

RECORD OF SOCIETY OF ACTUARIES 1980 VOL. 6 NO. 2

PUBLIC/MUNICIPAL PENSION PLAN ISSUES

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1. How do they differ from corporate plans? How should they differ?
2. Are traditional closed-group, reserve-accumulating valuation methods appropriate?
3. What should be the impact of universal social security coverage?
4. Is appropriate actuarial advice being given to public/municipal plan boards?

MR. WILLIAM S. THOMAS: How do public/municipal pension plans differ from corporate plans?

A corporation usually has about two plans at the most - an hourly plan and a salary plan. At times, because of collective bargaining, the corporation may have more than one plan for union employees. It may also contract out some employees by paying a fixed contribution to a joint multiemployer plan. In general, most of a single employer's plans follow some uniform general principles.

By comparison, most municipalities have more plans than a corporation. At a minimum, a municipality will have separate plans for career employees, teachers, policemen, firemen and other employees who are engaged in hazardous occupations. These plans may differ substantially as to benefit rate, retirement dates and cost. For example, a policeman or fireman may be able to retire after twenty years with immediate benefits of the order of magnitude of 50%. The cost of a plan for policemen or firemen may be many times that of a plan for long service career employees.

In addition, there are often differences in the age distributions of employees covered by public/municipal plans as opposed to corporate plans. For example, in New York City, almost one-half of the employees came to work for the City after they had reached age 44.

It is difficult to make a definitive statement as to the differences between public and private plans. In fact, I have found it difficult to make valid comparisons between the various types of public plans. There are many tabulations of the pension plan provisions of state and federal public employee retirement systems. Relatively few of these attempt to make comparisons.

The Pension Task Force Report on Public Employee Retirement Systems does make some comments on the benefit structure:

Contributory vs. Noncontributory - About 75% of the state and local plans surveyed require employees to make contributions. In total, about 85% of all active state and local employees are required to contribute to their plans. Most private defined benefit plans are noncontributory. However, many private employers have savings and thrift plans which require employee contributions with the employer matching on a % basis - frequently 50% or 100%. In our New York study, we found it was desirable to compare the benefits under the City plans, which are in effect a combination of a defined benefit plan and a defined contribution plan, with the combined pension plans and savings plan of private employers. Such a study showed that the difference between the City plan benefits and the private plan benefits of progressive employers was not as substantial as many critics had thought. The contribution question is not academic. One of the major deterrents to making Social Security benefits on a universal basis - especially with respect to federal civil service employees - is the fact that the contribution rate is 7%. If Social Security were added for the federal workers, the combined contribution would be in excess of 13%. Accordingly, it would seem necessary to reduce the contribution rate of 7% under the federal plan with an appropriate reduction in benefits. It is not surprising that this situation is not only perplexing but also emotional.

Coverage under Social Security - 45% of the employees in plans maintained by the Federal Government are covered by Social Security. These include the Military Retirement System, and such others as the Federal Reserve Banks Plan, the TVA Plan and the Federal Home Loan Banks Plan. The 55% not included are principally those covered under the Civil Service Retirement System. Compared with the federal, 70% of the state and local employees in staff retirement systems are covered under Social Security. The 70% is a composite of 85% of all state employees, 36% of members of police and fire systems and 56% for teachers except for university faculty. Private plans have, of course, Social Security benefits on all employees and most plans integrate their benefits with Social Security benefits either on an offset basis or in the form of step-rate benefits. Many public plans do not integrate with Social Security.

Other differences between municipal plans and private plans are:

1) Retirement Age

Most private plans provide for a normal retirement age of 65, with provision for actuarial reductions for earlier retirements. In recent years, because of the intense interest in early retirement, some plans provide for no actuarial reductions if retirement is at age 60 or later. Some collectively bargained plans provide for earlier retirements, provided the employee has completed a certain period of service or if the age and years of service add up to a specified number. In recent years, inflation and the Age Discrimination in Employment Act have resulted in later retirements. Public plans, in general, have had normal retirement ages of 60-62 with policemen and firemen eligible for normal retirement at age 50 or 55. Others permit retirements with immediate commencement of benefits after specified periods of service - i.e., 20 years for policemen and firemen and 25 years for other designated employees.

2) Cost of Living Adjustments

Relatively few private plans provide for post-retirement cost-of-living adjustments. Adjustments, when made, are on an "ad hoc" basis. These have been occurring more frequently in recent years. The federal plans generally provide for automatic adjustment without limit. The state and local government plans provide for adjustments, usually on an "ad hoc" basis for about 42% of the plans, but for over 90% of employees when measured by number of employees.

