

PFDPF/Actuarial
Valuation, PB#25

POLICE AND FIREMEN'S DISABILITY
AND PENSION FUND OF OHIO

Actuarial Evaluation to Determine
the Actuarial Rate Per Cent of
Contribution as of January 1, 1994

December 28, 1994

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OHIO RETIREMENT STUDY
COMMISSION

Wyatt



December 28, 1994

Board of Trustees
The Police and Firemen's Disability
and Pension Fund of Ohio
230 East Town Street
Columbus, Ohio 43215

Gentlemen:

We are pleased to submit to you herewith our report presenting the results of the actuarial evaluation to determine the actuarial rate per cent of contribution as of January 1, 1994. This report has been based upon the employee data which were supplied to us by the Executive Director and upon statements showing the assets and liabilities of the Fund as of December 31, 1993.

We would like to call your attention to the following items from the report:

- (1) The 1994 evaluation has been based upon the Fund benefit provisions as in effect on January 1, 1994. Excluded from the results, however, are the 1971 Amended Substitute House Bill No. 284 and the cost of the Death Benefit Fund established by 1976 Amended House Bill No. 1010, since we understand that these benefits are being funded by the State of Ohio. A brief summary of the main benefit specifications of the Fund considered in this evaluation is contained in Table 3.
- (2) The actuarial cost method is the same as that used in the prior year's evaluation. Actuarial assumptions regarding disability incidence, disabled mortality and retirement rates have been changed to reflect the recommendations presented in the experience study dated October 31, 1994. The changes made are discussed in Section D of the text of this evaluation. A summary of the actuarial assumptions and actuarial cost method is set forth in Table 4.

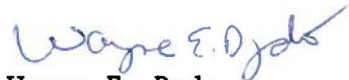
Board of Trustees
December 28, 1994
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- (3) The basic data used in the evaluation represent all active members, retirants and beneficiary-survivors covered by the Fund as of January 1, 1994. In total, 43,186 members were considered in the evaluation. A distribution of the coverage, by category, membership status and age, is set forth in various Table 2's.
- (4) The highlights of the evaluation results may be found in Table 1. In summary, the total actuarial rate per cent, applicable for the calendar year beginning January 1, 1994, has been developed as follows:

	<u>Police</u>	<u>Fire</u>
Current Rate Per Cent for Disability and Pension Benefits	28.28%	26.12%
Current Rate Per Cent for Health Care Plan and Medicare	6.50	6.50
Total Current Rate Per Cent	34.78%	32.62%

We look forward to discussing this report with the Board of Trustees in the near future.

Sincerely yours,



Wayne E. Dydo
Fellow-Society of Actuaries

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POLICE AND FIREMEN'S DISABILITY AND PENSION FUND OF OHIO
Actuarial Evaluation to Determine the Actuarial Rate Per Cent
of Contribution as of January 1, 1994

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POLICE AND FIREMEN'S DISABILITY AND PENSION FUND OF OHIO
Actuarial Evaluation to Determine the Actuarial Rate Per Cent
of Contribution as of January 1, 1994

A. PURPOSE

The Board of Trustees of the Police and Firemen's Disability and Pension Fund of Ohio has retained The Wyatt Company, as Actuary to the Fund, to perform the necessary actuarial evaluations required pursuant to the terms of the 1965 Amended House Bill No. 642. This report sets forth the results of our evaluation to determine the actuarial rate per cent for the year beginning January 1, 1994.

Section 742.14 of House Bill No. 642 provided for the initial determination of the appropriate current rate per cent, to be used as of January 1, 1967. The aforementioned section, as amended in 1986 by Amended Substitute House Bill No. 721, furthermore, provides as follows:

"The Board shall annually thereafter have prepared by a competent Actuary familiar with retirement systems, a report showing the adequacy of the rate of the Policemen Employers' Contribution provided for by Section 742.33 of the Revised Code, and the adequacy of the rate of the Firemen Employers' Contribution provided for by Section 742.34 of the Revised Code."

In addition, House Bill No. 721 added Section 742.311 which reads as follows:

"The Ohio Retirement Study Commission shall annually review the adequacy of the contribution rates provided under Sections 742.31, 742.33, and 742.34 of the Revised Code and the contribution rates recommended by the Actuary of the Police and Firemen's Disability and Pension Fund for the forthcoming year. The Ohio Retirement Study Commission shall make recommendations to the General Assembly which it finds necessary for the proper financing of the Police and Firemen's Disability and Pension Fund."

Pursuant to these two Sections, we have performed an actuarial evaluation based upon the January 1, 1994 membership data and upon the Annual Report and audited financial statements for the fiscal year ending December 31, 1993. The highlights of the evaluation are set forth in Table 1 at the end of this report, and are discussed in a subsequent section of this report.

B. BASIC DATA

The evaluation is based upon the data that were prepared and submitted to us under the direction of Mr. Henry E. Helling, III, Executive Director of the Fund. This information represented a complete census of members as of the valuation date and showed a total count of 43,186 members.

A summary of the data is as follows:

	<u>Police</u>	<u>Firemen</u>	<u>Total</u>
Actives	13,851	10,340	24,191
Retirants	7,183	6,150	13,333
Beneficiary-Survivors	<u>3,224</u>	<u>2,438</u>	<u>5,662</u>
Total	<u>24,258</u>	<u>18,928</u>	<u>43,186</u>

The total membership count of 43,186 compares to a membership of 42,130 individuals as of January 1, 1993, an increase of about 2.5%.

A compilation of the membership data, as of January 1, 1994, is contained in Tables 2(a) and 2(b) for police and firemen, respectively. The first page of each table shows a distribution of active members by attained age group and length of service as of the evaluation date. Also shown are the average attained age and average hire age, which are 38.6 and 26.4, respectively, for police, and are 38.7 and 26.5 for firemen; these measurements are essentially unchanged from last year. Also shown are the average annual salaries for each age group, and in total, as of the two valuation dates. For police, the total averages are \$38,017 based on the 1994 data, and \$36,783, based on the 1993 data, for an increase of 3.4%; for firemen, the corresponding amounts are \$38,338, \$36,783 and 4.2%, respectively. The present value of future compensation, shown in Table 1, Item C.4, is based on the Table 2 salaries increased by the age-graded salary scale for one year.

The second pages of Tables 2(a) and 2(b) set forth the distribution of retirants by attained age group and sex as of January 1, 1994. Also shown are the annual rate of pension, average attained age, and average annual pension payable to retirants. The prior year's corresponding information is also shown.

The average attained age of retirants is 61.4 years for police and 63.9 years for firemen, essentially unchanged from last year. This year we find that the average annual benefit to retirants, without considering the benefit increase (up to \$50 a month) effective January 1, 1972 provided by the 1971 House Bill No. 284, is \$19,422 for police and \$19,477 for firemen. The corresponding averages last year were, respectively, \$18,488 and \$18,537. The total annual rate of pension for retired police as of January 1, 1994 of \$139,511,376 represents a 9.4% increase over the rate of payout one year ago; similarly, the total annual rate of pension for retired firemen as of January 1, 1994 of \$119,784,264 represents an 8.2% increase over the rate of payout one year earlier.

