



Highway Patrol Retirement System

6161 Busch Blvd. • Suite 119 • Columbus, OH 43229-2553 • 614.431.0781
fax 614.431.9204 • www.ohprs.org

September 9, 2009

The Honorable Todd Book, Chairman
Ohio Retirement Study Council
88 East Broad Street, Suite 1175
Columbus, Ohio 43215

Dear Chairman Book:

Pursuant to Section 5505.121, of the Ohio Revised Code, the Highway Patrol Retirement System is submitting the plan required when the system's actuary determines the unfunded actuarial accrued liability period exceeds 30 years. Included in this plan is the actuarial evaluation for the period ending December 31, 2008 and a supplemental letter from the actuarial firm of Gabriel Roeder Smith attesting to a funding period of 30 years or less if the elements of this plan are implemented by the Legislature.

Earlier this year the ORSC made requests for actuarial cost impact data from each of the Ohio public pension plans. The supplemental report prepared by GRS is included in this plan.

The HPRS Board of Trustees established certain goals to guide the development of this plan.

- The elements of the plan must achieve the 30 year funding level required by the statute.
- The plan must be a balanced approach to funding solvency and consider in a comprehensive way every issue associated with system.
- Assumptions and expectations used in this plan must be realistic and mainstream.
- The outputs of any of the elements of this plan must be measurable.

With these goals in mind the Board appointed a Special Legislative Committee comprised of two Trustees elected by the active members of the system; two Trustees elected by the retired members of the system; and one of the appointed Trustees of the system. That Committee held public meetings with all interested parties and used enhanced electronic tools to share information with all members of the HPRS and to provide a means for input from those unable to attend the meetings.

In the end the Committee presented to the Board a plan that achieved all of the goals noted above. That plan was unanimously approved by the Board on August 27, 2009. A summary of that plan is contained in TAB 1. Each item of the plan is then separately addressed in the subsequent tabs.

We look forward to further discussions with the Legislature as we seek to implement this plan as soon as possible.

Sincerely,


Richard A. Curtis
Executive Director

TABLE OF CONTENTS

- Plan Summary TAB 1
- COLA Reduction TAB 2
- Employee Contribution Rate TAB 3
- Final Average Salary Calculation TAB 4
- COLA Eligibility TAB 5
- Health Care Contribution TAB 6
- Supplemental Issues TAB 7
- ORSC Cost Impact Request TAB 8
- 2008 Actuarial Evaluation Report TAB 9



Highway Patrol Retirement System

6161 Busch Blvd. • Suite 119 • Columbus, OH 43229-2553 • 614.431.0781
fax 614.431.9204 • www.ohprs.org

HIGHWAY PATROL RETIREMENT SYSTEM

30-YEAR SOLVENCY PLAN

Pursuant to Section 5505.121, Ohio Revised Code, the HPRS Trustees are seeking legislative action to implement the following changes to achieve a 30-year funding status, as required by the statute.

- **Decrease the Cost of Living Adjustment (COLA) from 3% to 2%, except for any benefit recipient age 65 and older AND receiving a HPRS pension benefit of less than 185% of the federal Poverty Level (~\$26,000). The HPRS Board may authorize a COLA in an amount not to exceed 3% when funds are available according to Section 5505.121, ORC.**
- **Increase the EMPLOYEE contribution rate from 10% to 11% and exempt the additional 1% from flowing into DROP accounts.**
- **Increase the Final Average Salary (FAS) calculation period from 3 years to five years for anyone retiring on or after January 1, 2015.**
- **Increase the COLA eligibility age from 53 to 60 for anyone retiring on or after the effective date of this legislation.**
- **Reduce the allocation of the EMPLOYER contribution to health care up to 1% to achieve a 30-year funding status in conjunction with the items above**
- **Supplemental Issues:**
 - **Provide authority for the Board to seek and retain legal counsel when deemed necessary.**
 - **Implement a comprehensive review of the custodian role of the State Treasurer and seek competitive bids for custodian services at a national level.**
 - **Restore the Board's authority to establish the EMPLOYER contribution rate on a biennial basis.**

TAB 2

COLA REDUCTION

Decrease the Cost of Living Adjustment (COLA) from 3% to 2%, except for any benefit recipient age 65 and older and receiving a HPRS pension benefit of less than 185% of the Federal Poverty Level (~ \$26,000). The HPRS Board may authorize a COLA in an amount not to exceed 3% when funds are available according to Section 5505.121, ORC.

Comments:

- The exception to this reduction would apply to a small percentage of the HPRS benefit recipients and this group contains the oldest living recipients who receive the lowest annual benefits.
- This reduction to retirees parallels the 1% of additional contribution established for the employer in September of 2008 and the additional 1% from the employees being sought in this plan.
- If system solvency changes significantly to the positive side in the future the Board seeks the authority to restore COLA's to the 3% level.

TAB 3

EMPLOYEE CONTRIBUTION RATE

Increase the EMPLOYEE contribution rate from 10% to 11% and exempt the additional 1% from flowing into DROP accounts.

Comments:

- This 1% increase is consistent with the 1% increase in EMPLOYER contribution rate implemented in July 2009 and the 1% COLA reduction for retirees being sought in this plan.
- The 11% employee contribution rate exceeds a 10.5% employee contribution rate established in previous years.
- By excluding this additional 1% from DROP accounts the solvency benefit will accrue to the HPRS.

TAB 4

FINAL AVERAGE SALARY CALCULATION

Increase the Final Average Salary (FAS) calculation period from 3 years to 5 years for anyone retiring on or after January 1, 2015.

