Nebraska Retirement Systems Committee December 3, 2018

Rough Draft

KOLTERMAN: [00:00:02] I'd like to welcome all of you. Senator Groene said he'd be joining us. It's a pleasure for me to have this hearing today. My name is Senator Mark Kolterman. I represent the 24th District, which is Seward, York, and Polk Counties. To my immediate left over here is--

LINDSTROM: [00:00:19] Brett Lindstrom, District 18, northwest Omaha.

STINNER: [00:00:23] John Stinner, District 48, all of Scotts Bluff County.

KOLOWSKI: [00:00:24] Rick Kolowski, District 31, southwest Omaha.

KOLTERMAN: [00:00:30] We have our legal counsel, Kate Allen, to my immediate left and then Katie Quintero has been our clerk for three years, to the far left. We also have with us Greg Tracey. He's from Omaha. He's going to University of Nebraska at Lincoln, he's majoring in economics and he'll be a good hire one of these days. I would like to ask you to turn off your cell phones. If you're going to testify, please come forward and be ready to go. And then fill out the blue sign-in sheets. When you get up here to testify state your name and spell your name. If you have handouts we need them for-- we need eight copies. If you don't want to testify and just submit a letter, you can fill out the white sign-in sheets and do that as well. Joining us is a-- I'll let him introduce himself.

GROENE: [00:01:37] Senator Mike Groene, District 42. Senator Kolterman eats faster than I do. We were in the line at the same time.

KOLTERMAN: [00:01:49] The 1:30 hearing is going to be the presentation of valuation reports on the defined benefit plans. At this time I'd like the testifiers to come forward. Welcome.

PATRICE BECKHAM: [00:02:17] Thank you, Senator Kolterman, members of the committee. Patrice Beckham, P-A-T-R-I-C-E B-E-C-K-H-A-M, with Cavanaugh Macdonald Consulting out of Omaha. We're the retained actuary for the state retirement system. And it's my pleasure to be with you today to share the results of the July 1, 2018, actuarial valuations. I believe you all have a bound presentation. It's going to be a lot shorter so we'll go through that rather than through the actual reports themselves. As always, please feel free to ask any questions you have as we go through the material. I'm happy to stop and take questions and resolve those as they arise. So page 2. When we look at the valuation results we always end up looking back to the prior results and seeing how we went from the results in the 2017 valuation to the 2018 valuation, so it's important to note if there are changes. There were no changes to actuarial assumptions or methods this year. The same set of assumptions were used in both the '17 and the '18 valuation. We did have a legislative change LB415 from the 2017 session grants the PERB, the board, the authority to set the actuarial assumptions for optional forms of payments for members hired after July 1, 2017. So if someone decides to take a joint and survivor form of payment as opposed to a five-year certain in life, there's factors that are developed based on the mortality and investment return assumption and the PERB now sets those. We really don't have a lot of members in that tier, hired after July 1, '17, and we don't use a specific assumption at this point as to what form of payment members will elect. So it really virtually adds no cost impact on these results. The other change in LB415 was for the school system and that modified rule of 85. In the past there had been a minimum age of 55 to be eligible for a rule of 85 and that moved to age 60 for members hired on or after July 1, 2018. Obviously, there are no members in that tier in this valuation, but when we look at the projections you should realize we do have that reflected in the projections. So that's a little bit of a lower ongoing cost because people have to wait a little bit later in order to retire under that tier. Page 3. Every year we do an actuarial valuation. We capture what's actually happened, both the asset side of the equation and the liability side, liabilities being, you know, what's happening to the membership. So this year the return for fiscal year '18 on a market value is 8.6 percent. You might remember our assumed expected rate of return of 7.5 percent, so that was favorable. We use a smoothing method so we don't recognize all of that experience in one fell swoop. So in addition to FY '18 we have four other years that were reflecting part of that experience. All of that rolled together created an actuarial gain on the smooth or actuarial value so we had a gain. That means the value was higher than expected. And on the liability side we also had a gain. The liability side you get a gain when your liabilities are lower than anticipated and that was generally from salary increases that were lower, lower than expected. So this is actually a good year, an easier year to report. When you have gains on assets and gains on liabilities, everything's working in the right direction. So you'll see a consistent theme across all three plans where the unfunded liability is declining, is decreasing, and that's favorable. Page 4. Just a reminder about the actuarial valuation. These plans are very long-term obligations. The expected benefit payments for current members project down almost a hundred years. But we can't just put it on autopilot and let it go. So we monitor it every year the same point in time and look at certain key metrics and then recalibrate what's needed on the contribution side to sort of balance that equation and ensure that there'll be sufficient assets accumulated to pay the benefits to members when they retire. So we're measuring assets and liabilities at a point in time; that point being July 1. We stop everything on that date, we capture all the member data, that member data then drives the calculation of liabilities. And we also capture the asset values on that date and use that. We don't know exactly what the benefit payments will be in the future, so we're using actuarial assumptions to come up with a best estimate. You remember when we change the assumptions, that can have a pretty dramatic impact on the value of the liabilities. We're using what we believe is sort of our best estimate. There could be other sets of assumptions that are certainly reasonable that would produce different liability measurements. Once we calculate the difference between the liabilities and the assets we have a funding mechanism or budget policy that's actually in statute that we follow that helps us calculate the actuarial contribution rate. And that's really what's driving the funding for the the plan year that's ending June 30, 2019. Any additional state contributions are generally made July 1 of '19 so it falls in fiscal year 2020. The valuation also helps us look back over the last 12 months and compare that actual experience to what the assumptions anticipated. And if we track that from year to year sometimes we'll get a heads up on whether it's recurring losses on mortality might be indicating when I need to make an assumption. The same if there's recurring gains on salaries. When it gets to the next experience study we'll be looking at that. And then we're always trying to look to see if there are any trends or even forward-looking things that we should be anticipating or trying to get out in front of. Page 5. I know you've heard this from us year after year but just a reminder. Again, we're not using market value of assets in our calculations. The valuation uses what's called an asset valuation method that helps smooth out the fluctuations in the market value of assets. That creates more stability in both the funded status of the plan and the contribution rates. It's very common in public plans to use a smoothing method. There are actuarial standards of practice that prevent that methodology from being used to create a funding pattern that might be desirable by the plan sponsor but not responsible. And the method that Nebraska uses is the most common method and the five-year period is the most commonly used. That means at any point in time the actuarial value may be higher or lower than market value. If the actuarial value is higher than market you'll hear us talk about deferred investment loss. It means we haven't recognized all of the investment experience that is below the assumption at that point time and vice versa. If the actuarial value is less than market we will talk about having deferred investment gains and they're just deferred. There's no magic here. They will work through the calculation in future years. So, for example, on page 6, the smoothing method that we're using is that we calculate the dollar amount of the difference between the actual return and the expected return. The expected would have been using 7.5 percent on the market value of assets and whatever that difference is, we recognize it equally over five years. So if there was a $500 million gain we recognize $100 million each year; $100 in the current year, $100 each the next four years. Using that methodology we have again deferred gains and losses that will be recognized in the next four years. And you can see the amounts. The green ones are obviously gains the red ones that are decreasing our losses. And if you add those up we've got about $91 million deferred gain and it has not been recognized yet. But, again, it will in the future and when you look at projections those numbers are flowing through. All right. On page 7, this is the information for the school system and it's representative for all of the retirement systems. And again the black line is the assumed rate of return, which was 8 percent for most of the years until it was changed to 7.5 in the 2017 valuation. The blue line, the kind of the triangles, that's the return on market value. And the red line is the return on the smooth or actuarial value. So you can see that the red line is far smoother than the blue line and that's exactly what we're trying to accomplish. OK. It's just a timing because the market tends to be up and down over a five-year period and that provides some smoothing. All right. So we're going to look at the Judges Retirement System and Patrol and then School. And we'll spend a little bit more time on judges on a couple of definitions, so to speak, or kind of conceptual ideas and then we'll move quickly through the other two. But you'll hear probably a lot of expert lingo throughout the afternoon so I want to make sure to try to put it in context for you. Page 9. You have the results kind of summarized for the Judges Retirement System. The first line is the unfunded actuarial accrued liability. Again, the funding policy is in statute, the methodology that we're using the budget to pay or finance these benefits says we're going to contribute a level percent of payroll from the time employees are hired and come into the system until the time they leave. And on that basis we know who is in the system, we know when they were hired, we know what their salary is. And that allows us to calculate an amount that at least theoretically should be in the trust fund based on all the years of service that that person has worked. That's the actuarial accrued liability. We calculate that for each person and we sum it up for everybody. And that is according to the financing plan ideally where the plan's assets should be. Rarely are exactly there. There's usually a difference. And if the assets are less than the actual accrued liability we have an unfunded accrued liability. Sometimes the asset value is higher than the actuarial accrued liability and then we generally say we have surplus. So in this case there is a shortfall. The actuarial value of assets is lower than the actuarial accrued liability. Excuse me. But you can see that that difference has declined. So in the 2017 valuation it's about $11.9 million and then the 2018 valuation is down to $7.6 million. Again, the funded actuarial accrued liability is impacted by both the asset and the liability experience. So we had gains on both of those that helped decrease that. When we look at the funded ratio, that's the assets divided by the actuarial accrued liability. Same information, but looking at it in a different way. So you can see where 94 percent funded in 2017, 96 percent 2018. Our target, our goal is to get 100 percent. So, again, statutes set out the mechanism of calculating the actuarial contribution rate. And we follow that in our calculations. There's kind of two parts to that. One is we have to develop a contribution for people who are actively working to put money in this year to help finance the benefits that they'll ultimately receive. And then because we have an unfunded actuarial accrued liability we need another payment-- part of a payment to finance that unfunded liability amount. Those two together this year are 26.7 percent, down from 27.92 in the '17 valuation. We have-- members are contributing as part of the funding of the plan. Those contributions vary by sort of tiers of membership and they drop when a judge hits 20 years of service. So the 7.62 is a blended rate taking kind of all that into account, down a little bit from last year. But the nonmember actuarial contribution rate this year is just over 19 percent of pay; last year was just over 20, so it's down about 1 percent. We look at the projected pay for actives and that gives us the dollar amount we need that has to come from the funding mechanism other than the members. Okay? So, again, this year the rate is down. And so we're at about $4.6 million. The expected court fees for the current year are the actual court fees from the prior year. And we've had discussions looking for ways for better estimates and have had no luck coming up with a reliable way to estimate court fees. Much more complicated I think than it sounds. So that's been the standard. So we're using the $4.1 million. And on that basis the additional required state contribution would be $443,000, again, down from about $673,000 last year. So you're seeing the results of the favorable experience this year. Any questions on that page? All right. So page 10. It's kind of a short-term outlook looking at kind of projected contributions over the next five years. We're using a model that we developed in conjunction with the valuation. And it's based on of course lots of assumptions that drive these results. But one of the key assumptions is what's going to happen with the asset return? And so we're assuming that we're going to earn 7.5, which is our expected rate of return every year for the next five years. If that happens, this is kind of what the trend line looks like for the additional state contributions. Now remember, this is holding court fees at their current level, for lack of a better estimate. To the extent the court fees are changing it directly impacts additional state contribution. So this one is a not real reliable metric, but it's still helpful I think to see how that moves over time. So we're recognizing that deferred investment experience over the next four years and holding court fees level. And we do know generally our payroll is increasing. Okay? So every-- all of our calculations are based on level percent of payroll. So dollars of payroll increase, dollars of contributions will increase, even if all assumptions are met. So you get a little bit of squeezing on the additional state piece and you can see it kind of goes up and then it comes down a little bit and it starts going down. Again, this one's a little harder because the court fees are just really hard to anticipate. But it's I think at least helpful for you to see. I mean, the story is if you're going to plan our budget, plan on there being an additional state contribution.

