

**G20J01**  
**State Retirement Agency**

***Operating Budget Data***

(\$ in Thousands)

|                    | <u>FY 07</u><br><u>Actual</u> | <u>FY 08</u><br><u>Working</u> | <u>FY 09</u><br><u>Allowance</u> | <u>FY 08-09</u><br><u>Change</u> | <u>% Change</u><br><u>Prior Year</u> |
|--------------------|-------------------------------|--------------------------------|----------------------------------|----------------------------------|--------------------------------------|
| Special Fund       | \$26,290                      | \$22,415                       | \$29,850                         | \$7,436                          | 33.2%                                |
| <b>Total Funds</b> | <b>\$26,290</b>               | <b>\$22,415</b>                | <b>\$29,850</b>                  | <b>\$7,436</b>                   | <b>33.2%</b>                         |

- The fiscal 2009 allowance, absent pay-as-you-go health insurance and Other Post Employment Benefits funding which distort year-to-year comparisons, increases by \$6,648,059, or 31.9%, from the fiscal 2008 working appropriation.
- Funding of \$5,262,794 related to the Maryland Pension Administration System (MPAS) information technology project represents the majority of the increase.

***Personnel Data***

|                        | <u>FY 07</u><br><u>Actual</u> | <u>FY 08</u><br><u>Working</u> | <u>FY 09</u><br><u>Allowance</u> | <u>FY 08-09</u><br><u>Change</u> |
|------------------------|-------------------------------|--------------------------------|----------------------------------|----------------------------------|
| Regular Positions      | 187.00                        | 191.00                         | 189.00                           | -2.00                            |
| Contractual FTEs       | <u>10.70</u>                  | <u>14.00</u>                   | <u>15.00</u>                     | <u>1.00</u>                      |
| <b>Total Personnel</b> | <b>197.70</b>                 | <b>205.00</b>                  | <b>204.00</b>                    | <b>-1.00</b>                     |

***Vacancy Data: Regular Positions***

|                                   |       |       |
|-----------------------------------|-------|-------|
| Turnover, Excluding New Positions | 7.56  | 4.00% |
| Positions Vacant as of 12/31/07   | 16.00 | 8.38% |

- The two positions deleted were part of the 2007 special session action to abolish 500 vacant positions, but they are still reflected in the vacancy rate tally. A new contractual position has been added to the fiscal 2009 allowance in the benefits processing function as backfill for the MPAS project.
- The agency is attempting to fill vacancies rather than create new positions due to its high vacancy level. The turnover offset was adjusted down by \$215,743 for this purpose.

Note: Numbers may not sum to total due to rounding.

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## *Analysis in Brief*

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### Major Trends

**Short-term Investment Returns Lose Ground, as Long-term Returns Improve but Still Lag Behind Other Funds:** The system's returns were high, at 17.6% for fiscal 2007, but this performance signified a drop in Maryland's standings against peer systems for the last year. Longer term performance posted gains, but the State remains in the bottom half of ranked peer systems.

**Call Center Performance Problems Deepen:** Despite significant enhancements to customer service personnel and technology, performance measures for prompt attention to the client have again worsened.

### Issues

**Actuarial Changes Impact Funded Status:** Several changes to the assumption used by the State Retirement Agency actuary Segal Co. have changed the funded status of the system. **The Department of Legislative Services (DLS) recommends that the board detail its plans for the independent audit of Segal's actuarial assessment to ensure that the basis for future calculations is sound.**

**MPAS Information Technology Project Schedule and Budget Troubles:** Additional funding for the MPAS project is included in the fiscal 2009 allowance, but budget and schedule delays have combined with a much delayed independent project review to merit further discussion. **DLS recommends that MPAS-1 funding not be expended until an independent verification and validation is completed and that MPAS-2 funding be likewise restricted until completion of MPAS-1 and refinement of Phase II's project scope.**

### Recommended Actions

|   | <u>Funds</u>      |
|---|-------------------|
| 1. Add budget bill language to restrict the Maryland Pension Administration System funding until independent reviews are conducted. |                   |
| 2. Reduce unneeded .Net code review funds.  | \$ 356,400        |
| <b>Total Reductions</b>   | <b>\$ 356,400</b> |

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**State Retirement Agency**

***Operating Budget Analysis***

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**Program Description**

The State Retirement Agency (SRA), under the direction of the 14-member Board of Trustees for the State Retirement and Pension System (SRPS), is responsible for administering the State's retirement and pension systems. The board-appointed executive director is responsible for policy development, legislation, and legal affairs.

The agency has identified four fundamental goals for its operation:

- To prudently invest system assets in a well-diversified manner that optimizes long-term returns while controlling risk through excellence in the execution of the investment objectives and strategies of the system.
- To effectively communicate to all retirement plan participants the benefits provided by the system and to educate them about planning and preparing for all aspects of their defined benefit system.
- To pay all retirement allowances provided by State pension law to the system's retirees and their beneficiaries in an accurate and timely manner.
- To efficiently collect the required employer and employee contribution necessary to fund the system.

The agency's administrative budget is funded solely through special funds drawn from the pension trust fund based on statutory authority. Its annual spending is capped at 0.22% of members' payroll, or approximately \$33.7 million in fiscal 2009. The 2009 allowance is \$3.8 million below the upper limit established by the cap.

As of June 30, 2007, the system's assets totaled \$39.4 billion. A description of the system's holdings by asset class is provided in **Appendix 5**. Changes in net assets from fiscal 2006 to 2007, including benefit payments to retirees are shown in **Appendix 6**.

## Performance Analysis: Managing for Results

### Short-term Investment Returns Lose Ground, as Long-term Returns Improve but Still Lag Behind Peer Funds

SRPS ended fiscal 2007 with a 17.6% return on its investment portfolio, the fourth straight year it has exceeded its 7.75% targeted rate of return following several years of sluggish or negative performance. The returns have helped turn around past lags on the system’s actuarial rate of return, a dynamic five-year average of investment returns used in calculating employer contribution rates. The actuarial rate of return for fiscal 2007 was 8.51%. Exceeding the system’s target of 7.75% helped minimize the planned increase in State contribution rates from fiscal 2008 to 2009.

Additionally, the system’s one-year investment returns as of September 30, 2007, surpassed median performances achieved by other large public pension funds according to the Trust Universe Comparison Service (TUCS). The system’s investment return ranks in the forty-sixth percentile compared with other pension funds with at least \$1 billion in assets, as shown in **Exhibit 1**. TUCS is a collaboration of 19 major banks, Wilshire Associates, and Greenshore Associates that tracks public pension performance. In the TUCS analysis, the ninety-ninth percentile is the lowest ranking, and the first percentile is the highest ranking.

