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General Accounting Office  
Washington, D.C. 20548

Human Resources Division

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December 3, 1992



148293

The Honorable Edward R. Roybal  
Chairman, Select Committee on Aging  
House of Representatives

Dear Mr. Chairman:

This letter responds to your request for information on the pension-funding practices of state and local governments. We first addressed this issue in 1979 when we reported to the Congress that because billions of dollars in unfunded liabilities had accumulated in state and local government pension plans, these governments were threatened with severe future financial difficulties.<sup>1</sup> On October 2, 1992, we briefed you on the preliminary results of our recent work and reported that even after a long period of favorable earnings on their investments, many state and local pension plans remain underfunded. As you requested, we are providing additional details at this time.

You were specifically concerned about the extent to which (1) state and local governments have failed to make appropriate contributions to their pension plans, (2) actuarial assumptions or funding methods have been changed in order to lower state and local governments' required contributions to their pension plans, or (3) these governments have used pension funds to pay government operating expenses. Our work shows that

- pension plan contributions by some state and local governments frequently fall short of actuarially required amounts,
- in some instances, actuarial assumptions have been changed to lower required plan contributions, and

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<sup>1</sup>Funding of State and Local Government Pension Plans: A National Problem (HRD-79-66, Aug. 30, 1979) and related testimony, The Funding of State and Local Government Pension Plans and the Need to Closely Monitor Such Plans (Sept. 30, 1980).

GAO/HRD-93-9R, Underfunded State and Local Pensions Plans

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- while the issue of state or local governments removing funds from their pension plans has received considerable attention in the press, we were unable to obtain sufficiently detailed and verifiable information about this issue.

To address your concerns, we researched and examined studies and literature on state and local government funding of pension plans. We reviewed a number of reports and surveys that address the characteristics and pension-funding practices of state and local governments. We also discussed your concerns with representatives of a number of national associations with interests in matters affecting the pension plans of state and local governments.

#### PUBLIC EMPLOYEES' PENSIONS ARE NOT PROTECTED BY ERISA

In late 1991, about 15.7 million government workers and retirees participated in pension plans of state and local governments. About 95 percent of these participants were covered by defined benefit plans.<sup>2</sup> Pension plans of state and local governments, however, are not covered by the Employee Retirement Income Security Act of 1974 (ERISA).

ERISA protects the pension rights of employees participating in private pension plans by (1) providing standards for plan participation, vesting, funding, fiduciary duties, and disclosure and reporting and (2) prescribing mechanisms to enforce these standards. ERISA's provisions--for protection of pension benefits, systematically funding pension obligations, and benefit insurance--assure private sector pensioners that most benefits promised for completed service will be paid. There are no comparable assurances for state and local pensioners.

#### PUBLIC PENSION PLANS ARE CREATED AND REGULATED BY LAWS OF STATE AND LOCAL GOVERNMENTS

Typically, state and local pension plans are created and governed by laws of the various state and local governments. In the absence of specific legal funding requirements, governments are not required to prefund their pension plan liability, and may opt to pay retirement benefits as they become due.

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<sup>2</sup>In a defined benefit plan, pension benefits are established by a formula that is generally based on such factors as years of employment, age, and compensation.

Public employee groups believe that adequate plan funding, regular employer contributions, and sound investment of plan assets provide a buffer against possible pressure on governments to reduce plan benefits in times of budget constraints.<sup>3</sup>

STUDIES HAVE RAISED CONCERNS ABOUT  
UNDERFUNDED PUBLIC PENSION BENEFITS

In March 1978, the Pension Task Force of the House of Representatives completed the last comprehensive study of public pension funding. This study covered 96 percent of participants in existing state and local pension plans. The task force reported, among other things, that the various laws relating to state and local pension plans did not adequately protect the participants' interests in their retirement systems; the ambiguity in the Internal Revenue Code provisions and the inconsistent enforcement by the Internal Revenue Service of qualification requirements limited the protection such provisions afforded the participants; and more actuarial information was needed to better assess the funding status and funding needs of state and local government pension plans.

