PUBLIC RETIREMENT SYSTEMS' ACTUARIAL COMMITTEE

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Public Retirement Systems' Actuarial Committee

MINUTES
12 FEBRUARY 2020

I. CALL TO ORDER

A meeting of the Public Retirement Systems' Actuarial Committee (PRSAC) was held on 12 February 2020 in Committee Room A-B at the State Capitol in Baton Rouge, Louisiana. The chairman, Senator Barrow Peacock, called the meeting to order at 9:00 AM.

II. ROLL CALL

The secretary called the roll and the following were accounted:

MEMBERS PRESENT

Senator Barrow Peacock	Chairman and Designee for Senate President John Alario
Representative Lance Harris	Designee for House Speaker Clay Schexnayder
Daryl Purpera	Louisiana Legislative Auditor (LLA)
Rick McGimsey	Proxy for Barbara Goodson Designee for Commissioner Jay Dardenne (DOA)
John Broussard	Designee for Treasurer John Schroder
Greg Curran	Actuary | G.S. Curran & Company, Ltd. (GSC)
Shelley Johnson	Actuary | Foster & Foster Actuaries & Consultants
Senator Edward Price	Newly appointed chairman to the Senate Committee on Retirement

Chairman Peacock confirmed PRSAC is in receipt of proper documentation from a majority of the statewide retirement systems. He acknowledges staff and witnesses wishing to speak having completed white cards. He indicated public comment would be taken first, with valuations to follow.

STAFF MEMBERS PRESENT

Kelsey Rome	Secretary
Laura Gail Sullivan	Senate Counsel

WITNESS CARDS SUBMITTED - FOR INFORMATION

James J. Rizzo	Louisiana Legislative Auditor
Lowell Good	Louisiana Legislative Auditor

III. APPROVAL OF MINUTES

John Broussard motioned to approve the minutes of 18 December 2019; Daryl Purpera seconded. There being no objection, the minutes were approved.

IV. PUBLIC COMMENT

WITNESS CARDS SUBMITTED | STATEMENTS

Scott Brewer Fire District 9	Can provide information if requested

Mayor Ronnie Walker City of Ruston, LA	-Serves on the LMA and the Firefighters (FRS) boards -Spoke as Mayor of Ruston, Louisiana The firefighters benefit portion for the last 15 years has increased *from* 8% *to* 10%; 25% increase. Benefits for the city of Ruston has increased *from* 10% *to* 32%; 220% increase. Lowering the assumed rate is totally supported. Reducing the rate by a quarter of a percent, the real cost to police, firefighters and municipal workers - would be $3 million. The city of Ruston can sustain this but most cities can not. Funding mechanisms must be addressed because the cities can not continue to fund this issue The work of PRSAC is appreciated however, there are no administrators, mayors, or firefighters on the committee. We are the entities footing the bill for most of the retirement system. --------------- Chairman Peacock requested LMA & FRS submit recommendations through there legislators.
Chief Gerard C. Tarleton - Firefighters Assn. of Louisiana | Board of Trustees Member	-Spoke as fire chief of St. George Fire District of East Baton Rouge -Addressed the proposed 57% increase and confirmed this would decimate fire services in Louisiana. With decent funding, this increase would amount to an approximate three and half million dollar hit to St. George. With a $12 million payroll and 200 employees, layoffs are inevitable. Daily, not monthly or annual, conversations are needed to address and solve this issue. Contract workers have been laid off over concerns of the 32% increase.
Chief Chris Kaufman -St. Tammany Police Chief District 1 | Slidell -St. Tammany Fire Chiefs Association -Louisiana Association of Fire Chiefs	-Echoed sentiments from Chief Tarleton, and recommended the lowest rate possible. Request made to remove the 57% from consideration, especially with two actuaries so far apart in calculations. Discontinuing new firefighter contributions would devastate the system in the near future. Legislation to reform this measure should be discussed with firefighter associations. A third party financial institution is assessing the FRS portfolio, including all fees. For the first time, Louisiana chiefs and firefighters are working together to develop solutions. Having the right people at the table will make a major difference.

Mark Waniewski PMI Resource, Inc. (Personnel Management, Inc.) - Shreveport, LA	-Represents LA districts: Dist. 1 (Slidell), Dist. 3 (LaCombe), Dist. 2 (Madisonville), Dist. 4 (Mandeville) Dist. 3 and Dist. 5 (Caddo). -The 57% valuations would equate to a 20-25% reduction in force. Firefighters are manpower-rich and service-based; more than 80% in operations, payroll/payroll related expenses. By law, junior members are laid off first; new system contributors would be dropped in addition to a hiring freeze. With this workforce reduction, PAIL would have adverse effects. Cascade effects to first responders, firefighters and citizens served would be as much or even more devastating. Strongly recommended closer look at audit calculations;30 points apart by two actuaries is significant. A long-term solution is needed.

Member Purpera extended gratitude for the public testimony provided and those present in support of the recommended valuations. Budget issues and increases are totally understandable.
From a legislative auditor/actuary perspective, real cost did increase. Not recognizing this may have occurred through assumptions, but does not make the cost disappear nor ensure available funds.