KOLTERMAN: [00:20:00] I have a question about that. If you look at page 9, last year we had expected court fees were a little bit less than they are this year. So did you use that amount last year going forward back in your estimate?

PATRICE BECKHAM: [00:20:20] If I remember right, I think we had a change in the court fees in '17.

KOLTERMAN: [00:20:25] We did.

PATRICE BECKHAM: [00:20:26] And so we anticipated that. It was actually a pretty good guess; Kate probably helped us. So we did anticipate because the law changed on, you know, how the court fees were going to come in. But typically, absent a change in how those fees are going to be collected or calculated--

KOLTERMAN: [00:20:48] It doesn't change much.

PATRICE BECKHAM: [00:20:49] -- we just leave them. Sometimes you know they go down instead of up. It's just a tough one.

KOLTERMAN: [00:20:55] Okay.

PATRICE BECKHAM: [00:20:57] But they're not-- you know, the sort of key there is they're not related to payroll. So we kind of have this disconnect between how we're developing the contribution rates and how part of the money is coming in. And that makes the additional state piece much more volatile. Okay? All right. Page 11. We have really the same.

KOLTERMAN: [00:21:22] Pat, we have another question.

PATRICE BECKHAM: [00:21:23] Oh, I'm sorry.

STINNER: [00:21:25] I had looked at court fees I think over a four-year period of time and that trend looked to be going down instead of up. In this case, we're showing it going from 4,079 to 4,113, but I think if you do it five years back and did a trend line analysis to court fees actually going back as a trend.

PATRICE BECKHAM: [00:21:52] We did see that. I think back in 2015 we had seen that general trend. They decreased from about $3.6 million to $3.1. And then, Kate help me out, but I think there were a couple of changes in law.

KATE ALLEN: [00:22:07] There was-- right. There was a bill that passed that staggered increases. I think they were two years apart. So one occurred I believe in maybe '16 or maybe '15 and then again in '17. And those are the last scheduled increases. There's no more scheduled increases after that.

STINNER: [00:22:27] We actually passed a court fee increase when Ernie Chambers was here?

PATRICE BECKHAM: [00:22:31] Not when he was here.

STINNER: [00:22:31] Not when he was. Okay.

PATRICE BECKHAM: [00:22:35] Just if you're interested page 8 of the Judges Retirement Report actually has about a 15-year period that shows what the court fees were. In the actual physical report--

STINNER: [00:22:51] Okay.

PATRICE BECKHAM: [00:22:54] -- on page--

KOLTERMAN: [00:22:57] He doesn't have access to it.

PATRICE BECKHAM: [00:22:58] Oh, he doesn't? I'm sorry.

KOLTERMAN: [00:22:59] I didn't give one of those to everybody.

PATRICE BECKHAM: [00:22:59] I thought you all had one of those.

STINNER: [00:23:02] He keeps some secrets.

PATRICE BECKHAM: [00:23:04] Anyway, they're so valuable.

KOLTERMAN: [00:23:05] I'll see to it that he gets one, Pat.

PATRICE BECKHAM: [00:23:06] All Right. But your memory is right, just it's been a few years back.

STINNER: [00:23:10] Okay.

PATRICE BECKHAM: [00:23:12] Great. Any other questions. Very good. Page 11. And this is a 30-year projection. Again, no court fees are being held at the current level for 30 years. It's not that I think that's a great assumption, it's just there's just no better assumption. So this has some limitations, but again I think the message is there are additional state contributions every year to make sure that the full actuarial contribution is made. And that's a function of again all the financing predicated on things as a level percent of payroll and payroll growing every year, which means dollars of contributions are growing. And whatever isn't covered by the members or the court fees falls to the state. And that's where that volatility comes in and we'll talk about that a little bit later as well. Page 12. So for all three of these systems it's what we call they're actuarially funded. So there is an actuary contribution rate that's calculated and the dollars related to that contribution rate or contributed every year. And if that happens and all assumptions are met you better see a graph that's moving the funded ratio to 100 percent. That's what actuarial funding really is all about. And you see that here that by 2038 the Judges Retirement System reaches 100 percent funding and stays there. But it does take those additional state contributions to move the system to this point. All right. If there are no other questions, we'll move to the Patrol. Page 14. Similar information that you saw for Judges. Again, the unfunded actuarial accrued liability decreased as a result of favorable experience on both assets and liabilities down from about $70 million in the '17 valuation, about $62.5 million in this valuation, funded ratio moving up from 85 to 87. On the contributions side, the unfunded actuarial accrued liability is lower and therefore the contribution to fund that is lower, which results in an actuarial contribution rate that's about 1.7 percent lower than it was in the '17 valuation, right around 45.5 percent of payroll. The members contribute-- this is again a blended rate-- 16.08 and the state matches that. That still leaves an additional contribution rate of 13.37 percent. That is down from 15.15 percent of '17 valuation. You take that times the projected pay and that gives us the total required contribution and the additional required state is about $4 million. So the required is the statutory, the 16.08 and then the additional piece is about $4 million total state, it's about $8.8 million. Again, spend it on an actuarial basis, part of the contributions are fixed in statute and then the state makes the additional contribution, if needed. Page 15 is a five-year projection. As you can see, if all assumptions are met we expect there to be an additional state contribution around $4 million for the next five years. If returns are lower than 7.5, we'll expect that to go up. If they're better than 7.5, we'll expect it to go down. So like two sources of financing, that's been income or contributions. Page 16. The 30-year projection for the Patrol. Again, the blue bars are the employer statutory contributions, the green bars are the member statutory contributions. Those are the same amounts. And then the red bars are the additional amount of state contributions that would be expected, again, if all the actuarial assumptions were met. You'll notice that when we get to 2038 there are no longer any additional state contributions needed. We've improved the funding to the point where the statutory contributions are sufficient to cover the costs of the plan. And over this period you remember we do have a new tier for Patrol that has a little bit lower benefit structure and a higher contribution rate. So that's kind of helping with that trend as well. You see on the next slide 17 again about 2038 the system reaches 100 percent funding. And from that point forward if all assumptions are met those statutory contribution rates for both the member and the state are sufficient to cover. And actually you'll see that the funded ratio kind of being above 100. Money coming in is slightly higher than what's needed to pay the benefits for current members. A lot probably will happen in the next 20 years, but if it plays out as assumed that's what the trend looks like. Any questions on Patrol before we move on to School?

KOLTERMAN: [00:29:55] Senator Groene.

GROENE: [00:29:55] Looking at these numbers, like page 14, so that's 16.08 percent. Is that a percentage of their wages?

PATRICE BECKHAM: [00:29:55] Yes, sir.

GROENE: [00:29:55] And then we match 16 percent?

PATRICE BECKHAM: [00:29:55] Yes.

GROENE: [00:29:56] So if you look at that additional required statute, a percentage of the total required, that's basically about another 14 percent of pay. So we're at about 50 percent of the cost of retirement is total pay?

PATRICE BECKHAM: [00:30:05] The total contribution is just over 45.5 percent and the members are paying about 16, so it leaves you about--

GROENE: [00:30:14] So you factored in the additional requirement to come up with about 45 percent.

PATRICE BECKHAM: [00:30:21] Yes. We actually calculate the 45 first. That's the actuarial calculation based on the funding policy in statute and you subtract what the members are going to contribute. Then we subtract what the employer automatically contributes, because they match the member. And then the 13.37 percent of payroll is what's left as an additional state contribution and that's it. You know, so it's pretty variable because good or bad it all flows down to the bottom line.

KOLTERMAN: [00:30:55] Patty, is it fair to say though, you know we pay more in that category than anywhere else simply because they don't pay Social Security tax either. That's true, you know.

PATRICE BECKHAM: [00:31:06] Right. The ongoing cost of the benefits is higher because of the benefit structure, which reflects that they're not covered by Social Security. Right. And because of the nature of the job, they tend to have earlier retirement.

KOLTERMAN: [00:31:20] I think there is a required age to retire, is there not?

PATRICE BECKHAM: [00:31:23] Mandatory is 60.

GROENE: [00:31:27] So you're talking about funding--

PATRICE BECKHAM: [00:31:30] You're funding higher benefits over a shorter period of time--means higher cost.

LINDSTROM: [00:31:36] Good questions. Does that answer your question, Senator Groene?

GROENE: [00:31:40] Retirement is expensive.