In our 1979 report, we studied selected large public plans; we pointed out that many state and local government pension plans were not funded on a sound actuarial basis because they were not setting aside sufficient funds to provide for estimated future benefits. We also reported that billions of dollars in unfunded liabilities had accumulated. In addition, we pointed out that many state and local government retirement plans were not actuarially funded, which threatened cities and states with severe future financial difficulties. In fact, most of the state and local pension plans we examined would not have satisfied ERISA funding standards had they applied.

In light of these conditions, we concluded that sound funding of public pension plans was a national problem and that systematic funding of these pensions was needed. We recommended that the Congress closely monitor actions taken by state and local governments to improve the funding of their pension plans.

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<sup>3</sup>Public Pension Plans: The Issues Raised Over Control of Plan Assets, Congressional Research Service (May 15, 1990).

## FUNDED STATUS OF PUBLIC PENSION PLANS VARIES WIDELY

You have expressed concern that the low levels of funding of state and local government pension plans--which we and others identified earlier--have persisted into the 1990s and that recent fiscal problems related to the recession have caused funding levels to deteriorate further. Our review of recent industry surveys of public pensions shows that plan funding varies widely. Some plans are overfunded, but most are underfunded.

During the 1987-90 period, the average funded ratios of public pension plans reported by these surveys ranged from a low of 75 percent to a high of 89 percent, as shown in enclosure I, table I.1. The funded ratio is the proportion of pension liability covered by the value of plan assets. It is important to note that funded ratios provide only general indications of funded status because public pension plans can use different actuarial assumptions, such as the assumed rate of return on plan investments, to calculate plan liabilities.

### Most Plans Are Underfunded

We analyzed the 1991 Public Pension Coordinating Council (PPCC) survey of pension plans from 47 states and Puerto Rico and found that of those 189 plans that provided complete funding data, most were underfunded. This group, which consisted of 89 statewide plans with assets of \$306.7 billion and 100 local plans with assets of \$156.4 billion, had an average funded ratio of 85 percent of liabilities (see enclosure II, table II.1). This funded ratio is consistent with other surveys we identified. The distribution of the funded ratios for the 189 plans is shown in enclosure II, figure II.1.

The funded status of the plans varied widely. Most (128 or 68 percent) of the plans were underfunded; 61 or 32 percent were fully funded or overfunded. The assets of the underfunded plans, \$311.3 billion, fell short of plan obligations by \$96.9 billion, which represents an average funded ratio of 76 percent. Further, 54 of the 128 underfunded plans had funded ratios of less than 75 percent. The average funded ratio for underfunded state pension plans was about the same as for underfunded local government pension plans.

The ability of state and local governments with underfunded plans to fully fund their plans will depend on their revenue-raising capabilities and on the willingness of the taxpayers to meet the cost. This may be particularly difficult in the face of competing future demands for the governments' moneys.

Fully funding state and local government pension plans may be more urgent than some governments realize. Demographics indicate that most state government employees are over the age of 41, and many of these are expected to retire before the age of 60. Further, the ratio of active workers to retirees is declining.<sup>4</sup> Thus, the proportion of pension plan participants receiving benefits rather than contributing to the plan could increase quickly in the near future.

As these participants retire, state and local governments could face fiscal problems because the increase in the number of retirees could overtake the plans' ability to pay retiree benefits. Such a dilemma may already be close at hand for the sponsors of six public pension plans: teachers' retirement plans in the District of Columbia, Maine, Oklahoma, and West Virginia; and state employees' retirement plans in Maine and Massachusetts lack sufficient assets, reportedly, to even pay for benefits promised to current retirees.<sup>5</sup>

#### STATE AND LOCAL GOVERNMENT CONTRIBUTIONS FALL SHORT OF ACTUARIALY REQUIRED AMOUNTS

The degree of underfunding of state and local government plans will worsen if contributions fall short of amounts actuarially required to maintain funding levels or overcome past funding shortfalls. Recent surveys and studies show that the contributions of many state and local governments fall short of the actuarially required amounts. These amounts are needed from plan sponsors in order to fund current pension expenses and the amortized portion of past unfunded accrued obligations. Inadequate contributions over the long term could seriously erode the tenuous financial status of some plans, especially those underfunded by large amounts.