The third pages of Tables 2(a) and 2(b) show the distribution of beneficiary-survivors by attained age group, as of the evaluation date. The average attained ages for surviving spouses are 71.3 for police and 73.2 for firemen, compared to 71.1 and 73.2 one year ago. In addition, there were 312 police beneficiaries and 220 firemen beneficiaries receiving optional benefit payments, compared to 292 police and 210 firemen beneficiaries one year ago. These tables also show that there are 338 dependent children of police and 170 dependent children of firemen receiving benefits as of the evaluation date.

C. PLAN PROVISIONS

The basic provisions of the Police and Firemen's Disability and Pension Fund of Ohio with respect to disability and pension benefits that are used to determine the current rate per cent are summarized in Table 3. That table and the evaluation presented in this report are based upon the provisions of the Statewide Plan, as set forth in Section 742 of the Revised Code, including all amendments in effect as of the valuation date, except for changes that are funded entirely by contributions from the State of Ohio (the 1972

pension increases of 1971 House Bill No. 284, and the Death Benefit Fund established by 1976 House Bill No. 1010). No changes to Plan provisions have been recognized in this report.

D. VALUATION ASSETS AND ACTUARIAL ASSUMPTIONS

The valuation assets have been based upon the "Comprehensive Annual Financial Report for the Year Ended December 31, 1993" which was furnished to us by the Fund.

The Comprehensive Annual Financial Report indicates that the cost value of assets as of December 31, 1993 was \$4,328,504,397, inclusive of:

1. Cash	\$ 21,031,898
2. Office Property	3,322,993
3. Receivables	132,355,804
4. Other Assets	<u>1,193,895</u>
	\$157,904,590

The book value of the investment portfolio was \$4,170,599,807 which consisted of:

1. Bonds *	\$2,216,690,847
2. Stocks - Book Value *	1,284,053,979
3. Short-Term	450,832,952
4. Venture Capital	6,442,175
5. Real Estate	<u>212,579,854</u>
	\$4,170,599,807

* Market Value of Bonds	\$2,333,099,955
* Market Value of Stocks	\$1,620,250,036

The cost value was offset by payables totaling \$39,781,164 and other liabilities of \$3,994,346. Hence, the net assets available for benefits as of December 31, 1993 was \$4,284,728,887.

For valuation purposes this net cost value is used for the bond, real estate, short-term, and venture capital asset classes. For stocks, the value is determined under the 4-Year Market Adjustment Method. Valuation assets equal the sum of these two components, less \$1,225,898 of contributions that have yet to be refunded to employees who terminated with less than 15 years of service.

This is the second valuation for which stocks are being valued under the 4-Year Market Adjustment Method. The method was first used in 1993 with an initial value equal to market value. The 1994 valuation is the first in which a phase-in is used on gains and losses. The combined realized and unrealized gain on stocks for 1993 was \$125,257,957. This gain is phased-in at 25% per year, which means 75% of the gain, \$93,943,468, is excluded from 1994 valuation assets. The stock portion of valuation assets equals market value of stocks less the excluded gain. When the method has been in place for four years there will be exclusions for gains or losses from the prior three years: 75% for the prior year, 50% for the second prior year, and 25% for the third prior year.

After determining total valuation assets, the Health Care Stabilization Fund balance is subtracted to obtain the assets used for the pension and disability rate percents. The Health Care Stabilization Fund was created effective January 1, 1992, with \$150 million allocated for health care expenses - \$81,777,000 for police and \$68,223,000 for firemen. The fund is credited with retiree and beneficiary premiums, a portion of employer contributions equal to 6.5% of payroll, and 8.25% effective annual interest. All medical expense payments, including medicare premiums, are debited to the fund. The fund value as of December 31, 1993 is \$167,945,600: \$96,594,800 for police and \$71,350,800 for firemen. After excluding this amount, the resulting valuation assets, rounded to the nearest \$100,000, are \$4,357,800,000.

The allocation of the valuation assets between police and firemen is developed in Table 6. This development is based upon an allocation of the actual change in valuation assets due to investment results in proportion to expected growth based upon the valuation interest rate. This results in valuation assets of \$2,432,000,000 for police and \$1,925,800,000 for firemen.

During 1993, the rate of return on valuation assets was approximately 9.00%. The calculation of this rate of return uses valuation assets under the

4-Year Market Adjustment method at both December 31, 1992 and December 31, 1993. The calculation also involves total assets, prior to the allocation of assets to the Health Care Stabilization Fund. This return compares to the interest rate assumption of 8.25%. Also, as is indicated in Table 6, the expected growth in valuation assets due to investment performance, based on accrual basis contributions, benefit payments, and expenses, is \$343,762,900 (Item (4)) compared to actual growth of \$374,485,100.

The actuarial assumptions and the actuarial cost method used in the instant evaluation are the same as those employed in the prior evaluation except for the following changes.

- (1) A change in the retirement rates to reflect experience for the period 1990-1993. The age 48 rate was raised from .25 to .35 for both police and firemen. Rates were decreased by .05 for police ages 54-64 and firemen ages 53-64. At all other ages the rates were unchanged.
- (2) A change in the rates of disability incidence to reflect the results of the 1987-1991 Quinquennial Report and the 1992-1993 experience study. The previous rates, which were graduated experience rates from the 1982-1986 Quinquennial, were increased at all ages by 30% for police and by 15% for firemen.
- (3) A change in the assumed distribution of disability type, to reflect a higher proportion of partial disabilities. For police the assumed percentages are now 75% partial, 22% P&T and 3% off-duty. For firemen they are 70%, 27% and 3%, respectively. The prior assumption was 57%, 40%, 3% for both police and firemen.
- (4) A change in the post-disability mortality assumption for active members. Since partial disabilities have lower mortality than P&T disabilities, the above change in the disability distribution suggests a decrease in the rates of post-disability mortality. The decrease is represented by a two-year age setback on the prior mortality table. The mortality assumption for those already in disabled status is unchanged.

The above changes are discussed in the retirement and disability experience study dated October 31, 1994.

A summary of the assumptions and a description of the actuarial cost method are presented in Table 4.

The increase during the past year in the average annual current salary of active members was, as noted above, 3.4% for police and 4.2% for firemen. These increase percentages compare to an average expected increase of 5.4% based upon the age-graded salary scale assumption.

E. EVALUATION RESULTS

Table 1 summarizes the January 1, 1994 evaluation results and sets forth the actuarially determined current rate per cent of contribution applicable to the calendar year commencing January 1, 1994. In Section A of Table 1, we indicate the extent of the membership, by police and firemen, for various categories. This section represents a summary compilation of the data breakdown shown in the various Table 2's.

