

Highway Patrol Retirement System



Comprehensive Annual Financial Report

A Component Unit of the State of Ohio

Year ending December 31, 2012



Mark R. Atkeson, Executive Director
6161 Busch Boulevard, Suite 119
Columbus, Ohio 43229-2553

Highlights for 2012

- During 2012, 20 active members entered into retirement status including 10 disabilities, 30 members terminated DROP, and 37 active members entered DROP. During the year, 38 retirees and surviving spouses passed away. At the end of 2012, there were a total of 1,645 active members (including 129 members in DROP) and 1,198 retired members (including 121 on disability.)
- At the end of 2012, the net position of the System was \$717,867,679, and the investment return for the year was 11.9% (gross of fees except for real estate and alternatives which were net of fees.) The value of the DROP Account was \$22,144,740.
- The Ohio Legislature took action with all five state pension systems, and with respect to HPRS, passed Substitute SB 345. This legislation will ensure the solvency of our system, bring us into compliance with the Ohio Revised Code (ORC) 30-year amortization requirement, and provide long-term stability of our health care fund. Components of the legislation include:
 - The percentage of active member contribution, which will range between 10% - 14%, will be determined by the Board as deemed necessary to comply with the actuarial valuation requirements of ORC 5505.121. (Effective date June 24, 2013)
 - The annual cost of living adjustment (COLA) applied to eligible retirees, which will range between 0% - 3%, will be determined by the Board as deemed necessary to comply with the actuarial valuation requirements of ORC 5505.121. (Effective date January 7, 2013)
 - Increase Final Average Salary (FAS) calculation period from 3 to 5 years for members retiring after 2014. (Effective date January 1, 2015)
 - Increase COLA eligibility age from 53 to 60. (Effective date January 7, 2013)

No legislation was enacted by the United States Congress that impacted the System.

- For the first time in HPRS's history, the pension system created a five-year strategic plan, developed by system members; the plan sets forth the Mission, Vision, Values, Goals, Objectives and Performance Measures to address future fiscal and health care challenges.
- The Hewitt Ennis Knupp (HEK) audit commissioned by the Ohio Retirement Study Council (ORSC) was completed and presented to the ORSC on October 26, 2012. This audit evaluated the policies and procedures of the retirement system in detail. The report included a number of recommendations, but no breach of fiduciary responsibility had occurred or appeared imminent.
- In early 2012, the Summit County Internal Audit Department was retained to perform internal auditing services.
- Mark Atkeson joined the System as the Executive Director on January 2, 2012, Wayne Warner was hired as the Chief Financial Officer and Chief Investment Officer on January 29, 2012, and Dennis Smith was hired as the system's first general in-house counsel on September 4, 2012.

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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, 2011

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.



Christopher P. Morinell

President

Jeffrey R. Emer

Executive Director

Introductory Section

Board of Trustees and Senior Staff



Col. John T. Born
Statutory Trustee/Chair



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



S/Lt. Anthony C. Bradshaw
Employee Trustee



Lt. Heidi A. Marshall
Employee Trustee



Capt. Carl Roark
Employee Trustee



Lt. Andre T. Swinerton
Employee Trustee



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



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



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



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



Maj. (ret.) J.P. Allen
*Governor's Investment Expert
Appointee*



Maj. (ret.) Mark R. Atkeson
Executive Director

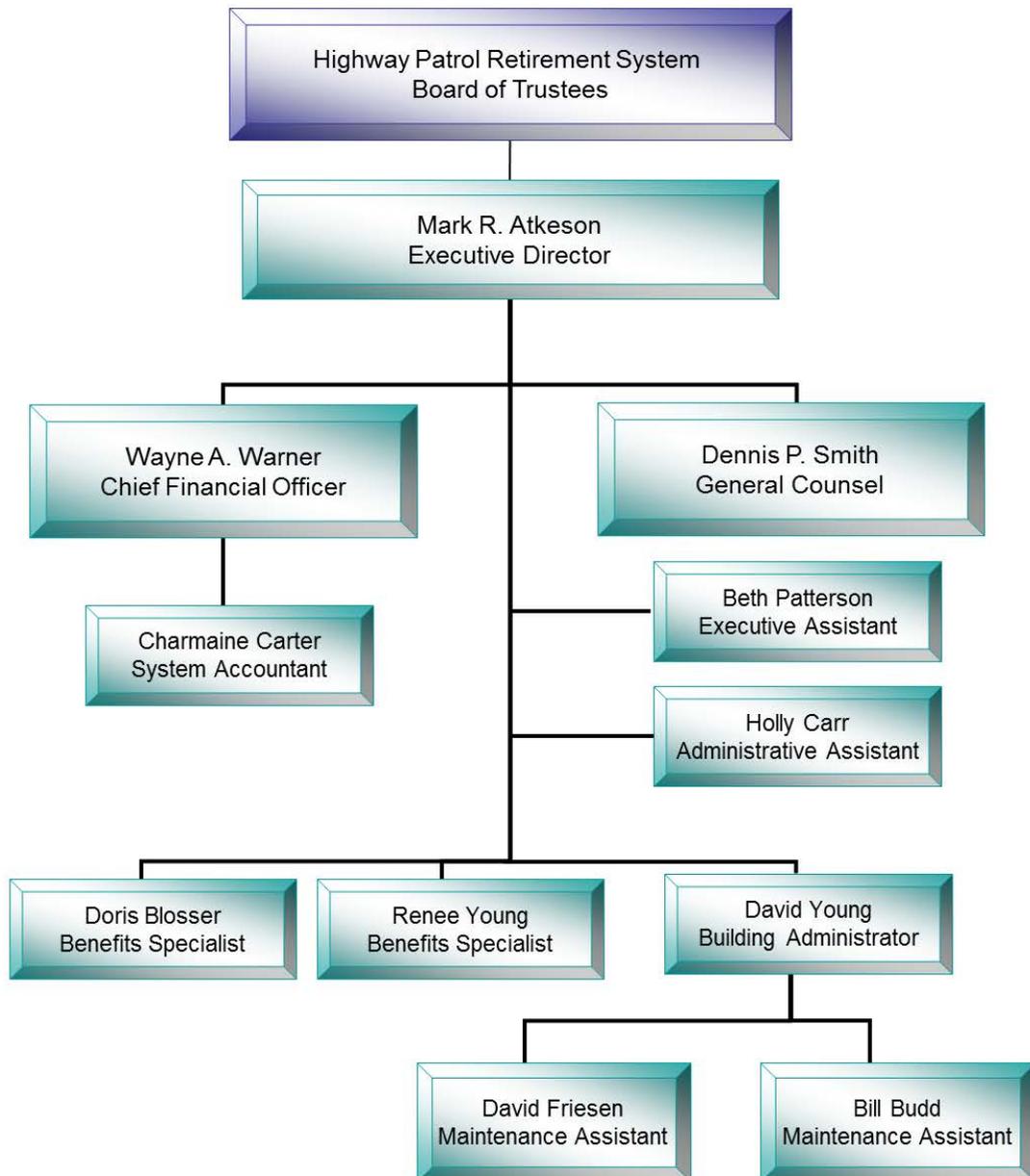


Capt. (ret.) Wayne A. Warner
CFO / CIO



Dennis P. Smith
General Counsel

Highway Patrol Retirement System Organizational Chart



See page 9 for a list of consultants and investment managers.

Introductory Section

Consultants and Investment Managers

Consultants

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

Actuary
Gabriel, Roeder, Smith, & Co.
Southfield, Michigan

Investment Consultant
Hartland & Co.
Cleveland, Ohio

Investment Managers

Ancora Advisors Beachwood, Ohio <i>Micro Cap Equity</i>	Johnson Institutional Management Cincinnati, Ohio <i>Core/Short-Term Fixed Income</i>	Protégé Partners New York, New York <i>Fund of Hedge Funds</i>
Credit Suisse Alternative Investments New York, New York <i>Private Equity</i>	J.P. Morgan Asset Management New York, New York <i>Intermediate-Term Fixed Income</i>	Pyramis Global Advisors Springfield, Rhode Island <i>Real Estate</i>
DePrince, Race & Zollo Winter Park, Florida <i>Large Cap Value Equity</i>	Kayne Anderson Capital Advisors Los Angeles, California <i>Energy/Mezzanine & Private Equity</i>	Sankaty Advisors Boston, Massachusetts <i>Distressed Debt</i>
Dimensional Fund Advisors Austin, Texas <i>Small Cap Blend Equity & International Equity</i>	Legg Mason Baltimore, Maryland <i>High Yield Fixed Income</i>	Seix Investment Advisors Upper Saddle River, New Jersey <i>Distressed Debt</i>
Driehaus Capital Management Chicago, Illinois <i>International Small Cap Growth Equity</i>	LSV Asset Management Chicago, Illinois <i>Large Cap Value Equity</i>	T. Rowe Price Baltimore, Maryland <i>Large Cap Blend Indexed</i>
Evanston Capital Management Evanston, Illinois <i>Fund of Hedge Funds</i>	Manning & Napier Fund Dublin, Ohio <i>International Equity</i>	The Vanguard Group Wayne, Pennsylvania <i>Money Market</i>
Feingold O’Keeffe Capital Boston, Massachusetts <i>Distressed Debt</i>	Oaktree Capital Management New York, New York <i>Real Estate & Private Equity</i>	Wellington Management Co. Boston, Massachusetts <i>Fixed Income & Large Cap Growth Equity</i>
Forest Investment Associates Atlanta, Georgia <i>Timber</i>	OFI Trust Company New York, New York <i>Emerging Markets</i>	Westfield Capital Management Boston, Massachusetts <i>Small/Mid Cap Growth Equity</i>
Henderson Global Investors Hartford, CT <i>Real Estate</i>	Pantheon Ventures San Francisco, California <i>Private Equity</i>	William Blair & Company Chicago, Illinois <i>International Equity</i>
James Investment Research Alpha, Ohio <i>Micro Cap Equity</i>	Pinnacle Asset Management New York, New York <i>Fund of Hedge Funds</i>	World Asset Management Birmingham, Michigan <i>International Equity</i>

See the Investment Section, pages 54-55 for payments to investment managers and brokers.

Introductory Section

Legislative Summary

In the fall of 2009, the Ohio Legislature directed each of the five public pension systems to develop and submit a fiscal solvency plan that would bring each system into compliance with the ORC 30-year amortization requirement, and provide long-term stability of the health care funds. All of the systems submitted their recommendations at that time. In February 2012, the Ohio Senate moved pension reform to the forefront. Between the fall of 2009 and February 2012, positive and negative events impacted each plan, necessitating that each system's board modify its original plans. The changes in HPRS's plan were formalized in SB 345.

Late in 2011, the Ohio Retirement Study Council (ORSC), a committee comprised of senators and representatives of the Ohio Legislature, and appointees of the governor, committed over \$250,000 of the pension funds' assets to conduct a comprehensive report and actuarial assessment of each fund. The goal was to validate the financial standing of each fund and to evaluate the actuarial assumptions the funds use to make fiscal decisions. The consultant hired by the ORSC submitted his final report in July 2012, and that report validated the actions of the HPRS Board of Trustees which were reflected in Substitute SB 345.

On September, 12, 2012, Substitute SB 345 unanimously passed the Ohio House and Senate. Governor Kasich signed the bill on September 26, 2012. The main components of this bill were:

1. The percentage of active member contribution, which will range between 10% - 14%, will be determined by the Board as deemed necessary to comply with the actuarial valuation requirements of ORC 5505.121. (Effective date June 24, 2013)
2. The annual cost of living adjustment (COLA) applied to eligible retirees, which will range between 0% - 3%, will be determined by the Board as deemed necessary to comply with the actuarial valuation requirements of ORC 5505.121. (Effective date January 7, 2013)
3. Increase Final Average Salary (FAS) calculation period from 3 to 5 years for members retiring after 2014. (Effective date January 1, 2015)
4. Increase COLA eligibility age from 53 to 60. (Effective date January 7, 2013)

This legislation will ensure the solvency of our system, bring us into compliance with the 30-year amortization requirement, and provide long-term stability of our health care fund. Granting the Board the authority to set employee contribution rates and COLA gives our system more flexibility in dealing with future market uncertainty.

In 2012, the United States Congress took no meaningful action to improve the financial solvency of the Social Security System, Medicare, and Medicaid. The majority of HPRS retirees qualify for Social Security benefits due to employment outside of the Highway Patrol, and qualify for Medicare Part A or B, or both. If these federal retirement/health care programs collapse or suffer significant cutbacks, additional pressure will be placed on HPRS benefits. The Patient Protection and Affordable Care Act (PPACA) was upheld by the United States Supreme Court which will have an impact on the HPRS health care funding. The extent of the impact is unclear at this time.



June 10, 2013

Letter of Transmittal

Members of the Board of Trustees:

We are pleased to present to you the *Comprehensive Annual Financial Report* for the Highway Patrol Retirement System (HPRS) for the period ending December 31, 2012. This report is intended to provide financial, investment, actuarial, and statistical information in a single publication. Working with each HPRS staff member and the various consultants employed by the HPRS, HPRS management takes full responsibility for the accuracy and completeness of this report. The data presented in this report demonstrates the careful stewardship of the system's assets to enable the Board to provide excellent pension and health care benefits to our members.

