State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
ACTUARIAL COMMITTEE MEETING

Robert B. Atwood Building
Conference Center, 1st Floor
550 W. 7th Avenue
Anchorage, Alaska

June 20, 2018

ATTENDANCE

Committee Present: Kristin Erchinger, *chair*
Commissioner Sheldon Fisher
Gayle Harbo
Rob Johnson
Commissioner Leslie Ridle
Norm West
Bob Williams

Committee Absent: Tom Brice

Department of Revenue Staff Present:
Pamela Leary (director, Treasury Division)
Bob Mitchell (chief investment officer)
Zach Hanna (deputy chief investment officer)
Sean Howard (state investment officer)
Shane Carson (state investment officer)
Stephanie Alexander (board liaison)

Department of Administration Staff Present:
Ajay Desai (director, Division of Retirement & Benefits)
Christina Maiquis (chief financial officer, Division of Retirement & Benefits)

Others Present:
Scott Young (Conduent Human Resource Services, actuary)
David Kershner (Conduent Human Resource Services, actuary)
Stuart Schulman (Conduent Human Resource Services, actuary) *by telephone*
Leslie Thompson (GRS Retirement Consulting, review actuary)
Paul Wood (GRS Retirement Consulting, review actuary)
Paul Erlendson (Callan Associates)
John Pirone (Callan Associates)
Stuart Goering (Board legal counsel, Department of Law)

I. CALL TO ORDER

CHAIR CHRIS ERCHINGER called the meeting to order at 9:40 a.m.

II. ROLL CALL

Seven committee members were present at roll call to form a quorum.

III. PUBLIC MEETING NOTICE

Board liaison STEPHANIE ALEXANDER confirmed that public meeting notice had been met.

IV. A. APPROVAL OF AGENDA

MS. HARBO moved to approve the agenda. MR. WEST seconded. The motion passed without objection.

B. APPROVAL OF MINUTES – May 3, 2018

MS. HARBO moved to approve the minutes of the May 3, 2018 meeting. MR. WEST seconded. The minutes were approved as written.

V. PUBLIC/MEMBER PARTICIPATION, COMMUNICATIONS & APPEARANCES

No one present at the meeting or listening by telephone responded to the Chair's invitation to make a public comment. MS. ALEXANDER said she had received no written communications for the Committee.

VI. ACTUARIAL REVIEW/AUDIT FINDINGS LIST UPDATE/CERTIFICATION AND ACCEPTANCE OF FY2017 VALUATIONS AND AUDIT REPORTS

A. Introduction

CHAIR ERCHINGER summarized what the Committee would be taking up today. She mentioned that Conduent's previous report gave somewhat of a range of economic assumptions. That has generated some deeper conversations about the need to get the Callan people involved early to help the Committee navigate the discussion around economic assumptions. Two representatives from Callan were present at the meeting to help narrow the scope of the economic assumptions before they goes to the full Board for approval in September.

B. Gabriel Roeder Smith Review (review actuary)

MS. LESLIE THOMPSON and MR. PAUL WOOD, with GRS Retirement Consulting, the review actuary, accompanied their report with a slide presentation, which is on file at the ARMB office.

1. 2017 Judicial Retirement System and National Guard Naval Militia System Valuations

MR. WOOD began with the Judicial Retirement System (JRS) and the National Guard Naval Militia Retirement System (NGNMRS) roll-forward valuations as of June 30, 2017. A roll-forward takes the prior year's valuations (in this case the June 30, 2016 valuations) for these two plans and rolls them forward using standard actuarial principles, without collecting any new data or other information that would go into a full valuation. However, the roll-forwards do include actual asset values as of June 30, 2017. GRS replicated the

calculation of the actuarial value of assets and came very close to the actuary's numbers. They also looked at the actual contribution calculation and were able to match that calculation and be comfortable with that portion of the valuation.

MR. WOOD stated that GRS had one recommendation for JRS related to the healthcare portion of that plan. The Committee saw some significant updates to the healthcare trend rate assumption and the per capita claims that were used as underlying benefits to the plans in the PERS and TRS valuations. GRS believes that it is appropriate, when doing roll-forward valuations where there are large assumption changes, to look at the impact of the healthcare cost trend assumption and the underlying per capita claims on the results of the Judicial Retirement System. This will be self-correcting next year when the actuary does a full valuation of JRS, but the interim valuation may not have captured the change in the healthcare trend and underlying per capita claims.

CHAIR ERCHINGER asked if GRS had any concerns with the underlying data for the NGNMRS.

MR. WOOD said that GRS did not look at the data for this valuation. For the last valuation GRS looked at some of the benefit calculations, which meant the data that was used to actually calculate the benefits versus the data that was used. GRS did not see too many discrepancies between those two, so the data that they do have is probably the best they are going to get. When it did translate into an actual benefit or a lump sum that was paid, it was fairly consistent.

CHAIR ERCHINGER said she understood that the dollar amounts were not material with respect to the retirement plans overall and, to the extent that there is data, GRS was fairly comfortable with the data. Just with respect to the NGNMRS, however, to the extent that there is not data, and there may be people who have not been reported as having benefits who may come forward in the future and say they are owed a benefit, she asked if GRS had any concerns about materiality with respect to the unknowns.

MR. WOOD replied that that is probably not what they would see. Rather, small incremental losses would probably show up in the valuation every year because a person would come out of the woodwork to claim their benefit. If there was a pattern of this particular loss, then the ARMB would want to put a provision in the valuation to accommodate that and address an unfunded liability that was cropping up every year. But absent a clear pattern, he would accept some of the smaller losses that come up on a year-by-year basis.

2. <u>Update: DB and DCR Valuations Previously Reviewed</u>
MS. THOMPSON informed the Committee that GRS made a change this year and consolidated their two reports to the ARMB into one report. This year's report included the actuarial review of the June 30, 2017 valuations for the State of Alaska Public Employees' Retirement System Defined Benefit Retirement Plan (PERS DB) and the Teachers' Retirement System Defined Benefit Retirement Plan (TRS DB), as well as the actuarial

review of the June 30, 2017 valuations for the State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan (PERS DCR) and the Teachers' Retirement System Defined Contribution Retirement Plan (TRS DCR). In the past, GRS also provided checklist spreadsheets that were separate from the reports. Those tables are now embedded inside the report, starting on page 4, and provide a summary of the audit issues that GRS found, what they recommended, Conduent's comments, and the disposition.

MS. THOMPSON noted that GRS has already presented most of the report information at previous meetings, but she had a couple of comments. There is an assumption about EGWP (Employer Group Waiver Program), a subsidy program that will keep the cost of prescription drugs down for the plans. GRS reflected in its comment on page 5 that the way that Conduent is valuing this program is optimistic, and there may be some risk if, in the future, those subsidies go away. The measurement of the liabilities will be different as a result of that.

Her second comment was that GRS agreed to disagree with Conduent on item 4(a) and 5(a) on page 6. This assumption, one for PERS and one for TRS, is that there will be a 0.2% decrease in costs each year of DCR. That is because there is the ability to change the deductible/copay on the healthcare side. Past practice has not really shown that to be the case, but nonetheless the State could make that change. GRS would not set the assumption that way, but Conduent does not see any reason to change the assumption.

MS. THOMPSON stated that GRS still has cautionary statements in the assumption review section of the report. They feel the 8.0% return assumption needs to be reviewed in the experience study, which is happening. She noted the test lives section at the back of the report, where GRS took data and ran it through their valuation estimates and compared it to Conduent's. Once again, it was a very favorable audit from that perspective.

