equity*

Pantheon Ventures  
San Francisco, California  
*Private Equity*

Protégé Partners  
New York, New York  
*Fund of Hedge Funds*

Pyramis Global Advisors  
Springfield, RI  
*Real Estate*

Sankaty Advisors  
Boston, Massachusetts  
*Distressed Debt*

Seix Investment Advisors  
Upper Saddle River, New Jersey  
*Distressed Debt*

State Street Global Advisors  
Boston, Massachusetts  
*Large Cap Blend Indexed*

T. Rowe Price  
Baltimore, Maryland  
*Large Cap Blend Indexed*

Timbervest  
Atlanta, Georgia  
*Real Estate*

The Vanguard Group  
Wayne, PA  
*Money Market*

Wellington Management  
Boston, Massachusetts  
*Large Cap Growth Equity*

Wells Capital Management  
Los Angeles, California  
*Intermediate-Term Fixed Income*

Westfield Capital Management  
Boston, Massachusetts  
*Small/Mid Cap Growth Equity*

World Asset Management  
Birmingham, Michigan  
*Small Cap Value Indexed, Mid Cap  
Blend Indexed, & International Equity*

See the Investment Section, pages 49-50, for payments to investment managers and brokers.

## Introductory Section

---

### Legislative Summary

Since mid-2009, the Highway Patrol Retirement System and the other Ohio public plans have been proposing plan design changes to improve long-term solvency. In 2010, an election year, political uncertainty seemed to derail any significant discussion of potentially controversial pension legislation. The year ticked away with no action by the legislature.

The fall elections brought significant change to both the Ohio House and the Senate, along with a new governor. The stage appeared to be set for responsive action to the pending pension solvency plans. Instead, the legislative priority shifted to limiting collective bargaining, which resulted in the passage of Senate Bill 5. With an expected referendum on the November ballot to undo the law, once again, pension legislation is on hold.

Investment values have risen dramatically from the market lows, but it is unlikely that long-term solvency can be achieved without some relatively minor plan design changes.





June 23, 2011

## Letter of Transmittal

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, 2010. Responsibility rests with the management of the system for both the accuracy of the data and the completeness and fairness of the presentation. 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 1941 with membership limited to uniformed and communications personnel employed by the State Highway Patrol. Previously, SHP personnel were members of 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 who were hired prior to November 2, 1989.

Plan benefits include age and service pensions, disability retirement, survivor and death benefits, and health care coverage for benefit recipients and eligible dependents. A more detailed benefits description is provided in the Plan Summary in the Actuarial Section.

### **Major Initiatives and Changes Enacted**

At the end of 2008, based on the severe downturn of the investment markets, HPRS fell out of compliance with the Ohio Revised Code's requirement of an amortization period for unfunded pension liabilities of thirty years or less. The HPRS Board responded by developing a comprehensive solvency plan that will require legislative action for implementation. It appears unlikely that any action will be taken in 2011.

In 2010, Hewitt EnnisKnupp performed a fiduciary audit of HPRS as required by the Ohio Revised Code. Although the final audit report has not been released, we consider this to be a "clean" audit that emphasizes our commitment to our members and the state of Ohio.

Late in 2010, HPRS made significant strides in migrating from an overly complex and outdated accounting and pension system. Work continues in 2011 to simplify our accounting and record keeping procedures. The anticipated results are increased automation in standard procedures and calculations and additional user-friendly features for members and staff. We plan to have these new systems completely implemented by the end of 2011.

## **Investments**

The HPRS investment policy objective is to provide eligible members with scheduled pension benefits. Accordingly, the funds of the system are invested in order to balance long-term appreciation and risk.

Investment returns for the Highway Patrol Retirement System in 2010 were 13.8%. Three-year annualized returns were flat (0.0%) and five-year annualized returns were 4.3%. Because of the continued momentum in the financial markets that started in 2009, the total investment portfolio increased to \$755.0 million (including cash) at December 31, 2010, representing an 8.8% increase from the prior year.

For a detailed analysis of financial operations, please refer to Management's Discussion and Analysis on pages 15 through 18.

## **Internal Controls**

The management of HPRS has implemented and is responsible for a system of internal accounting controls, designed to provide reasonable assurance of the safeguarding of assets and the reliability of financial records. An internal control system can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Designing an internal control system requires acknowledging that there are resource constraints and the benefits of controls must outweigh the costs to implement them. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that instances of fraud, if any, have been detected or prevented. Evaluation of the effectiveness of controls in future periods is subject to the risk that the controls may have become inadequate because of changes in the business.

The internal accounting controls in place are adequate to meet the purpose for which they were intended and are reviewed annually by an external auditor. The financial statements, supporting schedules, and statistical tables are presented fairly in all material respects.

## **Funding**

The goal of the Board has been to limit the period of unfunded pension liabilities to no more than thirty years, as required by Ohio law. At December 31, 2009, unfunded actuarially accrued pension liabilities could not be amortized over a finite period. Pension assets, as a percentage of pension liabilities, decreased to 66.0% as compared to 66.7% and 80.9% in 2009 and 2008, respectively.

## **Awards**

The Government Finance Officers Association of the United States 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 for the fiscal year ended December 31, 2009. In order to be awarded a *Certificate of Achievement*, a government must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements. A *Certificate of Achievement* is valid for a period of one year only. We believe that our current comprehensive annual financial report continues to meet the *Certificate of Achievement* program's requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

HPRS received the *Making Your Tax Dollars Count* award from the Ohio Auditor of State for the year ending December 31, 2009. Fewer than five percent of all Ohio government entities are eligible for this award. To receive this award, entities must submit a comprehensive annual financial report and receive an audit with no findings or issues.

### **Professional Services**

To aid in efficient and effective management, 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 Hartland & Co. of Cleveland, Ohio. Under contract with the Auditor of the State of Ohio, Kennedy, Cottrell, Richards, Certified Public Accountants of Columbus, Ohio, audited the financial records of the system.

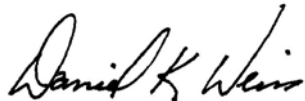
### **Acknowledgments**

In June 2010, Valerie Nesbitt retired as Benefits Director of HPRS after over thirty years of service. In January 2011, Marty Hudson retired as Trading Analyst with over seventeen years of service. For their long-time diligence on behalf of active members, retirees, and other benefit recipients, we thank Valerie and Marty for their dedicated service.

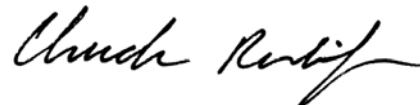
The preparation of this report reflects the combined efforts of the system's staff under the direction of the Board of Trustees. It is intended to provide complete and reliable information as a basis for making management decisions, a means for determining compliance with legal provisions, and a means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

Upon publication of this report at [www.ohprs.org](http://www.ohprs.org), HPRS will notify interested parties of its availability, including all State Highway Patrol facilities, professional consultants, investment managers, and the Ohio Retirement Study Council.

Respectfully Submitted,



Daniel K. Weiss, CPA, JD  
Executive Director/Chief Investment Officer



Charles C. Redifer, CPA  
Chief Financial Office



# **Financial Section**

## INDEPENDENT ACCOUNTANTS' REPORT

Ohio State Highway Patrol Retirement System  
6161 Busch Boulevard, Suite 119  
Columbus, Ohio 43229-2553

To the Board of Trustees:

We have audited the accompanying basic financial statements of the Ohio State Highway Patrol Retirement System (HPRS), a component unit of the State of Ohio, as of and for the year ended December 31, 2010, as listed in the table of contents. These financial statements are the responsibility of the 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 the Comptroller General of the United States' *Government Auditing Standards*. Those standards require that we plan and perform the audit to reasonably assure 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 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 Ohio State Highway Patrol Retirement System, as of December 31, 2010, 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 June 17, 2011, on our consideration of the HPRS' internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters. While we did not opine on the internal control over financial reporting or on compliance, that report describes the scope of our testing of internal control over financial reporting and compliance and the results of that testing. That report is an integral part of an audit performed in accordance with *Government Auditing Standards*. You should read it in conjunction with this report in assessing the results of our audit.

Accounting principles generally accepted in the United States of America require this presentation to include the Management's discussion and analysis and Required Supplementary Schedules, as listed in the table of contents, to supplement the basic financial statements. Although this information is not part of the basic financial statements, the Governmental Accounting Standards Board considers it essential for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any other assurance.

We conducted our audit to opine on the financial statements that collectively comprise the HPRS' basic financial statements taken as a whole. The introductory section, supplementary information, investment section, and actuarial section, as listed in the table of contents, provide additional analysis and are not a required part of the basic financial statements. The supplementary information is management's responsibility, and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. These schedules were subject to the auditing procedures we applied to the basic financial statements. We also applied certain additional procedures, including comparing and reconciling this information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, in accordance with auditing standards generally accepted in the United States of America. In our opinion, this information is fairly stated in all material respects in relation to the basic financial statements taken as a whole. We did not subject the introductory section, investment section, and actuarial section to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we express no opinion or any other assurance on them.



Kennedy Cottrell Richards LLC  
June 17, 2011

#### Financial Highlights

- At December 31, 2010, the assets of HPRS exceeded liabilities by \$734,282,707. All of the net assets are held in trust for pension and health care benefits and are available to meet HPRS's ongoing obligations to plan participants and their beneficiaries.
- During 2010, HPRS's total net assets increased by \$58,609,505, or 8.7%, with 153.4% 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, 2009, the date of the most recent actuarial valuation, HPRS assets equaled 66.0% of the present value of pension obligations.
- Revenues (additions to plan net assets) for the year were \$124,343,637, which includes member and employer contributions of \$32,735,731 and investment income of \$89,895,586.
- Expenses (deductions from plan net assets) increased 5.9% over the prior year. Of this amount, pension benefits increased by 5.2%, health care expenses increased by 16.8%, and administrative expenses decreased by 15.6%.

#### Overview of the Financial Statements

The financial statements consist of the following 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 benefit recipients, 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, 2009, the date of the latest actuarial valuation, the current funding ratio was 66.0%. This means that HPRS had approximately \$0.66 available for each \$1.00 of projected pension liabilities.

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. Each capital asset is depreciated over its expected useful life.

## Financial Section

### Management's Discussion and Analysis

The difference between HPRS assets and liabilities is reported on these statements as Net Assets Held in Trust for Pension and Post-Employment 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 19-20 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 the Notes to the Financial Statements on pages 21-35 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 the Required Supplementary Schedules on pages 36-37 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 2010, total contributions and rebounding securities markets resulted in additions of \$124.3 million. Employer contributions decreased by 1.2% and member contributions decreased by 3.8%.

##### Revenues - Additions to Plan Net Assets

(in thousands)

	2010	Restated 2009	\$ Change	% Change
Net appreciation in fair value of investments	\$86,194	\$125,533	(\$39,339)	(31.3%)
Interest and dividend income	8,875	13,638	(4,763)	(34.9)
Real estate operating income, net	127	(228)	355	155.7
Investment expenses	(4,924)	(4,581)	(343)	7.5
Security lending activity, net	(377)	(3,838)	3,461	90.2
Employer contributions	24,440	24,735	(295)	(1.2)
Member contributions	8,296	8,624	(328)	(3.8)
Transfers from other Ohio systems	329	1,009	(680)	(67.4)
Health care premiums	911	902	9	1.0
Retiree Drug Subsidy	472	514	(42)	(8.2)
Total additions	<u>\$124,343</u>	<u>\$166,308</u>	<u>(\$41,965)</u>	<u>(25.2%)</u>

The investment section of this report summarizes the result of investment activity for the year ending December 31, 2010.



**Expenses - Deductions from Plan Net Assets.**

HPRS was created to provide retirement, disability, and survivor benefits to qualified members and their beneficiaries. The costs of these programs include benefit payments by the plan, refunded contributions, and the administrative costs of the system. In 2010, total deductions from plan net assets increased 5.9%. This included a 5.2% increase in pension benefits, largely attributable to an increase in the number of benefit recipients and cost of living adjustments. Health care expenses increased by 16.8% and administrative expenses decreased by 15.6%. Refunds of member contributions decreased by 55.7% and transfers of contributions to other Ohio retirement systems increased by 39.7%.

<b>Expenses – Deductions from Plan Net Assets</b>				
<i>(in thousands)</i>				
	<b>2010</b>	Restated <b>2009</b>	<b>\$ Change</b>	<b>% Change</b>
Pension benefits	\$52,499	\$49,884	\$2,615	5.2%
Refunds of member contributions	477	1,077	(600)	(55.7)
Health care	11,448	9,802	1,646	16.8
Administrative expenses	744	882	(138)	(15.6)
Transfers to other Ohio systems	567	406	161	39.7
Total deductions	<u>\$65,735</u>	<u>\$62,051</u>	<u>\$3,684</u>	5.9%

**Changes in Net Assets**

In 2010, Net Assets Held in Trust for Pension and Post-Employment Health Care Benefits increased by \$58,609,505, or 8.7%. Investment income attributable to the appreciation in fair values of investments equaled \$86,194,097, or 147.1% of the increase in net assets. All of the net assets are available to meet HPRS's ongoing obligations to plan participants and their beneficiaries.

<b>Changes in Net Assets</b>		
<i>(in thousands)</i>		
	<b>2010</b>	<b>2009</b>
Beginning balance	\$675,673	\$571,416
Ending balance	734,283	675,673
Total change	<u>\$58,610</u>	<u>\$104,257</u>
% change	<u>8.7%</u>	<u>18.2%</u>

**Capital Assets**

As of December 31, 2010, HPRS's investment in capital assets totaled \$20,534 (net of accumulated depreciation), an increase of \$11,242 or 121.0% from December 31, 2009. This investment in capital assets includes office equipment, software, and furniture for administrative use. The increase in HPRS's net investment in capital assets for the current year was wholly attributable to the acquisition of office equipment.

## Financial Section

### Management's Discussion and Analysis

#### Total Assets

In 2010, total assets increased by \$44,135,453, or 6.2%. The change in total assets was largely attributable to increases in the fair value of investments.

<b>Assets</b> (in thousands)				
	<u>2010</u>	<u>2009</u>	<u>\$ Change</u>	<u>% Change</u>
Cash and short term investments	\$15,744	\$26,688	(\$10,944)	(41.0%)
Receivables	2,792	4,369	(1,577)	(36.1)
Investments, at fair value	739,247	667,416	71,831	10.8
Collateral on loaned securities	-	15,190	(15,190)	(100.0)
Prepaid assets	11	7	4	57.1
Other assets	21	9	12	133.3
Total assets	<u>\$757,815</u>	<u>\$713,679</u>	<u>\$44,136</u>	<u>6.2%</u>

#### Total Liabilities

Total liabilities decreased by \$14,474,052, or 38.1%, primarily as a result of the cessation of the securities lending program during 2010. The decline in total liabilities attributable to a lower level of securities lending activity was \$19,116,848. Without this decline, total liabilities would have increased by \$4,642,796 or 12.2%.