The HPRS was created by the Ohio Legislature in 1941 to provide pension benefits to the sworn officers and communications personnel of the Ohio State Highway Patrol (OSHP). Prior to this action of the Legislature, active duty members of the Patrol contributed to the Ohio Public Employees Retirement System. In 1974, the Legislature authorized the HPRS to offer health care benefits to retired members, if excess funds are available. Currently, only sworn officers, cadets in training to become sworn officers, and communication personnel hired prior to November 2, 1989, are permitted to be contributing members of the HPRS.

In addition to pension benefits, the HPRS provides disability benefits to active duty members, disabled both in-the-line-of and off duty. Survivor and death benefits and health care coverage is provided for benefit recipients and eligible dependents. A full description of benefits provided by the HPRS can be found in the *Summary of Plan Provisions* portion of the *Actuarial Section*.

Major Plan Initiatives and Changes in 2012

The most significant change in 2012 centered on pension reform legislation. As reported in the *Legislative Summary* section, Substitute SB 345 unanimously passed the Ohio House and Senate on September 12, 2013, and Governor Kasich signed the bill on September 26, 2012. This legislation will ensure the solvency of our system, bring us into compliance with the ORC 30-year amortization requirement, and provide long-term stability of our health care fund. Granting the Board the authority to set employee contribution rates and COLA gives our system more flexibility in dealing with future market uncertainty.

Both houses of the Legislature and the governor were committed to passing this needed legislation. The components of Substitute SB 345 were further substantiated by Pension Trustee Advisors, Inc. (PTA), the consultant hired by the ORSC. PTA's goal was to validate the

financial standing of each fund and to evaluate the actuarial assumptions the funds use to make fiscal decisions. PTA's report was presented to the ORSC in July 2012.

To obtain buy-in and support of our legislation, we concentrated on information dissemination to our membership, both active and retired. This was achieved through numerous district meetings, retiree gatherings, union meetings, emails, phone calls, virtual roll call training, web postings and newsletters.

As reported in the 2011 annual report, HPRS subjected itself to a comprehensive fiduciary audit which is a best practice and was required by the ORSC. This audit, conducted by HEK, evaluated the policies and procedures of the retirement system in detail. HEK provided a number of recommendations for the HPRS Board to consider. In response, the Board hired Colonel (ret.) Thomas Rice to assist it in considering the recommendations and developing and implementing strategies. Throughout 2012, Colonel Rice facilitated responses and actions to each of the 75 recommendations, and his final report was presented to the Board on October 25, 2012, and submitted to the ORSC the next day.

The HEK report concluded that no breach of fiduciary responsibility had occurred or appeared imminent; however, it did find room for enhancement as detailed in the recommendations.

Based on action taken by the HPRS Board to resolve the recommendations, numerous best practices have been established:

- Management structure reviews have been completed on all asset classes.
- A risk budgeting methodology has been implemented.
- Policy and procedure are now in place for an annual evaluation of the investment consultant.
- A total fund policy benchmark that is a passive reflection of the target allocations of the fund as they have changed over time is now in place.
- The merits and risks of directly held real estate in the portfolio have been thoroughly examined and new building management policies, procedures and practices are in place.
- A five year strategic plan has been developed.
- A new Board Governance Manual has been developed.
- For the first time, the board will annually conduct board self-evaluations.

All of these important changes are the result of countless hours of research, analysis and deliberation by the Board and HPRS staff. Action by the Board to resolve the recommendations in the best interest of HPRS is evidence of its commitment to its fiduciary responsibility.

Hartland & Co. staff must be acknowledged for their excellent and untiring work in assisting the Investment Committee and the Board in resolving the thirty investment recommendations. Colonel Rice is also acknowledged for his commitment and diligence in overseeing, coordinating and completing this demanding endeavor.

Starting on February 8, 2012, and ending on July 11, 2012, over two hundred active and retired members of the HPRS participated in five strategic planning meetings conducted at the OSHP Academy. In addition to the HPRS members who attended each of the five hour planning sessions, the meetings were broadcast live over the Patrol's PolyCom closed circuit television

network to district headquarters and other Department of Public Safety network locations. For the first time in HPRS's history, the pension system now has a five-year strategic plan, developed by system members; the plan sets forth the Mission, Vision, Values, Goals, Objectives and Performance Measures to address future fiscal and health care challenges in an ever-changing economic environment.

Mission Statement: Provide stable pension services that are fiscally responsible, prudently administered, and delivered with understanding and responsiveness to all members and beneficiaries.

Vision Statement: Maintain a financially sound pension system that is a leader in the oversight of our investments and liabilities, providing for the long term financial wellbeing of our retirement system.

In early 2012, the Summit County Internal Audit Department was retained to perform internal auditing services, specifically the development of a risk assessment model and work plan for auditing services. After the work plan was developed, Summit County conducted internal auditing services in the functional areas of property management, accounting, and information technology. Although several recommendations for improvement were given, no material weaknesses were identified. The recommendations were discussed and changes or improvements were made, most being put into place prior to the completion of the audit.

Finally, Mark Atkeson began as executive director on January 2, 2012, Wayne Warner was hired as the CFO (and later became certified as CIO) on January 29, 2012, and Dennis Smith was hired as the system's first general in-house counsel on September 4, 2012. This was a time of great transition complicated by the loss of much institutional knowledge. The professionalism, commitment, and hard work of the staff coupled with the support of the Board made this transition manageable.

Investments

The primary objective of the State Highway Patrol Retirement System is to provide eligible members and beneficiaries with scheduled pension benefits. It is very important that the Board develop and implement an investment strategy that provides the funds necessary to maintain the security and safety of the plan. With benefit recipients living longer, health care costs rising at a rate of many times the actual rate of inflation and financial downturns, such as the recession of 2008, the investment strategy must be monitored and adjusted constantly.

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 HPRS'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. Diversification of assets will ensure that adverse or unexpected results from a security class will not have a detrimental impact on the entire portfolio.

As stated earlier, HPRS responded to the HEK audit to which many of the recommendations were investment related. The Board's commitment to fiduciary best practices was exemplified through this process. Also, through a major initiative, the Board evaluated every investment and every asset class in great detail over the course of 2012. This in-depth analysis included

evaluation of performance, management teams, style, risk controls, fees, liquidity, position size, active/passive exposure, and overall portfolio fit. Adjustments were made throughout the portfolio, and the Board is confident with the investment program.

The U.S. economy continued to grow in 2012, as real GDP growth increased to 2.2% for year, up from 1.8% in 2011. HPRS's assets (or position) increased 11.9% finishing the year with a net position of \$717, 867,679.

A more detailed report on investment operations and performance can be found in the *Management's Discussion and Analysis* section, beginning on page 20, and the *Investment Section*, beginning on page 48.

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. In 2012, the Summit County Internal Audit Department was retained to perform internal auditing services, specifically the development of a risk assessment model and work plan for auditing services. After the work plan was developed, Summit County conducted internal auditing services in the functional areas of property management, accounting, and information technology. Although several recommendations for improvement were given, no material weaknesses were identified. Additional functional areas will be audited in 2013.

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. For the past many years the external auditors appointed by the Auditor of State have noted in their reports that the internal controls of the HPRS parallel best practices of public pension plans and are in full compliance with nationally accepted accounting standards.

Funding

The funding of pension and health care benefits of the HPRS comes from a combination of employer and employee contributions, and investment returns. Ohio law requires public pension plans be able to amortize pension obligations within a 30-year period. A national standard of funding status is benchmarked at 80%. At the close of 2009, the HPRS was not able to amortize pension liabilities in 30 years or less. The funding status percentage dropped from 80.9% at the end of 2007 to 62.0% at the end of 2010. The amortization period still exceeds the 30-year limit, and the funding status was 59.5% for the period ending December 31, 2011.

With the passage and implementation of Substitute SB 345 and the favorable returns of 2012, HPRS's funding status will be greatly improved. According to our actuary, once provisions of Substitute SB 345 are enacted, HPRS will immediately come into compliance with the 30-year amortization period, which will allow the Board to strengthen the health care fund.

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, 2011. 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 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.

Professional Services

To aid in efficient and effective management, professional services are provided to the HPRS by consultants appointed by the Board. Gabriel, Roeder, Smith & Company (GRS) 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 (KCR), Certified Public Accountants of Columbus, Ohio, audited the financial records of the system. The Summit County Internal Audit Department of Akron, Ohio, was retained to perform internal auditing services.

Acknowledgements

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, HPRS will notify interested parties of its availability, including all State Highway Patrol facilities, professional consultants, investment managers, ranking members of the appropriate Ohio House and Senate committees, and the ORSC.

Submitted for your review,



Mark R. Atkeson
Executive Director



Wayne A. Warner
Chief Financial Officer

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Financial Section

INDEPENDENT AUDITOR'S REPORT

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

To the Board of Trustees:

Report on the Financial Statements

We have audited the accompanying basic financial statements of Ohio State Highway Patrol Retirement System (the HPRS), a component unit of the State of Ohio, as of and for the year ended December 31, 2012, and the related notes to the financial statements, which collectively comprise the HPRS' basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for preparing and fairly presenting these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes designing, implementing, and maintaining internal control relevant to preparing and fairly presenting financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to opine on these financial statements based on our audit. We audited in accordance with auditing standards generally accepted in the United States of America and the financial audit standards in the Comptroller General of the United States' *Government Auditing Standards*. Those standards require us to plan and perform the audit to reasonably assure the financial statements are free from material misstatement.

An audit requires obtaining evidence about financial statement amounts and disclosures. The procedures selected depend on our judgment, including assessing the risks of material financial statement misstatement, whether due to fraud or error. In assessing those risks, we consider internal control relevant to the HPRS' preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not to the extent needed to opine on the effectiveness of the HPRS' internal control. Accordingly, we express no opinion. An audit also includes evaluating the appropriateness of management's accounting policies and the reasonableness of their significant accounting estimates, as well as our evaluation of the overall financial statement presentation.

We believe the audit evidence we obtained is sufficient and appropriate to support our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the plan net position of the Ohio State Highway Patrol Retirement System, as of December 31, 2012, and the respective changes in plan net position for the year then ended in accordance with the accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require this presentation to include *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 applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, consisting of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, to the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not opine or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to opine or provide any other assurance.

Supplementary and Other Information

Our audit was conducted to opine on the HPRS' basic financial statements taken as a whole. The introductory section, supplementary information, investment section, actuarial section, and statistical section, as listed in the table of contents, present 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. We subjected these schedules 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, and other additional procedures 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, actuarial section, and statistical section information 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.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated June 10, 2013, 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. That report describes the scope of our internal control testing over financial reporting and compliance, and the results of that testing, and does not opine on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the HPRS' internal control over financial reporting and compliance.



Kennedy Cottrell Richards LLC
June 10, 2013

Financial Highlights

- At December 31, 2012, the assets of HPRS exceeded liabilities by \$717,867,678. All of the 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 2012, HPRS's total net position increased by \$38,463,192 or 5.7%.
- HPRS's funding objective is to meet long-term benefit obligations through contributions and investment income. At December 31, 2011, the date of the most recent actuarial valuation, HPRS assets equaled 59.5% of the present value of pension obligations.
- Additions to plan net position for the year were \$110,618,504, which includes member and employer contributions of \$34,201,720 and investment gains of \$73,702,001.
- Deductions from plan net position increased 1.1% over the prior year. Of this amount, pension benefits increased by 4.8%, health care expenses decreased by 0.5% and administrative expenses decreased by 10.0%.

Overview of the Financial Statements

The financial statements consist of the following components:

1. Combining Statement of Plan Net Position
2. Combining Statement of Changes in Plan Net Position
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 Position 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 Position provides a summary of current year additions and deductions to the plan. At December 31, 2011, the date of the latest actuarial valuation, the current funding ratio was 59.5%. This means that HPRS had approximately \$0.60 available for each \$1.00 of projected pension liabilities.

The Combining Statement of Plan Net Position and the Combining Statement of Changes in Plan Net Position 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.

The difference between HPRS assets and liabilities is reported on these statements as the Net Position Held in Trust for Pension and Post-Employment Health Care Benefits. Over time, increases and decreases in HPRS's net position are one indicator of whether the fund's financial

Financial Section

Management's Discussion and Analysis

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 24-25 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 26-39 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 40-41 of this report).

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

HPRS Activities

Additions to Plan Net Position

Employer and member contributions, as well as income from investments, provide reserves needed to finance retirement benefits and health care. In 2012, total contributions and positive investment returns resulted in additions of \$110.6 million. Employer contributions increased by 3.5% and member contributions increased by 4.9%, primarily due to the increase in the number of active members.