**Exhibit 1**  
**TUCS Comparison to Public Fund >\$1.0 Billion**  
**Rolling Years Ending September 30, 2007**

|                 | <u>3 Months</u> |      | <u>1 Year</u> |      | <u>5 Years</u> |      | <u>10 Years</u> |      |
|-----------------|-----------------|------|---------------|------|----------------|------|-----------------|------|
| 5th Percentile  | 4.23            |      | 19.47         |      | 16.72          |      | 9.63            |      |
| 25th Percentile | 2.74            |      | 16.84         |      | 15.46          |      | 8.51            |      |
| Median          | 2.38            |      | 15.41         |      | 14.35          |      | 7.84            |      |
| 75th Percentile | 1.97            |      | 14.65         |      | 13.56          |      | 7.51            |      |
| 95th Percentile | 1.18            |      | 7.49          |      | 8.60           |      | 6.68            |      |
| SRPS            | 2.44            | 48th | 15.62         | 46th | 14.20          | 55th | 6.75            | 88th |

TUCS: Trust Universe Comparison Services  
SRPS: State Retirement and Pension System

Source: State Street Analytics (TUCS Master Trust Report)

Maryland’s ranking in the forty-sixth percentile for the one-year period, therefore, represents a decline from the advance into the thirty-seventh percentile made in fiscal 2006 (but is still an improvement from its ranking in the fifty-ninth percentile two years ago). The long-term TUCS

comparison shows improvement in the relative standing of the State's five-year investment return, moving from the eighty-eighth percentile in September 2005 to the fifty-fifth percentile in September 2007. The 10-year return ranks in the eighty-eighth percentile which is a slight improvement from a year ago.

SRA has mentioned in the past that it believes the TUCS findings should not be utilized as an absolute measure of comparative success because TUCS does not disclose the allocations of the measured systems, and investment performance is chiefly driven by asset allocation. **The board is asked to comment on alternative investment performance comparison services.**

### **Call Center Performance Problems Deepen**

SRA's call center is the agency's primary vehicle for communicating with system members about the benefits to which they are entitled. Large increases in call volumes over the past several years had prompted the agency to bolster the Member Services division through increased personnel. The agency's fiscal 2006 budget included two full-time regular benefit counselor positions to answer member calls and technological upgrades, such as the installation of a more sophisticated Interactive Voice Response (IVR) telephone system. Furthermore, in response to the Department of Legislative Services' (DLS) comments during the 2007 session about declining performance in this area, the agency cited the following additional efforts it made to provide more prompt service to members seeking pension benefit information:

- development of new, sophisticated recruitment tools that led to the hiring of seven new benefit counselors, who were planned to be fully trained and in place by April 2007;
- assignment of a senior counselor as a full-time counselor trainer;
- initiation of a mentoring system for new trainee counselors;
- work day hour alterations to allow time for research on complex questions and "call backs";
- expansion of the exit interview to improve future recruitments; and
- compensation adjustments, such as:
  - step increases for counselor I and II classifications; and
  - increase of starting base salary by two steps, from \$34,313 to \$36,863 (fiscal 2007 level).

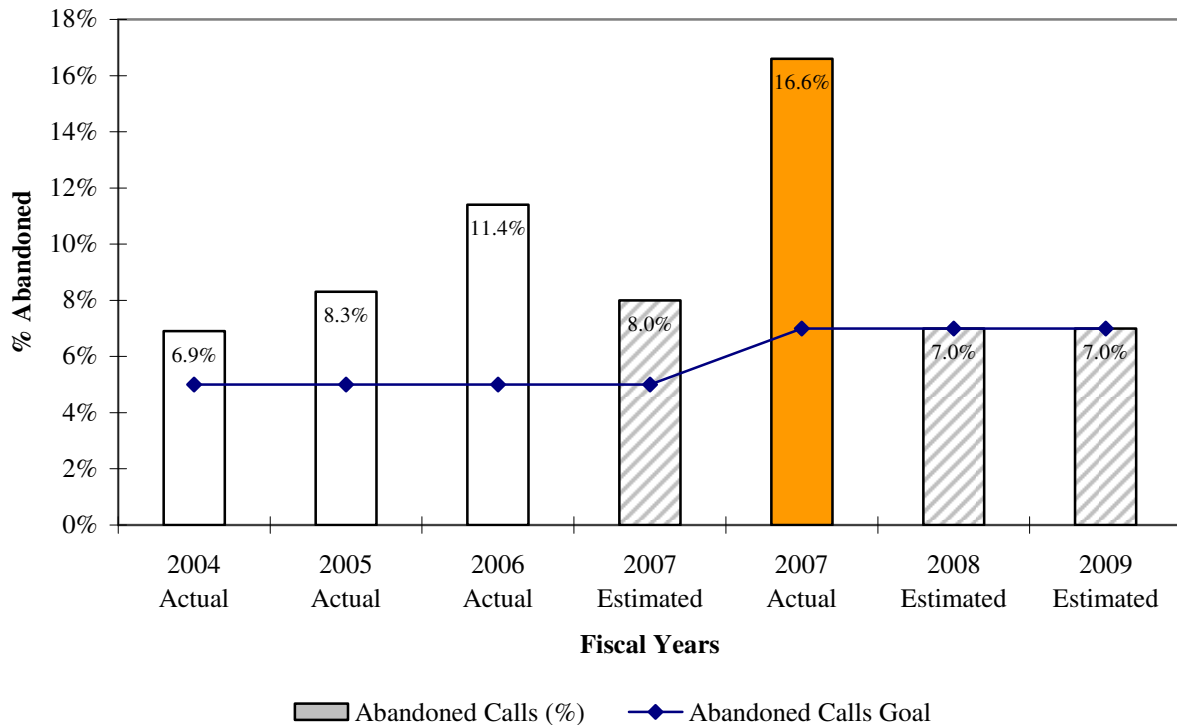
In fiscal 2007, the call center answered 96,513 calls, a drop of 22,683 calls, or 19%, from the 119,196 incoming calls handled in fiscal 2006. This call volume is lower than the figure had been in fiscal 2000. With the decrease in call volume, in fiscal 2007 just 50% of interactions between members and benefit counselors came through the phone system, down from 58% in fiscal 2006.

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IVR activity increased from fiscal 2006 to 2007 by 10%, but the absolute IVR utilization by members is on par with levels seen in fiscal 2001. Yet, in spite of the enhancements and significantly reduced incoming call volume, the call center’s performance declined in fiscal 2007 for the fourth straight year.

