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## Chapter One

# AUDITOR GENERAL'S SUMMARY

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## REPORT CONCLUSIONS

On June 18, 2012, Public Act 097-0694 was signed into law which directed the Auditor General to contract with or hire an actuary to serve as the State Actuary. Cheiron was selected as the State Actuary. The Public Act directed the State Actuary to:

- Review assumptions and valuations prepared by actuaries retained by the boards of trustees of the State-funded retirement systems;
- Issue preliminary reports to the boards of trustees of the State-funded retirement systems concerning proposed certifications of required State contributions submitted to the State Actuary by those boards; and
- Identify recommended changes to actuarial assumptions that the boards must consider before finalizing their certifications of the required State contributions.

Cheiron reviewed the actuarial assumptions used in each of the five systems' actuarial valuations and **concluded that they were reasonable**. Consequently, Cheiron did not recommend any changes to the assumptions. Cheiron did, however, make recommendations for additional disclosures for the 2012 valuations (involving information that Cheiron reviewed but which was not presented in the valuation reports) and also recommended changes for future valuations. Recommendations included the following:

- Cheiron concluded that the interest rate assumptions for each of the five systems were reasonable at this time. However, for three of the systems (TRS, SURS, and SERS), Cheiron recommended that the Boards consider lowering the interest rate assumption in the future. Cheiron also recommended that the Boards annually review the interest rate assumption as opposed to waiting for the completion of a formal experience study.
- Cheiron recommended that the systems' actuaries, in future valuations, consider establishing a corridor that would limit the maximum spread between the actuarial value of assets (smoothed value) and the market value of assets so that the actuarial value of assets, in any year, would be no more than 120 percent of market value or no less than 80 percent of market value. A move to this approach would have no impact on the 2012 actuarial valuation results as the actuarial value of assets for all five systems is currently within the 80 percent to 120 percent corridor.

Cheiron verified the arithmetic behind the calculations made by the systems' actuaries to develop the required State contribution and reviewed the assumptions on which the calculations were based. Cheiron did, however, recommend that the systems' actuaries disclose additional

information in future valuation reports to enable a more comprehensive analysis of the required State contribution.

The Illinois Pension Code requires that the systems' actuaries base the required contribution using a prescribed funding method that achieves 90 percent funding in the year 2045. In the actuarial valuation reports, the systems' actuaries discuss the issues with this funding method. The actuaries for two of the systems (TRS and SURS) specifically recommend that the funding method should be based on 100 percent funding within 30 years. Similarly, the actuaries for the remaining three systems (SERS, JRS, and GARS) recommend reducing the projection period and increasing the 90 percent target. Cheiron concurred with the systems' actuaries stating that the statutorily mandated funding method does not conform with the accounting parameters set forth by Governmental Accounting Standards Board Statement No. 25 or generally accepted actuarial practices. Cheiron also suggested that, due to the systematic underfunding of the systems, the Boards use the conservative end of any range of assumptions recommended by the systems' actuaries.

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## INTRODUCTION AND BACKGROUND

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On June 18, 2012, Public Act 097-0694 was signed into law which directed the Auditor General to contract with or hire an actuary to serve as the State Actuary. The Public Act amended the Illinois State Auditing Act as well as sections of the Illinois Pension Code for each of the five State-funded retirement systems. The five State-funded retirement systems are:

- The Teachers' Retirement System (TRS);
- The State Universities Retirement System (SURS);
- The State Employees' Retirement System (SERS);
- The Judges' Retirement System (JRS); and
- The General Assembly Retirement System (GARS).

### **Requirements of Public Act 097-0694**

Public Act 097-0694 requires the State Actuary to conduct an annual review of the valuations prepared by the actuaries of the State-funded retirement systems. Specifically the Act requires the State Actuary to:

- Review assumptions and valuations prepared by actuaries retained by the boards of trustees of the State-funded retirement systems;
- Issue preliminary reports to the boards of trustees of the State-funded retirement systems concerning proposed certifications of required State contributions submitted to the State Actuary by those boards; and



The following sections discuss some of the key assumptions and recommendations. Further details on the assumptions and recommendations, including those not discussed in this summary chapter, are contained in the State Actuary’s preliminary reports for each of the five systems, found in chapters 2 – 6 of this report.

**Economic Assumptions**

Cheiron reviewed the economic assumptions utilized in the actuarial valuations for each of the five State-funded retirement systems. The following sections discuss two of those assumptions – the interest rate assumption and the inflation assumption.

**Interest Rate Assumption**

The interest rate assumption (also called the investment return or discount rate) is the most impactful assumption affecting the required State contribution amount. This assumption is used to value liabilities for funding purposes. The retirement systems use varying interest rate assumptions. Exhibit 1-2 shows the interest rate assumptions for each of the five State-funded retirement systems. As can be seen in the exhibit, each of the systems recently lowered its interest rate assumption.

Exhibit 1-2 INTEREST RATE ASSUMPTIONS FOR THE FIVE STATE-FUNDED RETIREMENT SYSTEMS		
System	Interest Rate	Notes
Teachers’ Retirement System	8.00%	Lowered from 8.50% for the June 30, 2012 actuarial valuation
State Universities Retirement System	7.75%	Lowered from 8.50% for the June 30, 2010 actuarial valuation
State Employees’ Retirement System	7.75%	Lowered from 8.50% for the June 30, 2010 actuarial valuation
Judges’ Retirement System	7.00%	Lowered from 8.00% for the June 30, 2010 actuarial valuation
General Assembly Retirement System	7.00%	Lowered from 8.00% for the June 30, 2011 actuarial valuation

Source: Retirement system actuarial reports and experience studies.

After reviewing all of the materials made available, Cheiron concluded that the interest rate assumptions for each of the five systems were reasonable at this time. However, for three of the systems (TRS, SURS, and SERS), Cheiron recommended that the Boards consider lowering the interest rate in the future and annually reviewing the interest rate assumption as opposed to waiting for the completion of a formal experience study. As shown in Exhibit 1-2, all three systems have recently lowered their interest rate assumption:

- **TRS** – The TRS actuary, Buck Consultants, issued a five-year experience study in August 2012 where they recommended that the Board change the interest rate