V. DISCUSSION ITEMS

APPROVAL OF 2019 ANNUAL ACTUARIAL VALUATIONS AND THE REQUIRED CONTRIBUTIONS AND DEDICATION OF REVENUES THEREIN FOR THE FOLLOWING STATE AND STATEWIDE RETIREMENT SYSTEMS

TEACHERS' RETIREMENT SYSTEM OF LOUISIANA (TRSL)

Member Johnson indicated a revised valuation was covered, after a lengthy discussion held 18 December 2019. The TRSL 30 June 2019 had a change to the projected contribution rate for fiscal year ending 2021. The valuation was and remains prepared at 7.55. The board considered and adopted this change for the projected rate; next year's valuation will be at the 7.45% discounted rate.
Page 1, Section 10 of the valuation displayed the discounted rate for next year; change to 7.45%. The aggregate contribution rate was changed *from* 25.3 *to* 25.6; a reduction from the prior year of 25.9; a reduction *from* .6 *to* .3%.
Page 2 displays the employer group summary. The project contribution rates of the plans for retired teachers and lunch plans was 25.8, up *from* 25.5. The higher education rate was changed *from* 24.7 *to* 25.0. The aggregates for both groups was 25.3, now 25.6. The UAL has a projected increase by $300 million; a change worth $150 million.

Member McGimsey stated the original assumed value rate of return was recommended at 7.50; the same rate presented to the legislature based on the original action of the board. The new recommendation of 7.45 will impact higher education. Higher education increased cost is estimated at $3 million dollars; not submitted in the executive budget, and must be addressed.

Member Johnson motioned to approve the revised valuation for TRSL at 7.55% discount rate and the 7.45% discount for the projected contribution rate. **Member Broussard** seconded. **Hearing no objection, the motion was approved.**

FIREFIGHTERS' RETIREMENT SYSTEM (FRS)

Member Curran referenced Page 4 data displaying methods and assumptions of the FRS plan. Act 91 of the 2019 Legislative Session changed the funding method for firefighters to the frozen initial liability cost method. This modifies future cost allocations. Instead of a preset time period, liability is spread and based on plan population and the average future working lifetime. The UAL entry age is frozen and set on a schedule pay off over 15 years.
Page 24-25 displays history but not all history due to the frozen UAL to be assessed. Since 2002 this report, with all non-merger UALs combined and offset, listed are all plan gains or losses culminating where Act 91 applies. Each item has a payment and schedule combined with 15 years of payments. All future cost is calculated under this future working lifetime calculation.
Act 91 was set to decrease payments at 1%. In 1989, when UALs were first reviewed, the plans were younger and growing in population. Many of the created payment schedules were set to increase payments annually. If payroll grows at 3% on average and the payment grows at the same, the payroll cost would remain level. In the last decade, plans have slow or stagnated growth. UAL cost increased as a percentage is paid even with level payments. To avoid this problem in the future, Act 91 required decreasing payment of one percent. Even if FRS had stagnant or slight population declines, the cost to payoff the UAL would remain level. With no plan shrinkage, particular portions would decline with a percentage of payroll - assuming future growth is not guaranteed.
Addressing previous witness testimony regarding differences between the actuaries and the LLA, there are two distinct valuations with FRS and MERS. One valuation difference is the interest rate. Review processes are similar but outcomes are different; actuaries build averages differently with varied information from consultants. Capital market assumptions and long term assumptions are different. Common actuarial practice supports this outcome. Open pension plans add new hires and exist long term, using long-term rates of return. Standards of practice dictate actuaries are to consider numerous factors. A valuation of interest rates are similar throughout the system to set reasonable ranges. In 2017, the FRS plan rate was reduced *from* 7.5. *to* 7% over five years. The plan rate reduction at 7.2% reduction was outside the updated reasonable range. The board set the rate at the top of the reasonable range, with all assumed rates for review. MERS will have an experienced study. FRS and other statewide plans will see a review of assumptions.
With a process to determine a reasonable range, many areas are reviewed to determine what is preferable. At the top of the reasonable range was 7.15. Further discussions allows for a reduced rate. The range is not a single value is due to uncertainties. If there is a set range, with a process to make a range determination, there must be a willingness to accept a value within that range. Over time, decreasing a range would carry built-in conservatism along with future plan liability.
Page 5 displays a review of long-term inflation, reducing the rate of return. With a significant reduction in the valuation rate *from* 7.5 *to* 7.15% in three years; having lowered the assumed rate of

inflation. An interim review of salary scale was selected. This review effectuated, as with other system inflation rates, to an annual salary scale review. Salaries are below the assumed rates set in the last study period; salary scale was lowered by .25%. This lowered scale does not come remotely close to off-setting the impact of the valuation interest rate. Performing a review every five years is suggested versus changing assumptions.
When making assumptions bigger than those the board decides, it is appropriate to complete an interim study. In the end, the assumption changes were negative to plan cost. An increase to the UAL payments are about $3 million.
Page 7 displays a review of risks. FRS has suffered through significant lost in the market even though not market-driven. The portfolio created under a prior consultant, provided no investment in a broad market of private investments. The fund was invested in a number of individualized investment opportunities; all were credit-sensitive.
The 2008 credit crunch led to numerous loses that were not projected. When setting an assumed rate of return, it can be 5.8; as it was in the past where employers were asked to pay significantly more. This would ignore today's portfolio, writing off most of the one-off investments that are not expected to follow market-trends. Today's portfolio is invested in broad categories, stocks, bonds and real estate, with little private investments. Asset classes are expected with standard deviations of returns, applied continually.
The top reasonable range is .15.. Actuarial standards of practice at one time recommended *from* the 25th *to* 75th percentile of likely results. The standards board was removed, not to give too much flexibility to actuaries while maintaining good judgement.

Senator Peacock stated the shortfall of investment income is a major concern that needs addressing.

