Arizona House of Representatives
House Majority Research
REPORT

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To: **JOINT LEGISLATIVE AUDIT COMMITTEE**
Senator Blendu, Chairman
Representative Knaperek, Vice Chairman

Date: December 16, 2005

Subject: **Sunset Review of the Elected Officials' Retirement Plan, Public Safety Personnel Retirement System and the Corrections Officers Retirement Plan**

Attached is the final report of the sunset review of the Elected Officials' Retirement Plan, Public Safety Personnel Retirement System and the Corrections Officers Retirement Plan, which was conducted by the Senate Finance and the House of Representatives Public Institutions & Retirement Committee of Reference.

This report has been distributed to the following individuals and agencies:

Governor of the State of Arizona
The Honorable Janet Napolitano

President of the Senate
Senator Ken Bennett

Speaker of the House
Representative Jim Weiers

Senate Members
Senator Dean Martin, Cochair
Senator Ken Cheuvront
Senator Jorge Luis Garcia
Senator Jack W. Harper
Senator Jay Tibshraeny

House Members
Representative Trish Groe, Cochair
Representative Jennifer Burns
Representative Meg Burton Cahill
Representative Steve Gallardo
Representative Marian McClure

Public Safety Personnel Retirement System
Arizona State Library, Archives & Public Records
Office of the Auditor General

Senate Majority Staff
Senate Research Staff
Senate Minority Staff
Senate Resource Center

House Majority Staff
House Research Staff
House Minority Staff
Chief Clerk

COMMITTEE OF REFERENCE REPORT

Senate Finance and House of Representatives Public Institutions & Retirement Committee of Reference

ELECTED OFFICIALS' RETIREMENT PLAN
PUBLIC SAFETY PERSONNEL RETIREMENT SYSTEM
CORRECTIONS OFFICERS RETIREMENT PLAN

Background

Pursuant to § 41-2953, Arizona Revised Statutes, the Joint Legislative Audit Committee (JLAC) assigned the sunset review of the Elected Officials' Retirement Plan (EORP), Public Safety Personnel Retirement System (PSPRS) and the Corrections Officers Retirement Plan (CORP) to the Senate Finance and House of Representatives Public Institutions & Retirement Committee of Reference for review.

The EORP was established in 1970 to cover state and county elected officials, some city elected officials and judges. The PSPRS was created in 1968 to provide a uniform and consistent statewide retirement program for public safety personnel throughout the state. The CORP was created in 1986 to provide retirement benefits for prison and jail personnel of certain state, county and local governments. All three systems were established to administer retirement benefits as well as survivor, disability, and health benefits for eligible members and their beneficiaries.

The Fund Manager is a five member board responsible for the administration and investment activities of the EORP, PSPRS and CORP. The Fund Manager develops investment guidelines, investment policies and funding objectives with the assistance of independent investment counsel. A fund Administrator is responsible for collecting and refunding contributions from members and employers, disbursing benefits to qualified members in a timely manner and investing monies as the Fund Manager determines necessary and prudent to meet investment objectives and accruing benefit obligations.

Committee of Reference Sunset Review Procedures

The Committee of Reference held one public hearing on Wednesday, November 16, 2005 to review the Agency responses, as required by A.R.S. § 41-2954, subsections D and F, and to hear and accept public testimony. Testimony was received from Jack Hacking, Administrator, Public Safety Personnel Retirement System and Mike Colletto, Lobbyist, Professional Firefighters of Arizona.

Committee of Reference Recommendations

The Committee of Reference recommended that the Elected Officials' Retirement Plan, Public Safety Personnel Retirement System and the Corrections Officers Retirement Plan be continued for ten years.

Attachments

1) Meeting Notice
2) Minutes of the Committee of Reference Meeting
3) Agency factors pursuant to A.R.S. § 41-2954, subsections D and F
4) Additional Sunset Document
5) PSPRS Presentation
6) Funding Status Improvement Options Document

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Interim agendas can be obtained via the Internet at http://www.azleg.state.az.us/InterimCommittees.asp

ARIZONA STATE LEGISLATURE

INTERIM MEETING NOTICE
OPEN TO THE PUBLIC

SENATE FINANCE AND HOUSE OF REPRESENTATIVES PUBLIC INSTITUTIONS AND RETIREMENT COMMITTEE OF REFERENCE FOR THE SUNSET HEARING OF:
ARIZONA STATE RETIREMENT SYSTEM
ELECTED OFFICIALS RETIREMENT PLAN
PUBLIC SAFETY PERSONNEL RETIREMENT SYSTEM
CORRECTIONS OFFICERS RETIREMENT PLAN

Date: Thursday, December 1, 2005

Time: 1:00 p.m.

Place: House Hearing Room 5

AGENDA

1. Call to Order – Opening Remarks

2. Arizona State Retirement System (ASRS)
   - Presentation by the Auditor General
   - Response by the Arizona State Retirement System
   - Public Testimony
   - Discussion and Recommendations by the Committee of Reference

3. Presentation of Elected Officials Retirement Plan, Public Safety Personnel Retirement System, and Corrections Officers Retirement Plan
   - Public Testimony
   - Discussion and Recommendations by the Committee of Reference

4. Adjourn

Members:

Senator Dean Martin, Co-Chair
Senator Ken Cheuvront
Senator Jorge Garcia
Senator Jack Harper
Senator Jay Tibshraeny

Representative Trish Groe, Co-Chair
Representative Jennifer Burns
Representative Meg Burton Cahill
Representative Steve Gallardo
Representative Marian McClure

11/16/05
jmb

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Pat

ARIZONA STATE LEGISLATURE
Forty-seventh Legislature – First Regular Session

SENATE FINANCE AND HOUSE OF REPRESENTATIVES PUBLIC INSTITUTIONS AND RETIREMENT COMMITTEE OF REFERENCE FOR THE SUNSET HEARING OF: ARIZONA STATE RETIREMENT SYSTEM ELECTED OFFICIALS RETIREMENT PLAN PUBLIC SAFETY PERSONNEL RETIREMENT SYSTEM CORRECTIONS OFFICERS RETIREMENT PLAN

Minutes of Meeting
Thursday, December 1, 2005
House Hearing Room 5 -- 1:00 p.m.

Co-Chair Senator Dean Martin called the meeting to order at 1:30 p.m. and attendance was noted by the secretary.

Members Present

Senator Garcia
Senator Harper
Senator Martin, Co-Chair
Representative Gallardo
Representative McClure
Representative Groe, Co-Chair

Members Absent

Senator Cheuvront
Representative Burns
Representative Burton Cahill

Speakers Present

Lisa Eddy, Performance Audit Manager, Arizona State Retirement System
Paul Matson, Director, Arizona State Retirement System
Keith Meredith, Chairman of the Board, Arizona State Retirement System
Anthony Guarino, Deputy Director of Arizona State Retirement System
Jim Hacking, Administrator, Public Safety Personnel Retirement System
Mike Colletto, Lobbyist, Professional Firefighters of Arizona

Lisa Eddy, Performance Audit Manager, Auditor General's Office, ASRS, presented the results of the Performance Audit and Sunset Review on the Arizona State Retirement System (ASRS) (see presentation handout, Attachment 1). A list of the findings presented is as follows:

1. The ASRS is generally managing its investments appropriately (p. 5, attachment 1);
2. ASRS should improve its performance in paying some benefits (p. 9);
3. ASRS may need to revise its plan to improve response times at its Call Center (p 14).

The presentation also included information on member and employer contribution factors, the viability of the original retirement system and the agency's sunset factors.