Comments:

- The net effect of this change is to reduce the liability of the system by lowering pension benefits.
- This change also minimizes any impact that might occur when salary increases, generally resulting from promotions, occur in the latter stages of ones career.
- The HPRS does not calculate overtime in the Final Average Salary.
- Delaying the implementation date until January 1, 2015 will provide an opportunity for anyone in the final years of a career to modify retirement plans to adjust to this change.

TAB 5

COLA ELIGIBILITY

Increase the COLA eligibility age from 53 to 60 for anyone retiring on or after the effective date of this legislation.

Comments:

- Age 60 is the maximum age of service within the Highway Patrol.
- Members retiring prior to age 60 frequently have other sources of income before reaching eligibility for Social Security.

TAB 6

HEALTH CARE ALLOCATION

Reduce the allocation of the EMPLOYER contribution to health care up to 1% to achieve a 30-year funding status in conjunction with the items above.

Comments:

- Calculating the impacts of the other elements of this plan it was determined that a small contribution from the health care allocation – somewhere between 0% and 1% - would be needed to achieve a full 30-year funding status.
- The current health care fund solvency is estimated to be 15 years

TAB 7

SUPPLEMENTAL ISSUES

Provide authority for the HPRS Board to seek and retain legal counsel when deemed necessary.

Comments:

- Senate Bill 133 created the authority for the State Attorney General to bring legal action against the Board. It is an inherent conflict for the State Attorney General to then be the sole legal representative of the Board, whether through special counsel or not.
- Past cases demonstrate clearly that conflicts of interest arise when the State Attorney General represents multiple clients on the same issue.
- An independent audit of the OP&F and STRS noted this issue several years ago.

Implement a comprehensive review of the custodian role of the State treasurer and seek competitive bides for custodian services at a national level.

Comments:

- The language in the law establishing the duties of the State Treasurer with regard to the pension system is clearly antiquated.
- Using the combined financial resources of the five pension systems would result in significant savings when seeking national bids on custodian services.
- An independent audit of the OP&F and STRS noted this issue several years ago.

Restore the HPRS Board's authority to establish the EMPLOYER contribution rate on a biennial basis.

Comments:

- The HPRS was granted the authority by the Legislature in the 1960's to establish the employer - State of Ohio – contribution rate as a part of the biennial budget process.

- On three occasions since that authority was granted the HPRS Board has voluntarily reduced the EMPLOYER contribution rate for specific two-year budget cycles resulting in a net savings of about \$1,000,000 to the State of Ohio.
- The EMPLOYER contribution rate is based solely on the annual actuarial evaluation report that is required in Section 5505.121, of the Ohio Revised Code.
- This authority was recently removed from the HPRS by amending the State Budget Bill.



Highway Patrol Retirement System

6161 Busch Blvd. • Suite 119 • Columbus, OH 43229-2553 • 614.431.0781
fax 614.431.9204 • www.ohprs.org

August 27, 2009

TO: HPRS Trustees
FROM: Dick Curtis DC
RE: Comprehensive Pension Funding Bill Items

The Ohio Retirement Study Council recently asked the five Ohio public pension funds to seek actuarial costing data for several plan design changes and contribution level increases. At the onset of this request all parties agreed that all issues should be on the table and a comprehensive evaluation of all the factors should occur. Paul Morgan, of Evaluation Associates, advocated that same position when reviewing the performance of the five systems at a recent ORSC meeting. All five systems engaged in this process.

During my meeting with the ORSC Staff I raised two other issues that should be a part of any comprehensive review. The response was that involving other officer holders in any pension legislation this fall may unduly delay the process. I understand that concern but I would rather spend the time and complete a comprehensive consideration than act with incomplete information.

The first issue comes from discussions in several ORSC meeting over the years and was made very clear during the operational audits contracted by the ORSC for the Ohio Police & Fire Fund and the State Teachers Retirement System. During the final report presentation to the ORSC the auditing firm – IFS – stated clearly that a conflict of interest for the pension systems exists when the Ohio Attorney of General serves as the exclusive legal advisor. While this issue may be considered as distinct from any funding discussions there are instances where this conflict directly affects the fiscal side of the funds' operations.

Several years ago Ohio and several other states successfully settled a law suit with tobacco products producers. The Attorney General's Office represented the five pension funds as well as the State of Ohio. The final terms of the settlement resulted in a substantial amount of money being paid to each state for various specified projects, among them was tobacco usage cessation initiatives and reimbursement for health care costs associated with treating diseases associated with tobacco usage, especially in aging populations.

This litigation was settled by the Attorney General's Office by certifying that the five pension funds were State of Ohio agencies and agreed with the terms of the settlement. In fact the HPRS only learned of the settlement from media accounts after it was settled. The Attorney General's Office has previously opined that the pension funds are not state agencies. In any event a significant amount of the settlement was diverted to other legislative projects and recently the last remaining funds were taken from the entity implementing the terms and conditions of the settlement and diverted to administrative projects. In the end no funds ever made their way to any of the five Ohio public pension plans, in spite of the fact that the plans are responsible for providing health care benefits to people who were undoubtedly tobacco product users.

Obviously, if the pension funds were represented by counsel exclusively dedicated to the interests of the systems the outcome may have been different. It is impossible to determine the amounts of funds that could or should have come to the systems but in today's rising cost of care the treatment of the diseases associated with tobacco usage are among the most costly to each system.

The solution to this problem is simple and straight forward. A pension system, as any other business organization, needs legal representation that exclusively represents its interests. When legal representation attempts to represent clients with diverse interests one of those clients generally suffers, as the pension systems did in the tobacco case.