Member Curran concurred and stated not all statewide systems are the same but some have similar portfolio mixes. A variety of reports show a less drastic schedule of investment losses versus expected results. Some Louisiana mayors and fire chiefs noticed rates were higher and accounted for losses. Smoothing is good but not with a single-sided lost or gain. Currently, cost increases are seen, especially since the last five years were not positive. Best practices were not the problem as much as a lack of execution in investment portfolios.

Member Purpera indicated sticking to the method did not result in an assumed rate of return in line with the actual experience . When a higher assumed rate of return is attempted, it directs the portfolio. If the past 25-30 years has not resulted in best actions and results, recognized cost is not realized.

Member Curran stated the next experience study is due in Spring.
It is often inappropriate for the board to set asset-allocations based on the actuarial assumptions. The exact opposite should occur. Asset allocation and risk tolerance should be reviewed and based on the comfort of the system. Thereafter, actuaries can review and make appropriate assumptions. It has gone the opposite way in the past. Champion actuarial standards will always occur. Placing systems in risk-free investments and spending more for each pension be a balance. Long-term investing and plan limits cost and are risky assets.
Page 1 displays the valuation summary, including basic plan numbers. A slight increase occurred in active membership. A growth in retired members is expected, unless mortality exceeds the number of

retirements in the plan. Payroll shows a slight increase; percentage of pay slightly more positive while benefits and payments continually increased. Gains and losses will no longer flow from the UAL. This valuation will be harder to view due to the change from one method to another. Currently, the plan is 76% funded. Returns in the year were not helpful. Calculation summaries were provided.
Funds are needed for the new accrual; not a normal cost. UAL pay-off is required; up from last year due to additional losses. $28 million was received to cover administrative cost and does eliminate direct employer costs. 32.25 will be received at the end of FY21. Liability experience gains provided off-sets but not enough. Entities still felt a big squeeze.

Lowell Good - Actuary for Legislative Auditor (LLA) spoke of his current responsibilities acquired one year ago; arriving at LLA with 35 years of experience.
The mission of LLA is to monitor fund status of 13 state retirement systems, and advocate for sound actuarial practices. The legislature, system boards, members and beneficiaries rely on LLA to value liabilities by providing sound retirement securities.
LLA has contracted with Gabriel, Roeder, Smith & Company (GRS) to assist in developing advantageous recommendations. Mr. Good introduced James Rizzo, a senior GRS consultant with 40 years experience and thought-leader on pension returns: will present FRS data. Dr. Piotr Krekora has a PhD in quantum physics and was a former research scientist prior to becoming a GRS actuary; with more than 14 years experience.
GRS performed full actuarial valuations for FRS and MERS. Founded in 1938, GRS is a national actuarial and benefits consulting company; one of the largest firms dedicated to bringing clients innovative and sustainable solutions . With more than 50 consultants and 800 clients in 42 states, GRS supports long-term success of pensions, health and welfare benefit plans. GRS staffers sit on the national actuarial board and chairs the National Standards Board Pension Committee

James Rizzo summarized the FRS valuation indicating the current summations cover two full actuarial reports, coupled with comprehensive actuarial reviews. The comprehensive reports encompass only key assumptions, minus calculations of a contribution requirement. The actuarial review is the same as the comprehensive, but not as detailed.
The return assumption *is not* driven by what can be afforded. It *is not* a lever to adjust up or down to meet a budget. It *is not* a lever to set for budget purposes, then identify a budget to support it. *It is* an unbiased expectation of portfolio funds and earning expectations over time; utilizing input from expert forecasters. GRS actuaries do not forecast future rates of return on market debt. GRS provides return assumptions used in a valuation.
Page 5 GRS Actuarial Report displays a 31.2% rate of pay mirroring previous comments from Mr. Curran. GRS added .6% to the contribution rate; all within actuarial audits and replications.

Dr. Krekora discussed mortality rates. As a board member of the Society of Actuaries many changes are made to mortality rates. Mr. Curran chose to defer this change until the comprehensive actuarial experience is complete. GRS suggest it would not be necessary to wait, as most actuarial assumptions occur over five years, unless a new development arises. The new mortality table, the first study of its kind, is a collected from multiple, large, public sector retirement systems. Previous mortality tables were collected simultaneously from member data. Although grouped in different ways, GRS had income levels and job types but no geographical data on members from the third party vendor. This

vendor used responses that were not uniform across the nation. GRS used national mortality data when reviewing FRS on positions covering safety. In lieu of geographical data, FRS income levels in Louisiana were used. The state is on the low end of the low-income national income average.
GRS applied generational projections using baked-in expected improvements to the life cycle of the plan; applied to all FRS members. These are called cohort effects like smokers; improvements are lower. All data mirrors other systems having gone through the experience study. 1.7 was the change in mortality rates relative to firefighters. The lower the rate, the easier it is to change during the course of an experience study, especially in small groups.