Paul Matson, Director, Arizona State Retirement System (ASRS) mentioned that there were a number of staff members of ASRS present and he introduced Dr. Keith Meredith who has been Chairman of the Board for a little over a year. After complimenting the auditor staff on the professionalism of the audit Ms. Eddy had presented, he referred to the handouts of the presentation he was about to make (see Attachments 2 through 8). In pointing out Attachment 2 he stated he would be breaking it up into three sections: pp 1-16 about direct responses to the Auditor General's comments; pp 17-31 strategic planning items at ASRS, and pp 32-34 – 2006 legislative initiatives for the State Retirement System. He summarized the findings as follows:

<u>Finding No. 1, ASRS investment management generally appropriate.</u> The recommendation to adopt the six draft policies has been approved. They cover such things as funding process, audit process, appraisals and method of funding external investment managers in the real estate space.

<u>Recommendation No. 2, in respect to monitoring other states' policies and procedures in this area,</u> Mr. Matson reported that this was and is being done and will be continued. This recommendation contained three sub-recommendations for improving benefit payments: 1) timeliness of new retirees; 2) accuracy of new retirees' payments; and 3) timeliness of refunds. He said a lot of the timeliness and accuracy issues will be resolved by an information technology plan to be completed by 2007.

Regarding new retirees, the paperwork is to be done in ten days; this phase to be completed by December of 2006.

Some of the minor inaccuracies were deemed to be a function of two areas: 1) inadequate policies and procedures; and 2) inadequate training. The staff has now completed appropriate training to ensure that there is a homogenous understanding of how to do the calculations; and the update of the policies and procedures has been virtually completed.

<u>Finding No. 3, regarding the Call Center, Recommendation No.1</u> is to monitor secondary reasons for calls. This is being investigated to determine if there is a combination of software ability and time allocation to do so. At present he has different perspectives from staff members and will continue the research over the next several months. The second item in this regard is the number of FDE's required in the Call Center. There are two different statistical analyses; one says 19 and one 24.

Co-Chair Groe requested of Mr. Matson that he elaborate on how he plans to make these objections come to fruition when he discusses the second part of his presentation,

Continuing with his presentation, Mr. Matson reported ASRS has a plan that will invest 6 percent of the total fund invested in real estate -- geographically (nationally and possibly internationally) and by product groups (office buildings, hotels, retail, storage, etc.). The vast majority of assets, approximately 70 percent will be invested in core type real estate properties which are typically higher grade, more liquid and close to major city centers like San Francisco, Chicago, New York. Approximately 30 percent of these assets will be invested in non-core, mostly opportunistic, investments. These are typically investments through joint-venture projects. The current allocation for real estate is close to 0 percent.

Senator Martin asked about the general overall funding status to which Mr. Matson responded that it was 86.1 percent, though it was expected to drop to the low 80s over the next several years before it starts rising again; and that this rate is calculated by financial analysts and is irrespective of financial tactics.

Senator Martin then asked about the turnover factor. Ms. Matson responded that some would be five or more years; those more opportunistic, three years or less; that three or four years would end up being an average turnover holding period for a property.

Senator Martin then asked how joint venture partners are selected. Mr. Matson explained in detail the process of consulting a number of core real estate consultants and an internal chief portfolio manager.

Mr. Matson reported that the Information Technology (IT) plan is scheduled for completion by December 2007; within that framework an online website for members to check their balance, their statements and what the records show as far as account name and beneficiary is scheduled for completion by February 6, 2006.

Mr. Matson stated that the Call Center has now two types of staff members, one of which is higher paid, who although they do not do financial planning or give advice, have benefit advisor skills; the other type have call center skills. The first would be able to answer the questions on the spot that now are being answered by "I'll do some research and get back to you later." He reported that call time wait is now 3 minutes that he hopes to reduce it further.

Representative Groe asked Mr. Matson to explain what checks and balances were in place to ensure the success rate with as few employees as necessary. Mr. Matson answered that their internal audit department would next be auditing the Call Center and the time it takes to respond to calls.

Anthony Guarino, Deputy Director of ASRS, reported that the staff at the Call Center is at the number that the Auditor General has recommended and will stay at that number unless service deteriorates.

Representative Groe asked if there is a date for the internal audit. Mr. Guarino advised that a new internal auditor was just hired and that it is part of his mandate to schedule it; that Mr. Guarino would get back with a clarification of time schedule and details of what they will be doing. He said that additionally the plan is to monitor the call service daily and monthly report to the board of trustees.

Mr. Matson continued his presentation by giving summaries of his handout (Attachment 2) focusing on page 25 "Vision and Values" and page 28 "Impact of Cost Reduction Initiatives" and finally pages 33 and 34, "Legislative Public Policy Initatives for 2006."

> **Cochair Groe moved that the Committee of Reference recommend to the Legislature that the Arizona State Retirement System be continued for ten years. The motion carried approved by a voice vote.**

The next speaker was Jim Hacking, Administrator for the Public Safety Personnel Retirement System. (PSPRS) (Attachments 3 through 6). Mr. Hacking explained that PSPRS is the administrative entity that manages and administers benefits for three separate benefit plans in this state. All the retirement plans are authorized and operate under Title 38, ch 5, art. 3, 4 and 6 of the Arizona Revised States. It is governed by a board of 5 members all of whom are appointed by the Governor and two of whom must have some investment expertise. The PSPRS has a system of 210 local boards that are responsible for such things as determining eligibility to participate in the system, determining eligibility for benefits and actually calculating the benefits that are to be awarded. The central office monitors and audits the work that is done by the local boards of PSPRS.

In the case of the Corrections Officers Plan (Attachments 3, 4 and 7), they too have a system of local boards, 19 of them, and they perform functions similar to those of the Board of the PSPRS program.

Mr. Hacking then reviewed the options and constraints in trying to improve the fund (see Attachment 3, pp 11 and 12). Considering the constraints he emphasized that if the only thing to be done was that the amortization period was changed from 20 to 30 years, the 17.1 percent employer rate would be reduced to 15.44 percent in 2007; a 40-year period would make it even less. He reported that he is having research done to see what would happen if the salary growth assumption were reduced from 6 percent to possibly 5 or 5½ percent. He said that generally the result would be an improvement in the funding ratio of the systems and a concomitant reduction in the required employer contribution. As soon as he receives the projections from the Actuary he will share them with the Committee.

Mr. Hacking also suggested that consideration be given to making some changes in regard to the Deferred Retirement Option Plan (DROP) either by setting a statutory rate or interest to be credited to DROP participant accounts or imposing contribution requirements to one degree or another on either the employer or employee or both.

Mike Colletto, Lobbyist, Professional Firefighters of Arizona, was asked by Representative McClure what kind of action he would expect if the DROP program were continued for those already in it, but otherwise eliminated, or if the rate of return was tied to the actual interest rate that is in place by the federal government.

Mr. Colletto reported on a plan in which he has been involved and which is being called reverse DROP. He stated that the firefighters have also obtained a constitutional attorney who is reviewing both the constitution and case law. He said that the Firefighters' goal is to work on doing everything possible within the constitutional case law to lower the employers' contribution rates, and that they are actively working with them in that regard; that the Firefighters care greatly about the financial stability of this plan because they do not have social security.

> **Co-Chair Groe moved that the Committee of Reference recommend to the Legislature that the Elected Officials Retirement Plan, the Public Safety Personnel Retirement System and the Corrections Officers' Retirement Plan be continued for ten years. The motion carried by a voice vote.**

Without objection, the meeting adjourned at 2:45 p.m.

Pat Hudock, Committee Secretary
December 6, 2005

(Original minutes, attachments and tape are on file in the Office of the Chief Clerk.)