Section B of Table 1 sets forth a summary of the actuarial present values of future benefits, by police and firemen, with respect to active members, retirants, and beneficiary survivors. The total present values are \$4,088,300,000 for police and \$3,227,800,000 for firemen (Item B.4.). Thus, the combined actuarial present value of future benefits (for both police and firemen) approximates \$7.3 billion.

In Section C, we show the development of the current rate per cent for disability and pension benefits, based upon this January 1, 1994 evaluation. This rate includes a loading for administrative expenses, as indicated in the assumptions set forth in Table 4. The rate is determined by subtracting the valuation assets and the employer accrued liability from the actuarial present value of future benefits, and dividing the resulting amount by the actuarial present value of active member future compensation.

The employer accrued liability used in this valuation is \$343,028,538 and represents the outstanding principal as of December 31, 1993 of the original accrued liability under the funding scheme prescribed by the Ohio Revised Code. This amount is set forth in the Comprehensive Annual Financial Report. The allocation of this accrued liability between police and firemen, as developed by Fund office personnel, is \$175,200,000 for police and \$167,800,000 for firemen, rounded to the nearest \$100,000.

The \$343,028,538 reflects a \$51,324,316 decrease in the accrued liability due to settlements under House Bill No. 38. As of June 21, 1994 several cities had contracted to pay off their remaining balances at 65 cents on the dollar (a 35% discount). Together, these cities had over \$145,000,000 in accrued liability. The \$51 million decrease in accrued liability represents the 35% discount on this \$145 million. For the 1995 valuation the accrued liability will be further decreased by the actual settlement payments made during 1994, approximately \$94 million, but this will be offset by an equal increase in Fund assets.

Item C.6. of Table 1 shows the current rate per cent for the disability and pension benefits (i.e., excluding consideration of health care plan benefits). As indicated in the table, these figures are 28.28% for police and 26.12% for firemen. The current rate per cents include: (1) the 10% contribution for active members; (2) the original State of Ohio appropriation of \$1.2 million per annum; (3) a State of Ohio appropriation of \$1.5 million per annum for Senate Bill No. 48; (4) a State of Ohio appropriation of an additional \$1.2 million per annum to fund for part of the additional cost arising from the "purchase": of military service credit; (5) an appropriation to fund House Bill No. 204; and (6) an appropriation to partially fund House Bill No. 694 and House Bill No. 215. As indicated earlier, these figures do not include the cost

of the 1972 pension increases precipitated by House Bill No. 284 or the Death Benefit Fund established by Amended House Bill No. 1010, since these additional costs will be met entirely by additional appropriations from the State of Ohio.

Item D.1. of Table 1 shows the current rate per cent for health care plan and Medicare benefits. In conjunction with the establishment of the Health Care Stabilization Fund effective January 1, 1992, the current rate per cent for health care has been defined by the Board to be 6.50%. Additional discussion of health care funding is provided in Section G of this commentary.

Item D.2. of Table 1 shows the total current rate per cent, and represents a combination of the figures for disability and pension benefits and for health care plan and Medicare benefits. As can be seen, the total current rate per cent with respect to 1994 is 34.78% for police and 32.62% for firemen.

F. COMPARISON OF EVALUATION RESULTS WITH PREVIOUS YEAR

Table 5 sets forth a comparison of evaluation results for 1993 and 1994. Section A indicates that the number of active members has increased by 311 for police and by 191 for firemen. Also, the number of participants currently receiving benefits has increased by 343 for police and 211 for firemen. As a percentage of total membership, 42.9% of police members are currently receiving benefits, compared to 42.6% last year; the corresponding percentages for firemen are, respectively, 45.4% and 45.2%.

The actuarial present values of future benefits have increased by \$281.8 million for police and \$208.1 million for firemen as is indicated in Section B. Valuation assets, in turn, increased by \$179.9 million for police and \$150.4 million for firemen.

In Section C we set forth a comparison of contribution rate per cents. Item C.1. indicates that the current rate per cent for disability and pension

benefits has increased from 26.66% to 28.28%, or by 1.62%, for police, while for firemen the corresponding rate has increased from 25.63% to 26.12%, for an increase of 0.49%.

A reconciliation of last year's contribution rates for disability and pension benefits to this year's is as follows:

	<u>Police</u>	<u>Firemen</u>
1. Rate per cent as of January 1, 1993 (Items 2-4 based on old assumptions)	26.66%	25.63%
2. Actuarial (gains) or losses and changes in membership	.40	.13
3. Actual investment growth versus expected growth	(.32)	(.31)
4. Settlements of Employer Accrued Liability	.55	.50
5. Assumption changes	.99	.17
6. Rate per cent as of January 1, 1994	28.28%	26.12%

The settlements of employer accrued liability initially raise the rate per cents because the accrued liability, which is effectively treated as an asset, is decreased by the 35% discount. However, the long-term effect of the settlements is expected to be positive, due to expected investment earnings on the settlement payments received.

G. HEALTH CARE FUNDING

Effective January 1, 1992 the Board of Trustees established the Health Care Stabilization Fund with an initial allocation of \$150 million. This Health Care Fund allows the segregation, for accounting purposes, of the assets used to pay health care benefits from those used to pay pension and disability benefits.

In conjunction with the establishment of the Health Care Fund, the Board directed that the employer contribution to be allocated to this fund would be 6.50% of payroll each year. This 6.50% was derived from the results of the

Wyatt Company's 35-Year Forecast Study, dated May 17, 1991, which indicated that the Fund could achieve long-term solvency if health care expense were limited to 6.50% of payroll and all actuarial assumptions were realized.

In addition to the 6.50% employer contribution, the Health Care Fund is also credited with retiree and survivor health care contributions, which were approximately \$5.0 million for 1993. Interest is credited at the valuation rate, currently 8.25%. Fund personnel have established an accounting procedure under which retiree and survivor contributions are assumed to be made at the beginning of the month and employer contributions and health care expenditures are assumed to occur at the end of the month.

This 1994 valuation is the second to recognize the establishment of the Health Care Fund. The balance in this fund as of December 31, 1993 is \$167,945,600, as developed by Fund personnel. As mentioned earlier in this report, Health Care Fund assets are deducted from total valuation assets to determine valuation assets for pension and disability benefits, i.e. the Health Care Fund value is considered to be in terms of valuation assets.

For purposes of determining the total actuarial rate per cent of contribution, the Board-defined 6.50% health care contribution replaces the calculation of the pay-as-you-go rate. However, the actual funding of health care benefits can still be considered to be essentially on a pay-as-you-go basis, but with the Health Care Stabilization Fund providing temporary smoothness in the allocated rate per cent. In particular, health care liabilities were not considered to be prefunded by the establishment of the \$150 million Health Care Fund, nor is there any funding program in place which would accomplish such prefunding.

The 15-Year Forecast Study presented in a report dated November 7, 1994 shows the expected balance in the Health Care Fund at the beginning of each year for the period 1994 through 2009 under various assumption/active membership

growth scenarios. Table 4 presents results under 1994 valuation assumptions, no assumed growth in active membership and relatively high health care inflation assumptions. Under this scenario the HealthCare Fund is expected to be exhausted sometime during the year 2004. Under a more modest health care inflation assumption, the Health Care Fund will be depleted near the end of 2007.

