HOUSE OF REPRESENTATIVES
COMMONWEALTH OF PENNSYLVANIA

* * * * * * * * * *

Public Hearing

# Status of Pennsylvania's Public Pension Systems

* * * * * * * * * *

House Finance Committee

Irvis Office Building
Room G-50
Harrisburg, Pennsylvania

Tuesday, April 6, 2010 - 10:00 a.m.

--o0o--

BEFORE:

Honorable David Levdansky, Majority Chairman
Honorable Rick Mirabito
Honorable Tim Briggs
Honorable Jaret Gibbons
Honorable David Kessler
Honorable Chris Sainato
Honorable Tim Seip
Honorable Josh Shapiro
Honorable John Yudichak
Honorable Scott Boyd
Honorable Jim Cox
Honorable Brian Ellis
Honorable Michael Peifer
Honorable Mario Scavello

1300 Garrison Drive, York, PA

ALSO PRESENT:

Bob Kassoway
Majority Executive Director

Mark Foreman
Majority Research Analyst

Jenny Stratton
Minority Executive Director

C O N T E N T S

CHAIRMAN LEVDANSKY: Good morning. I'm Dave Levdansky. I'm the chairman of the House Finance Committee and I'm calling the meeting today of the Finance Committee to gather input and testimony from the representatives from the State Employees' Retirement System, as well as the Public School Retirement System so that the members of the Finance Committee and the public may gain a better understanding of how these two pension systems work; that we gain as well an understanding of the causes of the financial dilemma and challenges that are confronting the two pension funds; and that eventually, not today but in the future, I expect to hold additional meetings of the Finance Committee so that we may begin to explore alternatives to resolving the financial challenge of the two pension systems here in Pennsylvania.

So today is just the beginning of the process here in the House Finance Committee so that members and the public, as I said, gain an understanding about how the two pension systems operate, learn a little bit about their investment strategies and come to an understanding of the causes of the anticipated rate spike in fiscal year 2012-2013.

Before we go any further, let me -- let me introduce and welcome the vice-chair of the committee, Representative Scott Boyd, for his remarks.

REPRESENTATIVE BOYD: Thank you, Mr. Chairman. First of all, I'd like to commend you for scheduling these hearings. This is an extremely important issue that the Commonwealth is facing and something that a number of us many, many years ago that kind of came out of the private sector began to look out four or five years and recognize that it might be prudent to take a look at these pension funds. And with the downturn in the market last year, late last year, and end of 2009, it certainly exacerbated that situation.

So I'm encouraged that you're holding these hearings and I'm encouraged that you're going to be focusing on some solutions too. That's good to know for those of us on both sides of the aisle who desire to address this problem. So thanks very much for having these hearings.

CHAIRMAN LEVDANSKY: Thank you, Representative Boyd.

Members of the committee, I'd like to have the members of the committee introduce themselves starting off to the right here.

REPRESENTATIVE BRIAN ELLIS: Representative Brian Ellis, 11th District, Butler County.

REPRESENTATIVE YUDICHAK: Good morning. John Yudichak, Luzerne County.

MR. KASSOWAY: Bob Kassoway. I'm the Director for the Finance Committee for the Democratic Caucus.

MS. STRATTON: Jenny Stratton, Executive Director for the Republican Caucus.

REPRESENTATIVE SCAVELLO: Mario Scavello, 176th District, Monroe County.

REPRESENTATIVE PEIFER: Good morning. Mike Peifer, 139th District, which is Pike, Wayne and Monroe Counties.

REPRESENTATIVE BRIGGS: Good morning. Tim Briggs from Montgomery County and the 149th District.

REPRESENTATIVE SAINATO: I'm Representative Chris Sainato. I represent the 9th Legislative District which is parts of Lawrence and a small section of Beaver County.

REPRESENTATIVE KORTZ: Good morning. My name is Bill Kortz. I'm from Allegheny County, 38th District.

REPRESENTATIVE GIBBONS: Jaret Gibbons, 10th Legislative District, Beaver, Lawrence and Butler Counties.

CHAIRMAN LEVDANSKY: Thank you. Gentlemen, if you'll introduce yourselves for the committee and for the stenographer and begin.

MR. CLAY: Yes. My name if Jeffrey Clay. I'm the Executive Director of the Public School Employees' Retirement System.

MR. KNEPP: Leonard Knepp, Executive Director of the State Employees' Retirement System.

MR. CLAY: All right. We'll start. This is going to be a joint presentation today by both myself and Mr. Knepp. I'll start off here with the beginning portion. Again, the goal of this is to give an overview of the system and then obviously talk about the rate spike and potential options to resolve it.

Referring first to the two systems, both systems of course are mandatory multi-employer defined benefit pension plans for all public school employees for PSERS, all state employees for SERS. Both systems are some of the oldest defined benefit plans in the country. PSERS was established in 1917. SERS was established in 1923. Both systems are governed by state statutes. If you want to sort of think of it that they act as a plan document where the benefits are defined and the authority of the boards are defined. The PSERS plan documents or state statute is the Public School Employees' Retirement Code. For the State Employees' Retirement System it's the State Employees' Retirement Code.

The reasons I bring these issues up with respect to the nature of the systems, PSERS is governed by a 15-person Board of Trustees, SERS by an 11-person Board of Trustees. Both systems cover a significant number of members. PSERS serves over 547,000 school employees, SERS over 220,000 state employees.

One difference between the systems, PSERS actually operates a voluntary retiree health program for its members. It's basically a hundred percent funded by the members with one minor exception. PSERS adds a premium assistance benefit which provides up to $100 per month to offset premium costs for the health care in retirement or out-of-pocket costs, whichever is less. Not all retirees for PSERS basically qualifies for the benefit. You have to meet certain age and service requirements to do so, so it's a number of individuals. The benefit can only be used in the PSERS health care program which is one of the options program or in school district plans.

SERS does not administer a retiree health plan for state employees. That is typically provided by the Pennsylvania Employees' Benefit Trust Fund.

For defined benefit plans, in general they typically are looking for financial funding from three sources. Provided these sources are functioning correctly, they will remain well funded. We basically look for employee contributions. They are set by statute. For PSERS that is 7.5 percent for most employees, and SERS is six-and-a-quarter percent. Also, they look for employer contributions. They are set by the boards. Each board has a system for their respective systems on an annual basis.

PSERS basically does that in December every year. SERS, they typically do that in April or May of every year.

The first source of funding is investment returns. Most systems have significant assets. If you take a look over any of the time periods that you want to look at in examining systems, you're going to find that the main source of funding for the system is from investment returns and earnings. The two pie charts here show a ten-year history, 2000 to 2009. For PSERS during that time frame our returns were 59 percent of the funding of the system; member contributions, 26 percent; employer contributions, 15 percent. So if you look at this, you can see from basically a ten-year snapshot the member contributions were almost double employer contributions. The reason that is the case is during this time frame the employer contributions have been artificially suppressed by statute.

If you take a look at the SERS funding, again a similar picture, 69 percent from investment income, 10 percent from the employer, and 21 percent from members. So obviously on the SERS side member contributions have actually been more than double the employer contribution. Again, it's the same issue. The rates have been artificially suppressed.

I also want to point out here that the reason you'll see some differences between the numbers in the systems, the systems have different fiscal years. PSERS actually operates on a July 1st-June 30th fiscal year. For SERS, their plan is operated on a calendar-year basis, January 1 to December 31. So the numbers are always off by about six months.

Most systems make an assumption as to what their rate of return of their investment assets are going to produce. The early part of this decade, that was 8.5 percent. Most systems, in light of the downturn in the markets this decade, basically made the decision to reduce that 8.5 percent to 8 percent. That is the median rate for public pension funds across the country. We do think that's a more realistic view from a long-term perspective as you go forward at this point. This is an issue we'll probably take up every valuation going forward as we monitor the markets. Plus, PSERS is starting what is known as a five-year experience study to take a look very closely at all of the assumptions over the last five years and see how they match up with the actual experience of the system.

When we reduced the number down to the 8 percent, one of the things that happened, the liability of the system goes up as a result because we're assuming less income coming in from the major source of funding of the system. We also think because of the downturn in the market and obviously where the markets are going to go forward in the future, you know, the systems are not going to rebound as quickly as they did in the past because we have a lesser base to grow from, plus we are assuming a lesser amount coming from the investment returns.

The next slide basically shows the rates of return, the actual investment rates of returns over this last decade. You know, the numbers in red are basically those that are below the earnings assumptions of the system. Even if they're a positive number, if it's still below the earnings assumption, that's still considered a loss for a system. If you take a look at the PSERS return for '01-02, you see it was a negative 7.4 percent. At that point our earnings assumption is 8.5 percent so the actual loss to the system was 15.9 percent because it's the 8 percent plus the negative number going down.

You can see a similar sort of happening on the SERS side of the equation. One of the things to point out about these two time frames, again that first breakdown for both systems was what generally economists do. There's the greatest decline in the market since the Great Depression only to be outdone by the decline in the market since the Great Depression at the end of the decade. So you had two very significant economic activities or historical events take place within a very close time frame.

If you step away from that time frame and you take a look over a 25-year period, you're going to see that on PSERS we basically earned 9.23 percent as the average annual rate of return on the assets. SERS for that same 25-year period, yet off by six months, it was 9.7 percent.

Turning to the current performance, obviously the '08-09 time frame was a very difficult time frame. Basically most of the loss that took place during that time frame took place during -- in the first three quarters so it was the July 1st to the October time frame over to the March time frame in '09, our report since that time has been positive.

For the one-year period for PSERS ending December 31, 2009, we had a 12.06 percent rate of return. Positive; it was obviously good. For the quarter ending December 30, 2009, it was 4.09 percent. If we take a look at it from a fiscal year-to-date number, and that's the number that's critical for us because it's the June 30 date rate of return as of that date that sets the valuation numbers for us, at this point as of December 31, we're at 13.65 percent. We are currently north of that at this present time.

Net assets during this time frame grew to 46.7 billion as of December 31 from 43.1 billion as of June 30, 2009. If you notice we added 5.5 billion. If you try to add that up, it doesn't add up. We're paying pension benefits out the door. As a result, we'll note this a little bit further in the presentation, we are cash flow negative. Member contributions, employer contributions, plus what I call the investment income, rents, interest, dividends, not sufficient to pay the benefits. So there's going to be -- there's a need to sell assets to pay the benefits.

If you take a look at the SERS performance, a similar picture here. Again SERS is on a calendar-year basis. Basically the 2009 performance was negatively impacted by that first quarter. That was the last quarter of that recessionary time frame I was mentioning. Basically they lost a negative 7.5 percent in that first quarter, but then gained a combined 18 percent for the final three quarters to end up at a 9.1 percent positive rate of return, which is above the earnings assumption. And, again, that date was the key date for the valuation so it's at a positive impact in valuation.

You can also see they added assets at the same time, 2.2 billion in benefits. After paying out 2.2 billion in benefits, their assets grew to 24.4 billion as of December 31, 2009.

Turn over to the contribution rate at the present time. We'll start first with PSERS. The current contribution rate is 4.78 percent. Four percent is for the pension component, .78 percent is for the health care premium assistance benefit. That's that benefit that costs a hundred dollars per month of the out-of-pocket costs, whichever is less. School payroll for this year is estimated to be about 12.9 billion. The 4.78 is obviously -- not obviously, but it's multiplied against the 12.9 billion to produce the actual dollars that we expect.