COMMISSIONER FISHER asked for the view about the long-term trend assumption around healthcare.

MR. SCOTT YOUNG of Conduent Human Resource Services stated that the assumptions all start out differently based on whether they are medical or prescription drugs, and they have different [unintelligible] rates based on current expectations on survey data and the trend. Ultimately, they reach a rate of 4%. That 4% is essentially the long-term nominal GDP growth, which is made up of inflation plus real GDP.

COMMISSIONER FISHER said that meant that healthcare will continue to grow as a percentage of the overall economy.

MR. YOUNG stated that they use the Getzen Model, which limits healthcare to be no more than 25.5% of the entire economy. That is how they get to the ultimate 4%. The model assumes that once you reach that point, both nominal GDP and healthcare will grow at the same rates so that they maintain that relationship and do not ultimately become 75% of the economy.

COMMISSIONER FISHER asked if GRS felt comfortable with that. There was no response, and he mentioned that GRS has highlighted a couple of cases where they think that Conduent is being optimistic in terms of their healthcare assumptions. He wondered if there were offsetting places where GRS would go the other direction, and if those balanced out.

MS. THOMPSON said she hesitated in answering because she was not sure that GRS agreed that GDP is going to grow at 4%. Also, right now healthcare is 20% of the economy and is going to grow to, and get capped at, 25% under the Getzen Model. That is offsetting against the 0.2% per year shift in costs assumption for the defined contribution plans that she spoke of earlier. As actuaries, GRS is required to set each assumption as its best estimate and does not get to have things come out in the wash anymore. The ARMB is free to do that, but GRS cannot recommend it.

MS. THOMPSON posed the question if the ARMB lowered its inflation assumption in the discussions later today and in September whether Conduent would lower the healthcare trend assumption.

MR. YOUNG said Conduent would look at everything fresh, once the Board settles on an inflation assumption and everything else.

COMMISSIONER FISHER commented that he understood why the actuaries could not have everything come out in a wash, but he was still struggling with how to think about the two issues around healthcare specifically.

MS. THOMPSON said GRS had raised the healthcare trend assumption in another light at the last meeting, where they said it means that over so many years the costs will more than double. That is a massive increase and one that she was not sure the State of Alaska was going to absorb.

MR. YOUNG stated that she was referring to the prescription drug trend rate, which originally started at around 5.5%. Based on the survey data, Conduent recommended increasing it so it is starting off now at 8.5%, a 3% increase. That difference grades down over time as they both still reach a 4% increase. But using a 3% increase a year for 20 years results in a 60% increase. The floor percentage is something like 49% over 22 years, but that is what is going to happen when assuming the trend rate starts out 3% higher and continues at that magnitude for 20 years. Everyone agrees that the healthcare trend assumption looks reasonable year to year, but the cumulative number 25 years from now is a big difference.

CHAIR ERCHINGER commented that this conversation was very important, especially when actuaries must look at every assumption as their best estimate. The ARMB and the actuaries have diametrically opposed requirements, because the Board has to care about what comes out in the wash. That is the difference between the art and the science of this work. The actuaries are the scientists and the ARMB is the artist. Healthcare is a very good

example of this, as is the investment return assumption. It seemed to her that the actuary is concerned about the 8% return assumption, but behind that is the real concern that the ARMB is not going to meet its investment target. But if the Board tweaks its investment return assumption and sets a higher inflation assumption, it will end up with a higher real return assumption. The Board will have gone in the opposite direction of the actuary's concern for not hitting the return assumption. In fact, it will be harder to reach the target investment return.

CHAIR ERCHINGER said the conversation about the economic assumptions and the healthcare trend assumption are the two most important issues to her. She hoped for more clarity around these by the end of the day.

MR. YOUNG stated that Ms. Thompson was correct about the EGWP assumption and the 0.2% decrease in costs for the DCR plans per year. From Conduent's perspective, there is a lot of uncertainty around the EGWP, but the estimate that is built into the current valuation is more conservative than the two estimates provided by Segal and the three estimates provided by Aetna. It is a conservative assumption right now, and Conduent is not being aggressive in any way. Regarding the 0.2% decrease in costs, he said it is still in there because Mr. ________ said that at some point they are going to change the DCR design to have higher cost-sharing for the participants. If Conduent removes that assumption, there will be a big unexpected gain in the year the higher cost-sharing goes into effect. Conduent is building in an assumption for the anticipation that the cost-sharing provisions will change in the future and will lower the cost for the DCR plans.

MR. WILLIAMS asked if three years from now the review actuary and the actuary would still have this agree-to-disagree about the 0.2% decrease in DCR plan healthcare costs or if they would have a better idea if it was panning out.

MR. YOUNG replied that Conduent kept the assumption in the DCR valuations because the current health plan for the participants says that the State can increase all the cost-sharing provisions, such as the deductible, the co-pay, and out-of-pocket limits, to help manage the costs between the State and the participants. There has not been a change so far, but the model was set up to change at some point in the future, and the cost for the State will be lower.

MS. THOMPSON reiterated that GRS disagreed and would continue to disagree until a policy or something more concrete was written.

MR. JOHNSON pointed out that this discussion has been about the DCR plans. For the defined benefit plans there is the whole issue of no diminishment of benefits, and the ability to change health plan provisions runs up against a constitutional framework.

MR. YOUNG stated that the 0.2% shift in cost applies only to the DCR plan population.

COMMISSIONER FISHER asked how material this shift in cost was.

MS. THOMPSON said she would not characterize it that way because the DCR plans will keep growing over time.

C. Action Items:

1. Committee Recommendation for Board Acceptance of GRS Certification for FY17 PERS, TRS, NGNMRS, JRS and DCR Plan Valuations

[Please see the memorandum dated June 20, 2018 that summarizes the review actuary's work done on the fiscal year 2017 valuation reports]

CHAIR ERCHINGER read into the record the Committee's recommendation, as follows:

> The Actuarial Committee recommends that the Alaska Retirement Management Board accept the review and certification of FY 2017 actuarial reports by Gabriel Roeder Smith & Company.

MS. HARBO moved the motion as read, and MR. WEST seconded.

Board legal counsel, MR. STUART GOERING, pointed out that the statutory reference in the first sentence of the memo should be AS 37.10.220 (a) (9), not AS 39.10.220 (a) (9).

CHAIR ERCHINGER said that would be considered an administrative change to the memorandum.

MR. JOHNSON asked how accepting and certifying the actuarial reports tracked with the cautionary notes that GRS provided to the Committee.

CHAIR ERCHINGER said she understood it to mean that the Committee is acknowledging that GRS has reviewed the valuation reports and provided their input. There is also a separate audit findings list that GRS prepares that identifies their concerns. The Committee tackles each item on that list and determines whether or not to concur with making a change based on GRS's recommendation or that it is okay with Conduent's recommendation. If the audit findings are not resolved, they either remain as an outstanding item on the list to continue looking at, or Conduent indicates it will include the item in the next valuation. If GRS indicates it agrees to disagree with Conduent on an item, it is on the record that GRS has given the Committee a recommendation that they would do something other than what Conduent recommended, and the valuation contains what Conduent recommended because the Committee has not recommended to the Board that a change be made.