3) Retirement Benefits

There is a wide range of benefit formulae in both the private and the public sectors. Most are geared to a percentage of final average pay. The percentage for each year of service may be level, or it may increase with years of service - the federal government plan, for example, has 1.5% for the first 5 years, 1.75% for the next 5 years and 2% for all years of service thereafter. Some private plans in recent years have adopted a reverse pattern - e.g., 2% for first 15 years, 1-1/2% for the next 10 and 1% thereafter, in order to make provision for employees hired in the 30-40 age bracket.

The compensation used in computing pension benefits is as important a determinant of relative pension levels as is the basic benefit formula. In private plans, the most frequently used is a final five year average. Occasionally a final three year average is used. Generally, bonuses and overtime are not included in these averages. For municipal plans for policemen and firemen, almost 33% use the final day's rate of pay or final year's pay for computing pension benefits. Another 23% use the final five year average. For plans covering other categories of state and local government employees, 44% use the five year average and 27% use the three year average. In many plans overtime in the final years is counted as compensation.

The use of a final rate of pay can result in many unusual situations. I heard of a state situation where four patrolmen were promoted to chief of police in the same day. They all retired at the benefit based on the chief's rate of pay and, of course, that would be greater than what they had been earning.

Here are a few statistics regarding the extent of the various plans. The state and municipal plans had assets at the end of 1976 of about \$125 billion. The federal plan had assets of \$50 billion, and the private pension system had assets of \$375 billion. If you compare the assets with the payout, the ratio of assets to payout is 13 times for the state/municipal plans, 5 times for the federal plan and 17 times for private plans. I realize that this is only one measure and that there are many kinds of measures. Nonetheless, I would have expected private plans to have a substantially higher ratio than the ratio for the state and municipal plans.

MR. THOMAS J. CAVANAUGH: My role here today, aside from moderating the panel, is to address two of the topics on our program. The topics are:

- "Are traditional closed-group, reserve-accumulating valuation methods appropriate for public plans?" and
- "Is appropriate actuarial advice being given to public/municipal plan boards?"

The answer to the first question is yes and no. Public and municipal pension plans are just that - pension plans. As such, it is extremely important that proper funding techniques be utilized. Some of the main reasons for funding, and I am sure you can all think of others, are:

- It promotes sound fiscal policy and budgetary discipline
- It adds restraint to benefit liberalization considerations
- It secures the pension rights of members
- The investment income earned on the accumulated assets lowers the overall cost of government
- It properly allocates costs among generations of taxpayers
- It is becoming a practical necessity in today's environment of increased fiscal audits and taxpayer's awareness
- The unfunded accrued liability of a system is playing an ever increasing role in the sponsoring government's attempts to obtain outside financing.

For reasons of bond rating and disclosure, traditional methods are helpful because they are recognized as being the same as those used by private plans. There are certain exceptions and caveats to this rule, however:

- Of greatest impact on funding methods, the law governing the retirement system will usually specify what funding method to use or at least give enough detail such that only one or two methods will meet the legal requirements. The corollary to this, of course, is that funding methods cannot then be changed without legislative action.
- Some systems have a fixed contribution level as a per cent of covered payroll. Therefore, even if a traditional funding method is used, the funding period for any unfunded accrued liability becomes the balancing item in the valuation process.
- We at Buck feel there are certain situations where it is appropriate to recognize future growth in the payroll when determining accrued liability funding levels or funding periods. These situations are those in which inflation is fully recognized on the liability side of the valuation process and can therefore appropriately be recognized on the contribution side.

In practice, if a system has automatic cost-of-living increases that are fully recognized in the liability calculation, and recognizes market value of assets in determining the actuarial asset value, then we feel it appropriate to recognize the effect of inflation on the size of the future payroll. For systems funding on a level percent of payroll basis, this produces either a lower accrued liability contribution or a shorter funding period. Of course, it is absolutely essential that a client understand the impact of this approach on the unfunded accrued liability of the

system. It will grow in absolute dollar amount for quite a few years into the future before the assumed contribution level becomes large enough to cover interest and to begin amortizing the principal.

The closed group method is appropriate for the typical valuation of today. However, we have used open-group techniques in some projection studies for clients, and this may be the wave of the future. More and more people will begin to recognize that the assets and liabilities of a retirement system are not separate issues. Rather, they are two parts of the overall pension problem and should therefore be studied together. This "comingling" of the asset and liability problems will require a greater reliance on projection techniques.