<b>Liabilities</b> (in thousands)				
	<u>2010</u>	<u>2009</u>	<u>\$ Change</u>	<u>% Change</u>
Current liabilities	\$3,305	\$22,094	(\$18,789)	(85.0%)
Long-term liabilities	20,227	15,912	4,315	27.1
Total liabilities	<u>\$23,532</u>	<u>\$38,006</u>	<u>(\$14,474)</u>	<u>(38.1%)</u>

#### Summary

The investment gains experienced by HPRS during 2010 are the result of a strong and successful investment program, risk management, and strategic planning; however, both management and HPRS's actuary concur that, in the absence of future actuarial gains, HPRS will require an increase in contributions or benefit changes to the pension program to meet its obligations to plan participants and beneficiaries.

#### 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 Chief Financial Officer, State Highway Patrol Retirement System, 6161 Busch Boulevard, Suite 119, Columbus, OH 43229-2553.

## Financial Section

<b>Combining Statement of Plan Net Assets</b>			
December 31, 2010			
	Pension	Post-Employment Health Care	Total
<b>Assets</b>			
Cash and short-term investments	\$13,492,587	\$2,251,450	\$15,744,037
Receivables			
Employer contributions receivable	756,423	115,108	871,531
Member contributions receivable	715,505	-	715,505
Accrued investment income	877,178	146,371	1,023,549
Health care receivable	-	180,492	180,492
Miscellaneous receivable	1,114	-	1,114
Total receivables	<u>2,350,220</u>	<u>441,971</u>	<u>2,792,191</u>
Investments, at fair value			
Domestic equity	272,847,882	45,528,948	318,376,830
International equity	106,019,244	17,690,974	123,710,218
Fixed income	120,051,942	20,032,549	140,084,491
Real estate	19,535,298	3,259,771	22,795,069
Private equity	64,133,016	10,701,600	74,834,616
Hedge funds	50,944,640	8,500,912	59,445,552
Total investments	<u>633,532,022</u>	<u>105,714,754</u>	<u>739,246,776</u>
Prepaid expenses	9,590	1,600	11,190
Property and equipment, net	17,598	2,936	20,534
Total other assets	<u>27,188</u>	<u>4,536</u>	<u>31,724</u>
Total assets	<u>649,402,017</u>	<u>108,412,711</u>	<u>757,814,728</u>
<b>Liabilities</b>			
Accounts payable	955,235	159,396	1,114,631
Accrued payroll liabilities	129,933	21,681	151,614
Accrued pension liabilities	21,390,278	-	21,390,278
Accrued health care liabilities	-	807,107	807,107
Other liabilities	58,611	9,780	68,391
Total liabilities	<u>22,534,057</u>	<u>997,964</u>	<u>23,532,021</u>
<b>Net assets held in trust for pension and post-employment health care benefits</b>	<u>\$626,867,960</u>	<u>\$107,414,747</u>	<u>\$734,282,707</u>

See the accompanying Notes to the Financial Statements, pages 21-35.

**Combining Statement of Changes in Plan Net Assets**

Year ending December 31, 2010

	Pension	Post-Employment Health Care	Total
<b>Additions</b>			
Contributions			
Employer	\$21,211,944	\$3,227,905	\$24,439,849
Member	8,295,882	-	8,295,882
Transfers from other systems	329,335	-	329,335
Other income			
Health care premiums	-	911,076	911,076
Retiree Drug Subsidy	-	471,909	471,909
Total contributions	<u>29,837,161</u>	<u>4,610,890</u>	<u>34,448,051</u>
Investment activity			
Net appreciation in fair value of investments	68,989,007	17,205,090	86,194,097
Interest and dividend income	7,606,218	1,269,217	8,875,435
Real estate operating income, net	108,542	18,112	126,654
	<u>76,703,767</u>	<u>18,492,419</u>	<u>95,196,186</u>
Less: investment expenses	(4,219,501)	(704,090)	(4,923,591)
Net income from investment activity	<u>72,484,266</u>	<u>17,788,329</u>	<u>90,272,595</u>
Income from security lending activity			
Gross income	(311,042)	(51,902)	(362,944)
Less: borrower rebates	(6,978)	(1,164)	(8,142)
Less: management fees	(5,076)	(847)	(5,923)
Net loss from securities lending activity	<u>(323,096)</u>	<u>(53,913)</u>	<u>(377,009)</u>
Total net investment income	<u>72,161,170</u>	<u>17,734,416</u>	<u>89,895,586</u>
Total additions	<u>101,998,331</u>	<u>22,345,306</u>	<u>124,343,637</u>
<b>Deductions</b>			
Pension benefits	52,498,558	-	52,498,558
Refunds of member contributions	476,936	-	476,936
Health care expenses	-	11,447,630	11,447,630
Administrative expenses	637,943	106,450	744,393
Transfers to other systems	566,615	-	566,615
Total deductions	<u>54,180,052</u>	<u>11,554,080</u>	<u>65,734,132</u>
Change in plan net assets	<u>47,818,279</u>	<u>10,791,226</u>	<u>58,609,505</u>
<b>Net assets held in trust for pension and post-employment health care benefits</b>			
Balance, December 31, 2009	<u>579,049,681</u>	<u>96,623,521</u>	<u>675,673,202</u>
Balance, December 31, 2010	<u>\$626,867,960</u>	<u>\$107,414,747</u>	<u>\$734,282,707</u>

See the accompanying Notes to the Financial Statements, pages 21-35.

**Note 1 Summary of Significant Accounting Policies**

**Basis of Accounting**

HPRS financial statements are prepared using the accrual basis of accounting, under which expenses are recorded when incurred and revenues are recorded when earned and 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 recorded at the trade date. Administrative expenses are financed by investment income.

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 assets and liabilities, disclosure of contingent assets and liabilities, and the reported revenues and expenses during the accounting period. Actual results could differ from these estimates.

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 post-employment health care plans.

**Investment Accounting**

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

All investments are reported at fair value. Fair value is the amount that the plan could reasonably expect to receive in a current sale between a willing buyer and a willing seller, other than in a forced or liquidation sale.

Securities traded on a national exchange are valued at the last reported sales price at the current exchange rate. Fair values of real estate and private equity investments are based on information provided by the fund's managers or by independent appraisal.

Net appreciation (or depreciation) in fair value of investments is determined by calculating the change in the fair value between the beginning of the year and the end of the year, less purchases at cost, plus sales at fair value. Investment expenses consist of expenses directly related to HPRS investment operations, as well as an allocation of certain administrative expenses.

#### **Use of Estimates**

In preparing financial statements in conformity with governmental accounting principles generally accepted in the United States of America, the management of HPRS makes estimates and assumptions that affect (1) the reported amounts of assets and liabilities, (2) disclosures of contingent assets and liabilities, and (3) the amount of revenues and expenses during the reporting period. Actual results could differ from those estimates and assumptions. Certain investment assets, including private equity and real estate, use estimates in reporting fair value in the financial statements. These estimates are subject to uncertainty in the near term, which could result in changes in the values reported for those assets in the Combining Statement of Plan Net Assets.

#### **Capital Assets**

When acquired, an item of property or equipment in excess of \$5,000 is capitalized at cost. 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 useful life of each asset (typically, between three and ten years).

#### **Accrued Health Care Liabilities**

Accrued health care liabilities are based upon estimates furnished by the claims administrators. These estimates have been developed from prior claims experience.

In general, costs of member health care benefits are recognized as claims are incurred and premiums are paid. Health care benefit expenses of \$11,447,630 for 2010 are shown on the accompanying Combining Statement of Changes in Plan Net Assets.

#### **Contributions and Benefits**

Based on statutory or contractual requirements, employer and employee contributions are recognized when due. In accordance with the terms of the plan, benefits and refunds are recognized when due and payable.

#### **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.

#### **Recently Issued Accounting Pronouncements**

Governmental Accounting Standards Board (GASB) issued Statement No. 54, *Fund Balance Reporting and Governmental Fund Type Definitions*. This statement is effective for the year ending December 31, 2011. It enhances the usefulness of fund balance information by providing clearer fund balance classifications that can be more consistently applied, and it clarifies the existing governmental fund type definitions.

GASB issued Statement No. 59, *Financial Instruments Omnibus*. This statement is effective for the year ending December 31, 2011 with earlier application encouraged. The objective of this pronouncement is to update and improve existing standards of financial reporting and disclosure requirements of certain financial instruments and external investment pools. It requires more complete information be disclosed, improves on the consistency of measurements, and provides clarification of existing standards.

GASB issued Statement No. 61, *The Financial Reporting Entity: Omnibus—an amendment of GASB Statements No. 14 and No. 34*. This statement is effective for the year ending December 31, 2013 with earlier application encouraged. The objective of this pronouncement is to improve financial reporting for a governmental financial reporting entity by requiring the inclusion of financial reports of other entities for which elected officials are financially accountable or that are determined by the government to be misleading to exclude.

GASB issued Statement No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA*. This statement is effective for the year ending December 31, 2012 with earlier application encouraged. The purpose of this statement is to codify all sources of generally accepted accounting principles for state and local governments so that they derive from a single source.

Management does not anticipate that the implementation of the above pronouncements will have a significant impact on the financial statements.

#### **Note 2 Plan Description**

##### **Organization**

The State Highway Patrol Retirement System (HPRS) is a single-employer retirement system for employees of the Ohio State Highway Patrol, including officers with arrest authority, cadets in training at the Highway Patrol Training Academy, and members of the radio division who were hired prior to November 2, 1989. HPRS was created by Ohio Revised Code Chapter 5505 and is administered by a Board of Trustees consisting of five active members, two retired members, three appointed members, and one ex-officio member. The Board appoints an executive director, actuary, investment consultant, medical advisor, and independent auditor.

HPRS administers both a defined benefit pension plan and a post-employment health care plan, which is considered to be an “other post-employment benefit,” or OPEB. Financial information for pensions and OPEB are presented separately in the combining financial statements. HPRS, a separate financial reporting entity in accordance with criteria established by GASB Statement No. 39 (an amendment to No. 14), is a component unit of the State of Ohio. HPRS does not have financial accountability over any entities.

**Membership**

HPRS membership consisted of the following at December 31, 2009 (the latest available actuarial data):

<b>Membership Data</b>	
December 31, 2009	
<b>Pension &amp; OPEB Benefits</b>	
Retirees & other benefit recipients	1,385
Terminated members not yet receiving benefits	3
<b>Active members</b>	
Vested	678
Nonvested	869

**Benefits**

Members are eligible for pension and health care benefits upon reaching both an age and a service requirement with the Ohio State Highway Patrol. The pension benefit is a percentage of the member's final average salary, which is defined as the average of the member's three highest salaried years. For a minimum of 15 years of service, but less than 20, the percentage is determined by multiplying 1.5% times the number of years of service credit, with benefits commencing at age 55. For 20 or more years of service, 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 pension and health care benefits, HPRS also provides for disability and survivor benefits.

In 2006, HPRS implemented a Deferred Retirement Option Plan (“DROP”). In general, a member who is eligible to retire with an unreduced pension benefit may enter the DROP. The member will continue to work in the existing assignment as determined by the employer and receive the appropriate compensation for that rank. A DROP member does not accumulate additional pension service credit; however, instead of receiving a monthly pension benefit, the member accrues that benefit in a tax-deferred account until employment with the Ohio State Highway Patrol is terminated. At December 31, 2010, HPRS had a DROP liability of \$20,226,941 to 166 DROP participants.



**Contributions**

The Ohio Revised Code requires contributions by both active members and the Ohio State Highway Patrol. Both the member and employer contribution rates are established by the Ohio General Assembly, and any change in the rates requires legislative action. The employer contribution rate may not be lower than nine percent of the total salaries paid to contributing members and may not exceed three times the member contribution rate.

In 2010, the member contribution rate was 10.0% of payroll and the employer contribution rate was 26.5%.

Based on the December 31, 2008 actuarial valuation, the Board allocated the employer contribution rate to pension benefits and OPEB as follows:

<b>Pension</b>	<b>OPEB</b>	<b>Total</b>
22.00%	4.50%	26.50%

Based on the December 31, 2009 actuarial valuation, the Board allocated the employer contribution rate to pension benefits and OPEB as follows:

<b>Pension</b>	<b>OPEB</b>	<b>Total</b>
23.00%	3.50%	26.50%

Because losses that occurred in 2008 are not yet fully recognized, the HPRS actuary was unable to amortize unfunded actuarially accrued pension liabilities over a finite period. Without plan design changes, the system is unlikely to be able to pay off future liabilities.

Upon request of a member who terminates employment with the Ohio State Highway Patrol, member contributions are refunded. If a member dies while active in the service of the Ohio State Highway Patrol, member contributions are refunded to the member's beneficiary, provided that no survivor benefits are payable.

A member with credited service in Ohio Public Employees Retirement System (OPERS), School Employees Retirement System (SERS), State Teachers Retirement System (STRS), Ohio Police & Fire Pension Fund (OP&F), or Cincinnati Retirement System (CRS) may transfer that service credit to HPRS. Similarly, a member with credited service in HPRS may transfer that service to OPERS, SERS, STRS, OP&F, or CRS.

**Funded Status and Funding Progress**

**Pension**

The funded status of the pension plan at the most recent actuarial valuation, December 31, 2009, is as follows:

<b>Pension Funded Status</b>	
December 31, 2009	
Actuarially Accrued Liability	\$940,084,346
Valuation Assets	620,356,505
Unfunded Actuarially Accrued Liability	<u>\$319,727,841</u>
Assets as a % of AAL	66.0%
Active Member Payroll	\$94,824,789
UAAL as a % of Active Member Payroll	337.2%

The Schedule of Funding Progress - Pension includes six years of data and is presented as required supplementary information following the Notes to the Financial Statements.

**OPEB**

The funded status of the OPEB plan at the most recent actuarial valuation, December 31, 2009, is as follows:

<b>OPEB Funded Status</b>	
December 31, 2009	
Actuarially Accrued Liability	\$287,581,772
Valuation Assets	100,747,785
Unfunded Actuarially Accrued Liability	<u>\$186,833,987</u>
Assets as a % of AAL	35.0%
Active Member Payroll	\$94,824,789
UAAL as a % of Active Member Payroll	197.0%

The Schedule of Funding Progress - OPEB includes four years of data and is presented as required supplementary information following the Notes to the Financial Statements.

**Actuarial Assumptions and Methods**

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

The health care coverage provided by HPRS is considered to be an Other Post-Employment Benefit (OPEB) as described in GASB Statement 45. Health care benefits are not guaranteed and are subject to change at any time. The OPEB valuation is based on the substantive plan as it is currently presented to plan members, including the historical pattern of cost-sharing between the plan and benefit recipients. The actuarial methods and assumptions do not explicitly incorporate the potential effects of legal or contractual funding limitations on the pattern of cost sharing in the future.