One of the things that I mentioned, again, the State also participates in reimbursing the school districts for their contribution rate. The State by statute will reimburse the districts not less than 50 percent of the employer contribution rate. There are districts that because of their financial situation actually get reimbursed more than that through the income aid ratio populations. If you do a statewide average, 55 percent of the employer contribution rate is being paid by the State, 45 percent is being paid by the local districts. That 55 percent will be gradually going up over the next four or five years to 60 percent.

Our contribution rate for July 1 of 2010, which is rapidly approaching, has now been certified by the board back in December of 2009. That is going to be 8.22 percent. We're starting to see the increase to the rate spike taking place at this point. Again 64 basis points or .64 percent is for premium assistance, and 7.58 percent is for the pension component. Our school payroll at this point is estimated for the next year at 13.5 billion.

As I've already mentioned, the rates are in this packet, ever since about 2002, 2003, artificially suppressed by statute. The main statute that was responsible for that was Act 40. Act 40 basically caused a mismatch of gains and losses for a ten-year period. Again, when we basically have a gain or loss in the system, we do not recognize that all at one time. We basically use two smoothing techniques. One is a five-year smoothing. We're going to take -- for example, if we've got a hundred-dollar gain, we're going to recognize $20 of that. Next then we amortize it over some time frame. Before Act 40 that was a ten-year time frame so it would be $2 for ten years as a credit.

What Act 40 did is they said we have rates that are not affordable at that point in time, we're going to basically try to defer the liability to the future so we're going to basically do any of the gains or losses that existed prior to Act 9, which is 2001 -- at that time it was all gain, all the gains in the '90s, okay -- we're going to keep that on a ten-year amortization. So we're going to recognize it over five years but amortize it over ten. So they're going to concentrate the gains over a ten-year period. Okay.

Next, any of the gains or losses post Act 9, again 2001, all losses back in the recessionary time frame, we're going to keep that on a 30-year amortization. So they're going to defer it over 30 years. Okay. So you've concentrated your gains in a ten-year period, okay, which suppress the rates for a ten-year period, and a dramatic suppression.

This slide that I have here basically shows that. If you had not done the suppression, the rate for this time frame would be 25.27 percent. The impact of the suppression was to cause it to be reduced by 21.64 percent, which would take it below the rate that Act 40 put into play, which was 4 percent, which is the reason it has been raised to 4 percent, plus the premium assistance on top of that.

This chart basically shows the cash flow negative status of the system. Actually, probably the better way to look at this, and this is over probably a 20-year time frame, the blue line, the solid blue line at the bottom is basically the member contributions. And you can obviously see they're above the employer contributions, which is the dotted purple line. Those are cumulative so you want to sort of move them up to show that gap, and that gap is in excess of $2 billion of cash flow negative for the system.

The next chart basically shows the details of that in that time frame. I won't go down through the numbers, but that's the backup detail.

With that I will turn it over to Mr. Knepp.

MR. KNEPP: On the next line, you'll see on the information that relates to the SERS side, you have the 4 percent on rate right now, the composite rate is 4 percent for the employer and that's reflecting the floor that is in place currently. The normal cost I'd like to point out is also 9.5. So we have a employer rate of 4 percent, we have a normal cost. Cost of the fund is 9.5.

The next slide, similar to the prior one that Jeff has shown, are the components of the employer rates. And a couple items I'd like to point out is, of course, the 9.51 that you see, and then adding to that 4.78 that you see reflects the prior COLAs they paid back to '84. And then you'll see the suppression from Act 40 in red of negative 20.62 percent which brings the rate down to 3.63. But because of the floor, the employer rate is at 4 percent.

This chart illustrates the flow of the benefit payments versus contributions, similar to the PSERS slide. And you will see the red line going up to approximately $2.2 billion. It's projected to go over 2.5. The flat line, the orange line, represents the employee contributions and the black line is the actual employer rate.

Now, this is the data that supports this chart.

And what I'd to point out is in 1980 versus the 2009 data the benefits have increased seven times. They were approximately 300 million in 1980, and now they are $2.3 billion. Member contributions at the time increased a multiple of three, and yet you can see the employer contributions actually have gone down.

One of the other items I'd like to point out in all these projections of both PSERS and SERS, we're assuming that the 8 percent return and we're also assuming that the contributions noted in these charts are being paid.

The funded ratios I reflect on this slide is PSERS -- for PSERS is 79.2 and for SERS it's 89 percent. Now, SERS funded ratio is basically 12/31/08 numbers. It's projected to drop to 84 -- approximately 84 or 85 percent in the coming year. We're in the process right now of doing our valuation. The next board meeting April 28th is where we'll discuss the results of that valuation.

This slide reflects what we believe are the causes of this upcoming spike. As you can see, it's the market downturn in 2000-2002 that Jeff talked about earlier in addition to the 2008 losses. We also have the Act 9 multiplier increase and actuarial assumption changes and, of course, the Act 38 COLA. But the big driver of this is the last Act 40. As Jeff talked about, you had this mismatch between this huge credit that existed that we brought in over 10 years and then all the costs associated with the Act 9 and all the future costs are being brought in over 30 years that resulted in this mismatch. That ends in 2012.

This slide reflects the contributions -- projected contributions for PSERS. And what I'd like to point out, if you look at the 2012-2013 rows, you will see a jump. This is the PSERS rate jumping from 10.5 percent to 29.2. And that's an additional -- results in an additional $2.7 billion in contributions that will be needed to the PSERS account.

Similar data for the SERS side. Our spike is projected to be July of 2012. That is jumping from approximately 8 percent to approximately 27 percent or a difference of 700 million in additional contributions will be necessary.

This slide reflects the history of the employer rate for PSERS and SERS. Actually this one is for PSERS. And what I'd like to point out is the dotted line. That represents the actual employer rate. The red line going through here is the normal cost. So you can see that prior to 2000, for PSERS they've been funded at a rate less than the normal cost.

This chart illustrates the SERS -- similar SERS data. And the area in red reflects again the amount of the funding less than the normal cost. That's amounted to approximately 15 years of underfunding.

This chart illustrates the history of the spike. Starting in 2003 the original spike was projected to be 32 percent. It was dropped to 27.7 percent with Act 40. It went all the way down to 11 percent. Now it's back to 29.2.

And for those of you that have been to other hearings, this is the chart we refer to in SERS. This shows the history of the spike for SERS. Originally starting out at 28 percent, dropping to 24.2. With the Act 40 change, now it's back up to 29.5. You also see, I'd like to point out, that it's no longer considered a spike. It goes up and stays up for a considerable amount of time. So now it's in a plateau.

MR. CLAY: With that background information, obviously the rate spike and plateau, we're talking significant dollars, multiple billions of dollars for both systems.

As you take a look at how to address this issue, there's really only three ways to do it from a large strategic perspective. You can increase the funding of the system; you can decrease or cut the liabilities of the system. That's basically a fancy term for benefits cuts. You can also again continue to further defer the liabilities to try to do another deferral and try to refinance the system.

We'll walk down through each of these in a little more detail. So let's talk about the funding first. Obviously, the first source of funding is employer contributions. We anticipate obviously both systems are projecting significant increased employer contributions. The reason we're having this discussion is the second bullet point under the first item, it is unlikely both the districts and the -- or the Commonwealth and school employers can afford these costs without significant and perhaps prohibitive tax increases at both the state and local levels. And that is the issue.

I've been across the state talking to a lot of school districts. Every school district I've talked to says they cannot afford that raise, 29.22 percent. Something has to happen to resolve it.

Not withstanding that, no matter what we do as far as these options, there is going to be a need for significant increased employer contributions. All circumstances that needs to be the case. It cannot jump that quickly up to 29.22. We're going to have to find some way to level that out somewhat and mitigate the impact of the rate.

Second, you can go to another second source of funding which is the increased employee contributions. This can be done, but it can only be done prospectively for all new hires for both systems after the effective date of the statute. And this is one of those contract impairment issues which I'll go into a little more detail later. But you can't make it with the existing employees and you can't make it retroactive as a result of that. So it doesn't have a major impact on solving the rate spike. It basically is a future issue down the road.

A third issue is significant increased investment returns. From our perspective there simply is not enough time to do that without being extremely risky with the assets. Plus, obviously the markets are still somewhat unstable. Not withstanding that, obviously both systems are positive this year. We're generating positive returns. That's going to help the issue, but there simply is not enough time to have the impact to significantly mitigate those rates by the rate spike time frame.

You can seek other sources of funding. There was an effort last year I believe with the budget to move federal stimulus money over. That was not successful. It is questionable whether that is even legal to do that from the federal government side of the equation.

There's also been discussion heard about dedicating revenue from an existing source to supplement the contributions. One is House Bill 2307 which is to reallocate the Johnstown Flood Tax to pension -- to the pension systems. Again, this will obviously impact general revenue because you're taking revenue from Johnstown Flood revenue to move over to the pension systems.

Third, as has been talked about, is what's called a pension obligation bond. This is where basically you take the unfunded -- some portion of the unfunded -- all the unfunded liability for either of the systems or both and basically issue a bond to pay that off. The concept here being earning assumption is 8 percent, you have this unfunded liability which is a debt to the system for each system. If you're earning 8 percent, if you can refinance that at like 5 percent or 4 percent, you're making a savings on the interest on that money.

The difficulty with this is if you were to do that and markets would have another dramatic downturn, you've taken out what is a soft liability, you've made it a hard liability on the Commonwealth's books, you could actually have the debt recreated in some fashion. So our advice on this issue is this is not the solution to the problem. We view this to be rather risky. It could be a piece of the issue.

One of the points we'll get across here is there is no one simple solution for this problem. It's going to take a series of 5-percent, 10-percent solutions to knit together what we need to do. This could be part of it, but you really have to really open your eyes up to be aware of the risks involved with this.

The other issue with this I should mention, the State Constitution actually lists the bonds that the State can actually issue. If it's not on that list, you can issue the bond but you need a voter referendum to do that. This would be one of those bonds that you would need a voter referendum. It would be a taxable bond from an IRS perspective which narrows that interest rate down.

Basically I showed you the impact if you did a pension obligation bond on PSERS. You can see the size of the numbers we're talking about here. One of the things I want to point out here, there's two columns -- two illustrations here; one if it's on a 30-year amortization, one if it's on a 10-year amortization. That amortization is not the bond amortization for bonding purposes. Amortization is how we reflect the credit within the system.

If you take a look at this, if you try to keep the rate spike below 20 percent for PSERS, it's going to require $12.8 billion. What you need to do is also take into account you're obviously going to reduce the contribution rate if you did this, but there's going to be interest payments and debts payments on the other side. Both have to be added together to see what the true savings is going to be. If you're trying to keep all the future contribution rates below that 20 percent, again on a 30-year amortization is 23.3 billion. Obviously, if you see, if you try to lower it even more, the numbers get to be staggering. If you go on a 10-year amortization, you notice you only need $7.7 billion to do it because you're concentrating the credits for a 10-year period. But if you look out -- if you're trying to keep everything further out, it jumps up to 32.8 because you don't have those credits of those out years.