A moment ago I mentioned cost-of-living benefits. As you know, many public plans have an automatic escalation of retirement benefits as part of their system. We have been working recently with a few state systems to see if there is some way to finance these benefits short of full reserve funding. As part of this discussion on funding methods I would just like to mention one way of financing cost-of-living benefits that has been considered and is being used in at least two state systems.

This method utilizes a side fund or special fund specifically earmarked for cost-of-living benefits. Contributions are made to the fund at a specified level percentage of covered payroll, and all cost-of-living benefits are paid from the fund. It is important when using a special fund to either have an annual cap on the benefit adjustment or to limit the system's liability for cost-of-living benefits to the assets currently in the fund.

Through the use of projections, an adequate funding level can be selected. This approach works best with a system that is still growing in active membership and it is not a substitute for full advance funding in the long run. It does, however, usually provide for a lower level of funding than full advanced and can make the granting of cost-of-living benefits more palatable to state and local governments.

To sum up on funding approaches, reserve accumulation methods are essential, particularly in today's atmosphere of increased interest by the federal government and the taxpayers on the soundness and cost level of public/municipal pension plans.

The second question I will address, "Is appropriate actuarial advice being given to public/municipal plan boards?" has an easier answer than the first. For the boards I work with, the answer is - of course.

Seriously, this is a very timely question. In the last 12 to 18 months, we have seen markedly increased interest in the answer to this question. And that increased interest is coming from the board members themselves. We have recently been involved in actuarial reviews both as the reviewer and the reviewee. Boards appear quite a bit more willing to spend sizable amounts of money in search of a specific answer to our second question.

The reason for this recent activity was mentioned earlier. Boards are under an ever brighter spotlight being trained on them by both the federal government through PERISA, ADEA, Unisex, etc. and by taxpayers through Proposition 13, FASB Statement #35, and the like. Board members naturally then want a second and third opinion on actuarial matters.

And do not slight the ancillary issues. Unisex, ADEA, Mandatory Social Security Coverage, FASB, PERISA - all these and others are requiring greater and greater specialization on the part of the consultant to the Board. I think the days of consulting actuaries adequately handling the requirements of large industrial clients and large municipal clients are over. The needs of the two and the work performed for the two are rapidly diverging and multiplying.

In fact, one of the main points to be made in consulting to public boards is that they are on a different track than private pension plans. ERISA requirements can be used as a guide to the operation of public plans, but the differences should be communicated to the Board in a manner that will be understandable.

Another point to recognize in working with public boards is that they are much more responsive to the needs of the system membership - both active and retired. In fact, it is normal for active and retired members to be elected or appointed to the Board of Trustees. The actuary must therefore present his or her reasoning in a clear, sound manner. This is obviously necessary so that it will be understood by members of the Board who are not familiar with the actuary's world. But it is also necessary so that the Board members will be able to discuss the issues with the people they represent.

The answer to our second question is obviously different for every public board in the country. Some are receiving excellent advice while others are receiving none at all or, worse, they are receiving actuarial advice from non-actuaries. If any of you work for a public system your attendance here today shows your concern with giving proper advice to this different animal. That I think is the most important element in working with any client - a genuine concern for doing the best possible job.

MR. THOMAS D. LEVY: There are currently three major categories of employees who are not covered by Social Security -- federal civil service employees, state and local employees working for employers who have not elected coverage, and certain employees of non-profit agencies. Periodically, the exclusion of these employees becomes a "hot issue." The present discussions represent the eighth serious attempt to make social security coverage mandatory, or "universal."

Historically, federal employees were excluded because they had substantial retirement benefits when the Social Security program began. State and local employees presented a different problem. The Constitution generally prohibits the federal government from taxing state governments. This prevents the federal government from compelling payment of the employer share of social security taxes. Nonetheless, roughly 75% of state and local employees are covered by Social Security as a result of voluntary agreements between the states and the federal government.

Lack of coverage has several consequences for both the employees and the Social Security system. The effects on non-covered employees take the form of gaps in coverage and unintended windfall benefits. The gaps arise where the employer provides benefits which are lower than benefits from Social Security. For example, an employee who terminates before vesting receives no pension for that service, whereas that same service would ordinarily have increased his Social Security benefit. Windfalls occur because employees who work for part of their career while covered under Social Security can receive benefits which are a higher percentage of Social Security covered pay than similar employees who were covered for their entire working career.