PATRICE BECKHAM: [00:31:45] Just to give you a breakdown on that 45 percent, about 30 percent of that is the cost for active members. And then the other 15 is the amortization catching up to pay for that $62 million shortfall, to put it in perspective. All right. Great question. So on to Schools. Page 19 . The same general outlay that you've seen for the other two systems. This is a bigger system so the numbers are bigger. The unfunded liability, again, it's down as a result of the gains on assets and liabilities. So we're unfunded actuarial accrued liabilities about $1.5 billion, down from about $1.7 last year, the funded ratio up to 89 percent. Again, when we look at the statute and calculate the pieces of contribution that comes up to 18.3 percent, down from last year. And then again we look at members are contributing 9.78 percent. And I might mention, they are covered by Social Security. The employers are paying 101 percent of the member rate, which is 9.88. And the state is contributing 2 percent of payroll. So those three together are 21.66 percent of pay. And that results in what we've generally been calling a contribution margin, which just means those fixed contribution rates are higher than the actuarial rate this year. And you can see the margin is up a little bit from last year. It was 2.35 last year, 2.93 this year. The good news that comes along with that means the state doesn't have any additional contributions for this plan. Since this payroll is a big number, that's good news. Okay. Any questions on the school, kind of the valuation results and then we'll look at the projections. Page 20 has the projections. And this actually includes projections for the state service, the state service annuity for certain members of the Omaha School Employees Retirement System and then the 2 percent of pay for Omaha. Those are the first two lines. And then you can see the red bars are the 2 percent of pay that the state contributes to the school retirement system and then the employer, the 101 percent the employers are putting in. And the black bars, which are nonexistent, is the additional state contribution. So, again, the next five years if we earn 7.5, we don't have to contribute any additional contributions from the state. And having that margin helps improve the probability that you won't have to even if you don't earn the7.5. Page 21 is a 30-year projection. Again, assuming all assumptions are met you would no-- there would be no additional state contributions for that entire period. You can see the dollars are increasing. And that's simply because payrolls are increasing. When you look over a 30-year period, payroll increases pretty significantly even when you have a pretty low. increase over a 30-year period. But the rates are stable. Page 22. Again, the system is actuarially funded and we just saw a little bit more money coming in than the actuarial rate, which means if we assume all the assumptions are met we'll reach full funding sooner. Like anything else, you're paying off your debt more rapidly. So for the school system the projected full funding date is actually 2028. Remember, the other two systems it was more like 2038. So 2028 here and then this holds everything static so it just assumes you keep plugging away and putting the money in and that's why you see the funded ratio continuing to increase about 105 percent. A lot of things will happen in the next ten years and beyond, but the trend line is what we're really looking for in these projections, what's the trend look like. So it's pretty exciting to look at a trend that's 100 percent funded in ten years. It's really, really good news. Page 23. This is, again, comparing the statutory contribution rates. That the member, the employers, and the state at 21.66 is the red line that you see on page 23. The blue line is the actuarial contribution rate. So I'll-- couple things are impacting the blue line. You can see it's going down till that 2027. We do new tiers, so people who are coming in to replace those who retire or leave employment are generally coming in have a lower cost plan. So that's driving the piece for current actives is trending down. We're also putting in more in contributions to pay off the unfunded liability. So we're driving that piece of the contribution rate down as well. And then we made to 2028 we're fully funded, we say we don't need as much money. Okay? Again, all this predicated on every single assumption we use being met every single year. The only thing I can tell you is that that will not happen, even if it's right over, you know, 20 or 30 years it won't happen every year. But the trend is what we're trying to look at our focus on here. And the reason is, because that difference between the red line and the blue line is that what we're calling the contribution margin is very important because it allows this plan to have adverse experience without necessarily increasing the state's contribution. It's like an insurance policy of sorts. So if bad things happen we've got a little bit of a cushion that helps us absorb it and if bad things don't happen we get fully funded sooner. And the retirement systems just like everything else, once your debt is paid off you got a lot more options. So in that vein I wanted to share some information that we shared with the board that is kind of connected to a new actuarial standard of practice that will be effective for valuations in 2019. It has just to do with kind of improving the communication of the variability of investment return and the impact that has on funding contribution rates. So when we look at that contribution margin, again, it's really important and it really helps stabilize the state's contribution. So what this table is telling us is we can have a return in one year, from 2019, fiscal year '19, a return of a minus 2.75 percent and still not trigger an additional state contribution or we could have two years of a return of 2.25 percent without triggering an additional contribution or 4 percent for three years. You can see how to read the table. And if we look out ten years, again, if it were 6.25 every year for ten years we still would not trigger an additional state contribution. And there is a bit of a sense in the investment community that the next ten years might be a little less optimistic than longer term. So this, again, provides a significant degree of protection for the state by having that margin there to absorb potential adverse investment experience. When I say adverse, it just means less than 7.5, not necessarily negative. Does that make sense? This is a little bit of new information, but I think it's kind of helpful to put things in context. All right. Another piece of information that we're sharing with the board and we'll be developing additional materials in the 2019 valuations that we'll probably share with you, but one we wanted to get your feet wet with this year is called the asset volatility ratio. And, again, it's a way of looking at what's the impact on contribution rates funding if the actual returns are different than what's expected. And this asset volatility ratio is just equal to the market value of assets divided by payroll, because everything we're funding is over payroll. That number is an indicator of the impact of the volatility of investment return on the contribution rates. So the higher the number, the more volatility in the contribution rate. It's not good, bad, or ugly necessarily, it's just informational because you think about it, if its market value of assets divided by covered payroll, if you're better funded you have a higher number, right? So you're better funded, you have more risk in terms of if the returns are not as expected there is more money in terms of dollars there that don't-- are not created. It's also as the plans mature their assets grow faster than payroll. That's pretty common. And then we've had a couple of systems that have had a decline in the active membership that will affect this asset volatility ratio. So let's look at the next page, page 26. And it's kind of fun for you guys, because you have three-- you actually have five different plans and the cash balance numbers look very different. But for these three plans the asset volatility ratio is 8.2 for the Judges, 14.9 for Patrol, and 6.1 for School. Well, what does that mean? Let's look at the table at the bottom of page 26. So if we have a return that's 10 percent lower than expected. So we're expecting 7.5 and instead, it's a minus 2.5. Okay? That's one standard deviation from a portfolio about which means it's not that uncommon. It could be higher or lower, but because we have a lot of volatility on the asset side it's important that we understand what that means on the contribution side. So you can see for Judges if that happens that 10 percent deviation is 82 percent of payroll. That's, you know, the 8.2 times the 10 percent. If we did not use the five-year smoothing we still amortize that experience over 30 years. That would change the contribution rate .3 percent. We do use smoothing so the first-year impact would just be under 1 percent, .13 percent. The same exact experience for Patrol would result in 8.47 percent of pay without the smoothing or 1.69 with the smoothing. And then you can see for Schools, again, the first-year impact, about .69 percent. So the same myths, so to speak, experience that's off by 10 percent has a very different impact on the contribution rate for these three plans simply because of the relationship between the assets and the payroll in those three plans. But you can see if we say it's not that and for there to be a variation of 10 percent, be it 10 percent higher or 10 percent lower, I can see how these contribution rates can really move. And, again, the first year is .93, 1.69 percent, but if there is a favorable experience to offset that there'll be additional pieces in subsequent years. So, again, we'll be doing some-- you know, still kind of kicking around the most effective way to try to communicate some of these little more complex ideas and concepts. But we'll be trying to kind of build on this and helping you, you know, you have access to the model. That's another good way you can just plug in a return, see what happens, and compare it to the baseline. I wanted to spend just a couple of minutes with you though on this subject matter for Patrol and Judges, because those funding policies create a lot of volatility in the additional state piece. And you heard me say that when we went through the valuation results this is just another way to sort of think about that. That's why it's very hard to have reliable numbers for those because they're so volatile. But if we looked at Patrol on page 27, the first column of numbers is actual 2018. Those were the valuation results I just went over with you. The 45.53 percent, the actual rate, kind of trace it all the way down and the additional state contribution was just under $4 million. If instead of the actual return we had for fiscal year '18, which was 8.6 percent, it had been 10 percent lower, it would have been a minus 1.4 percent. The actuarial rate would be 47.22 percent. That's that 1.69 percent we just saw on the chart before. But you can see that the increase in the additional state contribution moves from about 4 to 4.5, which is you know about a 13 percent increase. It all flows down to the bottom line for the additional state piece and you'll see the same thing is true for judges on the next page. If the return had been 10 percent lower for fiscal year '18 instead of $443,000, we'd be at $665,000, almost a 50 percent increase. So I think for Nebraska, this is kind of a challenge. It's really the same with school with that big margin that's very helpful. It's kind of stabilized that. But for Judges and Patrol we know that we're going to have this volatility from year to year with the additional piece. Be it good or bad, it's just the nature of the impact of the actual [INAUDIBLE] return on the additional funding piece. And I wanted to make sure we spend a little bit of time today talking about that. That's a little bit of the fly in the ointment from a funding perspective, from a budgeting prospective. That concludes my presentation. Are there other questions or comments?

STINNER: [00:48:49] I was just thinking, if you go to a two-, three-, four-year period of missing projections to the downside and say that it's 10 percent or better, that accumulates doesn't it?

PATRICE BECKHAM: [00:49:02] Actually, the minute that we missed the return the valuation captures that--

STINNER: [00:49:10] Right.

PATRICE BECKHAM: [00:49:10] -- and that says, you're going to have to start paying more money over the next 30 years--

STINNER: [00:49:16] So it will adjust [INAUDIBLE]. I was trying to figure that out.

PATRICE BECKHAM: [00:49:18] Yeah, the valuation sort of has an endpoint and whenever the experience is different than expected it recalibrates. The contribution says, I need a little bit more money now for the next 30 years to make up for what did not happen according to schedule. OK. Thank you.

LINDSTROM: [00:49:35] Any other questions from the committee? Seeing none, thank you very much.

PATRICE BECKHAM: [00:49:36] Thank you.

LINDSTROM: [00:49:37] Okay, we have another hearing, LR369, that will start at 2:30, so we have about six, seven minutes. We'll take a quick break and start up here at 2:30.

[00:49:37] [BREAK]

KOLTERMAN: [00:59:40] So the next thing up is Metro, Curt Simon, if he'd like to come forward and speak please. This hearing is to talk about the 2018 underfunded plan plans. We will have seven different plans that will be-- eight actually that will be discussed briefly this afternoon. We're going to start just in the essence of time, so Curt spell your name and thank you for your report.

CURT SIMON: [01:00:19] Thank you. Curt Simon, C-u-r-t S-i-m-o-n, I'm the executive director at Metro Transit, 2222 Cuming Street, Omaha, Nebraska 68102. And I wanted, if I could, to explain some of the variances in our LB759 report. I thought that might be the easiest way to proceed and some positive steps that have occurred between the last time I was here and today. So if you note on item 1a, funding status improved by six points between last year and this year. That's in large part because of a fairly robust return on investment that you see in 1c of 13.35 percent. However, it also is a result of changes in contributions by both the employer and the employee during the same one-year period of time where the employer moved their percentage from 6.5 percent to 7.5 percent and the employees move there from 6 percent to 7 percent. You might note that those returns also occurred-- if you look at item 1b, we've been very-- what we think is very conservative as it pertains to our assumed return of investment. You'll note that in 2013 it was 7.5 percent and we've reduced it throughout several years up until 2018 where we're assuming a 6.75 percent return on investment, which we think is much more conservative. It's a fairly mature plan that we have there. Other notable changes to the plan that occurred during the last year appear on item 6 on the second page. Most notably, we change the plan document to indicate that full retirement age would be at such time as that employee reached full retirement for the purposes of receiving Social Security. Prior to that it was age 65 was considered for retirement. We also tiered the plan for employees. Effective August 31, 2017, we tiered it based upon years of service as opposed to straight out 1.4 percent benefit formula that it was heretofore. In addition to that, we contributed a-- the company contributed 1 percent of wages lump sum to the plan in 2016 in order to bolster the plan. The current collective bargaining agreement runs through 2019, at which time we'll be looking at what the results are. We're on a calendar year as it pertains to our actuarial being done, so our next actuarial will be January 1, 2019. So we'll be looking at that very seriously to see what we need to do with working with our bargaining unit to continue to keep this in line. We're pretty confident that we're making the right positive moves together to get there. Are there any questions?