A similar picture on the SERS side of the equation. Again, smaller system but again significant funding requirements. If you again want to keep it under 20 percent, it's 4.5 billion. If you want to keep the other rates below 20 percent over the future rate, it's 6.3. If you did it on a year basis, it's 2.7. To keep all future ones, it's 10.6. So there would be a significant -- if you try to do it all with a pension obligation bond, it would be a significant addition to the Commonwealth's debt.

Next we're going to talk about the benefits issues, and I want to sort of stop here because when I talk about this across the state I usually try to phrase this -- I want you to think of this as really two issues that we're dealing with here. One of the issues is how are you going to pay the unfunded liability. Okay. That unfunded liability under all circumstances has to be paid. And that's really the first and most pressing issue on 2012 and 2013.

The second issue is a more strategic issue. How do you prevent a reoccurrence of this in the future. How do you prevent being back in a similar situation. There are a lot of people that have a lot of solutions for this. Some of them are listed here. You can convert the system to a defined contribution system, which of course is going to prevent shifting investment risks or gain or loss over to the employees, and have the liability at the state school district level. You can basically go to what's known as a hybrid plan, that is what the School Boards' Association has proposed, which is a combination of the two types of plans. You would basically have a defined benefit. The existing bill is for 1 percent multiplier defined benefit plan.

Layered on top of that is essentially a 401(k) type plan, defined contribution plan, which would be a mandatory contribution of the members of 3 percent with a match of the employers of not more than 2 percent. Plus, for that benefit you cap off the employer liability of 2 percent.

The other thing you can do is obviously make changes to the existing system. I'll talk about that in a minute. All these situations, however, are not going to have a major impact. Again, these are future issues. They don't solve the first problem because of the contract impairment issue. These would affect only new hires after the effective date of the statute.

The other place it would apply is if someone left the system, went to work, for example, at IBM, and came back in the future into the system. Obviously they would be viewed as one of these new hires. Their existing benefits would remain the same but any future benefits would be under the new provisions if you would opt to do that.

Taking a look at the benefit cuts, again, we have some illustrations about this. And on this chart, by the way, are the two key cases with the attempt back in the '80s to increase employee contributions. Basically it's all existing members in the systems, and the Court ruled obviously that that was not permitted, which is one of the reasons there's tiers of rates within the systems at this point.

This table, and I have a parallel table for SERS, basically shows what happens if you were to make certain benefit cuts and what impact they have on the rate spike. If you take a look, you see the fiscal year time frame you can see down to 2012-2013 of 29.2. If you go back to 10-year vesting, you can see it has absolutely no impact on the rate spike whatsoever. One year I found -- you can sort of go down to the very bottom, 2034-2035, you can see over that time frame basically it's about 3 basis points, 16.8 to 16.5 percent. So it's not a significant issue.

If you take a look at the 2 percent, taking it from two-and-a-half to two percent, back to where it was before Act 9, again the rate spike era, you start to see a slight change. It's 29.1. You can obviously see it does not have a significant impact.

If you go to the one-percent multiplier, this would be a much more significant. You can still see the rate spike, it's 28.9 percent. You know, if you drop down to the 2034-35, you're going to start to see a more significant difference there. It's 15 versus 11.3 percent.

One of the things to get across, Len has mentioned this concept of normal cost, the normal cost is the amount you need to pay for the benefit that is earned. Benefit cuts really are only affecting the normal cost. For our system the normal cost tends to fluctuate between seven-and-a-half and eight percent. So if you were to wipe out all of the benefits, you're only saving that seven-and-a-half, eight percent. So when we talk about the rest of this, it's all the unfunded liability still has to be paid.

This chart shows the SERS system. Take care of that.

MR. KNEPP: And we ran numbers comparable to what PSERS has done and the results were very comparable as you'll notice. We took ten-year vesting; we're currently at a five-year vesting program. We're taking that to 10 years. The multiplier that we use is two-and-a-half percent. We're adjusting that back to two percent, which is pre-Act 9 or the 1 percent multiplier.

In looking at all these, if you compared the current law, you'll see the results are comparable to PSERS. These changes have minimal impact on it.

MR. CLAY: Next, you can basically make adjustments to the funding methodology to again try to defer liability to again sort of refinance the systems, you know, to get breathing room, financial breathing room. Both systems have looked at this issue extensively. Our viewpoint at this point, no single change. Act 40 was the silver bullet back in that time, but no single change or combination of changes actually resolves the rate spike. Again, any time you defer things to the future, it's actually going to cost more money. So it's the concept again of an unfunded liability.

If I have a mortgage, for example, at 15 years and I want to push it out to 30 years, it lowers my payments but it's going to cost me more over the life, and that's essentially what these techniques do.

Governor Rendell has proposed his own method to solve the problem which is in his 2010-2011 budget proposal. And basically what he would do is actually "fresh start" the system's liabilities. So the net effect of this is again each system has unfunded liability, it's all being amortized at different time frames, again over 30 years since Act 40 took place, but every year a year drops off that you would basically just wrap that all up and refinance that out over 30 years.

Second, he would then put what are called employer rate collars on the contribution rates which would be -- or it can't go more than the employer 1 percent and every year after that 3 percent. As a result, obviously it's going to start to mitigate the increases up.

This is a projection that basically shows a couple of things here. The blue line basically does indicate the current proposal. This is showing the funded ratio. The red line is an alternative proposal that indicates a series of actuarial changes that we've been looking at. The brown line is the Governor's proposal and its impact on the system.

You can see that it would drive our system below 50 percent for a seven-year period. If you take a look at this from the actual dollar contributions, you can see the difference in the slope of the lines here. The Governor's proposal is obviously at this point being capped out. The alternative we have is a little bit higher than that. And we also use rate caps, like the Governor did, but not as tight as his. You can see the rate spike -- you can see that dramatic increase in a one-year -- the one-year time frame.

Taking a look at it from a contribution perspective, obviously you can see why it's called a rate spike. Obviously the rates plateau after. And again you can see the Governor's proposal which essentially makes the rate peak further out up to 36 and change.

If you look at these charts, what I would suggest to you again is you look at the rate spike issue. The real issue is what is that acceptable slope of increase to get to a reasonable plateau.

Obviously the blue line is unacceptable. That's the jump in a one-year time frame. Okay. The Governor has pushed that a little bit lower. Ours is a little bit higher than that, but you notice in our red illustration here it comes up and literally comes to a flat line at that point in time. It stays relatively flat.

If you were to stress test that by basically presuming certain losses, the line's not going to go like this. It's going to stay relatively flat here. That has been done by four changes. One is projecting a funding credit, which is a private-sector approach, a 10-year asset smoothing effective with 6/30/10 valuation; amortize the basis similar to the Governor but not on level percent. We would have a series of pension collars but we would not collar next year's rate. The Governor would actually require us to recertify next year's rate, which is the 8.22 percent, back down to 5.64 percent.

This is a chart that shows the data points for those previous charts. I'll turn it back over to Len.

MR. KNEPP: Okay. This chart on Slide 42 illustrates a projection in the next 25 years where the rate is projected to go. The dark line represents the current law. The green line is the Governor's proposed plan, and then, of course, the orange line is Alternative Three. We refer to it as Alternative Three. And that is a ten-year smoothing. We're currently at a five-year smoothing. It's placing collars of three, three-and-a-half and four-and-a-half percent on, and it's also fresh-starting the liability. However, the difference between this and PSERS -- one of the differences, we would stay at the entry age normal. They use projecting giving credit.

The next slide represents the dollars associated with these changes and what they found with the current law, the Governor's proposal and our proposal. And I don't want to say it's our proposal. Just so you understand that, these are just options. There's a variety of options out there. We at SERS are not promoting any one of these. We're just trying to show you the different impacts each change will have.

The next slide we see the data supporting these charts. And again it's a ten-year smoothing, three, three-and-a-half and four-and-a-half percent changes, very similar to what the Governor is doing. The difference here would be -- point to a ten-year smoothing.

Now, the conclusion we'd like to make by wrapping this up, as Jeff has stated, there is no silver bullet for resolving this issue. It will require a combination of approaches on SERS and PSERS solutions. We don't have to be identical. And, also, no matter what we do here, significant additional funding is necessary.

Then the issue with the Hybrid or DC plan conversion, this is a long-term solution. As stated, we see the two different issues we have to deal with. One is the immediate funding of this plan. Two is something that the Commonwealth would sustain going forward as far as the cost of these plans. This type of conversion will not solve the funding issue.

Also, the idea of prospective benefit cuts may be an option. Benefit enhancements are not likely now or in the near future. And as always, we stand ready to work with you to resolve this issue.

That concludes our presentation and we'll open it up for questioning.

CHAIRMAN LEVDANSKY: Thank you, Mr. Clay and Mr. Knepp, for that thorough, comprehensive, detailed and sobering assessment. This is obviously going to be an extraordinary challenge.

Questions from members. Representative Ellis.

REPRESENTATIVE ELLIS: Thank you, gentlemen, for coming to testify today.

Just real quickly, you talked about various things that we can do to help this situation. Last year we had -- there were several of us that proposed using the stimulus dollars and there was some question of whether we could or not, and in fact we received a letter saying that we couldn't use it to offset these pension liabilities. If we would have used -- or say this year say we could have ingested $400 million into the problem, what kind of impact would that have?

MR. CLAY: I would be the last one to say we would turn away any cash being given to the system so I'll take the 400 million. Okay? It would not have a significant impact again because of the time frame being so close.

If you were again to take a look at those projections of the pension obligation fund, one way you can look at that is onetime cash infusion impact. If you're looking at 12 points, whatever the number was for PSERS, they have to get below 20 percent. You can obviously see the 400 million is not -- it will have an impact, but it's not going to be a major impact.

REPRESENTATIVE ELLIS: Okay.

MR. CLAY: It's more money we have in hand to invest. The market to this point also helps solve our liquidity issue so I would take the cash and run with it.

REPRESENTATIVE ELLIS: And, similarly, all the members -- you had suggested maybe somewhere down the road benefit reductions, creating a hybrid plan for new prospective employees. What if the option of taking the lump sum was removed from the equation for people that were retiring? Would that have an impact on the system?

MR. KNEPP: That would have an impact. But as we talked before, approximately -- I think we're comparable as far as the percentage -- but approximately 90 percent of our people take all or a portion thereof of their contributions. It would have an impact, but it wouldn't be to the level that you would think because we also apply an actuarial reduction for that Option Four withdrawal -- as we call it, the Option Four withdrawal. There's an actuarial reduction to the present value of that member's account so that reduces the impact that would have. But there is an impact effect of that, but, however, it's not as significant as you would think.

REPRESENTATIVE ELLIS: Would the recommendation be, if we did create a hybrid plan going forward for prospective employees, would we probably look at not giving them the lump option or would we continue? It's not really going to make a huge difference for a new plan.

MR. CLAY: If you look at the hybrid plan, it's a one-percent defined benefit plan, you know, so their contributions they are making are going to be at I think 3.25 percent, so you're not going to get as much contribution going in so it's not going to have that significant of an impact.