The general public is concerned because the required Social Security tax rates are slightly higher than would be needed if there were universal coverage. This occurs because of the "social" component of Social Security. Benefits are weighted towards lower-paid workers. The uncovered group is generally higher-paid, but, as just discussed, they receive benefits as though they were lower paid. This is a "double whammy" -- the system takes in less and pays out more. The public also often objects to the fact that the Congressmen who impose Social Security taxes do not have to pay them.

The non-participating employees have been very vocal in their desire to remain out of Social Security. The reasons for this are:

- The general adequacy of their present retirement plans, at a lower contribution than Social Security requires.
- The ability to obtain significant Social Security benefits for small or no contributions.
- The incorrect perception that their total present pension would be lost and that Social Security would become their only retirement income.
- The fact that courts have generally held that pensions are contractual rights not subject to future reduction, while Social Security is a government program that Congress can reduce or change freely at any time.

Congress recently authorized a new study of universal Social Security coverage. The study group on this subject has recently filed its report, without recommendations but with extensive study data.

With regard to federal employees, the study group found that there would be little in the way of added costs or complications, primarily because the Civil Service Retirement System provides benefits which generally are at least as good in all respects as Social Security provides.

I would like to spend the bulk of my time discussing the problems of universal coverage for state and local retirement systems. This portion of the study was done by the actuarial profession, through the Actuarial Education and Research Fund (AERF), a research organization sponsored by the six North American actuarial bodies. Thirteen actuaries supervised and wrote the study; nineteen actuaries engaged by twenty-five state and local retirement systems did the actuarial calculations. Those of you who are members of the Academy will receive (or have received) a special supplement to the Newsletter dated

May, 1980, which reprints the report summary. For those who would like copies of the complete report, it can be ordered from the Academy for \$10. Those who want everything -- the report, the appendices, and the (anonymous) reports of the engaged actuaries -- can obtain the complete package from the Academy for \$40.

The report has a number of findings and observations, as follows:

1. Present benefits of retirement systems for non-Social Security employees provide the same percent of pay at all salary levels, for any given age and service at retirement. If a new plan were designed to integrate with Social Security coverage, this would no longer be true -- lower paid employees would receive a higher percent of pay than higher paid ones, even after adjusting for such things as taxes.
2. Because of the practical design problems involved, new plans coordinated with Social Security plus the Social Security benefits will tend to provide generally higher benefits than the present plans provide.
3. Mandatory coverage can be extended to all participants, future participants only, or some more limited group -- say those who are young enough that they can expect to become fully insured for Social Security before they retire. Covering only new employees minimizes the transaction problems, but it maximizes the number of years until there is truly universal coverage.
4. The total employer actuarial cost, including Social Security contributions, increased by 4% to 8% of payroll compared to present plan costs. The factors tending to increase costs were:
 - Generally higher combined benefits to prevent substantial benefit reductions at the higher salary levels.
 - Better post-retirement indexing under Social Security.
 - Better "vesting" and shorter eligibility periods for Social Security benefits.
 - Addition of Medicare and other ancillary benefits.

The factors tending to decrease costs were:

- Social Security being unfunded.
- The generally higher cost characteristics of non-covered employees; Social Security taxes are charged at an "average" rate.
- Lower "gross" benefits because of the non-taxability of Social Security.

5. Contributions in the earlier years would generally be higher, because FICA contributions are effective immediately but reduced benefit payments do not take effect for many years. A well funded system could draw down its reserves to avoid this added burden.
6. Costs and disruptions would be least if only new employees were covered; and the new plans could perhaps be more modest if present employees were excluded.
7. Coordinated plans will generally have no or low employee contributions, because present employee contributions are about the same as Social Security requires.
8. Mandatory coverage would reduce capital formation because state and local pension plans are better funded than Social Security.
9. Transition problems are potentially major if present employees are brought into Social Security.
10. Some legislatures only meet every other year, so three or four years would be required to implement any changes.

The AERF was also asked to propose alternatives to mandatory coverage that might alleviate the present problems. The suggested alternatives included mandatory minimum pension benefits, to narrow gaps in coverage, coupled with revisions in the Social Security benefit formula to reduce windfalls. This would be a partial solution at best, but would at least address some of the problems.

In addition to providing important information on a national issue, the AERF study was a test of the ability of the actuarial profession to work together. This project was only possible by the combined efforts of many actuaries who are usually competitors. The AERF was able to bring together a range of experts in the profession to prepare a high-quality study at a reasonable cost, including a diversity of opinions, without bickering or unresolved conflicts. The final report had the full concurrence of all thirteen actuaries, without any "watering down." The purpose of the study was to give technical advice on a complex actuarial problem, and the profession demonstrated that it was able to do so.