The average annual contribution amounted to 89 percent of that actuarially required for the 42 plans evaluated for 1988 by Cornell University researchers. Those plans that undercontributed in 1988, they noted, had a history of

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<sup>4</sup>1990 Comparative Study of Major Public Employee Retirement Systems, State of Wisconsin Retirement Research Committee, Staff Report No. 79 (July 1990).

<sup>5</sup>1990 Report on Funding Levels for State Retirement Systems, Wilshire Associates Incorporated (Santa Monica, Calif.: Nov. 12, 1990).

underfunding in past years. Fiscal pressures were a factor, they concluded, in the plans' varying funding practices.<sup>6</sup>

#### Most Plans Contribute Required Amounts

From our analysis of data reported by the 189 plans (see enclosure III, table III.1), we found that plan sponsors contributed \$15.3 billion (80 percent) of the \$19.1 billion actuarially required. The sponsors of 75 plans (40 percent) failed to contribute the full amounts required. On average, these plans contributed only 38 percent of the actuarially required amount. In contrast, sponsors of 65 plans (34 percent) contributed amounts that met the required contribution; 49 plan sponsors (26 percent) exceeded their required contributions by about \$600 million (9 percent).

The distribution of contribution ratios for the 189 plans we analyzed in the 1991 PPCC survey are shown in enclosure III, figure III.1. The contribution ratio is the proportion of the actual contribution to the actuarially required contribution.

#### ACTUARIAL ASSUMPTIONS CHANGED TO REDUCE REQUIRED CONTRIBUTIONS

Underfunding can develop when contributions are less than the actuarially required amount as well as when unrealistic actuarial assumptions are employed. Recent studies show instances in which actuarial assumptions were changed to reduce the contribution amount required of the state and local governments. In 1989, a study of public pension plans showed 27 percent changed their actuarial assumptions; in 1990, 13 percent of these plans did so.<sup>7</sup> Our work, however, indicates that beginning in about 1989, greater numbers of state and local pension plans made changes in their actuarial assumptions in order to reduce the sponsors' contributions.

In 1988, some plans made unrealistic economic assumptions which, Mitchell and Smith noted, significantly reduced the size of the plans' projected liabilities. In addition, in a number of instances, the media have reported, the required

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<sup>6</sup>Olivia S. Mitchell and Robert S. Smith, Pension Funding in the Public Sector, Cornell University, School of Industrial and Labor Relations (New York: Oct. 1991).

<sup>7</sup>Greenwich Reports-Suggestion: Stress Strategy, Greenwich Associates (Greenwich, Conn.: 1990).

contributions of state and local governments have been reduced or eliminated based on changes in the plans' actuarial assumptions.<sup>6</sup>

The pension plan sponsor's required annual contribution is particularly sensitive to changes in the underlying actuarial assumptions. A small change in the assumed rate of return on plan investments can produce a large change in calculated pension liabilities and, in turn, in the annual contribution needed from the employer. For example, a 1 percent increase in the assumed investment return rate, with other assumptions remaining the same, could result in a 20 to 25 percent reduction in the required annual contribution.

It is important to note, however, that changing actuarial assumptions is not necessarily inappropriate behavior by pension plans. Actuaries change assumptions regularly after assessing pension fund performance and then recalculate contributions required from plan sponsors.

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As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this correspondence until 30 days from its issue date.

If you have questions concerning this letter, please call me on (202) 512-7215. Other major contributors to this report are listed in enclosure IV.

Sincerely yours,



Jane L. Ross  
Associate Director

Enclosures

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<sup>6</sup>Public Pension Plans: A Status Report, Congressional Research Service (Dec. 16, 1991).

AVERAGE FUNDED RATIOS OF PUBLIC PENSION PLANS

Details on the average funded ratios of public pension plans reported by five studies we examined are shown in table I.1. The average funded ratios of plans reported by these studies remained below 90 percent during the 1987-90 period.

We obtained financial data on the funded status of a group of 30 public pension plans for the 1988-90 period from the Government Finance Officers Association. The funded status of these plans, which held assets of about \$168 billion in 1989, remained at less than 90 percent funded during this period.

In a detailed survey of 269 public pension plans, which held \$570 billion in assets and covered about 8.5 million participants in 1990, the Public Pension Coordinating Council (PPCC) reported an overall funded ratio of 85 percent.