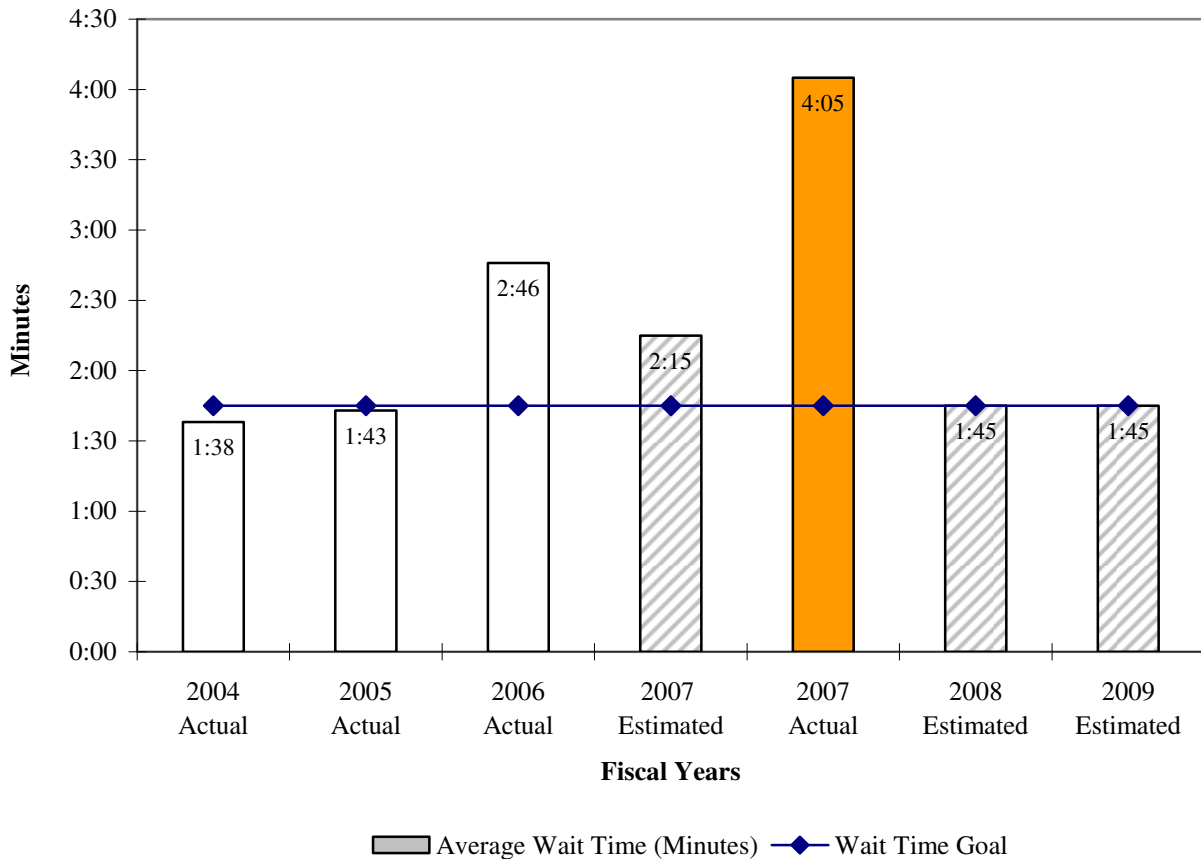
**Exhibits 2 and 3** demonstrate the persistence of the downward trend in the service rendered to pension system members seeking phone counseling. The average wait time to connect to a benefits counselor has more than doubled from its fiscal 2005 level to 4:05 minutes in fiscal 2007, which is also more than double the agency’s goal of 1:45 minutes. In a related development, the percentage of abandoned calls also jumped from 8.3% in fiscal 2005 to 16.6% in fiscal 2007, over triple the agency’s goal of 5.0% – so much above the goal that the agency adjusted the goal for the current year and beyond upward, to 7.0%. SRA’s estimated fiscal 2007 outcomes indicate the extent of the problem.

**Exhibit 2**  
**Percent of Abandoned Calls**  
**Fiscal 2004-2009**



Source: State Retirement Agency

**Exhibit 3  
Telephone Call Wait Time  
Fiscal 2004-2009**



Source: State Retirement Agency

The agency, notwithstanding the remedies described above, still attributes its deteriorating performance to vacancies in the Member Relations division. During fiscal 2006, the Member Relations division had 10 vacancies among its staff of 23 benefit counselors. But at the end of fiscal 2007, the 23-person division had only 3 benefit counselor vacancies. Moreover, **Exhibit 4** shows that the agency’s belief that the situation would improve after April 2007, when the new counselors had been trained, was incorrect. Fiscal 2007 indicators for both call abandonment and average time-to-answer were worse than they had been in fiscal 2006 in all but one month. More to the point, in May and June 2007, the indicators remained well above their May and June 2006 levels, despite having the new staff on board during months with traditionally low call volumes. With an ever-expanding membership, detailed in **Appendix 7**, these results are troubling.

**Exhibit 4**  
**Monthly Rate of Call Abandonment and Average Time to Answer**  
**Fiscal 2006-2007**

|      | 2006                            | 2007                            | 2006                       | 2007                       |
|------|---------------------------------|---------------------------------|----------------------------|----------------------------|
|      | <u>Rate of Call Abandonment</u> | <u>Rate of Call Abandonment</u> | <u>Avg. Time to Answer</u> | <u>Avg. Time to Answer</u> |
| July | 5.8%                            | 10.5%                           | 1:32                       | 2:28                       |
| Aug  | 5.2%                            | 17.1%                           | 1:19                       | 4:10                       |
| Sept | 8.9%                            | 16.0%                           | 2:03                       | 3:43                       |
| Oct  | 10.3%                           | 18.5%                           | 2:52                       | 4:43                       |
| Nov  | 11.2%                           | 23.9%                           | 3:01                       | 6:12                       |
| Dec  | 9.5%                            | 17.0%                           | 2:12                       | 3:52                       |
| Jan  | 19.1%                           | 20.5%                           | 4:55                       | 5:23                       |
| Feb  | 14.9%                           | 28.3%                           | 3:46                       | 8:38                       |
| Mar  | 18.9%                           | 18.9%                           | 4:58                       | 4:59                       |
| Apr  | 14.6%                           | 11.6%                           | 3:29                       | 2:59                       |
| May  | 7.5%                            | 10.2%                           | 1:43                       | 2:14                       |
| June | 6.1%                            | 9.3%                            | 1:20                       | 2:07                       |

Source: State Retirement Agency

**Given all of these indicators, DLS recommends that the agency explain its continued poor performance in phone service provided to members, and why it expects the wait times to be reduced in the future while the call abandonment goal level is raised.**

### **Governor's Proposed Budget**

As shown in **Exhibit 5**, the largest sources of growth in the SRA fiscal 2009 allowance are the two explicit MPAS information technology expenditure allotments – \$3,561,478 for MPAS Phase I and \$1,200,000 for MPAS Phase II. There is another \$501,316 of increases tied to the MPAS project. Significant personnel growth areas include Other Post Employment Benefits funding of \$597,550, salary growth of \$395,736, a reduction of the turnover offset of \$215,743, and health insurance cost increases of \$211,448.

