PRESENT ACTUARIAL STATUS OF THE
STATE EMPLOYES' RETIREMENT FUND

July, 1973

HUGGINS
& COMPANY, INC.

CONSULTING ACTUARIES • EMPLOYEE BENEFIT PLAN CONSULTANTS | 1401 WALNUT STREET • PHILADELPHIA PA 19102 • (215) 665-1401

July 3, 1973

Mr. Richard L. Witmer, Secretary
State Employes' Retirement Board
E-260 Labor and Industry Building
Harrisburg, Pennsylvania 17101

Dear Mr. Witmer:

At your request and for the benefit of members of the Retirement Board, we are pleased to submit these comments on the present actuarial status of the State Employes' Retirement Fund with particular emphasis on the changes resulting from Act 230, approved July 31, 1968.

In any consideration of the actuarial status of the Retirement Fund there are three main areas to keep in mind.

1. What is the unfunded liability and has it been increasing in recent years?

2. What are the actuarial assumptions and how do they compare with the actual experience?

3. What actuarial cost method is used in the valuation?

1. Unfunded Liability

The record of unfunded liability, in the State Annuity Accumulation Account ("S.A.A.A.") in recent valuations has been as follows:

Valuation Date	Annual Payroll Used*	Total Unfunded Liability (SAAA)		Unfunded Accrued Liability (SAAA)	
		Amount*	% of Payroll	Amount*	% of Payroll
12/31/71	$924,623	$1,257,072	136.0%	$760,593	82.3%
12/31/70	888,498	1,059,318	119.2	585,835	65.9
6/30/69	732,219	842,411	115.0	450,401	61.5
6/30/68	636,810	555,106	87.2	-	-
6/30/67	586,273	518,898	88.5	-	-

*In thousands of dollars.

In addition to the unfunded liability we have shown the annual payroll used in these valuations and the unfunded liability as a percentage of the annual payroll. Under the new actuarial cost method established by Act 230, we can now separate the unfunded liability into the portion to be funded by future normal costs and the unfunded accrued liability. Consequently, beginning with the 1969 valuation, we show the item of unfunded accrued liability and this liability as a percentage of the payroll.

In looking first at the unfunded liability, it will be noted that on June 30, 1967 the liability was $518,898,000 and that it more than doubled to $1,257,072,000 as of December 31, 1971. During the same period the annual payroll increased from $586,273,000 to $924,623,000, which is less than a 60% increase.

If we now look at the fourth column showing the unfunded liability expressed as a percentage of the annual payroll, it will be noted that, from June 30, 1967 to June 30, 1968, there was little variation in the percentage, being 88.5% in 1967 and 87.2% in 1968. However, there was a large jump as of June 30, 1969 to 115.0%. This is an increase of 27.8% percentage points and resulted from the substantial increases in liability resulting from the passage of Act 230 effective July 31, 1968. The increase from June 30, 1969 to December 31, 1970, a period of 18 months, was relatively minor being only 4.3 percentage points to 119.2%. The last increase to 136.0%, or 16.8 percentage points, is puzzling to us and may be partly due to possible errors in the basic data in the valuation as of December 31, 1971 about which we have previously expressed some reservations.

In examining the changes in the unfunded accrued liability, it will be noted that it increased from $450,401,000 in 1969 to $760,593,000 in 1971. Here again the percentage increased moderately from 1969 to 1970, but jumped sharply in 1971.

It might be helpful to make some brief comments about Act 230 at this time. In 1968 we estimated that the additional liability resulting from the passage of this act represented approximately 23.8% of total payroll. Based on the payroll in 1968 this was approximately $152,000,000 of additional liability although, in terms of 1969 payroll, the figures would be closer to $174,000,000. Thus, the increase in the total unfunded liability from 87.2% of payroll in 1968 to 115.0% in 1969 might be considered in two parts; first, an increase of 4.0% to 91.2% due to the typical yearly increases; and secondly, an additional increase of 23.8% of payroll due to Act 230.

In order to maintain the actuarial soundness of the Retirement Fund, it is necessary for the State to make the required appropriations and to make them in full and on a timely basis. As you know, the appropriation askings recommended in our reports have not been fully billed in recent years following the change in procedure in the Budget office.

Under the change in procedure, effective in 1969-70, the appropriation asking was not shown as a separate item in the General Fund budget; instead the State contributions were included as part of the expense items in the various departmental budgets. This system has operated to the disadvantage of the Retirement Fund as will be seen from the following table:

Fiscal Year	Appropriation Recommended	Appropriation Billing	Excess over Billing
1971-72	$ 66,796,000	$ 65,323,428	$ 1,472,572
1970-71	62,332,000	57,040,766	5,291,234
1969-70	56,900,000	53,463,738	3,436,262
Totals	$186,028,000	$175,827,932	$10,200,068

In addition to these billings less than the appropriation askings, there have been occasions during the past several years when payments into the fund of the required appropriations have been delayed, thereby resulting in substantial loss of investment income at a time when the funds were being invested at rates of 7% or more annually.