MR. JAY C. RIPPS: Could the panel tell us a little about PERISA, what you expect it will do with regard to funding standards for public plans, what the prospects for passage are and anything else you would like to comment on?

MR. CAVANAUGH: Officially there are no funding requirements in PERISA. However, if you were to talk to some of the board members in the state and local area they would swear that that is not the case, that there is something written in between the lines. But there are no funding standards in PERISA, although there are disclosure items and some reporting items.

In terms of the possibility of its passage, our reading is that it has absolutely no chance this year. We see no support for it at all by anyone and given that it is an election year it is hard to believe that it will move through the legislative process when no one is pushing it.

MR. RIPPS: Both of those answers are really unfortunate it seems to me. What is the profession doing on both of these issues?

MR. CAVANAUGH: I am not aware of anything the profession is doing to influence matters.

MR. LEVY: I do not believe that the profession is attempting to exert an influence. A principal reason is that there is not a great deal of agreement on what is meant by "adequate funding" for a public retirement system. I work in Washington and the indications I have received there are that the one issue which could lead to a federal employee strike of all branches of the federal government is the issue of governmental regulation in this area. I have not heard anything that would suggest that PERISA is likely to pass.

It is important to remember that there is an "opt-out" provision. If the state regulates the same things that are in the federal bill in some reasonably comparable way, then PERISA would not apply to local plans in that state. We have seen the proposed PERISA bills becoming watered more and more down, and still with no prospect of passage.

Do we feel the plans ought to be funded? I am not looking to see the federal government make another bureaucracy to do it, but I am sympathetic to the view that if they really are not funding and if they really are creating serious problems for future generations of taxpayers, then something ought to be done about it.

MR. THOMAS: I feel that state and municipal plans should be placed on a well-funded basis. ERISA was necessary because of inter-state activities. Municipal plans or state plans are all intra-state so that the right people to really regulate these plans are the state authorities, and this is why the bill will not go very far. If the actuarial profession is going to take the lead, they should take it at the local and state level and work it out that way.

MR. LEVY: The State of Florida passed a bill that actually does require funding of local systems and reasonable actuarial assumptions. The bill also provides authority for review. If the plans are not adequately funded, the penalty is that the State can take over the finances of the municipality and declare the municipality bankrupt. This is the other extreme of the funding issue, where they take a very strong position that local plans do have to be carefully funded.

MR. CAVANAUGH: As a profession we may not be doing anything as a group, but those of us responsible for public plans are doing a lot as individuals. My firm works for statewide systems in eleven states on an on-going basis, and we do studies for others. I feel confident in saying that those systems are either on an adequate funding basis now, since we have been helping them, or they are certainly getting there very rapidly.

I mentioned before that such people as the taxpayers are now looking at the systems more closely. As a result, it is not going to require a PERISA to put the systems into some kind of positive funding basis if they are not now there. Statement 35 which recently came out, applies to state and local governments. That by itself is going to produce a hard look at how these plans are being funded.

MR. BOYD MAST: A more fundamental issue is the question of Plan design. We as actuaries are in the best position to help educate a concerned public taxpayer's group that such things as gearing benefits to pay in the year before retirement, with a permissibility of "piggy-backing" overtime payments, and so forth, are not what retirement plans are supposed to do. In my perspective, it is more important that we obtain some intelligent attention addressed to that aspect of public plans rather than whether we are paying for them on a fully reserved basis or not.

In regard to the mandatory Social Security coverage study, I would like to know whether the proposed police and fire plan designs address attention to the need for Social Security benefits commencing before age 62. Also, did these designs address the question of the absence of such a need for those plans which have this type of provision, even though there is not some physical or mental stress need for people to leave the workforce at an early age?

MR. LEVY: For the police and fire plans, we generally found that when the actuaries re-designed their plans, they re-designed them with a supplement before age 62 so that the benefits would tend to match both before and after age 62 what was available under the existing plan. There were one or two who simply re-designed the benefit formula after 20 or 25 years of service and did not cut it at age 62. These re-designs produced really excessive benefits after 62, but appropriate benefits before age 62. Some kept the present formula up until age 62 and used a revised formula thereafter. Others, where they had offset or step-rate plans, did not apply the offset or step-rate until age 62 and cut it in at that point. But certainly, there was a strong feeling that there had to be a substantial benefit before age 62.