**Exhibit 5**  
**Governor’s Proposed Budget**  
**State Retirement Agency**  
**(\$ in Thousands)**

| <b>How Much It Grows:</b>  | <b>Special<br/>Fund</b> | <b>Total</b>  |
|----------------------------|-------------------------|---------------|
| 2008 Working Appropriation | \$22,415                | \$22,415      |
| 2009 Governor’s Allowance  | <u>29,850</u>           | <u>29,850</u> |
| Amount Change              | \$7,436                 | \$7,436       |
| Percent Change             | 33.2%                   | 33.2%         |

**Where It Goes:**

**Personnel Expenses**

|   |       |
|---|-------|
| Employee and retiree health insurance – Other Post Employment Benefits funding..... | \$598 |
| Increments and other compensation .....   | 396   |
| Turnover adjustments .....  | 216   |
| Employee and retiree health insurance – pay-as-you-go-costs .....                   | 211   |
| Social Security.....  | 48    |
| Overtime.....   | 46    |
| Retirement .....  | 31    |
| Unemployment Compensation .....   | -10   |
| Workers’ compensation premium assessment.....                                       | -14   |
| Abolished/transferred positions.....  | -120  |
| Other fringe benefit adjustments .....  | 4     |

**Other Changes**

|  |       |
|--|-------|
| Explicit MPAS-I-related spending .....                                       | 3,561 |
| Explicit MPAS-II-related spending.....                                       | 1,200 |
| Other MPAS-related spending .....  | 501   |
| Office of Administrative Hearings usage charge .....                         | 330   |
| Non-MPAS computer purchases and replacements .....                           | 219   |
| Comptroller interest charge for use of general funds .....                   | 126   |
| Base rent, building expense, and related tax increases.....                  | 110   |
| Office software purchases .....  | 70    |
| Office equipment replacement .....   | 45    |
| Network Maryland Disaster Recovery hosting charge.....                       | 37    |
| Staff training.....  | 16    |
| Interactive Voice Response telephone system maintenance charge increase..... | 14    |
| Travel cost increase .....   | 5     |
| Fiscal and office assistance contractual service changes.....                | -10   |
| Completion of chief investment officer search .....                          | -100  |

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**Where It Goes:**

|  |                |
|--|----------------|
| Lower per capita salary required for contractual positions ..... | -128           |
| Other expenses .....   | 35             |
| <b>Total</b>   | <b>\$7,436</b> |

MPAS: Maryland Pension Administration System

Note: Numbers may not sum to total due to rounding.

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In fiscal 2008, the Office of Administrative Hearings erroneously failed to charge SRA for its services, resulting in the fiscal 2009 return of its annual charge worth \$329,784. Additionally, SRA’s fiscal 2009 allowance includes computer and printer purchases and replacements of \$219,050, a temporary Comptroller interest charge of \$126,000 for use of general funds, and a rent increase of \$109,857.

There were two decreases of significance. First, the contract for the agency’s chief investment officer (CIO) search will be completed by the end of fiscal 2008, thus reducing expenditures by \$100,000. Second, a switch to contractual positions with a lower per capita salary lowered total compensation of contractual employees by \$128,299.

Two vacant positions were deleted as part of the 2007 special session action to abolish 500 vacant positions statewide. The value of salary and fringe benefits associated with these abolitions totals \$120,070.

## *Issues*

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### 1. Actuarial Changes Impact Funded Status

The Segal Company (Segal) was hired in 2006 to replace Milliman Consulting, the agency's previous actuary. After auditing its predecessor and providing a fiscal 2006 annual actuarial evaluation, it conducted a four-year actuarial experience study covering June 2002 to June 2006 that it presented to the board in July 2007. This work reset the actuarial groundwork for the agency based on its thorough examination of the experiential data of those four years of actual SRA data.

In October 2007, building on the experience study, Segal presented its annual valuation for the fiscal year ended June 30, 2007, which contained the calculation used by the board to determine the employer contribution rates for fiscal 2009. Importantly, that valuation included significant changes in the actuarial assumptions from Segal's initial study. The new base assumptions alter the SRA actuarial financial statements as described below.

- **Change in Actuarial Cost (Funding) Method:** The funding method used by the actuary changed from the Aggregate Entry Age Normal method to the Individual Entry Age Normal method. The change was prompted by IRS guideline updates that deemed the aggregate method unacceptable for corporate pension plans. The board chose to heed these guidelines for the State's public plan when it altered the SRA's funding method in August 2007. The switch affects the inputs to the SRA's financial statements in two ways:
  - **Increase Precision When Calculating Liabilities:** The new method calculates the actuarial accrued liability (AAL) with individual-specific data for each extant pension system member. The prior method used systemwide averages for each employee's age, retirement date, etc. The replacement of averages by individualized information in benefit calculations provides a more exact figure for the system's liabilities.
  - **More Accurately Account for Value of Future Employee Contributions:** Previously, the present value of future employee contributions were counted as assets that offset the total AAL. This offset increased the percent funded level by reducing the size of the liability by the value of the future contributions. Under the assumption change, future contributions are not used in calculating the liability. Instead, they are noted exclusively as an offset to the normal cost – the present value of pension obligations for all members incurred in the current year.
- **Adjustments to Demographic Assumptions:**
  - Mortality table changes were the most notable. Healthy participant tables and disabled participant tables were moved to the RP-2000 tables with sex distinct timelines that bring greater calculation accuracy.

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- Changes with less significant impact included:
  - withdrawal rates for participants with less than 10 years of service;
  - early retirement rates for first eligibility and subsequent years;
  - normal retirement rates for first eligibility and subsequent years;
  - married assumption lowered (from 90% to 75%);
  - salary increase rate was decreased and subsequently assumes a 2% flat increase rather than a rate based on the initial salary; and
  - payroll growth assumption was lowered from 4.0% to 3.5%.
- **Normal Passage of Time:** Normal passage of time also increased the liability, but this is not an assumption change.