Another problem arises in the timing of the appropriation askings because of recent very large salary increases. We first determine the State contribution as a percentage of the applicable payroll. For appropriation asking purposes we convert this to a dollar amount by applying the percentage contribution rate to the estimated total covered payroll. Since appropriation askings are submitted approximately two years in advance of the fiscal year involved, we must anticipate the increase in payroll over the interim period. Because of the substantial increases in payroll that have occurred in recent years, the actual payroll has proved to be higher than we anticipated. The following table will give an indication of how this procedure has worked to the disadvantage of the Retirement Fund in recent years at a time when very large general salary increases have occurred, partly as a result of Act 195 providing bargaining rights for State employes.

Fiscal Year	Assumed Payroll*	Percent of Payroll	Appropriation Asking*	Actual Payroll*	Percentage Applied to Actual Payroll*	Excess Over Asking*
1971-72	$840,000	7.95%	$ 66,796	$1,044,370	$ 83,027	$ 16,231
1970-71	780,000	7.99	62,332	935,326	74,733	12,401
1969-70	715,000	7.96	56,900	884,085	70,373	13,473
1968-69	630,000	8.20	51,650	738,190	60,532	8,882
1967-68	530,000	8.27	43,850	675,355	55,852	12,002
			$281,528		$344,517	$ 62,989

*In thousands of dollars.

As you know, we are attempting to solve this problem of underestimates in future payrolls by having the Budget Secretary use the percent of payroll that we specify and apply it to the actual payroll of the members of each department. With the possible exception of State police and the judges, we would expect that this would be a flat percentage, currently at a rate approximating 8% of payroll. If this procedure is followed, then State contributions to the Retirement System would be on a more current basis and this would prevent the continuing increases in the unfunded liability from this source.

2. Actuarial Assumptions

The actuarial assumptions in current use are those developed in our eighth actuarial investigation covering the 3-year period July 1, 1962 to June 30, 1965. Our report on this investigation was dated March 4, 1969. Normally, the investigation would have covered the five-year period ending June 30, 1965, but information concerning membership activity was unavailable for the first two years of this period. These assumptions are summarized in Schedule T shown on page 49 of our most recent valuation report (as of December 31, 1971) and we are attaching a copy of this schedule for your convenience (marked as Exhibit A). These assumptions have been used in the following valuations:

Valuation as of	Date of Report
June 30, 1967	June 2, 1969
June 30, 1968	June 2, 1970
June 30, 1969	May 21, 1971
December 31, 1970	January 19, 1972
December 31, 1971	June 5, 1973

The ninth actuarial investigation covering the 5½ year period from July 1, 1965 to December 31, 1970 was reported to you on August 23, 1972. No actuarial valuations have yet been made using the results of this investigation although it is our intention to use these rates in conjunction with a 5% interest assumption when the legislature acts to pass the recodification bill which makes provision for such an interest assumption in the actuarial valuations. For your information we have prepared a summary schedule of our proposed actuarial assumptions which we would use on the basis of a 5% interest rate and the tables developed in the 1965-70 investigation. This schedule is attached and is entitled "Proposed Actuarial Assumptions Based on 1965-70 Investigation" (marked as Exhibit B).

In comparing these two schedules the first point to note is the interest assumption which, as previously stated, would be increased from 4% per annum to 5% per annum. This change is reasonable and would bring the assumed rate of interest closer to the actual rate which has been substantially higher than 4% for many years. Recently reported rates of earnings on the invested funds have been substantially in excess of 6% and it would appear that a high rate of return may be anticipated for the foreseeable future.

In the service tables, a comparison of these schedules indicates the following differences in the various elements:

1. Withdrawal - Except in the case of the female members in Classes A and B, the rates of withdrawal are generally lower in the more recent experience. This element in itself would lead to higher costs and liabilities in our actual valuations because we would anticipate generally smaller State reserves released as members withdrew their contributions.

2. Mortality - The rates of death among active members would be substantially lower under the new tables. This would operate in two directions. On the one hand the cost of superannuation retirement would tend to increase because of the larger percentage of members reaching superannuation age, hence, leading to somewhat higher costs and liabilities; on the other hand, the cost of death benefits in active service would be decreased because of the anticipated fewer deaths during active membership.

3. Disability - With some exceptions, the rates of disability would tend to be lower under the new tables and this would result in a reduction in costs and liabilities on account of disability benefits.

4. Retirement - The new rates of service retirement are, in general, substantially lower than before. This would lead to a reduction in costs and liabilities compared with the old rates.

5. Salary Scale - In line with the continuing substantial increases in salaries of members, the salary scale shows sharp increases as compared with the salary scale previously in use. This element taken alone will result in sharply increased costs and liabilities.

We consider it possible that the combination of the higher interest rate and the higher assumed increases in salaries together with the varying effects due to the other elements in the actuarial assumptions would probably lead to some increase in costs and liabilities compared with the continued use of the present actuarial assumptions shown in Schedule T. We consider that the valuation on the new tables would produce more realistic results which will be closer to the actual experience in recent years than the continued use of the present assumptions.