In addition to the basic re-designs I have just discussed, we asked the actuaries to re-design the plans to conform to what they felt would really happen. We found there was no tendency at all for the actuaries to design the plans to take away excessive benefits.

It turns out that, in terms of additional cost, the police and fire plans were the ones that had relatively lower cost to add Social Security. The reason for this is primarily because over a substantial portion of the retirement period, there was no change in benefits because Social Security was not payable. They were substituting less in terms of the actuarial value of retirement to obtain Social Security which was not going to cut in until 10 years after the person was assumed to retire. For the general employees Social Security was assumed to cut in immediately, so police and fire plans tend to have a low added cost for mandatory coverage and general ones had a higher added cost.

In terms of your first comment, it was interesting to note that the benefits for the non-covered plans of career employees, whose only employer is the non-covered plan sponsor, do not have the problems of excess benefits. This is because it is customary to have some sort of a limit, say 80% of pay. Since the plan is providing the total pension you do not have Social Security on top of this, and you do not wind up with people receiving substantially more after retirement than they were before - as you do with the plans that provide benefits for the covered population.

MR. CHARLES E. NIGHTENGALE: My question is about asset valuation bases. I would like to know if there is a trend towards market value and asset valuation bases similar to what we have seen in the private plans.

MR. LEVY: Certainly, I see a very strong trend towards the kinds of asset valuation procedures that we use in private plans. It has not been as extreme as in the private plans. First of all, there is no compulsion. Also, the investment policies in many jurisdictions are almost completely restricted to fixed income and, to the extent that that is the way they are investing, they tend to value at amortized cost - with various rules for spreading gains and losses if they sell something before maturity. If you were to use an ERISA basis, they would all adopt amortized costs and obtain substantially the same thing. Where you have significant equity investments, there clearly is going to be more and more use of some sort of write-up procedure similar to what private plans use.

MR. CAVANAUGH: I agree with Tom. The one state I work with which has the highest concentration of stock is the one state I have on a 5 year market value average. The others are more heavily in bonds to the point of 100% in bonds, no stock at all, and they are on an amortized cost basis. There is no real impetus right now for them to change. We mentioned it to them but they are not really all that interested. The new Statement 35 will add a little push to this. When the requirement is to show the market value on financial statements as well as the value of accrued benefits, they might be more interested in using their market value in funding for the benefits. I am hoping that this will be the case, because I would like to have them move over to a market value basis.

MR. ALLAN J. SCHUTZ: I was wondering when you discussed valuation methods, whether you found the accrued liability or the unfunded accrued liability at times to become a "political football", and also whether it seemed somewhat arbitrary in selecting a valuation method that comes up with an unfunded accrued liability to assign a particular part of the cost to the current generation as opposed to an average method which might spread it out more over a period of time.

MR. CAVANAUGH: Some of the answer goes back to what I briefly mentioned before, and that was that in most of the state systems the law will specify the funding method. Much of that has to do with the fact that the founder of my firm worked with a lot of the state systems and wrote the law, and he basically wrote in an entry age normal funding method. Much of that still exists even if we are not currently the actuary for the system. The law usually will specify how to fund the system, and will describe the normal contribution rate and accrued liability contribution rate and how it is to be determined. Some laws are vague enough that the actuary can select the method.

MR. SCHUTZ: Do you have some problems with that from the point of view of explaining that the effect of the cost method is somewhat arbitrary? I have seen several municipal reports of groups complaining that "we have this unfunded accrued liability" - which probably to the laymen sounds like to a dirty word even though it is a somewhat arbitrary measure of a cost method.

MR. CAVANAUGH: I have seen problems with people being concerned about it and throwing the number around. It is probably the overall communications problem with the public side in trying to explain that the unfunded number may be not as significant as they are trying to make it appear. The situation is going to become even more interesting when we start doing the accumulated benefit calculation, and have yet another number. Then we will be trying to explain that the accrued benefit number has nothing to do with this unfunded number we tell you to fund for, and trying to explain why it does not have anything to do with it. That is going to be very difficult. As a corollary, I see more of the problem in terms of the assets these plans hold rather than in terms of the unfunded accrued liabilities. The retiree groups are very vocal in the systems. They see the system with a couple of billion dollars of assets earning 8%, and they want to know why they cannot be given a better benefit than the one they are receiving.

MR. LEVY: I attended a state system meeting. We were discussing their bond rating, and the chairman mentioned that one of his tools for blunting the effect of their large unfunded liability is to point out that their employees are not covered by Social Security. When people are looking at their system's unfunded liability they are looking at all of it. When people are looking at the unfunded liability of other systems, they are not seeing a share of the Social Security System's unfunded liability and that is where part of the benefits are coming from. This is an interesting point, but I do not know how the bond houses are going to deal with it.