The immediate effect on year-to-year comparisons of SRA's information is as follows:

- **Percent Funding Level Lowered:** The funded ratio is the actuarial value of assets divided by the actuarial value of liabilities. Large gains on the investment side greatly increased the system's asset value, so one would naturally expect the funded ratio to increase favorably. However, the funding methodology change increased the AAL by removing future employee contributions from the calculation of the total liability. As shown in **Exhibit 6**, when the funded ratio is calculated, the percent funding for the State system is reduced because of the large increase in the AAL. It should be noted that not all of the AAL increase is attributable to the change in methodology, as the demographic assumption changes and the normal passage of time as mentioned above also contributed to the increase, albeit to a lesser degree.
- **Contribution Rate Uncertain Due to Actuarial Error:** The contribution rate is composed of (1) a portion dedicated to paying the State's normal costs; and (2) a portion dedicated to paying down the unfunded liability. DLS has been advised that rates calculated by the SRA's actuary, Segal, and included in the budget are erroneous due to a failure to properly calculate the effect of the actuarial changes adopted by the board. **The agency should brief the committees on the impact of the board's actions on the contribution rate under both the actuarial and corridor funding methods and the potential impact of these changes on the fiscal 2009 and future budgets.**

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**Exhibit 6**  
**State Retirement and Pension Systems of Maryland**  
**State Funded Ratio**  
**Fiscal 2006-2007**  
**(\$ in Millions)**

|                                   | <u>2006</u>    | <u>2007</u>     |
|-----------------------------------|----------------|-----------------|
| Market Value of Assets            | \$31,964       | \$36,567        |
| Actuarial Value of Assets         | 33,293         | 35,129          |
| Actuarial Accrued Liability (AAL) | 39,984         | 45,917          |
| <b>Unfunded AAL</b>               | <b>\$6,691</b> | <b>\$10,788</b> |
| <b>Funded Ratio</b>               | <b>83.27%</b>  | <b>76.50%</b>   |

Source: Segal Co.

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These changes will have more profound of an impact in the years to come than on the current state of affairs, as growth factors established now escalate over time. Small errors compounded over several years can require painful corrective measures down the line if not identified quickly. Verifying the validity of the numerous changes and the actuarial framework as a whole established by Segal, is of vital importance to the financial integrity of the State's retirement and pension system. The board issued a Request for Proposal (RFP) in early 2008 for a contractor to audit Segal's work, and the agency hopes to have an auditor in place by April 2008. DLS believes that this independent evaluation is appropriate. The audit's findings will be of greatest utility if concluded in time to allow their consideration in Segal's updating of the contribution rates to be conducted after the end of fiscal 2008. **DLS recommends that the board update the budget committees of the audit's findings and their impact on contribution rates and funded status calculations.**

## **2. MPAS Information Technology Project Schedule and Budget Troubles**

The Maryland Pension Administration System (MPAS) represents the agency's effort to replace its 30-year-old legacy computer system with more modern and agile technology. In April 2006, the agency awarded a two-year, \$10.2 million contract to Saber, Inc, (Saber) – with a possible \$1.0 million in contingencies to be awarded as required – to design and implement the project's first phase, termed MPAS-1. A fiscal 2006 budget amendment for \$7,783,000 was approved to fund most of the contract cost, subject to the agency's statutory spending limit. The fiscal 2008 budget bill (House Bill 50) included a deficiency appropriation in the amount of \$5,912,456, which was intended to provide funds for the remaining costs to fully develop and implement the first phase of the project.

However, the project's Information Technology Project Reports (ITPR) indicated that more funding would be required. The fiscal 2008 tally projected \$17.005 million in total special fund project costs. The fiscal 2009 ITPR sees the total project value increase by approximately \$250,000, up to \$17.260 million. The increase results mainly from the inclusion of a second independent verification and validation (IV&V) among the project costs, to be conducted in fiscal 2009. Spending of \$3,561,478 appears in the Governor's fiscal 2009 allowance for the project to bridge the gap between the funding needed and that provided by the 2006 budget amendment and the fiscal 2007 deficiency.

Notably, there is another \$501,316 dispersed throughout the SRA budget that corresponds to increased costs related to MPAS. SRA considers these costs as operational because they are associated with either staff acquiring new skill sets in order to use the new system or an upgrade to hardware or standard system analysis that would be part of operational costs whenever a software or system platform upgrade is performed. No mention of these costs is included in the ITPR descriptions.

### **Schedule Problems**

Comparing the spending for this project to the appropriated funding is difficult because of significant time delays that have plagued the project schedule. SRA reports schedule slippages and overruns in Milestone 4 and Milestone 6 of the project. Specifically, Milestone 4, the component of the system that computes member functions, was scheduled to be fully tested and accepted by May 2007. The latest target for completion is now March 2008. Likewise, Milestone 6, which processes all retiree functions, was scheduled to be tested and accepted by September 2007, but SRA project management now believes it will not be completed until May 2008. The reasons provided for these slippages and overruns are:

- the application is more complex than Saber originally thought;
- the legacy COBOL code is in worse shape than what was originally thought;
- until recently, Saber's approach to Quality Control was to take a "hands-off" approach and just let L-3 Titan and SRA do all of the testing; and
- Saber generally underestimated what the effort would require.

These slippages mean that only about \$2.8 million have been expended on the project, while more than \$6 million worth of work has been completed, but not paid for, because the milestones have yet to be completed. They also have led Saber to request change orders to the contract that would add millions of dollars to the project cost. SRA will negotiate with Saber to arrive at an acceptable figure, but the value will likely exceed the \$1.0 million contingency originally envisioned for the project. Any change orders would have to go before the Board of Public Works for approval, given the size of the potential contract modification. **SRA is asked to discuss the current time**

frames for completion of the project and to estimate potential change orders that will result from project delays.

### **Independent Verification and Validation Delay**

The IV&V is a standard information technology check that provides oversight for complex projects to help avoid design, program architecture, and technical composition problems that can lead to project delays and cost overruns. During the 2007 session, DLS recommended that SRA should not proceed with the MPAS-1 project until such verification took place. The agency disagreed. Testimony of the then-State CIT was referenced in support of SRA's belief that the IV&V was not necessary in the early stages of the project. Writing at the end of January 2007, the CIT reported that the MPAS project would benefit from an IV&V "within a few months," when enough progress on the project had been made to allow for a meaningful evaluation. He also suggested that multiple IV&Vs would be appropriate given the complexity and visibility of the system. A kick-off IV&V meeting was held January 29, 2008, a full year later, for the initial IV&V on this project, which is now well behind schedule and threatens to be overbudgeted.

DLS believes that the lack of this outside review has contributed to several of the problems cited above. The lack of the independent review also limits possible commentary on the project's progress. However, one component of the project – the .Net code review – has been identified as redundant by project management staff. SRA has stated that this function, valued at \$356,400, will be undertaken by L3 Titan and accommodated within the confines of its larger \$3.6 million contract for quality assurance. **DLS recommends that the allowance for the MPAS-1 project be reduced by \$356,400 to eliminate unneeded funding for the .Net code review and that the remaining \$3,205,078 may not be expended until SRA completes an IV&V review of the MPAS design and architecture and provides a copy of the written IV&V report to the budget committees.**

Moreover, the fiscal 2009 allowance contains funding to begin Phase II of the MPAS project. The second phase seeks to provide a data scrubbing and reengineering of data collection for the MPAS System. SRA's fiscal 2009 ITPR roughly estimates the cost of the MPAS-2 project to total \$3.3 million. The cost pieces the agency contemplates are as follows:

- \$250,000 for scoping the clean up;
- \$2,750,000 for the contractual work and technological upgrades involved in scrubbing the system data; and
- \$300,000 for an IV&V.