KOLTERMAN: [01:03:01] Just a general comment. If you keep this up you won't have to be back next year maybe.

CURT SIMON: [01:03:10] Well, I do love coming down and seeing you but--

KOLTERMAN: [01:03:16] I don't have any questions. Does anybody have any questions?

CURT SIMON: [01:03:19] Thank you.

KOLTERMAN: [01:03:20] I appreciate your time. Thank you.

CURT SIMON: [01:03:21] Thank you.

KOLTERMAN: [01:03:26] Okay, next we have Dr. Logan and Dave Kramer, OPS on behalf of OSERS.

CHERYL LOGAN: [01:03:49] Good afternoon. Senator Kolterman and members of the Retirement Committee, my name is Cheryl Logan, C-h-e-r-y-l, Logan, L-o-g-a-n, I am superintendent of Omaha Public Schools. While I have met several of you individually, this is my first chance to testify before the legislative committee. I thank you for the opportunity. With me is David Kramer who is outside legal counsel to OPS. He has been involved with OSERS for several years and has the technical expertise in case you have detailed questions. As you may know, I was hired by the Omaha Public Schools in January and started as superintendent on July 1. While I was still back east, through the magic of technology I was able to watch events on-line including OPS board meetings and legislative proceedings. I was very much aware of the OSERS proceedings. I was very much aware of the OSERS funding issue and watched broad debate on LB548. Of course, you will remember that LB548 would have authorized pension obligation bonds to address the shortfall. The Legislature decided against that option and we have moved on from it. Since arriving in Nebraska, OSERS has been a top priority. I have had discussions with board members about it and I can assure you that the OPS board shares my concern with OSERS funding and its serious impact on the budget. This fiscal year we paid our ARC on a timely basis on July 11. We understand that this is our obligation. We also understand that it has a significant impact on our budget. We can continue to seek ways to mitigate that impact and therefore impacting our ability to deliver service to our 53,300 students. To that end I have had the opportunity to meet with Senator Kolterman and committee legal counsel and hope to continue to work closely with this committee. OSERS does not only affect only OPS. Many others are impacted, including current teachers and noncertificated employees, our retirees, administrators, students, and OSERS trustees. My view is that any resolution to OSERS funding must involve collaboration among those impacted. To that end OPS invited various stakeholders to participate in a series of meetings hoping to arrive at consensus solutions. These meetings have included OSERS, OEA, which is Omaha Educators Association, Nebraska State Education Association, SEIU, retirees, our administrators group, and GNSA. We have engaged an outside facilitator to guide the discussions. We believe that all participants understand that this will be a difficult process which will include some very tough decisions. We also believe that all stakeholders are participating in a good faith effort to reach consensus. We have already agreed in writing that any resolution impact all constituencies equally. It is my hope that our group can find consensus agreement that will protect the interest of all stakeholders to the fullest extent possible. But most importantly served are this-- importantly the students that all of us serve. As the process continues we will keep Senator Kolterman and this committee apprised of our progress. Thank you for the opportunity to speak today and I will be happy to answer any questions that you may have. I will defer technical questions to Mr. Kramer.

KOLTERMAN: [01:07:20] Do we have any questions? Dr. Logan, I have just a couple of questions. I guess my first question would be, you know we looked at several options a year ago and unfortunately you weren't here yet, but is that still an ongoing process? Are you still looking at other funding options other than through your PRISM work?

CHERYL LOGAN: [01:07:46] We are looking at everything. We just began our work together as a group and we've had two-- OSERS has had two separate meetings where they have brought in experts where, for example, we met with-- on-line via the magic of on-line-- on an on-line meeting we met with a Minnesota group as they worked through their issues in 2010 and 2016 to kind of learn about some of the things that they went through and how they formed a coalition and were able to keep that coalition together. One of the things that I spoke about earlier with us all signing an agreement saying that we were going to agree that we will all be impacted equally was some-- one of the things that we adopted from the work that we saw in Minnesota. Just getting everybody to the table has been a lift and hopefully moving forward we can-- I'm confident that we can keep our coalition together. I do believe that everyone there is making a good faith effort and we are starting to look at several different things that could help us with our unfunded liability.

KOLTERMAN: [01:08:59] Okay. Senator Groene, you have a question?

GROENE: [01:09:00] Thank you, Chairman. Yes. I forget what school district you came from.

CHERYL LOGAN: [01:09:06] I was in Philadelphia.

GROENE: [01:09:07] And you were the superintendent?

CHERYL LOGAN: [01:09:09] No, I was the chief academic officer.

GROENE: [01:09:11] So you weren't involved-- just looking what experience you have. What was the retirement situation where you came from? Was it troubled, too, like most?

CHERYL LOGAN: [01:09:22] In the Commonwealth of Pennsylvania?

GROENE: [01:09:23] Yes.

CHERYL LOGAN: [01:09:23] Yes, very much so. Yes.

GROENE: [01:09:25] So you've seen this before?

CHERYL LOGAN: [01:09:27] I have, yes.

GROENE: [01:09:27] And you've been involved? Have they done anything with theirs or are they just kicking the can down the road?

CHERYL LOGAN: [01:09:34] I don't believe that they're kicking the can down the road. They did several things, especially for folks who were new coming on board and changing the way that the benefits were structured. So their resolutions and the Commonwealth were much more weighted on new employees, increasing the amount that folks paid into the system. Now, there is a difference, that there's only one-- it was only one system for the entire state. Making sure that all districts made their payments, so adding some controls and to make sure that all districts paid into their 500 districts in the state of Pennsylvania, the Commonwealth of Pennsylvania and making sure all paid in in a timely fashion.

GROENE: [01:10:22] Thank you.

CHERYL LOGAN: [01:10:23] You're welcome.

GROENE: [01:10:25] Senator Stinner.

STINNER: [01:10:34] Welcome.

CHERYL LOGAN: [01:10:34] Thank you, Senator Stinner.

STINNER: [01:10:34] There is-- in this report there's currently $131 million of deferred, unrecognized investment [INAUDIBLE] by 11 percent of the market value and because of smoothing techniques five years we need to offset that by investment gains. Any feel for where you're at with that in terms of having to fund an additional contribution should that happen?

CHERYL LOGAN: [01:10:59] So one of the things that we are doing in our own budget is looking at sustainability, realizing that we're going to have to make that payment. We will have-- we are working right now on our budget for 1920 [SIC]. We'll have a rough cut budget by the time we leave for winter break, which is the 21st, that includes the ARC payment that we anticipate making and any potential changes in our budget structure which really are our fixed costs, looking at our fixed costs so that-- our fixed recurring costs so that we are ready to act and to adopt a budget that will allow us to make our payment. In addition, we also are looking at our fund balance. We have a obligation to have a fund balance between 10 and 20 percent. We are trying to make sure our fund balance never dips below 15, actually, and that would like to keep it closer to 18 percent on balance is a rainy day fund, and it rains. And so we are trying to make sure that we-- because that is another way for us to be sure that we can make a payment. For every 1 percent of fund balance represents about $6 million dollars. And so we have-- are looking at making sure that we keep that fund balance at a healthy and in a healthy position realizing that there is variability in the ARC payment based on returns.

STINNER: [01:12:32] Okay. And the fund balance is actually your cash reserve balance and you're carrying, if the computation is right, about [INAUDIBLE] to carry about a $30 million cushion in your budget. I think that's right.

CHERYL LOGAN: [01:12:47] Well, it could be as high as that, but it depends on if it's between 15 and 20. Yes that's correct.

STINNER: [01:12:52] Okay. And that should be enough to take care of this contingency should it so happen?

CHERYL LOGAN: [01:12:58] Well, it's a lot of-- because we're counting on we're factoring in what we project our state aid to be and many other things in terms of that, so there's variability in that as well. But we feel like we-- it was going to be difficult for us to maintain this payment, but we are going to structure our budget in a way that will allow us to do it to the best of our ability.

STINNER: [01:13:33] Okay. And you are highly reliant on state aid. Do you know that percentage?

CHERYL LOGAN: [01:13:38] I do not. I apologize. I did not know the percentage.

STINNER: [01:13:40] Somewhere along the line I think it's like 40 to 44 percent. What is it, Mike?

GROENE: [01:13:43] I think it's over 50, isn't it?

CHERYL LOGAN: [01:13:49] I'll find out the exact number. I'm not sure if anybody on our team knows the exact number, but I'm not sure of the exact number so I don't want to misspeak.

STINNER: [01:13:56] OK. So you are highly reliant on that. You do have a considerable amount of debt. You have this contingent liability out there. And you're trying to build a cash cushion or cash reserve that would accommodate some of these contingencies. Is that--

CHERYL LOGAN: [01:14:11] Well, we need to be prepared so that we can run our district for our students, yes.

STINNER: [01:14:15] OK. I noticed in 2017 we did-- or actually, effective July 2018 we created a new tier of the retirement or the rule of 85 from 55 to 60. Is there any other modifications that you can see that we can do that would reduce some of this?

CHERYL LOGAN: [01:14:37] Those are some of the bills, are some of the things that we're currently considering and studying. So the group that I spoke with you about a couple months ago, that would be some of the things that we'll take under consideration. One of the things that we don't want to do is become that divergent from the NPERS system. And so we have to consider any moves that we may be harmonious with the NPERS system.

STINNER: [01:15:05] OK. That's all. Thank you very much.

KOLTERMAN: [01:15:06] Senator Groene.

GROENE: [01:15:09] I mean, that's all in this new process, but have you looked at levy override vote? Wouldn't it be more reliable if you went to the people and said, we're going to go three cents and it's dedicated to this, to our problem with our retirement and then not worry about the fluctuations of state aid versus--

CHERYL LOGAN: [01:15:30] We have-- that is something that we will likely consider.

GROENE: [01:15:34] I mean, this school bond election, you could probably sell that if you made a commitment that it was-- that's where the money was going just to. Make it more reliable.

CHERYL LOGAN: [01:15:44] Thank you. Okay, thank you.

KOLTERMAN: [01:15:46] Dr. Logan, I have just a couple of questions for you. I know you-- I believe the school board, OPS, is working with the-- under the auspices of PRISM. Did you hire them to work with you to follow a model?

CHERYL LOGAN: [01:16:02] No. That sounds like OSERS. I'm not sure. I don't know if Cecilia [PHONETIC] is here.

KOLTERMAN: [01:16:05] Well, you have a working group.

CHERYL LOGAN: [01:16:08] Right.

KIOLTERMAN: [01:16:08] And then OSERS also has a sustainability working group. Is that not correct?

CHERYL LOGAN: [01:16:13] Yeah, they have a group and we have a group. Our consultant, yes, she worked-- that's the name of her company. I'm sorry. So I don't-- I didn't really associate her with the company, I just think about her. Yeah.