The forecast also shows projected health care costs as a percentage of payroll under the various scenarios. Under the no active membership growth/high health care inflation scenario, the pay-as-you-go rate is projected to be 11.22% during the year 2004. This decreases to 9.92% if active membership grows at 1.5% per year, and further decreases to 8.74% under the low health care cost inflation assumption.

It thus appears that sometime after the year 2004 it will be necessary to allocate additional funds to the Health Care Fund, and perhaps also, increase the 6.50% contribution allocation. As discussed in the next section, however, this does not necessarily mean that current statutory rates will need to be increased.

H. ADEQUACY OF STATUTORY RATES

The rate per cents developed in these evaluation reports, in conjunction with the 15-Year Forecast Study, provide a basis for assessing the adequacy of the current statutory employer contribution rates. Specifically, the evaluation results provide the information needed to determine which of the scenarios in the forecast study most closely models actual experience. That determination then, along with the Forecast Study results, allows for a determination as to whether or not the current statutory rates are adequate, for the valuation year in question.

Because 1994 is the first year of the Forecast Study, the Forecast Study alone should be used to assess adequacy. That Study showed the current rates to be adequate at least for the next five years, so, we conclude that for 1994 the statutory rates are adequate.

However, an adjustment should be made to eliminate the disparity between the police and firemen statutory rates. The 1994 actuarial rate for police of 34.78% compares to the actuarial rate for firemen of 32.62%, for an excess of 2.16%. In 1993, the excess was 1.03%, and in 1992, the actuarial rate for firemen exceeded that of the police by .40%. The statutory rates, however, after considering approximately \$4.6 million in state subsidies are about 29.9% for police and 34.5% for firemen. These various rates strongly suggest that a change be made to the statutory rates that equalizes the rate for both police and firemen.

That rate would be 21.5% plus, for 1994, about .5% for state subsidy plus the 10% member contribution rate, for a total of 32.0%. The combined actuarial rate for 1994 would be 33.8%. The 33.8% is 1.8% in excess of the 32.0%. This 1.8% however, when compared to an estimated payroll of \$973 million, amounts to only \$17,514,000, which is only about .4% of the valuation assets. This small percentage is additional support for the conclusion stated above, namely, that the 1994 statutory rates are adequate.

* * * * *

In conclusion, we recommend that the Board of Trustees consider this evaluation report in determinations concerning the appropriateness of the actual employer contribution rates.

Respectfully submitted,

THE WYATT COMPANY



Wayne E. Dydo
Fellow - Society of Actuaries



Peter N. Dorsey
Associate - Society of Actuaries

Table 1

POLICE AND FIREMEN'S DISABILITY AND PENSION FUND OF OHIO

Summary of Evaluation Results as of January 1, 1994 1/

	<u>Police</u>	<u>Firemen</u>
A. <u>MEMBERSHIP</u>		
1. Number of Active Members	13,851	10,340
2. Number of Retirants	7,183	6,150
3. Number of Beneficiary-Survivors		
a. Surviving Spouses and Beneficiaries	2,886	2,268
b. Children	338	170
c. Total Beneficiary-Survivors	3,224	2,438
4. Total Membership <u>2/</u>	24,258	18,928
B. <u>SUMMARY OF ACTUARIAL PRESENT VALUES OF FUTURE BENEFITS</u>		
1. Active Members <u>3/</u>	\$2,531,100,000	\$1,955,900,000
2. Retirants	1,433,800,000	1,182,700,000
3. Beneficiary-Survivors	123,400,000	89,200,000
4. Actuarial Present Value for All Members	4,088,300,000	3,227,800,000
C. <u>DEVELOPMENT OF CURRENT RATE PER CENT FOR DISABILITY AND PENSION BENEFITS</u>		
1. Actuarial Present Value of Future Benefits	\$4,088,300,000	\$3,227,800,000
2. Valuation Assets	2,432,000,000	1,925,800,000
3. Actuarial Present Value of Employer Accrued Liability	175,200,000	167,800,000
4. Actuarial Present Value of Active Member Future Compensation	5,276,300,000	4,375,600,000
5. Net Rate Per Cent, Prior to Expense Loading ((Item C1 - C2 - C3) ÷ C4)	28.07%	25.92%

Table 1
(continued)

	<u>Police</u>	<u>Firemen</u>
6. Current Rate Per Cent for Disability and Pension Benefits	28.28%	26.12%
D. <u>TOTAL CURRENT RATE PER CENT</u>		
1. Current Rate Per Cent for Health Care Plan and Medicare <u>4/</u>	6.50	6.50
2. Total Current Rate Per Cent (Item C6 + D1)	34.78	32.62

1/ Excludes assets and liabilities arising from the increases due to the 1971 House Bill No. 284 and from the Death Benefit Fund established by House Bill No. 1010.

2/ Excluding 42 inactive policemen and 24 inactive firemen.

3/ Includes present values of \$3,400,000 for 42 policemen and \$2,000,000 for 24 firemen who have terminated with more than 15 years of service. Also includes \$200,000 for 22 policemen and \$100,000 for 10 firemen who have been rehired from retired status under House Bill No. 382.

4/ As specified by the Board of Trustees, 6.50% of payroll is the portion of the employer contributions to be credited to the Health Care Stabilization Fund. For valuation purposes this replaces the determination of a pay-as-you-go rate per cent for health care.

Table 2(a)

POLICE AND FIREMEN'S DISABILITY AND PENSION FUND OF OHIO

Police

Distribution of Members by Attained Age Group and Length of Service as of January 1, 1994

(Females are indicated in parentheses and are included in adjacent totals)

Attained Age Group	0-4 ^{1/}	5-9	10-14	15-19	20-24	25-29	30-Over	Totals	Average Annual Salary	
									As of January 1, 1994	As of January 1, 1993
Under 25	333(47)	1(0)	-	-	-	-	-	334(47)	\$24,980	\$24,583
25 - 29	1,801(174)	316(34)	-	-	-	-	-	2,117(208)	31,717	30,727
30 - 34	1,076(139)	1,124(83)	219(33)	1(0)	-	-	-	2,420(255)	35,709	34,510
35 - 39	411(69)	663(82)	1,182(118)	369(18)	7(0)	-	-	2,632(287)	38,537	37,322
40 - 44	185(21)	310(25)	623(81)	993(41)	423(7)	4(0)	-	2,538(175)	40,060	38,741
45 - 49	77(5)	104(14)	183(26)	424(31)	1,187(16)	420(3)	2(0)	2,397(95)	42,328	40,742
50 - 54	22(3)	37(1)	40(3)	38(1)	319(8)	481(3)	82(2)	1,019(21)	43,120	41,415
55 - 59	8(0)	19(1)	10(0)	17(0)	37(1)	110(1)	98(1)	299(4)	41,241	39,289
60 - 64	4(0)	7(0)	5(0)	5(0)	7(0)	6(1)	40(0)	74(1)	39,846	37,970
65 & Over	-	2(0)	1(0)	-	-	-	18(0)	21(0)	42,443	44,873
Total	3,917(458)	2,583(240)	2,263(261)	1,847(91)	1,980(32)	1,021(8)	240(3)	13,851(1,093)	\$38,017	\$36,783

January 1, 1994

January 1, 1993

Average Attained Age
Average Hire Age

38.6
26.4

38.7
26.4

^{1/} Includes 849 members hired in 1993.

