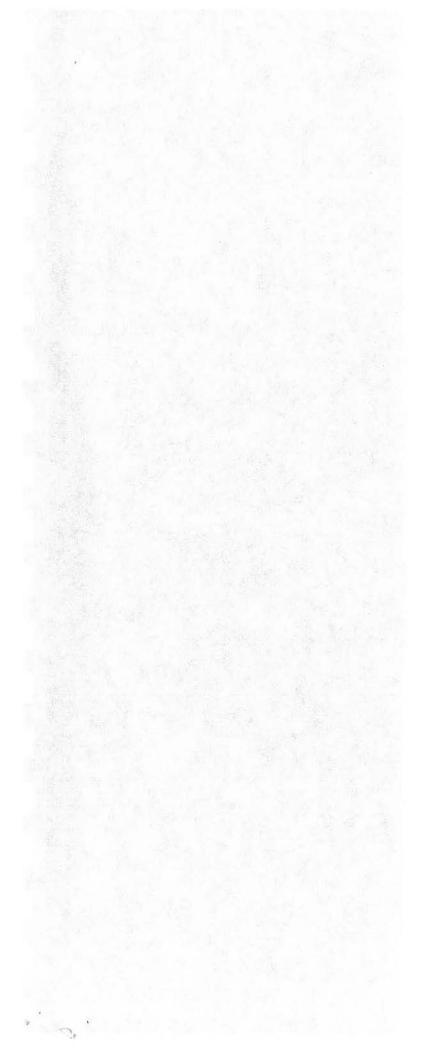


POLICE AND FIREMEN'S DISABILITY AND PENSION FUND OF OHIO

Actuarial Evaluation to Determine the Actuarial Rate Per Cent of Contribution as of January 1, 1995

November 22, 1995





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The Wyatt Company

Suite 1400 1801 East Ninth Street Cleveland, OH 44114-3149

Telephone 216 696 6250 Fax 216 687 0675

November 22, 1995

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, 1995. 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, 1994.

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

- (1) The 1995 evaluation has been based upon the Fund benefit provisions as in effect on January 1, 1995. 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 assumptions, actuarial cost method and asset valuation method are the same as those used in the prior year's evaluation. A summary of these items is set forth in Table 4.
- (3) The basic data used in the evaluation represent all active members, retirants and beneficiary-survivors covered by the Fund as of January 1, 1995. In total, 44,015 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.



Board of Trustees November 22, 1995 Page 2

> (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, 1995, has been developed as follows:

	Police	Fire
Current Rate Per Cent for Disability and Pension Benefits	29.76%	27.05%
Current Rate Per Cent for Health Care Plan and Medicare	6.50	6.50
Total Current Rate Per Cent	36.26%	33.55%

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

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Sincerely yours,

Wayne C. Dyde

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, 1995

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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, 1995

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, 1995.

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, 1995 membership data and upon the Annual Report and audited financial

statements for the fiscal year ending December 31, 1994. 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 44,015 members. A summary of the data is as follows:

	Police	Firemen	Total
Actives	14,072	10,511	24,583
Retirants	7,397	6,224	13,621
Beneficiary-Survivors	3,289	2,522	5,811
Total	24,758	19,257	44,015

The total membership count of 44,015 compares to a membership of 43,186 individuals as of January 1, 1994, an increase of about 1.9%.

A compilation of the membership data, as of January 1, 1995, 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 26.5, respectively, for police, and are 38.9 and 26.6 for firemen; these measurements are slightly higher than 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 \$39,951 based on the 1995 data, and \$38,017, based on the 1994 data, for an increase of 5.1%; for firemen, the corresponding amounts are \$40,143, \$38,338 and 4.7%, 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, 1995. 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 61.5 years for

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police and 64.1 years for firemen, slightly higher than 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 \$20,300 for police and \$20,300 for firemen. The corresponding averages last year were, respectively, \$19,422 and \$19,477. The total annual rate of pension for retired police as of January 1, 1995 of \$150,161,440 represents a 7.6% increase over the rate of payout one year ago; similarly, the total annual rate of pension for retired firemen as of January 1, 1995 of \$126,345,472 represents a 5.5% increase over the rate of payout one year earlier.