3. Actuarial Cost Method

An important change in the actuarial cost method employed in the State Employes' Retirement System was made by Act 230, approved July 31, 1968. The change was from the so-called "aggregate cost method" to the "entry age normal cost method" with amortization of the unfunded accrued liability over a 30-year period, assuming increases at the rate of 4% each year in the annual installments.

I would say that the sequence of events that led to the change may be summarized as follows:

1. The Public School Employes' Retirement System made provision for substantial liberalizations in Act 34, approved June 30, 1967, which were financed without substantial increases in current annual contributions by a change in actuarial cost method from the aggregate cost method to the entry age normal cost method with 30-year funding of the unfunded accrued liability assuming increases at the rate of 4% each year on the installments. The new actuarial cost method was written into the Public School Employes' Retirement Code at the time of this amendment by Act 34.

2. One year later when the legislature decided to liberalize the State Employes' Retirement System, a similar procedure was used and this resulted in the liberalizations provided by Act 230 with a corresponding change in the actuarial cost method in order to keep the annual contribution rates at approximately the same level as they were prior to the change.

For the record, I might say that the legislation that led to Act 230 was contained in House Bill No. 2768 (Printer's No. 3779) which was introduced on July 8, 1968 and in Senate Bill No. 1294 (Printer's No. 2295) which subsequently was the bill that was enacted. At the time that these bills were being considered I wrote a letter to Dr. Wueller of the Joint State Government Commission dated July 15, 1968, a copy of which I am enclosing (marked as Exhibit C). On July 16, 1968 I wrote to Mr. Davies about House Bill No. 2768 and I am also enclosing a copy of this letter (marked as Exhibit D). One final item relating to Act 230 is the enclosed memorandum dated July 25, 1968 on Senate Bill No. 1295, Printer's No. 2295 (marked as Exhibit E). Both letters discuss the new actuarial cost method which, as I stated to Dr. Wueller, is perfectly acceptable and the most frequently used method for pension funding today. The memorandum also provides examples of the operation of the Social Security integration supplement including cases where the total allowance exceeds 100% of final average salary

In the letter to Mr. Davies you will note that we stated the additional annual cost because of the liberalizations would be approximately $11,546,000, which would be offset by a reduction in the annual cost of approximately $12,200,000 by reason of the change in actuarial cost method. We also subsequently estimated that additional liabilities involved at that time would be approximately $152,000,000 as previously mentioned.

I might state that the judges, at that time, were attempting to obtain legislation for retirement benefits approaching 100% of final salary in line with the benefits for Federal judges. The provisions of Act 230 generally succeeded in achieving this objective while at the same time including the higher paid officers at comparable salary levels. I think the main reason benefits for several judges have exceeded 100% of salary is that the Social Security integration supplements were made retroactive for <u>all</u> credited service instead of being restricted to service beginning in 1956 when State employes first became eligible for Social Security coverage, as we had recommended when the legislation was first proposed.

As a result of this analysis of the actuarial status of the Retirement Fund, we would like to summarize our comments as follows:

1. We think the steps you have taken to update the actuarial file so that we can obtain completely reliable data should yield excellent results. As you know we are not satisfied as to the accuracy of the data for the 1971 valuation.

2. Under the provisions of Senate Bill 472 and the new procedure discussed with the Budget Secretary, we hope that shortages in the amounts of the appropriation askings will no longer occur. By applying the recommended rate of contribution to the current payroll and recognizing the higher employer rates for the legislators and the judges, we think that the shortages should be eliminated and the delays in making the payments minimized.

3. The new actuarial tables reported in our investigation for 1965-70 along with a 5% interest rate will form the basis of the new actuarial assumptions we are planning to use. This should result in current and realistic assumptions based on recent experience.

4. The actuarial cost method specified in Act 230 (1868) is perfectly valid and parallels the method in use in the Public School Employes' Retirement System. In conjunction with the new actuarial assumptions, the method should result in actuarial liabilities and costs that should be relatively stable if further liberalizations are kept to a minimum.

Respectfully submitted,

HUGGINS & COMPANY, INC.

By Kenneth H. Ross
KENNETH H. ROSS

KHR:fl

Encls.

ACTUARIAL ASSUMPTIONS

Interest Rate: 4% per annum, compounded annually, which is the statutory interest rate.

Service Tables: Service tables for active members based on the experience of the Retirement System in 1962-65, with values at specimen ages in 5 separate classes as follows:

CLASS	AGE	RATES OF SEPARATION DUE TO				SALARY SCALE
		Withdrawal	Death	Disability	Retirement	
A and B (MALE)	25	.17556	.00076	.00005	-	$4,065
	35	.01249	.00137	.00007	.00032	5,500
	45	.08541	.00358	.00094	.00129	5,630
	55	.07212	.01044	.00207	.00923	5,675
	65	-	.02442	-	.19765	5,700
A and B (Female)	25	.19629	.00062	.00005	-	3,620
	35	.08451	.00099	.00041	.00042	4,150
	45	.05180	.00200	.00121	.00138	4,350
	55	.03817	.00648	.00284	.00774	4,400
	65	-	.01556	-	.20984	4,400
C (MALE and FEMALE)	25	.01908	.00076	.00005	-	5,575
	35	.00526	.00137	.00007	.00218	6,455
	45	.00188	.00358	.00094	.01740	7,100
	55	.00066	.01044	.00207	.20451	7,450
	65	-	.02442	-	.31546	7,500
D (MALE and FEMALE)	25	-	.00076	.00005	-	-
	35	.07492	.00137	.00007	-	-
	45	.01878	.00358	.00094	.03478	-
	55	.00303	.01044	.00207	.13912	-
	65	-	.02442	-	.14447	-
E (MALE and FEMALE)	25	-	.00076	.00005	-	-
	35	.01619	.00137	.00007	-	-
	45	.00898	.00358	.00094	-	-
	55	.00397	.01044	.00207	.01260	-
	65	-	.02442	-	.02811	-

*No salary increases assumed for Class D or for Class E.

Superannuation and Withdrawal Allowances: The mortality table used for those receiving superannuation and withdrawal allowance is the 1951 Group Annuity Table.

Disability Allowances: The mortality table used for those receiving disability allowances is a 45% modification of Hunter's Table of Mortality among Disabled Lives.

PROPOSED ACTUARIAL ASSUMPTIONS BASED ON 1965-70 IVESTIGATION

Interest Rate: 5% per annum, compounded annually.

Service Tables: Service tables for active members based on the experience of the Retirement System in 1965-70, with values at specimen ages in 5 separate classes as follows:

CLASS	AGE	RATES OF SEPARATION DUE TO				SALARY SCALE
		Withdrawal	Death	Disability	Retirement	
A and B (MALE)	25	.17831	.00012	.00007	-	1.455
	35	.07588	.00022	.00018	.00020	2.485
	45	.04458	.00073	.00062	.00080	4.068
	55	.03035	.00261	.00170	.00381	6.050
	65	-	.01567	-	.10685	8.251
A and B (FEMALE)	25	.20802	.00010	.00004	-	1.408
	35	.09854	.00015	.00035	.00019	2.294
	45	.05109	.00038	.00059	.00057	3.613
	55	.03102	.00133	.00191	.00524	5.375
	65	-	.00970	-	.14387	7.328
C (MALE and FEMALE)	25	.01883	.00012	.00007	-	1,534
	35	.00673	.00022	.00018	.00062	2.620
	45	.00135	.00073	.00062	.00466	4.287
	55	.00029	.00261	.00170	.08797	6.377
	65	-	.01567	-	.26082	8.696
D (MALE and FEMALE)	25	-	.00012	.00007	-	1.230
	35	.01789	.00022	.00018	-	1.653
	45	.00374	.00073	.00062	.00482	2.221
	55	.00125	.00261	.00170	.01777	2.985
	65	-	.01567	-	.05642	4.012
E (MALE and FEMALE)	25	.02360	.00012	.00015	-	1.230
	35	.01896	.00022	.00018	-	1.653
	45	.01052	.00073	.00062	-	2.221
	55	.00465	.00261	.00170	.00624	2.985
	65	-	.01567	-	.06237	4.012

Superannuation and Withdrawal Allowances: The mortality table used for those receiving superannuation and withdrawal allowance is the 1951 Group Annuity Table.

Disability Allowances: The mortality table used for those receiving disability allowances is a 45% modification of Hunter's Table of Mortality among Disabled Lives.

July 15, 1968

Dr. Paul H. Wueller, Associate Director in
Charge of Research and Statistics
Joint State Government Commission
P. O. Box 1361
Harrisburg, Pennsylvania 17120

Re: House Bill 2758

Dear Dr. Wueller:

This letter will confirm our opinion that the funding provisions included in House Bill 2758 are actuarially sound. Such funding method is typical of most pension funding today and provides for a normal cost contribution and an accrued liability contribution.

The normal cost consists of funding a portion of the liabilities over the remaining period of the membership of the present members and the accrued liability is amortized over a period of years in the future, assuming an increase of at least 4% each year in the annual instalment. For active employes, the funding period is 30 years and for annuitants it is 20 years.

Our reasons for concluding that the funding provisions are actuarially sound include the following:

1. The Public School Employes' Retirement System was amended last year by Act No. 34 which specified similar funding provisions.

2. Opinion No. 8 of the Accounting Principles Board stipulates that a minimum funding period of 40 years, assuming level payments, is acceptable.

3. A large number of pension plans negotiated between unions and corporations specify a funding period of 30 years assuming level payments.

Respectfully submitted,

HUGGINS & COMPANY, INC.

By

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July 16, 1968

Mr. Fred E. Davies, Jr., Secretary
State Employes' Retirement System
E-260 Labor and Industry Building
Harrisburg, Pennsylvania 17101

HOUSE BILL NO. 2768 (Printer's No. 3779)

Dear Mr. Davies:

In accordance with your request, I am pleased to make the following comments about House Bill No. 2768 (Printer's No. 3779) which was introduced on July 8, 1968 and referred to the Committee on State Government.