KOLTERMAN: [01:16:23] How are those two organizations coming together? Are you working hand-in-hand?

CHERYL LOGAN: [01:16:27] Well, the-- I will say that one of the things that we did at our last meeting with our facilitator, who works for PRISM, I'm so sorry, was to have OSERS do a presentation of the work that we-- what we learned from Minnesota. So that is the way that we have them there. They are a crucial piece of the group. I am a ex officio member of the board-- of OSERS' board, so I also attend those meetings and bring that information back to the board. And actually, those meetings are open to the public. So each of the individuals who is represented actually usually sends a representative to the OSERS workshops, that's where they're called, as well, so they're also very well aware. So SEIU, OEA, etcetera send a rep to that workshop. That rep is also usually the person who also comes as part of this collaborative group that we put together.

KOLTERMAN: [01:17:31] Okay.

CHERYL LOGAN: [01:17:31] We do recognize that-- I'm sorry.

KOLTERMAN: [01:17:33] No, go ahead.

CHERYL LOGAN: [01:17:33] I mean, we do recognize that having OSERS as a fully participating member is crucial to moving this forward.

KOLTERMAN: [01:17:40] Just a couple of other questions. Right now you make your ARC payments, and you made it in July, have you ever given any consideration to doing those on a monthly or quarterly, semiannual basis which would, in essence, help your dollar cost average into the plan, into the investments.

CHERYL LOGAN: [01:18:04] It's something that we may also consider. I have our interim CFO, chief financial officer, Ms. Courtney Bird, is looking at that and trying to make a decision on whether to make a recommendation to the Board of Ed if we should go in that direction.

KOLTERMAN: [01:18:22] And then one last question from me is, in the past couple of years there's been some interest in-- OPS has an interest in having the PERB board manage the plan or NPERS manage the plan. Do you still have an interest in that?

CHERYL LOGAN: [01:18:39] Well, the Nebraska Investment Council does the investments now. And I would say, generally, from the Board of Education there is an interest.

KOLTERMAN: [01:18:47] Okay. Thank you. Any other questions? Thank you very much.

CHERYL LOGAN: [01:18:54] Thank you. I appreciate it.

KOLTERMAN: [01:18:56] I appreciate you coming.

CHERYL LOGAN: [01:18:56] No problem.

KOLTERMAN: [01:18:57] We'll continue to dialogue.

CHERYL LOGAN: [01:18:58] I'm sure we will. Thank you.

KOLTERMAN: [01:18:59] Mr. in den Bosch, which one is this? This will be the Omaha Civilian Plan.

BERNARD in den BOSCH: [01:19:39] Possibly more information, maybe too much.

KOLTERMAN: [01:19:44] You guys killed another tree, huh? Actually, I assume you're just going to go from the Omaha Civilian right into the Omaha Police and Fire.

BERNARD in den BOSCH: [01:19:58] If that's OK.

KOLTERMAN: [01:19:59] Thank you.

BERNARD in den BOSCH: [01:20:00] Obviously, you'll tell us when you're done with one of those and one will go on with the other.

KOLTERMAN: [01:20:16] Okay. Go ahead and start off.

BERNARD in den BOSCH: [01:20:20] I'll go. Bernard in den Bosch, first name, B-e-r-n-a-r-d, last name is three words, first word, i-n, second word, d-e-n, third word, B-o-s-c-h, deputy city attorney for the city of Omaha.

PATRICE BECKHAM: [01:20:37] Patrice Beckham, P-a-t-r-i-c-e, Beckham, B-e-c-k-h-a-m, with Cavanaugh Macdonald, the retained actuary for the system.

BERNARD in den BOSCH: [01:20:45] And what I think we've decided to do is we've described the plan that we've had in place. [INAUDIBLE] and do a presentation, a walk-through of a lot of it and then if there's any questions or any additional things we'll obviously both try to help you with as many answers as we can, hopefully.

PATRICE BECKHAM: [01:21:05] Right. Glad to be back. And we kind of put a presentation together to think this may be a little more cohesive. And we won't take a lot of time. We'll try to keep this moving, because I know you have plenty of folks to listen to, but think a little bit of background is helpful. On page 2, just a reminder that the Omaha city ordinance requires essentially a 50-50 split of costs between the city and the members. The benefit provisions, including contribution rates, are negotiated in the labor contracts so they don't move automatically. The contribution rates are set until there's a new labor agreement in place. And this system includes employees that are covered by several different bargaining groups and there aren't any anticipated pension changes, I think, for '18 and beyond at this point in time. Page 3. I think given that we're talking in 2018 results it's good to sort of look back and remember the history for both this plan and the police or fire plan. The funding outlook after the Great Recession in 2008-09 was pretty grim. The plan was projected to be depleted, run out of money in about 20 years or so. So there were significant changes made to both benefit provisions and contributions at the end of 2014 beginning in 2015. Those included a lot of the similar things that were occurring across the United States for public plans' later retirement age. The benefit accrual was lower. It was two and a quarter times years of service. It was lowered to 1.9 for future years of service only. Benefits moved from a high one-year average to high five, with some phase-ins there of disability was significantly decreased.

City increased their contribution rate by 7 percent and then, pretty importantly for employees hired on or after March 1 of 2015, they are now covered by a cash balance plan which this group is familiar with that because Nebraska has a cash balance plan for both state and county employees. It's sharing the preretirement investment risk directly with the employees, because there is a guaranteed interest credit of 4 percent but the additional what we call dividend, additional credit, interest credit, is based on actual returns, not assumed. So if actual returns are lower, essentially account balances are lower, benefits are lower.

BERNARD in den BOSCH: [01:23:49] And, ironically, in approximately the three years we've had a cash balance plan we've had approximately a 29 percent turnover in employees. So roughly 29 percent of our employees are actually now in the cash balance plan.

PATRICE BECKHAM: [01:24:00] Page 4, just a little bit again historical or background information on the funded ratio, the funded status. You can see in 2009 about 63 percent funded. And, you know, the sharp drop is, again, asset smoothing. We're recognizing the investment return in 2008 over this period. You can see kind of a bounce back in 2015. That was a result of the changes, the benefit changes in the labor contracts that decrease the actuarial accrued liability. And then there's a decrease in 2018. We'll talk about a little bit more detail; it's due to assumption changes. Page 5, just comparing the blue bars of the actuarial required contribution, and the red line is the actual employer contribution. And you can see for a period from 2009 through 2015 there was less money actually going in than what was actuarially needed to move the plan towards full funding on the schedule that was in place. The last couple of years there's actually been a little more coming in on the actual contributions than the actuarial rate, so that's a significant change. On page 6 we talked earlier about the normal cost rate, how much needs to be paid each year to cover the benefits for active members. So what this is showing you very clearly is that the changes in 2015 lowered the costs of this plan from about 14 to 10 percent of pay. So that's a significant change in the value of the benefits. And we don't get all of that immediately, okay, because this is the ongoing costs for actives. But when the same percent of payroll is coming in if we only need 10 percent to fund the benefits for current people we'd have more money to pay off the unfunded liability. And over time, as more and more people are in the lower cost plan we have additional dollars to help fund the unfunded liability. So moving to the 2018 valuation, according to state statute an experience study was performed in 2017, results presented to the board in 2018. The board did take action, adopted all of the recommended assumptions. Most significantly, there was a reduction in the inflation assumption from 3.25 to 2.5. That's a pretty big change in one movement. That impacted the other economic assumptions. Most importantly, investment return assumption was reduced from 8 percent to 7.5. We had to sort of weigh wages in the general economy move. That's part of the individual salary increase assumption. That was lowered from 4 to 3.10. And then payroll growth, again, how covered payroll in aggregate will increase over time was reduced from 4 to 3. And, again, now we see with a cash balance plan if we assume the returns are going to be lower, we assume the interest crediting rate will be lower as well. That's that kind of risk sharing. We also adopted the most recent mortality table RP-2014 and use a one-year setback for females. So a 65-year-old female is assumed to exhibit the mortality of 64, better than the table, and that did have a pretty significant impact for the system's funding as well. On page 8 you can see the 2018 valuation results. If we had used the old assumptions, those being the set of assumptions used in the 2017 valuation, compared to the new assumptions which were what the board adopted. Again, you can see the increase in actuarial liability was $27.5 million flows straight through to the unfunded liability, so it would have been about $196 million, but instead it's $223 million. And that's simply due to the change in the assumptions. The funded ratio decline would have been 56 percent, decline of 53, and then the very bottom line, the very last row of this table, the contribution margin this year would have been 1.65 percent and instead there is a contribution shortfall of 2.21 percent. So the change in assumptions impacted the contribution rate by almost 3.9 percent of pay, a very, very significant change. We make those changes because we think that's a better estimate of what the future holds. We can't control what the market-- rate of return on market is or how long people are going to live. All we're trying to do is come up with the best estimate of the future that we can gather at this point in time. Page 9, you can kind of see the last three valuations. Again, 2018 is going to look worse than it really was because of the assumption change. It looks like the unfunded liability went up from 2017; it actually would have gone down except for the assumption change. But we've-- actually, I think-- the way I like to look at it is we've improved the probability of meeting our assumptions and therefore have kind of a better track to expect it to follow those projections going forward.

KOLTERMAN: [01:29:51] Doesn't that also take into effect the change in mortality?

PATRICE BECKHAM: [01:29:55] Yes. All assumptions, yes, exactly. And then you can see in the '16, '17 valuations again we had a contribution margin. This year we've got a shortfall. Membership information on page 10. Really, the important piece of information here is the very first line, active members. In the '18 valuation we had 1,222. Look to the far right, under 2015 you can see we only had 1,143 at that point in time. As there are more members, it has a positive impact on the funding because we're collecting a fixed contribution rate. More people, more payroll, more dollars helps fund their unfunded liability more quickly. Page 11, kind of comes back to Mr. in den Bosch's comment about the cash balance plan. The red bars are members in the cash balance plan. The blue bars are those in the legacy, the final pay plan. We're up to 27 percent of the active membership in the '18 valuation is in the cash balance plan. That's important because that liability will grow more slowly and we'll react to actual experiences, different than expected, in a more favorable way than the final pay plan. But no doubt about it, most the liability is still with the legacy plan. Page 12 is a comparison of market and actuarial. We did sort of flip, January 1 of '17 actuarial was higher than market deferred losses. January '18 now market is higher than actuarial by $3 million. You can see the return on market was almost 13 percent for 2017, on an actuarial smooth basis was 8.5. So we did have a gain on assets. And then the next page is just a glimpse of the actual liability by group. And the thing I like about this chart is it makes it very clear there's a lot of liability for inactive members, which essentially can't change. So it's the blue part of the pie is people who are currently receiving benefits, including the red pieces for disabled members and the yellow for those who are active, entitled to a benefit in the future. So, really, we've got about 25 percent of the pie for active members, which is when we went through the benefit changes and reform in 2014 really only got 25 percent of the pie that you can modify at all to impact the funding. And that's why it's very hard to move funding from 55 percent to 80 percent in one fell swoop. It just can't happen absent a really large influx of money. Page 14, change in the unfunded liability. The only thing I want to point out on this page, again, the assumption change under 2017, $27 million. You won't see any other numbers on any of these years anywhere close to that. That was a very, very significant [INAUDIBLE] for the retirement system. Page 15. A little bit more detail on the pieces of the contribution. You can see ongoing it costs about 10 percent of pay to pay for current actives and 21 percent of pay to pay off the system's unfunded liability. And that's really the challenge.