On a roll call vote, the motion passed unanimously, 7-0. [Mr. Brice was absent]

2. Committee Recommendation for Board Acceptance of Conduent Valuations for FY17 PERS, TRS, NGNMRS, JRS and DCR Plan Valuations

[Please see the second memorandum dated June 20, 2018 that summarizes the background for the fiscal year 2017 actuarial valuation reports prepared by Conduent]

CHAIR ERCHINGER read into the record the Committee's recommendation, as follows:

> The Actuarial Committee recommends that the Alaska Retirement Management Board accept the actuarial valuation reports prepared by Conduent for the Public Employees', Teachers', Public Employees' Defined Contribution (for Occupational Death and Disability and Retiree Medical Benefits), Teachers' Defined Contribution (for Occupational Death and Disability and Retiree Medical Benefits), and the roll-forward actuarial valuation reports for the Judicial and National Guard and Naval Militia retirement systems as of June 30, 2017.

MS. HARBO moved the motion as read, and MR. WILLIAMS seconded.

There was no discussion, and the roll was called. The motion carried unanimously, 7-0. [Mr. Brice was absent]

VII. PRESENTATION ON ASSUMPTIONS – EXPERIENCE ANALYSIS

DAVID KERSHNER, SCOTT YOUNG and STUART SCHULMAN (by telephone), of Conduent Human Resource Services, gave a presentation on the 2017 experience study they conducted. *[A copy of the presentation slides is on file at the ARMB office.]*

MR. KERSHNER first briefly reviewed the June 30, 2017 roll-forward valuation results for the Judicial Retirement System (JRS) and the National Guard Naval Militia Retirement System (NGNMRS), saying they had not discussed those results with the Committee yet *[see slide 4]*. He pointed out that the valuations reflect the actual asset performance during the fiscal year, which has caused the contribution rates and funded status to change. The plan assets did better than expected during FY17 – the market return was approximately 13% for JRS, and the return on the actuarial value (using the smoothing method) was 8.2%, still slightly higher than the 8.0% assumed return. The funded ratio for JRS was slightly higher at June 30, 2017 than it was the prior fiscal year. One change that started with the FY17 valuations is that for the healthcare plan the contribution rate is at least equal to the normal cost rate. (In the FY16 valuation, it was offset by the healthcare plan being overfunded, which resulted in a zero contribution rate.)

MS. ERCHINGER said she thought the JRS normal cost, especially on the pension side, was extraordinarily high.

MR. YOUNG stated that, based on experience with other judicial plans, typically judges start later in their careers and there is a shorter period over which to accrue these high benefits. That drives the normal cost up tremendously.

MR. KERSHNER added that it is also a very small number of people, so there is a leveraging impact as well. There are under 100 active judges in the plan.

MR. KERSHNER reported that the market return for the NGNMRS was 9% in FY17, versus the assumed return of 7%. The actuarial return based on smoothing was 4.8%, so there was actually a

loss on the actuarial value of assets, which was why the funded ratio declined slightly. The contribution was still zero.

Chief Investment Officer BOB MITCHELL expanded on the contribution for NGNMRS, saying the benefit paid in this system is a dollar figure tied to years of service. As a result, it is not sensitive to inflation.

MR. KERSHNER began the 2017 experience study review by recapping what the Committee had covered at the December 6, 2017, March 28, 2018, and May 3, 2018 meetings. At this meeting, Conduent intended to (1) revisit the GEMS results; (2) talk about the new building block results related to the expected rates of return and inflation rates; and (3) identify alternative scenarios to model for economic assumptions (for PERS only), where they estimated the cost effects and 30-year projections of the additional State contributions under the different scenarios.

MR. SCHULMAN said the asset allocation displayed on slide 8 was Mix 4 that was discussed at the prior meetings and the allocation adopted by the ARMB for use by PERS, TRS and JRS effective June 30, 2017. As background, he also reviewed the following items that were discussed in detail at previous committee meetings:

- The GEMS model
- The building block method
- Approach #1 based on the premise that long-term historic averages for asset return and inflation may be a reasonable estimate for the center of the distribution of where things are going to be 10, 20 or 30 years in the future
- Approach #2 based on emerging demographic trends contributing to a new normal economic condition that will persist

MR. SCHULMAN explained how to read the chart on slide 10, which showed the rate of return and inflation rate under GEMS geometric, GEMS arithmetic, and building block geometric. These rates were calculated for Approach #1 and Approach #2, and for 10-, 20- and 30-year periods. He encouraged people to focus on the geometric return numbers over the long term because they account for portfolio volatility and the benefits of diversification.

MS. THOMPSON asked how Conduent was factoring into its approaches that this is a closed plan.

MR. SCHULMAN replied that even though it is a closed plan, there are still contributions coming in and benefit payments going out. Looking at the dollars that are in the fund now and when they are going to have to be disbursed, and after adjusting for the contributions coming in, he felt it was a very long fund horizon. The contributions are there to sort of extend the life of the current principal of the fund. It is certainly comfortable to look at the 20-year and 30-year numbers as more appropriate than the 10-year numbers, and he thought it would be closer to 30 years than 20 years.

MR. KERSHNER stated that when Conduent does its projections they are currently projecting benefit payments for PERS of about $1.2 billion. Twenty years from that point, they are projecting $2.5 billion. Extending to 30 years, they are projecting $2.2 billion. PERS is a closed plan that still

has active members in their thirties and forties who are going to be around for many years before they retire and then receive benefits in retirement for 20-plus years. It is not at the point yet where the outlook for the plan is much shorter, as evidenced by the projections. He noted that the projections are for the defined benefit plan only.

MR. MITCHELL asked for Conduent's thinking behind 3.12% as the 30-year inflation number for GEMS geometric Approach #1 and 2.6% as the 30-year inflation number for building block geometric Approach #1, and the difference between those two. Callan's capital market assumptions over all time periods are assuming a 2.25% inflation number.

MR. SCHULMAN responded that they looked at a number of the usual barometers for inflation expectations, such as Social Security that was 2.6% a year ago and is a 75-year average forecast for inflation, and TIPS (treasury inflation protected securities) spreads.

MR. MITCHELL also asked for background about the 30-year real rate of return numbers in Approach #1 and how they compared with historical performance. He noted that there is not a lot of historical performance for large portions of the portfolio that are in alternative investments.

MR. SCHULMAN said that even though there is not a 30-year history for certain asset classes, Conduent is still obligated to come up with a 30-year forecast estimate. They have to look at the indices for all the asset classes going back 30 years and fill in the blanks where they have to (private equity or absolute return does not have that long a benchmark). He said he would be surprised if the 30-year historic real rate of return was lower than the 6.2% shown on the chart.

MR. JOHN PIRONE of Callan Associates (in the Capital Markets Research Group) said he did a [unintelligible] calculation on the past 30 years and made some reasonable proxies for private equities, etc. because they did not exist back then. Taking the current asset allocation for PERS and solving for what the real return would have been if it was in place for the past 30 years, he got about a 6.5% real return. One caveat is that the past 30 years have been characterized by a steady decline in interest rates, so the return for the bond portfolio would probably be greater than what can be expected going forward.

MR. SCHULMAN said the decline in interest rates is clearly true and certainly acknowledged. He also pointed out that the Mix 4 portfolio has 10% in intermediate treasuries, and he did not see any other bond-like asset classes. Equities may not care that much one way or the other what interest rate environment they are in. There is a limited amount of the portfolio that is sensitive to the decline in interest rates. Conduent assumes that interest rates are going to rise to some degree over 10, 20 and 30 years, and the expected price change and expected loss on account of that is baked into the piece for that one asset class. The overall effect on the portfolio is not that great.