In light of MPAS-1's budget and project schedule overruns and the failure of the previous SRA attempt to upgrade its information technology system, the lack of a firm number for MPAS-2 does not inspire confidence. SRA believes it can piggyback on the work of the failed 1998-2000 information technology overhaul to move more quickly through the process of scoping the data pieces to be cleaned, but the time delays for completion of MPAS-1 milestones suggests that a much

more refined analysis of the second phase's project design and component work products is required. **DLS recommends that the entire \$1,200,000 of MPAS-2 funding be made contingent on 100% verified completion and implementation of MPAS-1, and further that \$950,000 of the MPAS-2 funds may not be expended until completion of the MPAS-2 project scope and RFP and the submittal of a report to the budget committees that provides a definitive accounting of total MPAS-2 project costs, adjusted for the findings of the scope.**

## ***Recommended Actions***

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1. Add the following language to the special fund appropriation:

. provided that no funds may be expended for the first phase of the Maryland Pension Administration System (MPAS) information technology project until the State Retirement Agency (SRA):

- (1) completes an independent verification and validation (IV&V) review of the MPAS design and architecture; and
- (2) provides a written copy of the IV&V report to the budget committees, and the committees shall have had 45 days to review and comment on the report.

Further provided that no funding may be expended on the second phase of the MPAS project until the budget committees receive verification of 100 percent completion and implementation of the first phase of MPAS.

Further provided that \$950,000 for the second phase of the MPAS project funds may not be expended until the SRA:

- (1) completes the initial scoping of the clean-up that will determine the parameters of the second phase and the associated Request for Proposals; and
- (2) provides a definitive accounting of total estimated MPAS-2 project costs, adjusted for the findings of the scope, to the budget committees. The committees shall have 45 days to review and comment on the report.

**Explanation:** The first phase of the MPAS project has met with significant time delays and budget overages. An independent review that could have helped alleviate these problems, which was initially urged by the Department of Legislative Services in January 2007, is only beginning in February 2008, after the aforementioned project delayed the project launch date. This language is recommended to prevent further project problems.

*G20J01 – State Retirement Agency*

|  | <b><u>Amount<br/>Reduction</u></b> |    |
|--|------------------------------------|----|
| 2. The State Retirement Agency project management staff has assigned the .Net code review function to L3 Titan within the confines of its large \$3.6 million contract; therefore, additional funds for this purpose are not needed. | \$ 356,400                         | SF |
| <b>Total Special Fund Reductions</b>   | <b>\$ 356,400</b>                  |    |

## *Current and Prior Year Budgets*

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### Current and Prior Year Budgets State Retirement Agency (\$ in Thousands)

|                                  | <u>General<br/>Fund</u> | <u>Special<br/>Fund</u> | <u>Federal<br/>Fund</u> | <u>Reimb.<br/>Fund</u> | <u>Total</u>    |
|----------------------------------|-------------------------|-------------------------|-------------------------|------------------------|-----------------|
| <b>Fiscal 2007</b>               |                         |                         |                         |                        |                 |
| Legislative<br>Appropriation     | \$0                     | \$21,826                | \$0                     | \$0                    | \$21,826        |
| Deficiency<br>Appropriation      | 0                       | 5,912                   | 0                       | 0                      | 5,912           |
| Budget<br>Amendments             | 0                       | 190                     | 0                       | 0                      | 190             |
| Reversions and<br>Cancellations  | 0                       | -1,638                  | 0                       | 0                      | -1,638          |
| <b>Actual<br/>Expenditures</b>   | <b>\$0</b>              | <b>\$26,290</b>         | <b>\$0</b>              | <b>\$0</b>             | <b>\$26,290</b> |
| <b>Fiscal 2008</b>               |                         |                         |                         |                        |                 |
| Legislative<br>Appropriation     | \$0                     | \$22,189                | \$0                     | \$0                    | \$22,189        |
| Cost Containment                 | 0                       | 0                       | 0                       | 0                      | 0               |
| Budget<br>Amendments             | 0                       | 226                     | 0                       | 0                      | 226             |
| <b>Working<br/>Appropriation</b> | <b>\$0</b>              | <b>\$22,415</b>         | <b>\$0</b>              | <b>\$0</b>             | <b>\$22,415</b> |

Note: Numbers may not sum to total due to rounding.

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**Fiscal 2007**

- There was a \$5,912,456 deficiency appropriation for SRA’s MPAS technology initiative.
- A special fund budget amendment distributed \$190,349 to the agency from the 2% cost-of-living adjustment (COLA) that was centrally budgeted in the Department of Budget and Management (DBM).
- There was a cancellation in the amount of \$1,638,207. Of the total, \$770,000 represents funding related to contractual employees and conversions, \$359,000 corresponds to savings on communications spending, \$300,000 represents the IV&V test to the MPAS system that was not undertaken due to contractual difficulties, \$230,000 was saved because the Board of Trustee Elections for this year were uncontested and the associated funds were not needed, and \$188,000 represents salaries. There was an offsetting gain of \$301,000, primarily from administrative fee interest charges that reduced the total final cancellation.

**Fiscal 2008**

- A special fund budget amendment distributed \$225,615 to the agency from the 2% COLA that was centrally budgeted in DBM.