As Len indicated also, the other issue here, if you want to preserve the right for them to reduce and withdraw their Option Four money, the reason this costs the system money is when we determine this reduction that takes place, we are discounting -- our earning percent is 8 percent but we're discounting at 4 percent. We're losing the value of that 4 percent between the two issues. If we were basically to discount at the 8 percent, actually get a savings, plus they could still withdraw their contributions with interest.

One of the things you need to think about on the contributions with interest issue, one of the issues that I think needs to be resolved by the General Assembly when they take a look at this and what the future structure is, what's going to happen with cost-of-living adjustments. They are not in the systems. If they're done on an ad hoc basis, there's no contract impairment issues with cost-of-living adjustments. Okay. So if you don't do it in the future, that's not an issue. Okay. But if you make the decision you're not going to do cost-of-living adjustments in the future, you know, from a policy perspective it may be good to have a member take out their contributions and effectively that becomes their cost of living adjustment.

REPRESENTATIVE ELLIS: I appreciate it. Thank you, Mr. Chairman.

CHAIRMAN LEVDANSKY: Before I recognize the next questions, we've been joined by Representative David Kessler from Berks County and, to my right here, Representative Rick Mirabito from Lycoming County.

Representative Yudichak.

REPRESENTATIVE YUDICHAK: Thank you, Mr. Chairman.

To follow up on Representative Ellis's point, is there a dollar number that you have in mind that could get us to the point where we're attacking that unfunded liability in terms of sustained dollars, not a onetime cash infusion?

MR. CLAY: I think again this is a multi-year issue so the question is, as I said it before, what is that slope going to be. All that is going to be dependent upon school revenues and state revenues as to what they can afford to get that up there.

I think that what you're going to probably see if you took a look at one proposal we have in there with the red line, you can sort of see that was north of 25 percent of the plateau. I would assume you can get probably lower than that, but during that slope up you're probably going to be in the teens to get up to that reasonable plateau at that point. And I'd have to translate it into dollars because the further you go out, the higher the dollars are going to be.

REPRESENTATIVE YUDICHAK: Now, do we have a number on that at this juncture where there is -- if we can find a billion dollars and do sustained revenue to dedicate to the pension issue, what that means in terms of --

MR. CLAY: We can calculate that for you and get that number back. We can do a series of those for you.

REPRESENTATIVE YUDICHAK: What I'm concerned about, the language here that the spike that we're talking about -- and I've been at the school board meetings and talking about the spike, the spike tends to suggest that it's a temporary event, a one or a two year. We're talking 15 years at 25 percent or more in these funds. That's not a spike. That's a sustained fiscal crisis for our school districts, for our Commonwealth.

And in looking at your suggestions, new revenue is where we're going to really have to take a look at because you mentioned the Governor's proposal about phasing in, and that may be helpful, but that it continues to defer the costs. And that's one of the problems that you highlighted in deferring that cost, as you pointed out, like a mortgage, it's going to cost more. We might be able to phase it in and reduce that cost, but it's going to cost more.

And if we have another downturn in the economy, if there's another downturn in the stock market, we're really going to be in tough shape. So I'd like to see that number in terms of how we can help so that this isn't entirely on the back of the taxpayers at the local level. Thank you.

Thank you, Mr. Chairman.

CHAIRMAN LEVDANSKY: Thank you, Representative Yudichak. I also just want to point out we've been joined to my far left by Representative Cox, Representative Seip just stepped out though, and also joined by Representative Shapiro who has the next question.

REPRESENTATIVE SHAPIRO: Thank you, Mr. Chairman. Thank you, gentlemen, for your testimony today. I had several questions.

You had commented on one of the slides about the market would have to have almost historic gains in order to sort of avoid the crisis that's coming. I'm just curious, and I recognize this isn't the solution, but what are we talking about in terms of how would the market have to perform for us to not have to do anything and the burden not be placed on the local taxpayers as we presume it will be?

MR. CLAY: I actually did a calculation. This was based on last year's valuation.

REPRESENTATIVE SHAPIRO: Oh, I'm sorry. I didn't see that.

MR. CLAY: No, that wasn't in here. Just to see what it would take, and we would have had to have had a 35-percent return for three years in a row to basically hold the rate at 4.78 percent.

REPRESENTATIVE SHAPIRO: How many years in a row?

MR. CLAY: Three years in a row, for 4.78, of 35 percent each of those years. Now, that is obviously suppressing it. There'd be something left in the 35 percent if you're trying to get it up to the normal costs. But it would be significant returns.

REPRESENTATIVE SHAPIRO: And several times where you have graphs like this that show the employer contribution rate and the employee rate, there were several different charts like that. What should these graphs look like?

And I'll wait for you to pull it out. You can pick whichever one. There were several. What should these graphs look like in a healthy system that is not -- you know, that is not facing these types -- this type of a spike and subsequent plateau?

MR. CLAY: First, it would be -- if you're in an unfunded liability perspective -- situation, which you have, your employer contribution rate needs to be north of the income for your normal costs. Okay. So it needs to have enough to pay the principle payment -- it has to be enough to pay for the benefits that year plus amortize off on the upcoming liability. So it's going to be probably north of the members' rate because members obviously are fixed by statute in that at that point in time.

If you have tremendous investment returns, you can see the silver line going from the mid-part of the '90s down, all that's being driven, of course, by the investment market in the '90s. Okay. So that rate is going to fluctuate back and forth like that but at least north of the normal costs basically to take care of the liabilities so that's going to be north of 8 percent.

REPRESENTATIVE SHAPIRO: So north of 8 percent. Well, what should the difference be? Is it just slightly north? Is it significantly north?

MR. CLAY: If you're in an unfunded liability perspective, it's -- in our current situation, basically north of 8 percent. If the system's operating perfectly, it would be right at 8 percent.

REPRESENTATIVE SHAPIRO: Right at 8 percent?

MR. CLAY: Right.

REPRESENTATIVE SHAPIRO: And then you talked about the various what I'll call phasing options, the alternative option that I think you all were suggesting, as well as the Governor's option. I think Representative Yudichak was asking a little bit about this, where it -- you know, what about the risk during that ramp-up period where we have the unfunded liability, we're not contributing at the rate, we're just, you know, hitting the spike exactly where it needed to be and then the plateau. What's the risk during that period until we catch up, for lack of a better term?

MR. KNEPP: The risk to the fund would be -- we stress-tested this and we used comparables. The items that we've used were in 2000-2002. Some of these funded statuses of the funds were dropping into the 40s. Right now we're in the 80s. So it's significant if we see another market downturn like we've seen.

REPRESENTATIVE SHAPIRO: And when you talk about a market downturn like we've seen, obviously what we just saw in the last couple years was an historic downturn and we would hope we wouldn't have that.

I mean how much resiliency would we have during this phase-in process to see a slight downturn? I mean just help us understand whether or not such a phase-in is even realistic. Assuming that the market doesn't always just go up, how can we be confident that in taking a phase-in approach that we're not subjecting the funds to more massive risk?

MR. CLAY: If it's an extreme deferral that takes place, you're going to have more significant problems. If you're basically, again, paying that normal cost plus a reasonable amount on top of that, again there's going to be tension between what's actually reasonable and what's fiscally reasonable during this time. Again, it's going to be that line over the next five or six years, how fast can you ramp up given the State's finances at the present time.

Let's say you can only afford let's say 10 percent. Okay? But if you can get the next year 12 percent, 14 percent, you're in the right direction, you're going to start to chip away at the unfunded liability. If there's a downturn in the market, it's all going to depend on the scope of that downturn. But if you can have significant smoothing technique out there, which is the issue when we mentioned about -- see if I have it here -- if you take a look at this slide here, once -- because of the smoothing techniques here that you're going to spread this out as much as possible, okay, you're not going to have as much fluctuation from a value of the fund status perspective, so that's where you want to be.

But, again, if you want to get the slope point up there, it's got to be a reasonable amount to start to have a significant impact on that unfunded liability. The more you pay that off, the better the system is going to be.

REPRESENTATIVE SHAPIRO: Sure. When we talked about risk during that ramp-up period, how would that risk manifest itself? Give us the scenario.

MR. CLAY: The risk would be that there's a significant downturn in the market, okay, we're going to have -- then you have more liquidity issue, it's going to add more liability to the system which makes the debt bigger. Okay? If you're not paying off the debt at a significant turn, then the debt is going to continue to grow.

REPRESENTATIVE SHAPIRO: All right. I guess what I'm asking is does that pose a risk to any of the current beneficiaries? I mean what would the burden be on the general fund? I'm just talking about short-term risks.

MR. CLAY: Yeah. The ultimate guarantor of both systems is the State. Both benefits are guaranteed by the State so it would be that ultimate risk.

There is no question if there was a severe, you know, actual cataclysmic collapse of the markets, with the system basically not having the assets to pay the benefits, I think you'd almost go to a pay-as-you-go type arrangement, which would not be good because these systems, you want to have them funded out of investment returns. That's the cheapest way to do it.

MR. KNEPP: And one other point, just to elaborate on what Jeff was saying, that's why we use a five-year, some are discussing now a ten-year smoothing, that controls that volatility. So if you're having good years and all of a sudden a bad year, you're only bringing in 20 percent of that loss in any one year. So that helps to control that downturn that we would see.

REPRESENTATIVE SHAPIRO: One final question, Mr. Chairman. You had talked about defined contributions a bit because it's been an issue that some members have brought forth as a solution. Obviously, we know that's not a solution for the spike looking forward. You had also indicated in your testimony you really couldn't say what that would save because you don't know what the benefit package might look like. Can you give us maybe some anecdotal evidence based on what other states are doing, what other funds are doing, to kind of give us a sense of what that really saves over time.

MR. CLAY: If you really want to think about it, let's just say it went from a pure defined contribution -- and we'll take the PSEA proposal and say, okay, we just have that defined contribution plan. Under the proposal the employer is basically only having a two-percent match so that's going to cap out the State's liability or the school district's liability at one percent so that's two percent. It doesn't matter what the market's doing at that point in time.

But again if you went totally to a defined contribution, again what you're really saving is that normal cost number. So if it's eight percent on an ongoing basis, so you're basically reducing it to eight if you went to the PSEA approach at two just on a defined contribution.

REPRESENTATIVE SHAPIRO: Okay. Mr. Chairman, thank you for the time.

Let me actually just say publicly on an unrelated issue, we worked very closely together over the last I guess six years now. We've had a long discussion on terror-free investing at both PSERS and SERS, and that bill, as you know, passed in the House of Representatives unanimously a few months ago. I just wanted to publicly thank both funds for their discussions over the last several years.

We started out sort of here and we ended up I think being in a place where we could agree and understand each other. I just wanted to publicly thank all of you for participating in those discussions.

MR. CLAY: Thank you for listening to our concerns.

REPRESENTATIVE SHAPIRO: Absolutely. Thank you. Thank you, Mr. Chairman.

CHAIRMAN LEVDANSKY: Thank you. Representative Mirabito.

REPRESENTATIVE MIRABITO: Thank you. I wasn't here in 2003, but I think someone referred to it as the silver bullet, it was considered the silver bullet, Act 40?

MR. CLAY: Right.

REPRESENTATIVE MIRABITO: And I guess if you reflect -- were you folks here back then?

MR. CLAY: Yes.