CHAIR ERCHINGER asked for the Callan representatives to weigh in with their expert opinion on what the Committee had heard so far. There were a lot of options, some of which she thought were good options to look at and other options she was not sure why the Committee was looking at them.

MR. PIRONE stated that Mr. Schulman hit a number of elements that Callan looks at when

forecasting inflation, including looking over 10-year, 20-year and 30-year horizons. There are three things to think about. The first is Callan's understanding of the debt policy, the second is looking at what the markets are telling them in terms of inflation, and the third is looking at history to get some insight.

MR. PIRONE stated that the Federal Reserve has a dual mandate – to control inflation and ideally keep it around 2% (CPI-U), and then full employment. The Fed's actual results over the past three decades have been quite successful at keeping inflation within that desired range. Over the past decade, inflation has run about 1.7%, and going back two decades is a 2.1% inflation number. One has to look over a very long horizon to get to a 3% inflation number. For doing planning over a 10- to 30-year horizon, Callan feels more comfortable focusing on a shorter horizon number. Anything past 30 years, inflation has been between 2.25% to 2.5%.

Regarding listening to what the markets are saying in terms of what inflation expectations are, MR. PIRONE talked about inflation break-evens. He had looked at Bloomberg today, and the market was saying inflation was around 2.0% to 2.25% over 10 years. The 30-year horizon says the exact same thing. That is why Callan is using essentially an equivalent inflation rate both for the 10-year and the 30-year. Callan uses their judgment on those three building blocks and is comfortable with a 2.25% inflation forecast, irrespective of the time horizon.

MR. SCHULMAN pointed out that the Fed inflation target is 2%, but that 2% may not be the same as Conduent's 2%. The Fed's target is a 2% change in the price of personal consumption expenses. That is not the same as the CPI-U. The rule of thumb is that 2% change in the personal consumption expenses is roughly the equivalent to a 2.3% change in CPI-U. That would be very consistent with what Callan has been talking about and put Conduent right in the middle of the numbers in the model.

CHAIR ERCHINGER remarked that it was an important point. She said the inflation assumption is really key, but she asked what the impact would be of getting it wrong in either direction for boards like the ARMB, which has to make sure it errs on the side of having sufficient assets to pay liabilities. She understood how the inflation assumption impacted the investment assumption but did not clearly see where it hits every point in pension forecasting.

MR. KERSHNER explained that the inflation assumption is inherent in Conduent's salary increase rates and also part of the medical trend rates. The salary increase rate has no impact on the liabilities for the existing retirees; it only affects the liabilities for future retirees. It also impacts the pension liabilities related to the COLA (cost-of-living adjustment) because right now Conduent is assuming that the PRPA (post-retirement pension adjustment) increases and COLA increases are tied to the inflation assumption. If the inflation assumption turns out to be lower than what Conduent is projecting, those liabilities are overstated.

Regarding how the inflation assumption is an element of the healthcare trend, MR. YOUNG stated that currently the ARMB's inflation assumption is 3.12%. That is part of the ultimate trend rate of 4%. The 0.88% difference is everything else besides inflation. Whether 0.88% is the right difference is something to take a fresh look at.

MR. WILLIAMS asked if the three methods (GEMS geometric, GEMS arithmetic, and Building Block geometric) and the two different approaches to developing rate of return assumptions and inflation assumptions had equal validity and equal popularity with other pension funds. He asked if one approach was more appreciated or valued, in general. He personally favored Approach #1 GEMS arithmetic because it is exactly what the ARMB wants. Noting that there is a lot of uncertainty in the assumptions, he wondered if return numbers to two decimal places were realistic. He asked where the range really fell.

MS. THOMPSON responded that GEMS is only used by Conduent, and GRS has never seen it at any other pension system. While not popular and not in use, it does not make GEMS wrong. It is simply a unique tool in this field. Building block is what is used more often because building block is what is discussed in the actuarial standards of practice when setting this assumption. GRS is going to weigh in on the discussion from a building block approach. She added that GEMS is not what is at issue; ultimately, what is at issue is inflation and real return assumptions.

MR. WEST stated that he has always considered the real rate of return as the number that really means a lot because inflation is factored in on both sides. Whatever the rate of inflation, the real return has been impacted by politics and technology over the last 40 years of his career. The real rate of return is paying down the outstanding liabilities. If liabilities are not growing as a result of estimates for salary increases and inflation being high, similarly the ARMB is not going to be realizing the inflationary returns on the investment side. The return that is reducing the outstanding liability is what he has always watched when it came to defined benefit plans. That is where you can make the big mistake in terms of controlling more with asset allocation, investment management, and so forth. Then having not too long-term of assumptions in the actuarial assumptions so that the ARMB can quickly take the differences between the expected real rate of return and the actual rate of return. It is wonderful to smooth but, from an actual funding standpoint, it is better to bite the bullet, get it over with, and not let the liability build up too long.

MR. WEST said he does not like some of the statutory assumptions that have been placed on the ARMB in terms of the long amortization. But as long as State employees make about the same wages, it is the real rate of return variation that bothers him. It is not too big on an absolute basis, but the Committee is looking at a fairly big variation on a percentage basis. Projections are not worth much. The Fed tries to come up with new ways to manage things, whether we worry about money supply or accommodations or stimulus. He thought Conduent had a fair amount of variance in the assumptions on a percentage scale, and he urged not to cloud it by all the other issues. Conduent is saying there is one assumption that is basically historically based and one assumption that the Committee should pay attention to because Conduent is saying it is the best thoughts based on what the best minds in our world tell us. He posed the question of whether he was wrong to focus on the real rate of return and not really care that much about inflation, as long as it is not wildly out of line with everybody else.

MR. KERSHNER responded that the real rate of return is important, but it is important to get all of the assumptions as best predictors as they can. Conduent is not trying to come up with something that in one case will be very optimistic and another case be conservative, and overall they are being

sort of middle-of-the-road. They are trying to come up with best estimates of each assumption and, when looked at in totality, they are internally consistent and reasonable.

CHAIR ERCHINGER suggested narrowing the discussion about Conduent's economic assumption results by first choosing the time horizon to focus upon, and she favored selecting the 30-year time period. Second, choose either Approach #1 (the historical view) or Approach #2 (the new normal view) to weigh more heavily. From that point, did committee members like the building block model or the GEMS model better, or some combination of those.

MS. THOMPSON advised discussing with Conduent whether it makes sense to lean toward the 20-year horizon because the defined benefit retirement plans are closed, even though she hears that the corpus of the fund is going to be around for a while.

MR. KERSHNER said he did not have a strong opinion about whether to look at the 20-year or the 30-year time horizon. The bottom line is to think about what interest rate assumption to pick. In Conduent's analysis – whether looking at the 30-year or 20-year, or Approach #1 or Approach #2, or building block or GEMS – an 8% rate of return assumption is supportable. But they understand that the Board has concern about adverse deviation and, therefore, may want to enter into some margin for that by selecting something lower like 7.75% or 7.5%, or even lower than 7.5%. That is within what Conduent would deem reasonable. He said he understood the concern of maybe not looking at 30 years, although 30 years is still valid because the benefit payment stream is looking at a very long time horizon. Conduent had no concerns if the trustees wanted to focus on a 20-year approach.