The third pages of Tables 2(a) and 2(b) show the distribution of beneficiarysurvivors by attained age group, as of the evaluation date. The average attained ages for surviving spouses are 71.4 for police and 73.3 for firemen, compared to 71.3 and 73.2 one year ago. In addition, there were 341 police beneficiaries and 257 firemen beneficiaries receiving optional benefit payments, compared to 312 police and 220 firemen beneficiaries one year ago. These tables also show that there are 338 dependent children of police and 173 dependent children of firemen receiving benefits as of the evaluation date.

Presented below is a reconciliation of the number of retirees and beneficiaries included in our January 1, 1994 and 1995 evaluations.

Police	Number at 1/1/94	Additions During Year	Deletions During Year	Number at 1/1/95
Retirants & Beneficiaries Deferred Vested	10,407 42	648 <u>29</u>	369 <u>10</u>	10,686 <u>61</u>
Total	10,449	677	379	10,747
Fire				
Retirants & Beneficiaries	8,588	454	296	8,746
Deferred Vested	24	<u> 10</u>	_5	29
Total	8,612	464	301	8,775

The retirees and beneficiaries include children, parents and widows.



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, 1994" which was furnished to us by the Fund.

The Comprehensive Annual Financial Report indicates that the cost value of assets as of December 31, 1994 was \$4,665,568,785, inclusive of:

1.	Cash	\$ 4,981,090
2.	Office Property	2,989,283
3.	Receivables	152,555,951
4.	Other Assets	974,498
		\$161,500,822

The book value of the investment portfolio was \$4,504,067,963 which consisted of:

1.	Bonds *	\$2,187,665,920
2.	Stocks - Book Value *	1,611,504,222
3.	Short-Term	413,995,280
4.	Venture Capital	7,580,389
5.	Real Estate	283,322,152
		\$4,504,067,963
*	Market Value of Bonds	\$2,084,543,602
*	Market Value of Stocks	\$1,831,246,036



The cost value was offset by payables totaling \$42,994,258 and other liabilities of \$5,593,333. Hence, the net assets available for benefits as of December 31, 1994 was \$4,616,981,194.

For valuation purposes this net cost value is used for the bond, real estate, shortterm, 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 \$2,865,884 of contributions that have yet to be refunded to employees who terminated with less than 15 years of service.

This is the third 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 1995 valuation is the second in which a phase-in is used on gains and losses.

The combined realized and unrealized gain/(loss) on stocks for 1993 was a gain of \$125,257,957. The corresponding result for 1994 was a loss of \$(51,841,975). These gains/(losses) are phased-in at 25% per year, which means 75% of the 1994 loss, \$(38,881,481) and 50% of the 1993 gain, \$62,628,979, are excluded from 1995 valuation assets. The stock portion of valuation assets equals market value of stocks less the excluded gains/(losses). The resulting value is \$1,807,498,538. 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



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premiums, are debited to the fund. The fund value as of December 31, 1994 is \$108,891,000 for police and \$75,674,600 for firemen. After excluding this amount, the resulting valuation assets, rounded to the nearest \$100,000, are \$4,625,500,000.

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 \$2,571,300,000 for police and \$2,054,200,000 for firemen.

During 1994, the rate of return on valuation assets was approximately 4.55%. The calculation of this rate of return uses valuation assets under the 4-Year Market Adjustment method at both December 31, 1993 and December 31, 1994. 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 \$376,538,700 (Item (4)) compared to actual growth of \$207,654,800.

The actuarial assumptions and the actuarial cost method used in the instant evaluation are the same as those employed in the prior evaluation. 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, 5.1% for police and 4.7% for firemen. These increase percentages compare to an average expected increase of 5.4% based upon the age-graded salary scale assumption.

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E. EVALUATION RESULTS

Table 1 summarizes the January 1, 1995 evaluation results and sets forth the actuarially determined current rate per cent of contribution applicable to the calendar year commencing January 1, 1995. 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 \$4,348,200,000 for police and \$3,409,200,000 for firemen (Item B.4.). Thus, the combined actuarial present value of future benefits (for both police and firemen) approximates \$7.8 billion.

In Section C, we show the development of the current rate per cent for disability and pension benefits, based upon this January 1, 1995 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 \$213,301,582 and represents the outstanding principal as of December 31, 1994 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 \$105,600,000 for police and \$107,700,000 for firemen, rounded to the nearest \$100,000.



