ACTUARIAL REVIEW OF THE DISTRICT ATTORNEYS' RETIREMENT SYSTEM'S 2019 ACTUARIAL VALUATION

ACTUARIAL SERVICES

PRESENTED TO THE PUBLIC RETIREMENT SYSTEMS' ACTUARIAL COMMITTEE

FEBRUARY 12, 2020

LOUISIANA LEGISLATIVE AUDITOR
DARYL G. PURPERA, CPA, CFE

January 14, 2020

Ms. Kristi G. Spinosa, Director
District Attorneys' Retirement System
2525 Quail Drive
Baton Rouge, Louisiana 70808

Re: Actuarial Review of the 2019 Actuarial Valuation

Dear Ms. Spinosa:

To fulfill the requirements of R.S. 11:127(C) to the Public Retirement Systems' Actuarial Committee, the Louisiana Legislative Auditor has arranged for an Actuarial Review for the District Attorneys' Retirement System (System).

The remainder of this letter contains the results of our Actuarial Review of your June 30, 2019 actuarial valuation (prepared by G.S. Curran & Company and dated November 15, 2019). More specifically, we have evaluated for appropriateness certain actuarial assumptions and methods employed by the System and its actuary.

I would like to thank you, your staff, and the board's actuary for your cooperation and assistance with this review.

Sincerely,

Daryl G. Purpera, CPA, CFE
Legislative Auditor

DGP:JJR:ch

cc: G.S. Curran & Company

1600 NORTH THIRD STREET • POST OFFICE BOX 94397 • BATON ROUGE, LOUISIANA 70804-9397
WWW.LLA.LA.GOV • PHONE: 225-339-3800 • FAX: 225-339-3870

Scope of Review

The 2019 actuarial valuation report for the District Attorneys' Retirement System (DARS or System) for funding purposes was prepared by G.S. Curran & Company, and dated November 15, 2019.

This Actuarial Review of that report was prepared jointly by James J. Rizzo, Senior Consultant and Actuary employed by Gabriel, Roeder, Smith & Company (GRS), and by Piotr Krekora, Consultant and Actuary also employed by GRS. GRS serves as staff for the LLA Actuarial Services section. This Actuarial Review includes evaluations for appropriateness of certain actuarial assumptions and methods. However, a full actuarial valuation replicating the actuary's results was not performed; nor was a full actuarial valuation performed using recommended assumptions and methods.

This Actuarial Review is limited to discussion of (1) appropriate actuarial treatment of DARS' COLA benefits, (2) appropriate investment return assumption, (3) the actuary's use of acceptable mortality tables.

Summary of Findings

1. **<u>Gain-sharing Cost-of-Living Adjustments (COLAs)</u>**.

   The cost of future COLAs is currently not included in the actuary's funding valuations. Future COLAs are currently recognized in the calculations of costs and liabilities only after they are granted.

   For DARS, the LLA agrees with this treatment, for now. The favorable investment performance and other conditions in the past several years put the DARS board in a position of being permitted to grant gain-sharing COLAs in a few of those years. However, the DARS board of trustees has chosen not to exercise its authority to do so. That might change in the future. But for now, it is the opinion of the LLA that it is acceptable actuarial treatment not to recognize future COLAs in the measurement of costs and liabilities.

   "<u>Gain-sharing COLAs</u>" are allowed when the actuarial investment earnings exceed the valuation rate, effectively sharing the better-than-assumed gains with eligible members. The authority for the DARS board to pay gain-sharing COLAs is also subject to various timing and other conditions and restrictions. Practically speaking, there are two types of gain-sharing COLAs outlined in statutes for DARS.
   - R.S. 11:1638 describes a plan-specific COLA and
   - R.S. 11:246 describes "*additional*" cost-of-living adjustments.

   The likelihood of future gain-sharing COLAs being permitted is actuarially predictable when standing alone. The statutory provisions that give rise to permitted DARS gain-sharing COLAs operate under something akin to auto-pilot. The rules are set forth in statutes. However, when a gain-sharing COLA is allowed to be paid, the DARS board of trustees has discretionary authority to grant, or not to grant, a gain-sharing COLA to increase eligible members' benefits.

In addition to gain-sharing COLAs, "Funding Deposit COLAs" are permitted for DARS when there is a balance in the Funding Deposit Account (FDA). Again, the authority for the DARS board to pay FDA COLAs is subject to various timing and other conditions and restrictions.

- R.S. 11:107.1(D)(4)(a) and R.S. 11:243(G)

DARS has not accumulated any balance in its Funding Standard Account and may continue to operate with a zero balance. Thus, there is little likelihood of DARS paying FDA COLAs either.

Refer to the Appendix for the recent history of when DARS COLAs were permitted to be granted and for the amounts granted (none for period examined).