Additions to Plan Net Position

(in thousands)

	<u>2012</u>	<u>2011</u>	<u>\$ Change</u>	<u>% Change</u>
Net appreciation in fair value of investments	\$63,662	(\$25,843)	\$89,505	(346.3)
Interest and dividend income	14,363	11,543	2,820	24.4
Real estate operating income, net	81	153	(72)	(47.1)
Investment expenses	(4,404)	(4,991)	587	(11.8)
Security lending activity, net	-	-	-	-
Employer contributions	25,446	24,589	857	3.5
Member contributions	8,756	8,349	407	4.9
Transfers from other Ohio systems	557	608	(51)	(8.4)
Health care premiums	1,284	1,274	10	0.8
Retiree Drug Subsidy	500	423	77	18.2
Prescription Drug Rebates	356	366	(10)	(2.7)
Medicare D Refunds	17	7	10	142.9
Total additions	<u>\$110,618</u>	<u>\$16,478</u>	<u>\$94,140</u>	571.3

The *Investment Section* of this report summarizes the result of investment activity for the year ending December 31, 2012.

Financial Section

Management's Discussion and Analysis

Deductions from Plan Net Position

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 2012, total deductions from the plan net position increased 1.1%, but health care expenses decreased by 0.5%, and administrative expenses decreased by 10.0%. Refunds of member contributions decreased by 60.2% and transfers of contributions to other Ohio retirement systems decreased by 79.0%.

Deductions from Plan Net Position

(in thousands)

	2012	2011	\$ Change	% Change
Pension benefits	\$58,297	\$55,638	\$2,659	4.8
Refunds of member contributions	180	452	(272)	(60.2)
Health care	12,303	12,361	(58)	(0.5)
Administrative expenses	997	1,108	(111)	(10.0)
Transfers to other Ohio systems	378	1,798	(1,420)	(79.0)
Total deductions	<u>\$72,155</u>	<u>\$71,357</u>	<u>\$798</u>	1.1

Changes in Net Position

In 2012, the Net Position Held in Trust for Pension and Post-Employment Health Care Benefits increased by \$38,463,192, or 5.7%. Investment income attributable to the increase in fair values of investments equaled \$63,662,449. All of the assets are available to meet HPRS's ongoing obligations to plan participants and their beneficiaries.

Changes in Net Position

(in thousands)

	2012	2011
Beginning balance	\$679,404	\$734,283
Ending balance	717,868	679,404
Total change	<u>\$38,464</u>	<u>(\$54,879)</u>
% change	<u>5.7%</u>	<u>(7.5%)</u>

Capital Assets

As of December 31, 2012, HPRS's investment in capital assets totaled \$17,504 (net of accumulated depreciation), an increase of \$1,718 or 10.9% from December 31, 2011. 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 2012, total assets increased by \$40,517,260, or 5.8%. The change in total assets was largely attributable to increases in the fair value of investments.

Assets (in thousands)				
	<u>2012</u>	<u>2011</u>	<u>\$ Change</u>	<u>% Change</u>
Cash and short term investments	\$12,423	\$10,641	\$1,782	16.7
Receivables	2,936	2,076	860	41.4
Investments, at fair value	726,662	688,789	37,873	5.5
Prepaid assets	52	51	1	2.0
Other assets	17	16	1	6.3
Total assets	<u>\$742,090</u>	<u>\$701,573</u>	<u>\$40,517</u>	5.8

Total Liabilities

Total liabilities increased by \$2,054,068, or 9.3%, primarily due to an increase in DROP contributions.

Liabilities (in thousands)				
	<u>2012</u>	<u>2011</u>	<u>\$ Change</u>	<u>% Change</u>
Current liabilities	\$2,022	\$2,315	(\$293)	(12.7)
Long-term liabilities	22,201	19,854	2,347	11.8
Total liabilities	<u>\$24,223</u>	<u>\$22,169</u>	<u>\$2,054</u>	9.3

Summary

The investment gains experienced by the HPRS during 2012 were the result of a strong and successful investment program, risk management, and strategic planning. HPRS management and HPRS's actuary agree that, in absence of future actuarial gains, HPRS will require an increase in contributions and/or benefit changes to the pension program to meet its obligations to plan participants and beneficiaries.

In Substitute Senate Bill 345 signed by Governor Kasich on September 26, 2012, the HPRS Board was granted authority to adjust employee contributions and COLA in order to meet funding requirements set forth in the Ohio Revised Code.

Requests for Information

This financial report is designed to provide retirees, members, trustees, investment managers, and the public 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 can be requested from:

Wayne A. Warner, Chief Financial Officer, State Highway Patrol Retirement System,
6161 Busch Boulevard, Suite 119, Columbus, OH 43229-2553.
P: 614-430-3558; E: wwarner@ohprs.org

Financial Section

Combining Statement of Plan Net Position

Year ending December 31, 2012

	Pension	Post-Employment Health Care	Total
Assets			
Cash and short-term investments	\$ 10,704,598	\$ 1,718,053	\$ 12,422,651
Receivables			
Employer contributions receivable	1,016,315	71,817	1,088,132
Member contributions receivable	676,271	-	676,271
Accrued investment income	1,009,438	162,012	1,171,450
Total receivables	2,702,024	233,829	2,935,853
Investments, at fair value			
Domestic equity	237,249,843	36,355,916	273,605,759
International equity	105,425,108	16,053,383	121,478,491
Fixed income	140,709,673	21,426,264	162,135,937
Real estate	26,826,308	4,084,919	30,911,227
Private equity	65,489,604	9,972,289	75,461,893
Hedge funds	54,734,379	8,334,560	63,068,939
Total investments	630,434,915	96,227,331	726,662,246
Prepaid expenses	45,008	7,224	52,232
Property and equipment, net	15,083	2,421	17,504
Total other assets	60,091	9,645	69,736
Total assets	643,901,628	98,188,858	742,090,486
Liabilities			
Accounts payable	425,355	68,268	493,623
Accrued payroll liabilities	109,995	17,654	127,649
Accrued pension liabilities	22,852,065	-	22,852,065
Accrued health care liabilities	-	667,327	667,327
Other liabilities	70,783	11,361	82,144
Total liabilities	23,458,198	764,610	24,222,808
Net position held in trust for pension and post-employment health care benefits			
	\$ 620,443,430	\$ 97,424,248	\$ 717,867,678

See the accompanying Notes to the Financial Statements, pages 26-39.

Combining Statement of Changes in Plan Net Position

Year ending December 31, 2012

	Pension	Post-Employment Health Care	Total
Additions			
Contributions			
Employer	\$ 23,766,361	\$ 1,679,422	\$ 25,445,783
Member	8,755,937	-	8,755,937
Transfers from other systems	557,316	-	557,316
Other income			
Health care premiums	-	1,283,866	1,283,866
Retiree drug subsidy	-	500,134	500,134
Prescription drug rebates	-	356,377	356,377
Medicare D refunds	-	17,090	17,090
Total contributions	33,079,614	3,836,889	36,916,503
Investment activity			
Net appreciation in fair value			
of investments	54,857,935	8,804,514	63,662,449
Interest and dividend income	12,376,768	1,986,430	14,363,198
Real estate operating income, net	69,388	11,136	80,524
	67,304,091	10,802,080	78,106,171
Less: investment expenses	(3,795,073)	(609,097)	(4,404,170)
Net income from investment activity	63,509,018	10,192,983	73,702,001
Total additions	96,588,632	14,029,872	110,618,504
Deductions			
Pension benefits	58,297,304	-	58,297,304
Refunds of member contributions	179,614	-	179,614
Health care expenses	-	12,302,980	12,302,980
Administrative expenses	859,477	137,943	997,420
Transfers to other systems	377,994	-	377,994
Total deductions	59,714,389	12,440,923	72,155,312
Change in plan net position	36,874,243	1,588,949	38,463,192
Net position held in trust for pension and post-employment health care benefits			
Balance, December 31, 2011	583,569,187	95,835,299	679,404,486
Balance, December 31, 2012	\$620,443,430	\$97,424,248	\$ 717,867,678

See the accompanying Notes to the Financial Statements, pages 26-39.

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 governmental generally accepted accounting principles 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 (Governmental Accounting Standards Board) 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.

Basis of 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 appraisals.

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 GAAP, 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 Position.

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 \$12,302,980 for 2012 are shown on the accompanying Combining Statement of Changes in Plan Net Position.

Contributions and Benefits

Based on statutory 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.

Changes in Accounting Principles

In 2012, HPRS implemented the following:

GASB issued Statement No. 60, *Accounting and Financial Reporting for Service Concession Arrangements*. This statement is effective for reporting periods after December 11, 2011. Statement 60 addresses how to account for and report service concession arrangements (SCAs), a type of public-private or public-public partnership that state and local governments are increasingly entering into.

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

reporting periods after June 15, 2012. The purpose of this statement is to improve financial reporting for a governmental financial reporting entity.

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.

GASB issued Statement No. 63, *Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position*. This statement is effective for periods after December 15, 2011. The purpose of this statement is to amend the net asset reporting requirements in Statement No. 34, *Basic Financial Statements—and Management's Discussion and Analysis—for State and Local Governments*, and other pronouncements by incorporating deferred outflows of resources and deferred inflows of resources into the definitions of the required components of the residual measure and by renaming that measure as net position, rather than net assets.

GASB issued Statement No. 64, *Derivative Instruments: Application of Hedge Accounting Termination Provisions—an amendment of GASB Statement No. 53*, which clarifies whether an effective hedging relationship continues after the replacement of a swap counterparty or a swap counterparty's credit support provider. This statement sets forth criteria that establish when the effective hedging relationship continues and hedge accounting should continue to be applied. This statement is effective for reporting periods after June 15, 2011.

GASB issued Statement No. 65, *Items Previously Reported as Assets and Liabilities*. This statement is effective for periods after December 15, 2012, with earlier application encouraged. This statement clarifies the appropriate reporting of deferred outflows of resources and deferred inflows of resources to ensure consistency in financial reporting.

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

Note 2 Plan Description

Organization

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, chief investment officer, actuary, investment consultant, medical advisor, and internal 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 the end of 2011 and 2012:

Membership Data		
Year ending December 31		
	<u>2012</u>	<u>2011</u>
Pension & OPEB Benefits		
Retirees & other benefit recipients	1,497	1,465
Terminated members not yet receiving benefits	14	14
Active members		
15 or more years of service	679	634
Less than 15 years of service	966	886

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. Retirement with reduced benefits is available upon reaching age 48 with 20 years of service credit. Retirement with full 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, 2012, HPRS had a DROP liability of \$22,200,917 to 129 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 were established by the Ohio General Assembly, and any change in the rates requires legislative action. Legislative action occurred in 2012 to be effective in 2013. The HPRS Board will have the authority to adjust employee contributions in the future. 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 2012, the member contribution rate was 10.0% of payroll and the employer contribution rate was 26.5%.

Based on the December 31, 2011, actuarial valuation, the Board allocated the employer contribution rate to pension benefits effective January 1, 2012, and OPEB as follows (this was the same allocation that was set in 2011):

Pension	OPEB	Total
24.75%	1.75%	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. As stated earlier, plan design changes were legislatively approved by the Ohio General Assembly in 2012. These changes will positively affect 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, 2011, is as follows:

Pension Funded Status	
December 31, 2011	
Actuarially Accrued Liability	\$1,047,699,686
Valuation Assets	623,360,121
Unfunded Actuarially Accrued Liability	<u>\$424,339,565</u>
Assets as a % of AAL	59.5%
Active Member Payroll	\$93,126,449
UAAL as a % of Active Member Payroll	455.7%

The Schedules of Funding Progress: Pension funded status presents multi-year trend information about whether the actuarial values of plan assets are increasing or decreasing relative to the actuarial accrued liability for benefits over time. These schedules are presented in the *Required Supplementary Schedules* section.

OPEB (other post employment benefit)

The funded status of the OPEB plan at the most recent actuarial valuation, December 31, 2011, is as follows:

OPEB Funded Status	
December 31, 2011	
Actuarially Accrued Liability	\$424,143,941
Valuation Assets	99,001,756
Unfunded Actuarially Accrued Liability	<u>\$325,142,185</u>
Assets as a % of AAL	23.3%
Active Member Payroll	\$93,126,449
UAAL as a % of Active Member Payroll	349.1%

OPEB Funding Status presents multi-year trend information about whether the actuarial values of plan assets are increasing or decreasing relative to the actuarial accrued liability for benefits over time. These schedules are presented in the *Required Supplementary Schedules* section.

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 another 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 actuarially determined amounts for the OPEB plan are subject to continual revision as results are compared to past expectations and new estimates are made about the future. The actuarial calculations of the OPEB plan reflect a long-term perspective.

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 5.0% 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 RP-2000 Combined Healthy Male and Female Tables projected to 2020 using Projection Scale AA,
- 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 5 years,
- 50% of disability retirements is assumed to be duty-related and 50% is assumed to be non-duty-related,
- health care inflation of 4.0%, compounded annually, plus an additional declining percentage ranging from 5.0% - 0.5% through 2019,
- OPEB recipients are eligible for Medicare at age 65 or at the time of a social security 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 Net Position

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.