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

Other actuarial assumptions and methods are as follows:

- projected investment return of 8.0% for pension assets and 6.5% for OPEB assets, compounded annually, net of administration expenses,
- projected salary increases of 4.0%, compounded annually, attributable to inflation,
- additional projected salary increases attributable to seniority and merit, ranging from 0.3% to 10.0% per year, depending on service,
- post-employment mortality life expectancies of members based on 105% of the RP-2000 Combined Healthy Male and Female Tables,
- probabilities of early withdrawal from active service based on actual plan experience,
- for disability retirement, impaired longevity is based on the RP-2000 Combined Healthy Male and Female Tables, set forward 10 years,
- fifty percent of disability retirements are assumed to be duty-related and fifty percent are assumed to be non-duty-related,
- health care inflation of 4.0%, compounded annually,
- OPEB recipients are eligible for Medicare at age 65 or at the time of a disability,
- employer contributions are assumed to be received in equal installments throughout the year, and
- maximum contribution rates have not been considered in the projection of actuarially accrued liabilities for pension or OPEB benefits.

### **Note 3 Fund Balances**

Chapter 5505 of the Revised Code requires that various funds be established to account for contributions, reserves, income, and expenses.

The Employees' Savings Fund was created to accumulate the contributions deducted from the salaries of members, less any refunds of member contributions. Upon retirement, a member's contributions are transferred to the Pension Reserve Fund.

## Financial Section

### Notes to the Financial Statements

The Employer's Accumulation Fund is the fund in which the state's contributions to HPRS are accumulated. Included in this fund are the reserves allocated to the payment of other post-employment benefits (OPEB).

The Pension Reserve Fund is the fund from which all pensions are paid to members who retire on or after January 1, 1966.

The Survivors' Benefit Fund is the fund from which survivor benefits are paid to qualifying beneficiaries.

The Income Fund is used to accumulate all interest, dividends, distributions, and other income from deposits and investments. Gifts, bequests to the system, transfers, and any other income are also credited to the Income Fund.

The Expense Fund provides for the payment of administrative expenses with the necessary money allocated to it from the Income Fund.

At December 31, 2010, plan net assets were allocated to the various funds as follows:

<b>Fund Balances</b>	
December 31, 2010	
Employees' Savings Fund	\$107,873,496
Employer's Accumulation Fund	143,014,849
Pension Reserve fund	502,400,796
Survivors' Benefit Fund	29,798,808
Income Fund	(48,805,242)
Expense Fund	-
Total	<u>\$734,282,707</u>

Notes to the Financial Statements

**Note 4 Property and Equipment**

The following is a summary of equipment, at cost, less accumulated depreciation, at December 31, 2010:

<b>Fixed Assets</b>	
December 31, 2010	
Cost, 12/31/2009	\$118,189
(+) Additions	16,620
(-) Retirements	-
Cost, 12/31/2010	<u>\$134,809</u>
Accumulated depreciation, 12/31/2009	\$108,897
(+) Additions	5,378
(-) Retirements	-
Accumulated depreciation, 12/31/2010	<u>\$114,275</u>
Book value, 12/31/2010	<u><u>\$20,534</u></u>

**Note 5 Deposits and Investment Risk**

**Investments**

Ohio Revised Code Section 5505.06 grants “full power” to the Retirement Board to invest the system’s assets pursuant to a prudent person standard. This standard provides that “the board and other fiduciaries shall discharge their duties with respect to the funds solely in the interest of the participants and beneficiaries; for the exclusive purpose of providing benefits to participants and their beneficiaries and defraying reasonable expenses of administering the system; with care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims; and by diversifying the investments of the system so as to minimize the risk of large losses, unless under the circumstances it is clearly prudent not to do so.”

<b>Total Investments at Fair Value</b>	
December 31, 2010	
Domestic equity	\$318,376,830
International equity	123,710,218
Fixed income	140,084,491
Real estate	22,795,069
Private equity	74,834,616
Hedge funds	59,445,552
Total investments	<u><u>\$739,246,776</u></u>

All investments, both domestic and international, are registered in the name of HPRS.

**Deposits**

HPRS cash balances consist of an operating cash account held at PNC Bank, cash on deposit with the State Highway Patrol Federal Credit Union, and excess investment cash held by the custodian, PNC Bank. Cash balances are either interest-bearing or invested in highly-liquid debt instruments with an original maturity of three months or less. At December 31, 2010, the carrying value of all deposits was \$15,744,037 (including money market funds of \$12,830,403), as compared to bank balances of \$2,764,538. The difference in the carrying amount and the bank balances is caused by outstanding warrants and deposits in transit.

**Concentration of Credit Risk**

Concentration of credit risk is the risk of inability to recover the value of deposits, investments, or collateral securities in the possession of an outside party.

Investment managers are expected to maintain diversified portfolios by sector and issuer. Pursuant to its investment policy, and excluding U.S. government securities, HPRS has no more than ten percent of the fixed income portfolio invested in the securities of any one issuer, and no more than five percent in any one issue.

**Credit Risk**

Credit risk is the risk that an issuer or counterparty to an investment will be unable to fulfill its obligations. HPRS does not have a policy to limit credit risk.

HPRS exposure to credit risk on fixed income securities, based on S&P Quality Ratings, is as follows:

<b>S&amp;P Quality Ratings</b>	
December 31, 2010	
AAA	\$68,273,432
AA	6,661,930
A	28,111,571
BBB	13,162,311
BB	4,587,318
B	6,424,543
CCC	2,883,734
CC	4,940
Unrated	9,974,712
Total Investments	<u>\$140,084,491</u>

**Foreign Currency Risk**

Foreign currency risk is the risk that changes in exchange rates between the U.S. dollar and foreign currencies could adversely affect an investment's fair value. HPRS does not have a policy to limit foreign currency risk. HPRS exposure to currency exchange risk in its commingled international equity investments, stated in U.S. dollars, is as follows:

<b>International Equity Securities</b>		
December 31, 2010		
<b>Currency</b>	<b>Allocation</b>	<b>Fair Value</b>
Australian Dollar	2.28%	\$2,826,700
Brazilian Real	1.36	1,679,927
British Pound	7.61	9,414,816
Canadian Dollar	4.42	5,467,158
Czech Koruna	0.22	267,916
Danish Krone	0.47	577,290
Euro Currency	14.26	17,640,067
Hong Kong Dollar	3.13	3,866,267
Hungarian Forint	0.00	30
Indian Rupee	0.04	54,790
Indonesian Rupiah	0.02	27,048
Israeli New Shekel	0.08	93,348
Japanese Yen	6.23	7,709,471
Mexican Peso	0.17	208,128
New Zealand Dollar	0.04	51,616
Norwegian Krone	0.79	973,751
Polish Zioty	0.00	50
Singapore Dollar	0.20	242,929
South African Rand	0.48	595,723
South Korean Won	0.36	439,980
Swedish Krona	0.65	805,460
Swiss Franc	3.33	4,123,818
Taiwan New Dollar	0.04	50,534
Thailand Bhat	0.16	194,799
Total held in foreign currencies	46.33	57,311,616
Held in U.S. Dollars	53.67	66,398,602
Total	100.00%	\$123,710,218

**Interest Rate Risk**

Interest rate risk is the risk that an interest rate change could adversely affect an investment's fair value.

HPRS does not have a policy to limit interest rate risk.

The reporting of effective duration in the table below quantifies, to the fullest extent possible, the interest rate risk of the system's fixed income assets.

<b>Investment Maturities</b>	
December 31, 2010	
Less than 1 year	\$7,795,324
1 - 5 years	69,561,133
Greater than 5, up to 10 years	43,678,827
Greater than 10 years	19,049,207
<b>Total</b>	<b>\$140,084,491</b>

**Custodial Credit Risk**

Custodial credit risk is the risk that, in the event of a failure of a depository institution or counterparty to a transaction, HPRS will be unable to recover the value of deposits, investments, or collateral securities in the possession of an outside party.

All investments and deposits are held in the name of HPRS or its nominee by the Treasurer of State of Ohio as custodian. Bank balances are insured up to \$250,000 by the Federal Deposit Insurance Corporation. Credit union balances are insured up to \$250,000 by the National Credit Union Administration. The remaining deposits are covered by collateral held in the name of HPRS’s pledging financial institution, as required by state statute.

**Securities Lending**

Under the HPRS securities lending program, authorized by the Board of Trustees and administered by US Bank, securities were loaned to investment brokers/dealers (“borrowers”). In return, HPRS received cash collateral and agreed to return the collateral for the same securities in the future. Securities loaned were collateralized at a minimum of 102 percent of the fair value of loaned securities. The cash collateral from securities loaned was reinvested in short-term securities and repurchase agreements ("repo's") that were marked-to-market daily. If, at the inception of the repurchase agreement, the market value of the securities fell below the excess collateral percentage, borrowers were required to provide additional cash collateral. There was no matching of the securities loaned with the invested cash collateral.

Either HPRS or the borrowers could terminate all loans on demand. The custodial bank and its affiliates were prohibited from borrowing HPRS securities. HPRS could not pledge or sell collateral securities received unless the borrower defaulted.

HPRS was fully indemnified from losses that might occur in the event of a material borrower’s default based on insolvency or failure to return loaned securities. HPRS bore the risk of loss on the market value of the short-term securities and repo’s in which cash collateral was invested.

In June 2010, HPRS closed the securities lending program and, therefore, had no credit risk exposure to borrowers as of December 31, 2010. The net loss from securities lending was \$377,009 in 2010.



**Note 6 Derivatives**

During the year ending December 31, 2010, HPRS adopted GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments*. GASB 53 was issued to address the recognition, measurement, and disclosure of information regarding derivative instruments entered into by state and local governments.

A derivative is an investment vehicle that derives its value from another instrument or index. Derivatives are primarily used to maximize yields and offset volatility caused by interest rate and currency fluctuations. These instruments leave investors exposed to various credit, market, and legal risks.

At December 31, 2010, HPRS did not have any direct investments in derivatives; however, it held shares in commingled funds that had incidental exposure to derivatives.

**Note 7 Pension and OPEB Benefits for Employees**

**Pension**

The employees of HPRS are members of the Ohio Public Employee Retirement System (OPERS), which administers three separate pension plans as described below:

1. The Traditional Pension Plan - a cost sharing, multiple-employer defined benefit pension plan.
2. The Member-Directed Plan - a defined contribution plan in which the member invests both member and employer contributions (employer contributions vest over five years at 20% per year). Under the Member-Directed Plan, members accumulate retirement assets equal to the value of member and (vested) employer contributions, plus any investment earnings.
3. The Combined Plan - a cost sharing, multiple-employer defined benefit pension plan. Under the Combined Plan, employer contributions are invested by OPERS to provide a formula retirement benefit similar in nature to the Traditional Pension Plan benefit. Member contributions, the investment of which are self-directed by the members, accumulate retirement assets in a manner similar to the Member-Directed Plan.

OPERS provides retirement, disability, survivor and death benefits and annual cost-of-living adjustments to members of the Traditional Pension and Combined Plans. Members of the Member-Directed Plan do not qualify for ancillary benefits.

Authority to establish and amend benefits is provided in Chapter 145 of the Ohio Revised Code.

The Ohio Revised Code provides statutory authority for member and employer contributions. For 2010, member and employer contribution rates were consistent across all three plans. The 2010 member contribution rate was 10.0% of covered payroll. The 2010 employer contribution rate was 14.0% of covered payroll. HPRS employer contributions to OPERS for the years ending December 31, 2010, 2009, and 2008, were \$83,141, \$99,963, and \$94,660, respectively, which were equal to the required contributions for each year.

#### **OPEB**

As described above, OPERS administers three separate pension plans — the Traditional Pension Plan, the Member-Directed Plan, and the Combined Plan.

OPERS maintains a cost-sharing multiple employer defined benefit post-employment health care plan, which includes a medical plan, prescription drug program, and Medicare Part B premium reimbursement to qualifying members of both the Traditional Pension and the Combined Plans. Members of the Member-Directed Plan do not qualify for ancillary benefits, including post-employment health care coverage.

In order to qualify for post-employment health care coverage, age and service retirees under the Traditional Pension and Combined Plans must have ten or more years of qualifying Ohio service credit. Health care coverage for disability benefit recipients and qualified survivor benefit recipients is available. The health care coverage provided by OPERS meets the definition of an “other post-employment benefit” as described in GASB Statement 45.

The Ohio Revised Code permits, but does not mandate, OPERS to provide OPEB benefits to its eligible members and beneficiaries. Authority to establish and amend benefits is provided in Chapter 145 of the Ohio Revised Code.

OPERS issues a stand-alone financial report. Interested parties may obtain a copy by writing OPERS, 277 East Town Street, Columbus OH 43215-4642, or by calling 614-222-5601 or 800-222-7377.

#### **Funding Policy**

The Ohio Revised Code provides the statutory authority for public employers to fund post-employment health care through contributions to OPERS. A portion of each employer’s contribution to OPERS is set aside for the funding of post-employment health care benefits.

Employer contribution rates are expressed as a percentage of the covered payroll of active members. In 2010, state and local employers contributed at a rate of 14.0% of covered payroll. The Ohio Revised Code currently limits the employer contribution to a rate not to exceed 14.0% of covered payroll for state employer units. Active members do not make contributions to the OPEB Plan.

**Notes to the Financial Statements**

OPERS's post-employment health care plan was established under, and is administrated in accordance with, Internal Revenue Code 401(h). Each year, the OPERS Board of Trustees determines the portion of the employer contribution rate that will be set aside for funding of post-employment health care benefits. The portion of employer contributions allocated to health care was 5.5% from January 1 through February, 2010 and 5.0% from March 1 through December 31, 2010. The OPERS Board of Trustees is also authorized to establish rules for the payment of a portion of health care coverage by retirees and surviving beneficiaries. Payment amounts vary depending on the number of covered dependents and the coverage selected.

**Annual OPEB Cost**

The rates stated above are the contractually required contribution rates for OPERS. HPRS employer contributions to OPERS for OPEB benefits for the year ending December 31, 2010, was \$41,571, which was equal to the required contributions for the year.

**Health Care Preservation Plan**

The Health Care Preservation Plan ("HCPP"), adopted by the OPERS Board of Trustees on September 9, 2004, was effective January 1, 2007. Member and employer contribution rates for state and local employers increased on January 1 of each year from 2006 to 2008. These rate increases allowed additional funds to be allocated to the health care plan.

**Note 8 Risk Management**

HPRS purchases insurance coverage for general liability, property damage, employee, and public official liability with varying policy limits. In the past three years, no settlements have exceeded insurance coverage, and coverage has not been significantly reduced.

**Note 9 Contingent Liabilities**

HPRS is a party to various litigation actions. While the final outcome of any action can not be determined, management does not expect that the liability, if any, for these legal actions will have a material adverse effect on the financial position of HPRS.