Mr. Rizzo stated Appendix B4 displays inflation data provided by third party experts. Inflation is significant when setting a return assumption. The less expected inflation, the less market expectations. The return assumption is an arms-length assessment of what the portfolio earns over time. A long-run objective (10 years) is used and is a Core Personal Consumption Expenditure (PCE) expectation. The Consumer Price Index (CPI) is about 40 base points higher. The CPI off of the federal reserve board objective is 2.4. The Congressional Budget Office (CBO) has an ultimate and 10 years are in the 2.3 to 2.4 range. Social Security is in 2.5 range and are the highest. A review of several banks are provided including break-even amounts.
FRS were commended for lowering their return assumption. Although not fast or far enough, it is in the right direction. Lowering of inflation is also the appropriate action to take. Each time the data is reviewed, it does not appear to be enough based on expert forecasts. It is safe for a fiduciary to rely on forecast experts. The strongest factor effecting investment performance is asset allocation; conventional wisdom used for years. Aggressive and prudent portfolios should have equal expectations for earnings. Conservative portfolios do not yield as much.
Page C5 displays the largest investment firms in the country that use a principle of forecasting science encompassing numerous models.
Page C7 displays 14 firms, regarding 50th percentile rate of return. The most optimistic forecast is 7.07. Appendix D displays adjustments to cash flow that removes plans off the horizon. Recommended rates are moved for 10 years at 6.08% to recognize cash flow. GRS recommended the most appropriate rate of 6.5; used to run the valuation report. A lower inflation assumption was used in the salary assumption. Salary scales are tied to inflation scales with 2.5% built-in. For FRS, some salary adjustments were factored to ensure the plan is not underfunded, including merit and inflation rates. Having more than 300 employers, it is unknown how each are accounted for per pay scale periodically adjusted for inflation. Salaries can be sticky and show jagged increases over time. Assumptions are made on plan levels on the average member. This is not consistent with each municipality.

Dr. Krekora stated the ways to evaluate pay scales: new recruits are expected to be paid less. Increases are expected to annualized for a terminal FRS member at the top of the pay scale. Either has built-in pay COLA increases. GRS used the most appropriate 50/50 to achieve a long or short-term rise. A plan to earn income used an inflation assumption of 2.2, 30 bases lower than the boards' 2.5% .

Mr. Rizzo indicated moving the assumption to more mainstream would raise contribution requirements by 10.3% of pay. Must of these plans rely heavily on the investment world for funding; approximately 80% of earnings which are derived from investments not contributions. If the investment world does not cover plans, funds must be covered through contribution rates. If employee rates, benefits and risk

files of the portfolios are fixed by statutes, the contribution of the employer must be backed-into to determine a number; making good on an actuarially funded plan. Otherwise, the program is out of balance. When referring to mainstream, the inference is to investment consulting.

Member Johnson questioned how similar actuarial funds are compared. Her research found that GRS also uses a rate of inflation of 2.5%. She questioned Mr. Rizzo on what guided GRS to use the 2.5% inflation assumption. She questioned whether this appears to be ok for GRS but not for Louisiana plans.

Mr. Rizzo suggested trouble could be imminent if peer comparison is the only action taken. Reviewing outside peer systems and comparing inflation rate of returns is recommended. Economists own future inflation forecasting.

Member Curran indicated a peer comparison can be done as a defense of how assumptions are made. Assumptions have long and short-term applications for actuarial standards; some have even more facets. A range is set versus an actual number because even experts have disparities. Remaining on a path to lower rates, we are comfortable by defending a range. Will must not bent to the board by setting unreasonable assumptions.

Mr. Rizzo explained the two kinds of COLAs. COLAs in Louisiana can be paid from in-excess earnings and another from a funding deposit account (FDA) credit balance. FRS does not have the FDA option. By statute, FRS COLAs are paid only from earnings that exceed assumption.
Appendix E2 displays history. By statute, FRS must meet two rules before granting a COLA: the window-rule and the sufficient Actuarial return rule. The window rule requires if a COLA is paid, the window closes on granting another COLA for two, three or four years; allowing the window to open again thereafter. The window-rule was satisfied in 2014 and closed for three years. The window-rule was re-opened in 2018. The sufficient Actuarial rule was met and paid in 2014, with a sufficient rate of return exceeding its valuation rate of 7.5%. For the following years, there was insufficient rates of return, preventing COLAs for five years. If FRS expects 7.15% rate of return in the future, some years must be higher than 7.15 and some lower than 7.15. Actuarial duties must assume the reasonable likelihood of benefits for COLAs to be permitted and/or paid. GRS proposed a *pay as you go* versus waiting for something to happen and then determine how its paid.

Member Broussard spoke of his 38 years in the investment industry and believes whether the board chooses the GRS or LLA valuation, both are wrong. Economics is called the dismal science because if the Bloomberg chart is viewed showing inflation PCI or PCE landings, much of the 60 plus economists polled are wrong. Inflation will not be 2.16 and will not be 2.5. With investment returns, GRS estimates may be overly optimistic or the Curran/LLA estimates may be overly pessimistic. Both are in the realms of probability. The truest item discussed is what the cities and firefighters will pay. The math of the actuaries are exactly correct. Regardless of sources, the best we can do is to position investments the best we can do today.

Representative Barry Ivy spoke as an FRS board member. Efforts made by LLA have proven a measure of gold standards, even with disparities. Sins of the past exist in the systems. The legislature did not pay its liability, and FRS made poor investment decisions. In some cases FRS was defrauded. The FRS board made reduced rates of return without encouragement. Ultimately, taxpayers are on the hook when the system gets it wrong. Plan designs appear to be all or nothing. There is no shared risk for employees. Sustained design needs to be reviewed. Too much too soon can create a ripple effect of consequences - a direct effect on insurance.

Member/Representative Harris indicated there is a difference in what is paid, however dissimilar the dollar amount. Drastic measures, especially layoffs, are of major concern.

Member Purpera indicated the win should be based on independent evaluation and assisting the board to make decisions.