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The \$213,301,582 reflects a large decrease in the accrued liability due to settlements under House Bill No. 38. Several cities have paid off their remaining balances at 65 cents on the dollar (a 35% discount). Together, these cities had approximately \$180,000,000 in accrued liability. The employer accrued liability is reduced by the \$180,000,000, and Fund assets are increased by 65% of that amount, or \$117,000,000.

Item C.6. of Table 1 shows the current rate per cent for 1995 for the disability and pension benefits (i.e., excluding consideration of health care plan benefits). As indicated in the table, these figures are 29.76% for police and 27.05% 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 1995 is 36.26% for police and 33.55% for firemen.



F. COMPARISON OF EVALUATION RESULTS WITH PREVIOUS YEAR

Table 5 sets forth a comparison of evaluation results for 1994 and 1995. Section A indicates that the number of active members has increased by 221 for police and by 171 for firemen. Also, the number of participants currently receiving benefits has increased by 279 for police and 158 for firemen. As a percentage of total membership, 43.2% of police members are currently receiving benefits, compared to 42.9% last year; the corresponding percentages for firemen are, respectively, 45.4% and 45.4%.

The actuarial present values of future benefits have increased by \$259.9 million for police and \$181.4 million for firemen as is indicated in Section B. Valuation assets, in turn, increased by \$139.3 million for police and \$128.4 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 28.28% to 29.76%, or by 1.48%, for police, while for firemen the corresponding rate has increased from 26.12% to 27.05%, for an increase of 0.93%.

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

		Police	Firemen
1.	Rate per cent as of January 1, 1994	28.28%	26.12%
2.	Actuarial (gains) or losses and changes in membership	(.27)	(.77)
3.	Actual investment growth versus expected growth	1.65	1.58
4.	Settlements of Employer Accrued Liability	.10	.12
5.	Rate per cent as of January 1, 1995	29.76%	27.05%



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 \$4.9 million for 1994. 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 1995 valuation is the third to recognize the establishment of the Health Care Fund. The balance in this fund as of December 31, 1994 is \$184,565,600 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



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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 <u>temporary</u> <u>smoothness</u> in the allocated rate per cent. In particular, health care liabilities were <u>not</u> 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 7 presents results under 1995 valuation assumptions, a 1.5% per year assumed growth in active membership and modest health care inflation assumptions. Under this scenario the Health Care Fund is expected to be exhausted sometime during the year 2009.

The forecast also shows projected health care costs as a percentage of payroll under the various scenarios. Under the 1.5% active membership growth/modest health care inflation scenario, the pay-as-you-go rate is projected to be 8.74% during the year 2004 and 9.61% during the year 2009. Also, the projected net health care costs for 1994 was \$60.2 million, and for 1995, \$64.6 million. The Health Care Fund's expected balance as of Janaury 1, 1995 was \$171 million, and, as of January 1, 1996, \$189 million.

The actual net health care cost for 1994 was \$60.5 million and the actual balance as of January 1, 1995 was \$184.6 million. For the first nine months of 1995, the net health care cost was \$49.2 million, which produces an expected annual net cost of \$65.6 million for 1995.



The Health Care Fund balance as of September 30, 1995 was \$197.7 million.

So, it appears that actual results for 1994 and 1995 are very close to those predicted under the 1.5% growth/modest inflation scenario of the forecast. Also, the balance in the Health Care Fund as of January 1, 1996 should be modestly higher than the expected balance. This implies that it is reasonable to assume that the Health Care Fund will provide funds to stabilize the health care component of the rate per cent at 6.5% for at least the next 10 to 15 years.

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, <u>for the valuation year in question</u>.