REPRESENTATIVE MIRABITO: Okay. So if you reflect back on the discussions at the time, you know, what lessons, not so much in terms of crunching numbers and so forth but in the big picture, what do you recall that people were -- I don't want to use the word parading but people were saying was the solution to our caveat emptor warnings that we should look for now? I guess what I'd like is I'd like to get the benefit of some historical perspective to help to try to find a solution to it now.

MR. CLAY: I went back into the presentation and I put up the PSERS chart. And the SERS chart is very similar to this. But if you look at the number at the 32.11 percent, okay, that is what was being faced by the State in ten year pre-Act 40. Okay. The slope to get there was like this. It was going to go up very dramatically over a ten-year period. And in fact the numbers -- the rate before this was 3.77 was going to go to 9.69, 15.87, 21.41 and peak out at that 32.11. So fairly dramatically going up, straight up. Okay.

Recessionary time frame, the State had major problems with their funding. Obviously the demands for unemployment and all the rest of it was up, the school districts had the same issues, so they basically wanted a solution to buy some cash-flow time. When the market turned better, Act 40, you can see the 27.73 percent was the result, but the slope was like this, sort of a J-curve. Okay. Understanding in that time frame always was when the markets return, we need to resolve this issue. We need to get rid of this mishmash that's taking place.

If you take a look at the '04, '05, '06, '07 time frame, it was the middle part of the decade, markets are really good, you can see what happened. The rate spike for PSERS went down to 11.23 percent, and I think --

MR. KNEPP: Ours were going under six at the end of 2007 so it worked.

MR. CLAY: Basically worked. But during that -- during those time frames, they did not -- during the good times, the State did not resolve the mishmash that took place. Essentially they said, oh, we may have resolved the issue just from investment returns. Obviously, the markets turned at the end of the decade and reversed that whole process.

So one of the lessons for this is if I was going to go back and relook at this, I would not have let the rate go below the normal cost because that's an added unfunded liability to the system.

So to get back to your question, any fix that we go on a going-forward basis needs to be at least the normal cost plus enough to amortize the debt.

Second, if things really get good, okay, and there's extra cash coming into the system, I think again some onetime infusion of cash again essentially to prepay the debt would be a wise thing to do.

MR. KNEPP: Just to expand on that -- and Jeff pointed out -- one of the lessons I think we learned was the floor should have been established, and Jeff's referred to this normal cost, put a floor in place and actually two years we would have been zero. That did not help. So if nothing else, when we go forward, establishing a floor would help.

REPRESENTATIVE MIRABITO: And the other question I have is -- and this is following up on Representative Shapiro a little bit -- are there other -- I'm thinking back to the 1970's in New York City when the city went bankrupt -- or was on the verge of bankruptcy, I think the pension plans were in very difficult shape. Are there lessons from that that we can apply now?

MR. CLAY: Yeah. Each of -- if you go across the country, most of the pension systems for state employees, school employees and municipal employees are defined benefit plans. Each of the systems have its own issues, of course, obviously with the downturn in the market. The benefits are different obviously for all the systems, so you can't totally make comparisons back and forth.

What has happened in other systems, some systems have gone to defined contribution plans. Some systems have tried that and are actually moving back. I think West Virginia was one of those that did that. Some systems do what's called a new tier of benefits. That's where they make a benefit cut. The New York system had several tiers of benefits as they try to control costs. Other systems are using some of the actuarial funding techniques that we talked about here. Other systems have gone to hybrids.

Again, we've been watching what's going on across the country. All have been included in some of the options that we noted to you.

REPRESENTATIVE MIRABITO: Thank you.

CHAIRMAN LEVDANSKY: Representative Boyd.

REPRESENTATIVE BOYD: I couldn't let you guys go without questions. Thank you, Mr. Chairman. Each time I go through this presentation you add some new slides that generate some additional questions.

One of the questions that I want to focus on is the slide that you had up for Representative Shapiro which I have it here, Page 23. If you can -- here's -- this slide demonstrates something that hadn't occurred to me before. The normal cost to the system is approximately eight-and-a-half to nine-and-a-half percent. Now, in a -- between the two systems. To a very simply brain like mine, what that means is is that all things being normal, the employee makes a contribution of X. The employer's minimum contribution should be that normal cost. And if the market over the time period has hit its actuarial assumption, which is eight, eight-and-a-half percent roughly, that all things should stay fully funded.

So if we look at this chart, in 1980 the employer contribution rate should have been at close to 15 -- like 13 percent. So that tells me that in 1980 this fund was underfunded.

MR. CLAY: That would be correct.

REPRESENTATIVE BOYD: And if I look at it going through '85 and '86, which arguably was a pretty good time in the economy, '81 was terrible, '82, but then in '84, '85, '86 the economy was jumping along pretty good, you're still -- up at 1990 you're still up showing that the employer contribution rate should have been -- or was I guess up close to 21 percent.

Now, just out of curiosity's sake, do you have a chart like this that goes back to 1917? And I don't know that I need it as much as --

MR. CLAY: I don't think we do.

REPRESENTATIVE BOYD: My point being that it seems that historically this fund has been underfunded.

MR. CLAY: Actually, the first time the fund became fully funded from the PSERS side of the equation I think was '96-97, in that time frame. So basically underfunded. Now, that's okay, if you sort of think about this, because it's moving towards fully funded status.

Other things that have been happening during this time frame, the benefits have been different, the code -- it was the original code back in '17. It's been recodified in 1955, recodified in 1975, so there's been different changes taking place in that time frame. Again, that's when the authority of the board was different during these time frames.

So back during the Great Depression basically the system was not invested in stocks during that time. It was basically bonds. Okay. During the '80s we had what's known as the legal list. We could only invest in certain items. There was a basket clause that you can invest outside of those items, so that's had an impact. We didn't actually pick up equity ability until the '70s, late '70s, to actually invest in stock. Okay. So if the benefits are going up because salaries and all that are going up, you're basically fixing yourself at a bond rate, you're going to have trouble making money.

So what happened, of course, if the investment authority of the board's been expanded and in the early '90s we eliminated the legal list and went to what's called the prudent investor standard for the systems which then opened things up.

And just to give you an idea of how severe the list was, the NASDAQ Stock Exchange was not a permitted investment. In the '90s that was the place to be because of all the tech stocks that were going up in that time frame. So there is -- yeah, there are some issues.

REPRESENTATIVE BOYD: And I understand the history. Obviously, I've been through many of these presentations and I appreciate that analysis. I think the point that I was trying to get to is that the fund has been historically underfunded, not to the point where there's any real stress or duress on the fund in meeting its obligations but because -- and here's the point I'm going to go to. I would suggest that particularly, you know, post '99, post Act 9, the benefit structure is too rich. And I want to use that term cautiously because I know that offends some people in the room, but it's too high for the fund to stay fully funded. The expectation of the return of the marketplace being at minimum of eight-and-a-half percent -- and I understand one of you now is talking about rolling that down from eight percent down even lower on your assumption, your actuarial assumption of what the market's going to return.

And I'll add to that that historically the fund was not paying out as much in benefits as it was bringing in from employer and employee revenue. Now that's tipping and as people retire -- and we do things in this Legislature all the time that exacerbates this problem. Every time we passed a COLA, it increases that unfunded liability. Every time we consider something like changing the retirement age from 35 years to 30 years, it further exacerbates, it creates a greater unfunded liability.

MR. CLAY: That is correct.

REPRESENTATIVE BOYD: And so the problem that I see with this is that we as legislators love to make all 60,000 people that we represent happy, and a percentage of that 60,000 are people who are on that system and there is this inherent desire for us to do for them what they desire us to do, which is to increase the benefit which could be a COLA or 30 and out as being discussed at this point again. And so my concern is is that I'd love to see the history of when this fund was actually fully funded.

And it's interesting that it approaches the late '90s. And the first thing that this Legislature did in the late '90s when we said the fund was 115 percent fully funded was increase the benefit which is -- you know, created a problem.

So I love this chart, and I wanted to point that out that it has not been a fully-funded fund. And you can get away with that as long as you're growing towards that.

MR. CLAY: Add to that, one of the concepts we do like to get across, even when you're overfunded, there really is no such thing as a surplus in the fund because that surplus is for the down years. Again, our earning assumption is a long-term assumption. And there's going to be times where you're over, and times under you want that surplus to offset the time down risk.

REPRESENTATIVE BOYD: Another question I had for you and Jeff, we talked about this a couple times before, but on your last slide, Page 46, when you talk about converting to a hybrid or a DC, in black there you say in fact it may aggravate the employer's cash flow problems as each employer will be supporting two pension plans.

I've always had a hard time getting my arms around this concept. If we -- if we change a system date certain, all new hires are going to go into that new system, there are literally no liabilities for that system on day one. Particularly if it's a defined contribution, something like the typical 401(k), that would be a six-percent employee contribution with a six-percent employer match.

Why are -- you say that that creates cash flow problems for the other system. Is the other system so fragilely built that the benefits that you're paying out to retirees are relying on the contributions from current employees?

MR. CLAY: It's not a cash flow issue for the benefits per se. It's for the contributions. So sort of think of it this way. If you made the conversion to a defined contribution plan, so all new hires. Okay? Now you still have let's say 270,000 school employees under the old system.

REPRESENTATIVE BOYD: Correct.

MR. CLAY: The contribution rate during -- it's going to be 29.22 percent.

REPRESENTATIVE BOYD: Correct. Absolutely.

MR. CLAY: Okay. New people coming in. You're going to then say basically, okay, I'm going to make some employer match. Let's go back to the two-percent employer match, okay, on that smaller group of people. That additional two percent, you know, added on to what you're already paying, so you're actually -- you're paying on both sides of the equation.

Now, there's no question as the 270,000 people starts to reduce, okay, there comes a point when it becomes cheaper. Okay? So it's not a payment of benefits issue per se. You're just paying contributions in both directions.

REPRESENTATIVE BOYD: There have been those that have suggested that that switch would in fact put at risk the current defined benefit for existing retirees and beneficiaries, and I don't think that that's an accurate statement.

MR. CLAY: Well, there is an issue with that. If you went to a true defined contribution plan, okay, on an ongoing basis, you have these active people. Okay? These active people eventually retire. The question then comes -- remember it's funded against payroll. But if you don't have enough tactics how you fund it when these people all get into retirement, that's where you have a problem if you go to a pure DC plan.

REPRESENTATIVE BOYD: And the House Bill -- I think it's 1974 or 1174 that I have out provides for the DC contributions to be put into the systems. And an employee who starts at the age of 23 years old is not going to be looking for that money until -- unless they leave so you can still create a methodology where their influx of cash can be invested by the defined contribution employee into the system. My bill provided that one of the investment portfolios would be SERS and PSERS for the employee.

MR. CLAY: But in a DC -- and if that happens, let's say I'm making my contributions it's into my account. It can't be to somebody else's account. It can't offset the DB -- the remaining DB because you're basically segregating the accounts at that point.

REPRESENTATIVE BOYD: I understand. Having been the trustee on a DC, you have separate accounts, but the money is co-mingled in the fund --

MR. CLAY: Correct.

REPRESENTATIVE BOYD: -- and you see the aggregate growth of the fund, and the only way that employee has access to that money is retirement or when they leave. And you can even put requirements when they leave that they can roll it over into another DC, but they can't just take it out without substantive penalties. So you can create a structure I think where that money can be used not to necessarily meet liabilities but be used to sustain the fund.