Conclusion – The LLA agrees with the System's actuary in not recognizing gain-sharing COLAs in the annual actuarial valuations. The LLA recommends that the DARS board of trustees engage its actuary to undertake a quantitative actuarial analysis of the operation of the gain-sharing provisions, in order to be able to advise the board about the long-term costs and liabilities associated with granting future gain-sharing COLAs (when permitted). Without that sort of study, the board of trustees may not have any quantitative measure of the longer-term cost of embarking on that path.

In summary, at this time, we do not find compelling reasons to recommend the recognition of gain-sharing COLAs in the System's annual actuarial valuations. That may not hold true of our opinions in the future for DARS and is not necessarily true of other systems.

2. Optimistic Return Assumption

For this Actuarial Review, a detailed analysis of independent experts' current forecasts for DARS' portfolio was not undertaken. The last time such a detailed analysis was undertaken by the LLA was for the 2016 valuation report (presented in a Comprehensive Actuarial Review dated February 3, 2017).

The DARS' 2016 valuation report used a 7.0% return assumption. The Comprehensive Actuarial Review prepared at that time suggested 6.24% for the 2016 return assumption, based on a consensus average among independent national investment forecasters applied to an estimate of DARS own asset allocation.

The DARS board of trustees and actuary lowered the return assumption for the 2017 valuation to 6.75% and lowered it again for the 2018 valuation to 6.50%. This action is commendable and has kept the DARS return assumption moving in the direction where the majority of national investment forecasts have moved. However, the DARS board of trustees and actuary did not lower its return assumption for the 2019 valuation, retaining the same 6.50% rate.

In the absence of a new Comprehensive Actuarial Review of the return assumption, we cannot assess the current reasonableness of the 6.50% assumption against the forecasters' current sentiments about future returns.

DARS' asset allocations appear to be relatively conservative and, therefore, the fund is not expected to earn as much as other portfolios. Therefore, 6.50% is not to be considered conservative merely because it is lower than other retirement systems. The appropriate benchmark for whether 6.50% is conservative or optimistic is a consensus average of expert inflation forecasters and, more importantly, expert investment forecasters.

Nevertheless, the trend among professional investment forecasters since 2016 has generally been reductions in their forecasts well below the 6.24% determined for 2016. So, if the asset allocation is unchanged from our 2016 analysis, the 6.50% would likely be considered optimistic, compared to the direction we have seen from our survey of 14 major national investment forecasters since 2016. An optimistic return assumption, applied repeatedly, creates underfunding in a retirement system and undermines the actuarial promise to career public servants.

The appropriateness of a retirement system's investment return assumption for any given year's pension valuation is assessed as follows:

- In terms of the expected future inflation rates and future capital market assumptions for relevant asset classes;
- As forecasted by several reputable and independent professional forecasters, and applied to the pension fund's own asset allocation targets;
- Net of the pension fund's own expected investment-related expenses - both in-house or external - for passive management fees, for custodial and trade-execution fees, and for external investment consulting; and
- Adjusted for the pension plan's duration calculation (a proxy for adjustments due to projected benefit cash flows).

Professional investment forecasters have been more pessimistic about the next 10 years' returns. This is mostly driven by currently high stock price valuations and currently low yields and interest rates. They are not expecting the next 10 years' investment returns to be nearly as high levels as we have seen in many prior periods.

While experts' forecasts are not certain or guaranteed, in our opinion they are the best sources for decision-makers to rely on -- a consensus average of the collective expectations of independent subject matter experts applied to the System's own characteristics.

<u>Conclusion</u> – In the absence of conducting a detailed analysis using updated 2019 or 2020 expert forecasts and in the absence of applying them to DARS' own asset allocation

and expected cash flow, the LLA recommends that the DARS retirement board and actuary consider lowering the return assumption for the 2020 valuation to be somewhere within a range from 5.50% to 6.25%, with the top end of that range being an aggressive (not conservative) assumption.

3. Mortality Assumption

The 2019 actuarial valuation report (page 36) states that the mortality assumption for annuitant and beneficiary mortality is the "RP 2000 Combined Healthy with White Collar Adjustment Sex Distinct Tables Projected to 2032 (Female table set back one year)."

To evaluate the reasonableness of the mortality assumption, we reviewed the base mortality (RP2000) separately from the projection scale (Scale AA).

Additionally, we note that the Pub-2010 Mortality Tables, the most recently developed broad-based mortality tables, were issued by the Retirement Plans Experience Committee (RPEC) of the Society of Actuaries and published in January 2019. These tables constitute the most recent and reliable standard reference tables available for purposes of national estimates of mortality for public pension plans and include tables reflecting variations in mortality due to above- or below-median income levels.

Conclusion – A more current approach to estimating mortality rates for valuation purposes would be to use PubG-2010 adjusted for partially credible plan-specific experience, then projecting generationally using MP2018 or MP 2019.

The membership in this System has characteristics often associated with white collar workers exhibiting better mortality than experienced by typical public retirement systems covering general employees (suggesting use of the above-median income mortality rates in the PubG-2010 tables). However, data from the Centers for Disease Control and Prevention suggests that the general Louisiana population has higher mortality rates than nationwide experience. This geographic effect is likely to offset the above-median income adjustment, leaving the PubG-2010 rates as the most appropriate standard reference table before adjustments for partially credible plan-specific experience.