Sunset Factors
PSPRS

In accordance with A.R.S. §41-2954, the Legislature should consider the following 12 factors in determining whether the Public Safety Personnel Retirement System, the Corrections Officer Retirement Plan and the Elected Officials' Retirement Plan should be continued or terminated.

1. **The objective and purpose of establishing the agency.**

   The Public Safety Personnel Retirement System (PSPRS), the Corrections Officer Retirement Plan (CORP) and the Elected Officials' Retirement Plan (EORP) were established to administer retirement benefits for eligible members. The PSPRS was created in 1968 to provide a uniform, consistent, and equitable statewide retirement program for public safety personnel employed by the State or by political subdivisions of the State. The CORP was created in 1986 to provide benefits for prison and jail employees of certain state, county and local governments. The EORP, created in 1970, has evolved to cover state and county elected officials, judges, and some city elected officials. In addition to retirement benefits, survivor, disability, and health benefits are also provided.

   The Fund Manager, consisting of five appointed members, is responsible for the administration and investment activities of the PSRPS, CORP and the EORP. The Fund Manager develops investment guidelines, investment policies, and funding objectives with the assistance of independent investment counsel. A fund Administrator, employed by the Fund Manager, is responsible for collecting and refunding contributions from members and employers, disbursing benefits to qualified members in a timely manner, and investing monies as the Fund Manager deems necessary and prudent to meet investment objectives and accruing benefit obligations.

2. **The effectiveness with which the agency has met its objectives and purpose and the efficiency with which it has operated.**

   In general, the Fund Manager has been effective in providing retirement income and, as the Fund Manager deems necessary and prudent, other benefits to eligible members at the lowest reasonable cost. According to agency personnel, as of July 2005, 9,816 members are receiving monthly retirement benefits from the PSPRS, CORP, and EORP. We also have 28,864 active members participating in the three plans. The cost of providing these benefits has been kept low due to the solid investment performance of the funds. For example, annual reports for the PSPRS, CORP and the EORP indicate the funds have continued to outperform the market indexes and have exceeded the actuarial yield on a long-term basis. Additionally, the administrative cost to provide all mandated benefits and services to all plan participants is approximately 4 basis points. This equates to $69 per

7. **The extent to which the Attorney General or any other applicable agency of state government has the authority to prosecute actions under the enabling legislation.**

   A.R.S. §38-848(M) authorizes the Attorney General or an attorney approved by the Attorney General to represent the Fund Manager in any legal proceeding. At present, a private law firm is representing the Fund Manager in several cases that are in litigation.

8. **The extent to which the agency has addressed deficiencies in its enabling statutes which prevent it from fulfilling its statutory mandate.**

   Numerous technical and administrative changes have been made to statutes pertaining to the PSPRS, CORP and the EORP over the years. However, these changes were made to either clarify statutory language or bring state statutes into compliance with federal law. According to agency personnel, there are no deficiencies in the enabling statutes of the three plans that prevent the system or its personnel from fulfilling their statutory mandates.

9. **The extent to which changes are necessary in the laws of the agency to adequately comply with the factors listed in this subsection.**

   No changes are necessary at this time.

10. **The extent to which the termination of the agency would significantly harm the public health, safety, or welfare.**

    Certainly, the Legislature could terminate the administering agency. However, the retirement, survivor, and disability benefit entitlements of the PSPRS, CORP, and EORP participants could not be changed, since these participants have a constitutionally protected property interest in these benefits. Therefore, even if the system were terminated, the state would still need an administrative mechanism to distribute benefits and it is doubtful that one could be created or otherwise found that could perform this critical function as efficiently and cost effectively as the existing entity has done for so many years.

11. **The extent to which the level of regulation exercised by the agency is appropriate and whether less or more stringent levels of regulation would be appropriate.**

    Since the agency is not regulatory, this factor does not apply.

below the peer average of $87, as reported by the Cost Effectiveness Measurement (CEM) Benefit Administration.

3. **An identification of any other agencies having similar, conflicting or duplicate objectives, and an explanation of the manner in which the agency avoids duplication or conflict with other such agencies.**

The responsibilities of the PSPRS, CORP and EORP do not overlap with any other board or commission. The agency is, by statute, specifically dedicated to serve certain, very well-defined, constituencies.

4. **An assessment of the consequences of eliminating the agency or consolidating it with another agency.**

Eliminating the existing agency would remove the mechanism that provides retirement and other benefits for state and local public safety personnel, various state, county and municipal prison and jail employees, and state and county elected officials, judges, and some city elected officials. Although the state legislature could create or otherwise designate, another administering entity to provide the benefits and services for which the existing agency was designed, it is highly doubtful that such other entity could provide the mandated benefits and services as efficiently and as consistently cost-effectively as the existing agency has done over so many years.

PUBLIC SAFETY PERSONNEL RETIREMENT SYSTEM
CORRECTIONS OFFICER RETIREMENT PLAN
ELECTED OFFICIALS' RETIREMENT PLAN
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James M. Hacking
Administrator

James A. Nielsen
Assistant Administrator-CIO

Tracey D. Peterson
Assistant Administrator-COO

September 13, 2005

Representative Trish Groe, Co-Chair
Committee of Reference
Arizona State Legislature
1700 West Washington Avenue, Suite H
Phoenix, Arizona 85007-2844.

c/o Tami Stowe
Committee Research Analyst
House Public Institutions and Retirement
Committee

Dear Representative Groe:

In reply to your letter of July 27th, I have enclosed for your review: (1) the responses of the Public Safety Personnel Retirement System (PSPRS) to the factors identified in A.R.S. 41-2954 that are used in the sunset review process required by Title 41, Chapter 27; and (2) the most recent (FY'04) Comprehensive Annual Financial Reports (CAFR's) for the Public Safety Personnel Retirement System, the Correctional Officers Retirement Plan (CORP) and the Elected Officials Retirement Plan (EORP).

As soon as the FY'05 Financial Reports for the three plans are available, I shall forward them for review to the sunset review Committee of which you are Co-Chair. Those reports should be available soon.

Your July 27th letter also asked for a description of the composition and manner of appointment of the Fund Manager and a description of any recent major activities, projects or accomplishments.

The Fund Manager's composition and manner of appointment is as follows. The Fund Manager is composed of five members, all of whom, as of August 6, 1999, are appointed by the Governor for three year terms. In addition, as a result of legislation enacted this year, both the "employer" and "public" members of the Fund Manager must have substantial investment experience.

The Fund Manager is responsible for investing the system's combined assets, setting the employer contribution rates in accordance with the annual actuarial valuations of the plans, collecting contributions from employers and participants, adopting an administrative budget, hiring personnel to administer the system, setting up records and accounts for all members, paying benefits to those eligible, establishing policies to govern all aspects of system operations and overseeing the administration and security aspects of the system, including (in the case of the PSPRS and CORP) coordinating with the System's network of Local Boards.

With respect to recent major activities, projects or accomplishments, I would point out that, for the fiscal year ending June 30, 2005, the System had a combined total rate of return of 9.11% which compares favorably to the 6.32% rate of return of the weighted composite market return benchmark against which the System's performance is evaluated. Over the 3, 10, 15 and 20 year periods ending June 30th, the System's total returns were 10.20%, 8.18%, 9.03% and 10.12% respectively. These too compare favorably with the benchmark returns for the same periods of 6.96%, 8.06%, 8.61% and 9.50%.

With respect to the System's expenses for FY'05, benefits paid to the System's retired members and other beneficiaries increased from $229.9 million in FY'04 to $257.4 million in FY'05. Although total administrative expenses also increased (from $ 1.6 million in FY'04 to $ 2.3 million in FY'05), the System's administrative and investment-related expenses were only between 4 and 5/100's of 1% (between 4 and 5 basis points) of the assets under management – a cost that is very low relative to the administrative and investment-related costs incurred by other public retirement systems.