Purpose of the Bill

This Bill would make major changes in the State Employes' Retirement System in line with corresponding legislation last year which amended the Public School Employes' Retirement System (Act No. 34, approved June 28, 1967). In addition to making changes corresponding to those made last year in the Public School Employes' Retirement System this Bill would provide new benefits in the form of a "social security integration supplement" and a "long-service supplement". The major changes provided in this Bill may be summarized in two categories as follows:

A. Changes corresponding with those in the Public School Employes' Retirement Act No. 34 approved June 28, 1967.

(1) Provides for vesting of the rights of a terminating member after 10 years of credited service and permits the addition of interest credits to accounts of terminated members with vested rights.

(2) Provides a flat member contribution rate of 5% for members of Class A who elect social security integration credit (this compares with the flat rate of 5½% for members of the Public School Employes' Retirement System who elect Class T-C coverage).

(3) Provides a new funding method for the State contributions which is actuarially sound in lieu of the aggregate method presently in effect. This new method provides for a normal contribution funding a portion of the liability over the remaining period of membership of the present members and an accrued liability contribution which is amortized over a period of years in the future assuming an increase of at least 4% each year in the annual installment. For active employes the funding period is 30 years and for annuitants it is 20 years.

(4) Provides a new minimum superannuation retirement allowance of $1,800 annually for 30 or more years of service instead of the present minimum of $1,200 for 25 or more years of service.

(5) Provides increased disability benefits at the same rates as the benefit rates for each class of membership. This would mean for Class A members a change from 1/90 of final average salary to 1/50 of final average salary for each year of service with a continuation of the present minimum disability allowance.

(6) Provides a guarantee that payments to the member or to his beneficiary would be not less than his own accumulated deductions at time of retirement if he should elect the maximum retirement allowance without optional modification. This is the so-called "modified cash refund" benefit and is available without reduction in the allowance.

(7) Includes in the State Employes' Retirement Code the provision for supplemental benefits on a permanent basis which were previously paid outside of the system to annuitants receiving superannuation or disability benefits under the terms of the Temporary Supplemental Benefits Retirement Act of November 21, 1959 (P.L. 1592) as amended.

(8) Provides cost-of-living increases for annuitants receiving superannuation or disability allowances who retired before January 1, 1967 (the bill on page 32, line 18 states "prior to January 1, 1965" but it is my understanding that this is a technical error and the intended date is January 1, 1967). A table of percentages according to year of retirement determines the amount of this cost-of-living increase but any supple-

mental benefits that are payable under Item A(7) above are included in the cost-of-living increase and are not an addition thereto. (There is a minor difference between the table in this Bill and the table in the Pennsylvania School Employes' Retirement Code in that the year of retirement 1965 is added with a 4% increase and the year of retirement 1966 is added with a 1% increase. Only school system members whose allowance became effective prior to January 1, 1965 were covered by Act 34 so that no increase is applicable to 1965 or 1966 retirements in that system.)

B. Changes not related to Public School Employes' Retirement Act No. 34

(1) Includes, as eligible employes, employes of the Delaware Valley Regional Planning Commission.

(2) Includes, as members of Class A, civilian employes of the National Guard for whom the Federal Government would make contributions at the rate of 6½% of salary less the Social Security employer taxes, with the Commonwealth paying for the balance of State annuity.

(3) Corrects an inequity related to the members of the General Assembly by providing a final average salary in terms of actual compensation rather than existing stipulated amount of $6,000. At the present time, members of the General Assembly make contributions related to an annual salary of $7,200, and the Bill would coordinate the basis of benefits and contributions.

(4) The right of a member of the General Assembly to elect coverage under Class D-3 is reopened as of July 1, 1968 if the application is filed prior to December 1, 1968.

(5) Provides an option for members to elect "social security integration credit" by making an extra contribution at the rate of 5% of "non-covered salary". The non-covered salary for any calendar year is the total salary in excess of the social security maximum wage applicable to that year. A member electing retroactive social security integration coverage must do so before January 1, 1969 and make back contributions to January 1, 1968 at the rate of 5% on annual salary in excess of $7,800. Members electing non-retroactive social security integration credit would begin paying at the rate of 5% of the excess salary over the Social Security limit in the year in which the election is made. Any member electing social security integration

coverage would receive credit which goes back to January 1, 1956 or subsequent date of social security integration credit. In effect an additional retirement allowance is provided at the rate of 2% of average non-covered salary for each year of social security integration credit. This supplemental allowance is payable under the same conditions as the regular retirement allowance, and is subject to vesting and death benefits after 10 years of service and may also be paid under an optional form of payment. A member may withdraw his social security integration deductions on termination of service if he does not elect a withdrawal allowance or a vested benefit.