## Financial Section

### Required Supplementary Schedules

#### Schedule of Employer Contributions - Pension

Years ending December 31, 2005 - 2010

Year	Actuarial Annual Required Contributions	Contributions	% Contributed
2005	\$18,467,789	\$18,467,789	100.00%
2006	19,567,233	19,263,941	98.45
2007	21,666,160	19,956,700	92.11
2008	21,221,089	20,302,216	95.67
2009	19,978,427	20,453,914	102.38
2010	22,872,487	21,211,944	92.74

#### Schedule of Employer Contributions and Other Contributing Entities - OPEB

Years ending December 31, 2007 - 2010

Year	Actuarial Annual Required Contributions	% Contributed by Employer	Federal Subsidy	Total % Contributed
2007	\$18,303,145	23.36%	\$329,158	25.16%
2008	19,272,604	22.57	317,381	24.22
2009	19,378,984	22.09	513,668	24.74
2010	16,365,476	19.72	471,909	22.61

#### Schedule of Funding Progress - Pension

Years ending December 31, 2004-2009

Valuation Year	Actuarially Accrued Liability ("AAL")	Valuation Assets	Unfunded Actuarially Accrued Liability ("UAAL")	Assets as a % of AAL	Active Member Payroll	UAAL as a % of Active Member Payroll
2004 ▲	734,464,371	569,858,387	164,605,984	77.6	81,757,707	201.3
2005 ►	773,856,164	591,922,200	181,933,964	76.5	83,408,155	218.4
2006 ▲	807,760,712	653,493,046	154,267,666	80.9	85,878,329	179.6
2007	866,255,394	700,860,707	165,394,687	80.9	93,752,908	176.4
2008	904,522,377	603,265,803	301,256,574	66.7	94,301,538	319.5
2009	940,084,346	620,356,505	319,727,841	66.0	94,824,789	337.2

#### Schedule of Funding Progress - OPEB

Years ending December 31, 2006-2009

Valuation Year	Actuarially Accrued Liability ("AAL")	Valuation Assets	Unfunded Actuarially Accrued Liability ("UAAL")	Assets as a % of AAL	Active Member Payroll	UAAL as a % of Active Member Payroll
2006 ▲	294,078,575	104,857,212	189,221,363	35.7	85,878,329	220.3
2007	335,231,779	111,180,356	224,051,423	33.2	93,752,908	239.0
2008	324,170,387	95,785,363	228,385,024	29.5	94,301,538	242.2
2009	287,581,772	100,747,785	186,833,987	35.0	94,824,789	197.0

▲ 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, 2009
Actuarial Cost Method	Entry Age
Amortization Method	Level Percent Open
Remaining Amortization Period	30 years for retiree health benefits in determining the Annual Required Contribution; unable to amortize unfunded actuarially accrued pension liabilities over a finite period
Asset Valuation Method	4 year smoothed market, 20% corridor
<u>Actuarial Assumptions</u>	
Investment Rate of Return	8.0% for pension, 6.5% for OPEB
Projected Salary Increases	4.3 – 14.0%, including wage inflation of 4.0%
Cost-of-living Adjustments	3.0% annual increases beginning at age 53
Health Trend	Intermediate

Notes to Required Supplementary Schedules

Description of Schedule of Funding Progress

An unfunded actuarially accrued liability exists when (1) actual financial experiences are less favorable than assumed financial experiences and (2) additional benefit obligations are applied to past service. Section 5505.121 of the Ohio Revised Code requires that an unfunded liability be systematically financed over a period of no more than thirty years.

In an inflationary economy, the value of a dollar decreases over time. While member payroll and unfunded actuarially accrued liabilities may be increasing in dollar amounts, the relative percentages of these factors may be declining. To account for this inconsistency, it is useful to measure the quotient of unfunded actuarially accrued liabilities divided by active member payroll. A smaller ratio indicates greater system strength. A declining ratio over time indicates an improving financial position.

<b>Schedule of Administrative Expenses</b>	
Year ending December 31, 2010	
<b>Personnel</b>	<u>\$401,620</u>
<b>Professional and technical services</b>	
Computer services	81,042
Actuary	49,000
Education	6,458
Medical consulting	2,188
Audit	17,434
Legal	38,544
Miscellaneous services	4,986
Medical services	1,800
Total professional and technical services	<u>201,452</u>
<b>Communications</b>	
Printing	1,460
Postage	6,400
Telephone	5,615
Total communications	<u>13,475</u>
<b>Other expenses</b>	
Office rent	65,923
Depreciation	5,378
Insurance	16,514
Equipment repairs and maintenance	2,349
Supplies	2,379
Miscellaneous	15,753
Ohio Retirement Study Council	2,729
Travel	9,652
Memberships and subscriptions	1,505
New equipment	5,664
Total other expenses	<u>127,846</u>
<b>Total administrative expenses</b>	<u><b>\$744,393</b></u>

Above amounts do not include investment-related administrative expenses.

<b>Schedule of Investment Expenses</b>	
Year ending December 31, 2010	
<b>Personnel</b>	<u>\$196,468</u>
<b>Professional and technical services</b>	
Investment services	4,484,068
Monitoring services	<u>232,250</u>
Total professional services	<u>4,716,618</u>
<b>Other expenses</b>	
Due diligence	1,155
Computer services	9,005
Memberships and subscriptions	483
Printing and supplies	<u>162</u>
Total other expenses	<u>10,805</u>
<b>Total investment expenses</b>	<u><u>\$4,923,591</u></u>

<b>Payments to Consultants</b>		
Year ending December 31, 2010		
Consultant	Fee	Service
Hartland & Co.	\$212,250	Investment
Gabriel, Roeder, Smith & Company	49,000	Actuarial
Schottenstein, Zox & Dunn	24,882	Legal
Global Trading Analytics, LLC	20,000	Investment
Kennedy Cottrell Richards LLC	16,325	Auditing
Bricker & Eckler LLP	2,880	Legal
Earl N. Metz, M.D.	2,188	Medical
Tucker Ellis & West LLP	<u>1,615</u>	Legal
Total	<u><u>\$329,140</u></u>	

See the Investment Section, pages 49-50, for payments to investment managers and brokers.

**INDEPENDENT ACCOUNTANTS' REPORT ON INTERNAL CONTROL OVER  
FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS  
REQUIRED BY GOVERNMENT AUDITING STANDARDS**

Ohio State Highway Patrol Retirement System  
6161 Busch Boulevard, Suite 119  
Columbus, Ohio 43229-2553

To the Board of Trustees:

We have audited the basic financial statements of the Ohio State Highway Patrol Retirement System, (HPRS) as of and for the year ended December 31, 2010, and have issued our report thereon dated June 17, 2011. 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 the Comptroller General of the United States' *Government Auditing Standards*.

**Internal Control Over Financial Reporting**

In planning and performing our audit, we considered the HPRS' internal control over financial reporting as a basis for designing our audit procedures for the purpose of expressing our opinion on the financial statements, but not for the purpose of opining on the effectiveness of the HPRS' internal control over financial reporting. Accordingly, we have not opined on the effectiveness of the HPRS' internal control over financial reporting.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, when performing their assigned functions, to prevent, or detect and timely correct misstatements. A material weakness is a deficiency, or combination of internal control deficiencies resulting in more than a reasonable possibility that a material misstatement of the HPRS' financial statements will not be prevented, or detected and timely corrected.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over financial reporting that might be deficiencies, significant deficiencies or material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider material weaknesses, as defined above.

**Compliance and Other Matters**

As part of reasonably assuring whether the HPRS' financial statements are free of material misstatement, we tested its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could directly and materially affect 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 an opinion. The results of our tests disclosed no instances of noncompliance or other matters we must report under *Government Auditing Standards*.

We intend this report solely for the information and use of management, the audit committee, the Board of Trustees, others within the HPRS, and the Auditor of State of Ohio. We intend it for no one other than these specified parties.



Kennedy Cottrell Richards LLC  
June 17, 2011





# Investment Section

## Investment Section

### Investment Summary

December 31, 2010

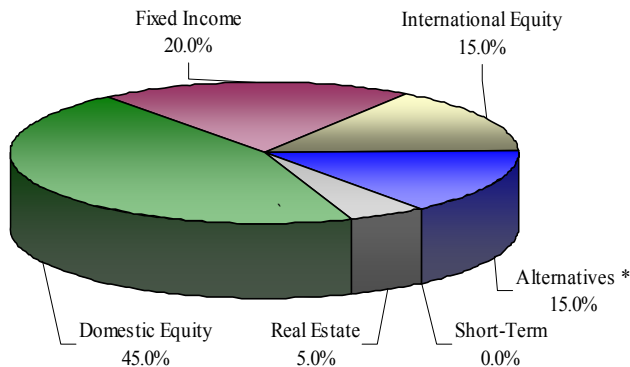
	Fair Value	Actual	Target	Range
Domestic equity	\$318,376,830	42.2%	45.0%	40 - 50%
Fixed income	140,084,491	18.6	20.0	15 - 25
Alternatives ▲	134,280,168	17.8	15.0	10 - 20
International equity	123,710,218	16.4	15.0	10 - 20
Short-Term	15,744,037	2.0	0.0	0 - 5
Real estate	22,795,069	3.0	5.0	0 - 10
Net portfolio value	<u>\$754,990,813</u>	<u>100.0%</u>	<u>100.0%</u>	

▲ Includes private equity and hedge funds

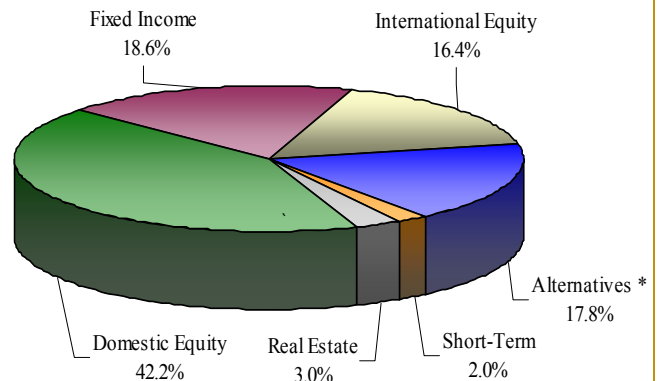
### Asset Allocation – Total Fund

December 31, 2010

Policy Allocation



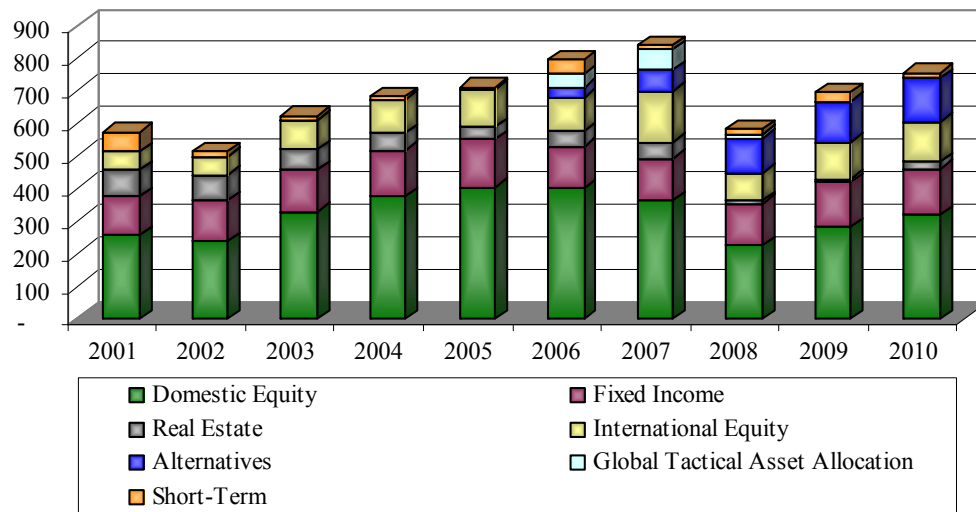
Actual Allocation



▲ Includes private equity and hedge funds

### Ten-Year Investment Comparison

(in millions)



▲ Includes private equity and hedge funds

#### **General Market & Economic Conditions**

The capital markets continued through on the positive movements that started in March of 2009 to post strong gains across just about every investment category in 2010. This is not to say that the year was a smooth ride to prosperity.

After posting a gain of 26% in 2009, the markets took a breather in January and contracted slightly. The strong positive read for Q4-09 GDP of 5.6% was well received by the markets in February and March to end the first quarter up about 5.4% for the S&P 500. Also contributing to the positive sentiment in the markets for the first quarter was the commentary from the Fed that they see rates staying “exceptionally low” for an “extended period of time.” The markets took this as a signal to load up on risk-assets.

GDP continued to be positive for all four quarters of 2010. The expanding economy was evidence enough for the National Bureau of Economic Research to declare that the recession that began in December 2007 had officially ended in June 2009 – though it took them until September 2010 to make that determination. Despite improvements in the economic output, there was still a large number of jobless as the unemployment number was above 9.0% for all of 2010.

Having stabilized the banking industry and the auto industry in 2008 - 2009, Washington focused its attention on housing in 2010. The home buyer tax credit that started in 2009 was extended through June 2010. As was the case with Cash for Clunkers, the incentive successfully accelerated sales activity and provided a lift in prices while it lasted. And when it went away it left a lack of buyers and falling prices. Home prices dropped in every month after June 2010 to levels below those prior to the tax credits.

Speaking of the banking and auto industries, the taxpayers got a bit of repayment in 2010 as \$234 billion of the \$389 billion TARP distributions were repaid by year end. In November, GM was able to reward the taxpayer investment through its \$23 billion IPO, the largest IPO in history.

Washington was also busy with marquee legislation as the “Health Care Reform Act” was signed into law in March and the “Dodd Frank Wall Street Reform and Consumer Protection Act” was approved in July. By the time the ink was dry on the new legislation, the mood of the electorate had shifted and Democrats suffered a net loss of 63 House seats – enough to cost them their majority. Given the new power dynamic, the soon-to-expire tax cuts were extended two more years in December, which caused a boost in the markets.

On the one hand, certain market forces were indicating a need for stimulative action in the form of entitlements, tax cuts and transfer payments as a means of helping the economy transition from recession to expansion. On the other hand, there were those who pointed out that only through the adoption of austerity measures can a country meet its current and future obligations. Nowhere was this conflict more pronounced than in the PIIGS (Portugal, Italy, Ireland, Greece and Spain), where the countries’ sovereign debts were being sold over a fear of default. This situation posed a fear of contagion as most of the sovereign debt of these countries was owned by other members of the European Union.

Newspaper ink was spilled by the barrel on the subject of whether one of the PIIGS would default and whether the euro, the common currency of the eurozone, would survive. While this was unfolding, equity markets around the world were contracting as fear of double-dip recession was looking more probable every day. The impact on the U.S. was a peak-to-trough decline on the S&P 500 from March to June of 15%, which many consider to be a signal of a recession. While this was playing out, leaders from the PIIGS countries were introducing their own austerity programs that called for such measures as later retirement dates, longer work weeks, and higher fees paid by students. These proposals were met with such violent opposition that not only was there significant property damage across many European capitals, but there were also a number of fatalities.