To accommodate the System's increased staff compliment that was necessitated by the service requirements of our increasing number of members and participating employers, the System's administrative offices were relocated to a larger and more secure facility in Phoenix. The administrative staff also initiated a document-imaging project in order to have a secure and easily retrievable copy of all System records. In addition, the Fund Manager completed a governance and investment policy review so that the System now has a written and comprehensive compilation of charters and policies governing all aspects of System operations. Finally, in order to buttress the System's internal control structure even further, the Fund Manager approved the addition of a Compliance Officer position; that position will be filled as of September 19th.

Should anything further be needed from PSPRS to facilitate the Committee's review process, please do not hesitate to contact me. I can be reached at 602-296-2527. My e-mail address is jhacking@psprs.com.

Sincerely,

James M. Hacking
Administrator

Total Fund
(PSPRS, EORP, CORP)

June 30, 2005

Total Plan Statistics
Defined Benefit Plan

Active Members		**28,850**
Terminated Vested Members		**321**
Drop		**1,472**
Retired		**9,190**
Normal	**6,672**	
Beneficiaries	**1,408**	
Disability	**1,110**	
Total Participants		**39,833**

Total Plan Statistics

Defined Benefit Plan

As of June 30, 2005

	Actuarial Value	Market Value*
Assets	$6.1 Billion	$ 5.1 Billion
Funding Ratio	84.6%	70.8%

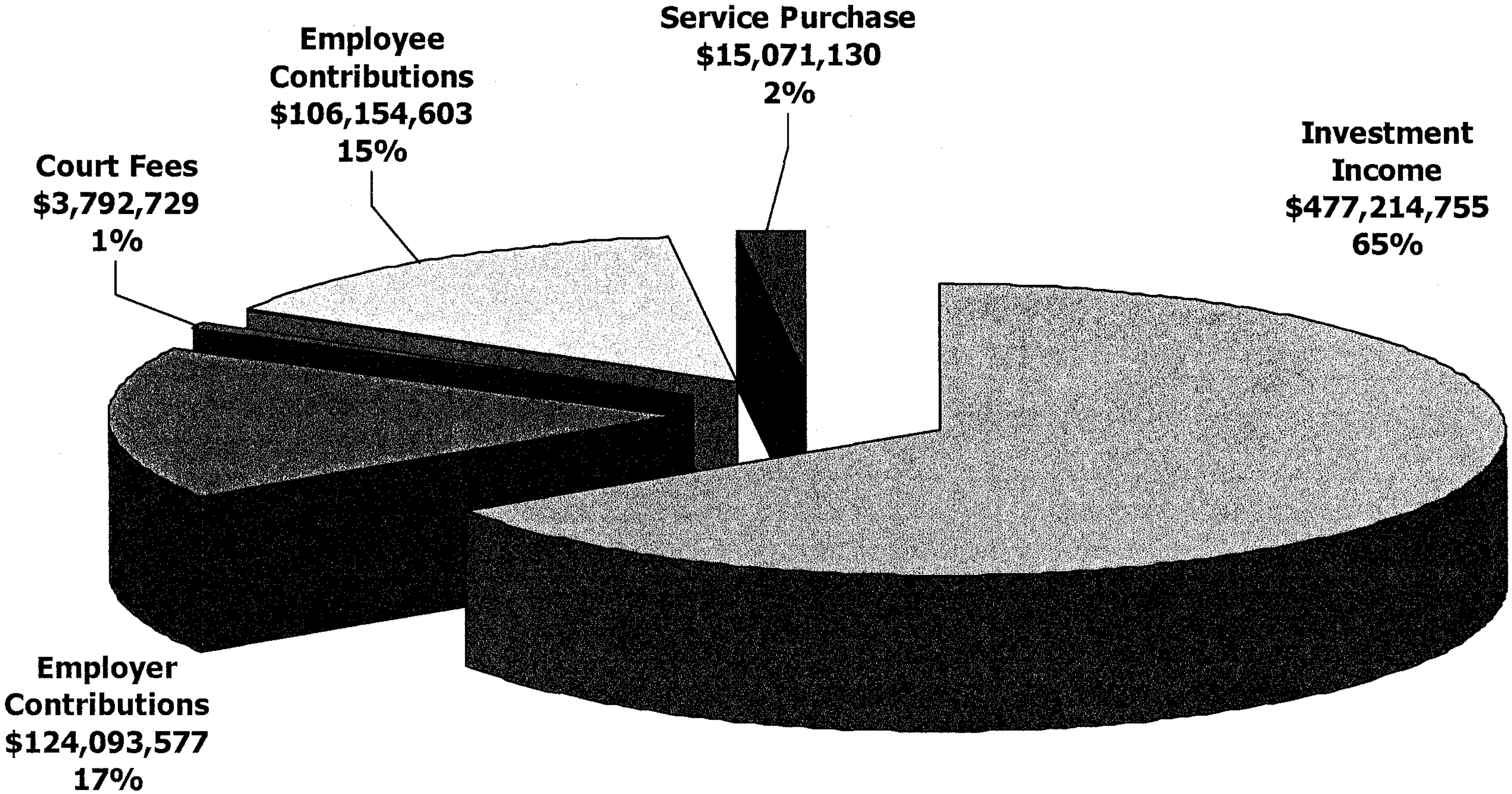
As of June 30, 2004

	Actuarial Value	Market Value*
Assets	$6.0 Billion	$ 4.7 Billion
Funding Ratio	94.6%	74.4%