BERNARD in den BOSCH: [01:33:39] And I'll just hit on one thing here. The first point that was made in the presentation is, is that the city and the employees' contributions are to be roughly equal. When the changes were made in 2014 to go into effect in 2015, the employees made their contribution by reduction in benefits and the city made theirs by an increase in cash. That's why you see the disparity, but there was an actuarial amount placed on that reduction in benefits to ensure that the employees and the city were both contributing similar or the same amount or to try to help the, obviously, the huge problem that existed, the tremendous problem that existed.

PATRICE BECKHAM: [01:34:23] Great point. And just to clarify, just because there's a contribution shortfall because the money that's coming in right now in this year is less than the actuarial rate doesn't mean that the system will never be fully funded. We are a lot of moving parts here and the only way we really get insight into that is do a projection similar to what we-- what I showed you for the state's three retirement systems earlier. And I'm going to in the interest of time just ask you to move to page 18. Again, this is assuming all assumptions are met and actually nothing else changes. There's no change in the benefit structure, there's no change in the number of active members. And so what we see is that by 2048, so in 30 years, the system gets to 100 percent funding. So it doesn't-- it's a shortfall because it isn't going to hit its targeted full funding date, but the money keeps coming in and eventually it gets to 100 percent funding. It is worth noting though that, you know, it's about 2034, 2035 before the funded ratio is above 60 percent. So kind of treading water here for a little bit and then as, again, more and more people are in the cash balance plan and that cost goes down, we have more money to throw to pay off our debt. We're kind of reversing that and then would, you know, I think pretty rapidly move from 60 to 80 in about 10 years. So while some might look at this and think it doesn't look that good, I would just remind the committee that in 2009 that was projected to be depleted about 2029. This is, you know, far-- a great improvement compared to that. So we need to think keep in mind where this system has been and the challenges with everything being negotiated. Any questions?

KOLTERMAN: [01:36:30] Senator.

STINNER: [01:36:30] I'm going to referred to page 11, which is active members and then cash balance versus final pay chart. If I understand this right, it's grown at about a 9 percent clip of people coming in or the turnover rate is around 9 percent. Not all of that 9 percent I know is going to be retirement-age people. Tell me what that demographic looks like, that 9 percent that's turning over. And it looks like maybe a hundred people or better per year. Are 50 percent of those taking away retirement benefits or are they early folks that just leave because there's opportunities of some other place that won't be in your--

BERNARD in den BOSCH: [01:37:27] I think you're probably right because I think historically you would expect that number to be 90 percent or something. I think you're finding probably turnover in a greater ratio of people that are leaving early. Obviously, the economy is strong. There's opportunities for other jobs so we do see some people leaving because they get--

STINNER: [01:37:46] And you cut your benefits.

BERNARD in den BOSCH: [01:37:47] And we've certainly reduced our-- not only our pension benefits and our pension. Ten percent right out of the top makes it difficult for employees who are making $15 or $16 an hour, which is what a significant percentage of the people in the civilian system are here. Blue collar workers who aren't necessarily making a lot, so a lot of those folks have a tendency to leave or pursue other opportunities. So I think you're 50 percent number is probably fairly accurate.

STINNER: [01:38:20] So it-- actually in two years you'd be at 45 percent if you continue to go at 9. So half of it's there. How does that-- how do you figure that into your calculation?

PATRICE BECKHAM: [01:38:31] It's amazing what computers can do.

STINNER: [01:38:34] I'm saying, shouldn't you narrow that gap a little quicker?

PATRICE BECKHAM: [01:38:37] Well, these projections-- well, not this one, but the one that you've looked at at the end had all the actuarial assumptions are met. And we have assumptions that people will leave before they're retirement eligible. We have assumptions that once they're eligible how many are going to leave and when and all that plays out. And when those bodies leave, the model brings in new people. And the new people are in the cash balance plans. So we actually, through the modeling we could go through and get sort of a breakdown each year of what the future populations look like. It's a little deceiving in the first few years because it's going to grow faster and then it's going to kind of slow down because some of these people are going to leave; current cash balance people leave and be replaced by people in the cash balance plan.

STINNER: [01:39:25] Right.

PATRICE BECKHAM: [01:39:25] Because your highest turnover is probably your first five years. But it-- over time we could actually model out if that's something you want to see next year.

STINNER: [01:39:32] I don't. I'm just trying to figure out--

______________________: [01:39:35] I'd like to see it.

PATRICE BECKHAM: [01:39:35] Yeah, you might want to see it.

STINNER: [01:39:35] If we have included this, I mean, it looks like, like I said, in two years 50 percent of your whole squad that's working is going to be covered on your cash balance which should relieve some of the pressure from and actually close that gap, that funding gap quicker. But you say you have put that into your assumptions?

PATRICE BECKHAM: [01:39:58] Yeah, it's in the very last page, those numbers that you saw, it is in there.

STINNER: [01:40:04] OK.

PATRICE BECKHAM: [01:40:05] I do think it's going to slow down a little bit because, you know, in your first year every single person that leaves goes into the cash balance plan. But think about ten years from now a lot of those people--

STINNER: [01:40:16] You do a lookback every year anyway and change--

PATRICE BECKHAM: [01:40:18] We capture everything that happens every year. And we have had a little bit of a growth in the number of active members, but even when half of the active population is in the cash balance plan, most of the liability is in the old plan because those are the people close to retirement.

STINNER: [01:40:35] I get that. Right.

PATRICE BECKHAM: [01:40:37] Or who have already retired.

KOLTERMAN: [01:40:39] Senator Groene, do you have a question?

GROENE: [01:40:41] Yes, Chairman. On page 10 you've got active members. The membership information is that on the defined benefit plan or the cash balance or combined?

PATRICE BECKHAM: [01:40:53] Combined.

GROENE: [01:40:53] So the money is blended?

PATRICE BECKHAM: [01:40:54] Yes, it's one plan. Do you want to answer instead of me? It's one plan with two benefit structures. So just like, if you think about your school retirement system--

GROENE: [01:41:02] Tiers.

PATRICE BECKHAM: [01:41:02] -- you have tiers. This is a tier, it's just the second tier is the cash balance plan. It's still a defined benefit plan.

GROENE: [01:41:11] And the payroll deduction is the same for both members?

PATRICE BECKHAM: [01:41:14] Yes.

GROENE: [01:41:15] So the new members are having to fund the old retirees is what you're saying.

BERNARD in den BOSCH: [01:41:22] The combination of the new members and the city contribution, because obviously you have-- the benefit the employee is getting is still greater than what they're putting in. But I would say that certainly the percentage of the city's contribution or whatever, there's more of the money putting in this is funding the old.

GROENE: [01:41:44] So you'd get more people on the cash balance, it costs you less, the city less payment. But what you're saying is, as you get more of those you're still going to budget the same amount you did. And that extra money is going to go basically to an ARC. And that's how you're going to catch up? Is that what you're saying?

PATRICE BECKHAM: [01:42:06] Yeah, to pay the unfunded liability. Right.

GROENE: [01:42:06] All right. You'd never really explained where the extra money was coming from--

PATRICE BECKHAM: [01:42:11] Oh, I'm sorry.

GROENE: [01:42:11] -- for them to catch up, but--

PATRICE BECKHAM: [01:42:13] Yeah. And It's important to remember for these plans is different than the state retirement systems where those are actuarially funded. So whatever the actuarial contribution rate is that's what goes in or more in the schools' situation. Here the rates are fixed, so in a way-- I don't want to say it doesn't matter, but that's the actuarial contribution is not directly impacting the money going into the plan, which is why the projections are so valuable because the projection says given your current funding how long will it take before you're fully funded, if ever. Back in 2009, the answer was not only never but the fund is depleted in 20 years. So it's a very different funding dynamic here. And you'll see the same thing with police and fire.

GROENE: [01:43:01] And do you do that on purpose, try to make sure you hire older people at 36 years of age so they have a less payment at the end?

BERNARD in den BOSCH: [01:43:10] [INAUDIBLE] You appreciate-- this group is a group that includes not only blue collar workers I described before, it also includes the white collar managers and professionals, it includes professionals in that it includes assistant directors and attorneys and accountants who generally are longer before-- they take longer to be educated and need more experience before they can be hired, so it's a blended group, a very diverse group of employees.

KOLTERMAN: [01:43:44] Any other questions? We're going to close that and we're going to move on to police and fire.

BERNARD in den BOSCH: [01:44:00] And I assume you want us to introduce ourselves again.

GROENE: [01:44:02] No, you're all right. Just keep going.

PATRICE BECKHAM: [01:44:40] So format and content very similar to what we just went through for the employees. So this is a city of Omaha Police and Fire Retirement System. Again, on page 2, by city ordinance there's a 50-50 split of the costs between the city and members. Benefit provisions and contribution rates are negotiated in labor contracts. The system includes employees from four different bargaining groups. Two have agreements in place through the end of 2018, I believe that's fire. And two of the police union, police management actually having agreements that are in place through 2020. Again, significant changes negotiated to the benefit provisions and contributions in October of 2010 for the police union and December 2012 for the fire union. As Bernard mentioned earlier for the civilians plan the 50-50 allocation of costs the city can only put in money. The members took benefit reductions and there were some increases in contributions and that's how they equaled the 50/50 split. Again, we saw similar trends. Later retirement age requiring 30-years of service for the maximum benefit instead of 25. There had been kind of an issue with the system was a high one-year final [INAUDIBLE] salary with the additional compensation paid in that final year. This Career Overtime Average, COTA is kind of what we call it, was put in place to kind of smooth that out and get away from that spiking in the pension amounts.

BERNARD in den BOSCH: [01:46:27] And that was for active employees of the-- new hires, actually their pension is based solely on their base pay.

PATRICE BECKHAM: [01:46:37] Right. And then for fire members, a maximum benefit of 65 percent instead of 75 percent and then, of course, increased contributions from the city. Page 4, you can kind of see the funding change in the funded ratio over--

KOLTERMAN: [01:46:54] Patty, before you go on can I ask a question about that page 3? Am I correct, you set up a second tier for all employees or did existing employees negotiate reduced benefits?