In 1991, Cornell University researchers Drs. Olivia S. Mitchell and Robert S. Smith reported an average funded level of 84 percent for 42 large public plans covering 4.7 million employees in 31 states for plan year 1988. Their study was based on the 1989 Survey of Systems published jointly by the National Association of State Retirement Administrators (NASRA) and the National Council on Teacher Retirement (NCTR). In their analysis of the funding data, Mitchell and Smith used the projected pension benefit obligation (PBO) as required by the Governmental Accounting Standards Board. The PBO is a standardized method of comparing plan assets with liabilities; this method excludes future service time of plan participants. In light of strong capital markets during the decade of the 1980s, the researchers believe 84 percent is not particularly high. In addition, plan assets "typically fell short of liabilities by 9 to 16 percent."

In 40 states and Puerto Rico, 77 public pension plans--which held about 71 percent of public pension plan assets--had an average funded ratio of about 75 percent, the 1990 National Conference of State Legislators study found. In addition, 371 large public pension plans reported an average funded ratio of about 83 percent in plan year 1987, according to a Greenwich Associates 1988 survey.

**TABLE 1.11**  
**Funded Ratios of Public Pension Plans**  
**as Reported by Industry Studies and Calculated by GAO**

Study	Plans	Dollar value of assets in billions	1987	1988	1989	1990
Government Finance Officers Association (1992 Special Analysis)	30	168.1 <sup>a</sup>		86	87	89
1991 PPCC Survey	269	570.0				85
1991 Mitchell & Smith Study (Based on the 1989 NASRA/NCTR Survey)	42	207.5		84		
1990 National Conference of State Legislatures	77	361.9			75	
1988 Greenwich Associates Survey	371	602.0	83			

Note: The funded ratio is assets as a percentage of obligations.

<sup>a</sup>GAO calculated value for fiscal year 1989.

DISTRIBUTION OF AVERAGE FUNDED RATIOS OF PUBLIC PENSION PLANS

Our analysis of the 1991 Public Pension Coordinating Council (PPCC) survey of public pension plans from 47 states and Puerto Rico identified 189 plans that responded with complete funding data. This group, which consisted of 89 statewide plans holding assets of \$306.7 billion and 100 local jurisdiction plans with assets of \$156.4 billion, had an average funded ratio of 85 percent of liabilities, as shown in table II.1. The distribution of funded ratios for this group of plans is graphically presented in figure II.1.

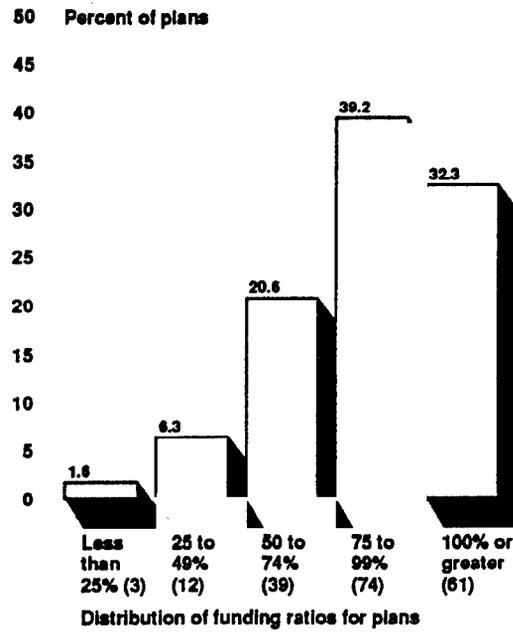
<b>TABLE II.1:</b> <b>GAO Analysis of Public Pension Plan Funding</b>			
	<u>All plans</u>		
	<u>State</u>	<u>Local<sup>a</sup></u>	<u>Total</u>
Plans	89	100	189
Assets	\$306,676,198	\$156,364,216	\$463,040,414
Liabilities	\$369,280,261	\$173,877,032	\$543,157,293
Funded ratio (assets to liabilities)	83%	90%	85%
	<u>Underfunded plans</u>		
	<u>State</u>	<u>Local<sup>a</sup></u>	<u>Total</u>
Plans	62	66	128
Assets	\$221,017,180	\$90,232,464	\$311,249,644
Liabilities	\$290,012,344	\$118,172,606	\$408,184,950
Funded ratio (assets to liabilities)	76%	76%	76%
	<u>Fully funded and overfunded plans</u>		
	<u>State</u>	<u>Local<sup>a</sup></u>	<u>Total</u>
Plans	27	34	61
Assets	\$85,659,018	\$66,131,752	\$151,790,770
Liabilities	\$79,267,917	\$55,704,426	\$134,972,343
Funded ratio (assets to liabilities)	108%	119%	112%

Note: All dollar amounts are rounded to the nearest thousand.