POLICE AND FIREMEN'S DISABILITY AND PENSION FUND OF OHIO

Police

Distribution of Retirants by Attained Age Group
and Sex as of January 1, 1994

<u>Attained Age Group</u> (1)	<u>Males</u> (2)	<u>Females</u> (3)	<u>Total</u> (4)	<u>Col. (4) as % of TOTAL</u> (5)	<u>Annual Rate of Pension 1/</u>	
					<u>As of January 1, 1994</u> (6)	<u>As of January 1, 1993</u> (7)
Under 40	102	24	126	2%	\$ 2,019,969	\$ 1,850,086
40 - 44	234	23	257	3	4,639,132	4,421,678
45 - 49	565	21	586	8	12,460,430	11,874,952
50 - 54	1,215	8	1,223	17	29,263,340	26,004,928
55 - 59	1,133	10	1,143	16	27,316,370	24,287,808
60 - 64	1,112	13	1,125	16	23,306,302	23,247,028
65 - 69	1,259	7	1,266	18	21,741,280	19,389,152
70 - 74	682	12	694	10	10,102,989	8,371,882
75 - 79	408	6	414	6	4,987,106	5,080,876
80 - 84	249	2	251	3	2,782,693	2,185,605
85 - 89	66	1	67	1	648,719	630,915
90 & Over	30	1	31	-	243,035	220,778
TOTAL	7,055	128	7,183	100%	\$139,511,376	\$127,565,696

Average Attained Age			
January 1, 1993	61.5	53.4	61.4
January 1, 1994	61.5	53.1	61.4

Average Annual Benefit	
January 1, 1993	\$18,488
January 1, 1994	19,422

1/ Excludes increases due to House Bill No. 284.

POLICE AND FIREMEN'S DISABILITY AND PENSION FUND OF OHIO

Police

Distribution of Beneficiary-Survivors by Attained Age Group
as of January 1, 1994

<u>Attained Age Group</u> (1)	<u>Number Receiving Benefits</u> (2)	<u>Col. (2) as % of TOTAL</u> (3)
A. <u>SURVIVING SPOUSES</u> <u>1/</u>		
Under 40	38	1%
40 - 44	50	2
45 - 49	78	3
50 - 54	119	5
55 - 59	194	8
60 - 64	257	10
65 - 69	367	14
70 - 74	374	15
75 - 79	406	16
80 - 84	320	12
85 - 89	233	9
90 & Over	138	5
TOTAL	2,574	100%
Average Attained Age	71.3	
B. <u>BENEFICIARIES RECEIVING OPTIONS</u>		
Under 35	5	2%
35 - 39	6	2
40 - 44	14	4
45 - 49	23	7
50 - 54	36	12
55 - 59	43	14
60 - 64	63	20
65 - 69	56	18
70 - 74	36	12
75 - 79	24	8
80 - 84	4	1
85 - 89	1	-
90 & Over	1	-
TOTAL	312	100%
C. <u>CHILDREN</u>	338	

1/ Includes dependent parents.

Table 2(b)

POLICE AND FIREMEN'S DISABILITY AND PENSION FUND OF OHIO

FiremenDistribution of Members by Attained Age Group and Length of Service as of January 1, 1994

(Females are indicated in parentheses and are included in adjacent totals)

Attained Age Group	0-4 ^{1/}	5-9	10-14	15-19	20-24	25-29	30- Over	Totals	Average Annual Salary	
									As of January 1, 1994	As of January 1, 1993
Under 25	272(6)	1(0)	-	-	-	-	-	273(6)	\$26,348	\$25,502
25 - 29	990(23)	230(4)	5(0)	-	-	-	-	1,225(27)	31,707	30,464
30 - 34	903(20)	816(25)	305(3)	2(0)	-	-	-	2,026(48)	35,664	34,372
35 - 39	352(18)	620(20)	890(8)	272(0)	3(0)	-	-	2,137(46)	38,752	37,140
40 - 44	119(4)	241(12)	599(2)	766(0)	220(1)	2(0)	-	1,947(19)	40,323	38,440
45 - 49	29(1)	70(3)	98(3)	413(0)	781(0)	169(0)	4(0)	1,564(7)	41,895	40,199
50 - 54	16(0)	9(1)	23(0)	46(0)	341(0)	365(0)	71(0)	871(1)	43,845	42,234
55 - 59	1(0)	3(0)	6(0)	13(0)	32(0)	89(0)	103(0)	247(0)	44,464	43,114
60 - 64	1(0)	1(0)	3(0)	3(0)	7(0)	3(0)	28(0)	46(0)	43,203	45,525
65 & Over	1(0)	-	-	-	-	-	3(0)	4(0)	29,557	44,800
Total	2,684(72)	1,991(65)	1,929(16)	1,515(0)	1,384(1)	628(0)	209(0)	10,340(154)	\$38,338	\$36,783

January 1, 1994January 1, 1993Average Attained Age
Average Hire Age38.7
26.538.7
26.4-
20
-^{1/} Includes 507 members hired in 1993.

POLICE AND FIREMEN'S DISABILITY AND PENSION FUND OF OHIO

Firemen

Distribution of Retirants by Attained Age Group
and Sex as of January 1, 1994

<u>Attained Age Group</u> (1)	<u>Males</u> (2)	<u>Females</u> (3)	<u>Total</u> (4)	<u>Col. (4) as % of TOTAL</u> (5)	<u>Annual Rate of Pension 1/</u>	
					<u>As of January 1, 1994</u> (6)	<u>As of January 1, 1993</u> (7)
Under 40	48	3	51	1%	\$ 842,754	\$ 874,615
40 - 44	101	3	104	2	1,830,721	1,756,167
45 - 49	249	-	249	4	5,365,739	5,042,695
50 - 54	778	-	778	13	18,678,436	16,585,953
55 - 59	997	-	997	16	24,389,840	22,072,046
60 - 64	1,121	-	1,121	18	24,400,070	25,013,984
65 - 69	1,354	-	1,354	22	24,572,814	22,280,680
70 - 74	673	-	673	11	10,102,232	8,245,282
75 - 79	457	-	457	7	5,780,881	5,607,691
80 - 84	267	-	267	4	2,936,957	2,404,608
85 - 89	73	-	73	1	658,063	602,644
90 & Over	26	-	26	1	225,750	215,353
TOTAL	6,144	6	6,150	100%	\$119,784,264	\$110,701,720

<u>Average Attained Age</u>			
January 1, 1993	63.8	41.0	63.7
January 1, 1994	63.9	39.6	63.9

<u>Average Annual Benefit</u>	
January 1, 1993	\$18,537
January 1, 1994	19,477

1/ Excludes increases due to House Bill No. 284.