COMMISSIONER FISHER asked what the average life of the assets was for a closed plan, because he thought it was a mathematical question.

MR. KERSHNER replied that there are different measures. Talking about the duration of the liabilities, a duration is closer to something like 12 or 13 years. The duration of the liabilities is a measure that says for every 100-basis-point change in the interest rate assumption, what percentage does the liability change by. In this case, 13 years would be 13%. That is not saying that the average life of the plan is 13 years. The outlook of the plan is that it is still expected to be paying significant benefits and contributions 30 years from now. It is not unrealistic to focus on the 30-year outlook, but he understood that because it is a closed plan the concern may be to not continue looking at 30 years.

MS. THOMPSON commented that Conduent has a 75-year assumption for inflation in the makeup of the 30-year assumptions because they are using the 2.6% average inflation forecast from Social Security. She wanted to be careful in using 30 years if it was really using assumptions that are much longer in building that assumption set.

MR. KERSHNER drew attention to the 20-year building block model where Approach #1 had a 7.85% nominal rate of return and Approach #2 had a 6.43% nominal rate of return. The average of those two is 7.61%. If the Committee said it was comfortable with the building block model and comfortable with a 30-year outlook and comfortable with taking an average because they do not

know if Approach #1 or Approach #2 is the right one, then something in the 7.5% to 7.75% nominal rate of return range would be more appropriate. Probably closer to 7.5% based on the science.

CHAIR ERCHINGER inquired if the ARMB should look at different asset allocations based on liquidity concerns in a closed retirement plan. Then the Board would not have to focus on 20 years or 30 years necessarily because the asset allocation itself would help drive at least the return.

MR. MITCHELL stated that he anticipated, as the closed plans get closer to maturity, that the asset allocation will change to reflect a shorter lifespan. The present value of that decision is probably relatively low today. It has some impact but it is not going to be a driver necessarily. It may be something on the margin to consider when the ARMB is setting the rate. Setting it a few basis points lower in terms of expected return might account for that impact.

Addressing Ms. Thompson, MR. WEST said the Committee was looking at 18 alternative rate-of-return assumptions on the Conduent spreadsheet. He thought all the rate of return alternatives would be supportable. He asked if any of the 18 rates were not supportable under actuarial professional rules on assumptions.

MS. THOMPSON said she could not comment exactly on Mr. West's question because it is not a question of violation of actuarial standards. As a question of opinion, GRS would not support 8%.

MR. WEST said he believed in amortizing things very quickly, instead of allowing the liability to grow in a multi-layered approach. Ms. Thompson's opinion helped him take the 18 alternatives for a rate of return assumption down to 12, and those 12 remaining alternatives ranged from 5.71% to 7.86%.

MS. THOMPSON stated that GRS's focus would tend to be more toward Approach #2, which is new normal, and it would tend to be more toward the building block model. GRS would have looked at arithmetic building block and geometric building block and probably landed somewhere in the middle. The arithmetic building block number was not included in Conduent's report.

MR. MITCHELL clarified an earlier comment from Mr. Pirone that 30-year real returns were at 6.5% and reflected a declining interest rate environment. Those numbers are gross of investment management fees, so that 6.5% is probably closer to 6.1%.

CHAIR ERCHINGER suggested talking about Approach #1 versus Approach #2. She mused that the term "new normal" has been used to describe Approach #2, but it brought to mind how "new normal" was used just before the housing bubble crash. This scared her because while Approach #2 could be very well informed of what is going on now, such as lower interest rates and lower inflation, she thought that relying solely on new normal had its own pitfalls.

MR. PIRONE took a few minutes to lay out a high-level look at Callan's forecasts. Callan actually embeds elements of both current conditions (like the new normal) and the building block together so it may potentially be a compromise that addresses both these issues. Callan's forecast for PERS over the next 10 years is a 6.6% nominal rate of return (their inflation is 2.25%). That reflects their

view that currently markets are in an exceptionally low interest rate environment, there is an exceptional monetary policy and quantitative easing, and equity valuations are arguably relatively high compared to historical averages. He stated that once they get outside the 10 years they feel more comfortable relying on more of a building block approach because they do not know what is going to happen very long term. For a very long horizon assumption, Callan looks at what premium equities have provided over bonds, what premium bonds have provided over cash, and what premium cash has provided over inflation. So, for something like a 100-year horizon, their model would get a rate of return assumption of 8.1%. As they move from 10 years to 20 years to 30 years, they blend the 6.6% 10-year forecast with the 8.1% long-term forecast, and as they increase the time horizon they give more and more weight to that equilibrium forecast (8.1%). At 20 years, their forecast moves up to 7.1%. At 30 years, the forecast goes up to 7.4% nominal return – and the real return assumption is a little over 5.1%, based on their 2.25% inflation forecast. Callan's forecasts for nominal return numbers are net of investment fees. Their approach has some of the beneficial elements of being cognizant of what is going on in the market today but not over-relying on that.

MR. MITCHELL stated that he would broadly characterize Callan's real return assumptions as in between the Conduent GEMS geometric approach and GEMS arithmetic approach.

MR. WILLIAMS said he thought these decisions were a huge deal. He recalled at the New York Education Conference being terrified at talk about moving from an 8% return assumption to a 7% return assumption. A second element is whether healthcare costs will improve and plateau somewhere or continue to rise. Those two things combined come close to half a billion dollars a year in costs to the retirement plans, which is terrifying. His question was whether it is moving enough because just changing the return assumption a small amount has huge ramifications.

CHAIR ERCHINGER said she was looking at the Callan 10-, 20- and 30-year projections. The 20-year real return assumption ends up with a 4.85% real rate of return. The ARMB's real return assumption is 4.88%. She noted that people are concerned about the ARMB's 8% nominal return target being too high, but they do not look at what is embedded in that, which is too high of an inflation assumption. That is why she continues to ask how the too-high of an inflation assumption impacts the actual liability projections, and does it offset so that in the final analysis it is not off-target by an enormous amount. She felt the ARMB is in the ballgame but might want to tweak where it is. She tries to get people to stop chewing on that 8% return target bone and focus on the 4.88% real return assumption because that is where the ARMB is. Having enough money to pay the beneficiaries is the mandate, but some ancillary things are very important, like what the State additional contribution will be. What scares her is if the Board starts pulling levers and making material changes when it really is kind of where it needs to be. To some degree, acting scares her more than not acting.

COMMISSIONER FISHER commented that in all the discussions he had not heard anyone defend the GEMS model inflation assumption, in particular the 30-year 3.12%. He asked the Conduent people if they believed in that 3.12% inflation number under Approach #1.

MR. SCHULMAN responded that the GEMS model tends to revert to the mean. For example, if you go back far enough, the 40-year inflation average is 3.51%, and for 50 years the average has

been 4.05%. The GEMS model is starting in the environment where inflation is down around 2%, but, if you do not change the parameters of the modeling, it will tend to take you back to the very long-term historical averages.

COMMISSIONER FISHER asked if the ARMB would be okay if it got the real rate of return assumption right and the inflation assumption wrong.

MR. SCHULMAN replied that if the ARMB were to get its execution of inflation wrong, the benefits are largely indexed for inflation. If the inflation assumption is off by 50 basis points, it is going to hit the liabilities by that amount, but it is also going to hit the spread factor. It would end up in roughly the same place.