Member Curran motioned to adopt the FRS valuation report presented by G.S. Curran & Co. (GSC), for 6.30.2019 including therein is the request for full allocation of insurance premium taxes for 2020 and a minimum contribution rate for 2021 or 32.25%. **Member Broussard** seconded. **Hearing no objection, the motion was approved.**

MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM (MERS)

Member Curran stated the MERS valuation includes assumptions recommended by GSC to the board in a full experience study. A move to generational mortality is included, along with resetting retirement, withdrawal and disability rates. In this study, investment return assumption was reviewed and determined. The estimated reasonable range was not met. The board accepted the recommendations to fast forward the early plan reduction *from* five *to* four years.
Page 5 references valuations at 7%; increase and decrease to the change in assumption.
MERS has two plans; Plan A is typical to other system plans. Plan B is composed employers primarily *not* excluded from Social Security, and therefore have lower benefit; smaller cost and lower benefit.
Page 8 displays sensitivity in the change of the valuation rate. Plan A, if reduced from the 7% to 6% assumed rate, the expected plan increase is 9.5% for Plan A and 5.6% for Plan B. Plans are not the same sensitivity; FRS had 15%. MERS is less sensitive.
Page 9 displays asset experience for both plans, as well as smooth returns. Plans A and B earned 4.9 and 4.8 from audited statements. Allocation in plans leads to nominal difference. 2019 led to losses below the assumed rate.
Page 10 displays Plan A cost increases related to investment earnings; approximately 3.4% in Plan A and 1.8 in Plan B. The legislature and the constitution prevents plans from failing even though the constitution leaves this up to the interpreter and the legislature has not given directives.
Page 11 displays both plans in demographic liability and experience; favorable for both groups even though conservative. The plans saved money; more than assumed. This is common due to muted salary increases, plan costs and economic environments.
Page 12 and 13 displays useful data, showing pros and cons of percentages listed. Plan A is provided an assumption change that increased the plan; netting .9% of pay. Asset experience was a lost; adding

almost 3.4%. Contribution reference lost timing; unusually small to .17%. As cost increase, chasing that will continue. Reduction in new member benefits have provided substantial savings; within 2% of pay. Plan liability experience was also positive.
Plan B has similar numbers displayed on Page 13.
Page 14 references the boards' right to set the employer rates up to 3% more than the minimum. If set at any point above the minimum and it generates gains, funds are placed in an FDA. The board must pay COLAs out of the FDA.
Page 1 of Plan A summarizes point to shrinking numbers with its own consequences. The good news is that payroll has grown overall. Benefits are up as expected. The UAL frozen 1989, set for payoff in 2029; reduced *from* $68 million *to* $65 million by design. The FDA stands at $9.3 million. The funding ratio is 60%. Plan B results has similar higher rates at 15.5%; collecting 14%, slightly above the minimum for the previous year. Plan B also paid off its UAL.

Mr. Rizzo stated GRS performed a complete valuation of MERS.
Page 6 displays incremental increases within reason. Even with the change in contribution requirements, it is still within tolerance ranges. The return assumption added 6% of pay by changing the return assumption *from* 7% *to* 6.4%.
Appendix C7 asset allocation is not much different than FRS because the average expectancy of the return is 6.03. This was increased where cash flow is a calculated horizon expectancy. The horizon is 15 years instead of 10 or 30; average used is 6.40 as the investment return assumption.
It has been a long time since MERS had a COLA.
Appendix E2 displays the window for granting a COLA is open but, MERS has insufficient actuarial rates of return to clear assumption hurdles. MERS has not used its healthy FDA to pay COLAs, but to reduce the 2016 employer contribution. In 2017, it was used to payoff the UAL for Plan B. Demographics differ compared to FRS. Firefighters retire earlier, hence FRS COLAs start earlier with shorter times to fund. The effect is 6% on economic changes, and another 6% on the COLA.

Dr. Krekora stated the table displayed on Page 7 has no line for change in assumptions due to assumptions adopted by the system actuary. The experience study report thoroughly describes the methods. GRS has endorsed the results from the board actuary.
The mortality rates were based on 2010 population, along with applying generational mortality rates with actuarial resources.

Member Purpera questioned whether his office has been consistent with the assumed rate of return, determined to be lower than what it has been per year. He questioned whether the most appropriate rate from GRS be lower than the system rate.

Dr. Krekora answered that outside forecasts have continually pointed lower. There were years that the upper range were attempted but did not fly. It is understood that the preference by Purpera's office would provide recommendations in the ideal world. Therefore, GRS suggests a recommendation right in the middle.

Mr. Rizzo answered that last year the only difference from last year was GRS developed an appropriate range. Last year's valuation of the four systems were performed at the upper end of the range. GRS has previously chosen lower rates than the system.

Member Purpera stated the 2016 contribution rate of 23% has increased to 24%, 26%, 26.7%, 25%, and now 29.50%. I f a lower appropriate rate in 2016 was selected, the eventual arrival would have been at the higher contribution rate. He questioned whether the investment earnings are required, resulting in investments to invest? Someone will have to pay in the future. Whenever that occurs, the lower amount is preferred.

Mr. Rizzo stated when increasing to the most appropriate rate and the median identified, the forecasters allow for stable contribution rates. It would be higher at the current rate, but if investment forecasters are correct, contribution rates will continue to creep upward. Yes, investments would result in investments to invest.