The second issue also comes from the operational audits of OP&F and STRS. In the final report IFS noted that the role of the State Treasurer as the custodian of the pension funds was significantly out of date.

The current practice of the Treasurer is to select a sub-custodian for the funds. Originally, the sub-custodians were to be Ohio-based banks so that the large volume of documents – stock certificates, bonds, etc. – could be accessible for review and processing; but that has changed because the pension funds have not traded paper documents for many years.

The nexus to the funding discussion is that many of the banks selected to be sub-custodians have limited ability to provide the services needed by the systems and additional vendors are added at additional expense. The HPRS has been precluded from using separate accounts for certain types of investments due to a lack of cost-effective international custody services offered by its sub-custodian. Several attempts to remedy this matter with several Treasurers have met with no success.

The solution to this issue is to place these services in the open market and seek competitive bids. Ohio-based vendors can always be considered once the best competitive prices for the full range of services is discovered. That process will likely impact the Ohio public plans in a very significant way in terms of driving fees down and providing access to the state of the art services that are now required.

These recommendations are presented with the intention that they will add to the comprehensive review that is currently underway. Anyone involved in these discussions understands that the funding of the plans has many moving parts and they must all be considered because of their interaction.



Highway Patrol Retirement System

6161 Busch Blvd. • Suite 119 • Columbus, OH 43229-2553 • 614.431.0781
fax 614.431.9204 • www.ohprs.org

August 27, 2009

TO: HPRS Trustees
FROM: Dick Curtis *DC*
RE: Chronology of the Changes to ORS Section 5505.15

Amended Substitute House Bill 1 was signed by the Governor on July 17, 2009 and became effective immediately. Contained in that Bill are changes to ORC Section 5505.15 that impact the authority of the HPRS Board of Trustees to establish the employer contribution rate. Since the language in this bill was not subject to public discussion in either the House or the Senate, the HPRS received numerous inquiries from active and retired members about the process employed to make this legislative change. The following chronology is constructed from interviews and inquiries made to and with key participants in the process; and from a review of the limited records available.

March/April 2009

Members of the majority caucus of the House engaged in conversations with the Director of the Ohio Retirement Study Council concerning an amendment to House Bill 2 (Transportation Budget Bill) that would reduce the employer contribution rate from 26.5% to 25.5% and eliminate the authority of the HPRS Trustees to establish the employer contribution rate without future legislative approval. The Director characterized the conversations as discussions about where money could be found to address shortfalls in state government.

NOTE: The HPRS Trustees established the 26.5% employer contribution rate in September 2008 pursuant to a requirement of the ORC. That rate increase of 1% would become effective for the state budget period of July 1, 2009 through June 30, 2010.

The HPRS learned that discussions were underway in the House to modify 5505.15 and that an amendment would be offered while HB 2 was in conference committee. The HPRS made inquiries as to whether amending a bill in conference committee with an item that was not part of the original House or Senate version violates the Ohio Revised Code. No amendment was made and records from the Legislative Service Commission indicate that no amendment was drafted for that purpose.

On Monday, April 27, 2009 at 5:35PM the House Finance and Appropriations Committee was convened and accepted a Substitute House Bill 1 and an Omnibus Amendment (HC-2455) to the original House Bill 1. This Committee promptly recessed at 6:07PM and

reconvened at 9:37PM. The Committee proceeded through a series of amendments offered by various Committee members. At 1:07AM, Wednesday, April 28, 2009 the Committee voted the amended House Bill 1 out and sent it to the House Floor.

NOTE: Prior to the drafting of this amendment and its introduction at the Committee meeting no one from the House or the ORSC contacted the HPRS to inquire about the impact of this change or to offer the HPRS an opportunity to testify about this change. The amendment was offered in such a way as to preclude the three hearings that normally accompany any legislation.

The amended House Bill 1 was passed by the House and it contained the changed version of Section 5505.15.

The Ohio Retirement Study Council held regularly scheduled meetings on May 6, June 10 and July 18, 2009 and this amendment was not reviewed or discussed as is required by ORC Section 171.

May/June 2009:

The HPRS contacted members of the majority and minority caucuses of the Senate and discussed this issue. The HPRS understood the Senate majority caucus position to be that, since a comprehensive review of pension funding was underway by each of the five systems and that since this review would likely result in legislative action, any modifications to pension funding, like those contained in House Bill 1, should take place in that process. The Senate then removed the modification of Section 5505.15 from the House version of HB 1.

NOTE: Since the Senate removed the changes to Section 5505.15 no testimony was offered in the Senate in opposition to the House version.

July 2009:

The Senate version of HB 1 was not accepted by the House and the matter went to a Conference Committee. Again, contact was made by the HPRS with members of the Senate leadership to confirm previous discussions. On July 13, 2009 the Conference Committee met at 11:35AM and approved the conference report by a vote of 5-1. The conference report then became the state budget bill. At this time it was noted by HPRS Staff that the House version of the modification to Section 5505.15 had been re-inserted.

NOTE: Conference Committees are not open to the public and Conference Committee documents are not available. There is no opportunity to offer testimony either at a Conference Committee or on the floor of the House or the Senate.

The HPRS contacted the majority caucus of the Senate to determine how the House change was accepted. We learned that the House members of the Conference Committee

informed the Senate members that the HPRS was adequately funded and that this change would not have any adverse impact on the system.

The HPRS contacted the Governor's Office and asked that this provision of House Bill 1 be vetoed. The Governor failed to take that action.