COMMISSIONER FISHER said that if that was true, the ARMB could move forward and get comfortable about a real rate of return number and be comfortable about inflation, because if it is wrong, the liabilities and the assets will sort of naturally flow together. He thought he had heard a Conduent analysis that that was not really true.

MR. KERSHNER explained that the interest rate assumption is more important than the inflation assumption because the inflation assumption does not affect every benefit that is being discounted. It is an over-simplification to say that as long as the Board gets the real rate of return correct it does not matter what the inflation assumption is.

COMMISSIONER FISHER said there could be a sensitivity around the rate of return and inflation assumptions that warrants maybe settling on two assumptions and not blending them together into one. The ARMB would think about those assumptions in different ways going forward because they behave differently as they flow through the model.

MR. KERSHNER said it was important to focus on setting what the ARMB thinks is a reasonable inflation assumption and what it thinks is a reasonable, long-term expected rate of return and, by implication, the real rate of return is also reasonable.

MR. SCHULMAN agreed, adding that the one place where the ARMB might want to exercise a little bit of caution is if there are contracts with various unions that specify a rate of salary increase that is independent of inflation. The argument that there are inflationary elements in the salary breaks down a little bit. Other than that cautionary note, it is reasonable to state that the salary is going to offset the inflation.

COMMISSIONER FISHER stated that there are union contracts, but they roll over every three years. He thought these factors over the long term tend to sort of tie with inflation.

CHAIR ERCHINGER declared that the Committee had made some progress but would have to nail things down more closely. A deeper dive on the discussion about the earnings assumption and inflation will be coming up with Callan, and she hoped it would roll in the work that Conduent has done, in order to give the Committee some context. Conduent's analysis covered a broad range but was actually in-depth on each of the elements, and that has led to a rich dialogue and helpful insight.

MR. JOHNSON observed that GRS on page 21 of their report seemed to be a lot more strident about the interest assumptions than the real rate of return assumption. Their statement was, "At GRS any inflation assumption recommendation of 3% or above requires special approval by GRS's chief actuary."

MS. THOMPSON stated that the inflation assumption is used in the valuation of benefits, particularly the COLA and salaries; the real rate of return is not.

MR. YOUNG said that Conduent looks at the same sources for valuing and sunsetting their inflation assumption. There is not a single source that says inflation is going to be anywhere near 3.12%. The question is whether they believe that things are going to miraculously change in ten years and we will see this 3.12% inflation over those next 20 years, or, as everyone else is saying, are they going to be closer to that 2% to 2.5% point. That seems to be a key decision point that the Board is considering.

MR. YOUNG stated that Conduent has some projections later in the presentation slides, and the GEMS geometric shows 7.59% over the next ten years. One can argue whether or not that is right. Callan is saying 6.6% nominal rate of return over ten years, and they are the people helping the ARMB with investing the money. To get the 8.51% over a 20-year period means having a return over the next ten years that is over 9.5%, so there would have to be incredible growth over that 10-year period to reach 8.51%. Not many people are saying that that is going to happen. If it happens, everyone would be very happy to have sustained 10% growth over a 20-year period. What is the risk of getting it wrong? It pushes the contributions into the future. Conduent has looked at the projections and there is a huge cliff coming up in terms of contributions coming into the plans. After 20 years, the contributions go almost to zero, meaning a huge negative cashflow situation. The investment options are going to have to change dramatically at that point as well. The Committee has to take that into consideration and maybe 30 years is a little too long, and sustained growth over the next 20 years may not happen.

CHAIR ERCHINGER remarked that it all hinges on the inflation assumption.

MR. MITCHELL stated that this clearly was a very nuanced and complicated subject with many moving parts. His presentation would introduce another moving part – there is sequence risk as well. The investment returns over the next five to ten years probably matter more than the sequence of returns thirty or forty years from now. He pointed to the general consensus that the returns over the next 10-year period under whatever method are lower than the same method's returns over longer periods of time. He thought there were some implications of that, that combined with the actuarial practice of assuming one rate of return each and every year for the entire life of the plan, that will have an impact on the cashflow profile for employers. He intended to show that there is a rollercoaster of increasing employer contributions and then a crash later in life. In his view, that places more stress on the employers ultimately to come up with those cashflows. Then there is a surplus that the poor man's actuarial model demonstrated. One implication of that would be if you believe rates of return will be relatively low over the next ten years and higher later and ultimately that would drive higher employer contributions. The ARMB might want to ratchet down the return

assumption slightly more to account for that so that contributions would be higher in the early years, but there would not be as big a spike in employer contributions ten to fifteen years out.

CHAIR ERCHINGER said that having this important discussion at the committee level has been valuable.

MR. KERSHNER proceeded with Conduent's presentation, directing attention to slide 12, where they had worked with investment staff to define some economic assumption scenarios under which they projected future additional State contributions. He clarified that any impact of whether the return assumption is at 8% or 7.5% will fall to the additional State contributions rather than the employer contributions. Further, Conduent was not saying that these were the only reasonable sets of economic assumptions, but they selected these ones for illustration and discussion purposes.

MR. KERSHNER went on to explain how Conduent developed the salary increase assumption for PERS peace officer/firefighter group, the PERS Others, and TRS, based on the last four years of experience and the inflation rate assumption. He also explained the wage growth assumptions used in the scenarios on slide 12.

Next was a chart of the cost effects of the different economic assumption scenarios on slide 17 (PERS only). The columns showed the funded ratio of PERS at 6/30/17 under each scenario, the employer/state contribution rate at 6/30/17, the projected additional State contributions for FY20 through FY39, and the present value of the State additional contributions in those future years. Of particular note were scenarios 3 and 6 where the risk of keeping the return assumption at 8% but then earning pessimistic returns over the next 10 years (Approach #2) results in a significant spike in the additional State contributions to make up the losses. The timing of when those contributions come in has an impact, so it is a huge spike in dollar amounts, but on a present value basis the spike is not quite as large.

MR. JOHNSON observed that all PERS employers contribute a maximum of 22% into the retirement system. A large part of the additional State contributions number, which is any contribution rate above 22%, is what the State is paying on behalf of its own employees, because the State is by far the largest employer in the system. He thought that made a difference when talking about the State paying contributions for employees that are not State employees.

CHAIR ERCHINGER thanked the gentlemen from Conduent for an informative presentation.

VIII. LEGAL INPUT

The ARMB's legal counsel, MR. GOERING, stated that from reading the minutes and looking at the Conduent presentation from the last time there was some question regarding a suggestion about doing layered amortizations. He said he could not give a definitive answer on exactly what the ARMB can and cannot do because he thought the statute does not cover every possible question relative to the calculation of the contribution rate for liquidating past service liabilities. As of the date that the statute was passed, it was probably fairly clear what the Legislature meant. They had a number in mind, they knew what they thought the past service liability was as of that date, and they wanted the ARMB to amortize that over 25 years. How the ARMB handles what has happened

since then is not totally clear from the statute. Commissioner Fisher apparently stated at the last meeting, based on the minutes, that there has been some discussion between the Department of Law and the Department of Administration about whether that allows any flexibility, in terms of how the ARMB handles this. He was unable to locate with whom those conversations had taken place, but he would like to consult with him/her.