POLICE AND FIREMEN'S DISABILITY AND PENSION FUND OF OHIO

Firemen

Distribution of Beneficiary-Survivors by Attained Age Group
as of January 1, 1994

<u>Attained Age Group</u> (1)	<u>Number Receiving Benefits</u> (2)	<u>Col. (2) as % of TOTAL</u> (3)
A. <u>SURVIVING SPOUSES</u> <u>1/</u>		
Under 40	21	1%
40 - 44	24	1
45 - 49	51	3
50 - 54	67	3
55 - 59	111	6
60 - 64	179	9
65 - 69	305	15
70 - 74	315	15
75 - 79	350	17
80 - 84	291	14
85 - 89	190	9
90 & Over	144	7
TOTAL	2,048	100%
Average Attained Age	73.2	
B. <u>BENEFICIARIES RECEIVING OPTIONS</u>		
Under 35	2	1%
35 - 39	5	2
40 - 44	6	3
45 - 49	17	8
50 - 54	14	6
55 - 59	28	13
60 - 64	43	19
65 - 69	49	22
70 - 74	32	15
75 - 79	19	9
80 - 84	4	2
85 - 89	1	-
90 & over	-	-
TOTAL	220	100%
C. <u>CHILDREN</u>	170	

1/ Includes dependent parents.

Table 3

POLICE AND FIREMEN'S DISABILITY AND PENSION FUND OF OHIO

Description of Benefits Under Statewide Plan
(Per Ohio Revised Code Chapter 742, Excluding
Consideration of 1971 House Bill No. 284
and 1976 House Bill No. 1010)

1. Service Retirement
 - (a) Eligibility: Age 48 and 25 years of service.
 - (b) Benefit: An annual pension equal to a percentage of the average annual salary, where the percentage equals 2.5% for each of the first 20 years of service, 2% for each of the next five years of service, and 1.5% for service in excess of 25 years, to a maximum of 72% of the average annual salary. Average annual salary means one-third of the total salary during the three years during which the total earnings were greatest.

2. Special Service Retirement for Late Hires
 - (a) Eligibility: Age 62 and 15 years of service.
 - (b) Benefit: The same as the Service Retirement Benefit.

3. Permanent and Total Disability (On duty)
 - (a) Eligibility: No age or service requirement.
 - (b) Benefit: An annual pension equal to 72% of the annual salary during the last year of active service.

4. Partial Disability (On duty)
 - (a) Eligibility: No age or service requirement.
 - (b) Benefit: An annual pension to be fixed by the Board of Trustees, but not to exceed 60% of the average annual salary; provided that if the member has 25 or more years of service the annual disability pension is equal to the accrued Service Retirement Benefit.

5. Heart Disease Disability
 - (a) Eligibility: No age or service requirement.

- (b) Benefit: An annual pension in an amount determined in accordance with the benefit provisions of Item 3. or Item 4. above, as the case may be.
6. Ordinary Disability
(Off duty)
- (a) Eligibility: Any age and five years of service.
- (b) Benefit: An annual pension to be fixed by the Board, but not to exceed the accrued Service Retirement Benefit, or \$5,000, whichever is greater.
7. Termination of Service
Prior to Retirement
- One of the following benefits depending upon the particular circumstances:
- Refund
- (a) Eligibility: No age or service requirement.
- (b) Benefit: A lump-sum amount equal to the sum of the contributions made by the member to the Fund.
- Vesting After 15 Years
- (a) Eligibility: 15 years of service.
- (b) Benefit: Commencing at age 48 or hire age plus 25 years, whichever is later; an annual pension equal to 1-1/2% of the average annual salary multiplied by the number of years of service.
- Vesting After 25 Years
- (a) Eligibility: 25 years of service.
- (b) Benefit: Commencing at age 48, the accrued Service Retirement Benefit.
8. Flat Death Benefits
- (a) Eligibility: Upon death to any member of the Fund, active or retired.
- (b) Benefit:
- (i) Surviving Spouse's Benefit - An annual amount equal to \$4,920.

Table 3
(continued)

(ii) Surviving Children - An annual amount equal to \$1,416, payable until such child attains age 18 or marries, whichever occurs first. (Similar payments made, regardless of age, to disabled children.) An annual amount equal to \$1,416 will continue beyond age 18 up to age 22 while the child is a student.

(iii) Dependent Parents - An annual amount of \$1,896 to one dependent parent or \$948 each to two dependent parents, during their lifetime or until dependency ceases or until remarriage, provided that deceased member leaves no surviving spouse or surviving children.

Note: Payment of the above benefits will be suspended during any period payments are being made pursuant to Sec. 742.63 RC (Death Benefit Fund established by Sec. 742.61 RC).

9. Pre-retirement Surviving Spouse Benefit

(a) Eligibility:

Upon death before retirement but after having satisfied the requirements for retirement.

(b) Benefit:

The surviving spouse or contingent dependent beneficiary will receive 50% of the benefit that the deceased member would have been entitled to had he retired on the day of his death under the 50% Joint & Survivor annuity form.

10. Member Contributions:

10% of salary.

11. Pension Increases for Certain Retirants:

Commencing January 1, 1974, the pensions of persons who retired between July 1, 1968 and June 30, 1971 will be increased by \$2.00 per month times the number of years on retirement as of June 30, 1973.

Effective January 1, 1977, annual pensions (except those arising from volunteer or part-time service, or early vested service) shall be increased as follows:

Table 3
(continued)

(i) if the annual pension was less than \$2,700, then the pension shall be increased to \$3,000; (ii) if the annual pension was \$2,700 or more, the increase shall be \$300 per year. These increases do not apply to benefits being paid under pre-1947 plans with an automatic escalating provision.

Effective July 1, 1979, retirees (excluding those with escalating benefits) who retired prior to January 1, 1974 have pension increases of 5% of the first \$5,000 of annual pension.

Effective January 1, 1982, retirees (excluding those with escalating benefits) who retired prior to February 28, 1980, have pension increases of \$46 per month.

Effective August 1, 1988, members who retired prior to February 28, 1984 and who were receiving an annual benefit of less than \$13,000 have pension increases of \$50 per month, or if larger, the amount needed to increase the current annual pension to \$4,200.

Effective July 1, 1989, the minimum annual pension for current retirees with 25 or more years of service is \$5,000, the annual pension of a surviving spouse is increased to \$4,920, and the annual benefit of a dependent surviving child is increased to \$1,416.

Retirees prior to July 24, 1986 whose annual straight life pension is less than \$18,000 will receive an increase in their annual pension of \$360, actuarially adjusted to reflect optional annuity forms of benefits. The increase is paid only if the annual increase in the Consumer Price Index, plus unused prior increases, equals or exceeds 3%. The first increase is paid July 1, 1988. Beginning in 1989, the \$18,000 limit is increased by \$500 each year.