<sup>a</sup>Local plans include all plans not governed by a state.

Source: 1991 Public Pension Coordinating Council Survey.

**Figure II.1: Distribution of Funding Ratios of State and Local Pension Plans**



Note: Number of plans in parentheses.

Source: 1991 Public Pension Coordinating Council Survey.

CONTRIBUTION RATIOS OF PUBLIC PENSION PLANS

Our analysis of contribution data reported for the 189 plans we assessed, from the 1991 Public Pension Coordinating Council survey, revealed that many plan sponsors failed to contribute the actuarially required amount. The actual and required contributions and contribution ratios shown in table III.1 are (1) for the 189 plans as a group, (2) for those plans whose sponsors contributed less than the required amount, and (3) for those plans whose sponsors met or exceeded the required contribution amount. The distribution of contribution ratios for the 189 plans is shown in figure III.1.

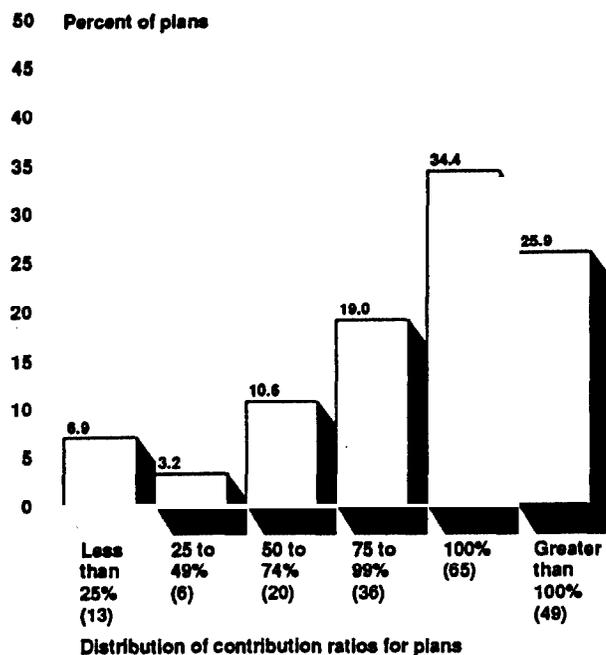
<u>TABLE III.1:</u> <u>GAO Analysis of Public Pension Plan Contributions</u>			
	<u>All plans</u>		
	<u>State</u>	<u>Local<sup>a</sup></u>	<u>Total</u>
Plans	89	100	189
Actual contribution	\$9,938,486	\$5,324,720	\$15,263,206
Determined contribution	\$12,431,231	\$6,636,243	\$19,067,474
Contribution ratio (actual to determined)	80%	80%	80%
<u>Undercontributing plans</u>			
	<u>State</u>	<u>Local<sup>a</sup></u>	<u>Total</u>
	Plans	36	39
Actual contribution	\$1,798,324	\$868,971	\$2,667,295
Determined contribution	\$4,720,406	\$2,346,018	\$7,066,424
Contribution ratio (actual to determined)	38%	37%	38%
<u>Fully contributing and overcontributing plans</u>			
	<u>State</u>	<u>Local<sup>a</sup></u>	<u>Total</u>
	Plans	53	61
Actual contribution	\$8,140,162	\$4,455,749	\$12,595,911
Determined contribution	\$7,710,825	\$4,290,225	\$12,001,050
Contribution ratio (actual to determined)	106%	103%	104%

Note: All dollar amounts are rounded to the nearest thousand.

<sup>a</sup>Local plans include all plans not governed by a state.

Source: 1991 Public Pension Coordinating Council Survey.

**Figure III.1: Distribution of Contribution Ratios of State and Local Pension Plans**



Note: Number of plans in parentheses.

Source: 1991 Public Pension Coordinating Council Survey.

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