The HPRS contacted the majority and minority caucuses of the House and asked if the change to Section 5505.15 was the position of the caucus. The House minority caucus responded by saying that it was not included in any of the discussions associated with this amendment and did not support it. The House majority caucus failed to respond to several telephone inquiries. The Senate majority caucus responded by saying they opposed including this change in the budget bill and believed it should be a part of any pension bill that is likely to be introduced this fall; and yet the Senate majority members of the Conference Committee voted in favor of the report containing this amendment. The Senate minority caucus failed to respond to several telephone inquiries.

August 2009:

The HPRS contacted the Governor's Office to determine whether that office requested the change to 5505.15 or supported that change. The Governor's Office response is pending.

The HPRS contacted the Director of the Department of Public Safety to determine whether that office requested or supported the change to 5505.15. DPS Director Henry Guzman stated that DPS was not aware of this amendment and did not request that it be inserted into House Bill 1.

Summary:

Changes were made to a portion of the governance law associated with the HPRS and placed in a budget bill. The manner in which these changes were made obscured prior knowledge of the issue and precluded any ability of interested parties to offer testimony on this issue. This process contains a series of remarkable coincidences, the net effect of which resulted in not a single public hearing or a review by the ORSC.

In the plan submitted to the ORSC on September 9, 2009 the HPRS Board should include an item that returns 5505.15 to its original language before House Bill 1.

TAB 8

ORSC COST IMPACT REQUEST

The Ohio Retirement Study Council requested from each system cost impact data from the systems' actuaries on a variety of contribution and benefit design issues.

Gabriel Roeder Smith prepared a supplemental report to provide the specific cost impacts of the ORSC items relating to the HPRS.

OR SC

The Ohio Retirement Study Council
88 East Broad Street, Suite 1175
Columbus, OH 43215-3506
Phone: (614)228-1346
Fax: (614)228-0118
Website: www.orsc.org

Voting Members

Senators

Kirk Schuring, *Vice-Chair*
Keith Faber
Sue Morano

Representatives

Todd Book, *Chair*
Dan Dodd
Lynn Wachtmann

Governor's Appointees


Doug Gillum
Rich Murray
Dale Van Vyven

Non-Voting Members

Richard Curtis, *HPRS*
Christopher DeRose, *PERS*
William Estabrook, *OP&F*
Mike Nehf, *STRS*
James Winfree, *SERS*

Director

Aristotle L. Hutras

TO : Members, ORSC 
FROM : Aristotle Hutras
RE : Potential Contribution/Benefit Changes under Review
DATE : June 30, 2009

Per your request, we are providing a list of potential changes in contributions and/or benefits which largely resulted from our collaborative work with each retirement system. The retirement systems' actuaries have been asked to determine the actuarial impact of each change upon the funding period and funded ratio of the retirement systems. Based upon these results, each retirement board has been asked to develop and present a plan to the ORSC on September 9, 2009 that will reduce its funding period to no more than thirty (30) years as required under S.B. 82.

A. Contributions

1. Increase the employee contribution rate to a maximum of 12% phased-in by one-half of one percent over a four-year period in PERS, STRS and SERS.
2. Increase the employee contribution rate to a maximum of 14% phased-in by one percent over a four-year period in OP&F, HPRS and PERS-LE.
3. Increase the employer contribution rate for police from 19.5% to 24% phased in by one-half of one percent in the first year and one percent in each of the next four years.
4. Increase the employer contribution rate for PERS-LE to a maximum of 20.1% phased-in by one-half of one percent over a four-year period.
5. Increase the employer contribution rate to a maximum of 16% phased-in by one-half of one percent over a four-year period in PERS, STRS and SERS.

B. Age and Service Retirement

1. Increase the normal retirement age to 52; 54 and 55 in OP&F, HPRS and PERS-LE, with actuarially-determined reductions for early retirement.
2. Increase the normal retirement age to 67 with at least five years of service in PERS, STRS and SERS; increase early retirement age to 62 with at least five years of service and retain 55 with at least 25 years of service, with actuarially-determined reductions; increase to 32 years of service at any age.
3. Increase the normal retirement age to 67 with at least ten years of service in PERS, STRS and SERS; increase early retirement age to 62 with at least ten years of service and 57 with at least 25 years of service, with actuarially-determined reductions; increase to 32 years of service with minimum retirement age of 57.

C. Age and Service Benefit Formula

1. Change benefit formula to 2.2% for the first 30 years of service, plus 2.5% for years of service in excess of 30 in STRS.
2. Change benefit formula to 2.2% for the first 32 years of service, plus 2.5% for years of service in excess of 32 in PERS, STRS and SERS.
3. Eliminate 35-year incentive in STRS.

D. Final Average Salary

1. Increase to five years in all five retirement systems.

E. Lump Sum Death Benefit

1. Eliminate lump sum death benefit in all five retirement systems.

F. Cost-of-Living Allowance

1. Eliminate three percent COLA in all five retirement systems.
2. Delay three percent COLA to age 55; 60; and 65 in OP&F, HPRS and PERS-LE.
3. Delay three percent COLA to age 60; 65; and 70 in PERS, STRS and SERS.
4. Reduce COLA to two percent after having received benefit for 24 months in all five retirement systems.
5. Reduce COLA to 1.5 percent after having received benefit for 36 months in all five retirement systems.

G. Service Credit

1. Increase to \$1,000 per month to earn one month's service credit in PERS, indexed for general wage inflation.
2. Increase to 180 days of employment to earn one year's service credit in STRS and SERS.