By the end of June, the IMF and Germany had structured a \$145 billion bailout that would stabilize the sovereign debt concerns and signal a vote of confidence in the euro and eurozone alliance. The markets responded favorably to this and bid up much of what had been sold off.

Back on our shores, so to speak, was a major oil spill in the Gulf after the April explosion of the BP Deepwater Horizon drilling platform. Much of Q2 and Q3 was spent trying to determine how much oil was spilled, how to cap the pipe, and how to clean the affected areas. This was a major hit to parties involved like BP, Haliburton, and Transocean, but also had impact on many oil servicers. By the time the summer ended, drilling had all but ceased throughout the Gulf region.

With a bit less supply on the world market, oil prices increased 15% in 2010. That was a modest increase compared to the rise in other commodities like gold (+31%) and corn (+39%).

As if there were not enough challenges facing the markets, the “Flash-Crash” in May had everyone’s head spinning. Though never really explained, the 1,000 point drop in the Dow Jones Industrial Average was eerily reminiscent of the downward moves of September 2008.

In August, Fed Chairman Ben Bernanke laid out the details for the next round of quantitative easing (QE2) designed to boost asset values. The \$700 billion of purchases prompted investors to bid up everything they could, resulting in the best September for the S&P 500 since 1939 (8.9%). By the end of December, all domestic equity styles were up 15-30% for the year.

Expectations of the impact of QE2 on treasuries caused their prices to rise and rates to fall. Interest rates had dropped to 2.5% for the 10-Year U.S. Treasury. Corporations took advantage of high investor demand and low interest rates by issuing large amounts of debt. The bonds of certain companies were trading at lower rates than treasuries -- a negative spread -- indicating that investors were more comfortable holding corporate bonds than U.S. government bonds.

*Source: Hartland & Co.*

**Schedule of Investment Results**

Year ending December 31, 2010

	<u>2010</u>	<u>2009</u>	<u>3-Year</u>	<u>5-Year</u>
<b>Domestic Equity</b>	<b>20.9%</b>	<b>33.1%</b>	<b>(0.3)%</b>	<b>3.7%</b>
S&P 500	15.1	26.5	(2.9)	2.3
Russell 3000	16.9	28.3	(2.0)	2.7
<b>International Equity</b>	<b>11.2</b>	<b>31.7</b>	<b>(5.3)</b>	<b>4.6</b>
MSCI ACWI ex-US	11.6	42.2	(4.6)	5.3
<b>Fixed Income</b>	<b>7.7</b>	<b>13.3</b>	<b>6.4</b>	<b>6.3</b>
Barclays Capital Aggregate	6.6	5.9	5.9	5.8
<b>Real Estate</b>	<b>0.5</b>	<b>(8.4)</b>	<b>(13.5)</b>	<b>(3.5)</b>
NCREIF	12.4	(16.9)	(4.4)	3.4
<b>Alternatives ▲</b>	<b>7.7</b>	<b>12.8</b>	<b>0.6</b>	<b>-</b>
HFRI Fund of Funds Composite	5.5	11.2	(2.6)	2.4
Wilshire 5000 + 3%, lagged one quarter	14.9	7.7	(3.3)	4.5
<b>Total Fund</b>	<b>13.8</b>	<b>23.2</b>	<b>0.0</b>	<b>4.3</b>
Absolute Objective	8.0	8.0	8.0	8.0
Relative/Composite Benchmark ►	14.4	21.0	2.7	6.1

▲ Includes private equity and hedge funds

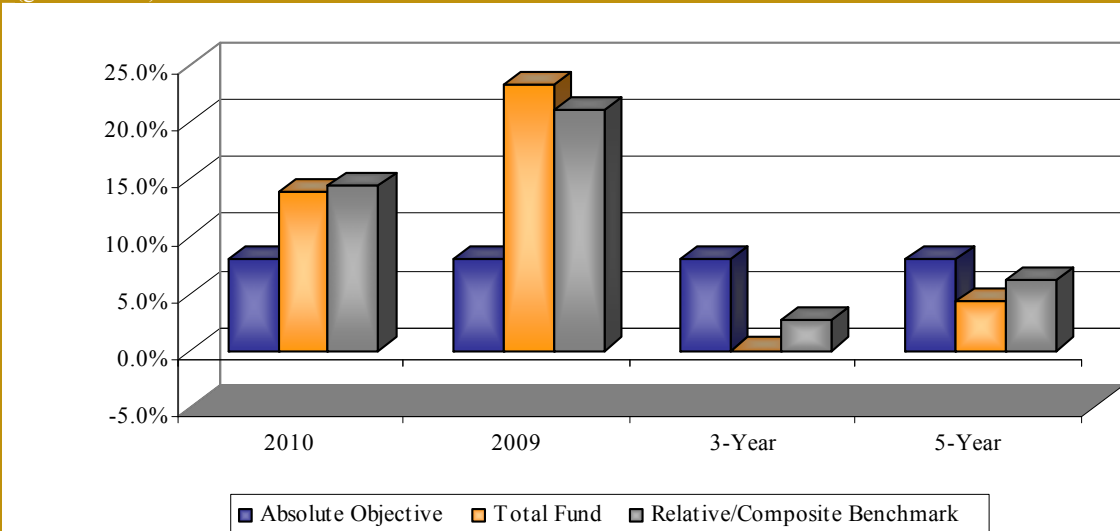
► Relative Composite Benchmark: 65% Russell 3000, 15% MSCI ACWI ex-US, 20% Barclays Capital Aggregate

All returns are calculated on market values, gross-of-fees, using time-weighted rates of return.

Source: Hartland & Co.

**Total Fund and Benchmark Returns**

(gross-of-fees)



## Investment Section

### Domestic Equity Holdings

December 31, 2010

<u>Security</u>	<u>Shares</u>	<u>Market Price</u>	<u>Fair Value</u>
Exxon Mobil Corp	34,300	\$73.12	\$2,508,016
Chevron Corporation	27,300	91.25	2,491,125
Microsoft Corp	78,200	27.91	2,182,562
Procter & Gamble Co	32,900	64.33	2,116,457
AT&T Inc	71,700	29.38	2,106,546
JPMorgan Chase & Co	43,800	42.42	1,857,996
General Electric Co	99,900	18.29	1,827,171
Johnson & Johnson	28,100	61.85	1,737,985
Wells Fargo & Company	52,900	30.99	1,639,371
Pfizer Inc	87,300	17.51	1,528,623
Other	8,265,373		180,318,722
Total domestic equity securities	8,821,773		\$200,314,574
<b>Domestic Equity Commingled Funds</b>			
DFA Small Cap Subtrust			\$16,317,657
Loomis Sayles Mid-Cap Core			11,966,490
SSGA S&P 500 Flagship Fund			47,942,820
Wellington Management Diversified Growth			41,835,289
Total domestic equity commingled funds			\$118,062,256
<b>Total domestic equity</b>			<b>\$318,376,830</b>

### International Equity Holdings

December 31, 2010

<u>Security</u>	<u>Shares</u>	<u>Market Price</u>	<u>Fair Value</u>
Ensco Plc	14,200	\$53.38	\$757,996
Schlumberger Ltd	7,902	83.50	659,817
Check Point Software Tech	13,500	46.26	624,510
Ctrip Com Int'l Ltd	10,500	40.45	424,725
NXP Semiconductors	20,100	20.93	420,693
Royal Dutch Shell Plc	6,000	66.78	400,680
Statoil ASA	16,600	23.77	394,582
Everest Re Group Ltd	4,314	84.82	365,913
Platinum Underwriters Hldgs	7,946	44.97	357,332
Allied World Assurance Company Holdings	5,268	59.44	313,130
Other	517,992		8,258,299
Total international equity securities	624,322		\$12,977,677
<b>International Equity Commingled Funds</b>			
World Asset Management Foreign Equity Fund			\$41,607,298
Artio International Equity II Group Trust			26,684,487
Manning & Napier Overseas Series			26,139,292
DFA International Small Cap Value			10,982,081
Driehaus International Small Cap Growth			5,319,383
Total international equity commingled funds			\$110,732,541
<b>Total international equity</b>			<b>\$123,710,218</b>

All values are stated in U.S. dollars.

A complete list of holdings is available upon request.

## Investment Section

### Fixed Income Holdings

December 31, 2010

Security	Par Value	Fair Value
USA Treasury Note, 3.500%, Due 02/15/2039	\$4,750,000	\$4,096,115
Federal Home Loan Mtg Corp Series 2705 Class Ld, 4.500%, Due 03/15/2032	2,500,000	2,696,474
Federal Natl Mtg Assn Nts Call 3/30/11 @ 100, 2.000%, Due 09/30/2015	2,500,000	2,478,950
Federal Natl Mtg Assn Struct Nts Call 9/28/12, 1.000%, Due 09/28/2015	2,500,000	2,469,050
Tennessee Valley Authority Cons Bds, 7.125%, Due 05/01/2030	1,750,000	2,294,040
Federal Natl Mtg Assn Pool #972077, 4.500%, Due 02/01/2023	2,148,121	2,261,907
Federal Natl Mtg Assn Pool #Ae0212, 5.500%, Due 12/01/2027	2,079,256	2,243,247
US Bank NA Med Term Bank Note, 6.300%, Due 02/04/2014	2,000,000	2,223,920
General Elec Cap Corp Sr Unsec Ser Mtn, 5.400%, Due 02/15/2017	1,500,000	1,609,605
Kentucky Asset/ Liabilitiy Com Taxable, 4.104%, Due 04/01/2019	1,500,000	1,489,965
Other	34,320,000	36,611,757
Total fixed income securities	\$57,547,377	\$60,475,030
<b>Fixed Income Commingled Funds</b>		
JP Morgan Investment Management		\$59,930,453
Western Asset High Yield Portfolio		14,738,641
Vanguard Short-Term Investment-Grade Fund Admiral Shares		4,940,367
Total fixed income commingled funds		\$79,609,461
<b>Total fixed income</b>		<b>\$140,084,491</b>

### Real Estate Holdings

December 31, 2010

Asset	Shares	Market Price	Fair Value
6161 Busch Blvd., Columbus, OH 43229			\$1,415,000
6500 Busch Blvd., Columbus, OH 43229			910,000
Hospitality Pptys Tr Sh Ben Int REIT	27,822	23.04	641,019
Corrections Corp Amer New Com New REIT	12,350	25.06	309,491
Vornado Realty Trust	2,146	83.33	178,826
Kimco Realty Corp REIT	7,106	18.04	128,192
Equity Residential Sh Ben Int REIT	1,832	51.95	95,172
Public Storage REITS	800	101.42	81,136
Avalonbay Communities Inc REIT	712	112.55	80,136
Boston Pptys Inc REIT	900	86.10	77,490
Other	76,172		1,448,773
Total real estate assets	129,840		\$5,365,235
<b>Real Estate Commingled Funds</b>			
Henderson Global Investors			\$3,057,420
Oaktree Real Estate Opportunities Fund IV			11,920,997
Pyramis Global Advisors (FREG II)			1,072,219
Pyramis Global Advisors (FREG III)			1,379,198
Total real estate commingled funds			\$17,429,834
<b>Total real estate</b>			<b>\$22,795,069</b>

All values are stated in U.S. dollars.  
A complete list of holdings is available upon request.

## Investment Section

### Private Equity Holdings

December 31, 2010

<b>Asset</b>	<b>Fair Value</b>
CSFB Private Equity Opportunities Fund LP	\$9,997,546
Issuer Entity, LLC	1,266,089
Kayne Anderson Energy Fund IV	1,870,131
Kayne Anderson Energy Fund V	273,969
Kayne Anderson Mezzanine Partners	1,156,599
Kayne Anderson MLP Fund	8,231,933
Oaktree PPIP Private Fund LP	1,276,214
Pantheon USA Fund VII, LP	9,636,896
Timbervest	41,125,239
<b>Total private equity</b>	<b>\$74,834,616</b>

### Hedge Fund Holdings

December 31, 2010

<b>Asset</b>	<b>Fair Value</b>
Evanston Capital Weatherlow Offshore Fund II	\$19,033,730
Feingold O'Keefe Distressed Loan Fund	5,568,810
GAM Fund Management Ltd.	15,185,119
Lehman Bros Offshore Div. Arbitrage Fund II	644,156
Protégé Partners, LP	8,172,419
Protégé Opportunistic Fund	2,041,651
Sankaty/Prospect Harbor Credit Partners	2,617,355
Seix Credit Opportunities Fund, LLC	6,182,312
<b>Total private equity</b>	<b>\$59,445,552</b>

All values are stated in U.S. dollars.

A complete list of holdings is available upon request.



## Investment Section

### Summary Schedule of Investment Manager Fees

Year ending December 31, 2010

Manager	Strategy	Assets Managed	Fees
<b>Cash and Short-Term Investments</b>			
The Vanguard Group	Money Market	\$ -	\$5,208
<b>Domestic Equity</b>			
Ancora Investment Advisors	Micro Cap	5,898,870	5,395
Brandywine Global Investment Mgmt LLC	Small/Mid Cap Value	12,733,615	122,522
DePrince, Race & Zollo, Inc.	Large Cap Value	24,740,966	137,780
Dimensional Fund Advisors	Small Cap Blend	16,317,657	49,576
Fred Alger Management, Inc.	Small Cap Growth	15,962,173	140,748
INTECH Investment Management LLC	Large Cap Growth	-	55,710
James Investment Research	Micro Cap	7,752,792	8,025
Loomis Sayles	Small/Mid Cap Core	11,966,490	5,119
LSV Asset Management	Large Cap Value	33,196,971	98,447
State Street Global Advisors	Large Cap Blend	47,942,820	18,615
T. Rowe Price	Large Cap Blend	48,182,670	90,833
Wellington Mgmt Co., LLP	Large Cap Growth	41,835,289	206,679
Westfield Capital Management	Small/Mid Cap Growth	28,285,666	240,406
World Asset Management	Small/Mid Cap	39,578,762	35,299
<b>International Equity</b>			
Artio Global Management LLC	Core	26,684,488	195,953
Dimensional Fund Advisors	Small Cap Value	10,982,081	89,491
Driehaus Capital Management	Small Cap Growth	5,319,383	23,836
Manning & Napier Advisors, Inc.	Core	26,139,292	167,169
World Asset Management	Core	41,607,298	30,557
<b>Fixed Income</b>			
Johnson Institutional Counsel	Intermediate-Term	65,415,397	35,705
JP Morgan Fleming Asset Management	Intermediate-Term	59,930,453	181,278
Western Asset Management	High Yield	14,738,641	89,596
Wells Capital Management	Intermediate-Term	-	92,322
<b>Real Estate</b>			
HPRS Internal Staff	Office Buildings	2,325,000	-
Pyramis Global Advisors	Specialty Real Estate	2,451,417	73,266
Henderson Global Investors	Specialty Real Estate	3,057,420	128,587
Oaktree Capital Management LP	Specialty Real Estate	11,920,997	172,901
<b>Private Equity</b>			
Credit Suisse Securities LLC	Fund of funds	9,997,546	108,055
Kayne Anderson Capital Advisors, LP	Energy and Mezzanine	11,532,632	459,864
Oaktree Capital Management LP	PPIP	1,276,214	5,665
Issuer Entity, LLC	Mortgages	1,266,089	-
Pantheon USA Fund VII,L.P.	Fund of funds	9,636,896	150,000
TimberVest	Timberland	41,125,239	304,247
<b>Hedge Funds</b>			
Evanston Capital Management LLC	Fund of Funds	19,033,730	179,857
Feingold O'Keeffe Capital	Distressed Debt	5,568,810	173,539
GAM Fund Mgmt Ltd	Fund of Funds	15,185,119	174,101
NB Alternative Investment Management	Fund of Funds	644,156	-
Protégé Partners, LLC	Fund of Funds	10,214,070	96,794
Sankaty Advisors, LLC	Distressed Debt	2,617,355	34,914
Seix Investment Advisors, LLC	Distressed Debt	6,182,312	241,852
<b>Total</b>		<b>\$739,246,776</b>	<b>\$4,429,911</b>