MR. THOMAS: The public employee unions are much more aggressive with respect to asking questions about funding and how it is handled in their system and elsewhere.

In New York City I soon discovered that I was not working on New York City plans, I was working on the teachers' union plan, police union plan, etc. Those who had been working on them full time understood their plans very well. This is going to come up more because funding is going to become more complicated.

MR. RIPPS: In the overall debate that is going to go on with regard to universal coverage under Social Security, do you think that the AERF Study will be an overall positive influence in terms of extending coverage universally, a negative influence because it suggests additional costs or a neutral, non-active influence?

MR. LEVY: On balance I hope it would be a neutral influence. It may be a negative one because it shows that the costs are going to be significantly higher than were perceived. In writing the report we worked hard trying to achieve a balance so that it would be neutral. Hopefully it will be that way, but ultimately I would guess that the people who are opposed to it will concentrate on the cost sections and point out that municipal governments do not have enough money to operate with already, so how can the kinds of additional cost that this study indicates are going to happen be imposed?

MR. PAUL RICHMOND*: Do you have any feed-back on the applicability of FASB reporting on public plans? In particular, FASB reporting says the liabilities can be computed on an on-going basis without a salary scale and with

*Mr. Richmond is not a member of the Society.

a current inflation interest assumption. For instance, in our plan, if we use an interest assumption of about 8%, we would show a funded ratio in excess of 100%. To my understanding, the New York City systems would also show a funded ratio in a much more favorable light than what might be otherwise indicated. Have you had any feedback on this or other complaints from other retirement systems?

MR. CAVANAUGH: We are certainly going to be doing it with the public systems. I do not think there is any doubt that the statement requirement applies to state and local government plans. We are concerned about the numbers in the same way that you are, in particular because of the retiree situation and the clamor for better benefits and improvements in benefits after retirement because of excess interest earnings. If we now come out with numbers that purport to show that the system is overfunded, it is even going to be worse. It is not that we just have excess earnings, we actually have excess dollars now, and it is going to be even harder to address that issue. But, there is no doubt that it applies and we will be applying it starting with the valuations in this calendar year, depending on the public system's fiscal year.

MR. LEVY: Certainly, the accountants are taking the position that it applies. Many government systems are not audited by members of the AICPA. They would have the liberty of doing other things, although whether or not they will I cannot say.

MR. CAVANAUGH: They will have the liberty but they will have to pay attention to Standard and Poors since, if they do not comply, their bond ratings might be hurt.

MR. DONALD R. SONDERGELD: How long generally are we planning to amortize the unfunded liability for these public plans, and are there other ways that the unfunded accrued liability number can be brought alive in explaining it to people?

MR. CAVANAUGH: The unfunded period varies from state to state. I have seen some states where the law requires funding over at least 75 years, I have seen some where it is at least 60 years and I have seen some where it is at least 40 years and below. The ones that I am currently working on are all under 40 years, or, in one case which is starting full funding effective January 1, 1980 and new systems for new employees, they are going to be using 40 years from July 1, 1980.

In some of the other systems, as I mentioned before, the funding period for the unfunded was the balancing item. They contribute a total percent of payroll and you figure out what is left for the accrued liability payment after you take out the normal cost, and then you figure the funding period required at that level of payment to fund the accrued liability. For those systems, the period tends to bounce around. Hopefully it continues in a downward direction unless we change benefits. And for all of the systems that I work on it is definitely under 40 years. For one state, it ranges from 12 years to 30 years depending on which system within the state you are talking about. But none of them that I work with are under 10 years.

In terms of measuring rods, I have not seen too many. Most people I talk with on the retirement side - the board members - are well aware of the enormity of a billion dollars. They do not have too much trouble relating it to the size of the state or the size of the government. Most of them tend to concentrate on the contribution level as a percent of payroll. They get a grasp on that and they know whether it is too high or not.

MR. LEVY: I certainly would want to focus away from the unfunded liability if at all possible and onto the annual level cost to support the system and whether the sponsoring employer could afford that cost. What really has more impact than the amortization schedule is what the pattern of payments is on that schedule. ERISA requires level dollars and some public funds are on the level dollar amortization basis, but others are on variations where the pattern of payments is expected to increase in the future with payroll, inflation or some other factor. Some that I would really consider too extreme have an infinite period because they use a level percent of projected payroll on a rolling 40-year period. Each year you take a new 40 year amortization as the level percent of payroll of the then remaining unfunded liability. There you are building into your plan a substantial increase in the liability forever. You are not building in any plan to reduce it and so, in the public sector, the pattern of payments has more impact on the current charge than the amortization period.