(6) Provides a new "long-service supplement" applicable to a member of Class A retiring with 41 or more years of credited service in which case the superannuation retirement allowance is increased by 2% if he has 41 years of service; by 4% if he has 42 years; by 6% if he has 43 years; by 8% if he has 44 years; and by 10% if he has 45 or more years. This long-service supplement includes, and is not in addition to, the social security integration supplement to which the member is entitled (or would have been if he had elected social security integration on the most favorable basis). A special long-service supplement is also provided for any member terminating service before superannuation retirement age if he has 35 or more years of credited service as a member of Class A. Such long-service supplement would be sufficient to build his regular retirement allowance and the social security integration supplement up to 100% of the superannuation retirement allowance to which he would have been entitled had he been age 60. For service in excess of 40 years, the applicable percentage is increased, being 102% for 41 years increasing up to 110% for 45 or more years of service.

(7) Provides that an annuitant, whose beneficiary under Option 2, 3 or 4 predeceases him, may elect an option covering a new beneficiary with a reduction based on the value of the allowance he was receiving at that time treated as a single-life annuity.

(8) The eligibility requirements for the new special retirement allowances payable to members of Class E or Class E-1 on attainment of age 70 or after 30 years of service, regardless of age, would be changed to reduce the 30 year period to 25 years.

Estimated Cost

Studies have been made in recent weeks that indicate that the additional annual cost of providing the liberalized benefits included in this Bill would be approximately offset by reductions in costs due to the change in the method of funding. Based on our analysis, the total estimated cost of the liberalizations is approximately $11,546,000, with a breakdown as follows:

	Thousands of Dollars
A(1) Provision of vested rights after 10 years of service	$ 715
A(2) Uniform contribution rate of 5% for Class A	2,695
A(4) Minimum Class A allowance of $1,800 for 30 years of service	82
A(5) Increase in disability benefits rate	220
A(6) Modified cash refund benefits	1,155
A(7) Permanent supplemental benefits under retirement system	210
A(8) Cost-of-living increases in addition to supplements	915
B(1) Membership for Delaware Valley Regional Planning Commission employes	0*
B(2) Provide Class A membership for National Guard technicians	750
B(3) 5 year final average salary for General Assembly	133
B(4) Reopen Class D-3 for retroactive credit	1
B(5) Social security integration supplements	4,400
B(6) Provide long-service supplements	255
B(7) Designation of second beneficiary under option	0*
B(8) Reduce eligibility requirement for special judges retirement from 30 years to 25 years	15
Total estimated cost of liberalizations	$11,546

*Administrative costs only.

Since the changes in the funding provisions included in this Bill in Item A(3) above would reduce the annual cost by approximately \$12,200,000, it will be seen that there will probably be a slight reduction in the annual cost to the Commonwealth if this Bill is enacted. However, this reduction is due to the amortization of the liabilities over a longer period than before and does not represent a long range reduction in costs.

Respectfully submitted,

HUGGINS & COMPANY, INC.

By Kenneth H. Ross

KHR:rmb

Memorandum on Main Provisions of Senate Bill No. 1295 (Printer's No. 2295) Amending the State Employes' Retirement Code as they Affect Benefits and Contributions of State Employes

The changes provided in this bill fall naturally in two categories:

A. Changes corresponding with those made in the Public School Employes' Retirement Code last year by Act No. 34, approved June 28, 1967.

B. Changes not related to Act No. 34

The main provisions in this bill affecting State Employes are summarized in those two categories, as follows: -

A. Changes corresponding with those made in the Public School Employes' Retirement Code by Act No. 34, approved June 28, 1967.

(1) It provides for vesting of the rights of a terminating member after 10 years of credited service and permits the addition of interest credits to accounts of terminated members with vested rights.

Under these new vesting provisions a member terminating State service after 10 years of service and before superannuation retirement age (60 for regular State employes who are classified as members of Class A) may elect to leave his accumulated deductions in the fund and to receive a deferred retirement allowance beginning at age 60. The amount of the retirement allowance beginning at age 60 is equal to the benefits accrued under the Class A formula up to the date of termination.

(2) It provides a flat member contribution rate of 5% for members of Class A who elect social security integration credit (this compares with the flat rate of 5½% for members of the Public School Employes' Retirement System who elect Class T-C coverage).

At the present time Class A members pay varying rates of member contribution depending on sex, entry age and whether or not membership began before June 1, 1948.

The rate of most members is presently more than 5%, but, in order to pay the new 5% rate, members must elect social security integration credit which would result in larger benefits, but might also result in larger dollar deductions. Various examples will be given following a discussion of the new social security integration supplement in B (1) pages 2 and 3.

(3) It provides a new minimum superannuation retirement allowance of $1,800 annually for 30 or more years of service instead of the present minimum of $1,200 for 25 or more years of service.

This provision affects only the lower paid State employes, normally only those whose final average salary is less than $3,000.

(4) It provides increased disability benefits at the same rates as the benefit rates for each class of membership. This would mean for Class A members a change from 1/90 of final average salary to 1/50 of final average salary for each year of service with a continuation of the present minimum disability allowance.

The minimum disability for most State employes is now 33-1/3% of final average salary. At the present time only disabled employes with more than 30 years of service would receive a larger allowance than 33-1/3% of final average salary. Under this bill, a disabled State employe with more than 16-2/3 years of service would receive more than the minimum of 33-1/3%.