The 15-Year Forecast Study scenario, which included an annual 1.5% active membership growth, modest health care inflation, and a 0% asset return in 1994 and projected returns of 9.4% each year thereafter, presented in Table 7 of the Forecast Study, showed that statutory rates should be adequater at least through 2003. Under this scenario the January 1, 1995 expected results, compared to the actual results, are as follows:



		January 1, 1995				
		Forecast-Table 7	Actual			
1.	Active Population	24,554	24,583			
2.	1995 Payroll	\$1,016,129,800	\$1,034,000,000 (estimated based on 9 months actual)			
3.	Present Value of Future Pay	\$10,193,000,000	\$10,303,100,000			
4.	Present Value of Future Benefits	\$7,726,500,000	\$7,757,400,000			
5.	Market Value of Assets	\$4,766,200,000	\$4,717,400,000			
6.	Funded Status (Item 5/Item 4)	61.69%	60.81%			

As is apparent, the 1995 results agree closely with the forecast results under the indicated scenario. Accordingly, we conclude that for 1995 the statutory rates are adequate.

However, an adjustment should be made to eliminate the disparity between the police and firemen statutory rates. The 1995 actuarial rate for police of 36.26% compares to the actuarial rate for firemen of 33.55%, for an excess of 2.71%. In 1994, the excess was 2.16%, and in 1993, 1.03%. The statutory rates, however, after considering approximately \$4.4 million in state subsidies are about 29.8% for police and 34.4% for firemen. These various rates strongly suggest that a change be made to the statutory rates that <u>equalizes</u> the rate for both police and firemen.

That rate would be 21.5% plus, for 1995, about .4% for state subsidy plus the 10% member contribution rate, for a total of 31.9%. The combined actuarial rate for 1995 would be 35.1%. The 35.1% is 3.2% in excess of the 31.9%. This 3.2% however, when compared to an estimated payroll of \$1,034 million, amounts to \$33,088,000, which is about .7% of the market value of assets. This small percentage is additional support for the conclusion stated above, namely, that the 1995 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.

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Respectfully submitted,

THE WYATT COMPANY

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Wayne E. Dydo Fellow - Society of Actuaries

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Associate - Society of Actuaries

Table 1

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POLICE AND FIREMEN'S DISABILITY AND PENSION FUND OF OHIO

Summary of Evaluation Results as of January 1, 1995 1/

А. <u>М</u>	EMBERSHIP	Police	Firemen
1.	Number of Active Members	14,072	10,511
2.	Number of Retirants	7,397	6,224
3.	Number of Beneficiary-Survivors		
	a. Surviving Spouses and Beneficiaries	2,951	2,349
	b. Children	338	173
	c. Total Beneficiary-Survivors	3,289	2,522
4.	Total Membership <u>2</u> /	24,758	19,257
-	IMMARY OF ACTUARIAL PRESENT ALUES OF FUTURE BENEFITS		
1.	Active Members <u>3</u> /	\$2,688,800,000	\$2,081,100,000
2.	Retirants	1,530,500,000	1,233,200,000
3.	Beneficiary-Survivors	128,900,000	95,000,000
4.	Actuarial Present Value for All Members	4,348,200,000	3,409,200,000
	EVELOPMENT OF CURRENT RATE I OR DISABILITY AND PENSION BENE		
1.	Actuarial Present Value of Future Benefits	\$4,348,200,000	\$3,409,200,000
2.	Valuation Assets	2,571,300,000	2,054,200,000
3.	Actuarial Present Value of Employer Accrued Liability	105,600,000	107,700,000
4.	Actuarial Present Value of Active Member Future Compensation - 15	5,657,900,000 5 -	4,645,200,000



Table 1 (continued)

			Police	Firemen	
	5.	Net Rate Per Cent, Prior to Expense Loading ((Item C1 - C2 - C3) ÷ C4)	29.54%	26.85%	
	6.	Current Rate Per Cent for Disability and Pension Benefits	29.76%	27.05%	
D.	<u>T0</u>	TAL CURRENT RATE PER CENT			
	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)	36.26	33.55	

- 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 61 inactive policemen and 29 inactive firemen.
- 3/ Includes present values of \$6,300,000 for 61 policemen and \$3,200,000 for 29 firemen who have terminated with more than 15 years of service. Also includes \$300,000 for 25 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, 1995 (Females are indicated in parentheses and are included in adjacent totals)