**Object/Fund Difference Report  
State Retirement Agency**

| <u>Object/Fund</u>         | <u>FY07<br/>Actual</u> | <u>FY08<br/>Working<br/>Appropriation</u> | <u>FY09<br/>Allowance</u> | <u>FY08-FY09<br/>Amount Change</u> | <u>Percent<br/>Change</u> |
|----------------------------|------------------------|---|---------------------------|------------------------------------|---------------------------|
| <b>Positions</b>           |                        |   |                           |                                    |                           |
| 01Regular                  | 187.00                 | 191.00                                    | 189.00                    | -2.00                              | -1.0%                     |
| 02Contractual              | 10.70                  | 14.00                                     | 15.00                     | 1.00                               | 7.1%                      |
| <b>Total Positions</b>     | <b>197.70</b>          | <b>205.00</b>                             | <b>204.00</b>             | <b>-1.00</b>                       | <b>-0.5%</b>              |
| <b>Objects</b>             |                        |   |                           |                                    |                           |
| 01Salaries and Wages       | \$ 12,475,570          | \$ 13,345,535                             | \$ 14,750,204             | \$ 1,404,669                       | 10.5%                     |
| 02Technical and Spec. Fees | 868,339                | 1,174,764                                 | 1,057,731                 | -117,033                           | -10.0%                    |
| 03Communication            | 642,465                | 682,376                                   | 737,655                   | 55,279                             | 8.1%                      |
| 04Travel                   | 134,877                | 200,494                                   | 205,478                   | 4,984                              | 2.5%                      |
| 07Motor Vehicles           | 123,615                | 146,587                                   | 145,509                   | -1,078                             | -0.7%                     |
| 08Contractual Services     | 9,758,328              | 4,718,373                                 | 10,237,995                | 5,519,622                          | 117.0%                    |
| 09Supplies and Materials   | 172,988                | 203,800                                   | 260,376                   | 56,576                             | 27.8%                     |
| 10Equipment – Replacement  | 53,485                 | 89,227                                    | 339,255                   | 250,028                            | 280.2%                    |
| 11Equipment – Additional   | 74,367                 | 55,500                                    | 80,050                    | 24,550                             | 44.2%                     |
| 13Fixed Charges            | 1,986,336              | 1,798,126                                 | 2,036,148                 | 238,022                            | 13.2%                     |
| <b>Total Objects</b>       | <b>\$ 26,290,370</b>   | <b>\$ 22,414,782</b>                      | <b>\$ 29,850,401</b>      | <b>\$ 7,435,619</b>                | <b>33.2%</b>              |
| <b>Funds</b>               |                        |   |                           |                                    |                           |
| 03Special Fund             | \$ 26,290,370          | \$ 22,414,782                             | \$ 29,850,401             | \$ 7,435,619                       | 33.2%                     |
| <b>Total Funds</b>         | <b>\$ 26,290,370</b>   | <b>\$ 22,414,782</b>                      | <b>\$ 29,850,401</b>      | <b>\$ 7,435,619</b>                | <b>33.2%</b>              |

Note: The fiscal 2008 appropriation does not include deficiencies.

**Fiscal Summary  
State Retirement Agency**

| <u>Program/Unit</u>                                  | <u>FY07<br/>Actual</u> | <u>FY08<br/>Wrk Approp</u> | <u>FY09<br/>Allowance</u> | <u>Change</u>       | <u>FY08-FY09<br/>% Change</u> |
|--|------------------------|----------------------------|---------------------------|---------------------|-------------------------------|
| 01 State Retirement Agency                           | \$ 20,749,750          | \$ 22,414,782              | \$ 25,088,923             | \$ 2,674,141        | 11.9%                         |
| 02 Major Information Technology Development Projects | 5,540,620              | 0                          | 4,761,478                 | 4,761,478           | 0%                            |
| <b>Total Expenditures</b>                            | <b>\$ 26,290,370</b>   | <b>\$ 22,414,782</b>       | <b>\$ 29,850,401</b>      | <b>\$ 7,435,619</b> | <b>33.2%</b>                  |
| Special Fund   | \$ 26,290,370          | \$ 22,414,782              | \$ 29,850,401             | \$ 7,435,619        | 33.2%                         |
| <b>Total Appropriations</b>                          | <b>\$ 26,290,370</b>   | <b>\$ 22,414,782</b>       | <b>\$ 29,850,401</b>      | <b>\$ 7,435,619</b> | <b>33.2%</b>                  |

Note: The fiscal 2008 appropriation does not include deficiencies.

**State Retirement and Pension System of Maryland**  
**Fund Investment Performance for Periods Ending June 30, 2007<sup>1</sup>**

|                          | <u>\$ Value<br/>in Millions</u> | <u>% Total</u> |
|--------------------------|---------------------------------|----------------|
| Domestic Equity          | \$15,683.9                      | 39.7%          |
| Fixed Income             | 11,065.3                        | 28.1%          |
| International Equity     | 5,195.8                         | 13.2%          |
| Global Equity            | 4,024.3                         | 10.2%          |
| Real Estate <sup>2</sup> | 1,830.7                         | 4.6%           |
| Real Return              | 679.5                           | 1.7%           |
| Private Equity           | 385.9                           | 1.0%           |
| Emerging Managers        | 332.3                           | 0.8%           |
| Cash and Other           | 247.0                           | 0.7%           |
| <b>Total Fund</b>        | <b>\$39,444.0</b>               |                |

<sup>1</sup> Data reflect the system's cash account and excludes money invested by the system on behalf of the Maryland Transportation Authority.

Source: State Retirement Agency

**State Retirement and Pension System of Maryland**  
**Statement of Changes in Net Assets Available for Plan Benefits**  
**Fiscal 2006-2007**  
**(\$ in Millions)**

|  | <u>2006</u>       | <u>2007</u>       |
|--|-------------------|-------------------|
| Increase in Assets                     |                   |                   |
| Contributions                          |                   |                   |
| Employer and Other                     | \$720.8           | \$833.7           |
| Member                                 | 215.1             | 319.3             |
| Investment Income <sup>1</sup>         | 3,225.6           | 5,924.1           |
| <b>Total</b>                           | <b>\$4,161.6</b>  | <b>\$7,077.1</b>  |
| Decrease in Assets                     |                   |                   |
| Benefit Payments                       | -1,829.5          | -1,965.9          |
| Administrative Expenses <sup>2</sup>   | -18.6             | -21.3             |
| Refunds                                | -16.4             | -16.0             |
| <b>Total</b>                           | <b>-\$1,864.5</b> | <b>-\$2,003.2</b> |
| Change in Assets during Period         | \$2,297.1         | \$5,073.9         |
| Net Assets Available for Plan Benefits |                   |                   |
| Beginning of Period                    | 32,073.7          | 34,370.7          |
| End of Period                          | 34,370.8          | 39,444.7          |
| <b>Total Investment Return</b>         | <b>10.4%</b>      | <b>17.6%</b>      |

<sup>1</sup>Dividends, interest, realized, and unrealized capital gains.

<sup>2</sup>Administrative Expenses do not include encumbered funds.

Note: Data presented here includes the system's bank cash account and excludes money invested by the system on behalf of the Maryland Transportation Authority. Columns may not add to total due to rounding.