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, 2012, the plan net position was allocated to the various funds as follows:

Net Position	
December 31, 2012	
Employees’ Savings Fund	\$113,552,646
Employer’s Accumulation Fund	182,628,754
Pension Reserve fund	386,250,566
Survivors’ Benefit Fund	35,435,712
Income Fund	-
Expense Fund	-
Total	\$717,867,678

Note 4 Property and Equipment

The following is a summary of equipment, at cost, less accumulated depreciation, at December 31, 2012:

Capital Assets	
December 31, 2012	
Cost, 12/31/2011	\$134,809
(+) Additions	6,466
(-) Retirements	(5,051)
Cost, 12/31/2012	\$136,224
Accumulated depreciation, 12/31/2011	\$119,023
(+) Additions	4,748
(-) Retirements	(5,051)
Accumulated depreciation, 12/31/2012	\$118,720
Book value, 12/31/2012	\$17,504

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.”

Total Investments at Fair Value	
December 31, 2012	
Domestic equity	\$273,605,759
International equity	121,478,491
Fixed income	162,135,937
Real estate	30,911,227
Private equity	75,461,893
Hedge funds	63,068,939
Total investments	\$726,662,246

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, 2012, the carrying value of all deposits was \$12,422,651 (including money market funds of \$6,111,011), as compared to bank balances of \$4,349,281. 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:

S&P Quality Ratings	
December 31, 2012	
AAA	\$16,534,025
AA	54,778,668
A	29,471,320
BBB	22,490,238
BB	4,172,361
B	9,401,923
CCC	6,378,557
Unrated	18,908,845
Total Investments	<u>\$162,135,937</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 foreign currency risk derives from its positions in foreign currency-denominated investments. These are stated in U.S. dollars, below:

Exposure to Foreign Currency Risk in U.S. Dollars	
December 31, 2012	
Currency	Real Estate
Euro Currency	\$2,816,647
Total held in foreign currencies	\$2,816,647

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.

Investment Maturities	
December 31, 2012	
Less than 1 year	\$15,044,021
1 - 5 years	76,297,293
Greater than 5, up to 10 years	43,331,663
Greater than 10 years	27,462,960
Total	\$162,135,937

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.

Note 6 Derivatives

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, 2012, 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, OPERS invests employer contributions to provide a formula retirement benefit similar in nature to, but less than, 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 2012, member and employer contribution rates were consistent across all three plans. While members in the state and local divisions may participate in all three plans, law enforcement and public safety divisions exist only within the Traditional Pension Plan. The 2012 member contribution rates were 10.00% of covered payroll for members in state and local classifications. Public safety and law enforcement members contributed 11.50% and 12.10%, respectively. Effective January 1, 2013, the member contribution rates for public safety and law enforcement members increased to 12.00% and 12.60% respectively. The 2012 employer

contribution rate was 14.0% of covered payroll. The law enforcement and public safety division employer contribution rate was 18.10% of covered payroll.

HPRS employer contributions to OPERS for the years ending December 31, 2012, 2011, and 2010, were \$83,482, \$75,680, and \$83,141, 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 visiting <https://www.opers.org/investments/cafr.shtml>, by writing to 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 requiring public employers to fund post-employment health care coverage through their contributions to OPERS. A portion of each employer’s contribution to OPERS is set aside for the funding of post retirement health care coverage.

Employer contribution rates are expressed as a percentage of the covered payroll of active members. In 2012, state and local employers contributed at a rate of 14.0% of covered payroll and public safety and law enforcement employers contributed at 18.10%. These are the maximum employer contribution rates permitted by the Ohio Revised Code. Active members do not make contributions to the OPEB Plan.

OPERS’ 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 for members in the Traditional Plan was 4.0% during calendar year 2012. The portion of employer contributions allocated to health care for members in the Combined Plan was 6.05% during calendar year 2012. Effective January 1, 2013, the portion of employer contributions allocated to healthcare was lowered to 1 percent for both plans, as recommended by the OPERS Actuary. The OPERS Board of Trustees is also authorized to establish rules for the retiree or their surviving beneficiaries to pay a portion of the health care benefits provided. 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, 2012, were \$23,852, which were equal to the required contributions for the year, and included in the employer contribution amount listed earlier in this Note.

Health Care Plan

Changes to the health care plan were adopted by the OPERS Board of Trustees on September 19, 2012, with a transition plan commencing January 1, 2014. With the recent passage of pension legislation under SB 343 and the approved health care changes, OPERS expects to be able to consistently allocate 4 percent of the employer contributions toward the health care fund after the end of the transition period.

Note 8 Risk Management

HPRS purchases insurance coverage for general liability, property damage, and 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, 2007 - 2012

Year	Actuarial Annual Required Contributions	Contributions	% Contributed
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
2011	26,956,449	22,966,338	85.20
2012	30,488,160	23,766,361	77.95

Schedule of Employer Contributions and Other Contributing Entities - OPEB

Years ending December 31, 2009 - 2012

Year	Actuarial Annual Required Contributions	% Contributed by Employer	Federal Subsidy	Total % Contributed
2009	\$19,378,984	22.09	\$513,668	24.74
2010	16,365,476	19.72	471,909	22.61
2011	18,600,414	8.73	422,640	11.00
2012	23,992,021	7.00	500,134	9.08

Schedule of Funding Progress - Pension

Years ending December 31, 2006-2011

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 ▲	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
2010	1,017,770,449	630,971,500	386,798,949	62.0	94,767,852	408.2
2011	1,047,699,686	623,360,121	424,339,565	59.5	93,126,449	455.7

Schedule of Funding Progress - OPEB

Years ending December 31, 2008-2011

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
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
2010	406,864,423	104,738,337	302,126,086	25.7	94,767,852	318.8
2011	424,143,941	99,001,756	325,142,185	23.3	93,126,449	349.1

▲ Plan amendment

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, 2011
Actuarial Cost Method	Entry Age
Amortization Method	Level Percent Open
Remaining Amortization Period	30 years for retiree health benefits and pension benefits in determining the Annual Required Contribution
Asset Valuation Method	4 year smoothed market, 20% corridor
<u>Actuarial Assumptions</u>	
Investment Rate of Return	8.0% for pension, 5.0% 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.

Schedule of Administrative Expenses	
Year ending December 31, 2012	
Personnel	\$ 465,944
Professional and technical services	
Computer services	69,177
Actuary	58,500
Education	5,045
Medical consulting	3,750
Audit	50,829
Legal	61,049
Miscellaneous services	87,988
Medical services	8,017
Total professional and technical services	<u>344,355</u>
Communications	
Printing	4,125
Postage	5,378
Telephone	16,473
Total communications	<u>25,976</u>
Other expenses	
Office rent	60,429
Depreciation	4,748
Insurance	32,802
Supplies	8,922
Miscellaneous	24,930
Ohio Retirement Study Council	1,919
Travel	15,549
Memberships and subscriptions	4,986
New equipment	6,860
Total other expenses	<u>161,145</u>
Total administrative expenses	<u>\$ 997,420</u>

Above amounts do not include investment-related administrative expenses.

Schedule of Investment Expenses	
Year ending December 31, 2012	
Personnel	\$ 178,855
Professional and technical services	
Investment services	3,994,160
Monitoring services	221,171
Total professional services	4,215,331
Other expenses	
Due diligence	593
Computer services	7,687
Memberships and subscriptions	1,246
Printing and supplies	458
Total other expenses	9,984
Total investment expenses	\$ 4,404,170

Payments to Consultants		
Year ending December 31, 2012		
Consultant	Fee	Service
Attorney General's Office	\$19,693	Legal
Summit County, Ohio	33,166	Auditing
Earl N. Metz, M.D.	3,750	Medical
Gabriel, Roeder, Smith & Company	58,500	Actuarial
Global Trading Analytics, LLC	5,000	Investment
Groom Law Group	150	Legal
Hartland & Co.	216,172	Investment
Ice Miller LLC	25,003	Legal
Kennedy Cottrell Richards LLC	17,185	Auditing
Tucker Ellis & West LLP	16,203	Legal
Total	\$ 394,822	

See the Investment Section, pages 54-55 for payments to investment managers and brokers.

**INDEPENDENT AUDITOR'S 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, in accordance with auditing standards generally accepted in the United States and the Comptroller General of the United States' *Government Auditing Standards*, the basic financial statements and the related notes to the financial statements of the Ohio State Highway Patrol Retirement System (the HPRS), as of and for the year ended December 31, 2012, and have issued our report thereon dated June 10, 2013.

Internal Control Over Financial Reporting

As part of our financial statement audit, we considered the HPRS' internal control over financial reporting (internal control) to determine the audit procedures appropriate in the circumstances to the extent necessary to support our opinion on the financial statements, but not to the extent necessary to opine on the effectiveness of the HPRS' internal control. Accordingly, we have not opined on it.

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 a reasonable possibility that internal control will not prevent or detect and timely correct a material misstatement of the HPRS' financial statements. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all internal control deficiencies that might be material weaknesses or significant deficiencies. Given these limitations, we did not identify any deficiencies in internal control that we consider material weaknesses. However, unidentified material weaknesses may exist.

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, opining 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*.

Purpose of this Report

This report only describes the scope of our internal control and compliance testing and our testing results, and does not opine on the effectiveness of the HPRS' internal control or on compliance. This report is an integral part of an audit performed under *Government Auditing Standards* in considering the HPRS' internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

A handwritten signature in cursive script that reads "Kennedy Cottrell Richards LLC".

Kennedy Cottrell Richards LLC
June 10, 2013

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Investment Section

Investment Section

Investment Summary

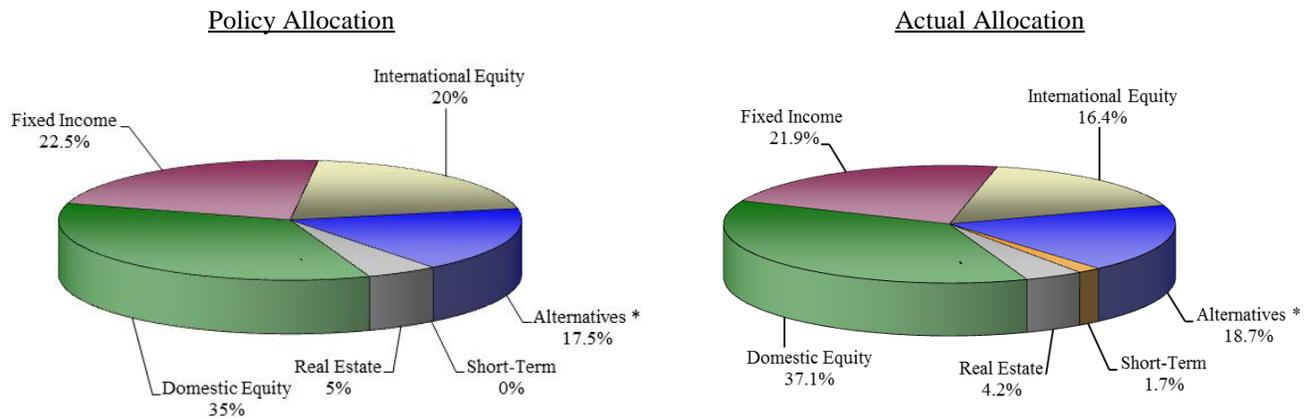
December 31, 2012

	Fair Value	Actual	Target	Range
Domestic equity	\$273,605,759	37.1%	35.0%	30-40%
Fixed income	162,135,937	21.9	22.5	17.5-27.5
Alternatives *	138,530,832	18.7	17.5	12.5-22.5
International equity	121,478,491	16.4	20.0	15-25
Short-term	12,422,651	1.7	0.0	0 – 5
Real estate	30,911,227	4.2	5.0	0 – 10
Net portfolio value	<u>\$739,084,897</u>	<u>100.0%</u>	<u>100.0%</u>	

* Alternatives include private equity and fund of hedge funds investments.

Asset Allocation – Total Fund

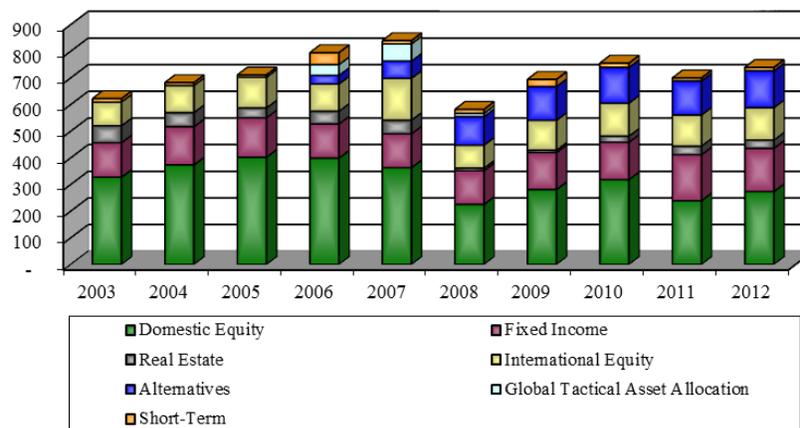
December 31, 2012



* Alternatives include private equity and fund of hedge funds investments.

Ten-Year Investment Comparison

(in millions)



* Alternatives include private equity and fund of hedge funds investments.