H. Grandfathering Clause

1. Five years - 2015.
2. New hires only.

The above list is not meant to be exclusive, and each retirement system and its actuary may consider other alternatives to achieve a 30-year funding period that are generally consistent with the current portability and coordination of benefits among Ohio's retirement systems. It is expected that some combination of the above changes, along with subsequent legislation to implement the changes, will be required.



Gabriel Roeder Smith & Company
Consultants & Actuaries

One Towne Square
Suite 800
Southfield, MI 48076-3723

248.799.9000 phone
248.799.9020 fax
www.gabrielroeder.com

July 27, 2009

Mr. Richard Curtis
Executive Director
Ohio State Highway Patrol
6161 Busch Blvd. - Suite 119
Columbus, Ohio 43229

Re: Ohio Retirement Study Council (ORSC) – HPRS Benefit and Contribution Review

Dear Dick:

As requested, we have performed supplemental actuarial valuations measuring the financial effects of the proposed retirement eligibility conditions. Enclosed is our report of these supplemental valuations.

Please feel free to contact us with any questions or comments.

Sincerely,

Mita D. Drazilov

MDD:mdd
Enclosures

cc: Brian Murphy (GRS)
Daina Sofinski (GRS)

Ohio State Highway Patrol Retirement System
Supplemental Actuarial Valuations
December 31, 2008

Submitted To: Mr. Richard Curtis, Executive Director
Ohio State Highway Patrol Retirement System

Submitted By: Brian B. Murphy, FSA, MAAA and Mita D. Drazilov, ASA, MAAA
Gabriel, Roeder, Smith & Company

Date: July 27, 2009

This report presents results of an actuarial valuation of proposed benefit changes for members of the Ohio State Highway Patrol Retirement System (HPRS). The actuaries issuing this report are Members of the American Academy of Actuaries (MAAA) as indicated, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

The date of the valuation was December 31, 2008. This means that the results of the supplemental valuation indicate what the December 31, 2008 valuation would have shown if the proposed changes had been in effect on that date. This supplemental valuation does not predict the result of the December 31, 2009 valuation or of any other future actuarial valuation. (Future activities can affect future valuation results in an unpredictable manner.) Rather, the supplemental valuation gives an indication of the probable effect of **only the proposed changes** on future valuations without comment on the complete end result of the future valuations.

Actuarial assumptions and methods were consistent with those used in the regular actuarial valuations as of December 31, 2008, unless otherwise indicated. In particular, the entry age normal actuarial cost method was utilized, the assumed rate of investment return was 8.0% for pension and retiree health solvency purposes and 6.5% for retiree health liability purposes, and the assumed rate of active member payroll growth was 4.0%.

This report is intended to describe the financial effect of the proposed plan changes. No statement in this report is intended to be interpreted as a recommendation in favor of the changes, or in opposition to them.

The calculations are based upon assumptions regarding future events, which may or may not materialize. They are also based upon present and proposed plan provisions that are outlined in the report. If you have reason to believe that the assumptions that were used are unreasonable, that the plan provisions are incorrectly described, that important plan provisions relevant to this proposal are not described, or that conditions have changed since the calculations were made, you should contact the authors of this report prior to relying on information in the report.

**Ohio State Highway Patrol Retirement System
Supplemental Actuarial Valuations
December 31, 2008**

If you have reason to believe that the information provided in this report is inaccurate, or is in any way incomplete, or if you need further information in order to make an informed decision on the subject matter of this report, please contact the authors of the report prior to making such decision.

A brief summary of the active member data used in this valuation is shown below:

<u>Number</u>	<u>Annual Payroll</u>	<u>Averages</u>		
		<u>Pay</u>	<u>Age</u>	<u>Service</u>
1,544	\$94,301,538	\$61,076	38.3 yrs	13.5 yrs

A brief summary of the retiree and deferred data used in this valuation is shown below:

	<u>Number</u>	<u>Annual Benefits</u>	<u>Averages</u> <u>Age</u>	<u>Benefit</u>
Retirees and Beneficiaries	1,371	\$43,537,104	63.6 years	\$31,756
Deferreds	5	134,892	48.6 years	11,241

The results are based upon the following employer and employee contribution rates and preliminary rate allocation between pension and retiree health benefits. If the Board selects a rate allocation other than that shown, the amortization periods shown in this report would need to be re-evaluated.

	Employer Contribution Rates Expressed As % of Active Payroll		
	Retirement, Survivor & Disability Allowances	Post Retirement Health Care	Totals
Employer	21.00%	5.50%	26.50%
Employee	10.00%	0.00 %	10.00%
Totals	31.00%	5.50%	36.50%

Based upon the above rate allocation, the unfunded actuarial accrued liabilities of both the pension program and the retiree health program cannot be amortized as of December 31, 2008.

**Ohio State Highway Patrol Retirement System
Supplemental Actuarial Valuations
December 31, 2008**

Present Provision: Members contribute 10.0% of salary to the employees' savings fund. A member who leaves the employ of the State Highway Patrol before a benefit is payable may withdraw the accumulated contributions, without interest, in lieu of any other system provided benefit.

Proposed Provision: Members contribute 14.0% of salary to the employees' savings fund (increases occurring 1% per year over a four-year period). A member who leaves the employ of the State Highway Patrol before a benefit is payable may withdraw the accumulated contributions, without interest, in lieu of any other system provided benefit.