(5) It provides a guarantee that payments to the member or to his beneficiary would be not less than his own accumulated deductions at time of retirement if he should elect the maximum retirement allowance without optional modification. This is the so-called "modified cash refund" benefit and is available without reduction in the allowance.

(6) It includes in the State Employes' Retirement Code the provision for supplemental benefits on a permanent basis which were previously paid outside of the system to annuitants receiving superannuation or disability benefits under the terms of the Temporary Supplemental Benefits Retirement Act of November 21, 1959 (P.L. 1592) as amended.

For the most part, this provision will affect State employes retired in past years, but it may add a supplemental benefit to lower paid employes retiring in the future, particularly when no Social Security benefit is payable.

B. Changes not related to Act No. 34, approved June 28, 1967.

(1) It provides an option for members to elect "social security integration credit" by making an extra contribution at the rate of 5% of "non-covered salary".

The non-covered salary for any calendar year is the total salary in excess of the social security maximum wage applicable to that year. A member electing retroactive social security integration coverage must do so before January 1, 1969 and make back contributions to January 1, 1968 at the rate of 5% on annual salary in excess of $7,800. Members electing non-retroactive social security integration credit would begin paying at the rate of 5% of the excess salary over the Social Security limit in the year in which the election is made. Any member electing social security integration coverage would receive credit which goes back to date of employment or subsequent date of social security integration credit. In effect an additional retirement allowance is provided at the rate of 2% of average non-covered salary for each year of social security integration credit. This supplemental allowance is payable under the same conditions as the regular retirement allowance, and is subject to vesting and death benefits after 10 years of service and may also be paid under an optional form of payment. A member may withdraw his social security integration deductions on termination of service if he does not elect a withdrawal allowance or a vested benefit.

Illustrations of the benefits and contributions under this new provision appear in Schedule I.

(2) It provides a new "long-service supplement" applicable to a member of Class A retiring with 41 or more years of credited service in which case the superannuation retirement allowance is increased by 2% if he has 41 years of service; by 4% if he has 42 years; by 6% if he has 43 years; by 8% if he has 44 years; and by 10% if he has 45 or more years. This long-service supplement includes, and is not in addition to, the social security integration supplement to which the member is entitled (or would have been if he had elected social security integration on the most favorable basis). A special long-service supplement is also provided for any member terminating service before superannuation retirement age if he has 35 or more years of credited service as a member of Class A. Such long-service supplement would be sufficient to build his regular retirement allowance and the social security integration supplement up to 100% of the superannuation retirement allowance to which he would have been entitled had he been age 60. For service in excess of 40 years, the applicable percentage is increased, being 102% for 41 years increasing up to 110% for 45 or more years of service.

STATE EMPLOYES' RETIREMENT SYSTEM OF PENNSYLVANIA

Illustrations of Benefits Payable under the Social Security Integration Supplement Provisions of Senate Bill No. 1295 (Printer's No. 2295)

STEP 1 Determine the "average non-covered salary" of the member; that is, the average of his compensation in excess of the Federal Social Security maximum wage in the years (not earlier than January 1, 1956) for which the member is to receive Social Security integration credit, as follows:

		EXAMPLE NO.1		EXAMPLE NO.2		EXAMPLE NO.3	
	Social Security	Compensation		Compensation		Compensation	
Year	Maximum	Total	Non-Covered	Total	Non-Covered	Total	Non-Covered
1956	$ 4,200	$ 5,500	$ 1,300	$ 4,000	$ -	$ 7,000	$ 2,800
1957	4,200	5,500	1,300	4,000	-	7,000	2,800
1958	4,200	6,000	1,800	4,300	100	7,500	3,300
1959	4,800	6,000	1,200	4,300	-	7,500	2,700
1960	4,800	6,500	1,700	4,600	-	8,000	3,200
1961	4,800	6,500	1,700	4,600	-	8,000	3,200
1962	4,800	7,000	2,200	4,900	100	8,500	3,700
1963	4,800	7,000	2,200	4,900	100	8,500	3,700
1964	4,800	7,500	2,700	5,200	400	9,000	4,200
1965	4,800	7,500	2,700	5,200	400	9,000	4,200
1966	6,600	8,000	1,400	5,500	-	9,500	2,900
1967	6,600	8,000	1,400	5,500	-	9,500	2,900
1968	7,800	8,500	700	5,800	-	10,000	2,200
Totals - 13 Years	$67,200	$89,500	$22,300	$62,800	$1,100	$109,000	$41,800
Average non-covered salary			$ 1,715		$ 85		$ 3,215
Final average salary		$ 7,900		$ 5,440		$ 9,400	

STEP 2 Illustrations based on above examples with varying periods of service and differing entry ages, all assumed to retire on December 31, 1968

	EXAMPLE NO.			EXAMPLE NO.			EXAMPLE NO.		
	1-A	1-B	1-C	2-A	2-B	2-C	3-A	3-B	3-C
Retirement age	60	62	65	60	62	65	60	62	65
Entry age	25	40	20	35	20	50	30	25	45
Service	35	22	45	25	42	15	30	37	20

MEMBER CONTRIBUTIONS

	1-A	1-B	1-C	2-A	2-B	2-C	3-A	3-B	3-C
Old rate	4.84%	6.84%	4.28%	6.11%	4.28%	7.86%*	5.44%	4.84%	7.42%*
1968 Amount-Old	$411.40	$581.40	$363.80	$354.38	$248.24	$455.88	$544.00	$484.00	$742.00
1968 Amount-New	460.00	460.00	460.00	290.00	290.00	290.00	610.00	610.00	610.00

*Male rates; would be higher for female.