<b>Summary Schedule of Broker Fees</b>			
Year ending December 31, 2010			
<b>Broker</b>	<b>Fees</b>	<b>Shares</b>	<b>Average Cost</b>
KeyBanc Capital	\$114.00	6,378,300	\$0.000
Citigroup Global	717.00	3,834,500	0.000
Cabrera Capital Markets	28,783.43	2,882,118	0.010
Robert W. Baird & Co	25,824.96	1,501,716	0.017
Merrill Lynch	9,900.32	1,170,836	0.008
Capital Institutional Services Inc	16,902.72	1,117,837	0.015
Morgan Stanley	5,345.50	979,520	0.005
Credit Suisse Securities (USA)	7,420.29	818,430	0.009
Knight Equity Markets, L.P.	10,138.45	757,150	0.013
Weeden & Co	6,938.51	665,002	0.010
Abel Noser Corp	7,221.79	663,700	0.011
Stephens Inc.	40.00	601,700	0.000
RBC Capital Markets	506.00	571,300	0.001
Ivy Securities	3,942.00	394,200	0.010
BNY Convergenx / LJR	4,296.21	391,253	0.011
Deutsche Bank Securities, Inc.	3,023.65	299,179	0.010
UBS Securities LLC	1,785.55	190,865	0.009
Jefferies & Company	1,693.74	106,726	0.016
Investment Technology Group	1,237.91	96,421	0.013
Goldman, Sachs & Co.	1,521.15	95,350	0.016
Instinet	1,176.22	64,960	0.018
Barclays Capital	1,318.50	64,430	0.020
JP Morgan	1,022.70	62,583	0.016
Fox River Execution	407.07	58,153	0.007
Guzman & Company	922.75	53,300	0.017
Rosenblatt Securities LLC	828.88	50,100	0.017
JonesTrading Institutional Services	558.00	18,600	0.030
Sanford C. Berns	253.00	17,700	0.014
Liquidnet Inc	439.90	17,030	0.026
Stifel, Nicolaus & Co	322.80	13,120	0.025
Raymond James & Associates Inc	375.00	10,700	0.035
Friedman Billings & Ramsey	335.40	9,630	0.035
Allen & Company	185.00	8,500	0.022
State Street	219.60	6,890	0.032
J.P. Morgan Securities Inc.	264.00	6,600	0.040
ISI Group Inc	226.50	6,100	0.037
Johnson Rice & Co	131.00	4,400	0.030
Collins Stewart	111.00	3,700	0.030
Wells Fargo	115.70	3,580	0.032
Other	1,323	45,635	0.029
<b>Total</b>	<b>\$147,889.50</b>	<b>24,041,814</b>	<b>\$0.006</b>

#### 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.

#### 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.

## Investment Section

---

### Investment Objectives, Policies, and Guidelines

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).
4. The Board shall, at least annually, establish a policy with the goal to increase utilization of Ohio-qualified investment managers, when an Ohio-qualified investment manager offers quality, services, and safety comparable to other investment managers otherwise available.
5. The Board shall, at least annually, establish a policy with the goal to increase utilization of Ohio-qualified agents for the execution of domestic equity and fixed income trades on behalf of the retirement system, when an Ohio-qualified agent offers quality, services, and safety comparable to other agents otherwise available.

### 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 40 to 50 percent of the market value of total fund assets with a targeted average of 45 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 0 to 10 percent of total fund assets with a targeted average of 5 percent.
4. U.S. fixed income obligations, including cash, will represent from 15 to 25 percent of the market value of total fund assets with a targeted average of 20 percent. Intermediate-term bonds may include contractual payments, preferred stocks, and bonds with a maturity date greater than one year and less than or equal to ten years. Long-term bonds have a maturity date greater than ten years.
5. Investments in alternatives will represent from 10 to 20 percent of the market value of total fund assets with a targeted average of 15 percent. The term "alternatives" includes hedge funds, private equity, and Global Tactical Asset Allocation.

### Short-Term

Cash equivalent investments may include the following:

- Short-Term Maturity Securities
- U.S. Treasury Bills
- U.S. Government Repurchase Agreements
- Money Market Funds

## Investment Section

---

### Investment Objectives, Policies, and Guidelines

- Commercial Paper
- Commingled Investment Funds

#### **Fixed Income**

A core bond allocation will be diversified as to type of security, issuer, coupon, and maturity. Qualifying bonds, at the time of purchase, will be rated as investment-grade by at least two nationally-recognized bond rating services. Generally, the average maturity of a fixed income allocation will be ten years or less, although individual securities may be longer.

An alternative bond allocation may invest in (1) high-yield or other non-investment-grade bonds, (2) non-United States bonds, and (3) bonds issued by emerging countries.

No more than ten percent of a fixed income allocation will 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 a combination of U.S. government bonds, U.S. agency bonds, and domestic corporate bonds.

Managers are prohibited from using derivative instruments.

#### **Equities**

Qualifying equities will be listed on an established stock market and be readily marketable. They may be held in separate or commingled accounts.

At least 67% of the value of a large cap domestic mandate will be invested in securities with a market capitalization of more than \$5 billion.

At least 67% of the value of a small/mid cap domestic mandate will be invested in securities with a market capitalization of more than \$500 million.

At least 50% of the value of an international mandate (excluding small cap) will be invested in securities with a market capitalization of more than \$1 billion.

Each equity manager will diversify the portfolio in an attempt to minimize the impact of substantial losses in any specific industry or issuer.

An equity manager may not --

- hold more than 10% of the account value in a single issuer
- where a sector is greater than 10% of the benchmark, allow that sector to exceed the lesser of 40% or 1.5 times the sector weighting of the relative benchmark
- where a sector is 10% or less of the benchmark, allow that sector to exceed the greater of 20% or 2.5 times the sector weighting of the relative benchmark
- invest in international-domiciled securities exceeding 10% of portfolio value in a domestic mandate
- allow one country to be more than 15% above the country weighting of the relative benchmark in an international mandate
- invest in emerging markets exceeding 25% of portfolio value in an international mandate.

## Investment Section

### Investment Objectives, Policies, and Guidelines

---

Equity managers are prohibited from investing in the following:

- Private placements
- Unregistered or restricted stock
- Derivatives
- Margin Trading/Short Sales
- Commodities
- Real Estate Property (excluding REITs)
- Guaranteed Insurance Contracts
- Securities issued by Highway Patrol Retirement System or its affiliates.

#### **Real Estate**

The fund may invest in 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.

#### **Alternatives**

The fund may invest in alternatives with individual fund managers or with fund of funds managers.

#### **Performance**

Comparative performance measurement of the total fund and its components will be conducted at least quarterly.

Each large cap equity manager is expected to exceed benchmark performance by 100 bps annually over rolling three and five year periods, net-of-fees, and rank in the upper 40 percentile relative to peers.

Each small/mid cap equity and international manager is expected to exceed benchmark performance by 150 bps annually over rolling three and five year periods, net-of-fees, and rank in the upper 40 percentile relative to peers.

All other managers are expected to exceed benchmark performance over rolling three and five year periods, net-of-fees, and rank in the upper 40 percentile relative to peers.

The broad benchmarks for each type of manager, subject to revision, are as follows:

## Investment Section

---

### Investment Objectives, Policies, and Guidelines

Large cap equity – S&P500  
Small/mid cap equity – Russell 2500  
International equity – MSCI ACWI ex-US  
Fixed income – Barclays Capital Aggregate  
Real estate – NCREIF  
Hedge funds – HFRI Fund of Funds  
Private equity/GTAA – Wilshire 5000 + 3%, lagged one quarter

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 benchmark composed of 65 percent Russell 3000 Index, 20 percent Barclays Capital Aggregate Index, and 15 percent MSCI ACWI ex-US Index.

#### **Directed Brokerage**

In separately-managed equity accounts, HPRS investment managers are expected to use brokers that are under contract with HPRS to provide execution-only brokerage. Every five years, these brokers will be selected through a Request for Proposal process.

An investment manager may be excused from the directed brokerage requirement if it can document favorable execution.

#### **Manager Selection**

Each investment manager will be selected through a Request for Proposal process, as follows:

- The Investment Committee will authorize the issuance of an RFP that is posted on the HPRS website and disseminated as a press release to at least three nationally recognized investment trade publications.
- Responses that meet the RFP requirements will be subjected to a due diligence analysis by the HPRS investment consultant.
- One or more finalists will be selected to be interviewed by the Investment Committee.
- The Investment Committee will recommend the hiring of an investment manager to the Retirement Board.
- The Investment Committee may recommend the hiring of a separate investment manager to the Retirement Board, contingent upon unsatisfactory contract negotiations with the primary selection.
- The Chief Investment Officer will negotiate contract terms with the selected investment manager.
- The Chief Investment Officer may conduct an onsite due diligence visit to the selected investment manager's premises.

#### **Investment Manager Responsibilities**

Managers are expected to --

- acknowledge the acceptance of this document;

## Investment Section

---

### Investment Objectives, Policies, and Guidelines

- hold and maintain errors and omissions insurance and provide proof of this insurance annually
- meet with the Board, when requested, to review investment activity and results
- provide performance measurement data, explanation, and other communication as required by the investment consultant
- provide frequent communication with HPRS and the investment consultant on all significant matters pertaining to the investment of assets
- promptly notify HPRS and the investment consultant of any significant changes in the manager's investment strategy, organizational structure, financial condition, or personnel assigned to manage HPRS assets.

### Board Responsibilities

The role of the Board is supervisory, and discretion is delegated to 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 necessary 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, August 26, 2010

Revised, April 22, 2010

Revised, February 25, 2010

Revised, April 23, 2009

Revised, October 25, 2007

Revised, June 16, 2005

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





# **Actuarial Section**

June 3, 2011

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

Dear Board Members:

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

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

The financial objective is addressed within the annual actuarial valuation. The valuation process develops contribution rates that are sufficient to fund the plan's current cost (i.e., the costs assigned by the valuation method to the year of service about to be rendered), as well as to fund unfunded actuarial accrued liabilities as a level percent of active member payroll over a finite period. The most recent valuations were completed based upon population data, asset data, and plan provisions as of December 31, 2009.

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 or assisted in preparing the following supporting schedules for the Comprehensive Annual Financial Report:

Actuarial Section

Summary of Assumptions

Funding Method, Asset Valuation Method, Interest Rate

Payroll Growth

Probabilities of Age & Service Retirement

Probabilities of Separation from Active Employment Before Age & Service Retirement

Health Care and Medicare

Short-Term Solvency Test

Recent Experience in the Health Care Fund

Membership Data

Analysis of Financial Experience

Supplementary Schedules  
Schedule of Funding Progress  
Schedule of Employer Contributions  
Notes to Trend Data

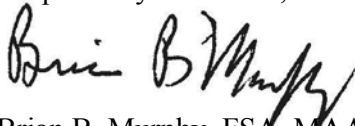
Assets are valued on a market related basis that recognizes each year's difference between actual and assumed investment return over a closed four-year period, subject to an 80% to 120% corridor on market value. The actuarial value of assets is 104% of the market value of assets as of December 31, 2009.

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 Statements No. 25 and No. 43 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, 2009 valuation were based upon a study of experience during the years 2000 through 2004.

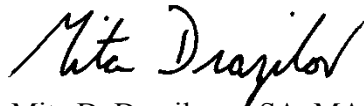
Investment return on a market value basis during 2009 was greater than assumed, which helped to partially offset the losses experienced during calendar year 2008. Given the present contribution rate allocation between the pension program and the retiree health plan, the pension program unfunded actuarial accrued liability cannot be amortized. In addition, the retiree health plan continues to be cause for concern. Based upon the present contribution rate allocation, the plan is expected to remain solvent until 2026. Available resources need to be brought in line with projected benefit payouts before that time if the plan is to continue to provide benefits similar to those currently provided.

Based upon the results of the December 31, 2009 valuations, we recommend that the Board continue to investigate ways of restoring financial balance to the pension program. Continued cost containment efforts can have a positive effect on the retiree health plan, but we believe that additional contribution income is needed.

Respectfully submitted,



Brian B. Murphy, FSA, MAAA



Mita D. Drazilov, ASA, MAAA

BBM:MDD:mdd

Statement of Actuarial Assumptions and Methods

After consulting with the actuary, these assumptions have been adopted by the Highway Patrol Retirement System Board of Trustees, effective January 1, 2003.

**Funding Method**

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

**Asset Valuation Method**

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

**Interest Rate**

The investment return rates used in making valuations are 8.0% for pension assets and 6.5% for OPEB assets, compounded annually (net of administrative 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:

Payroll Growth			
Service Years	Merit & Seniority	Base (Economic)	Total
1 - 2	10.0%	4.0%	14.0%
3 - 5	3.0	4.0	7.0
6 - 10	1.0	4.0	5.0
11 +	0.3	4.0	4.3

**Other Assumptions**

Each retiree is assumed to have a surviving spouse.

Health care costs are assumed to increase annually by 4.0%, plus an additional declining percentage ranging from 5.0% - 0.5% through 2019.

Each benefit recipient is assumed to be eligible for Medicare at age 65.

Post-employment mortality is based on 105% of the RP-2000 Combined Healthy Male and Female Tables.