									Average A	nnual Salary
									As of	As of
Attained							30-		January 1,	January 1,
Age Group	<u>0-4</u> <u>1</u> /	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	Over	<u>Totals</u>	1995	1994
Under 25	331(39)	1(0)	-	-	-	-		332(39)	\$27,094	\$24,980
25 - 29	1,828(194)	343(33)	3(0)	-		-	12 []	2,174(227)	33,516	31,717
30 - 34	1,088(135)	1,317(116)	213(29)	1(0)	-	-	- 1	2,619(280)	37,691	35,709
35 - 39	394(63)	685(75)	1,008(112)	381(29)	5(0)	-	-	2,473(279)	40,549	38,537
40 - 44	163(20)	330(33)	637(74)	1,105(54)	361 (9)	11(0)	-	2,607(190)	42,159	40,060
45 - 49	100(6)	109(12)	195(30)	491(39)	1,065(14)	467(2)	9(0)	2,436(103)	44,265	42,328
50 - 54	23(1)	47(5)	33(5)	65(5)	264(7)	518(5)	89(1)	1,039(29)	44,831	43,120
55 - 59	11(0)	18(1)	12(0)	13(0)	24(1)	123(1)	97(1)	298(4)	43,868	41,241
60 - 64	3(0)	8(0)	5(0)	6(0)	10(0)	11(1)	29(0)	72(1)	40,335	39,846
65 & Over	2(0)	1(0)	-	-	1(0)		18(0)	22(0)	47,463	42,443
Total	3,943(458)	2,859(275)	2,106(250)	2,062(127)	1,730(31)	1,130(9)	242(2)	14,072(1,152)	\$39,951	\$38,017

	January 1, 1995	<u>January 1, 1995</u>		
Average Attained Age	38.6		38.6	
Average Hire Age	26.5		26.4	

1/ Includes 858 members hired in 1994.

POLICE AND FIREMEN'S DISABILITY AND PENSION FUND OF OHIO

Police

Distribution of Retirants by Attained Age Group and Sex as of January 1, 1995

					Annual Rate	of Pension 1/
Attained Age Group	Males	Females	Total	Col. (4) as % of TOTAL	As of January 1, 1995	As of January 1, 1994
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Under 40	88	24	112	1%	\$ 1,826,619	\$ 2,019,969
40 - 44	219	24	243	3	4,462,659	4,639,132
45 - 49	571	28	599	8	13,105,889	12,460,430
50 - 54	1,285	12	1,297	17	32,000,972	29,263,340
55 - 59	1,230	9	1,239	17	30,735,336	27,316,370
60 - 64	1,069	13	1,082	15	23,615,830	23,306,302
65 - 69	1,244	8	1,252	17	22,840,674	21,741,280
70 - 74	776	10	786	11	11,960,333	10,102,989
75 - 79	405	8	413	5	5,489,265	4,987,106
80 - 84	265	2	267	4	3,067,979	2,782,693
85 - 89	74		74	1	714,790	648,719
90 & Over	32	1	33	1	341,081	243,035
TOTAL	7,258	139	7,397	100%	\$150,161,440	\$139,511,376
Average Attained Age						
January 1, 1994	61.5	53.1	61.4			
January 1, 1995	61.7	52.9	61.5			
Average Annual Benefit				January J January J		\$19,422 20,300

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, 1995

		Number	
	Attained	Receiving	Col. (2) as
	Age Group	Benefits	% of TOTAL
	(1)	(2)	(3)
Α.	SURVIVING SPOUSES 1/		
	Under 40	37	1%
	40 - 44	52	2
	45 - 49	80	3
	50 - 54	117	4
	55 - 59	197	8
	60 - 64	259	10
	65 - 69	369	14
	70 - 74	407	16
	75 - 79	395	15
	80 - 84	321	12
	85 - 89	224	9
	90 & Over	152	6
	TOTAL	2,610	100%
	Average Attained Ag	ge 71.4	
B.	BENEFICIARIES RECEIV		
	Under 35	6	2%
	35 - 39	5	2
	40 - 44	14	4
	45 - 49	22	7
	50 - 54	39	11
	55 - 59	48	14
	60 - 64	62	18
	65 - 69	66	19
	70 - 74	45	13
	75 - 79	27	8
	80 - 84	6	2
	85 - 89	1	-
	90 & Over	-	
	TOTAL	341	100%
C.	CHILDREN	338	

1/ Includes dependent parents.