Actuarial Analysis: The following illustrates (a) the computed change in the employer contribution rate that would result from the proposed change on a level cost basis as a % of active member payroll if increases in the unfunded actuarial accrued liability are amortized over a 30-year period and (b) the computed amortization period if employer contribution rates remain unchanged:

	Pension All Members
<u>Increase/(Decrease) in</u>	
Normal Cost	(2.97)%
UAAL % (30-year amortization)	0.15%
Total Employer Contribution - Rate	(2.82)%
 Total Employer Contribution - \$ (CY 2010)	 \$ (2,876,303)
<u>Increase/(Decrease) in</u>	
Actuarial Accrued Liabilities	
Actives	\$ 2,584,009
Inactives (Deferreds)	0
Retirees and Beneficiaries	0
Total	\$ 2,584,009
Assets	0
UAAL	\$ 2,584,009
 Computed Amortization Period	 72 years

**Ohio State Highway Patrol Retirement System
Supplemental Actuarial Valuations
December 31, 2008**

Present Provision: A member may retire with an unreduced retirement benefit at age 52 to age 60, provided he has more than 20 years of service, or at age 48 with 25 or more years of contributing service. A member who has acquired at least 20 but less than 25 years of service and is between the ages of 48 and 52 is eligible to retire with a reduced retirement benefit. Members eligible for an unreduced retirement benefit are eligible to participate in the Deferred Retirement Option Program (DROP).

Proposed Provision: Affected members (either new hires only or retirements on or after January 1, 2015) may retire with an unreduced retirement benefit at age 52 to age 60, provided they have more than 25 years of service. Affected members who have acquired at least 25 years of service and are between the ages of 48 and 52 are eligible to retire with a reduced retirement benefit. Members eligible for an unreduced retirement benefit are eligible to participate in the Deferred Retirement Option Program (DROP). Non-affected members of HPRS would be covered under the retirement eligibility conditions described in the present provisions.

Actuarial Analysis: The savings from this proposal are shown in two ways – (1) assuming the proposed provisions apply to new hires only and (2) assuming the proposed provisions apply to retirements occurring on or after January 1, 2015. The following illustrates (a) the computed change in the employer contribution rate that would result from the proposed change on a level cost basis as a % of active member payroll if increases in the unfunded actuarial accrued liability are amortized over a 30-year period and (b) the computed amortization period if employer contribution rates remain unchanged:

	Pension		Retiree Health	
	New Hires	Retirement After 2015	New Hires	Retirement After 2015
<u>Increase/(Decrease) in</u>				
Normal Cost	(1.05)%	(1.05)%	(0.39)%	(0.39)%
UAAL % (30-year amortization)	0.54%	(0.52)%	0.19%	(0.14)%
Total Employer Contribution - Rate	(0.51)%	(1.57)%	(0.20)%	(0.53)%
Total Employer Contribution - \$ (CY 2010)	\$ (520,182)	\$ (1,601,346)	\$ (203,993)	\$ (540,582)
<u>Increase/(Decrease) in</u>				
Actuarial Accrued Liabilities				
Actives	\$ 9,448,834	\$ (8,877,214)	\$ 3,892,500	\$ (2,940,663)
Inactives (Deferreds)	0	0	0	0
Retirees and Beneficiaries	0	0	0	0
Total	\$ 9,448,834	\$ (8,877,214)	\$ 3,892,500	\$ (2,940,663)
Assets	0	0	0	0
UAAL	\$ 9,448,834	\$ (8,877,214)	\$ 3,892,500	\$ (2,940,663)
Computed Amortization Period	Cannot be amortized	Cannot be amortized	Cannot be amortized	Cannot be amortized

Ohio State Highway Patrol Retirement System Supplemental Actuarial Valuations December 31, 2008

Present Provision: A member may retire with an unreduced retirement benefit at age 52 to age 60, provided he has more than 20 years of service, or at age 48 with 25 or more years of contributing service. A member who has acquired at least 20 but less than 25 years of service and is between the ages of 48 and 52 is eligible to retire with a reduced retirement benefit. Members eligible for an unreduced retirement benefit are eligible to participate in the Deferred Retirement Option Program (DROP).

Proposed Provision: Affected members (either new hires only or retirements on or after January 1, 2015) may retire with an unreduced retirement benefit at age 54 to age 60, provided they have more than 25 years of service. Affected members who have acquired at least 25 years of service and are between the ages of 48 and 54 are eligible to retire with a reduced retirement benefit. Members eligible for an unreduced retirement benefit are eligible to participate in the Deferred Retirement Option Program (DROP). Non-affected members of HPRS would be covered under the retirement eligibility conditions described in the present provisions.

Actuarial Analysis: The savings from this proposal are shown in two ways – (1) assuming the proposed provisions apply to new hires only and (2) assuming the proposed provisions apply to retirements occurring on or after January 1, 2015. The following illustrates (a) the computed change in the employer contribution rate that would result from the proposed change on a level cost basis as a % of active member payroll if increases in the unfunded actuarial accrued liability are amortized over a 30-year period and (b) the computed amortization period if employer contribution rates remain unchanged:

	Pension		Retiree Health	
	New Hires	Retirement After 2015	New Hires	Retirement After 2015
<u>Increase/(Decrease) in</u>				
Normal Cost	(2.00)%	(2.00)%	(0.63)%	(0.63)%
UAAL % (30-year amortization)	1.04%	(1.02)%	0.31%	(0.24)%
Total Employer Contribution - Rate	(0.96)%	(3.02)%	(0.32)%	(0.87)%
Total Employer Contribution - \$ (CY 2010)	\$ (979,167)	\$ (3,080,296)	\$ (326,389)	\$ (887,370)
<u>Increase/(Decrease) in</u>				
Actuarial Accrued Liabilities				
Actives	\$ 17,997,779	\$ (17,483,690)	\$ 6,287,885	\$ (5,034,192)
Inactives (Deferreds)	0	0	0	0
Retirees and Beneficiaries	0	0	0	0
Total	\$ 17,997,779	\$ (17,483,690)	\$ 6,287,885	\$ (5,034,192)
Assets	0	0	0	0
UAAL	\$ 17,997,779	\$ (17,483,690)	\$ 6,287,885	\$ (5,034,192)
Computed Amortization Period	Cannot be amortized	Cannot be amortized	Cannot be amortized	Cannot be amortized