MR. GOERING said one observation is that the statute is not complete and does not give the ARMB an absolute roadmap of what it has to do. A lot of what Conduent's Dave Kershner was talking about in his proposal are things that occurred after the statute, such as how to amortize liabilities that accrued after the date the statute was passed. The question is, does the statute say anything about that, and if so, what? The very short answer is that the ARMB has the responsibility initially to interpret its own statute. The Board can ask the Department of Law for advice, but the ARMB is the expert agency. There is a little bit of shared responsibility there because going back to the beginning of that particular subsection it says that "you shall coordinate with the retirement system administrator to have…" After the Board has done that, it is supposed to certify the appropriate contribution rate for liquidating past service liabilities. In the process of doing that, there is a shared responsibility between the Department of Administration and the ARMB.

MR. GOERING stated that even though it seems like this level percent of pay amortized over a closed term of 25 years comes in the certification part, it really, to some extent at least, dictates how the annual actuarial calculations will take place. It somewhat informs that process that is taking place at the system administrator level. He thought it was a shared responsibility, and there are a couple of ways to handle the situation. One is for the Board to do this on an ad hoc basis and decide as it goes along how to handle this. That is probably acceptable because the ARMB and the Department of Administration have the responsibility to decide about what the statute means and how to apply it in practice. That probably is going to be informed by advice from the actuaries because they know what the standard practices are and what the best results are going to be.

MR. GOERING said there were a couple of ways to implement that. One is the ad hoc way, by saying this is how we are going to calculate it for this year. The Board may see that as circumstances change that no longer makes sense. An extreme example would be that 26 years after the statute passed, the statute cannot possibly have anything to say about how to amortize past service liability if it meant that the closed term ended 25 years after the statute passed. It is obvious that anything that accrues after that date, the ARMB would have to make up completely on its own.

MR. GOERING commented that there is a lot of gray area in here. The ARMB has to decide where the gray area is and then how it wants to fill in that gray area. There are two levels. The legal level is unlikely to ever be triggered here because this is probably never going to come before a court for a decision about how to interpret this. Hopefully, that never happens because it would mean that something catastrophic had probably happened. The more important is the practical level, which includes the effects that the ARMB's decisions have on the system, in terms of administration and that sort of thing, as well as responses that may come back from the Legislature. Regardless of what arguments the Legislature may make about what they intended when they cast the statute, their memory of that is probably going to be different than what they actually did. That sort of puts a bound around it, in terms of the Board may not want to take a real extreme interpretation of what

the gray area is and how to fill it because that may be more likely to provoke a legislative response.

MR. GOERING said that having said all of that, he thought the ARMB had some flexibility to fill in that gray area, possibly on an ad hoc basis, where the Board decides for the purposes of this year, through the Department of Administration and this Committee, to instruct the actuaries on how to calculate that, and calculate the appropriate contribution rate based on the actuaries' calculations using those instructions. The other option would be for either the Department of Administration or for the ARMB to adopt regulations interpreting statute. The Board could define some of the terms and fill in some of the gray area gaps that the Legislature left. That would be an opportunity for the Board to explain why it was doing what it was doing and put that in law so that everyone could see what it was doing. There is a presumption of regularity that goes with adopted regulations that would give the Board a certain amount of protection in the event that someone did challenge it. It would also be a good way to tell the Legislature what the Board believes the statute means. That way, if there is a disagreement, there will be an opportunity ahead of time to get that worked out, as opposed to a couple of years later having an audit and Legislative Affairs or somebody trying to contradict the approach that the Board took.

MR. GOERING stated that as far as legal input goes there is no definitive answer. He planned to talk to Bill Nelson to get his point of view, but he thought there was some flexibility. It is just a question of how the Board wants to fill in the gaps in the statute for the purpose of proceeding. There is probably not time this year to do regulations, so the ARMB will almost certainly have to make an ad hoc decision. The Board may want to consider whether the Department of Administration or the Board itself should adopt regulations to interpret exactly what that statute means for the future. That way there will be no ambiguity about it on a going-forward basis.

CHAIR ERCHINGER commented that Mr. Goering had said that regulations would be adopted to interpret what the statute meant. But what the Committee is talking about is what the statute does not say and does not mean.

MR. GOERING expressed agreement with her statements.

CHAIR ERCHINGER said the statute says that the ARMB is going to amortize the unfunded liability over a closed 25-year period ending in 2039. It does not say what to do beyond 2039. Whatever the ARMB would be talking about with respect to anything happening after 2039 – whether to extend the amortization, or whether to change the amortization method, etc. – it sounded like Mr. Goering was saying that the ARMB would be talking about things that are not clear in the regulations.

COMMISSIONER FISHER stated that this issue was actually a dispute almost immediately after the statute passed. Certain individuals who worked for the Legislature at the time believed that the Legislature was very clear and a layered amortization was what they meant. He said that goes to the issue: does the statute say something different? He did not necessarily have an opinion, but he thought there were some people who actually believed the opposite of what (who?) just said.

CHAIR ERCHINGER said her point was that if the statute is not clear, and the ARMB was asked to

weigh in on regulations to clarify what the statute means, the trustees would not really know what that means, so they would be just interpreting what their version of it means. That could be what they think the statute meant or it could be what they wish the statute meant.

COMMISSIONER RIDLE commented that departments all the time clarify what is in statutes.

MR. GOERING agreed, adding that if they are not contradicting what the Legislature said. He noted that the statute does not say the year 2039; it says a closed term of 25 years. It does not say when that closed term starts. It may start when the liability accrued, or it may start on the date the statute passed. There are some assumptions that need to be clarified. It may be that if a liability does not accrue until 2020, it is amortized over a closed 25-year period that ends in 2045.

CHAIR ERCHINGER said it would essentially bring it back to the previous language in which there was not a closed period. So why even throw in the language of a closed period? She presumed the Legislature had a reason when using that language.

MR. GOERING said there could be some absurd results. There is the question of what happens if you get to the last year or past the last year, if you do believe that 2039 is the end of it, does that mean that you have to have liquidated 100% of the past service liability by that date? And if you have not, does the last year's contribution have to be 100% of the past service liability? He did not think the Legislature probably meant that. That was not the problem they were trying to solve. A lot of this would be sorted out and discussed in a lot of detail if regulations were done. He was not saying that regulations have to be done, because the ARMB could do an ad hoc determination. But regulations could be the opportunity to set the course for the future and make sure that it is clear to everyone.

MR. JOHNSON remarked that regulations create a problem in that, once adopted, there could be unforeseen events that would cause having to re-do the regulations, and so on. His feeling was that if there is ambiguity in the law about amortization that the ARMB do its best in terms of coming up with a solution on it and then ask its legal counsel if the law prohibits it from doing such-and-such. If it is not prohibited, then presumably under the ARMB's broader mandate to administer the fiduciary obligations and so on, it could proceed.

MR. GOERING said that was a valid approach as well. The only reason he was suggesting regulations was that if the Board adopted the approach Mr. Johnson was suggesting, then it is just as bound to that approach as it would be to regulations. The difference is that it is less clear exactly what the Board is bound to. The Board can always change the regulations and it can always change an ad hoc interpretation as well, as long as it can give reasons for why it is doing something different today than it did yesterday.

CHAIR ERCHINGER stated that the fact that the ARMB is in the bind it is in right now speaks to the need for that flexibility. When the Legislature passed that statute, it was not contemplating what was going to happen 25 or 30 years from now. Circumstances can change, whether it is the State's budget that changes or any number of things.