Table 2(b)

POLICE AND FIREMEN'S DISABILITY AND PENSION FUND OF OHIO

Firemen

Distribution of Members by Attained Age Group and Length of Service as of January 1, 1995 (Females are indicated in parentheses and are included in adjacent totals)

									Average A	nnual Salary
									As of	As of
Attained							30-		January 1,	January 1,
Age Group	<u>0-4</u> <u>1</u> /	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	Over	Totals	1995	1994
Under 25	208(2)	2(0)	-	-	-	-	-	210(2)	\$29,099	\$26,348
25 - 29	895(14)	319(8)	1(0)	<u> </u>	김 친 것 같아?		214	1,215(22)	33,829	31,707
30 - 34	858(22)	955(29)	263(6)	8(0)	-	_	-	2,084(57)	37,301	35,664
35 - 39	332(12)	717(26)	832(6)	305(2)	2(0)	-	-	2,188(46)	40,295	38,752
40 - 44	117(5)	288(11)	597(6)	787(0)	216(1)	1(0)	-	2,006(22)	42,028	40,323
45 - 49	33(1)	82(5)	117(5)	412(0)	835(1)	185(0)	3(0)	1,667(12)	43,427	41,895
50 - 54	13(0)	16(2)	22(0)	50(0)	327(0)	347(0)	59(0)	834(2)	45,551	43,845
55 - 59	3(0)	1(0)	6(0)	9(0)	46(0)	94(0)	96(0)	255(0)	46,213	44,464
60 - 64	1(0)	2(0)	2(0)	4(0)	8(0)	4(0)	25(0)	46(0)	45,072	43,203
65 & Over	1(0)	-	0(0)	1(0)	-		4(0)	6(0)	46,272	29,557
Total	2,461(56)	2,382(81)	1,840(23)	1,576(2)	1,434(1)	631(0)	187(0)	10,511(163)	\$40,143	\$38,338

	January 1, 1995		January 1, 1994
Average Attained Age	38.9	,	38.7
Average Hire Age	26.6		26.5

1/ Includes 475 members hired in 1994.



Table 2(b) (continued)

POLICE AND FIREMEN'S DISABILITY AND PENSION FUND OF OHIO

<u>Firemen</u>

Distribution of Retirants by Attained Age Group and Sex as of January 1, 1995

						A	nnual Rate	of Pens	<u>sion 1</u> /
				1.1	Col. (4)		As of	F	As of
Attained Age Group	<u>Males</u>	Females	<u>Total</u>	<u>o</u> 1	as % TOTAL	Ja 	nuary 1, 1995		uary 1, 1994
(1) Under 40	(2) 42	(3) 3	(4) 44		(5) 1%	\$	(6) 718,632	\$	(7) 842,754
40 - 44	89	3	92		1]	1,603,587	1	,830,721
45 - 49	229	1	230		4	5	5,003,304	5	,365,739
50 - 54	791	-	791		13	19	9,557,708	18	,678,436
55 - 59	1,027	-	1,027		16	26	5,060,156	24	,389,840
60 - 64	1,103	-	1,103		18	25	5,257,516	24	,400,070
65 - 69	1,371	-	1,371		22	26	5,298,000	24	,572,814
70 - 74	734	-	734		12	11	,658,135	10	,102,232
75 - 79	432	-	432		7	5	5,708,764	5	,780,881
80 - 84	289	-	289		4	- 51	3,388,723	2	,936,957
85 - 89	82	-	82		1		853,195		658,063
90 & Over	29	-	29		1		237,755		225,750
TOTAL	6,218	6	6,224		100%	\$126	5,345,472	\$119	,784,264
Average				+					
Attained Age									
January 1, 1994	63.9	39.6	63.9						
January 1, 1995	64.2	40.6	64.1						
Average Annual									
Benefit					January	1, 19	94		\$19,477
					January				20,300

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

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POLICE AND FIREMEN'S DISABILITY AND PENSION FUND OF OHIO

Firemen

Distributio	on of Beneficiary-Survivors by Atta	ined Age Gro	oup
1.1716	as of January 1, 1995		
	Number		