**Ohio State Highway Patrol Retirement System
Supplemental Actuarial Valuations
December 31, 2008**

Present Provision: A member may retire with an unreduced retirement benefit at age 52 to age 60, provided he has more than 20 years of service, or at age 48 with 25 or more years of contributing service. A member who has acquired at least 20 but less than 25 years of service and is between the ages of 48 and 52 is eligible to retire with a reduced retirement benefit. Members eligible for an unreduced retirement benefit are eligible to participate in the Deferred Retirement Option Program (DROP).

Proposed Provision: Affected members (either new hires only or retirements on or after January 1, 2015) may retire with an unreduced retirement benefit at age 55 to age 60, provided they have more than 25 years of service. Affected members who have acquired at least 25 years of service and are between the ages of 48 and 55 are eligible to retire with a reduced retirement benefit. Members eligible for an unreduced retirement benefit are eligible to participate in the Deferred Retirement Option Program (DROP). Non-affected members of HPRS would be covered under the retirement eligibility conditions described in the present provisions.

Actuarial Analysis: The savings from this proposal are shown in two ways – (1) assuming the proposed provisions apply to new hires only and (2) assuming the proposed provisions apply to retirements occurring on or after January 1, 2015. The following illustrates (a) the computed change in the employer contribution rate that would result from the proposed change on a level cost basis as a % of active member payroll if increases in the unfunded actuarial accrued liability are amortized over a 30-year period and (b) the computed amortization period if employer contribution rates remain unchanged:

	<u>Pension</u>		<u>Retiree Health</u>	
	<u>New Hires</u>	<u>Retirement After 2015</u>	<u>New Hires</u>	<u>Retirement After 2015</u>
<u>Increase/(Decrease) in</u>				
Normal Cost	(2.58)%	(2.58)%	(0.74)%	(0.74)%
UAAL % (30-year amortization)	1.34%	(1.33)%	0.36%	(0.28)%
Total Employer Contribution - Rate	(1.24)%	(3.91)%	(0.38)%	(1.02)%
Total Employer Contribution - \$ (CY 2010)	\$ (1,264,757)	\$ (3,988,065)	\$ (387,587)	\$ (1,040,365)
<u>Increase/(Decrease) in</u>				
Actuarial Accrued Liabilities				
Actives	\$ 23,217,135	\$ (22,861,418)	\$ 7,385,769	\$ (5,908,710)
Inactives (Deferreds)	0	0	0	0
Retirees and Beneficiaries	0	0	-	0
Total	\$ 23,217,135	\$ (22,861,418)	\$ 7,385,769	\$ (5,908,710)
Assets	0	0	-	0
UAAL	\$ 23,217,135	\$ (22,861,418)	\$ 7,385,769	\$ (5,908,710)
Computed Amortization Period	Cannot be amortized	58 years	Cannot be amortized	Cannot be amortized

**Ohio State Highway Patrol Retirement System
Supplemental Actuarial Valuations
December 31, 2008**

Present Provision: A member's final average salary is the average of salaries during highest 3 years of service.

Proposed Provision: A member's final average salary is the average of salaries during highest 5 years of service.

Actuarial Analysis: The savings from this proposal are shown in two ways – (1) assuming the proposed provisions apply to new hires only and (2) assuming the proposed provisions apply to retirements occurring on or after January 1, 2015. The following illustrates (a) the computed change in the employer contribution rate that would result from the proposed change on a level cost basis as a % of active member payroll if increases in the unfunded actuarial accrued liability are amortized over a 30-year period and (b) the computed amortization period if employer contribution rates remain unchanged:

	Pension	
	New Hires	Retirement After 2015
<u>Increase/(Decrease) in</u>		
Normal Cost	(0.78)%	(0.78)%
UAAL % (30-year amortization)	0.40%	(0.29)%
Total Employer Contribution - Rate	(0.38)%	(1.07)%
Total Employer Contribution - \$ (CY 2010)	\$ (387,587)	\$ (1,091,363)
<u>Increase/(Decrease) in</u>		
Actuarial Accrued Liabilities		
Actives	\$ 7,019,134	\$ (5,106,649)
Inactives (Deferreds)	0	0
Retirees and Beneficiaries	0	0
Total	\$ 7,019,134	\$ (5,106,649)
Assets	0	0
UAAL	\$ 7,019,134	\$ (5,106,649)
Computed Amortization Period	Cannot be amortized	Cannot be amortized

**Ohio State Highway Patrol Retirement System
Supplemental Actuarial Valuations
December 31, 2008**

Present Provision: A \$5,000 lump sum benefit is payable upon the death of the retiree.

Proposed Provision: Eliminate the lump sum death benefit.