Economic and Market Review - 2012

In 2012, several macroeconomic events impacted the global capital markets, including unrest in the Middle East (namely within Libya, Syria, Egypt, and Iran), strong action by the European Union and the continued monetary easing by the central banks. Central bank action was a significant driver for equity markets in the year, as interest rates remained low.

The U.S. economy continued to grow in 2012, as real GDP growth increased to 2.2% for year, up from 1.8% in 2011. Growth was mainly stimulated by a reduction in imports related to non-automotive capital goods and petroleum related products, a recovery in housing and increased inventory investment.

The second quarter of this year felt much like 2011, in that debt stricken nations in the euro zone were again the focus of the markets, and yields on Spanish and Italian bonds soared among fears of potential default. Fortunately, policymakers in Europe agreed to create a Europe-wide bank supervisor and approved a \$125 billion loan to recapitalize Spain's banks in June. The European Central Bank's (ECB) commitment to preserving the Euro calmed the markets, which would rally in the third quarter.

Emerging market economies experienced slower rates of growth in 2012, particularly in Brazil, as result of austerity and reduced spending in developed nations. Fortunately, as wealth grows within these nations, so too does demand; this reduces the dependence of emerging markets on their developed counterparts and makes for an intriguing long-term investment story.

2012 was essentially a roller coaster ride for global capital markets. The first quarter was "risk on" with equities and higher yielding bonds leading the way. As questions about Europe arose, equity markets experienced a reversal and there was a rush to safety, thus the markets were "risk-off" in the second quarter. The ECB's

actions helped return stability to global capital markets, leading to a strong third quarter. In the fourth quarter, the Federal Reserve continued its bond buying program and committed to purchasing an extra \$45 billion in bonds per month until the unemployment rate in the United States reaches 6.5%.

In summary, central bank action in developed markets essentially led investors out of government bonds and into risk oriented securities. As such, risk assets were in favor in 2012. In the U.S., large cap stocks (as measured by the S&P 500 index) gained 16.0% while small cap stocks (as measured by the Russell 2000 index) returned 16.4%. International markets provided even stronger results with developed markets (as measured by the MSCI Europe, Australasia, and Far East Index) returning 17.9% and emerging markets (as measured by the MSCI Emerging Markets index) returning 18.6%.

In a "risk-on" environment, investment grade bonds will tend to lag equities. This was certainly the case in 2012 as the Barclays Aggregate Index advanced only 3.8%. Riskier bonds such as high yield and emerging market debt were an exception within fixed income as the Barclays U.S. High Yield and Barclays Emerging Markets indices returned 15.8% and 17.9% in 2012, respectively.

Market data courtesy of Bloomberg

Source: Hartland & Co.

Schedule of Investment Results

Year ending December 31, 2012

	2012	2011	3-Year	5-Year
Domestic Equity	16.0%	(1.0)%	11.6%	2.7%
S&P 500	16.0	2.1	10.9	1.7
Russell 3000	16.4	1.0	11.2	2.0
International Equity	18.1	(14.5)	3.9	(3.0)
MSCI ACWI ex US	17.4	(13.3)	4.3	(2.4)
Fixed Income	6.6	7.5	7.3	6.7
Barclays Capital Aggregate	4.2	7.8	6.2	5.9
Real Estate	7.1	(4.7)	1.2	(7.8)
NCREIF	10.5	14.3	12.6	2.1
Alternatives ▲	6.9	(6.9)	2.3	0.2
HFRI Fund of Funds Composite	4.7	(5.7)	1.4	(1.8)
Wilshire 5000 + 3% (lagged one quarter)	33.5	3.4	16.6	4.6
Total Fund	11.9	(2.9)	7.4	1.7
Absolute Objective	8.0	8.0	8.0	8.0
Relative/Composite Benchmark ►	13.1	0.1	9.0	4.3

▲ Includes private equity and fund of hedge funds. Performance results for private equity classes are typically reported on a quarter lag basis, adjusted for cash flow activity during the fourth quarter.

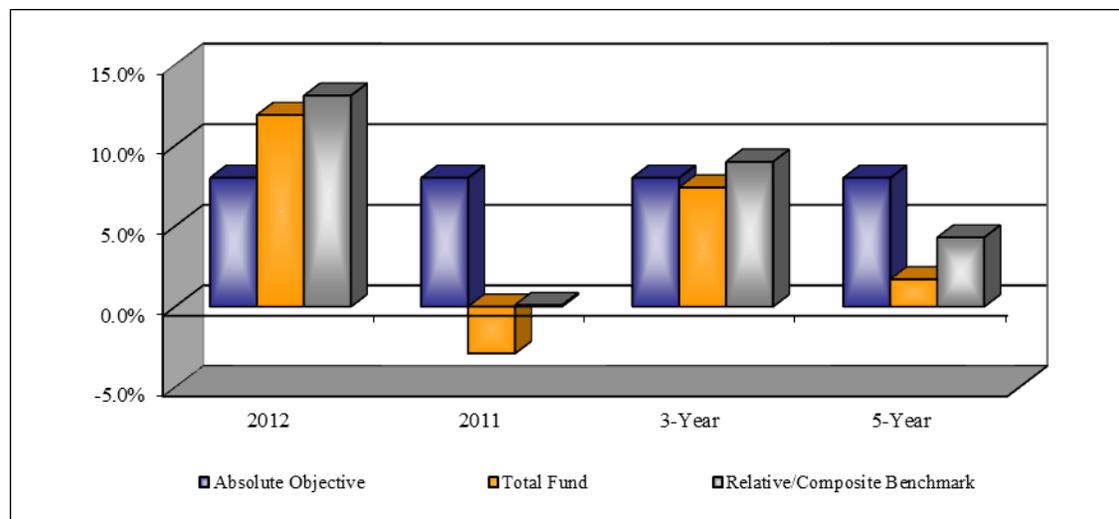
► Relative Composite Benchmark: 35% Russell 3000; 15% MSCI ACWI ex US Gross, 20%; NCREIF, 5%; HFRI Fund of Funds Composite Index 12.5%; Wilshire 5000 +3% (lagged one quarter) – HPRS, 5%; Barclays Aggregate, 22.5%

Performance is net of fees for alternative investments and gross of fees on all other investments. Net of fees returns are available upon request and investment management fees vary among asset classes.

Source: Hartland & Co.

Total Fund Rates of Return vs Policy Benchmark

(Gross of fees)



Investment Section

Domestic Equity Holdings			
December 31, 2012			
Security	Shares	Market Price	Fair Value
Exxon Mobil Corp	23,550	\$86.55	\$2,038,253
JPMorgan Chase & Co	38,200	43.969	1,679,616
Apple Inc	2,950	532.172	1,569,907
Chevron Corp	14,400	108.14	1,557,216
Pfizer Inc	60,900	25.079	1,527,311
Microsoft Corp	49,100	26.709	1,311,413
Cisco Systems Inc	56,600	19.649	1,112,133
Wells Fargo & Company	31,700	34.18	1,083,506
Intel Corp	52,300	20.62	1,078,426
Merck & Co Inc	24,200	40.94	990,748
Other	4,116,373		88,470,299
Total domestic equity securities	4,470,273		\$102,418,828
Domestic Equity Commingled Funds			
DFA Small Cap Subtrust			\$13,152,527
Vanguard Institutional Index Fund			74,213,309
Vanguard Mid Cap Index Fund			36,511,535
Wellington Mgmt Diversified Growth			47,309,560
Total domestic equity commingled funds			\$171,186,931
Total domestic equity			\$273,605,759

International Equity Holdings			
December 31, 2012			
Security	Shares	Market Price	Fair Value
Statoil ASA	15,100	\$25.04	\$378,104
Koninklijke Phillips Electronics	13,900	26.54	368,906
Schlumberger Ltd	4,702	69.298	325,839
Icon Pub Ltd	11,660	27.76	323,682
Embraer SA	9,200	28.51	262,292
Seagate Technology	8,100	30.42	246,402
Royal Dutch Shell Plc	3,300	68.95	227,535
Teva Pharmaceutical	6,000	37.34	224,040
Total SA	4,300	52.01	223,643
Ace Limited	2,800	79.80	223,440
Other	210,748		3,396,522
Total international equity securities	289,810		\$6,200,405
International Equity Commingled Funds			
DFA International Small Cap Value			\$10,468,652
Driehaus International Small Cap Growth			5,770,343
Manning & Napier Overseas Series			25,225,303
OFI Emerging Markets			15,792,383
Vanguard Total International Stock Indx Fnd			32,546,715
William Blair International			25,474,563
World Asset Management Foreign Equity Fund			127
Total international equity commingled funds			\$115,278,086
Total international equity			\$121,478,491

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

Investment Section

Fixed Income Holdings

December 31, 2012

Security	Par Value	Fair Value
Federal Home Loan Mtg Corp Series 2705 Class Ld, 4.500%, Due 03/15/2032	\$2,375,100	\$2,442,933
Federal Natl Mtg Assn Pool #AK9456 3.000% Due 03/01/2032	2,363,870	2,488,091
USA Treasury Notes 2.875% Due 02/15/2042	1,750,000	1,829,853
Federal Home Loan Mtg Corp Gold Pool #J12635, 4.000%, Due 07/01/2025	1,598,169	1,689,600
Federal Natl Mtg Assn Pool #AA4392, 4.000%, Due 04/01/2039	1,571,285	1,685,596
General Elec Cap Corp Sr Unsec Ser Mtn, 5.400%, Due 02/15/2017	1,500,000	1,725,150
Kentucky Asset/ Liabilty Com Taxable, 4.104%, Due 04/01/2019	1,500,000	1,670,535
Ohio State Build America Bonds Tax SE 3.643% Due 06/15/2016	1,200,000	1,298,460
Alabama Power Co SR Notes Series FF 5.200% Due 01/15/2016	1,000,000	1,116,700
Eaton Corp Notes 5.600% Due 05/15/2018	1,000,000	1,183,090
Other	44,800,530	49,428,948
Total fixed income securities	\$60,658,954	\$66,558,956
Fixed Income Commingled Funds		
JP Morgan Investment Management		\$54,089,192
Western Asset – High Yield Portfolio		22,152,754
Wellington Global Fixed Income		19,335,035
Total fixed income commingled funds		\$95,576,981
Total fixed income		\$162,135,937

Real Estate Holdings

December 31, 2012

Asset	Shares	Market Price	Fair Value
6161 Busch Blvd., Columbus, OH 43229			\$1,415,000
6500 Busch Blvd., Columbus, OH 43229			910,000
LaSalle Hotel Properties REIT	7,110	25.39	180,523
Brandywine Rlty Tr sh Ben Int REIT	10,100	12.19	123,119
Hospitality Pptys Tr Sh Ben Int REIT	4,200	23.42	98,364
Public Storage REITS	400	144.96	57,984
Avalon Bay Communities, Inc. REIT	300	135.59	40,677
Boston Pptys Inc REIT	200	105.81	21,162
Total real estate assets	22,310		\$2,846,829
Real Estate Commingled Funds			
Henderson Global Investors			\$2,816,647
Oaktree Real Estate Opportunities Fund IV			10,199,229
Oaktree Real Estate Opportunities Fund V			10,856,315
Pyramis Global Advisors (FREG II)			867,941
Pyramis Global Advisors (FREG III)			3,324,266
Total real estate commingled funds			\$28,064,398
Total real estate			\$30,911,227

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

Investment Section

Private Equity Holdings

December 31, 2012

Asset	Fair Value
Core Value, LLC	\$23,608,169
CSFB Private Equity Opportunities Fund LP	11,697,606
Kayne Anderson Energy Fund IV	2,154,732
Kayne Anderson Energy Fund V	7,349,986
Kayne Anderson Energy Fund VI	178,634
Kayne Anderson Mezzanine Partners	3,449,683
Kayne Anderson MLP Fund	8,479,125
Oaktree PPIP Private Fund LP	3,255,880
Pantheon USA Fund VII, LP ¹	15,288,078
Total private equity	\$75,461,893

Fund of Hedge Funds Holdings

December 31, 2012

Asset	Fair Value
Evanston Capital Weatherlow Offshore Fund II	\$24,495,609
Feingold O'Keefe Distressed Loan Fund	10,517,089
GAM Fund Management Ltd.	317,855
Pinnacle Natural Resources Offshore	9,957,662
Protégé Partners, LP	7,877,578
Sankaty / Prospect Harbor Credit Partners	3,013,207
Seix Credit Opportunities Fund, LLC	6,889,939
Total fund of hedge funds	\$63,068,939

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

¹Pantheon USA Fund VII, LP reflects 3Q + 4Q cash flow results due to lagged reporting.