		Number	
	Attained	Receiving	Col. (2) as
	Age Group	Benefits	% of TOTAL
	(1)	(2)	(3)
Α.	SURVIVING SPOUSES 1/		
	Under 40	25	1%
	40 - 44	23	1
	45 - 49	44	2
	50 - 54	73	4
	55 - 59	112	6
	60 - 64	187	9
	65 - 69	298	14
	70 - 74	333	16
	75 - 79	341	16
	80 - 84	311	15
	85 - 89	193	9
	90 & Over	152	7
	TOTAL	2,092	100%
	Average Attained Age	73.3	· · · · · · · · · · · · · · · · · · ·
B.	BENEFICIARIES RECEIVING OF	PTIONS	
	Under 35	3	1%
	35 - 39	6	2
	40 - 44	6	2
	45 - 49	11	4
	50 - 54	23	9
	55 - 59	31	12
	60 - 64	47	19
	65 - 69	57	22
	70 - 74	40	16
	75 - 79	25	10
	80 - 84	6	2
	85 - 89	2	1
	90 & over	-	-
	TOTAL	257	100%

C. <u>CHILDREN</u>

 $\underline{1}$ / Includes dependent parents.

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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:
 - (b) Benefit:
- 3. Permanent and Total Disability (On duty)
 - (a) Eligibility:
 - (b) Benefit:
- 4. Partial Disability (On duty)
 - (a) Eligibility:
 - (b) Benefit:

Age 62 and 15 years of service.

The same as the Service Retirement Benefit.

No age or service requirement.

An annual pension equal to 72% of the annual salary during the last year of active service.

No age or service requirement.

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.

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Table 3 (continued)

(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 2

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.



(ii)

(iii)

Note:

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.

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.

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).

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

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% of salary.

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:



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9. Pre-retirement Surviving Spouse Benefit

- (a) Eligibility:
- (b) Benefit:

10. Member Contributions:

11. Pension Increases for Certain Retirants:

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.

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).



interest (with 20 th target).

12. Group Health Insurance and Medicare:

Table 3 (continued)

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.

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.

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.

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

13. COLA or Terminal Pay:

14. Optional Forms of Payment:

15. Lump Sum Death Benefit:



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:

Rate of Mortality					
Age	Police	Firemen			
영희 가격되					
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:

Rate of Termination				
Age	Police	Firemen		
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. - 28 -



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 1992-1994. The following rates at selected ages are illustrative:

	Rate of Disa	bility
Age	Police	Firemen
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:

	Police	<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) agegraded promotional increases as follows:

	Promotional	Total
Age(s)	Increase	Increase
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 1994. These rates are applicable after the member has satisfied the conditions for retirement. The rates are as follows:

Poli	ice	Firemen		
Age(s)	Rate	Age(s)	Rate	
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			

Table 4 (continued)

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 setforward in age. The following probabilities at selected ages are illustrative:

	Probability <u>of Mortality</u>		
Age			
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:

	Probability
Age	of Mortality
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 oneyear set-forward in age. The following probabilities at selected ages are illustrative:

- - ---

	Probability
Age	of Mortality
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:

	Probability
Age	of Mortality
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

Table 4 (continued)

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 rates, decreased by 15% at all ages. The following probabilities at selected ages are illustrative:

	Probability
Age	of Mortality
35	.001326
40	.001938
45	.002950
50	.004471
55	.006775
60	.010464
65	.016448
70	.026121
75	.042560
80	.067465
85	.102527
90	.151530
95	.219657

2. Probability of Remarriage Among Surviving Spouses - The probabilities of remarriage of surviving spouses are based upon the results of the 1987-1991 Quinquennial Evaluation. The following probabilities at selected ages are illustrative:

	Probability		
Age	of Remarriage		
35	.030686		
40	.025594		
45	.017015		
50	.008101		
55	.006225		
60	.005491		
65	.002442		
70	.001092		
75	.000491		

3. Dependent Children -

No specific allowance has been made, in the evaluation of this benefit, for the probability of mortality prior to age 18, or the probability of disability at age 18 and thereafter. In valuing the benefit beyond age 18, it is assumed that 1/3 of the dependent children will be students and eligible for payments to age 22.



4. Dependent Parents -

E. COLA Annuities:

F. Expense Loading:

G. Actuarial Cost Method:

Costs based upon allowance for mortality (the Projected Annuity Mortality Table rates), but no specific allowance for change in dependency status.

It has been assumed that, where an election is possible, all members will elect the COLA annuity. It has also been assumed that the Consumer Price Index will increase each year at a rate equal to or greater than 3%.