SUPERANNUATION RETIREMENT ALLOWANCES (ANNUAL)

	1-A	1-B	1-C	2-A	2-B	2-C	3-A	3-B	3-C
Old Allowance...	$5,530	$3,476	$7,110	$2,720	$4,570	$1,632	$5,640	$6,956	$3,760
S.S.I. Supplement..........	1,201	755	1,544	42	71	25	1,929	2,379	1,286
Total New Allowance:									
Amount........	$6,731	$4,231	$8,654	$2,762	$4,641	$1,657	$7,569	$9,335	$5,046
% Increase....	22%	22%	22%	2%	2%	2%	34%	34%	34%
Soc.Sec.(1 I.A.)	1,255**	1,349	1,926	1,186**	1,277	1,830	1,255**	1,349	1,926
Total Ret. Income.......	$7,986	$5,580	$10,580	$3,948	$5,918	$3,487	$8,824	$10,684	$6,972

** Social Security commences 2 years after retirement, at age 62.

HUGGINS & COMPANY, INC.
July 25, 1968

SCHEDULE I

Illustrations of long-service supplements appear in Schedule II.

(3) It provides that an annuitant, whose beneficiary under Option 2, 3 or 4 predeceases him, may elect an option covering a new beneficiary with a reduction based on the value of the allowance he was receiving at that time treated as a single-life annuity.

NOTE: In addition to the above changes affecting present State employes, the bill provides cost-of-living increases for annuitants receiving superannuation or disability allowances who retired before January 1, 1967. A table of percentages according to year of retirement determines the amount of this cost-of-living increase but any supplemental benefits that are payable under Item 6 in the above summary are included in the cost-of-living increase and are not an addition thereto. There is a minor difference between the table in this bill and the table in the Pennsylvania School Employes' Retirement Code in that the year of retirement 1965 is added with a 4% increase and the year of retirement 1966 is added with a 1% increase. Only school system members whose allowance became effective prior to January 1, 1965 were covered by Act 34 so that no increase is applicable to 1965 or 1966 retirements in that system. Cost-of-living increases are payable to retired State employes beginning July 1, 1968.

HUGGINS & COMPANY, INC.
July 25, 1968

STATE EMPLOYES' RETIREMENT SYSTEM OF PENNSYLVANIA

Illustrations of Benefits Payable under the Long-Service Supplement Provisions of Senate Bill No. 1295 (Printer's No. 2295)

SUPERANNUATION RETIREMENT ALLOWANCES

Illustrations based on 2 examples in Schedule I with more than 40 years of service

		EXAMPLE 1-C	EXAMPLE 2-B
1.	Age at retirement	65	62
2.	Years of service	45	42
3.	Long-service percentage	10%	4%
4.	Regular retirement allowance - from Schedule I	$7,110	$4,570
5.	Percentage applied to allowance (3) x (4)	$ 711	$ 183
6.	S.S. Integration Supplement - from Schedule I	$1,544	$ 71
7.	Long-service supplement (5)-(6), if positive	0	$ 112
8.	Total allowance, including supplements (4)+(6)+(7)	$8,654	$4,753
9.	Increase in allowance (8)-(4)	$1,544	$ 183
10.	Percentage increase	22%	4%

WITHDRAWAL ALLOWANCES

Illustrations based on 4 new examples

		Example 4	Example 5	Example 6	Example 7
1.	Retirement age	55	58	55	59
2.	Years of service	35	42	37	41
3.	Assumed retirement allowance payable at 60	$5,500	$4,600	$7,000	$6,500
4.	Assumed S.S. I. Supplement	$1,200	$ 80	$2,400	$1,500
5.	Applicable reduction factor	.64305	.83152	.64305	.91068
6.	Reduced regular allowance (3)x(5)	$3,537	$3,825	$4,501	$5,919
7.	Reduced S.S. I. Supplement (4)x(5)	$ 771	$ 67	$1,543	$1,366
8.	Long-service percentage	100%	104%	100%	102%
9.	Percentage applied to superannuation allowance (3)x(8)	$5,500	$4,784	$7,000	$6,630
10.	Long-service supplement (9)-(6)-(7), if positive	$1,192	$ 892	$ 956	0
11.	Total allowance - new (6)+(7)+(10)	$5,500	$4,784	$7,000	$7,285
12.	Increase in allowance (11)-(6)	$1,963	$ 959	$2,499	$1,366
13.	Percentage increase	56%	25%	56%	23%

SCHEDULE II

HUGGINS & COMPANY, INC.
July 25, 1968