Source: State Retirement Agency

## Summary of State Membership Data by Plan Fiscal 2003-2007

|  | <u>Total</u> | <u>Teachers' Retirement</u> | <u>Teachers' Pension</u> | <u>Employees' Retirement</u> | <u>Employees' Pension</u> | <u>Judges' Retirement</u> | <u>State Police Retirement</u> | <u>LEOPS</u> |
|--|--------------|-----------------------------|--------------------------|------------------------------|---------------------------|---------------------------|--------------------------------|--------------|
| <b><i>From 7/1/2002 to 6/30/2003</i></b> |              |                             |                          |                              |                           |                           |                                |              |
| Active Members                           | 190,021      | 8,199                       | 89,099                   | 11,347                       | 77,939                    | 287                       | 1,542                          | 1,481        |
| Average Annual Salary                    | \$42,808     | \$67,755                    | \$44,520                 | \$40,723                     | \$38,004                  | \$115,571                 | \$52,424                       | \$46,907     |
| Retired Members                          | 90,803       | 30,305                      | 13,370                   | 24,662                       | 19,929                    | 306                       | 1,695                          | 503          |
| Average Annual Retirement Allowance      | \$16,278     | \$24,156                    | \$13,128                 | \$13,728                     | \$7,284                   | \$56,112                  | \$33,444                       | \$24,804     |
| Vested Former Members                    | 45,573       | 1,577                       | 17,284                   | 1,349                        | 25,212                    | 13                        | 41                             | 62           |
| <b><i>From 7/1/2003 to 6/30/2004</i></b> |              |                             |                          |                              |                           |                           |                                |              |
| Active Members                           | 185,861      | 7,197                       | 88,765                   | 10,489                       | 75,955                    | 283                       | 1,445                          | 1,675        |
| Average Annual Salary                    | \$44,169     | \$69,819                    | \$46,337                 | \$41,801                     | \$39,024                  | \$117,137                 | \$53,655                       | \$46,942     |
| Retired Members                          | 94,880       | 30,598                      | 15,093                   | 24,559                       | 21,913                    | 309                       | 1,790                          | 581          |
| Average Annual Retirement Allowance      | \$16,785     | \$25,064                    | \$13,704                 | \$14,343                     | \$7,795                   | \$56,761                  | \$34,822                       | \$26,085     |
| Vested Former Members                    | 46,911       | 1,478                       | 18,327                   | 1,311                        | 25,626                    | 14                        | 44                             | 81           |
| <b><i>From 7/1/2004 to 6/30/2005</i></b> |              |                             |                          |                              |                           |                           |                                |              |
| Active Members                           | 188,050      | 6,255                       | 91,535                   | 9,869                        | 76,787                    | 282                       | 1,439                          | 1,826        |
| Average Annual Salary                    | \$47,163     | \$74,291                    | \$50,152                 | \$42,934                     | \$41,509                  | \$120,206                 | \$53,934                       | \$48,700     |
| Retired Members                          | 100,196      | 30,921                      | 17,170                   | 24,633                       | 24,525                    | 316                       | 1,909                          | 708          |
| Average Annual Retirement Allowance      | \$17,269     | \$26,066                    | \$14,171                 | \$15,025                     | \$8,321                   | \$58,454                  | \$36,005                       | \$27,534     |
| Vested Former Members                    | 47,664       | 1,351                       | 18,792                   | 1,291                        | 26,058                    | 15                        | 47                             | 104          |
| <b><i>From 7/1/2005 to 6/30/2006</i></b> |              |                             |                          |                              |                           |                           |                                |              |
| Active Members                           | 191,273      | 5,449                       | 94,869                   | 10,121                       | 76,979                    | 296                       | 1,441                          | 2,063        |
| Average Annual Salary                    | \$48,557     | \$75,950                    | \$51,179                 | \$46,222                     | \$43,198                  | \$121,416                 | \$55,967                       | \$51,706     |
| Retired Members                          | 103,831      | 31,138                      | 19,141                   | 24,271                       | 26,216                    | 330                       | 1,937                          | 782          |
| Average Annual Retirement Allowance      | \$17,916     | \$27,253                    | \$14,892                 | \$15,732                     | \$8,904                   | \$61,020                  | \$38,844                       | \$17,412     |
| Vested Former Members                    | 49,310       | 1,229                       | 19,824                   | 1,258                        | 26,805                    | 14                        | 58                             | 115          |
| <b><i>From 7/1/2006 to 6/30/2007</i></b> |              |                             |                          |                              |                           |                           |                                |              |
| Active Members                           | 196,262      | 4,788                       | 98,789                   | 9,980                        | 78,719                    | 297                       | 1,416                          | 2,217        |
| Average Annual Salary                    | \$50,805     | \$80,121                    | \$53,914                 | \$47,347                     | \$45,017                  | \$126,729                 | \$58,751                       | \$55,036     |
| Retired Members                          | 108,355      | 31,023                      | 21,016                   | 24,408                       | 28,631                    | 335                       | 2,063                          | 863          |
| Average Annual Retirement Allowance      | \$18,642     | \$28,464                    | \$15,720                 | \$16,620                     | \$9,528                   | \$63,480                  | \$39,540                       | \$28,800     |
| Vested Former Members                    | 52,027       | 1,175                       | 21,544                   | 1,260                        | 27,847                    | 13                        | 54                             | 127          |

LEOPS: Law Enforcement Officers' Pension System

Source: State Retirement Agency

**Employer Contribution Rates and Actuarial Funding Levels\***  
**Fiscal 2007-2009**

| <u>Plan</u>            | Fiscal 2007          |                       |                      | Fiscal 2008          |                       |                      | Fiscal 2009          |                       |                      |
|------------------------|----------------------|-----------------------|----------------------|----------------------|-----------------------|----------------------|----------------------|-----------------------|----------------------|
|                        | <u>Corridor Rate</u> | <u>Actuarial Rate</u> | <u>Funding Level</u> | <u>Corridor Rate</u> | <u>Actuarial Rate</u> | <u>Funding Level</u> | <u>Corridor Rate</u> | <u>Actuarial Rate</u> | <u>Funding Level</u> |
| Teachers               | 9.71%                | 11.17%                | 89.26%               | 11.60%               | 12.78%                | 84.20%               | 11.70%               | 12.18%                | 78.37%               |
| Employees              | 6.83%                | 11.11%                | 84.90%               | 8.86%                | 12.27%                | 80.60%               | 8.73%                | 11.45%                | 72.69%               |
| State Police           |                      | 13.83%                | 100.34%              |                      | 15.44%                | 98.20%               |                      | 20.53%                | 85.02%               |
| Judges                 |                      | 42.43%                | 79.30%               |                      | 44.12%                | 77.60%               |                      | 43.61%                | 76.62%               |
| LEOPS                  |                      | 40.60%                | 57.67%               |                      | 41.74%                | 62.80%               |                      | 36.99%                | 55.57%               |
| <b>Combined System</b> | <b>9.18%</b>         | <b>11.58%</b>         | <b>87.84%</b>        | <b>11.10%</b>        | <b>13.00%</b>         | <b>83.30%</b>        | <b>11.14%</b>        | <b>12.37%</b>         | <b>76.50%</b>        |

LEOPS: Law Enforcement Officers' Pension System

\* For fiscal 2007, the funding level as of June 30, 2005; for fiscal 2008, the funding level as of June 30, 2006; for fiscal 2009, the funding level as of June 30, 2007.

Source: State Retirement Agency