Member Curran confirmed that COLA cost ignores employer cost as a factor in determining the whether COLAs are granted. FRS granting COLAs will cost an average of 12% of pay, regardless if the employer contribution rate has periodic gains. The board must use the same logic in paying COLAs. Most FRS COLAs were paid at a time when the employer rate was 9%, regardless of where the COLA was paid. Historically, boards have given COLAs when it did not have significant impact to employer rates. Whether at 29% or 32%, the same math is logical. If this is modeled, than actuarial judgement would be factored. Boards have historically followed ground facts along with the difficult changes in board dynamic. If GSC changes the employer rates to include COLAs on a future likelihood, the license to argue for COLAs would be given to all systems. When reports change requiring cities to pay COLAs, saying no to these systems becomes futile, especially if funded. The FDA is the preferred payment method when funds are available.
The legislature should identify the frequency and method for COLA payments . If every four or five years is the norm, anything extra could be calculated to include the amount needed above the minimum. This will project sufficient amounts into the FDA.
Actuaries are not intended to decide COLA frequencies. It is believed that if GSC modeled it, a total cost to the plan would be included as a triggering mechanism, limiting cost impact. By standard, it is not proper and by policy, its not a good idea.

Member Curran motioned to adopt the MERS valuation presented by GSC. This includes the collection of all taxes due to Plan A, due to the funds, and a minimum recommendation rate for employers: 29.50% for Plan A for FY2021 and 15.50% for Plan B for FY2021. **Member Broussard** seconded. **Hearing no objection, the motion was approved.**

CLERKS OF COURT RETIREMENT SYSTEMS (CCRS)

Member Curran stated there was no change to the investment return assumption at 6.75% for the CCRS. The same process was adapted for the FRS and MERS portfolio. 6.75 was found to be within

the reasonable range. An experienced study will be performed, and advise will be given to for reductions.
Page 1 displays a results summary showing a slight reduction in active membership. Payroll has grown, as with other plans. The frozen UAL measured in 1989 is set to be paid off by 2029. Payments are set in stone until the balance is zeroed. There is a FDA, funded by collecting additional contributions; balance of $9.4 million. T his could be used to pay COLAs or paying off UALs.. The funding ratio is higher at 81.33% because unlike MERS and FRS, the hope was that right-offs of investment decisions did not suffer. Returns for the year was 3.2% with a generic portfolio. Average actuarial return is similar to other plans at 4.9; below assumptions but is not intended increase cost.
Page 7 displays the return assumption number was lowered by a percent, the plan cost would increase to 11.44; north of MERS but below FRS. The sensitivity number increases as assumed rates decrease. Regardless of demographics, the plan grows as the sensitivity rate is reduced.
Page 8 displays demographics other than investment return. Assumptions were neutral with a normal cost of increase of .087%.
Page 9 displays three items impacting cost, with no contribution gain or lost due to FDA account. Asset experience lost would increase cost about 1.3%. Liability cost was minimal at .08. New members generally have new tiers of benefits and are generally cheaper . Eventual cost offsets are .77% of pay.
Page 10 displays a range from 19% - 22% for employer rate. This is a board decision.
Page 11 shows that because funding ratios are 81.71%, the plan does not qualify for an increase, since the fund granted an increase (COLA) in the prior two fiscal years. The legislature has included restrictions based on funding ratios.
Page 24 displays an additional $909,000 to the FDA by asking employers to pay more than the minimum. This accounts for the growth to approximately $9 million.
Page 33-34 displays actual rate held at 19% since 2015. This is due to held higher and any extra was added to the FDA.
GSC recommends 19%, which is above the minimum from last year, but equal to what was paid in a previous year . Investment valuation rate is 6.75, same as the prior year. Structurally, it is working but still conservitizing.

Member Peacock stated a concern for total years as a negative number; the shortfall of investment income. Four of the last five years are negative except 2017.

Member Curran stated the market value of assets, displayed on Page 21, is at $641 million to the Actuarial assets of $655 million. Not being far apart should provide comfort. Losses are bigger due to the smoothing out and all losses not accounted for. Smoothing mechanisms are not meaningfully for changing the plan rate.

Mr. Rizzo stated that the rate of return of 6.75 as optimistic.
Page 12 displays a comprehensive Actuarial review with the 14 investment forecaster providing specifics for the next 10 years; averaging 6.17, minus data to sharp-pencil the figure. It was increased to 6.50; a good 15year horizon. Because this was not a full valuation, the full contribution requirement was not calculated.
Page 16 displays the open or closure of the COLA window, satisfied or not; similar for other systems. In 2017, when the COLA was permitted, it was paid out of the FDA. GRC concurs with the valuation

of not having recognized COLAs in advance. The actuarial treatment for COLAs would be different if paid out of gain sharing versus FDA.

Dr. Krekora stated there were minimal considerations of mortality rates and not much reliance on experience. Using the 2010 population with some adjustment for below-median incomes, GRS would find this suitable versus the old mortality table. The experience study will show next year's change.