MR. GOERING said Mr. Kershner was specifically concerned about the effect that changing any actuarial assumptions would have on the past service liability calculation. The biggest takeaway is that the ARMB has a couple of options. He said Mr. Johnson put it in the exact right order: the best way to do it is for the Board to make its best good faith interpretation or reasonable interpretation of the statute, whether it does that on an ad hoc basis or a regulations basis. Then, the ARMB could ask the Department of Law to say yes, it could support that, or make some suggestions to make something supportable.

COMMISSIONER RIDLE stated that she does not represent municipal employers but she hears from them a lot. What she hears is that employers like knowing what they have to do for the next 20 years. However, that may not necessarily fit with what should be done. She asked Mr. Goering why he thought this was unlikely to get to the courts.

MR. GOERING said this kind of interpretation is the sort of thing that courts typically do not want to – he would not go quite so far as to say this might be non-justiciable, but it is fairly close. There are certain decisions that are policy decisions made by a government body, and it is difficult to frame those in a complaint that a court could decide. The municipal employers are paying the same rate, regardless. The State would have to sue itself to say its additional contribution is too large.

COMMISSIONER RIDLE pointed out that they also think that the additional contributions end at a future date on the horizon.

CHAIR ERCHINGER stated that when the amortization period was extended by nine years, it reduced the contribution rate to below 22%, thereby shifting all those costs that the State otherwise would have paid onto the municipalities. The municipalities tolerated that, but she did not think they were going to tolerate it again. Now it goes back to the whole deal that was cut with the municipalities and the State as to why the State agreed to pay anything over 22% in the first place. She did not want to rehash that whole issue; however, she did not think there was no ability for the State to be sued.

MR. GOERING said he could see her perspective on that now. The question in that case would not be how the statute is interpreted. The question would be who the past service liability attaches to, and that is a different issue than how to handle what is essentially a benefit administration issue of how to calculate that contribution rate. It is not a policy decision about whose liability it is. The municipalities may bring up the issue of who should pay the past service liability at some point.

CHAIR ERCHINGER stated that the statute talked about two things – setting a closed 25-year amortization period, and it also set the amortization methodology. To the extent that the Legislature spoke about the unfunded liability that existed on that date at that time, and that that unfunded liability has to be amortized over a closed 25-year period using level percentage of pay method, but every liability that accrues thereafter could be level dollar, could be a different amortization period – shorter or longer, rolling or not rolling, closed or not closed – that is very different.

MR. GOERING said that was an interpretation that the Board would have to make. Reading the statute, he thought there was a pretty wide range of things that people could come up with reasons

for. The Board might be able to come up with a reason why it would depart from a level percent of pay method for liabilities that occur in the future. But, practically, that would be a harder sell than the Board saying it was going to vary the term or when that term starts. Those are clearly ambiguous, as opposed to it seeming quite clear that the Legislature wanted the ARMB to use the level percent of pay method. He was not saying that the Board cannot depart from level percent of pay for things that were not contemplated by the statute, but that would be more out towards the fringes of reasonable than the things that would be right down the middle. Certainly, level percent of pay would be right down the middle of reasonable on the methodology. These are practical considerations, not legal ones.

CHAIR ERCHINGER explained that the reason the ARMB initially recommended a level dollar amount instead of a level percentage of pay had somewhat to do with the uncertainty of the pay. Who knows what payrolls are going to look like in the future? It also had to do with employers' preference to pay a known contribution amount that they could build into their budgets. In fact, the Governor asked the ARMB to meet a $500 million per year target because it was a sustainable contribution for the State. That is why the Board recommended doing away with level percentage of pay and going to the level dollar methodology. The Legislature, however, made its change in statute to accomplish what they wanted to at that time. Now there is talk again that it would be nice to have a known contribution amount that employers could budget. As long as it was a known amount that was budgetable and reasonable, she said she could argue that the Legislature had their intent, and this approach would not be inconsistent with what is reasonable, even though the language is not the same as the statute contemplated. On the other hand, she could make the same argument about the closed 25-year amortization period – it is crystal clear what the closed 25-year period means, unless she decided that there are other reasons why she did not want to be so crystal clear. People are looking for reasonable approaches that are going to be saleable, because a lot of parties will be interested and the ARMB does not want to get sued.

MR. GOERING responded that the ARMB has a range of reasonable options to handle this. The Board does have to interpret the statute: it is not a cookbook instruction that can be handed to the actuaries to do a certain calculation. He felt Mr. Kershner (Conduent) and Ms. Thompson (GRS) would say that the statute does not give enough information to know how to do what the Legislature meant. The only way that the current Legislature can speak today is by amending the statute: it cannot change what its intent was before. Also, in his view, it is unlikely that a court will ever interpret that.

Regarding constituencies, COMMISSIONER RIDLE said that when Legislative Finance had something different than the Governor's Office put in the budget, she did hear from municipalities and retiree groups asking why the State was endangering the retirement funds, etc.

MR. GOERING said those are practical considerations for the people around the table, but he thought they were a little bit outside the scope of legal interpretation. He added that he could go back and study the legislative record, and he was quite sure that in order to have intent a person has to understand the process. It seemed unlikely to him that the Legislature, as a whole, really understood the actuarial process. So, in the end, it is a bit of a fool's errand to try to figure that out. It comes down to the Board has to make a reasonable effort to interpret the statute and meet its

responsibilities as a board. That is the most important thing.

Prompted by Commissioner Ridle, MR. GOERING agreed that the Board could reasonably decide that the statute means exactly what it says, that the 25-year amortization started then, and all the problems of what happens when trying to squeeze new liabilities into a very short amortization period down the road justify amending the statute. That is a rational way to look at it, and the ARMB could ask the Legislature to fix that. It is just not the only way to do it because there is flexibility to do something differently.

CHAIR ERCHINGER remarked that it was a helpful discussion and a topic to return to, once the Committee has finished work on the valuations and the experience study.

IX. REVIEW TIMELINES: VALUATION AND EXPERIENCE STUDY

The Committee looked at the two timeline spreadsheets included in the meeting packet, one for the process of reviewing the June 30, 2017 valuations, which was drawing to a close with the Committee's recommendation to the full Board today to approve and adopt the reports at the board meeting this week. The other timeline was for taking up various aspects of the experience study until the Board adopts the new assumptions at its September 20 meeting, followed by Conduent's issuance of the final experience study report in the fall.

X. FUTURE MEETINGS

A. Calendar Review 2018-2019

The schedule of meetings for the second half of 2018 was included in the packet, along with a tentative outline for meetings in 2019.

B. Agenda Items – Follow-up on ARMB statute legal discussion.

C. Requests / Follow-Ups – None.

XI. OTHER MATTERS TO PROPERLY COME BEFORE THE COMMITTEE

There were no other matters.

XII. PUBLIC/MEMBER COMMENTS

MR. JOHNSON said he appreciated hearing the expert dialogue today from Conduent, GRS and Callan. It does not make matters necessarily easier to decide, but it is important to hear the different views from the experts.

MR. WILLIAMS indicated he also appreciated the three different perspectives. He referred to a note on slide 9 in the Conduent presentation to see December 6, 2017 meeting materials and asked if there could be a brief description of GEMS included because he was unable to find the reference.

XIII. Adjournment

MS. HARBO moved to adjourn the meeting, and MR. JOHNSON seconded. The meeting was adjourned at 12:48 p.m.

Note: An outside contractor prepared the summary minutes from staff's recording of the meeting. For in-depth discussion and presentation details, please refer to the recording, staff reports, and written presentation materials on file at the ARMB office.

Confidential Office Services
Karen Pearce Brown