MR. CLAY: But, again, if it's all segregated to that person's benefit, if I take it to help pay the liabilities on the other side of the equation, it's got to be replaced at some point.

REPRESENTATIVE BOYD: Right.

MR. CLAY: Where does that extra cash come from is the question.

REPRESENTATIVE BOYD: Well, in essence what we're doing is -- the only other place we go for cash in the State in those plans is the employer, which is the taxpayer.

MR. CLAY: Right.

REPRESENTATIVE BOYD: Thanks.

CHAIRMAN LEVDANSKY: Representative Kortz.

REPRESENTATIVE KORTZ: Thank you, Mr. Chairman. Thank you both for being here today.

The Auditor General has been in the news recently discussing issues of investment swaps and derivatives. In your portfolios have you been involved in any of those items?

MR. WINCHESTER: John Winchester, Chief Investment Officer for SERS. Good morning.

What they're referring to there are interstate swaps where the communities are paying a certain interest rate, a flowing rate, but they're also receiving a different interest rate back that's causing a mismatch.

We have never used any instrument like that. We have used some S & P swaps which are total return swaps, which means that we are paying interest-free rate for borrowing but we're getting back total return or paying total return against, depending on how the market is doing.

We are no longer using those instruments in the fund. We had used them for a number of years, but we're not using them anymore.

REPRESENTATIVE KORTZ: That's one of the risky vehicles that the Auditor General's pointed out. There's been a number of school districts that have lost millions of dollars. Has your fund lost a lot of money through that vehicle?

MR. WINCHESTER: No. In fact, we made money. We used those from 2002 to 2007, and you recall that that period was a very robust return. The total fund had a compounded return of 17.4 percent over those five, six years. So, no, that was --

REPRESENTATIVE KORTZ: So you have -- you've made a conscious decision now to stay away from that risky investment?

MR. WINCHESTER: Yes.

REPRESENTATIVE KORTZ: Okay. I'd like to -- I'm sorry. Go ahead.

MR. GROSSMAN: Jim Grossman. I'm one of the managing directors in the investment office at PSERS.

We do use funds, mostly total returns funds to gain exposure to the market. We continue to use those. We do swaps or any forms of derivatives. It's just one tool in a toolbox for the ability to get return over time. So if you think about it, the S & P, you and I can go and buy the 500 stocks with our cash and have 500 stocks or we can go buy a swap. We can keep the cash and exchange our cash return for the return of the S & P 500 index. So it's the same thing. We get the same type of return over time, but there's advantages and liquidity advantages to using swaps at times. So we still do use swaps.

REPRESENTATIVE KORTZ: What percentage of your portfolios are swaps?

MR. GROSSMAN: It's probably approaching about seven, eight percent of the fund.

REPRESENTATIVE KORTZ: I'm sorry?

MR. GROSSMAN: Seven to eight percent of the fund.

REPRESENTATIVE KORTZ: Seventy-eight?

MR. GROSSMAN: Seven to eight percent of the fund.

REPRESENTATIVE KORTZ: And if you broke out just the swaps, plus or minus in your investments over the time frame?

MR. GROSSMAN: I have to go back and check because it's probably a plus, but I'd have to go back and check to be sure.

We use those in some indexing-enhancing formats as well because there's times when people actually pay us to take the swap side so we actually make incremental returns on top of that. And we have a program internally that we use to generate incremental returns on top of the index returns that we would normally get just investing in the market.

REPRESENTATIVE KORTZ: I sure would like to see a breakout of just the swaps and how you made out over the course of time here.

MR. GROSSMAN: We could do that for you.

REPRESENTATIVE KORTZ: Because, you know, the Auditor General has really taken an issue with even being involved in the swaps. You know, he wants us to get out of it totally, the school districts. And here we have the pension fund involved and it's a little bit concerning.

MR. GROSSMAN: I think the Auditor General's report -- I do have it. He touches on interest rates swaps and how the school districts use those interest rates swaps to hedge out their interest rate risk.

I can't speak to exactly how all those different school boards may have or may not have used those. They can be -- it can be a good vehicle to protect the taxpayer. I think part of the problem with the swaps with some that were used is that interest rates kept falling and they fixed their interest rate cost which means they had to pay out on the swaps to create an expense.

I can't speak to the cost of those swaps to the school districts or how they were negotiated between the people at the school districts and the investment bankers on Wall Street. But I think the swaps themselves did what they were supposed to do but interest rates kept falling. They didn't do what the school boards thought, which was at the time interest rates were historically low, say 4 percent, they issued variable rate debt and put a swap on to swap out the variable rate cost of their debt for a fixed rate debt. Okay. And variable rates kept going down, which meant they ended up being net payers on those swaps.

So I do -- that's sort of what the Auditor General is getting at is that there's large payments going out that if they would not have hedged the interest rate risk they would have been -- it would have been to their benefit not to do that. But if interest rates would have fell enough, you wouldn't be hearing anything about that today because they would have been net receivers on those funds.

REPRESENTATIVE KORTZ: So you're basically telling me that you guys are a lot smarter in your investment of this so you're avoiding that risk.

MR. GROSSMAN: We understand the risk that we're taking when we enter into any swaps and any other types of derivative instruments. We use those -- again, say it's like a carpenter that goes to work every day. I can go to work, if I go without a screwdriver, I'm not going to use a hammer to drive the screw into the wall. I really want that screwdriver to be one part of my toolbox to gain the exposures that the system wants to get to try to make money over time.

REPRESENTATIVE KORTZ: Okay. Thank you, Mr. Chairman. Thank you.

CHAIRMAN LEVDANSKY: Thank you, Representative Kortz. I have a few questions for both systems.

Representative Gibbons.

REPRESENTATIVE GIBBONS: I just have one question I wanted to ask. I think there was a question about the aggravating of the cash flow problems, but one of the things you said about converting the systems to the DC or the hybrid for your employees will not affect the current liabilities problem. And, of course, that's the biggest issue with the spike is the current liability problem in terms of that's something we have to address.

My question goes to it looks as if those proposals are more, as I think, Jeff, you said earlier, intended to prevent something like this from happening again. My question is can we prevent these types of unfunded liability situations from happening again while continuing to have the defined benefit plan going forward?

MR. CLAY: Asking to go to a true defined contribution plan where you basically shift all the risk over to the employees, you're not going to be able to avoid it. Okay? The only thing you need to be concerned about is if the defined contribution plan does not function, okay, adequate retirement for the individuals in question, what's going to happen to those folks when they come into retirement time frame? If they're not prepared for retirement because again retirement is also a real liability, too, those costs there. Are they going to put more in on the PACE program, Medicaid, et cetera. That's the issue.

I mean there have been a series of issues that people have looked at defined contribution, 401(k)s in particular. Just a historical -- a note about this, 401(k)s are always intended to be a supplement to defined benefit plan to provide the up side that the defined benefit plan did not have. Okay. Obviously, it became a main provider.

There's been three criticisms to defined contribution plans. There's not mandatory contributions. People don't put enough money in. People don't invest correctly. They provide fees when they invest. Plus, it doesn't have an annuity to pay out at the end of the day. So what happens, people retire, they have a hundred-thousand dollars in their account and then basically two years later they have nothing in their account.

So if you think about those items all -- all three of those items are reflective of DB plans. If you were to structure a DC plan, you would want to mandate payments in. You would want to have professional management, low-cost management if you could possibly do that. Okay. Plus, you want to have an annuity at the end of the day so people don't essentially waste their assets within the first three or four years of retirement. So that's what you'd have to do.

REPRESENTATIVE GIBBONS: And I do appreciate that answer. And then I know you've been at these hearings before and you've discussed about how the DC came into being and how it was a supplement to the defined benefit pensions.

I guess my question -- and maybe I'm confused a little bit -- if we find a way to fix -- if we find the money to fix the unfunded liabilities, we try to get the fund back to a full funding or a more reasonable funding level, I mean is it possible to continue with a defined benefit going forward and keep that sustainable without switching to a DC or a hybrid?

MR. CLAY: Yes, I do think it would be. Again you'd have to have certain protections. You'd want an adequate rate floor, probably the normal cost. You'd probably want to put safeguards about any benefits enhancements that are going to take place. It would have to be overfunded by a significant amount of money. If you're going to grant cost-of-living adjustments, they need to be prefunded. Any other benefit enhancement would need to be prefunded so you're not incurring debt. Yes, you can structure it, but it would need to be funded.

REPRESENTATIVE GIBBONS: So basically by avoiding some of the problems that have happened in the past, the non-prefunded COLAs, the benefit enhancements, the employer contributions falling below the normal cost, if we avoid those going forward, we fix the unfunded liability situation we're currently facing, we can probably move forward with continuing the defined benefit pension plan as we currently have it and sustain it without facing future problems with unfunded liabilities that we have currently?

MR. CLAY: That's correct.

REPRESENTATIVE GIBBONS: So those are the type of things we can look at if we want to stay with defined benefit and prevent this problem in the future and not just do it with the DC hybrid to prevent the future unfunded liabilities?

MR. CLAY: That's right.

REPRESENTATIVE GIBBONS: Okay. Thank you.

CHAIRMAN LEVDANSKY: Representative Kessler.

REPRESENTATIVE KESSLER: Thank you. Could you go to Slide 22, please. Fiscal year '11-12 and '12-13, the expected contribution goes from $472 million to 1.676 billion. In those two years what is the employee contribution based on to come up with those numbers?

MR. KNEPP: The employee?

REPRESENTATIVE KESSLER: Yeah.

MR. KNEPP: The employee would be roughly six-and-a-quarter percent. The funding payroll would be about $6 billion as it states there.

REPRESENTATIVE KESSLER: Because the employee contribution would be 6.25 for both years.

MR. KNEPP: Right.

REPRESENTATIVE KESSLER: And then going through the rest of the years, what did you use to base this --

MR. KNEPP: Well, the employee contribution would remain the same, the rate itself would remain the same.

REPRESENTATIVE KESSLER: That's the 6.25 throughout this whole chart?

MR. KNEPP: That's the primary rate with the SERS system.

REPRESENTATIVE KESSLER: Okay. And then the multiplier would stay at 2.5 throughout this chart?

MR. KNEPP: Right. Yes, it would. The current system would stay, based on this chart, the way it is.

REPRESENTATIVE KESSLER: Thank you.

CHAIRMAN LEVDANSKY: I just -- I have several questions. One is just a request for information from both systems as a follow-up to what Representative Kortz raised, the questions relative to the use of swaps. I'd just like to know when both systems starting using swaps and how much both as a percentage of your total investment portfolio and in terms of actual dollars that the systems have invested in swaps, as well as your experience, you know, your gains versus your losses on an annual basis. If you could get me that information as a follow-up to Representative Kortz, that would be helpful.

Also, I think you partially touched this, but the other financial instrument, derivatives, do both funds also invest in derivatives as well?

MR. WINCHESTER: We're currently not using any derivatives at the fund level at SERS.

CHAIRMAN LEVDANSKY: Not now. In the past?

MR. WINCHESTER: No. Outside of the use of swaps, no.

