Commonwealth of Virginia Joint Legislative Audit and Review Commission

2018 Quadrennial Actuarial Audit of the Virginia Retirement System

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Lance Weiss, EA, MAAA, FCA
Amy Williams, ASA, MAAA, FCA

Agenda

- Background and Purpose of an Actuarial Audit
- Actuarial Audit Process
- Actuarial Audit Conclusions
- Actuarial Audit Recommendations
- Comments and Questions

Background and Purpose of an Actuarial Audit

- In accordance with the Virginia Retirement System Oversight Act, Gabriel, Roeder, Smith and Company ("GRS") was retained by the Joint Legislative Audit and Review Commission ("JLARC") to conduct the 2018 Quadrennial Actuarial Audit of the Virginia Retirement System ("VRS")
- The purpose of the audit is to provide the General Assembly with a comprehensive overview of the actuarial soundness of the VRS
- This audit was completed with the full cooperation of the VRS staff and VRS' consulting actuary, Cavanaugh Macdonald Consulting, LLC ("CMC")

Actuarial Audit Process

- GRS performed a non-replication actuarial audit of the June 30, 2017, actuarial valuations prepared by CMC
- The GRS audit addressed the following areas:
  - Reasonableness of Actuarial Assumptions;
  - Reasonableness of Actuarial Methods and Funding Policy;
  - Application of Actuarial Assumptions and Benefit Plan Provisions;
  - Actuarial Report Content, Detail, Format and Clarity;
  - Review of Contribution Rates and Funded Ratios; and
  - Actuarial Principles and Practices Employed by the Actuary.

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Actuarial Audit Process

- The actuarial audit of the VRS included a review of the following VRS programs:
  - VRS State Plans covering the following divisions: State Employees, Teachers, State Police (SPORS), Judges and Virginia Law Officers (VaLORS);
  - Seven select political subdivisions participating in the VRS;
  - Health Insurance Credit Program (“HIC”);
  - Group Life Insurance Program (“GLI”);
  - Virginia Sickness and Disability Program (“VSDP”); and
  - Virginia Local Disability Program (“VLDP”).

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Actuarial Audit Conclusions

- Audit confirms that VRS is actuarially sound
  - Actuarial assumptions and methods used for the June 30, 2017, actuarial valuations of all plans are generally reasonable
  - CMC appropriately applied the actuarial assumptions, methods and plan provisions
    - Based on our review of 94 sample test lives
  - The June 30, 2017, actuarial valuation reports prepared by CMC generally comply with the Actuarial Standards of Practice

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Actuarial Audit Conclusions

- Audit confirms that VRS is actuarially sound
  - VRS actuarial funding policy is reasonable
    - UAAL as of June 30, 2013, is amortized over a closed period (26 years remaining as of June 30, 2017) as a level percentage of payroll
    - Annual changes in the UAAL after June 30, 2013, are amortized over separate closed 20-year periods (between 17 and 20 years remaining as of June 30, 2017) as a level percentage of payroll
    - The employer contribution rates are reasonable
  - The funded ratios of the VRS plans are generally improving and moving towards a 100% funded ratio goal
    - The funded ratio for all systems combined is 76.8 percent as of June 30, 2017 (Including State Employees, Teachers, State Police, Judges, Virginia Law Officers and Political Subdivision Plans)

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Actuarial Audit Recommendations

- None of the following recommendations are the result of material deficiencies
- They are intended to improve the measurement and communication of future actuarial valuations

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Actuarial Audit Recommendations

- Actuarial Assumptions
  - Investment Return Assumption
    - The current 7.0 percent investment return assumption is reasonable
    - When next reviewing and setting the investment return assumption, VRS should give due consideration to both short-term and long-term investment horizons and document the weighting of each in the next experience study report
      - The short-term investment horizon is important to consider since a significant portion of VRS' liability is expected to be payable in the short-term
      - Both GRS and CMC calculated a return of less than 7.0 percent based solely on the short-term investment horizon
      - Reducing the investment return assumption will reduce the funded ratio and increase contribution requirements in the near term; however it will also increase the probability that the return assumption will be met in the future

Note: GRS is not recommending that any changes in assumptions need to be implemented prior to the next scheduled assumption/experience review

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Actuarial Audit Recommendations

- Actuarial Assumptions
  - Payroll Growth Assumption
    - VRS should continue to review the payroll growth assumption giving due consideration to both actual historical plan experience and future expectations
      - Total payroll has increased on average by less than the current assumption of 3.0 percent for the nine-year period from 2008-2017 as well as for the five-year period from 2012-2017
      - The implications of actual payroll increasing at a slower rate than the payroll growth assumption is that the contribution rate as a percent of pay increases over time

Note: GRS is not recommending that any changes in assumptions need to be implemented prior to the next scheduled assumption/experience review

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Actuarial Audit Recommendations

- VRS Actuarial Funding Policy
  - Provide more details in the VRS funding actuarial report regarding:
    - The implications (i.e., increasing contributions) of having separate unfunded liability amortization bases and an effective amortization period in excess of 26 years (the number of years until the systems are projected to be fully funded)
    - The magnitude of the expected increase in future contribution rates
  - Consider aggregating the outstanding unfunded liability bases
    - This would result in a smaller near-term contribution increase instead of a larger contribution increase in the future

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Actuarial Audit Recommendations

- Actuarial Report Content, Detail, Format and Clarity
  - For all plans, include funded ratio in future annual actuarial valuation reports
    - Funded ratio is a fundamental measure of the funding condition of a plan
  - For the OPEB plans, include background information on the "pay-as-you-go" history of OPEB plan funding in future annual actuarial valuation reports
    - This will help to explain the funded ratios for the OPEB plans

Actuarial Audit Recommendations

- Actuarial Report Content, Detail, Format and Clarity
  - For political subdivision plans, include enhanced disclosures in future actuarial valuation reports
    - Provide details on the sources of actuarial gains/losses
    - Provide a description of the development of the actuarial value of assets
    - Clarify the level of employer match to the DC plan
    - For political subdivisions plans identified as at-risk plans, provide more information on additional funding charges
      - Description of the purpose of the additional funding charge
      - Description of how the additional funding charge is calculated
      - Separately identify the amount of the additional funding charge

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Comments and Questions

Disclosures

- This presentation shall not be construed to provide tax advice, legal advice or investment advice.
- The actuaries submitting this presentation (Lance J. Weiss and Amy Williams) are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.
- This is one of multiple documents comprising the actuarial audit results of the VRS for the Joint Legislative Audit and Review Commission. Additional documentation regarding actuarial assumptions and methods, and important additional disclosures are provided in the full Actuarial Audit Report of the VRS prepared by GRS.

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Disclosures

- This study was performed at the request of the Commonwealth of Virginia Joint Legislative Audit and Review Commission ("JLARC"). It may be shared with other interested parties only with the permission of the JLARC. If shared with other parties, it should be shared in its entirety.
- This report was prepared by Gabriel, Roeder, Smith & Company ("GRS") in its role as actuary for the JLARC in accordance with the Virginia Retirement System Oversight Act (§30-78 – §30-84 of the *Code of Virginia)* to provide the General Assembly with a comprehensive overview of the actuarial soundness of the VRS.

Disclosures

- This report should not be relied upon for any other purpose or by any other party.
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- If you need additional information to make an informed decision about the contents of this presentation, or if anything appears to be missing or incomplete, please contact us before relying on this presentation.

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