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

Statement of Actuarial Assumptions and Methods

<b>Probabilities of Separation from Active Employment before Age &amp; Service Retirement</b>				
<i>Percentage of Active Members Separating Within Next Year</i>				
<u>Sample Age</u>	<u>Disability</u>	<u>Death (Men)</u>	<u>Death (Women)</u>	<u>Other</u>
20	0.08%	0.02%	0.01%	2.57%
25	0.08	0.02	0.01	2.24
30	0.23	0.02	0.01	1.91
35	0.42	0.04	0.02	1.56
40	0.70	0.05	0.04	0.84
45	0.85	0.08	0.06	0.41
50	1.13	0.11	0.08	0.15
55	1.32	0.18	0.14	0.00

<b>Probabilities of Age &amp; Service Retirement</b>		
<i>Percentage of Eligible Members Retiring Within Next Year</i>		
<u>Retirement Ages</u>	<u>Unreduced Benefit</u>	<u>Reduced Benefit</u>
48	40%	7%
49	35	7
50	25	7
51	30	7
52	30	--
53	30	--
54	40	--
55	25	--
56	25	--
57	25	--
58	30	--
59	35	--
60+	100	--

**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, which is 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 current assets (cash and investments) are compared with (1) active member contributions on deposit, (2) the liability for future benefits to current retired lives, and (3) the liability for service already rendered by active members. In a system that has been following the discipline of level percent financing, the liability for active member contributions on deposit (column 1 below) and the liability for future benefits to current retired lives (column 2 below) will be fully covered by current assets, except in rare circumstances. In addition, the liability for service already rendered by active members (column 3 below) will be partially covered by the remainder of current assets. Generally, if the system has been using level cost financing, the funded portion of column 3 will increase over time.

**Short-Term Solvency Test**

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

Year	(1)	(2)	(3)	Valuation Assets	Percentage of Accrued Liabilities Covered by Reported Assets		
	Active Member Contributions	Retirees, Beneficiaries, & Vested Deferreds	Active Members (Employer Financed Portion)		(1)	(2)	(3)
2004▲	\$77,100,466	\$445,084,791	\$212,279,114	\$569,858,387	100	100	22
2005▶	77,779,569	463,476,318	232,600,277	591,922,200	100	100	22
2006▲	82,720,940	482,998,754	242,041,018	653,493,046	100	100	36
2007	89,279,853	509,179,659	267,795,882	700,860,707	100	100	38
2008	94,749,356	511,626,943	298,146,078	603,265,803	100	99	-
2009	101,131,517	528,087,050	310,865,779	620,356,505	100	98	-

▲ Plan Amendment  
▶ Assumption or method change

**Active Member Valuation Data**

Years Ending December 31

Year	Active Members	Annual Payroll	Average Annual Salary	% Increase in Average Pay
2004	1,562	\$81,757,707	\$52,342	(1.3%)
2005	1,573	83,408,155	53,025	1.3
2006	1,592	85,878,329	53,944	1.7
2007	1,597	93,752,908	58,706	8.8
2008	1,544	94,301,538	61,076	4.0
2009	1,547	94,824,789	61,296	0.4

**Retirees and Beneficiaries Added to and Removed from Rolls**

Years Ending December 31

Year	Added to Rolls		Removed from Rolls		Rolls at End of Year		% Increase in Annual Allowances	Average Annual Allowances
	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances		
2004	58	\$3,448,140	29	\$409,836	1,282	\$36,280,092	9.1	\$28,296
2005	45	2,335,992	26	483,312	1,301	38,132,772	5.1	29,316
2006	70	2,589,840	34	620,952	1,337	40,101,660	5.2	29,988
2007	53	2,215,728	31	673,440	1,359	41,643,948	3.8	30,648
2008	45	2,532,732	33	639,576	1,371	43,537,104	4.5	31,752
2009	45	2,491,176	31	511,632	1,385	45,516,648	4.5	32,868

**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	
	2009	2008
<b>Age &amp; Service Retirements</b> 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.	\$272,398	\$127,547
<b>Disability Retirements</b> If disability claims are less than assumed, there is a gain - if more claims, a loss.	822,758	1,169,481
<b>Death-in-Service Benefits</b> If survivor claims are less than assumed, there is a gain - if more claims, a loss.	(106,084)	(72,528)
<b>Withdrawal from Employment</b> If more liabilities are released by withdrawals than assumed, there is a gain -- if smaller releases, a loss.	(641,440)	776,377
<b>Pay Increases</b> If there are smaller pay increases than assumed, there is a gain - if greater increases, a loss.	11,001,072	(357,076)
<b>Investment Income</b> If there is greater investment income than assumed, there is a gain - if less income, a loss.	(13,984,563)	(139,408,285)
<b>Other</b> Miscellaneous gains and losses resulting from data adjustments, timing of financial transactions, valuation methods, and other events.	(746,402)	5,557,206
<b>Gain (or Loss) During Year From Financial Experience</b>	(\$3,382,261)	(\$132,207,278)
<b>Non-Recurring Items</b> Adjustments for benefit and assumption changes.	-	-
<b>Composite Gain (or Loss) During Year</b>	(\$3,382,261)	(\$132,207,278)

### Summary of Plan Provisions

#### **Purpose**

In 1941, the Highway Patrol Retirement System (HPRS) was created by the Ohio General Assembly to provide for retirement and survivor benefits for members and dependents.

#### **Administration**

The general administration and management of HPRS are vested in the Highway Patrol Retirement System Board of Trustees under Ohio Revised Code Chapter 5505. The eleven-member Board consists of the Superintendent of the State Highway Patrol, three appointed members, five elected active members, and two elected retired members.

The appointed members are investment experts designated by the Governor, the Treasurer of State, and the General Assembly. 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 each contributing member is eligible to vote in the active member election process. Any retiree who is an Ohio resident and who has not served as a statutory or active member of the Board during the past three years is eligible to become a retired member candidate. Each retiree is eligible to vote in the retired member election.

The Superintendent of the State Highway Patrol serves by virtue of the office held. The Attorney General of the State of Ohio is the legal advisor to the Board.

A chairperson and vice-chairperson are elected by the Board annually. All regular Board meetings are considered to be public meetings. While the Board members serve without compensation, they are not expected to suffer any loss because of absence from regular employment while engaged in official Board duties.

In addition, the members of the Board are reimbursed for actual and necessary expenses.

#### **Employer Contributions**

Ohio law requires that the Board certify the employer contribution rate to the Office of Budget and Management in 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**

Each member of HPRS, through payroll deduction, must contribute the legally-established contribution rate as a percentage of salary. Individual member accounts are maintained by HPRS and, upon termination of employment, the amount contributed is refundable in lieu of the payment of a pension benefit.

#### **Service Credit**

Prior to retirement, the following types of additional service credit may be purchased: (1) military service pursuant to the Ohio Revised Code, (2) prior refunded full-time service as a contributing member of the State Highway Patrol Retirement System, the Ohio Police & Fire Pension Fund, the State Teachers Retirement System of Ohio, the School Employees Retirement System of Ohio, the Ohio Public Employees Retirement System, and the Cincinnati Retirement System. Military service and prior refunded full-time service in HPRS and the Ohio Police & Fire Pension Fund may be used to meet the minimum service requirement in order to qualify for unreduced pension



Summary of Plan Provisions

benefits. In the case of prior service credit that was not refunded, service credit may be transferred directly from another Ohio retirement system to HPRS.

**Retirement**

**Age and Service Retirement**

Upon retirement from active service, a member is eligible to receive a pension by achieving a minimum age and service requirement, as follows:

Age	Service Credit
55	15 years
52	20 years
48	25 years

For a fifteen-year pension, benefits are calculated as 1.5 percent of final average salary times the number of years of service. For a twenty-year pension, benefits are calculated as 2.5 percent of final average salary times the number of years of service. For a pension based on greater than twenty but less than twenty-five years, benefits are calculated as 2.5 percent of final average salary times the first twenty years of service, plus 2.25 percent of final average salary times the number of years of service in excess of twenty. For a pension based on twenty-five years, benefits are calculated as 2.5 percent of final average salary times the first twenty years of service, 2.25 percent of final average salary times the next five years of service, and 2.0 percent of final average salary in excess of twenty-five years. The maximum allowed pension factor of 79.25 percent of final average salary is earned with thirty-four years of service credit.

The final average salary, which includes base pay, longevity pay, hazard duty pay, shift differential, and professional achievement pay, is the average of a member's three highest years of salary.

Benefit payments become effective the day following the last day of employment and are payable monthly throughout the retiree's lifetime.

**Deferred Retirement**

A member who has met a service requirement, but not the requisite age, may retire and defer the receipt of benefits until the age requirement is met.

**Reduced Retirement**

A member who has accumulated at least twenty but less than twenty-five years of service credit may retire and receive a reduced lifetime 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

### Summary of Plan Provisions

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

#### **Resignation or Discharge**

With less than twenty years of service credit, a member may not collect a pension if “dishonesty, cowardice, intemperate habits, or conviction of a felony” was the basis for discharge or resignation from the Ohio State Highway Patrol.

#### **Disability Retirement**

A member who retires as the result of a disability that was incurred in the line of duty receives a pension of 61.25 percent of 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 50 percent of final average salary.

#### **Deferred Retirement Option Plan (DROP)**

A member who is eligible to retire with an unreduced pension benefit may enter the DROP. The member will continue to work in the existing assignment as determined by the employer and receive the appropriate compensation for that rank. A DROP member is considered retired; however, instead of receiving a monthly pension benefit, the member begins to accumulate funds in a tax-deferred account. The DROP account is funded by both the monthly pension benefit and the member’s continuing active contributions, as well as interest that accrues on these amounts.

A member may participate in DROP until age 60, but for no more than eight years. The minimum participation period is two years for members who enter the DROP at age 52 or more and three years for members who enter the DROP before age 52. A member who terminates employment earlier than the minimum participation period will forfeit any accrued interest.

When a DROP member terminates employment with the Ohio State Highway Patrol, the member will begin to receive the monthly pension benefit that had previously been funding the DROP account. In addition, after the minimum participation period, the proceeds of the DROP account will be rolled over into a qualified plan or paid to the member in a lump sum, an annuity, or a combination of these distribution types.

#### **Payment Plans**

Each retirement applicant must select a benefit payment plan. Regardless of the plan selected, a survivor benefit is paid to an eligible survivor of a deceased active member or retiree. The plan options are as follows:

##### **Plan 1 - Single Life Annuity**

This plan pays the highest monthly benefit, calculated as a percentage of final average salary, and is limited to the lifetime of the retiree. A member who receives a disability retirement may only receive a single life annuity.

##### **Plan 2 - Joint and Survivor Annuity**

This plan pays a reduced monthly benefit for a member’s lifetime and provides for a monthly benefit to a surviving beneficiary.

### Summary of Plan Provisions

#### **Plan 3 - Life Annuity Certain and Continuous**

This plan is an annuity, payable for a guaranteed minimum period. If a retiree dies before the end of the period, the pension benefit is paid to the designated beneficiary for the remainder of the period.

#### **Partial Lump Sum (PLUS) Distribution**

In addition to selecting one of the three retirement payment plans, a retiree may elect to receive a lump sum cash payment, either as a taxable distribution, or as a rollover to a tax-qualified plan. Following this payment, a retiree will receive a reduced monthly benefit for life. To be eligible for a PLUS distribution, a retiree must have attained age 51 with at least 25 years of total service, or age 52 with at least 20 years of total service. The lump sum amount may not be less than six times the monthly single life pension and not more than sixty times the monthly single life pension.

#### **Survivor Benefits**

A surviving spouse of a deceased retiree, or of an active member who was eligible to receive a retirement pension at the time of death, receives a monthly benefit equal to one-half the deceased member's monthly pension benefit (minimum, \$900). A surviving spouse of an active member who was not eligible for a retirement benefit at the time of death receives a monthly survivor benefit of \$900.

Each surviving dependent child receives \$150 monthly until age 18. If the child is a full-time student, this benefit continues until age 23.

#### **Health Care**

A comprehensive Preferred Provider medical health care plan is currently offered to all benefit recipients and dependents. Benefit recipients may elect to cover spouses and dependent children by authorizing the appropriate premium deduction.

Dental and vision coverage is also available to benefit recipients and dependents. The Board, which has the authority to implement changes, annually evaluates the premiums and plan design.

#### **Medicare**

Benefit recipients who submit proof of Medicare Part B coverage are reimbursed for the basic Part B premium, up to a maximum of \$96.40 monthly.

#### **Cost of Living**

At age 53 and thereafter, each retiree receives an annual cost of living adjustment (COLA) equal to 3.0%. Each survivor benefit recipient is eligible for a COLA increase after receiving benefits for twelve months. Each disability benefit recipient is 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.



# Statistical Section

### Introduction

The objectives of the statistical section are to provide financial statement users with additional historical perspective, context, and relevant details that will assist in using information in the financial statements, notes to the financial statements, and required supplementary information in order to better understand and assess HPRS's overall financial condition.

The schedules beginning on page 70 show financial trend information that will assist users in understanding and assessing how HPRS's financial condition has changed over the past ten years. The financial trend schedules presented are --

- Changes in Net Assets
- Benefit Deductions from Net Assets by Type

The schedules beginning on page 71 show demographic and economic information. This information is designed to assist in understanding the environment in which HPRS operates. The demographic and economic information and the operating information presented include --

- Principal Participating Employer
- Retired Members by Type of Benefit
- Average Benefit Payments

## Statistical Section

### Changes in Net Assets – Pension

Years Ending December 31

	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>	<u>2006</u>	<u>2005</u>	<u>2004</u>	<u>2003</u>	<u>2002</u>	<u>2001</u>
<b>Additions</b>										
Employer contributions	\$21,211,944	\$20,453,914	\$20,302,216	\$19,956,700	\$19,263,941	\$18,467,789	\$17,205,609	\$16,361,339	\$14,923,893	\$13,901,313
Member contributions	8,295,882	8,624,025	8,870,985	8,901,454	8,610,088	8,582,130	8,192,944	8,136,974	7,563,173	7,042,044
Transfers from other systems	329,335	1,009,422	632,894	717,017	648,282	1,180,951	856,496	763,419	999,176	999,380
Investment income, net	72,161,170	109,493,243	(207,583,959)	50,333,115	85,692,657	37,890,851	62,907,281	105,112,725	(42,921,956)	(17,920,157)
Total additions	\$101,998,331	\$139,580,604	(\$177,777,864)	\$79,908,286	\$114,214,968	\$66,121,721	\$89,162,330	\$130,374,457	(\$19,435,714)	\$4,022,580
<b>Deductions</b>										
Benefits paid to participants	52,498,558	49,884,126	47,939,139	44,676,510	40,343,244	37,716,268	35,187,531	33,074,853	31,325,089	29,457,281
Member contribution refunds	476,936	1,076,685	570,827	98,628	299,128	495,640	155,989	386,931	266,137	306,452
Administrative expenses	637,943	758,818	613,447	605,165	572,616	561,817	518,834	559,052	462,200	524,922
Transfers to other systems	566,615	406,147	282,987	330,539	914,950	403,975	602,345	789,387	1,054,264	448,381
Total deductions	\$54,180,052	\$52,125,776	\$49,406,400	\$45,710,842	\$42,129,938	\$39,177,700	\$36,464,699	\$34,810,223	\$33,107,690	\$30,737,036
<b>Change in pension net assets</b>	<b>\$47,818,279</b>	<b>\$87,454,828</b>	<b>(\$227,184,264)</b>	<b>\$34,197,444</b>	<b>\$72,085,030</b>	<b>\$26,944,021</b>	<b>\$52,697,631</b>	<b>\$95,564,234</b>	<b>(\$52,543,404)</b>	<b>(\$26,714,456)</b>