12. Group Health Insurance
and Medicare:

Commencing January 1, 1974, the Board may contract for group health insurance on the basis of part or all of the cost of the premium for the coverage to be paid by the Fund.

Effective January 1, 1977, the Fund will pay the premium for supplemental Medicare (Part B).

Effective July 1, 1992 pensioners and survivors make monthly medical benefit contributions, which are credited to the Health Care Stabilization Fund. Monthly contributions range from \$0 to \$50 depending on the type and amount of the participant's pension.

13. COLA or Terminal Pay:

Members retiring after July 24, 1986 and who have 15 or more years of service as of January 1, 1989, are allowed to select between (1) a pension calculated on the basis of average salary which is increased to reflect terminal pay adjustments, or (2) a pension based on average salary excluding the terminal pay adjustment, but increasing by 3% of the initial pension each retirement anniversary after July 1, 1989. The 3% addition is paid only if the annual increase in the Consumer Price Index, plus unused prior increases, equals or exceeds 3%. This additive 3% COLA annuity without terminal pay adjustment is the automatic form for active members with less than 15 years of service as of January 1, 1989.

14. Optional Forms of Payment:

Effective February 28, 1980, retiring members may elect to have actuarially reduced benefits payable under certain and continuous and joint and survivor annuity forms. The maximum certain period is 20 years, and the continuation percentage under the joint and survivor form is limited to 100%.

Effective September 26, 1984, members who retired before February 28, 1980 may make a one-time election to have their benefits reduced and paid under the joint and survivor annuity form with the surviving spouse as survivor annuitant.

Effective September 9, 1989, elected options may be cancelled within one year after benefits commence.

15. Lump Sum Death Benefit:

Effective November 2, 1989, a \$1,000 lump sum payment will be made on account of death of a retired member.

Table 4

POLICE AND FIREMEN'S DISABILITY AND PENSION FUND OF OHIO

Summary of Actuarial Assumptions and Actuarial Cost Method

A. Interest: A rate of 8.25% per annum, compounded annually.

B. Rates and Other Assumptions Among Active Members:

1. Before Retirement -

(a) Mortality: Mortality is based on the 1951 Group Annuity Mortality Table projected to 1980 using Scale C, with a one-year set-forward in age. The projected values are multiplied by 0.5 at all ages to obtain the assumed mortality rates. The following rates at selected ages are illustrative:

<u>Age</u>	<u>Rate of Mortality</u>	
	<u>Police</u>	<u>Firemen</u>
25	.000307	.000307
30	.000406	.000406
35	.000569	.000569
40	.000845	.000845
45	.001568	.001568
50	.002773	.002773
55	.004377	.004377

(b) Termination: The rates of termination are based upon the results of the 1987-1991 Quinquennial Evaluation. The following rates at selected ages are illustrative:

<u>Age</u>	<u>Rate of Termination</u>	
	<u>Police</u>	<u>Firemen</u>
25	.047001	.016655
30	.031525	.015071
35	.022161	.012432
40	.014759	.007482
45	.009658	.004385
50	.012847	.004884

Note: The present values of future benefits for active members resulting from the use of these withdrawal rates are actuarially adjusted to include provision for prospective terminated employees eligible for vested termination benefits arising from the vesting provisions of the 1971 Amended Substitute Senate Bill No. 137.

Table 4
(continued)

(c) Disability:

The rates of disability are based upon the results of the 1987-1991 Quinquennial Evaluation and upon the disability experience for 1992-1993. The following rates at selected ages are illustrative:

<u>Age</u>	<u>Rate of Disability</u>	
	<u>Police</u>	<u>Firemen</u>
25	.001175	.000236
30	.002370	.001254
35	.005326	.002934
40	.011544	.007136
45	.021970	.015119
50	.033918	.028520
55	.051672	.046271

Note: The present values of future benefits for active members resulting from the use of these disability rates reflect the fact that the occurrence of disability by type approximates the following:

	<u>Police</u>	<u>Firemen</u>
On duty permanent and total	22%	27%
On duty partial	75	70
Off duty ordinary	3	3

(d) Salary Increase Rate:

The per annum rates of future salary increase can be divided into two component parts: (i) inflationary increase of 4% per year and (ii) age-graded promotional increases as follows:

<u>Age(s)</u>	<u>Promotional Increase</u>	<u>Total Increase</u>
under 30	3.00%	7.00%
30 - 34	1.75	5.75%
over 34	1.00	5.00%

(e) Retirement:

The rates of retirement are based upon the experience during the periods 1989 through 1993. These rates are applicable after the member has satisfied the conditions for retirement. The rates are as follows:

<u>Police</u>		<u>Firemen</u>	
<u>Age(s)</u>	<u>Rate</u>	<u>Age(s)</u>	<u>Rate</u>
48	0.35	48	0.35
49 - 53	0.25	49 - 59	0.25
54 - 60	0.20	60 - 64	0.35
61 - 64	0.25	65	1.00
65	1.00		

2. After Retirement -

(a) On Service Retirement Pension:

The mortality, after retirement of active members expected to go on service retirement, is based on the 1951 Group Annuity Mortality Table projected to 1980 using Scale C, with a one-year set-forward in age. The following probabilities at selected ages are illustrative:

<u>Age</u>	<u>Probability of Mortality</u>
55	.008753
60	.013012
65	.020979
70	.033316
75	.056741
80	.099390
85	.158333
90	.236172
95	.316061

(b) On Disability Retirement Pension:

The mortality, after retirement of active members expected to go on disability retirement, is based on the results of the 1987-1991 Quinquennial Evaluation. The rates are based on the 1951 Group Annuity Mortality Table projected to 1980 using Scale C and include loads for disability. These rates are then set-back by two years in age to reflect the greater percentage of partial disabilities. The following probabilities at selected ages are illustrative:

<u>Age</u>	<u>Probability of Mortality</u>
35	.008424
45	.009636
55	.016736
65	.035482
75	.060183
85	.136516
95	.265027

C. Probabilities of Mortality Among Pensioners

1. Nondisabled Pensioners:

The mortality among all nondisabled retirants is equal to the 1951 Group Annuity Mortality Table rates projected to 1980 using Scale C, with a one-year set-forward in age. The following probabilities at selected ages are illustrative:

Table 4
(continued)

<u>Age</u>	<u>Probability of Mortality</u>
35	.001138
40	.001691
45	.003136
50	.005545
55	.008753
60	.013012
65	.020979
70	.033316
75	.056741
80	.099390
85	.158333
90	.236172
95	.316061

2. Disabled Pensioners:

The mortality among all disabled retirants is based on the 1951 Group Annuity Mortality Table projected to 1980 using Scale C and includes loads for disability. The following probabilities at selected ages are illustrative:

<u>Age</u>	<u>Probability of Mortality</u>
35	.008560
40	.009043
45	.010262
50	.012495
55	.018051
60	.022001
65	.038838
70	.050322
75	.071826
80	.111137
85	.168254
90	.222882
95	.297806