Member Curran motioned the adoption of the valuation report for June 2019. The Clerks should receive all ad valorem or revenue sharing tax due to the plan, and the minimum recommended employer contribution rate for FY2021 set at 19%. **Member Broussard** seconded. **Hearing no objection, the motion was approved.**

DISTRICT ATTORNEYS' RETIREMENT SYSTEMS (DARS)

Member Curren stated all assumptions remain unchanged from prior year; 6.5% valuation rate. The experience study will be performed in the Spring to include new assumptions for 2020. This may or may not include a reduction. The sensitivity number is 12.75 with one percent reduction.
Page 7 displays rates of return, earning 4.5 for FY. 4.9 was the actuarial return. The 25 year average for DARS exceeds by .4% of the presumed rate of return.
Page 8 displays favorable demographics and reliability experience; far below average salary expectations; 1.28% cost increase to the plan. Asset experience was negative. Contribution rate timing leads to lost, adding .25%. Plan liability experience will more than offset for asset liability. New members remain cheaper than the average, with 0.2% of pay. Overall, there was a reduction in normal cost rate.
Page 9 displays FDA language is by statute that has not been used.
Page 10 displays no excess earnings with no money in the FDA. DARS is not authorized to pay COLAs for 2020. A slight decrease is shown in active membership, with payroll showing slight increase. Legislation for re-employing retirees be developed in the future. Employers may choose to hire what is perceived to be cheaper retiree verus a new members. Subsidizing this kind of fund is not recommenced. Funding ratio is 94.4%. This is a spread-game method with all costs spread normally. DARS has no UAL and has not due to measurement since determining there was no need for one in 1989. The FDA remains zero until funds are added but the structure is in statute.
Employers are paying 4% . A minimum of 3.25% for 2021 is recommended. T he board has the right to set above the 4% minimum for the prior year.

Dr. Krekora stated only a high-level review was completed for DARS. The investment rate of return assumption is 6.5%; comparatively low to other systems but in top range of analysis performed two to three years ago. To determine if this is conservative, the asset allocation needs to be reviewed. Due to low investment appetite and the reduction in forecaster expectations, 5.5 or 6.35% is preferable. In the last six years, the COLA was granted six times. Each time the window was open, the board declined granting COLAs. Current value benefits does not anticipate future ad hoc cost. With such a small plan, there is no need to wait for an experience study to determine mortality rates. This mortality should be more favorable, as this group should have a higher life expectancy.

Member Curran motioned to accept the DARS actuarial review for 6.30.2019 inclusive with DARS to receive all revenue sharing funds allocated to the plan, along with setting the employer contribution rate of 3.25% for 2021. **Member Broussard** seconded. **Hearing no objection, the motion was approved.**

MUNICIPAL POLICE EMPLOYEES' RETIREMENT SYSTEM (MPERS)

Member Curran stated a review of the value interest rate was completed based on MPERS portfolio, finding 7.18% of return was still within reasonable range. A plan reduction occurred over several years. The prior valuation was 7.2 and set to change to 7.18. The MPERS board agreed to continue this decrease for the future. Experience study recommendations will be made in the Spring if needed.
Page 6 displays 15.75% sensitivity rate of payroll. By legislation, this plan had numerous retirees and greater sensitivity. When the valuation interest rate is lowered, the cost of retired liabilities and inactives. Funds are collected only from the actives.
Page 8 displays the actuarial asset of the MPERS; 3.8% market return in 2019. 14.6% smooth Actuarial return is still below the assumed rate, along with an increase in cost. The DROP rates are credited with 4.1%. The rate is certified for those who opt-in to the legislatively allowed rate MPERS has earned.

Ben Huxen, Executive Director and General Counsel for MPERS stated members who are first eligible for DROP on or after June 1, 2019 must enter the money market. They are not stuck in money-market. They can adjust to self-directed option. While some chose money market, other chose D1, which are in the can' t-loose/constitutional required version. D3 receives the system rate of return, less half of a percent for administrative cost. D3 can go negative.

Member Curran confirmed those in this category acquire a half of a percent lower than the return, allocated annually.
Page 9 displays impact of the asset experience; increase cost in 2019. Demographic gains were minimal; will offset cost by .03%. All aligned with assumptions are a part of the ebb and flow of salaries. 27 versus the 26 pay periods can be built into assumptions.
Page 10 displays the MPERS plan; funded on an entry-age funded basis. A service-related cost component is paid for each member. There is also a UAL with historical gains and losses with each having a specific legal period spread. Payroll has an impact, which is helpful as .93%; lowering UAL payment cost. There is no change in benefits, and liabilities were negative causing an increase in cost. Liability has slight gain, and there were no COLAs paid. Contribution gain lost was a gain of .28%. The total cost was 33.75 based on rounding rules in law.
Page 11 displays the funded ratio at 72.89%, and the system has not granted a COLA in the three most recent fiscal years. MPERS does not have sufficient earnings to grant a COLA for the current year.
Page 23 displays the UAL condition. Historical gains and losses find there way into this valuation. Payments would be made over 15 years.
Page 1 displays the summary with an increase in actives, along with increases in payroll and UAL. The funding ratio of the plan show slight increase in assumptions. The final recommended rate was at 32.5% paid the previous year, and will be required to 33.75 for FY2021. Following statute, there is some difference in contributions if poverty guidelines qualifications are met but there are none at this time.

Mr Rizzo stated a comprehensive actuarial review was performed and the basis from the 14 forecasters were applied.
Page 13 displays asset allocation and investment policy to expectations are in the 50th percentile expectation for the next 10 years; averaging 6.25%. Adding another 25 basis points for the cash flow was considered to be a good approximation landing at 6.50 at the most appropriate return assumption. This is a mid-range.
Page 17 displays the years COLAs were permitted minus the first year - 2014. The suggestion to the board should be the likelihood in granting COLAs, and that an actuarial study be performed to model COLA cost.

Dr. Krekora stated mortality rates are based on a public safety plan. It is recommended that MPERS adopts the latest table from the Society of Actuaries, and use the public safety below median along with generational mortality. It is not necessary to wait for the next experience study. The same is true for the salary scale; assumed salary increases have not decreased and tandem to expected inflation.
New hires are assumed to receive previous progressions.