*Market Value minus Future benefit Reserve

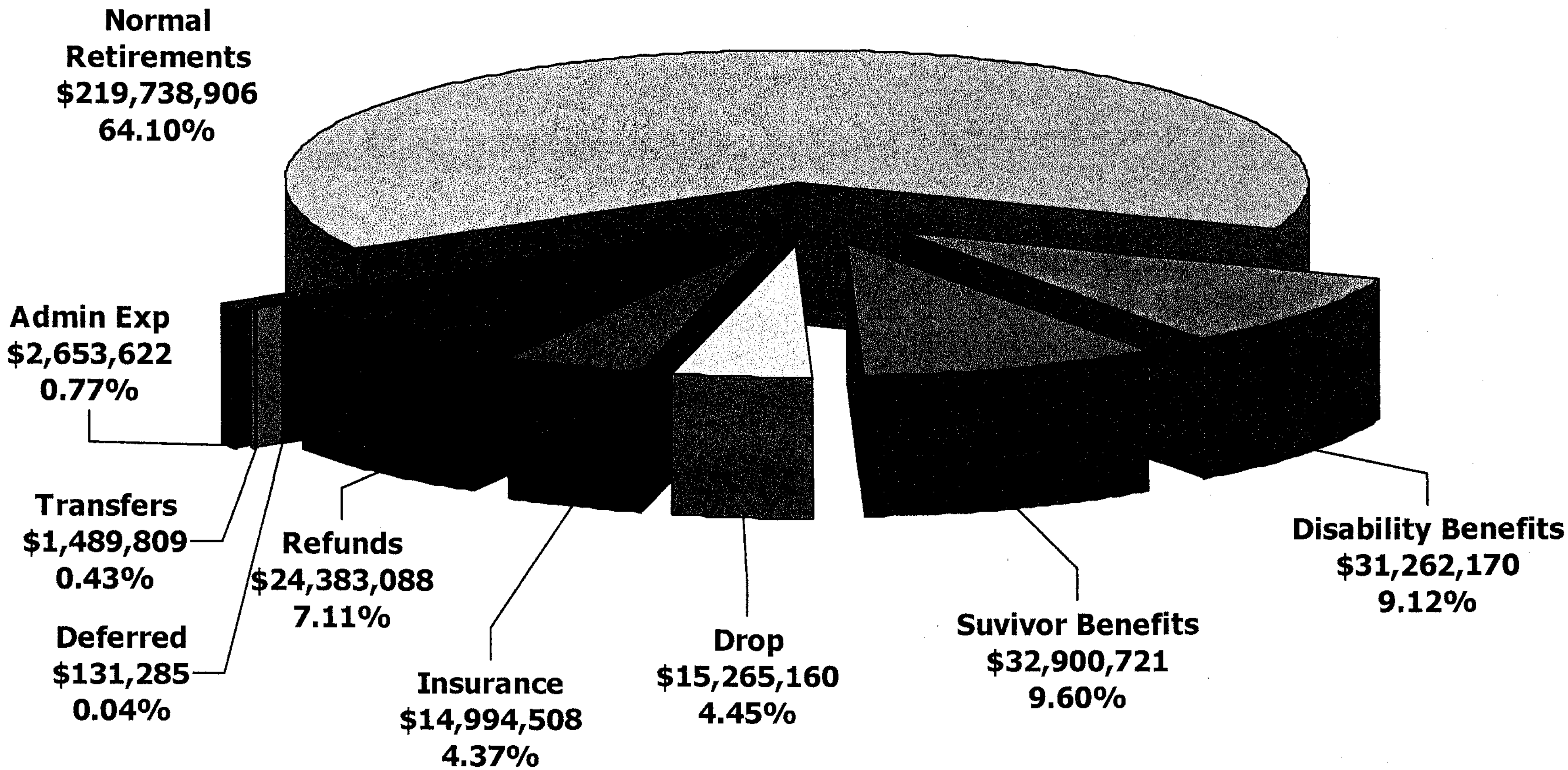
Total Revenue

June 30, 2005



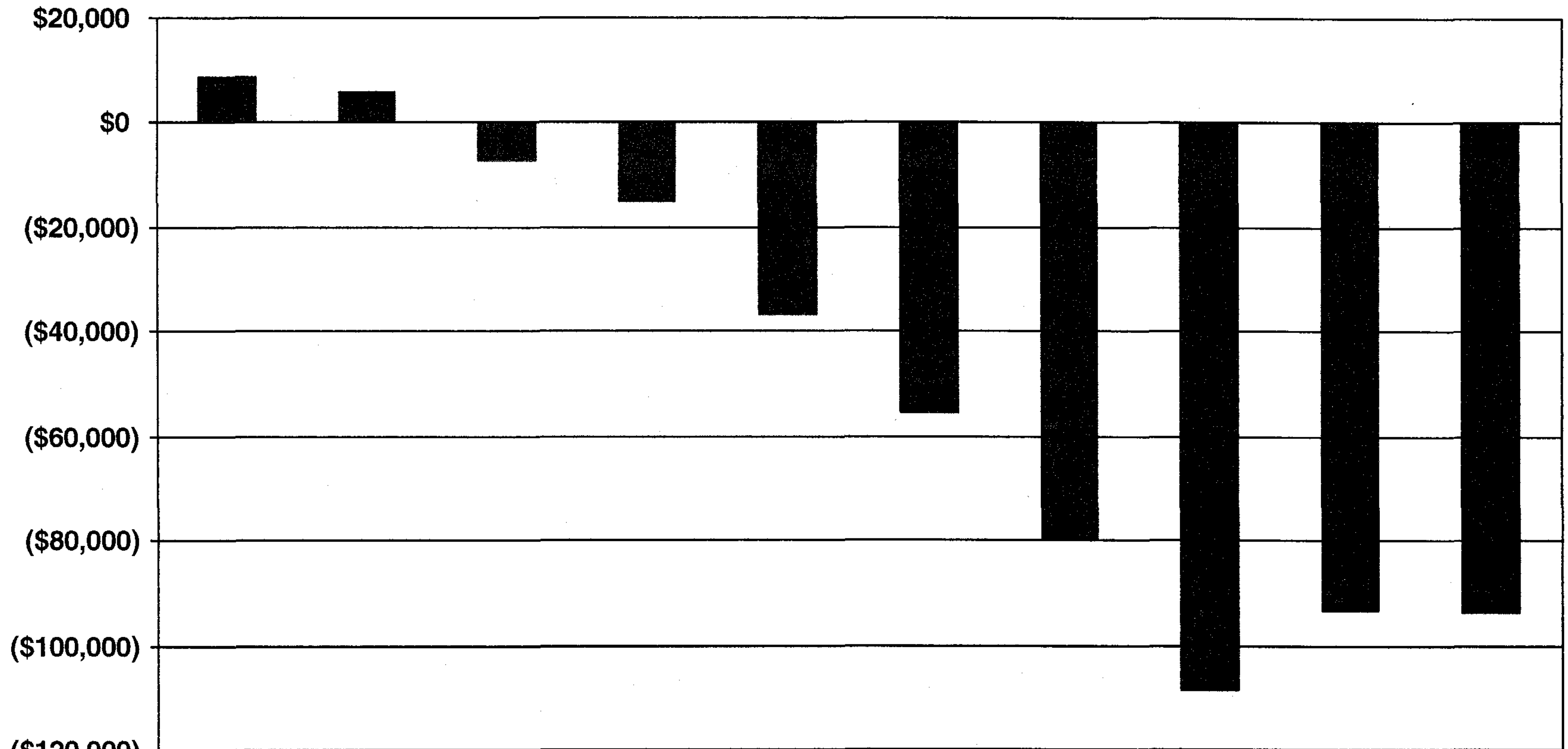
Total Expenses

June 30, 2005



Net Cash Flow

FYE June 30 (thousands)