BERNARD in den BOSCH: [01:47:18] So effectively what they did is-- yes, existing employees negotiated reduced benefits and I would argue will probably set up two different tiers, one tier for police and then another tier for fire. There were some difference in when it went to into effect and how the changes occurred that have some differences between the two. So police negotiated a second tier. Fire negotiated a tier that's slightly different, which is why you have the lower maximum benefit. But yeah, the city-- you have the contributions before that occurred. There was a slight-- the city was paying a little bit more as a result of a couple of lawsuits that were decided back in the' 70s. But then when it came to the reform that occurred in late 2000, 2010, and in late 2012 there were-- this is what the city is putting in and the unions-- the employees match that through reduction in benefits, some for current and of course a number for future employees as well.

KOLTERMAN: [01:48:19] So I just want to make sure I'm understanding that correctly. So you got a fireman that's been out here for 25 years and he's getting close to retirement. He was getting his based on 70 percent or 75 percent of their-- I guess that would be police, but does everybody then go to that 65 percent or does--

BERNARD in den BOSCH: [01:48:45] No, that was just for new hires.

KOLTERMAN: [01:48:46] Just for new hires.

BERNARD in den BOSCH: [01:48:47] When this was implemented for fire, at that point in time you had 25 years in and age 45. Those things changed because they moved it up.

KOLTERMAN: [01:48:58] It changed, but not for-- just for the new hires.

BERNARD in den BOSCH: [01:49:01] It changed somewhat for active and there were some people who might have been close to retirement that it didn't change much. It changed for existing people and then, obviously, it changed much more dramatically for new hires.

KOLTERMAN: [01:49:21] Okay. This process--

PATRICE BECKHAM: [01:49:23] Yeah. It's kind of complicated because dependent on their years of service at the time of their contract.

BERNARD in den BOSCH: [01:49:28] And If you ever had the specifics--

KOLTERMAN: [01:49:30] No, but it was all negotiated with the--

BERNARD in den BOSCH: [01:49:34] It was.

PATRICE BECKHAM: [01:49:35] But the current members did, essentially, take a reduction in benefits. It was more material for those further from retirement. Is that fair to say? And then new-- the new hires generally had the lowest cost tier, but the current members also took a reduction. All right. So I think we're on page 4. And, again, you can see the funded ratio. I mean, don't underestimate. It went from about 42 percent funded in 2010 to 52 percent, a 10 percent move in the funded ratio over a ten-year period. It's pretty significant to the positive, especially, you know, this plan had the same trend of going down and running out of money in 20 years. Page 5, similar to what you observed with the civilian plan that things are now close to an actuarial amount going in. Why is that important? Well, it means that we're closer or more likely to hit our funding target of reaching full funding and the amortization period that's set by the board. And on page 6, again, I like these graphs. The normal cost rate. So this is the value of benefits for active members. Okay, so in 2009 they were all pretty similar. Benefit structure was probably about a 29 percent of pay plan, not covered by Social Security. You could see that the decline in 2011. That was when the police contract was first reflected in the valuation. So we've got police and fire combined here. So you can see a pretty significant drop. And then you see another significant drop in 2013 when the fire contract is reflected in the normal cost. So those changes didn't have any new hires in there. Those were current active members. And it, you know, decreased the ongoing costs of the plan. Again, by decreasing the ongoing cost it frees up money to pay off the unfunded liability. Experience study for police and fire the board did adopt all of the recommended changes. Again, same change in inflation from 3.25 to 2.5. The investment return assumption was lowered from 8 to 7.75. These plans have different boards, different asset allocations, and that resulted in different expected returns over both the short and longer term. And the expected returns for police and fire is higher and that's why it's 7.75 compared to 7.5 for the employees' plan. Again, the general wage increase would decrease from 4 to 3.25. That impacts individual salary increase projections, which impacts projected benefits. No change in the mortality assumption for this plan. The actual experience was pretty darn close to what was anticipated by the mortality table. We're using the RP-2000 mortality table. It sounds really old, but it's not because we are projecting mortality improvements in the future. So we've already projected it from 2000 to 2018 and we're projecting improvements beyond that. And that's why I think the actual experience is pretty close to what we observed. Page 8, actuarial methods. For amortization they actually moved to methods similar to what you use, what's in state statute for amortizing the unfunded liability where there's sort of layers or pieces of unfunded liability. And then the police union contract had an increase in contributions by both the members and the city of 7.5 percent for 2018 through 2020. And so that's first reflected in the '18 valuations. The next slide you can see the impact of the assumption change . It increased the actuarial liability by $41 million. That flows straight through to the unfunded actuarial liability, so we would have been at $608 million, instead were at $649 million. The unfunded ratio would have been about 54, knocked it down to 52. And, again, we would have had a contribution margin of 1.84 percent. That swung it to a contribution shortfall of 1.91 percent, 3.8 percent of pay. So you can see small changes [INAUDIBLE] return assumption, pretty powerful impact when it comes to funding. And that's a little bit getting back to some of the information you had earlier in the presentation on the state system. Page 10, a lot of the same information but put kind of side by side with the previous two valuations. Again, you know, this year absent the change in assumptions we would have seen the unfunded liability go down and the funded ratio go up. We held steady at 52 percent. Again, we have a contribution shortfall. I don't think that means right now we need to be necessarily worried or making additional changes, but we need to keep an eye on that and an eye on the projections. Page 11 Is interesting, I think. This is looking at the two tiers. So Tier 2 for police are those hired after January 1, 2010, and for fire those hired after January 1, 2013, could kind of see the counts in the pie graph makes it a little easier to compare. There are, you know there's a higher percentage of tier 2 members for the police plan.

BERNARD in den BOSCH: [01:55:52] And you'd expect that because it's longer, but one of the other things that's occurring is, is we're trying to-- we've budgeted an increased number of police officers so that that number is growing because the budgeted amount of police officers is also increasing. And, quite frankly, it's supposed to be I think at 900. We're still having a hard time getting there because if you hire-- if you train 60 police officers a year and 30 retire every year you only end up with a net of 30.

PATRICE BECKHAM: [01:56:23] All right. And that growth will help from a funding standpoint as well. Slide 12 is asset values. Similar, a return of almost 15 percent on market for police and fire system resulted in a 9 percent return on actuarial that produced a gain on assets. We had a gain on liabilities. And we now have that kind of deferred investment gain, that strong return sort of flipped before market was less than actuarial, now market is greater than actuarial. Page 13. You saw the same kind of a graph before looking at kind of actives or inactives and active liability. We take all the inactive liability, it's about 65 percent of the total. The red, the true red is the active fire liability and the light blue is the active police liability and they're pretty close. Again, the police have had that lower tier in place longer, and lower benefits, lower liability. Page 14. On that far left-hand set of numbers you can see, again, the assumption changes the $41 million. That's the big driver of the results of the '18 valuation. Page 15. Again, showing you've been having what I would call a small contribution margin the last several years. The assumption change was enough to flip that to a shortfall, but it does not mean that the system will never be funded. It's just not going to make it in its scheduled time frame. And if you look at page 18, again, it's more for trend, it's not like we're saying this is exactly what's going to happen. But the idea is if the assumptions are met over the long term the system is moving to 100 percent funding and the trend is up. And that's really what we're looking for when we do these kind of projections. So at this point in time it is projected to reach 100 percent in 2046. Obviously, as every year we have favorable or unfavorable experience different than what is anticipated by the assumptions, it's going to move that date. But what we want to keep an eye on is the trend, but that's expected to go up.

KOLTERMAN: [01:58:44] So question. Pat, would you talk a little bit about the civilian plans, 7.5 percent assumed rate and police and fire are at 7.75. It seems like for some reason all of our plans, we've moved them all down to 7.75. Explain the difference between that-- 7.5, excuse me.

PATRICE BECKHAM: [01:59:20] Right. And my understanding is that all the money that's invested by the Nebraska Investment Council, the asset allocation is the same for all that money.

KOLTERMAN: [01:59:30] Correct.

PATRICE BECKHAM: [01:59:30] But here you have two separate trusts, two separate boards that have different asset allocations.

BERNARD in den BOSCH: [01:59:37] And one trust looks roughly double the size of the other because the police and fire trust is more than double as far as the assets.

KOLTERMAN: [01:59:45] Which one?

BERNARD in den BOSCH: [01:59:47] The police and fire is more than double the assets of the civilian system. It's a lot more to invest and potentially being able to get things with a higher yield.

PATRICE BECKHAM: [01:59:55] And you have-- you know, a different board has a little bit different view of risk. But asset allocation is the driver to the expected rate of return. And so that difference really did result in about a quarter of a percent difference. And in actuality, you know, based on some of the information or I know police and fire because we had more discussions there, could've made an argument to stay at 8 based on the data. It's still short term, long term. But the short term does not look as optimistic to the tune of generally it's about a 1 percent lower rate of return but longer term expectation is that it will be better. And I know that you know, we had some discussions and I think the actuarial committee had some discussions without me about whether to make that change or not, because the longer term view is that the return will be 8.8--

KOLTERMAN: [02:01:07] Good luck with that.

PATRICE BECKHAM: [02:01:08] -- compared to 7.4 in the short term. The truth of the matter is, you know, nobody knows, I mean.

KOLTERMAN: [02:01:14] Who knows is right.

PATRICE BECKHAM: [02:01:15] Who knows is right. But, you know, I really respect them because they did kind of lower the rate of return that was based on our recommendation because the maturity of the plan because of the unknown and the short term. That difference between short and long term is so significant that it feels a little more comfortable to be a little bit of the conservative side. But the numbers could have supported staying at 8.

STINNER: [02:01:47] My observation is appear that far underfunded, cut down to the 7.5 throw in a little more. Try to close the gap a little faster, that would be my guess. And then you can make your 8.8. That'll make it more-- faster.

KOLTERMAN: [02:02:03] Any other questions?

BERNARD in den BOSCH: [02:02:04] Thank you.

KOLTERMAN: [02:02:07] Well, I would just say that unlike some of these plans you're going to be coming back for a few years.

BERNARD in den BOSCH: [02:02:14] I was wishing I was in the same position as Metro Area Transit, but I didn't know if I should make such a joke. Well, thank you. And, hopefully, we didn't go into too much detail but I know you want some, so.

KOLTERMAN: [02:02:27] No, it's good. We like detail.

BERNARD in den BOSCH: [02:02:29] Thank you.

PATRICE BECKHAM: [02:02:30] Thanks.

KOLTERMAN: [02:02:30] Thank you.

BERNARD in den BOSCH: [02:02:31] Have good holidays.

KOLTERMAN: [02:02:34] Okay. Douglas County, you're up next. Mr. Lorenz, is that correct?