### Changes in Net Assets – OPEB

Years Ending December 31

	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>	<u>2006</u>	<u>2005</u>	<u>2004</u>	<u>2003</u>	<u>2002</u>	<u>2001</u>
<b>Additions</b>										
Employer contributions	\$3,227,905	\$4,281,052	\$4,350,474	\$4,276,436	\$3,064,718	\$3,006,385	\$2,867,602	\$3,395,749	\$3,780,715	\$3,521,665
Investment income, net	17,734,416	21,030,418	(30,809,552)	11,254,046	15,632,184	8,998,070	12,051,961	18,885,722	(6,673,383)	(2,900,183)
Health care premiums	911,076	902,310	784,499	577,511	553,916	552,570	489,889	459,601	370,431	349,786
Retiree Drug Subsidy	471,909	513,668	317,381	329,158	336,794	-	-	-	-	-
Total additions	\$22,345,306	\$26,727,448	(\$25,357,198)	\$16,437,151	\$19,587,612	\$12,557,025	\$15,409,452	\$22,741,072	(\$2,522,237)	\$971,268
<b>Deductions</b>										
Health care expenses	11,447,630	9,801,853	9,648,543	11,260,675	8,871,533	9,484,829	7,438,539	7,640,730	7,395,474	6,528,882
Administrative expenses	106,450	123,210	98,082	97,101	92,761	92,344	86,031	93,769	78,635	90,422
Total deductions	\$11,554,080	\$9,925,063	\$9,746,625	\$11,357,776	\$8,964,294	\$9,577,173	\$7,524,570	\$7,734,499	\$7,474,109	\$6,619,304
<b>Change in OPEB net assets</b>	<b>\$10,791,226</b>	<b>\$16,802,385</b>	<b>(\$35,103,823)</b>	<b>\$5,079,375</b>	<b>\$10,623,318</b>	<b>\$2,979,852</b>	<b>\$7,884,882</b>	<b>\$15,006,573</b>	<b>(\$9,996,346)</b>	<b>(\$5,648,036)</b>

## Statistical Section

### Benefit Deductions from Net Assets by Type - Pension

Years Ending December 31

Type of Benefit	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001
Age & Service	\$18,292,909	\$17,853,793	\$19,683,104	\$16,838,694	\$15,064,493	\$17,904,543	\$14,041,248	\$13,526,379	\$12,874,767	\$12,362,626
Early	25,132,620	23,585,973	25,159,586	19,997,110	17,533,382	15,729,197	14,183,148	12,901,479	11,972,979	11,120,366
Reduced	1,865,761	1,828,296	1,833,554	1,693,050	1,659,235	86,287	1,573,077	1,504,785	1,422,072	1,342,338
Disability	3,305,364	3,044,325	2,927,862	2,761,851	2,534,672	2,305,544	2,051,805	1,875,919	1,828,394	1,605,426
Survivor	3,846,904	3,496,739	3,575,139	3,320,805	3,486,462	1,615,697	3,258,253	3,186,291	3,141,877	2,961,525
Death Benefits	55,000	75,000	80,000	65,000	65,000	75,000	80,000	80,000	85,000	65,000
<b>Total Pension Benefits</b>	<b>\$52,498,558</b>	<b>\$49,884,126</b>	<b>\$53,259,245</b>	<b>\$44,676,510</b>	<b>\$40,343,244</b>	<b>\$37,716,268</b>	<b>\$35,187,531</b>	<b>\$33,074,853</b>	<b>\$31,325,089</b>	<b>\$29,457,281</b>

### Benefit Deductions from Net Assets by Type - OPEB

Years Ending December 31

Type of Benefit	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001
Medical	\$6,380,295	\$4,983,739	\$5,087,073	\$6,512,976	\$4,971,003	\$5,593,232	\$4,065,457	\$4,377,284	\$4,427,603	\$4,337,011
Wellness	57,747	86,007	79,679	67,479	28,820	-	-	-	-	-
Prescription drugs	3,709,855	3,430,089	3,274,896	3,513,662	2,832,743	2,980,755	2,710,367	2,681,414	2,431,297	1,960,825
Medicare-B reimbursement	713,317	673,450	632,293	572,127	503,034	422,045	347,585	290,506	260,772	231,046
Dental	453,276	495,272	453,003	464,402	408,667	364,139	230,994	209,429	194,893	-
Vision	133,140	133,296	121,599	130,029	127,266	124,658	84,136	82,097	80,909	-
Total	\$11,447,630	9,801,853	\$9,648,543	\$11,260,675	\$8,871,533	\$9,484,829	\$7,438,539	\$7,640,730	\$7,395,474	\$6,528,882
Member premiums/adjustments ▲	(1,382,985)	(1,415,978)	(1,101,880)	(906,669)	(890,710)	(552,570)	(489,889)	(459,601)	(370,431)	(349,786)
<b>Net paid by HPRS</b>	<b>\$10,064,645</b>	<b>\$8,385,875</b>	<b>\$8,546,663</b>	<b>\$10,354,006</b>	<b>\$7,980,823</b>	<b>\$8,932,259</b>	<b>\$6,948,650</b>	<b>\$7,181,129</b>	<b>\$7,025,043</b>	<b>\$6,179,096</b>

▲ Includes Medicare-D reimbursement. Prior to 2002, Dental & Vision were combined with Medical.

### Principal Participating Employer 2010 and 2001

Year	Participating Government	Covered Employees	Percentage of Total System
2010	Ohio State Highway Patrol	1,537	100%
2001	Ohio State Highway Patrol	1,520	100%

## Statistical Section

### Retired Members by Type of Benefit

December 31, 2010

Monthly Benefit	Number of Retired Members	Type of Retirement						Retirement Option								
		1	2	3	4	5	6	Unmodified	1	2	3	4	5	6	7	
Deferred	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$1 - 250	38	-	-	-	-	37	1	38	-	-	-	-	-	-	-	-
251-500	1	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-
501 - 750	4	-	-	-	-	-	4	4	-	-	-	-	-	-	-	-
751 - 1000	32	-	-	-	-	25	7	32	-	-	-	-	-	-	-	-
1001 - 1250	129	1	-	1	1	122	4	129	-	-	-	-	-	-	-	-
1251 - 1500	125	-	2	30	1	88	4	124	1	-	-	-	-	-	-	-
1501 - 1750	103	50	4	17	14	13	5	103	-	-	-	-	-	-	-	-
1751 - 2000	74	42	3	13	5	10	1	73	1	-	-	-	-	-	-	-
2001 - 2250	51	20	1	14	14	2	-	51	-	-	-	-	-	-	-	-
2251 - 2500	43	15	9	6	11	2	-	42	1	-	-	-	-	-	-	-
2501 - 2750	109	28	53	3	25	-	-	100	-	8	1	-	-	-	-	-
2751 - 3000	140	29	100	-	11	-	-	134	1	3	-	-	-	-	-	2
3001 - 3250	171	54	96	4	17	-	-	167	-	1	2	-	-	-	-	1
3251 - 3500	142	45	91	-	6	-	-	134	-	8	-	-	-	-	-	-
Over 3,500	469	199	262	1	7	-	-	455	1	5	7	-	-	-	1	-
<b>Total</b>	<b>1,635</b>	<b>483</b>	<b>621</b>	<b>89</b>	<b>112</b>	<b>299</b>	<b>27</b>	<b>1,587</b>	<b>5</b>	<b>25</b>	<b>10</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>3</b>

#### Type of Retirement

- 1 – Age & Service
- 2 – Early
- 3 – Reduced
- 4 – Disability
- 5 – Survivor
- 6 – Alternate Payee (Division of Property Order)

#### Retirement Option

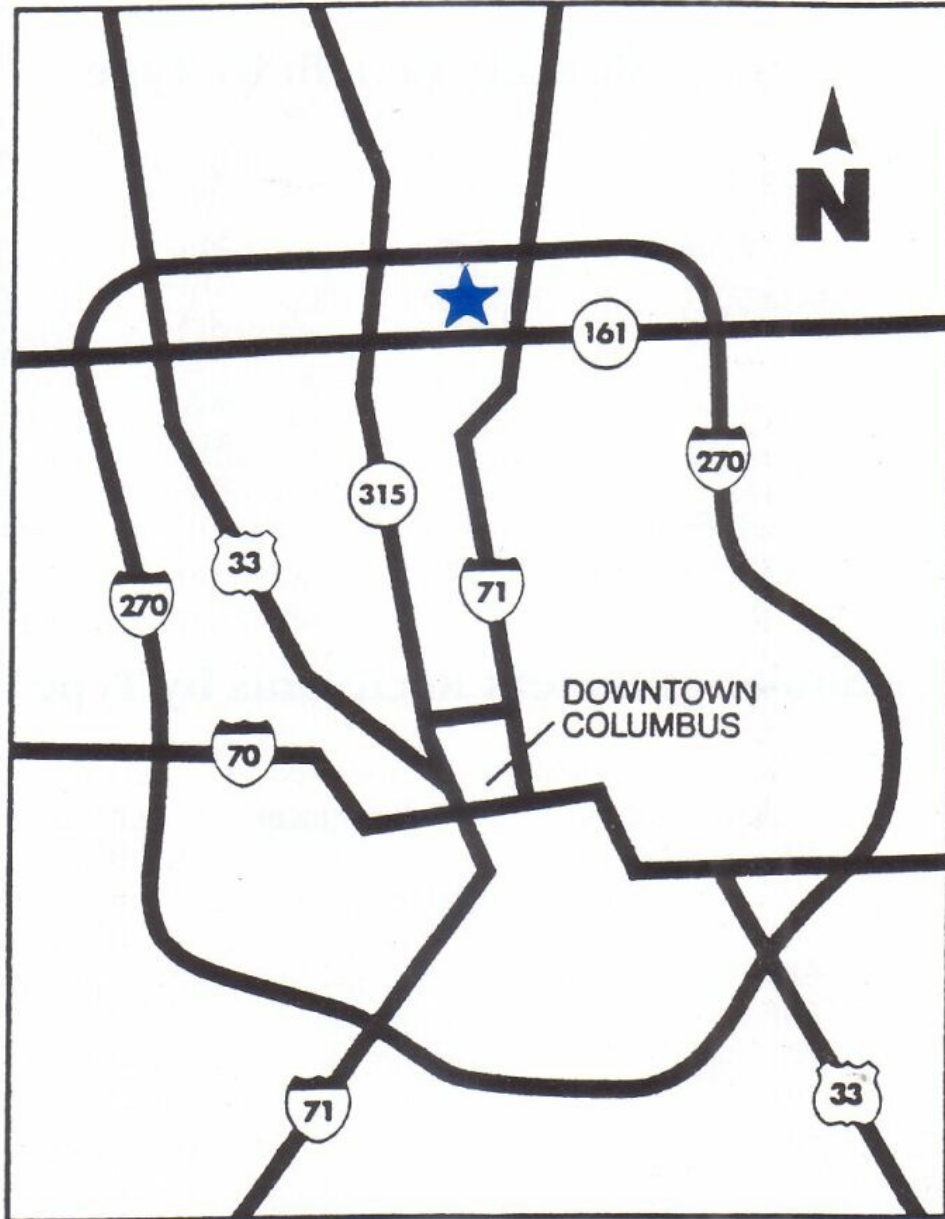
Under the unmodified plan, a surviving spouse receives a 50% continuance (minimum, \$900 monthly)

Under the following options, a surviving spouse qualifies for the above-noted 50% continuance; however, the member's lifetime benefit is reduced:

- Option 1 – Beneficiary receives 0 to <25% of member's reduced monthly benefit
- Option 2 – Beneficiary receives 25 to <50% of member's reduced monthly benefit
- Option 3 – Beneficiary receives 50% or more of member's reduced monthly benefit
- Option 4 – Beneficiary receives 100% of member's remaining reduced monthly benefit for 5 years after benefit begins
- Option 5 – Beneficiary receives 100% of member's remaining reduced monthly benefit for >5 to 10 years after benefit begins
- Option 6 – Beneficiary receives 100% of member's remaining reduced monthly benefit for >10 to 15 years after benefit begins
- Option 7 – Beneficiary receives 100% of member's remaining reduced monthly benefit for >15 years after benefit begins



<b>Average Benefit Payments</b>					
<b>2001-2010</b>					
<b>Retirement During</b>		<b>Years of Credited Service</b>			<b>Overall</b>
		<b>20 to &lt;25</b>	<b>25 to &lt;30</b>	<b>30+</b>	
2010	Average Monthly Benefit	\$2,923	\$3,571	\$5,375	\$3,670
	Average Final Average Salary	\$5,185	\$5,501	\$7,123	\$5,632
	Number of Retirees	7	33	5	45
2009	Average Monthly Benefit	\$2,861	\$4,114	\$5,424	\$3,826
	Average Final Average Salary	\$4,975	\$6,016	\$7,334	\$5,792
	Number of Retirees	9	19	2	30
2008	Average Monthly Benefit	\$2,621	\$3,879	\$4,822	\$3,736
	Average Final Average Salary	\$5,182	\$6,009	\$6,491	\$5,902
	Number of Retirees	6	24	3	33
2007	Average Monthly Benefit	\$2,089	\$3,245	\$5,619	\$3,202
	Average Final Average Salary	\$4,359	\$5,138	\$7,523	\$5,174
	Number of Retirees	5	17	2	24
2006	Average Monthly Benefit	\$2,681	\$3,571	\$6,850	\$3,353
	Average Final Average Salary	\$4,838	\$5,575	\$8,852	\$5,409
	Number of Retirees	13	24	1	38
2005	Average Monthly Benefit	\$2,601	\$3,238	\$5,064	\$3,378
	Average Final Average Salary	\$4,807	\$4,995	\$6,721	\$5,176
	Number of Retirees	4	26	4	34
2004	Average Monthly Benefit	\$2,267	\$3,327	\$5,386	\$3,489
	Average Final Average Salary	\$4,781	\$5,113	\$7,109	\$5,317
	Number of Retirees	3	36	5	44
2003	Average Monthly Benefit	\$2,116	\$3,322	\$3,685	\$3,183
	Average Final Average Salary	\$4,313	\$5,206	\$5,015	\$5,044
	Number of Retirees	6	28	5	39
2002	Average Monthly Benefit	\$2,151	\$2,937	\$3,223	\$2,924
	Average Final Average Salary	\$4,348	\$4,726	\$4,651	\$4,653
	Number of Retirees	5	21	12	38
2001	Average Monthly Benefit	\$2,228	\$3,100	\$3,900	\$3,054
	Average Final Average Salary	\$4,164	\$4,653	\$5,211	\$4,662
	Number of Retirees	13	13	12	38



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](mailto:system@ohprs.org)  
[www.ohprs.org](http://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.*