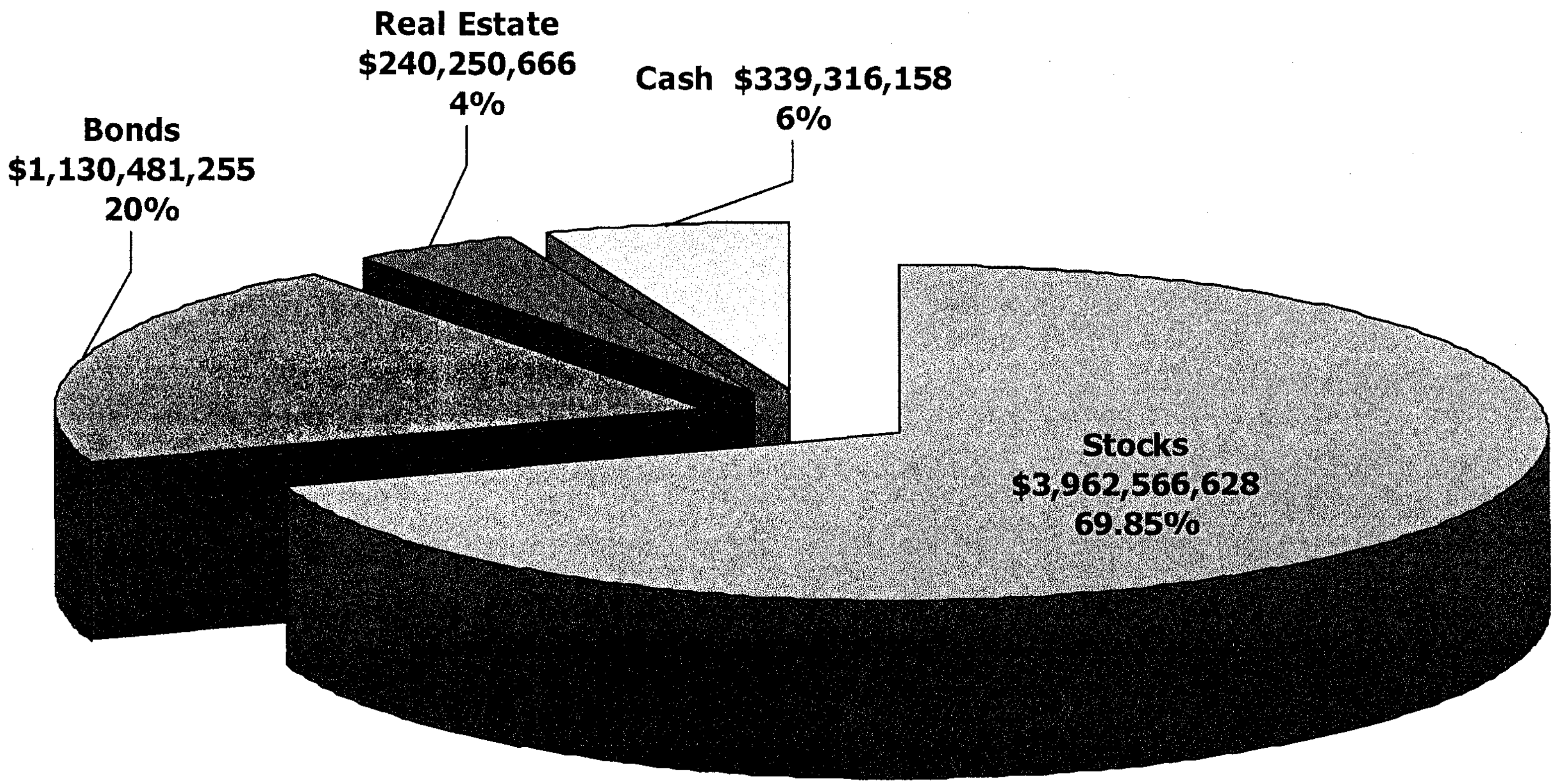


	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Net Cash Flows	8,564	5,697	-7,328	-15,146	-36,684	-55,531	-79,427	-108,626	-93,378	-93,707