Actuarial Analysis: The savings from this proposal are shown in two ways – (1) assuming the proposed provisions apply to all members and (2) assuming the proposed provisions apply to retirements occurring on or after January 1, 2010. The following illustrates (a) the computed change in the employer contribution rate that would result from the proposed change on a level cost basis as a % of active member payroll if increases in the unfunded actuarial accrued liability are amortized over a 30-year period and (b) the computed amortization period if employer contribution rates remain unchanged:

	Pension	
	<u>All Members</u>	<u>Retirement After 2010</u>
<u>Increase/(Decrease) in</u>		
Normal Cost	(0.01)%	(0.01)%
UAAL % (30-year amortization)	(0.14)%	(0.04)%
Total Employer Contribution - Rate	<u>(0.15)%</u>	<u>(0.05)%</u>
Total Employer Contribution - \$ (CY 2010)	\$ (152,995)	\$ (50,998)
<u>Increase/(Decrease) in</u>		
Actuarial Accrued Liabilities		
Actives	\$ (752,831)	\$ (752,831)
Inactives (Deferreds)	(2,929)	0
Retirees and Beneficiaries	<u>(1,776,882)</u>	<u>0</u>
Total	\$ (2,532,642)	\$ (752,831)
Assets	<u>0</u>	<u>0</u>
UAAL	\$ (2,532,642)	\$ (752,831)
Computed Amortization Period	Cannot be amortized	Cannot be amortized

**Ohio State Highway Patrol Retirement System
Supplemental Actuarial Valuations
December 31, 2008**

Present Provision: The basic benefit for all retirants is increased by 3 percent each year after age 53. The retirant must have also been receiving monthly benefits for at least twelve months. Benefit recipients receiving survivor benefits are eligible for the increase after receiving benefits for twelve months. Benefit recipients receiving disability benefits are eligible for the increase after receiving benefits for sixty months or age 53 whichever occurs first.

Proposed Provision: Eliminate the three percent cost of living allowance (COLA).

Actuarial Analysis: The savings from this proposal are shown assuming the proposed provisions apply to all members. The following illustrates (a) the computed change in the employer contribution rate that would result from the proposed change on a level cost basis as a % of active member payroll if increases in the unfunded actuarial accrued liability are amortized over a 30-year period and (b) the computed amortization period if employer contribution rates remain unchanged:

	Pension All Members
<u>Increase/(Decrease) in</u>	
Normal Cost	(3.52)%
UAAL % (30-year amortization)	(8.86)%
Total Employer Contribution - Rate	(12.38)%
 Total Employer Contribution - \$ (CY 2010)	 \$ (12,627,172)
<u>Increase/(Decrease) in</u>	
Actuarial Accrued Liabilities	
Actives	\$ (66,452,650)
Inactives (Deferreds)	(312,840)
Retirees and Beneficiaries	(86,285,688)
Total	\$ (153,051,178)
Assets	0
UAAL	\$ (153,051,178)
 Computed Amortization Period	 15 years

**Ohio State Highway Patrol Retirement System
Supplemental Actuarial Valuations
December 31, 2008**

Comments

- (1) The probabilities of unreduced retirement used in the supplemental actuarial valuations are presented below:

Retirement Ages	Probabilities of Age & Service Retirement		
	52 & 25	54 & 25	55 & 25
48			
49			
50			
51			
52	40%		
53	30%		
54	40%	40%	
55	25%	25%	40%
56	25%	25%	25%
57	25%	25%	25%
58	30%	30%	30%
59	35%	35%	35%
60 & Over	100%	100%	100%

Probabilities of reduced retirement were unchanged from the annual actuarial valuation. They are 7% at ages 48 through 54.

- (2) Savings resulting from the delayed retirement due to the proposed retirement conditions are partially offset by the fact that more individuals may retire with a disability benefit than otherwise would be the case.
- (3) In performing the supplemental actuarial valuations where retirement eligibility provisions change in 2015, it was assumed that a member would either retire or DROP under the current eligibility conditions if he was eligible to do so prior to January 1, 2015. For the other supplemental valuations that are assumed to begin at a future date, it was assumed that a member's employment behavior would be unaffected by such changes.

**Ohio State Highway Patrol Retirement System
Supplemental Actuarial Valuations
December 31, 2008**

Comments (Concluded)

- (4) The figures in this study are based upon the Ultimate Entry Age Normal Cost Method (UEANC). The UEANC method is a common choice, although not the only choice, in financing benefit changes that apply largely or exclusively to individuals who will be hired in the future. The objective of the method is to develop a normal cost that will remain approximately level as the population mix gradually shifts away from people covered under the old provisions toward people subject to the new provisions. As such, the UEANC normal cost is defined to be the normal cost that would apply to an individual who is subject to the new provisions throughout his or her entire career, and an adjustment is applied to the accrued liability to compensate for the difference between the provisions that will actually affect the people in the valuation, and those included in the UEANC normal cost computation. For technical reasons, when this method is used for a benefit change resulting in less generous benefits, the unfunded liability increases, and the funded % drops. However, the long term contribution rate and/or the amortization period may drop, as is the case in this study. The UEANC method can be used in cases where a permanent plan change is being considered. If the plan change is reversed some years after the UEANC method is applied, a possible result is that everyone will get the same benefits they would have received if the benefit change had not occurred, but the plan may have less money than it would have had if the UEANC method had not been used – a most undesirable result.

While we think that the UEANC method will be useful to the trustees for the purpose of understanding the financial implications of these proposals, the trustees can decide the actual method to be used following the adoption of the proposals, if, indeed they are adopted. GRS will be glad to work with the trustees to aid them in understanding the pros and cons of this method.

TAB 9

2008 ACTUARIAL EVALUATION REPORT

Pursuant to the requirements of the Ohio Revised Code the HPRS obtains an actuarial evaluation each year.

This evaluation was prepared by the actuary firm of Gabriel Roeder Smith for the period ending December 31, 2008.