Member Curran motioned to approve the actuarial review for 6.30.2019 for MPERS with the rate of 33.75%. for FY 2021, along with all allocated taxes for MPERS. There are no ad valorem tax to MPERS. **Member Broussard** seconded. **Hearing no objection, the motion was approved.**

REGISTRAR OF VOTERS EMPLOYEES' RETIREMENT SYSTEM (ROVERS)

Member Curran stated ROVERS has the highest rate of return of all plans this year, using 6.5%. The rate was found to be in the reasonable range. Building conservatism within smaller plans were discussed with the ROVERS board and will be a part of the experience study.
Page 6 displays sensitivity data at 12.91, and a rate of return of 7.4. Actuarial rate is 4.8 with losses. ROVERS had similar impacts as MERS and FRS but not as significant. Audit values have been removed. Standard portfolio is expected for the future; 6.5 is appropriate. There was a shortfall due to the assumed rate not met, and increasing cost by 1.3%.
Page 8 displays all contribution lost of .02% pay. Plan liability experience gains including pay increases and withdrawals were above expected levels that led to gains; almost identical to asset experience loss. New members on new tiers have cheaper benefits; a savings of 2.08% of pay that is fairly resilient. If the state had not allocated tax dollars to ROVERS, it would have a higher cost.
Page 1 displays the 14.5%, down from minimum. ROVERS is stable overall without growth and no past UAL. The board collects 18% in FY2020 with the minimal of 14.5%, and the board will have the right to set the rate by law.

Dr. Krekora stated a thorough review was not completed, hence previous analysis was relied upon. ROVERS has a fairly low assumed rate of return and a low appetite for risky investment. The current rate of return should be reduced *from* 6.5% *to* below 6%.
On the single page appendix displays the analysis of COLA history similar to DARS. There has been one opportunity to grant a modest COLA but the opportunity was declined. A few years later with the

FDA built-up, funds were used to pay COLA. Currently, the window is closed. There is no indication the board would approve COLAs from the investment earnings. No changes are recommended. The mortality table should be adopted from the library; general employees below median income with generational mortality.

Member Broussard stated the ROVERS board is undergoing changes and believes they will make more than the minimal rate until funding ratio is at 100%.

Member Curran motioned to approve the actuarial review for 6.30.2019 for ROVERS, along with all ad valorem sharing taxes allocated to ROVERS for 2020. The 2020 minimum employer contribution rate to be set at 14.5 of pay. **Member Broussard** seconded. **Hearing no objection, the motion was approved.**

SHERIFFS' PENSION AND RELIEF FUND (SPRF)

Member Curran stated the SPRF board remains consistent in its desire to lower it's interest rate. Two plan reductions have been set. SPRF is meeting the first plan reduction and working toward a 7% plan reduction. Valuation was run at 7.1. Embodied in the valuation is the impact of a reduction of .15% of the valuation interest rate. The assumption for demographics and others are the same as it was in the prior year. An experience study is underway and several recommendations will be made to the board in the coming months. The impact for the normal cost is 1.5 of pay.
Page 6 displays a sensitivity rate of 10.01%, showing a less sensitive rate than peers.
Page 7 displays all investment return experience. This year the plan earned 5% on a market basis and an actuarial return higher than many other systems at 6.1. The average over 20 years is 6.6. A 10 year average is 9%. Well within the range is 7.1 but could be appropriate to move that down.
Page 8 displays plan liability rates; slightly favorable while lowering cost to .17% of pay.
Page 9-10 displays explanation of increased cost totaling about two percent. Of pay, there should be a lowering of cost to .6% of pay, consistent over the last valuations. Liability gains added to positive view. The COLA section is applies to the window-rule with a potential payment every two years due to the R.S. 11:240 limitations. There was no access interest and the board is authorized to pay a COLA but only through the FDA.
Page 1 displays summaries of the funding account of $.7.5 million; consistent approach to prepare for the future. Growth in the plan continues along with payroll growth. A small piece of the frozen UAL remains. Funding ratio remains consistent. Actuarial return of 6.5 for the market is shown. The calculation for the final amount is 10.5%. for FY2021. The previous year was 9.25. The previous year's FDA increased from one years excess contributions of $22 million.

Dr. Krekora stated a thorough review was not completed, hence previous analysis was relied upon. The previous analysis does not support the 7.1%. Investments are conservative; less than 60% in equities. Since 2015, a healthy FDA build-up. One time, in one year, a COLA was granted of 3% using FDA funds. This is a part of stated policy.

Member Curran motioned to approve the actuarial review for 6.30.2019 for Sheriffs Pension Relief Fund, along with all ad valorem taxes and set a minimum employer contribution rate for FY2021 at be set at 10.5% of pay. **Member Broussard** seconded. Hearing no objection, the motion was approved..

VII. CONSIDERATION OF ANY OTHER MATTERS THAT MAY COME BEFORE THE COMMITTEE

VIII. ADJOURNMENT

Member Broussard motions to adjourn. There being no objection, the meeting was adjourned.

APPROVED

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Senator Barrow Peacock, Chairman

DATE APPROVED___________________

Public Retirement Systems' Actuarial Committee

MINUTES
FEBRUARY 12, 2020
Compiled by Louisiana Senate Staff

Respectfully submitted,

Chairman Lance Harris
Public Retirement Systems' Actuarial Committee

Date approved: August 19, 2020

The committee has acknowledged on August 19, 2020, that these minutes were prepared in accordance with the rules of the Senate.