Investment Section

Summary Schedule of Investment Manager Fees

Year ending December 31, 2012

Manager	Strategy	Assets Managed	Fees
Cash and Short-term Investments			
The Vanguard Group	Money Market	\$ -	\$2,529
Domestic equity			
Ancora Investment Advisors	Micro Cap	5,771,845	44,073
Brandywine Global Investment Mgmt LLC	Small/Mid-Cap Value	-	16,887
DePrince, Race & Zollo, Inc.	Large Cap Value	22,223,826	116,941
Dimensional Fund Advisors	Small Cap Blend	13,152,527	66,952
Fred Alger Management, Inc.	Small Cap Growth	-	41,105
James Investment Research	Micro Cap	5,891,970	45,540
LSV Asset Management	Large Cap Value	26,969,183	81,560
State Street Global Advisors	Large Cap Blend	-	19,111
T. Rowe Price	Large Cap Blend	36,320,428	162,725
Vanguard Institutional Index Fund	Large Cap Blend	74,213,309	2,474
Vanguard Mid Cap Index Fund	Mid-Cap	36,511,535	2,434
WA Account	Miscellaneous	1,121	-
Wellington Mgmt Co., LLP	Large Cap Growth	47,309,560	255,440
Westfield Capital Management	Small Cap Growth	11,962,690	126,203
World Asset Management	Mid-Cap and Russell 2000	-	24,446
International Equity			
Artio Global Management LLC	Large Cap Growth	-	40,725
Dimensional Fund Advisors	Small Cap Value	10,468,652	51,222
Driehaus Capital Management	Small Cap Growth	5,770,343	89,910
Manning & Napier Advisors, Inc.	Large Cap Value	25,225,303	165,919
OFI Trust Company	Emerging Markets	15,792,383	190,115
Vanguard Total International Stock Indx Fnd	Large Cap Core	32,546,715	3,526
William Blair International	Large Cap Growth	25,474,563	14,149
World Asset Management	Large Cap Core	127	36,234
Fixed Income			
Johnson Institutional Management	Intermediate-Term	66,558,955	122,033
JP Morgan Asset Management	Intermediate-term	54,089,192	157,799
Western Asset	High Yield	22,152,754	107,729
Wellington Global Fixed Income	Global Bond	19,335,035	85,067
Real Estate			
HPRS Internal Staff	Office Buildings	2,325,000	-
Pyramis Global Advisors	Specialty Real Estate	4,192,207	51,315
Henderson Global Investors	Specialty Real Estate	2,816,647	16,868
Oaktree Capital Management LP	Specialty Real Estate	21,055,544	322,960
Private Equity			
Core Value, LLC	Timber	23,608,169	251,566
Credit Suisse Securities LLC	Fund of Funds	11,697,606	99,797
Kayne Anderson Capital Advisors, LP	Energy, MLP, and Mezzanine	21,612,160	378,863
Oaktree Capital Management LP	PPIP	3,255,880	25,294
Pantheon USA Fund VII, LP	Fund of Funds	15,288,078	112,500
Hedge Funds			
Evanston Capital Management LLC	Fund of Funds	24,495,609	196,516
Feingold O'Keeffe Capital	Distressed Securities	10,517,089	132,616
GAM Fund Mgmt Ltd	Fund of Funds	317,855	-
Pinnacle Natural Resources Offshore, Ltd	Fund of Funds	9,957,662	78,845
Protégé Partners, LLC	Fund of Funds	7,877,578	77,543
Sankaty Advisors, LLC	Distressed Securities	3,013,207	44,160
Seix Investment Advisors, LLC	Distressed Securities	6,889,939	94,918
Total		\$726,662,246	\$3,956,609

Summary Schedule of Broker Fees			
Year ending December 31, 2012			
Broker	Fees	Shares	Average Cost
KeyBanc Capital	\$75.00	10,566,300	\$0.000
State Street Bank	-	8,493,152	0.000
Cap Institutional Services Inc	56,512.63	5,553,423	0.010
Morgan Stanley	1,582.45	4,463,301	0.000
Mutual Fund Agent	-	3,824,157	0.000
Stephens Inc.	-	3,671,469	0.000
UBS Financial Services	779.35	3,558,210	0.000
First Tennessee	-	3,350,000	0.000
RBC Capital Markets	892.50	3,044,350	0.000
BNY Capital Markets	-	2,430,000	0.000
Cortview Capital	-	2,175,000	0.000
Cabrera Capital	21,051.11	2,105,111	0.010
Duncan Williams	-	2,025,000	0.000
JP Morgan Securities	1,925.50	2,007,760	0.001
Raymond James & Associates	346.00	1,960,800	0.000
BNY Convergenx	1,378.69	1,770,603	0.001
Jeffries & Co	316.75	1,765,050	0.000
Wells Fargo	103.00	1,403,100	0.000
Citigroup Global	822.66	910,692	0.001
Oppenheimer & Co	45.95	881,330	0.000
Merrill Lynch	4,320.31	784,435	0.006
Abel Noser Corporation	3,573.13	505,719	0.007
Banc of America Securities LLC	-	500,000	0.000
Robert Baird	5,927.15	389,175	0.015
Knight Equity Markets	2,910.83	306,835	0.009
Cantor Fitzgerald & Co	4,920.30	247,849	0.020
Ivy Securities	1,887.00	188,700	0.010
Credit Suisse	1,728.14	118,159	0.015
Deutsche Morg Grenfell	1,182.81	75,756	0.016
Barclays Capital	1,215.10	67,870	0.018
Sanford C. Berns	661.00	46,400	0.014
Investment Technology Group Inc	367.25	42,276	0.009
Goldman Sachs Execution and Clearing	408.00	40,800	0.010
Goldman Sachs & Co	1,172.75	37,350	0.031
Assent LLC	193.20	27,600	0.007
Stifel Nicolaus	537.50	19,300	0.028
ISI Group, Inc.	593.90	17,860	0.033
Weeden & Co	363.84	15,742	0.023
Cowen and Co	380.50	12,700	0.030
Other	3,824.45	140,311	2.009
Total	\$121,999	69,543,645	\$0.002

HPRS Investment Policy

Introduction

The State Highway Patrol Retirement System was established by section 5505.02 of the Ohio Revised Code (ORC) for State Highway Patrol employees, as defined in division (A) of ORC section 5505.01.

Pursuant to ORC section 5505.04, the administration and management of the Highway Patrol Retirement System are vested in the State Highway Patrol Retirement Board. Members of the State Highway Patrol Retirement Board are the trustees of the funds created by ORC section 5505.03. The board has full power to create and adopt, in regular meetings, an investment committee, policies, objectives, or criteria for the operation of the investment program that include asset allocation targets and ranges, risk factors, asset class benchmarks, time horizons, total return objectives, and performance evaluation guidelines. The funds created by ORC section 5505.03 and managed by the Retirement Board are the employees' savings fund, the employer's accumulation fund, the pension reserve fund, the survivors' benefit fund, the income fund, and the expense fund. These funds are for the exclusive purpose of operating the Retirement System and providing benefits to any qualified employee in the uniform division of the State Highway Patrol, any qualified employee in the radio division hired prior to November 2, 1989, and any State Highway Patrol cadet attending training school pursuant to ORC section 5503.05, whose attendance at the school began on or after June 30, 1991. "Employee" includes the superintendent of the State Highway Patrol.

Purpose and Duties

The primary objective of the State Highway Patrol Retirement System is to provide eligible members and beneficiaries with scheduled pension benefits. Although the State Highway Patrol Retirement System 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 the fund. In particular, the prudent person guidelines are to be followed with regard to the investment management of the fund. These guidelines require the Board and other system fiduciaries to exercise 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. A secondary objective of the fund is to maintain a sufficient degree of liquidity in order to meet unanticipated demands and changing environments. Members of the Retirement Board and other fiduciaries of the Retirement System fully accept the duty to incur only reasonable expenses in the operation of the State Highway Patrol Retirement System.

Investment Goals

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. 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

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controlled firms, or firms owned and controlled by women, either alone or in joint venture with other firms.

Policies

Diversification of assets will ensure that adverse or unexpected results from a security class will not have a detrimental impact on the entire portfolio. Diversification is interpreted to include diversification by asset type, performance and risk characteristic, number of investments, and by investment style of management organizations. These guidelines may be implemented through specific directions or instructions to investment managers, and those directions or instructions may contain other more specific restrictions on diversification of assets by percentage holdings, by quality, or other factors.

Asset classes and ranges considered appropriate for investment of fund assets are to be determined by the Board in accordance with these investment guidelines. Asset class constraints only apply to separate account mandates.

Assignment of responsibilities for each asset category, including 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).

The Board will, 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.

The Board will, 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.

In order to achieve the return objectives, the fund will employ the following strategies for specific asset classes:

1. U.S. equities will represent from 30 to 40 percent of the market value of total fund assets with a targeted average of 35 percent. The term "equities" includes common stock, convertible bonds, and convertible stock.
2. Non-U.S. equities will represent from 15 to 25 percent of the market value of total fund assets with a targeted average of 20 percent.
3. U.S. fixed income obligations, including cash, will represent from 17.5 to 27.5 percent of the market value of total fund assets with a targeted average of 22.5 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.

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4. Investments in real estate and alternatives will represent from 17.5 to 27.5 percent of the market value of total fund assets with a targeted average of 22.5 percent. The term “alternatives” includes hedge funds, private equity, and Global Tactical Asset Allocation.

Short-Term

The purpose of the short-term cash component is to provide liquidity for short-term obligations.

Cash equivalent investments may include the following:

- Short-Term Maturity Securities
- U.S. Treasury Bills
- U.S. Government Repurchase Agreements
- Commercial Paper
- Commingled Investment Funds

Fixed Income

The purpose of the fixed income component is to provide a deflation hedge, to reduce the overall volatility of the pension assets in relation to the liability, and to produce current 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

The purpose of the equity component is to provide for growth in principal, while at the same time preserve the purchasing power of the portfolio's assets. It is recognized that the equity in the portfolio will represent a greater assumption of market volatility and risk as well as high total return over the long-term.

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.

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Investment Objectives, Policies, and Guidelines

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 15% 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 20% 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 35% of portfolio value in an international mandate.

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 purpose of the real estate component is to provide for growth of principal while at the same time preserve the purchasing power of the portfolio's assets. In addition, the real estate component seeks to enhance the overall portfolio by providing income, a hedge on inflation, and modest diversification.

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,

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- 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 purpose of the alternatives component is to provide diversification, risk reduction and to enhance the overall performance characteristics of the portfolio.

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:

- 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 eight percent, representing the fund's actuarial assumption, and also representing the long-term inflation rate of three percent plus a risk premium of five percent.
- A composite reference benchmark composed of 35 percent Russell 3000 Index, 20 percent MSCI ACWI ex-US Index, 5 percent NCREIF, 12.5% HFRI Fund of Funds, 5 percent Wilshire 5000 + 3% (lagged one quarter), and 22.5% Barclays Capital Aggregate 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, brokers will be selected through a Request for Proposal (RFP) process. An investment manager may be excused from the directed brokerage requirement if it can document favorable execution.

Manager Selection

Each new investment manager will be selected through an RFP 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.

An existing manager may be selected for an additional mandate without the need for an RFP process. All other aspects of the Investment Process must be followed with regard to the selection of an investment manager.

Roles and Responsibilities

Board

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,
- reject, modify, or approve a recommendation from the Investment Committee
- regarding the decision to hire or terminate a manager, 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.

Investment Committee

The Investment Committee will, at least quarterly, review the performance of the overall portfolio and selected components against their investment goals and policies. The Investment Committee will require investment managers to provide a comprehensive written quarterly report that includes the following:

- a review of investment performance, including the investment manager's relative performance
- a review of the HPRS investment,
- a report on the investment manager's current investment outlook or forecast, and
- a strategy for the future.

The Investment Committee will, at least biannually, consider whether the manager continues to operate in the manner represented when retained and outlined in the agreement between the Investment Committee and the investment manager. The Investment Committee will require their manager to report key personnel staffing changes to the Investment Committee on or before the effective date of such changes. While the actual frequency and the nature of reviews will vary according to asset class, the liquidity of markets, and perhaps logistics, the regulations above should be seen as the minimum standards for effective monitoring of managers. The elected Chair, or Vice-Chair, will report to the Board at regularly scheduled meetings.

Other roles of the Investment Committee include the following:

- Approve the initiation of a search
- Validate that the search process was carried out appropriately
- Select and evaluate the semi-finalists
- Attend manager presentations at HPRS' offices
- Request additional information, if warranted
- Select the manager(s) that will be recommended to the Board for hiring

Staff

The Chief Investment Officer (CIO), who is responsible for the day-to-day management of the investment program, is employed by, and is directly responsible to, the Retirement Board. A complete job description is available from HPRS upon request.

Other roles of the staff include the following:

- Post the RFP to HPRS' website
- Oversee the work of the investment consultant
- Ensure the process is completed in an appropriate manner
- Ensure the Investment Committee and Board receive appropriate information
- Coordinate the development and execution of manager contracts and guidelines
- Conduct on-site due diligence with selected finalist firm if deemed appropriate

Investment Consultant

An Investment Consultant is employed by, and is directly responsible to, the Retirement Board. The consultant is a fiduciary to the system, attends Investment Committee and Board meetings,

Investment Section

Investment Objectives, Policies, and Guidelines

provides quarterly investment monitoring reports, and works with the CIO to implement the Investment Policy of the Retirement Board.