EE-ER Contributions – Benefits Payments and Expenses

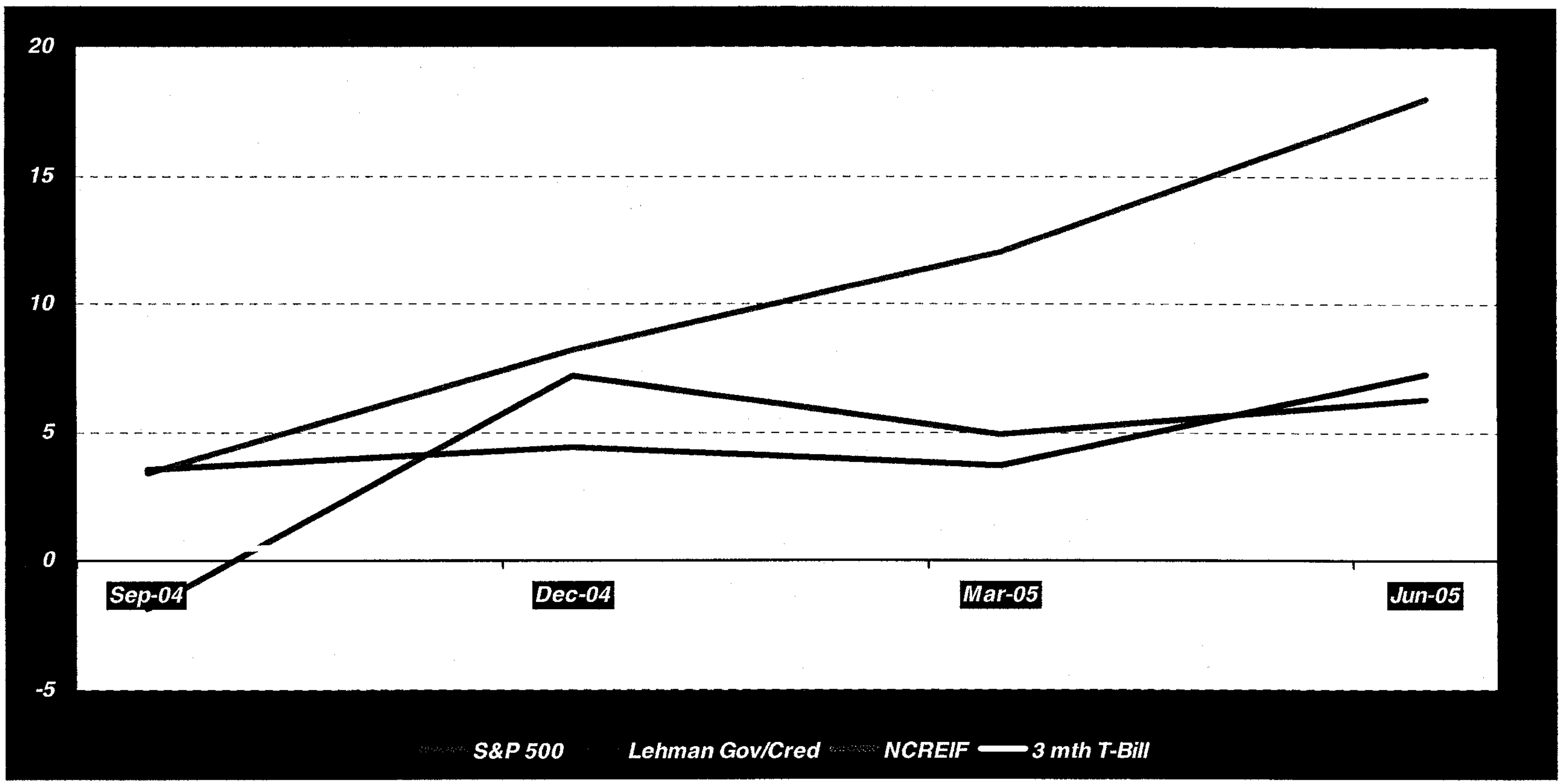
Asset Allocation at Market Value

June 30,2005



Financial Market Returns

June 30,2005



Investment Portfolio Returns

June 30,2005

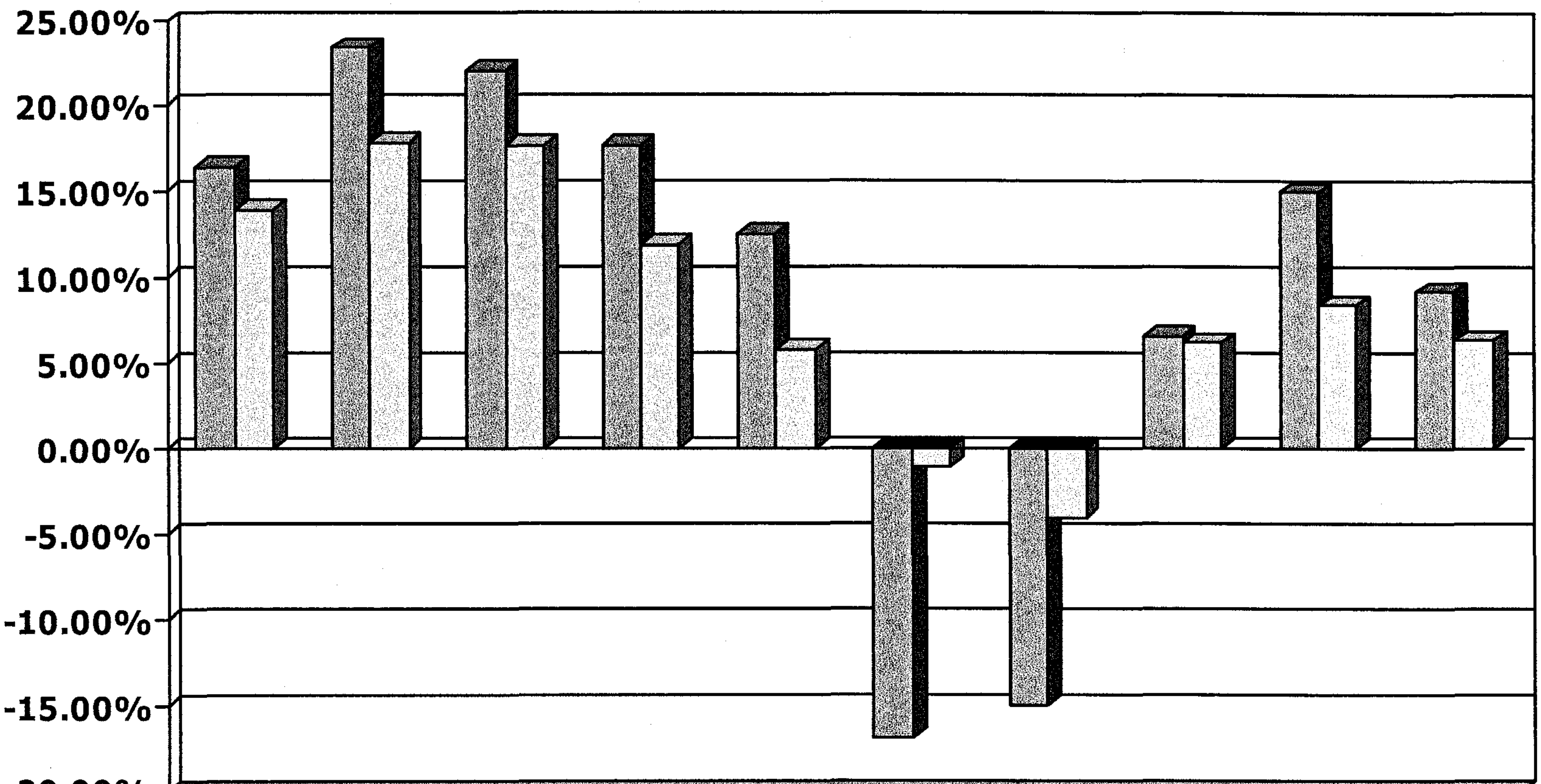
	1 Year	3 Year	5 Year	10 Year
Total Fund	9.2%	10.2%	-1.1%	8.17%
Benchmark*	6.3%	7.0%	3.0%	8.0%
ASRS	8.5%	9.2%	2.2%	9.4%
COPERS	8.6%	9.2%	3.7%	n/a

•Benchmark 45% S&P 500, 45% Lehman Gov/Credit, 10% T-Bill

Total fund

Total Fund vs Benchmark

June 30,2005



	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total Fund	16.40%	23.42%	22.11%	17.67%	12.47%	-16.89%	-15.04%	6.61%	14.94%	9.15%
Benchmark*	13.98%	17.87%	17.66%	11.94%	5.75%	-1.07%	-4.13%	6.18%	8.38%	6.32%

•Benchmark 45% S&P 500, 45% Lehman Gov/Credit, 10% T-Bill

Total Fund Actuarial Assets and Liabilities

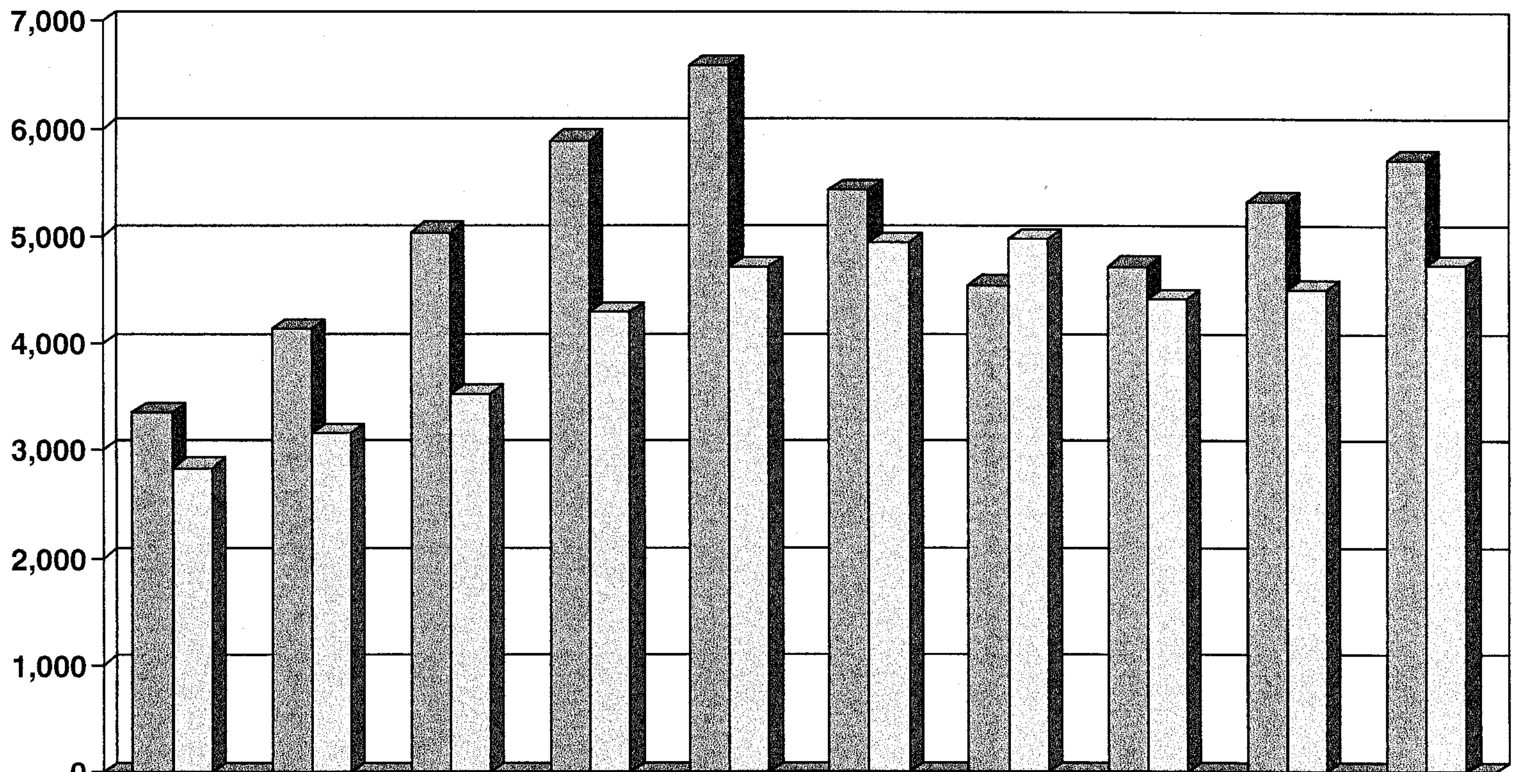
June 30,2005 (thousands)

June 30, 2004	
Total Assets	$5,951,310
Total Liabilities	$6,292,029
Funding Ratio	94.5%

June 30, 2005	
Total Assets	$6,104,548
Total Liabilities	$7,218,720
Funding Ratio	84.5%