MR. JEROME F. SEAMAN: I have some questions about how we stand as a profession. We talked about the need for funding and things of that nature, and Mr. Cavanaugh mentioned that even though we are not doing something as a profession to set forth standards, actuaries are working with plans to develop standards and in some cases have actually effected legal changes. It seems, as a profession, we rely on outside forces - governments, FASB, the accounting profession and federal legislation, either PERISA or ERISA. I wonder when we take our individual discomfort to the circumstances of a particular situation and try to deal with it that way, whether there is a need for greater standards within the profession itself. Or, are the circumstances and all of the factors involved in determining standards so varied and so complex that you really cannot come up with one set of standards that is really satisfactory to the profession?

MR. LEVY: There is certainly a wide variety. When you are talking especially about state employee plans, the employee protection kind of concept for a funding basis really does not have a whole lot of importance. You are concerned far more with the pattern of payments that is going to be imposed on future taxpayers, with reasonable price tags for benefit improvements, but only peripherally with protecting the employee. The state is unlikely to go out of business. The standards can be very different than perhaps for a small town.

The ability of the actuary, however, to use his access to the financial community - the bond prospectuses when they go out - really is very strong and we have taken the position with our public clients that we always will record what the actuarial cost is on what we consider to be best estimate assumptions and reasonable amortization periods. If they are not contributing on that basis, then at least there is disclosure that down the road this is what we think is coming. I believe that actuaries are going to be asked more and more to make statements for the bond prospectuses and for financial

statements. It will be an important step if the profession takes the position of saying that although there may not be an obligation to fund, then at least there ought to be an obligation that anybody who is investing in this situation can know what is coming up down the road.

MR. JOSEPH P. McALLISTER: I wanted to go back briefly to Don Sondergeld's question and essentially to second some of Tom Levy's comments. In the private sector, we are so regularly, under ERISA, saying that there has to be amortization of an unfunded liability that perhaps our thinking is cast in that direction. In the public sector it is not at all yet a closed question that there must be amortization for the Plan of a large public group which is clearly going to be on-going. In fact, it has been said that non-amortization of the unfunded is an acceptable solution provided there is no growth in the unfunded. Although my inclination is to amortize unfundeds, I would not necessarily say that this has to be the only solution to the problem. I prefer to see amortization of unfunded liabilities but practical realities sometimes intrude on that goal.

With regard to mature plans, I have worked with a couple of closed municipal plans and they are now on a pay-as-you-go basis, although we do a valuation every now and then. At one point, the accountants needed APB8 information. It turned out that the pay-as-you-go basis was costing more than the 30-year amortization basis.

MR. LEVY: I am not convinced a public plan must become fully funded. If a state employees' retirement system literally had 100% of its actuarial liabilities funded, then it probably would have taken too much money out of the tax base for that purpose, and to reach the point where the employer contribution then drops to a normal cost, which is one-third of the total the year before, creates some serious problems. I prefer to have amortization, first of all because it is a long way away and second of all because it applies a reasonable price tag to benefit improvements which infinite periods may not do for some of the things that are being proposed. If I reached the point where they really were pretty well funded - for example, with the vested liability covered - then I might suggest a re-financing of the initial liability but still keep the same policy for benefit improvements, or hold the unfunded liability where it was by going to interest only for that piece but fund with an amortization period any future benefit improvement.

MR. CAVANAUGH: I am a somewhat stronger advocate for funding the plans. I prefer amortization, but I do not mind using a growing workforce assumption provided there is some finite period of time over which the liability is being funded. I like to see the light at the end of the tunnel.

MR. THOMAS: I believe that, had we tried a no amortization basis when we did the New York jobs, Congress would not have approved the legislation it passed for New York City. In this situation there had to be amortization.

MR. LEVY: Another reason for using standard techniques is that it is frequently important to be able to say that what we are doing is the same as what is done for private plans. There are enough problems as it is, and it avoids raising questions.

MR. McALLISTER: Let me comment on one of Tom Cavanaugh's earlier comments concerning the legal definition of the funding method. There are still some laws that indicate that interest on the unfunded plus normal cost is all that is required. Perhaps it would help if these laws were changed to specify an amortization basis.