CHAIRMAN LEVDANSKY: Okay.

MR. WINCHESTER: I should take that back. We have used some. In a cash management program, we did use some futures in order to adjust our asset allocation. But that program was abandoned as well.

CHAIRMAN LEVDANSKY: Okay.

MR. GROSSMAN: Yeah, we do use different types of derivative futures contracts to manage interest rate risk. We may use forward contracts for currency transactions. For exchanging US dollar for the UK pound or pound back to dollar, you'll use a forward contract. That would also be considered a derivative type of contract so we do use derivative contracts.

CHAIRMAN LEVDANSKY: Okay. And then for both systems, if you could provide me the same information, how much in terms of dollar usage, what percentage of your investment portfolio that represents, and your -- you know, and your gain-loss experience with that as well. If you could provide that to me, I'd appreciate it.

Right now both funds are operating on an assumed rate of return of eight to eight-and-a-half percent going into the future. Is that prudent? Is that a prudent and sound assumption, or do you foresee making some adjustments to that?

MR. KNEPP: We look at that every year. Okay? We did extensive review of that along with the consultants, the board, the actuary, all looked at this. And based on the analysis, eight percent we thought was the appropriate number. We were at eight and a half. We lowered it to eight.

Based on the other funds throughout the country, that is still well within an accepted -- that is still within an acceptable range. So we still do believe it's an acceptable number to hit, but we will be looking at it again this year. And at the end of 2010 we do our experience study and we'll look at it even more in depth.

So at this point we believe -- although it will become a little more difficult -- because of our liquidity concerns, it will be a little more difficult to hit that number.

MR. CLAY: Basically the same answer for the PSERS side of the equation. We will be looking at that issue again at the December meeting. We will have the results of our experience study at that time.

There is no question we do have a concern about long term whether eight percent is the right number. But as Len has indicated, that is the median right now for public pension systems.

CHAIRMAN LEVDANSKY: Okay. Is it possible -- I mean have you looked at that whether it's eight or eight and a half or if it's adjusted downward a little bit, can two systems equate what a -- say a one percent rate of return change, convert that in terms of what it would mean to the employer contribution?

MR. KNEPP: We understand from the SERS side that it's an eight-to-one ratio. So if you lower it from an eight to a seven percent, that's an eight percent increase, the employer rate, which means that -- a funding level of $6 billion, that's $480 million. So going from eight to seven would be an eight-percent increase.

CHAIRMAN LEVDANSKY: What did you say, $480?

MR. KNEPP: Yeah. The funding payroll that we use for this type of analysis would be about a six-billion-dollar funding payroll so it's $480 million more.

MR. CLAY: We'll have to calculate that, you know, number, but it would have a significant impact on the unfunded liability.

CHAIRMAN LEVDANSKY: Okay. If you could follow up with that, that's fairly --

MR. KNEPP: Significant, yes.

CHAIRMAN LEVDANSKY: Given the extraordinary downturn in the market in '08-09, has this significant market change -- has it resulted in any investment policy change at the two retirement systems? Have you changed your portfolio investments based on the recent experience of the market crash of '08-9?

MR. CLAY: The answer is yes. One of the issues there was a liquidity concern in the '08-09 time frame. As a result, our system made an asset class of cash to maintain a liquidity reserve. We've also been reducing the risk of the system. Mr. Grossman may give a little more detail about that.

MR. GROSSMAN: Yeah. Coming through the crisis, liquidity became the biggest issue, especially with the lower contribution rate from the employer and the employee. I think for 2010 we estimate our cash flow shortfall between the benefits that we pay out to the members and the member contribution -- employee contributions that we get in to be about $3.8 billion. That represents about 7.8 percent of the fund at that point in time.

So to mitigate the risk of us needing to sell assets in a crisis, we created a cash allocation of 5 percent. So we put 5 percent of the fund into cash so it's always available to meet the benefit payments without needing to sell other assets should there be any types of market dislocations.

For 2011 we estimate that shortfall to be approximately about three-and-a-half billion using the eight percent assumption on the employer contribution and employee so we still estimate about 3.5 so we keep a cash reserve there.

Now, that's a lower-returning asset class and returns on cash are close to zero these days. A Treasury bill is going to get you about 5 basis points, .05 percent. So it does have some impact on the ability to generate the eight-percent return over a long period of time given how low and compressed the cash rate's return are.

But, yes, we did that. And we're always looking for ways to reduce the risk of the fund. We have an eight-percent return target. For every return target we're trying to minimize the amount of risk that we take to get that return.

CHAIRMAN LEVDANSKY: Let me -- you want to add to it?

MR. KNEPP: Well, I mean we had the similar liquidity concerns so we did start to adjust or rebalance, if you will, the portfolio. But I'd like to let John --

MR. WINCHESTER: Similarly to the PSERS account, we also had modified our asset allocation. We will be increasing our fixed-income allocation. That's going to get a reduction in the multiple risk of the portfolio. Again, this is all precipitated by recognition of one of the aggravations in 2008 and just the general increase in the retirements that we're expecting. We have a shortfall in portfolio to pay benefits by about a billion, eight this year, which will be increasing by about a billion, two.

Now, our total benefits I think are $2.2 billion this year. Ten years out they will be 3.5 billion. So it's a percent of the fund with relatively low contributions that means we're going to be paying out roughly 8 percent today but it could go out to as much as 18 percent in ten years. So 20 percent of your funds would be paid out each year and growing under the current circumstances.

So in order to prepare for that and in order to meet our pension obligations, we are incorporating some risk policy in order to better work through the market volatility, but we will see. That's a known. That's a given.

CHAIRMAN LEVDANSKY: My executive director, Bob Kassoway, has some questions for you folks.

MR. KASSOWAY: First, I believe Representative Boyd has another question.

REPRESENTATIVE BOYD: Thanks, Bob. The chairman made a really good point. I just want to make sure I clearly understood what he was asking.

If you adjust your actuarial assumption on your return from eight percent down to seven percent, that translates into an increase in the employer contribution an assumption of an eight-percent payroll increase.

MR. KNEPP: Right. The ratio is eight to one.

REPRESENTATIVE BOYD: So what we're saying -- I mean this is really substantive for our discussion here. What we're saying is is the normal cost right now is anywhere from eight to nine-and-a-half percent. If you make an actuarial assumption that you're going to not return on average eight percent or eight-and-a-half percent but seven percent, the normal cost goes to nine plus eight, 17 percent?

MR. KNEPP: Because I believe part of that would be used when you're picking up the unfunded liability.

REPRESENTATIVE BOYD: Well, the current fund is built on if there is no unfunded liability, the normal cost, the normal employer contribution rate with no unfunded liability is eight-and-a-half percent roughly; correct?

MR. CLAY: For PSERS it's about eight percent.

REPRESENTATIVE BOYD: Okay. So let's just use PSERS for now. The understanding is assuming the fund was fully funded, the normal employer contribution rate should be about eight percent. Correct? And that's based on with PSERS an understanding the average market return over the life of the fund is going to be eight percent; correct, Jeff? Aren't you right now at eight?

MR. CLAY: Yes.

REPRESENTATIVE BOYD: So if you drop that market return assumption from eight to seven, the normal cost, the employer contribution rate is going to need to go up based on SERS's analysis eight percent of payroll?

MR. CLAY: I'm not sure that's totally accurate.

MR. CARL: It's a one for one. It's almost a one for one.

MR. CLAY: When you drop the earnings assumption, you're going to make an assumption you're going to earn less income coming in the door. Okay. As a result, that is going to create unfunded liability. Now, it's not necessarily going to translate into, you know, eight percent going on top of the eight percent in employer normal cost number. It's going to be some lesser number that's going to be reflected there. And it's actually not the normal cost at all. It's unfunded liability funds. Because the normal cost is based on the existing benefits that are there. That's what's needed to fund those existing benefits.

REPRESENTATIVE BOYD: Okay. For the sake of time and the fact that we're going to wrap this up I'm sure, I don't want to belabor it, but maybe you guys could get back to me. Because each time you do these, you help clarify those issues.

The point that I'm -- that I really again feel pretty strongly to make is the current assumption is a normal employer contribution rate of somewhere in the neighborhood of eight, eight-and-a-half, nine percent. And I have to say that that is substantive compared to the private marketplace where typically a high-end employer contribution rate you'll see it around six percent on average. So currently the built-in assumption of the employer contribution rate under the current system is still a bit more -- a bit higher than the typical contribution rate in the private sector.

MR. CLAY: One of the differences too -- we'll do this in the illustration for you. Let's make the assumption that defined contribution average rate is six percent contribution. Okay. That's going to in theory produce some benefit out here. Okay. If you take a look at the eight percent -- let's presume that -- it's going to produce a much better benefit than this. So you're paying up a little bit, but the incremental increase in the benefit is dramatically better in a defined contribution plan.

REPRESENTATIVE BOYD: To the employee?

MR. CLAY: Yes.

MR. KNEPP: Yes. If we could, we'll get back to you on that. But Mr. Gentzel just showed me the breakdown that we have on the components. And if I recall the major change in that, last year's normal cost was around eight-and-a-half, 8.4 percent. It's now 9.5. The bulk of that by far would be because of the change in the rate of return.

The other piece of that to fund the unfunded liability, that's where we pick up -- it looks like 2.5 percent. But we will check on these and get back to you. All right.

MR. KASSOWAY: Going back to your Slide 29 where you spoke of the proposals out there to create pension obligation bonds, as I understand it, the systems would be issuing a bond to -- or who would be issuing them? The State would be issuing the bond?

MR. CLAY: The State would issue the bond.

MR. KASSOWAY: To generate basically prefunding what they would otherwise be contributing over a period of years; is that correct?

MR. CLAY: Right. The concept -- again, let's say there's a ten-million-dollar debt, okay, that's at eight percent and I'm going to refinance that debt at five percent. Pay it into the system. The system -- the unfunded liability disappears at that point in time which causes the employer contribution rate to drop. Okay? But now you're basically paying off that debt which you'd normally be paying off at eight percent by contributing to the system at five percent by contributing on the bond. But if that's recreated, downtown in the market, you've got both problems again.

MR. KASSOWAY: Right. Exactly. Based on what you've done, you've generated additional moneys to be invested on the assumption that you could turn a positive investment.

MR. CLAY: Right. We have to make over that eight to make it work.

MR. KASSOWAY: You've created leverage that can work to your detriment if the market doesn't go --

MR. CLAY: Correct. Not by an interest rate swap problem, but the market could go against you.

MR. KASSOWAY: Right. Right. And basically, you know, it's all part of trying to mitigate current and near-term contributions by the State --

MR. CLAY: Right.

MR. KASSOWAY: -- by funding it forward.

MR. CLAY: It's again that slope to get to the reasonable funding.

MR. KASSOWAY: And you wouldn't necessarily be funding all the debt. You'd just be funding a portion of the debt.

MR. CLAY: Right. That would be our advice. You know, after you go through everything else and you get -- let's say the slope is like this and you need to reduce some more, maybe you do a small POB to do that. But again you do have referendum issues you've got to deal with when you face that issue.

MR. KASSOWAY: And the State, of course, is also paying the interest rate charges on that too; correct?

MR. CLAY: Correct.