JOE LORENZ: [02:02:51] Yes. Good afternoon, senators. My name is Joe Lorenz, last name is spelled L-o-r-e-n-z, and I'm the Douglas County finance director. And so I'd like to give you the update on the current status of the Douglas County defined benefit plan. And I'm just going to run through basically the information on the reporting form that we provided to you. First, with a snapshot of the plan in 2018. The plan is 68 percent funded. Our assumed rate of return is 7.5 percent. The actual investment return from an actuarial sense last year was 11.4 percent. Well, from a market return it was 16.8, so you can see the effect of smoothing there on the actuarial return. The members and the employee contribution rates are 8.5 percent. It's one of those that's 50 percent funded by the county and 50 percent funded by the employees. Normal cost, 11.2, which has been pretty consistent. The actuarial ARC on the plan is $1.3 million. The actual dollars contributed, I was just looking at that today as we're about to make the year end contribution. It's going to come in at probably a little over $23.5 million. So we'll keep up what we've been doing the past few years of contributing slightly more than the ARC. So that's kind of a snapshot of the plan. Now I'll just go back a couple pages to the narrative and kind of take you through the history of the plan and how we got to where we are today. Our actuaries are Silverstone and the last valuation they performed was on January 1, 2018. And that report said the plan was 68 percent funded, had net assets on an actuarial basis of $315 million and had an unfunded actuarial liability of $148.5 million. The plan has 3,666 participants and, as I said, equal member-employer contribution rate of 8.5 percent of pay. Normal cost was $14.4 million and the ARC was 23.1 and funded a ratio increased year over year from 67.2 to 68 percent. To understand why the Douglas County DB plan is only 68 percent funded, it's important to look back at the history and the changes to the plan. In 1996, our plan was 97.8 percent funded. In that same year there were changes made to the plan, first for law enforcement and then in 1977 for all other plan participants when the county provided a reduced benefit upon rule of 75 and the benefit formula increased from 1.5 percent of pay per year of service to 2 percent. In those late '90s and early 2000 we were also providing COLAs with a COLA of 4 percent in 2000, 3 percent in 2002. Amazingly, by the year 2004 the funding ratio had fallen to 64.8 percent. The first thing that was done was the county and member contributions increased from 5.5 percent of pay to 8.5 percent of pay by 2008. Poor stock market performance during the Great Recession also negatively impacted the plans' funded ratio which reached the low point of 57.8 in 2010. At that time the members of the pension committee and the county board recognized that substantial changes had to be made to the plan to ensure the financial viability of the plan for current participants. It was a very conscious decision that we wanted to maintain a traditional defined benefit plan. We didn't want to have to go to like a cash balance plan. Instead we came back and really, like somebody said here, we decided to deal with the issue and not kick the plan down the road, kick the can down the road. And so we made the following changes effective December 31, 2011. We eliminated the rule of 75. We changed benefit formula from 2 percent of pay per year to 1.5 percent and we made-- the maximum retirement income was reduced from 60 percent of the participant's final average compensation of 45 percent. Sheriff's deputies who account for about 10 percent of the total plan total have slightly different plan provisions, which provide for increased benefits with early retirement. And I think the point is, we made these changes going on six years ago and what we've been able to do is since our low point we've increased the plan funding ratio by 10.2 percentage points to 68 percent. But this is what I always talk about is that a mature defined benefit plan takes-- you can make changes immediately like we did in the late '90s that have a dramatic impact on funding. But to bring the funding back up takes time. And so while we made these changes seven years ago and brought the funding up ten points, it's still really going to be another ten years before we hit that, according to actuarial projections, that we'll hit that magic 80 percent funded rate. So that's just one of the issues that you deal with in a mature defined benefit plan that it really takes time. But we did really take corrective action seven years ago, but it's just taken a long time to show the results. But if you look at our trend line it is definitely trending up to where we like it to be. So the next page you can see that the funding ratio in 2028 is projected to be close to 80 percent. In ten years after that we would be at 96 percent, close approaching 100 percent funding. We've tweaked the plan a little bit, you know, in putting things like the new mortality table in, changing the interest contribution on what's paid for people who leave the plan. And we've also changed the amortization period and the rates of early retirement and termination of employment were revised. And these [INAUDIBLE] tweaking the plan which had a slight positive impact. But where we are now is we feel we're on a good trend and that the plan is continuing to remain a viable employee benefit. The other point I want to bring up is that you asked about in your list of questions is that there-- that we are having ongoing negotiations with several collective bargaining groups, which represent county employees in which they are requesting that the county would institute a drop program for their members. The adoption of a drop program could impact the funding of the county's pension plan. But at this time, the county board has not agreed to any of the proposals to institute a drop program. And with that, I would open it up to any questions.

KOTERMAN: [02:11:11] Questions, anybody? Just from our experience, a drop program not just could, it will, it will impact.

JOE LORENZ: [02:11:25] Yes. And my advice to the county commissioners is that they should only entertain a drop program that would be funding neutral [INAUDIBLE] pension plan.

KOLTERMAN: [02:11:35] Good idea. Thank you very much, Mr. Lorenz.

JOE LORENZ: [02:11:36] Okay. Thank you.

KOLTERMAN: [02:11:38] It looks like we'll see you next year.

JOE LORENZ: [02:11:40] Yeah, I'm going to be back for a while. Okay, thank you.

KOLTERMAN: [02:11:45] Appreciate you being with us. Okay, now we have OPPD. Welcome.

JAVIER FERNANDEZ: [02:12:08] Good afternoon, Chairman and members of the committee. My name is Javier Fernandez. I'm the chief financial officer for Omaha Public Power District. That's spelled J-a-v-i-e-r, last name, F-e-r-n-a-n-d-e-z. And you are being distributed the report that was submitted to the committee a couple of weeks ago, just in case you don't have it already. Happy to answer any questions that you may have on the report. Happy to report we will continue to follow the plan. We continue to make every single payment as required by our annual required contribution and our funding did increase from 2017 to 2018 by 1 percent from 69 percent to 70 percent. We did not make any changes, any material changes to the assumptions. We have a what we believe is a conservative discount rate of 7 percent that was reduced from a 7.75 in 2015. Now it's 7 percent. We actively continue to talk to our investment advisors about the potential reduction or change to that discount rate. That is certainly something that is on the table. But for now it's still a 7 percent discount rate. We experienced positive earnings last year just like everybody else. Our earnings after fees, net of fees were 16.49 percent in 2017. Twenty eighteen is not necessarily turning out to be such a great year. We don't have final results, but I am very skeptical that we will have the same returns as in 2017. Our employee contributions in 2018 increased from 6.2 percent of payroll to 6.7 percent. We achieved a five-year contract with our unions that include an increase of about half a percent every year going-- starting at 6.2 percent in 2017, going all the way up to 9 percent by 2021. These are employee contributions. As I mentioned earlier, we have made every single payment, to the penny, on our ARC every year. Our annual [INAUDIBLE] contribution for 2017 was 53.1 percent, 53.6 percent in 2018. And we are-- next week our board will vote on approving our budget for 2019 where we are including fully payment of our ARC as well. Something that I've heard, a few questions I've heard this afternoon. We make payments every month, it's not every six months or every year. We have the ability to start making those payments every month, which helps with the dollar cost averaging but also helps with additional earnings in years like in 2017. With that, I'll answer any questions you may have.

KOLTERMAN: [02:15:08] Any questions? Thank you.

JAVIER FERNANDEZ: [02:15:12] You're welcome.

KOLTERMAN: [02:15:15] That was pretty painless, wasn't it?

JAVIER FERNANDEZ: [02:15:15] Thank you.

KOLTERMAN: [02:15:18] Thanks for coming. Appreciate it. And one last presenter, Eastern Nebraska Health Service Agency. Are you Glen? Welcome, Glen.

GLEN GAHAN: [02:15:53] Thank you. Good afternoon, Chairman Kolterman and the rest of the members of the Retirement Committee. My name is Glenn Gahan, last name spelled G-a-h-a-n, I'm an actuary with the SilverStone Group here on behalf of the Eastern Nebraska Human Services Agency employees retirement plan. And I'm going to touch on some of the highlights of the information we have previously provided to the committee. And just before I get into some of those information, just background. For this plan we would do a formal actuarial report every two years. The most recent one was completed as of January 1, 2018. And the members make a set 2.75 percent of pay contribution. And the agency makes an annual set contribution not directly tied to the actuarial determined contribution. And through the presentation we'll touch on the actual contributions made compared to the actuarially determined contribution. So some of the material that was presented, the funded status as a 2018 is 74 percent. This increase from 71 percent in the last actual valuation in 2016. That 74 percent includes a change in assumption when the mortality table was updated to a table based on our RP-2000 with projection in 2016 to RP-2014 with projection in 2018. Measurement and consistent assumption basis would have been 77 percent, but it's 74 percent funded because of the change in the mortality table. The assumed rate of return on plan assets is at 7 percent and it's been that assumption for many years. The most recent two years of investment performance was 11.7 percent in 2017 and 6.8 percent in 2016. So in total, there's been some actual gains on investment performance. The employer contribution rate is currently at 9.5 percent. That's increased by 50 basis points since 2000, it was at 5.5 percent. So it's been a 73 percent increase by agency contributions over that period time. The plan's normal cost is currently 7.4 percent of pay. Subtracting out the 2.75 percent of employee contributions would be a net of 4.65 percent. I'd compare that to the agency's 9.5 percent of pay in the excess of 4.85 percent goes to fund the unfunded liability. For the past four years the agency contributions has exceeded the actuarial determined contribution. The most recent, 2017, they contributed over 108 percent of the actual determined contribution. In the calculation of the actuarial determined contribution, in addition to the updated mortality table there was a method change as well where previously the unfunded liability was amortized over a 30-year period on an open group-- open basis, meaning each valuation there was a new 30-year amortization. Well, that was changed this most recent year to be a 25-year fixed on a closed layered basis. So after 25 years that current unfund would be fully amortized and then in future years gains or losses or change in assumptions or provisions would be amortized over a prospect of 25-year period. There was a updated forecast of the funded percentage done this year and, as I said, we're currently 74 percent funded. We forecasted based on current assumptions that the funding percentage would exceed 80 percent in 6 years and would exceed 100 percent in 24 years. Of course, when you go out that far, as you know, experience will differ from assumptions and actual percentage might be significantly higher or lower than that projection. With that, that hits the highlights of the information and the valuation results and I would open up for any questions on that.

KOLTERMAN: [02:20:25] Going in the right direction.

GLEN GAHAN: [02:20:27] Yeah, this year.

KOLTERMAN: [02:20:27] Maybe next year. All right. Any questions? Okay. With that, appreciate your coming.

GLEN GAHAN: [02:20:39] Thank you very much.

KOLTERMAN: [02:20:40] It will all be put in the record. That concludes all the hearings for the day. I would like to visit with the committee just briefly if you have time. I don't think we have to go into executive session on.