The net costs were loaded by 3/4 of 1% to allow for future administrative expenses of the Fund.

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.



Table 4 (continued)

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 1994 and 1995

			1995		1994	
			Police	Firemen	Police	Firemen
Α.	ME	MBERSHIP				
	1.	Number of Active Members	14,072	10,511	13,851	10,340
	2.	Number of Retirants and Beneficiary-Survivors	10,686	8,746	10,407	8,588
	3.	Total Membership	24,758	19,257	24,258	18,928
B.		TUARIAL PRESENT VALUE D ASSETS (000,000 omitted)				lane I d Fred so (bay) ¹ ,
	1.	Present Value of Future Benefits	\$4,348.2	\$3,409.2	\$4,088.3	\$3,227.8
	2.	Valuation Assets	2,571.3	2,054.2	2,432.0	1,925.8
	3.	Present Value of Employer Accrued Liability	105.6	107.7	175.2	167.8
	4.	Present Value of Active Member Future Compensation	5,657.9	4,645.2	5,276.3	4,375.6
C.	CU	RRENT RATE PER CENT				
	1.	Disability and Pension Benefits	29.76%	27.05%	28.28%	26.12%
	2.	Health Care Plan and Medicare <u>1</u> /	6.50	6.50	6.50	6.50
	3.	Total	36.26	33.55	34.78	32.62



Table 6

POLICE AND FIREMEN'S DISABILITY AND PENSION FUND OF OHIO

Asset Allocation for 1995

The following table presents a development of the allocation of assets between police and firemen as of January 1, 1995.

		Police	Firemen	Total
(1)	1/1/94 Valuation			
	Assets	\$2,528,551,516	\$1,997,204,062	\$4,525,755,578
(2)	Transactions during 1994			
~ /	a. Employer contributions	111,191,149	102,727,463	213,918,612
	b. Net employee contributions	56,753,911	42,967,772	99,721,683
	c. Retiree medical contributions	2,594,791	2,302,348	4,897,139
	d. Local Funds receipts	66,455,863	63,883,959	130,339,822
	e. Benefit payments and expenses	(201,226,358)	(170,951,670)	(372,178,028
	f. Total transactions	35,769,356	40,929,872	76,699,228
(3)	Item 1 plus Item 2(f)	2,564,320,872	2,038,133,934	4,602,454,806
(4)	Expected Investment Growth	210,080,986	166,457,692	376,538,678
(5)	Valuation Assets, Total			
	a. Book Value Excluding Stocks			3,005,476,972
	b. Market Adjusted Stock Value 1/			1,807,498,538
	c. Contribution Refunds Due		villebit? EnitionArc	(2,865,884)
	d. Total			4,810,109,626
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(6)	Actual Investment Growth (Item 5 less Item 3)			207,654,820
(7)	Allocation of Item 6 in			
. ,	proportion to Item 4	115,856,171	91,798,649	207,654,820
(8)	Health Care Stabilization Fund	108,890,966	75,674,620	184,565,586
(9)	1/1/95 Valuation Assets (Item 3 plus Item 7 less Item 8)	2,571,286,077	2,054,257,963	4,625,544,040

See footnote on next page.



Table 6 (continued)

<u>1</u> /	The Market Adjusted Stock Value is developed as follows:		12/31/92	12/31/93	12/31/94
	1.	 Unrealized Gain/(Loss) a. Market Value of Stocks b. Book Value of Stocks c. Cumulative Unrealized Gain/(Loss) (1.a -1.b) d. Annual Unrealized 	\$1,468,043,276 1,175,107,740 292,935,536	\$1,620,250,036 1,284,053,979 336,196,057	\$1,831,246,036 1,611,504,222 219,741,814
		Gain/(Loss)		43,260,521	(116,454,243)
	2.	Annual Realized Gain/(Loss) Reported by Fund		81,997,436	64,612,268
	3.	Total Gain/(Loss)		125,257,957	(51,841,975)
	4.	Gain/(Loss) Excluded from 1995 Market Value a. For 1994 (.75 x Item 3) b. For 1993 (.50 x Item 3) c. For Prior Years			(38,881,481) 62,628,979 N/A
		c. Total			23,747,498
	5.	Market Adjusted Stock Value (1.a - 4.d)			1,807,498,538

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