D. Probabilities Among Survivors:

1. Probabilities of
Mortality Among
Surviving Spouses -

The mortality among all present surviving spouses is based on the Projected Annuity Mortality Table rates, decreased by 15% at all ages. The following probabilities at selected ages are illustrative:

Table 4
(continued)

<u>Age</u>	<u>Probability of Mortality</u>
35	.001138
40	.001691
45	.003136
50	.005545
55	.008753
60	.013012
65	.020979
70	.033316
75	.056741
80	.099390
85	.158333
90	.236172
95	.316061

2. Disabled Pensioners:

The mortality among all disabled retirants is based on the 1951 Group Annuity Mortality Table projected to 1980 using Scale C and includes loads for disability. The following probabilities at selected ages are illustrative:

<u>Age</u>	<u>Probability of Mortality</u>
35	.008560
40	.009043
45	.010262
50	.012495
55	.018051
60	.022001
65	.038838
70	.050322
75	.071826
80	.111137
85	.168254
90	.222882
95	.297806

D. Probabilities Among Survivors:

1. Probabilities of
Mortality Among
Surviving Spouses -

The mortality among all present surviving spouses is based on the Projected Annuity Mortality Table rates, decreased by 15% at all ages. The following probabilities at selected ages are illustrative:

- F. Expense Loading: The net costs were loaded by $\frac{3}{4}$ of 1% to allow for future administrative expenses of the Fund.
- G. Actuarial Cost Method: The "frozen initial liability" method has been used in developing the required contributions to the Fund. Under this approach, the present value of future benefits is reduced by valuation assets and the present value of the employer accrued liability. This net amount is then expressed as a percentage of the present value of active member future compensation and that percentage is applied to current payroll to determine the actual contribution.
- The employer accrued liability was determined for each separate police and firemen's fund as of April 1, 1966. Each employer with an existing liability is presently making payments at the rate of 5% of the original liability (adjusted for any excess payments) pursuant to the schedule set forth in Section 742.30 of the Ohio Revised Code.
- H. Valuation Assets: Valuation assets equal the net cost (book) value of all Fund assets, except common and preferred stocks are included in valuation assets with a value equal to that developed under the 4-Year Market Adjustment Method, with an initial value equal to market value. Under this method realized and unrealized gains are recognized in the assets over a 4-year period: valuation assets equal market value less 75% of the previous year's realized and unrealized gains, 50% of the second previous year's realized and unrealized gains, and 25% of the third previous year's realized and unrealized gains. Full implementation of the phase-in is to occur on January 1, 1996. The balance in the Health Care Stabilization Fund is excluded from total assets to arrive at valuation assets for pension and disability benefits. Contributions due to be refunded to terminated members are also excluded from valuation assets.

Table 5

POLICE AND FIREMEN'S DISABILITY AND PENSION FUND OF OHIO

Comparison of Evaluation Results for 1993 and 1994

	<u>1994</u>		<u>1993</u>	
	<u>Police</u>	<u>Firemen</u>	<u>Police</u>	<u>Firemen</u>
A. <u>MEMBERSHIP</u>				
1. Number of Active Members	13,851	10,340	13,540	10,149
2. Number of Retirants and Beneficiary-Survivors	10,407	8,588	10,064	8,377
3. Total Membership	24,258	18,928	23,604	18,526
B. <u>ACTUARIAL PRESENT VALUE AND ASSETS (000,000 omitted)</u>				
1. Present Value of Future Benefits	\$4,088.3	\$3,227.8	\$3,806.5	\$3,019.7
2. Valuation Assets	2,432.0	1,925.8	2,252.1	1,775.4
3. Present Value of Employer Accrued Liability	175.2	167.8	208.4	192.1
4. Present Value of Active Member Future Compensation	5,276.3	4,375.6	5,087.3	4,135.8
C. <u>CURRENT RATE PER CENT</u>				
1. Disability and Pension Benefits	28.28%	26.12%	26.66%	25.63%
2. Health Care Plan and Medicare <u>1/</u>	6.50	6.50	6.50	6.50
3. Total	34.78	32.62	33.16	32.13

Table 6

POLICE AND FIREMEN'S DISABILITY AND PENSION FUND OF OHIO

Asset Allocation for 1994

The following table presents a development of the allocation of assets between police and firemen as of January 1, 1994.

	<u>Police</u>	<u>Firemen</u>	<u>Total</u>
(1) 1/1/93 Valuation Assets	\$2,339,038,784	\$1,843,335,776	\$4,182,374,560
(2) Transactions during 1993			
a. Employer contributions	103,462,922	97,240,144	200,703,066
b. Net employee contributions	51,542,487	40,609,000	92,151,487
c. Retiree medical contributions	2,669,711	2,379,136	5,048,847
d. Local Funds receipts	11,204,531	10,304,518	21,509,049
e. Benefit payments and expenses	<u>(188,693,137)</u>	<u>(161,823,374)</u>	<u>(350,516,511)</u>
f. Total transactions	(19,813,486)	(11,290,576)	(31,104,062)
(3) Item 1 plus Item 2(f)	2,319,225,298	1,832,045,200	4,151,270,498
(4) Expected Investment Growth	192,153,393	151,609,465	343,762,859
(5) Valuation Assets, Total			
a. Book Value Excluding Stocks	N/A	N/A	3,000,674,908
b. Market Adjusted Stock Value <u>1/</u>	N/A	N/A	1,526,306,568
c. Contribution Refunds Due	N/A	N/A	<u>(1,225,898)</u>
d. Total			4,525,755,578
(6) Actual Investment Growth (Item 5 less Item 3)	N/A	N/A	374,485,080
(7) Allocation of Item 6 in proportion to Item 4	209,326,218	165,158,862	374,485,080
(8) Health Care Stabilization Fund	96,594,814	71,350,815	167,945,629
(9) 1/1/94 Valuation Assets (Item 3 plus Item 7 less Item 8)	\$2,431,956,702	\$1,925,853,247	\$4,357,809,949

See footnote on next page.

Table 6
(continued)

<u>1/</u> The Market Adjusted Stock Value is developed as follows:	<u>12/31/92</u>	<u>12/31/93</u>
1. Unrealized Gain/(Loss)		
a. Market Value of Stocks	\$1,468,043,276	\$1,620,250,036
b. Book Value of Stocks	1,175,107,740	1,284,053,979
c. Cumulative Unrealized Gain/(Loss) (1.a -1.b)	292,935,536	336,196,057
d. Annual Unrealized Gain/(Loss)		43,260,521
2. Annual Realized Gain/(Loss) Reported by Fund		81,997,436
3. Total Gain/(Loss)		125,257,957
4. Gain/(Loss) Excluded from 1994 Market Value		
a. For 1993 (.75 x Item 3)		93,943,468
b. For Prior Years		N/A
c. Total		93,943,468
5. Market Adjusted Stock Value (1.a - 4.c)		1,526,306,568