Other roles of the investment consultant include the following:

- Identify the need for new managers.
- Develop the Request for Proposal (RFP).
- Evaluate proposals.
- Assist the Investment Committee in identifying semi-finalists.
- Attend manager presentations at HPRS' office.
- Discuss candidates with the Investment Committee and the Board.
- Conduct on-site due diligence with finalist firms.
- Conduct on-site due diligence with existing managers every eighteen (18) months
- Prepare comprehensive written search reports that analyze those factors identified in the HPRS Investment Process document.
- Assist in the development of investment manager guidelines.
- Conduct and provide the HPRS staff with comprehensive written search reports that analyze and discuss those factors identified in the Investment Process document.
- On an annual basis, the investment consultant will provide a written manager structure review. This review will go beyond a customary statistical review to elaborate on the following aspects of the manager structure: including the number of managers, allocations to managers, active versus passive management, investment management fees, and overall risk levels of the portfolio.
- Provide the HPRS staff with regular written reviews of the investment managers in the portfolio. These reviews should include both relevant statistical data as well as qualitative assessments of the manager's performance and portfolio strategy
- Provide HPRS staff with a quarterly report that documents managers' compliance with the guidelines they are to operate within.

Custodian

As provided in ORC section 5505.11, the Treasurer of State is the custodian of HPRS funds. The Treasurer appoints a banking institution as a subcustodian, which acts as the custodian of HPRS funds. All disbursements are processed under the direction of the Treasurer after authorization by the Board.

Investment Managers

Managers are expected to --

- acknowledge the acceptance of this Investment Policy
- act as a fiduciary to the system
- meet with the Board, or Investment Committee when requested, to review investment activity and results
- hold and maintain errors and omissions insurance and provide proof of this insurance
- 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

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Investment Objectives, Policies, and Guidelines

- 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
- vote the proxies of the fund's assets, consistent with the manager's internal voting process

Asset Allocation

The definition of asset allocation targets and ranges is the single most important investment decision that the Board faces. An optimal mix of investments will produce returns that consistently meet the long-term assumed rate of return at a prudent level of risk.

Periodic Reviews

Asset allocation should be reviewed at least annually to ensure that the plan is on track to achieve the investment goals and that all the major assumptions used to establish the plan remain reasonable. A comprehensive review of asset allocation in the form of asset-liability modeling should be conducted every three years, or whenever a major structural change occurs in liabilities or investment assets.

During the annual asset allocation review, the investment consultant will conduct risk budgeting to monitor the active risk that each asset class introduces into the portfolio to ensure it remains consistent with the Board's risk tolerance.

Rebalancing Policy

In order to maintain the desired asset allocation mix, the portfolio will be reviewed quarterly to determine compliance with asset allocation targets and ranges. Strategic decisions will be based on trading costs, liquidity needs, and the relative weighting of each manager.

To the extent that an asset class is outside of the allowable range, the CIO and the investment consultant will develop a plan for compliance. Without formal Board approval, the CIO may authorize one or more rebalancing transactions to implement the plan.

To the extent that an asset class varies from the target, the CIO and the investment consultant may develop a plan for tighter compliance. Provided that rebalancing may be achieved at minimal cost (e.g., through commingled funds with no direct trading expense), without formal Board approval, the CIO may authorize one or more rebalancing transactions to implement the plan.

Securities Lending

The Board may authorize an external service provider to conduct securities lending activities.

Shareholder Activities

Each investment manager is responsible for voting the proxies of the fund's assets, consistent with the manager's internal voting process. Unless the Board takes specific action to do so, HPRS does not take positions on shareholder proposals.

Monitoring and Reporting

Periodically, to accomplish the goal of earning the highest rate of return, HPRS may elect to have existing managers present to the Investment Committee, a subset of the Investment Committee or to Hartland & Co. This comprehensive performance review should go well beyond simply reviewing the manager's performance relative to the benchmark. It should encompass: ensuring compliance with the investment guidelines, ensuring compliance with reporting requirements, ensuring continuity of the investment process and philosophy, and ensuring consistency of strategy (no "style drift"). In short, the review is intended to assure that the reasons for originally selecting the manager are still intact.

The manager's presentation should begin with an organizational overview, including discussion of the firm's mission, history, ownership, assets, clients, etc. Any pertinent organizational or staff changes (resignations, hires, etc.) should be highlighted, and biographies of key personnel should always be included. Any pending legal or regulatory issues should be disclosed. A thorough review should restate the portfolio objectives and account guidelines.

The investment universe should be reviewed, highlighting allowed or prohibited types of securities and what, if any, derivative use is allowed. Perhaps most importantly, Investment Committee members should inquire about and be comfortable with the manager's risk management procedures. The manager should offer a market overview, reviewing and analyzing trends and conditions in the relevant market. He should compare the portfolio structure to the benchmark, highlighting significant over-weightings or under-weightings in sectors. Similar comparisons should be shown for major portfolio characteristics (for stocks, cap size, P/E valuation, etc.; for bonds, maturity, coupon, etc.). Major holdings should be listed; if possible, all holdings should be listed.

Analysis of performance should begin with confirmation that the manager is using the benchmark(s) agreed to in the account guidelines. Appropriate time periods for performance appraisal should be both short-term (quarter, year-to-date, past 12 months) and long-term (i.e., three years, five years, since inception). Performance should ideally be presented in both gross and net terms, but it should at least be clear which returns are being presented.

Just as important as the appropriate presentation of relevant performance figures is the discussion of performance attribution. The manager should explicitly present the factors (sectors, securities, duration, etc.) that enhanced performance and that had a negative impact.

As part of the presentation, the manager should present the firm's and/or department's outlook for the economy, the market, and the portfolio. For managers of nontraditional asset classes like real estate and alternative investments, the monitoring process will be different, tempered by

Investment Section

Investment Objectives, Policies, and Guidelines

such facts as the absence of public markets for the underlying investments, the lack of obvious benchmarks, and the much longer investment time horizons.

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. At the February 21, 2013 Board meeting, the Investment Policy Statement and Process Document were combined into one document. The new Investment Policy Statement can be viewed at www.ohprs.org.

Revised, February 23, 2012
Revised, October 27, 2011
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

May 20, 2013

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, 2011.

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 103% of the market value of assets as of December 31, 2011.

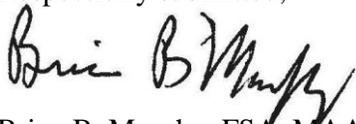
Actuarial valuations are based upon assumptions regarding future activity in specific risk areas including the rates of investment return and payroll growth, eligibility for the various classes of benefits, and longevity among retired lives. These assumptions are adopted by the Board after considering 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, 2011 valuation were based upon a study of experience during the years 2005 through 2009.

Investment return on a market value basis during 2011 was less than assumed. The pension unfunded actuarial accrued liability is 456% of the covered payroll. At the time the valuation was produced, the present contribution rate structure was not sufficient to amortize this unfunded actuarial accrued liability, even if all future contributions were allocated to the pension program. Recent changes enacted by Senate Bill No. 345 are expected to result in significant long term funding improvements for HPRS. The effect of these changes will be reflected in the December 31, 2012 valuation. Even with the Senate Bill No. 345 changes, the retiree health plan continues to be cause for continued review. Based upon the present contribution rate allocation, the retiree health plan is expected to remain solvent until 2022. Available resources need to be brought in line with projected benefit payouts in the near future if the retiree health plan is to continue to provide benefits similar to those currently provided.

Based upon the results of the December 31, 2011 valuations and the benefit provisions in effect at that time, neither the pension nor the retiree health program is in financial balance. Recently enacted changes have made significant progress to restoring this financial balance, especially with respect to the pension program. Continued cost containment efforts can have a positive effect on the retiree health plan, but additional contribution income is needed.

The signing actuaries are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

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 5.0% 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 the RP-2000 Combined Healthy Male and Female Tables projected to 2020 using Projection Scale AA.

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

Statement of Actuarial Assumptions and Methods

Probabilities of Separation from Active Employment before Age & Service Retirement				
<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

Probabilities of Age & Service Retirement		
<i>Percentage of Eligible Members Retiring Within Next Year</i>		
<u>Retirement Ages</u>	<u>Unreduced Benefit</u>	<u>Reduced Benefit</u>
48	35%	3.5%
49	15	3.5
50	10	3.5
51	10	3.5
52	15	--
53	10	--
54	10	--
55	20	--
56	30	--
57	25	--
58	20	--
59	20	--
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 (\$)	% of Accrued Liabilities Covered by Reported Assets		
	Active Member Contributions (\$)	Retirees, Beneficiaries, & Vested Deferreds (\$)	Active Members (Employer Financed Portion) (\$)		(1)	(2)	(3)
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	-
2010▶	104,503,065	583,714,389	329,552,995	630,971,500	100	90	-
2011	104,701,161	618,984,073	324,014,452	623,360,121	100	84	-

▲ Plan Amendment – Implementation of DROP
▶ Assumption or method change - Adoption of RP-2000 projected to 2020 Combined Mortality Table rates for non-disabled post-retirement mortality

Active Member Valuation Data

Years Ending December 31

Year	Active Members	Annual Payroll (\$)	Average Annual Salary (\$)	% Increase in Average Pay
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
2010	1,537	94,767,852	61,658	0.6
2011	1,520	93,126,449	61,267	(0.6)

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 (\$)		
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
2010	64	3,119,568	25	497,568	1,424	48,138,648	5.8	33,804
2011	73	3,932,508	32	821,472	1,465	51,249,684	6.5	34,915

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	
	2011	2010
Age & Service Retirements If members retire at older ages or with lower final average pay than assumed, there is a gain -- if younger ages or higher average pays, a loss.	(\$209,554)	(\$147,669)
Disability Retirements If disability claims are less than assumed, there is a gain - if more claims, a loss.	806,119	810,248
Death-in-Service Benefits If survivor claims are less than assumed, there is a gain - if more claims, a loss.	61,822	(326,458)
Withdrawal from Employment If more liabilities are released by withdrawals than assumed, there is a gain -- if smaller releases, a loss.	2,302,510	222,407
Pay Increases If there are smaller pay increases than assumed, there is a gain - if greater increases, a loss.	10,098,393	8,089,777
Investment Income If there is greater investment income than assumed, there is a gain - if less income, a loss.	(30,337,072)	(18,851,548)
Other Miscellaneous gains and losses resulting from data adjustments, timing of financial transactions, valuation methods, and other events.	357,554	(4,235,950)
Gain (or Loss) During Year From Financial Experience	(\$16,920,228)	(\$14,439,193)
Non-Recurring Items Adjustments for benefit and assumption changes.	0	(36,418,935)
Composite Gain (or Loss) During Year	(\$16,920,228)	(\$50,858,128)

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. 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. The employer contribution rate was 26.5% in 2012.

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. The member contribution rate was 10% in 2012. Due to legislative changes in 2012 and effective in 2013, the HPRS Board will have authority to adjust member contributions in the future.

Service Credit

Prior to retirement, the following types of additional service credit may be purchased: (1) military service, (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 benefits. In the case of prior service

Summary of Plan Provisions

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. Due to legislative changes in 2012, final average salary will be based on a member's five highest years beginning in 2015.

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:

Summary of Plan Provisions

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

The election to receive a reduced pension may not be changed once a retiree has received a 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. For actuarial purposes, 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:

Summary of Plan Provisions

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.

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 all or part of the basic Part B premium, as determined annually by the Board.

Summary of Plan Provisions

Cost of Living

At age 53 and thereafter, each retiree receives an annual 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. Due to legislative changes in 2012, and effective in 2013, COLA eligibility will increase to age 60. The HPRS Board also will have authority to adjust COLA in the future.