Actuarial Certification

This Actuarial Review report constitutes a Statement of Actuarial Opinion. It has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge the information contained in this report is accurate and fairly presents information it is purported to present. All calculations have been made in conformity with generally accepted actuarial principles and practices and with the Actuarial Standards of Practice issued by the Actuarial Standards Board.

James J. Rizzo and Piotr Krekora are members of the American Academy of Actuaries. These actuaries meet the Academy's Qualification Standards to render the actuarial opinions contained herein.

The signing actuaries are independent of the District Attorneys' Retirement System.

__________________________	January 8, 2020
James J. Rizzo, ASA, EA, MAAA	Date
Senior Consultant and Actuary	
Gabriel, Roeder, Smith & Company	

__________________________	January 8, 2020
Piotr Krekora, ASA, EA, MAAA, PhD	Date
Consultant and Actuary	
Gabriel, Roeder, Smith & Company	

Appendix

COLA History for the District Attorneys' Retirement System										
	Statutory Conditions for Gain-sharing COLA Under:		Authorizing COLA Statute Pct and Recipients[1]		Authorizing Funding Deposit Account COLAs					
Actuarial Measurement Date	**The Window Rule**[2]	**The Sufficient Actuarial Return Rule**[3]	**R.S. 11:1638 COLA [Up to 3%, to All Elg]**	**R.S. 11:246 COLA [2% or Nothing, to Elg Over 65]**	**Balance in the FDA**	**FDA Balance Spent?**	**Amount Granted by Board**	**Date Approved by Board**	**Effective Date of COLA**	**Comments**
6/30/2019	**Satisfied** (For YE 2020)	Not Satisfied (4.9% vs. 6.50%)	None Permitted [To All Eligibles]	None Permitted [To Elg Over 65]	$0	NA	NA	NA	NA	None permitted for failure of Sufficient Investment Return
6/30/2018	**Satisfied** (For YE 2019)	Not Satisfied (6.7% vs. 6.75%)	None Permitted [To All Eligibles]	None Permitted [To Elg Over 65]	$0	NA	NA	NA	NA	None permitted for failure of Sufficient Investment Return
6/30/2017	**Satisfied** (For YE 2018)	**Satisfied** (7.2% vs. 7.0%)	**<3.0% Permitted** [To All Eligibles]	None Permitted [To Elg Over 65]	$0	NA	NA	NA	NA	Partial COLA permitted but none granted
6/30/2016	**Satisfied** (For YE 2017)	Not Satisfied (6.5% vs. 7.0%)	None Permitted [To All Eligibles]	None Permitted [To Elg Over 65]	$0	NA	NA	NA	NA	None permitted for failure of Sufficient Investment Return
6/30/2015	**Satisfied** (For YE 2016)	**Satisfied** (9.8% vs. 7.25%)	**3.0% Permitted** [To All Eligibles]	**2%Permitted** [To Elg Over 65]	$0	NA	NA	NA	NA	COLA permitted but none granted
6/30/2014[4]	**Satisfied** (For YE 2015)	**Satisfied** (11.6% vs. 7.5%)	**3.0% Permitted** [To All Eligibles]	**2%Permitted** [To Elg Over 65]	$0	NA	NA	NA	NA	COLA permitted but none granted

[1] Per R.S. 11:1638, the Board is authorized to provide a supplemental COLA of up to 3% of the original benefit (with a maximum of $60 per month) to all eligible pensioners. Additionally, per R.S. 11:246, the Board is authorized to provide an additional COLA of 2% to eligible pensioners over age 65. No COLA may be provided during any fiscal year until the lapse of at least one-half of the fiscal year.

[2] Per R.S. 11:243, the Board may grant a benefit increase if any of the following apply: (1) the system has a funded ratio of at least 70% and has not granted a benefit increase to retirees, survivors, or beneficiaries in any of the three most recent fiscal years, (2) the system has a funded ratio of at least 80% and has not granted such an increase in any of the two most recent fiscal years, or (3) the system has a funded ratio of at least 90% and has not granted a benefit increase to retirees, survivors, or beneficiaries in the most recent fiscal year. The funded ratio as of any fiscal year is the ratio of the actuarial value of assets to the actuarial accrued liability under the funding method prescribed by the office of the legislative auditor.

[3] Per R.S. 11:1638, the Board is authorized to use interest earnings on investments of the system in excess of normal requirements to provide a supplemental COLA of up to 3% of the original benefit (with a maximum of $60 per month) to all eligible pensioners. Additionally, per R.S. 11:246, the Board has the authority to provide an additional COLA of 2% to eligible pensioners over age 65 if there is sufficient excess interest earnings to fund the entire 2% additional COLA.

[4] The 6/30/14 valuation date marks the first year that Act 170 applies, after the trustees elected to be covered under R.S. 11:243 by 12/31/13.