MR. KASSOWAY: Okay. Do you know how many other states have entered into this type of a arrangement to address their pension problems?

MR. CLAY: When you say arrangement, what arrangement do you --

MR. KASSOWAY: Well, I mean the State's issuing of new bonds.

MR. CLAY: Other states, I know New Jersey has done that, Illinois has done that.

MR. KNEPP: New Jersey, some cities, Illinois, yes.

MR. CLAY: They have not worked out well for them. Philadelphia did too also.

MR. KASSOWAY: I have a hypothetical. If the treasury market were to have a reaction similar to the late '70s and '80s where long yields went to outlandish levels such as 8, 10, 12 and back then actually as high as 16 percent on 30-year instruments, what would the system do in response to that situation?

MR. CLAY: I take it from an investment perspective?

MR. KASSOWAY: Yes.

MR. GROSSMAN: I have to figure out how exactly the system -- you'd probably want to reduce our interest rate risk. I mean if you anticipated that, you would want to take your interest rate risk off your durations. So you'd want to be more short-duration cash-like instruments on your fixed income side because they don't respond as negatively to big increases in interest rates. You'd want to do that.

The equity side, you'd probably want to reduce your equities in that type of environment because they probably would not behave favorably. That would be a much more difficult thing for us to do in a short period of time. And then once interest rates got up there, then you'd probably look to move more assets into that category because of the higher expected returns which would allow us to take the risk off. But getting there would most likely be fairly painful on the way there because that type of environment is very unfriendly to a lot of pension funds in the way they're structured.

MR. KASSOWAY: Do you either of you have an historical perspective on what we did do in the '80s when we were faced with that situation? It seems to me that, you know, I hold a degree of cash, you know, thinking, boy, if you ever got to that situation, boy, wouldn't it be nice to be able to invest in US governments for 30 years that are going to guarantee me an 8-, 10-, 12-, 14-percent return. And if you had done that in the '80s, you know, would that have maybe helped us along? Your other investment returns were very solid in the '80s too.

MR. GROSSMAN: Yeah, a lot of the other investments did well in the '80s. When you think about the '80s -- we actually did a slide on this in a board meeting recently, the chief investment officer did. If you look back, in 1982 the Fed fund's rate was 18 percent. It was very high. And the ten-year yield on the treasury bond was 15. So a very good time to put that money to work.

Now, part of the problem is if you're throwing the money there, you're getting these cash flows there that you have to reinvest, and as interest rates are coming down you're going to reinvest them at lower and lower rates. So you need to stay diversified. And there's nothing to say that rates are going to go from 15 to 20 and you went in at

15, you're going to have a pretty nice loss if interest rates kept going against you.

If you look at today, the interest rates on a ten-year treasury are almost four percent as of yesterday. So much lower expected returns on your cash. Now, if rates did get back up, you would probably want to tilt more into the bond side because it allows you to get the returns that you're seeking for a lower level of risk.

But, yeah, back then I'm not exactly sure how we were positioned in that. I imagine we kept a fairly diversified portfolio. Equities did good through that period of time, so being in equities wasn't a bad decision. And as interest rates came down, if you're discounting the future cash flows of equities, generally the prices will go up. So they did well as well.

MR. KASSOWAY: And, actually, if you buy at a high interest rate -- you said they went high -- if they go higher than 16, 18 percent, we were going to have a whole lot of other problems. But if you buy at rates that high, you can look at capital gains, the only way interest rates come back down is that the bond sells at a premium where then you have a capital gain on the bond too; right?

MR. GROSSMAN: Yes, if you sell the bond before maturity and interest rates come down, you can have a capital gain on the bond. Otherwise, you could hold it until maturity and earn that interest rate the entire life of the bond, whatever the interest rate implied in the bond purchase price, you could hold that to maturity.

MR. KASSOWAY: What percentage of both funds are invested in fixed-income returns versus equities currently?

MR. WINCHESTER: Currently SERS has about 28 percent in stocks. That would be both domestic and international funds. And we have -- I think it's 16 percent in fixed income. Bear with me.

MR. KASSOWAY: Where is the rest?

MR. WINCHESTER: Because of what happened in the market in 2008 and 2009, stocks, bonds, commodities, they all depreciated in price. So what that did is it pushed up our allocations which we had in private equity and the absolute return strategy in real estate so it pushed them to artificially high levels.

While all those exposures sound very low right now, we drill into the portfolio to look at the types of investments in private equity, we look at the type of investments in real estate absolute return. When we look at the portfolio, we actually have closer to 40 percent in stocks and 25 percent in fixed-income exposures. Our private equity is much closer to our target, it's 14.6. Our target right now is 14. We are lowering that to 12 over time because of the liquidity situation that we talked about. Real estate is seven-and-a-half percent. That too they are rolling back to seven percent over time.

So from a risk standpoint, this portfolio is very well balanced at this point in time. So if you look at the raw numbers, it looks like we're heavily overweighted to private equity and real estate, but, in fact, one, our private equity portfolio has been the best performing asset class over the past ten years. It earned 11 percent as stocks were virtually zero.

MR. KASSOWAY: Which one was that?

MR. WINCHESTER: Private equity. Our absolute return strategy is one of our lowest risk strategies in the whole portfolio, and the underlying managers in there tend to be very optimistic and will move to take advantage of what's going on in the marketplace. So last year it returned 13 percent to the portfolio and I think had a risk posture of about 5 percent below bonds.

MR. KASSOWAY: Now, it's interesting. I know last year when you guys lowered your return prospects or assumptions, I thought it was interesting because I always thought that, you know, after a large decline in the market the probability of a sharp rebound or a significant rebound is greater and that would be a time when you could almost raise your assumptions. Where the market goes up high, you know, after all those years of success in the '80s and '90s, I would have thought that you should have probably reduced your assumption based on, you know, whatever goes up has got to eventually come back down. And by the same theory, everything that goes down, eventually it's got to rebound.

MR. WINCHESTER: You're correct. But the irony is there's a lot of volatility year over year in a portfolio even as big and diversified as we are. Okay? You can go from plus 40 down to minus 30 from one year to the next. That's a possibility. But, more importantly, over the long term when you look at those returns, you know, what we've experienced is returns that reflect what was an eight-and-a-half percent long-term assumption. We earn 8.7 over 15 years, 8.6 over 20. You look out over 30 years, we earned 9.9 percent.

So in spite of all the gyrations that we've seen in the market, over the long term we've achieved our goal of 9.9 percent, which exceeded our actuarial interest rate assumption. So in fact the fund was successful.

MR. KASSOWAY: And my last question is -- and as I near retirement, I'm taking a look at whether I'm going to take the lump sum out or leave it in. And I find myself going just opposite of the vast majority.

And I wonder to what degree does -- do the systems try to give some information to individuals facing retirement? For instance, the way I worked it out is I have to get a seven-percent return if I rolled it over to an IRA-type situation, and if I actually took the cash myself I'd have to get an eleven-percent return to make up for what I'm giving up in benefits.

Well, you know, I'm not going to -- you know, no matter how much I like the market, I don't believe I'm going to make an eleven-percent return consistently over the remainder of my life so I've decided I'm going to leave it in.

Do the systems make any attempt to try to sway or to inform individuals what kind of return they'd have to get on their own if they take their money out?

MR. KNEPP: What we do for the SERS side is we provide them, as you're aware, an annual statement. An annual statement shows the difference if they leave the money in versus if they take the money with them.

But from a financial standpoint I believe most of the members are taking the money. They haven't done the extensive analysis that you have. They want that cash. And it is significant at times. So whether it's a seven-percent, eleven-percent return, for some individuals it's more important that they get that cash.

MR. KASSOWAY: Do you think any of that has to do with the fact that they haven't been shown what it might mean, you know, what they might be giving up, what they're sacrificing?

MR. KNEPP: Well, we do show them in the annual statement they get the difference between if you leave it or you take it so that it's a --

MR. KASSOWAY: That's the amount that you're foregoing in cash returns each year.

MR. KNEPP: Exactly.

MR. KASSOWAY: What I'm suggesting is if you take that out, here's what you've got to make up, you know, make up with it. For me it was simple math, you know. I get $11,000 less, you know, per year, and I'm taking out X number of dollars adjusted for taxes. You divide that amount over here by that amount over there. That gave me the return I had to make.

I think something could be put together to let people be more aware of what they might be losing. I mean I understand if an individual wants to pay off a mortgage or wants to pay for educational costs, a lump sum, but, you know, other than needing cash for immediate usage, it's not a good financial decision. And I think most individuals aren't aware of that and they could be helped if they're made aware of it by the systems possibly.

MR. KNEPP: It's something we could look at. But the other side of that, if you start giving them too much, then it's almost advice and then we're exposed from the standpoint, well, you told us to leave our money there. And that's the way it could be turned on you. That's the negative side of it, if something like that would happen. Because if we start directing them to do something like you're saying, it could expose us as far as the additional liability.

But it's not something we won't look at. It's something we can look at.

MR. KASSOWAY: I understand your hesitancy to do that, but really they wouldn't be suffering any -- they would be getting what they were guaranteed to get right along anyway because if they left it there they'd simply be getting the higher benefit which is more or less guaranteed anyway.

MR. KNEPP: That's true. And if the markets turn and of all a sudden these markets start doing 25, 30 percent, they're going to come back and say I could have done so much better. So it's just something that potentially that's out there, but we will look at it.

MR. KASSOWAY: Thank you.

CHAIRMAN LEVDANSKY: Thank you. Just in summary, I appreciate, Mr. Knepp, Mr. Clay, both you and your staff, I appreciate your presentation today and answering the questions thoroughly. And I appreciate the follow-up, the information that we requested.

I'm just -- it's pretty obvious -- I mean I like how you summarized it at the end, there is no silver bullet to resolve the system's funding issues. The problem wasn't caused by one single action or one single issue. It's a multiple of seven or eight different events that individually and at the time may have seemed like the prudent action to be taken. But cumulatively, long term, the way they've operated, it's put us in the position, you know, where we are.

And some of these things were under the control of the funds and of the Legislature, but the bigger factors of the downturn in the market twice over the last decade were things obviously outside of our control. So in the end it's not going to be -- the problem's complex; the solution is going to be complex as well.

Your summary at the end, under all options, however, there will be a need for significant additional funding to the systems, that is a reality no matter which alternatives we examine. It's going to result in increased contributions on the employer's side. And this will be a challenge for school districts, but it's even more of a challenge for the State, given the fact that the State is obligated to pay the employer contribution for SERS and 55 percent for PSERS.

So it's a daunting challenge not just for school districts but for the Commonwealth as well and the General Assembly.

One final observation. There are no easy choices. It's going to be -- they're going to be tough decisions that we're going to have to make.

I appreciate your testimony today. You helped us understand where we've been and where we are. Now we need to figure out where we need to go and how do we get there. And that will be the subject of additional hearings in the future. So I appreciate your presentations today, and we'll have -- this dialogue will continue into the future.

With that, that ends this hearing of the House Finance Committee. Thank you.

(Whereupon, the hearing adjourned at 12:11 p.m.)

I hereby certify that the proceedings and evidence are contained fully and accurately in the notes taken by me on the within proceedings, and that this copy is a correct transcript of the same.

Pamela L. Packer

Court Reporter-Notary Public