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 81, 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 Position
- Benefit Deductions from Net Position by Type

The schedules, beginning on page 82, 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
- Benefit Recipient by Type of Benefit
- Average Benefit Payments

Changes in Net Position – Pension

Years Ending December 31

Additions	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003
Employer contributions	\$23,766,361	\$22,966,338	\$21,211,944	\$20,453,914	\$20,302,216	\$19,956,700	\$19,263,941	\$18,467,789	\$17,205,609	\$16,361,339
Member contributions	8,755,937	8,348,577	8,295,882	8,624,025	8,870,985	8,901,454	8,610,088	8,582,130	8,192,944	8,136,974
Transfers from other systems	557,316	608,366	329,335	1,009,422	632,894	717,017	648,282	1,180,951	856,496	763,419
Investment income, net	63,509,018	(16,385,745)	72,161,170	109,493,243	(207,583,959)	50,333,115	85,692,657	37,890,851	62,907,281	105,112,725
Total additions	\$96,588,632	\$15,537,536	\$101,998,331	\$139,580,604	(\$177,777,864)	\$79,908,286	\$114,214,968	\$66,121,721	\$89,162,330	\$130,374,457
Deductions										
Benefits paid to participants	58,297,304	55,638,322	52,498,558	49,884,126	47,939,139	44,676,510	40,343,244	37,716,268	35,187,531	33,074,853
Member contribution refunds	179,614	451,682	476,936	1,076,685	570,827	98,628	299,128	495,640	155,989	386,931
Administrative expenses	859,477	948,319	637,943	758,818	613,447	605,165	572,616	561,817	518,834	559,052
Transfers to other systems	377,994	1,797,986	566,615	406,147	282,987	330,539	914,950	403,975	602,345	789,387
Total deductions	\$59,714,389	\$58,836,309	\$54,180,052	\$52,125,776	\$49,406,400	\$45,710,842	\$42,129,938	\$39,177,700	\$36,464,699	\$34,810,223
Change in pension net position	\$36,874,243	(\$43,298,773)	\$47,818,279	\$87,454,828	(\$227,184,264)	\$34,197,444	\$72,085,030	\$26,944,021	\$52,697,631	\$95,564,234

Changes in Net Position – OPEB

Years Ending December 31

Additions	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003
Employer contributions	\$1,679,422	\$1,622,889	\$3,227,905	\$4,281,052	\$4,350,474	\$4,276,436	\$3,064,718	\$3,006,385	\$2,867,602	\$3,395,749
Investment income, net	10,192,983	(2,752,009)	17,734,416	21,030,418	(30,809,552)	11,254,046	15,632,184	8,998,070	12,051,961	18,885,722
Health care premiums	1,283,866	1,274,337	911,076	902,310	784,499	577,511	553,916	552,570	489,889	459,601
Retiree Drug Subsidy	500,134	422,640	471,909	513,668	317,381	329,158	336,794	-	-	-
Prescription Drug Rebates	356,377	366,316	-	-	-	-	-	-	-	-
Medicare D Refunds	17,090	6,567	-	-	-	-	-	-	-	-
Total additions	\$14,029,872	\$940,740	\$22,345,306	\$26,727,448	(\$25,357,198)	\$16,437,151	\$19,587,612	\$12,557,025	\$15,409,452	\$22,741,072
Deductions										
Health care expenses	12,302,980	12,360,917	11,447,630	9,801,853	9,648,543	11,260,675	8,871,533	9,484,829	7,438,539	7,640,730
Administrative expenses	137,943	159,271	106,450	123,210	98,082	97,101	92,761	92,344	86,031	93,769
Total deductions	\$12,440,923	\$12,520,188	\$11,554,080	\$9,925,063	\$9,746,625	\$11,357,776	\$8,964,294	\$9,577,173	\$7,524,570	\$7,734,499
Change in OPEB net position	\$1,588,949	(\$11,579,448)	\$10,791,226	\$16,802,385	(\$35,103,823)	\$5,079,375	\$10,623,318	\$2,979,852	\$7,884,882	\$15,006,573

Statistical Section

Benefit Deductions from Net Position by Type - Pension

Years Ending December 31

Type of Benefit	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003
Age & Service	\$19,562,073	\$19,905,957	\$18,292,909	\$17,853,793	\$19,683,104	\$16,838,694	\$15,064,493	\$17,904,543	\$14,041,248	\$13,526,379
Early	28,163,835	26,634,505	25,132,620	23,585,973	25,159,586	19,997,110	17,533,382	15,729,197	14,183,148	12,901,479
Reduced	2,777,829	1,829,190	1,865,761	1,828,296	1,833,554	1,693,050	1,659,235	86,287	1,573,077	1,504,785
Disability	3,840,068	3,537,849	3,305,364	3,044,325	2,927,862	2,761,851	2,534,672	2,305,544	2,051,805	1,875,919
Survivor	3,803,500	3,670,821	3,846,904	3,496,739	3,575,139	3,320,805	3,486,462	1,615,697	3,258,253	3,186,291
Death Benefits	150,000	60,000	55,000	75,000	80,000	65,000	65,000	75,000	80,000	80,000
Total Pension Benefits	\$58,297,304	\$55,638,322	\$52,498,558	\$49,884,126	\$53,259,245	\$44,676,510	\$40,343,244	\$37,716,268	\$35,187,531	\$33,074,853

Benefit Deductions from Net Position by Type - OPEB

Years Ending December 31

Type of Benefit	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003
Medical	\$6,393,584	\$6,755,757	\$6,380,295	\$4,983,739	\$5,087,073	\$6,512,976	\$4,971,003	\$5,593,232	\$4,065,457	\$4,377,284
Wellness	24,604	95,210	57,747	86,007	79,679	67,479	28,820	-	-	-
Prescription drugs	4,301,088	4,053,343	3,709,855	3,430,089	3,274,896	3,513,662	2,832,743	2,980,755	2,710,367	2,681,414
Medicare-B reimbursement	839,451	770,183	713,317	673,450	632,293	572,127	503,034	422,045	347,585	290,506
Dental	594,292	528,824	453,276	495,272	453,003	464,402	408,667	364,139	230,994	209,429
Vision	149,962	157,600	133,140	133,296	121,599	130,029	127,266	124,658	84,136	82,097
Total	\$12,302,981	\$12,360,917	\$11,447,630	9,801,853	\$9,648,543	\$11,260,675	\$8,871,533	\$9,484,829	\$7,438,539	\$7,640,730
Member premiums/adjustments	(2,157,466)	(2,069,859)	(1,382,985)	(1,415,978)	(1,101,880)	(906,669)	(890,710)	(552,570)	(489,889)	(459,601)
Net paid by HPRS	\$10,145,515	\$10,291,058	\$10,064,645	\$8,385,875	\$8,546,663	\$10,354,006	\$7,980,823	\$8,932,259	\$6,948,650	\$7,181,129

Principal Participating Employer

2003-2012

Year	Participating Government*	Covered Employees	Year	Participating Government*	Covered Employees
2012	Ohio State Highway Patrol	1,645	2007	Ohio State Highway Patrol	1,597
2011	Ohio State Highway Patrol	1,520	2006	Ohio State Highway Patrol	1,592
2010	Ohio State Highway Patrol	1,537	2005	Ohio State Highway Patrol	1,573
2009	Ohio State Highway Patrol	1,547	2004	Ohio State Highway Patrol	1,562
2008	Ohio State Highway Patrol	1,544	2003	Ohio State Highway Patrol	1,542

*HPRS is a single-employer pension system; 100% of members are employed by the Ohio State Highway Patrol.

Benefit Recipients by Type of Benefit

December 31, 2012

Monthly Benefit	Number of Benefit Recipients	Type of Benefit						Retirement Option								
		1	2	3	4	5	6	Unmodified	1	2	3	4	5	6	7	
Deferred	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$1 - 250	26	-	-	-	-	24	2	26	-	-	-	-	-	-	-	-
251-500	1	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-
501 - 750	5	-	-	-	-	-	5	5	-	-	-	-	-	-	-	-
751 - 1000	33	-	-	-	-	24	9	33	-	-	-	-	-	-	-	-
1001 - 1250	78	1	-	-	1	74	2	78	-	-	-	-	-	-	-	-
1251 - 1500	117	-	4	20	1	84	8	116	1	-	-	-	-	-	-	-
1501 - 1750	74	-	9	15	9	36	5	74	-	-	-	-	-	-	-	-
1751 - 2000	73	18	18	22	6	8	1	73	-	-	-	-	-	-	-	-
2001 - 2250	38	11	7	7	5	7	1	37	1	-	-	-	-	-	-	-
2251 - 2500	54	13	14	5	19	2	1	53	1	-	-	-	-	-	-	-
2501 - 2750	70	19	24	7	18	2	-	67	-	3	-	-	-	-	-	-
2751 - 3000	137	24	80	4	28	-	1	128	1	6	1	-	-	-	-	1
3001 - 3250	185	45	116	13	11	-	-	178	-	4	1	-	-	-	-	2
3251 - 3500	141	58	70	2	11	-	-	134	-	6	1	-	-	-	-	-
Over 3,500	586	241	325	9	11	-	-	569	2	11	3	-	-	-	1	-
Total	1,626	430	667	104	120	261	36	1,572	6	30	6	-	-	1	3	

Type of Benefit Recipient (Includes current members in DROP)

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

Retirement Option

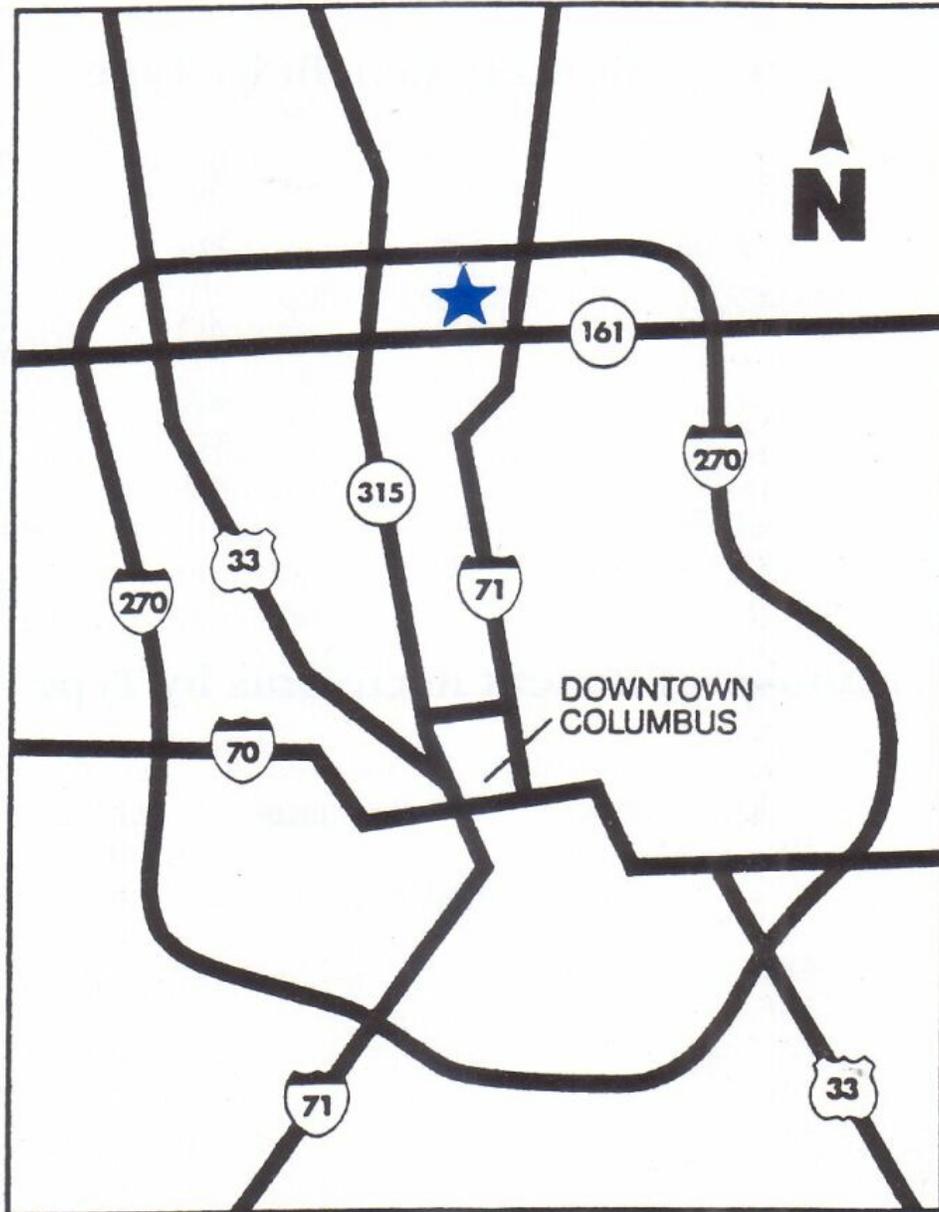
Under the unmodified plan, a surviving spouse receives a 50% continuance (minimum, \$900 monthly)

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

Average Benefit Payments					
2003-2012					
Retirement During		Years of Credited Service			Overall
		20 to <25	25 to <30	30+	
2012	Average Monthly Benefit	\$3,023	\$3,453	\$4,055	\$3,339
	Average Final Average Salary	\$5,146	\$5,643	\$4,922	\$5,450
	Number of Retirees	15	29	2	46
2011	Average Monthly Benefit	\$2,781	\$3,757	\$4,738	\$3,685
	Average Final Average Salary	\$5,734	\$5,779	\$6,155	\$5,694
	Number of Retirees	8	42	4	54
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

The table above does not include active DROP participants.



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

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

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



Dave Yost • Auditor of State

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

We have reviewed the *Independent Auditor's Report* of the Ohio State Highway Patrol Retirement System, Franklin County, prepared by Kennedy Cottrell Richards LLC, for the audit period January 1, 2012 through December 31, 2012. Based upon this review, we have accepted these reports in lieu of the audit required by Section 117.11, Revised Code. The Auditor of State did not audit the accompanying financial statements and, accordingly, we are unable to express, and do not express an opinion on them.

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

A handwritten signature in black ink that reads "Dave Yost".

Dave Yost
Auditor of State

August 21, 2013



Dave Yost • Auditor of State

OHIO STATE HIGHWAY PATROL RETIREMENT SYSTEM

FRANKLIN COUNTY

CLERK'S CERTIFICATION

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

Susan Babbitt

CLERK OF THE BUREAU

CERTIFIED
SEPTEMBER 3, 2013