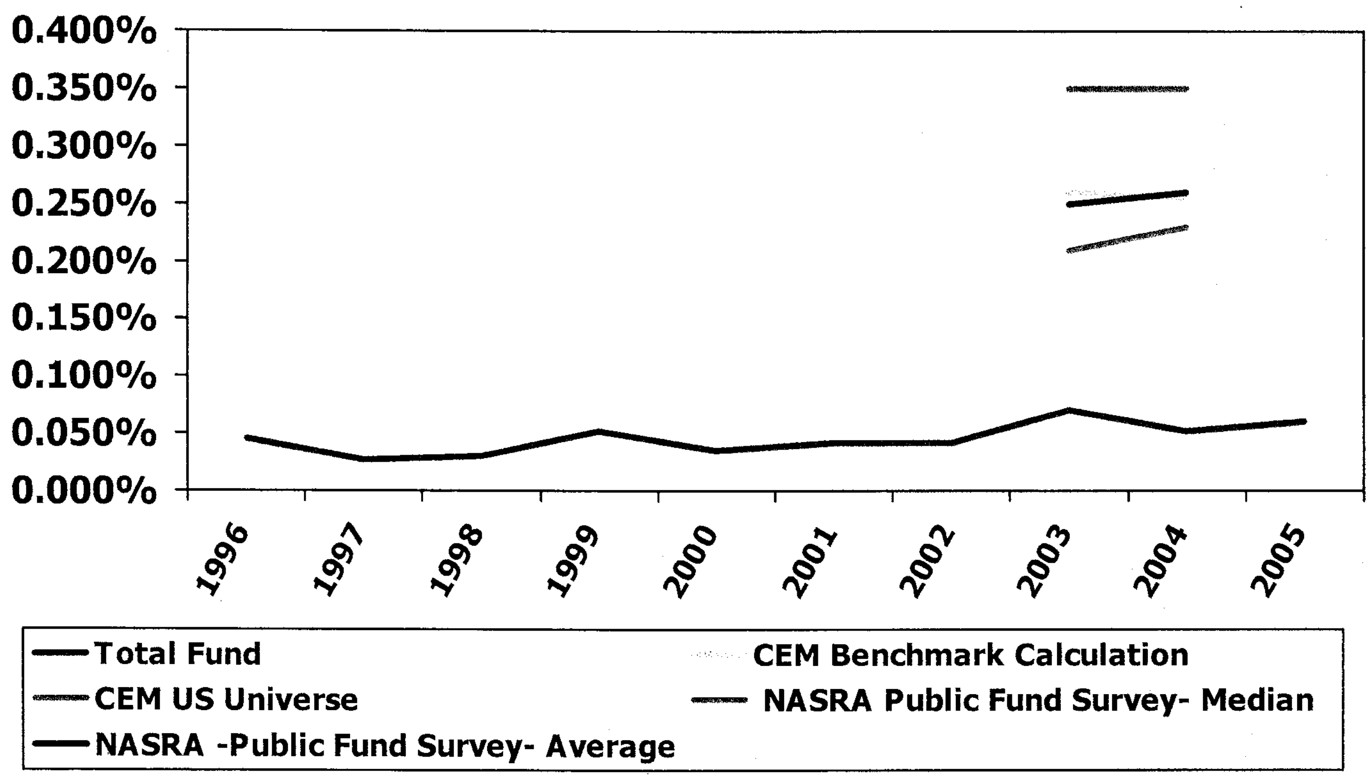
Book Value vs Market Value

June 30, 2005 (millions)



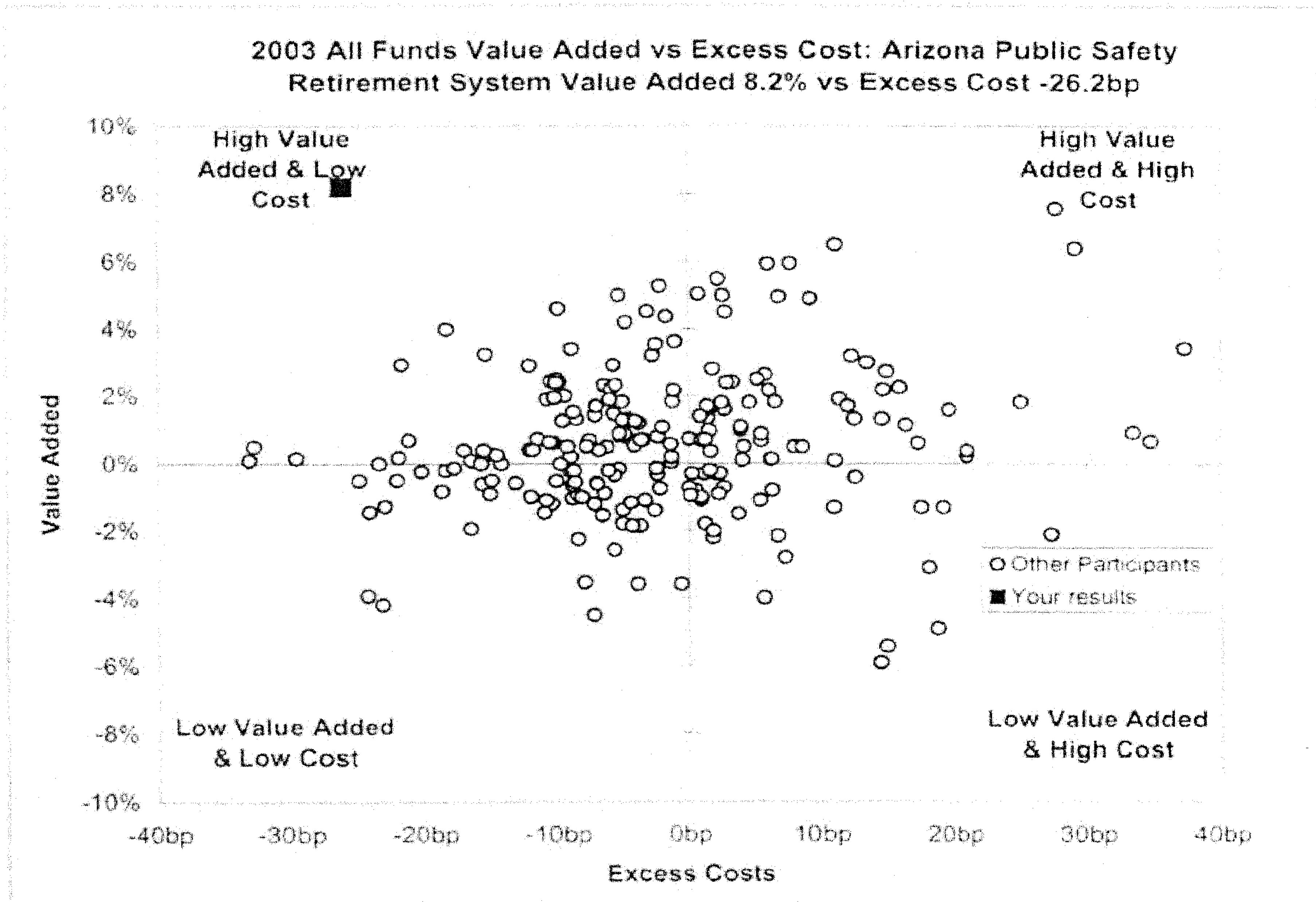
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Market	3,355	4,137	5,034	5,897	6,589	5,431	4,548	4,725	5,325	5,708
Book	2,838	3,161	3,530	4,291	4,718	4,939	4,973	4,416	4,501	4,736

Investment Expense (% of Assets)

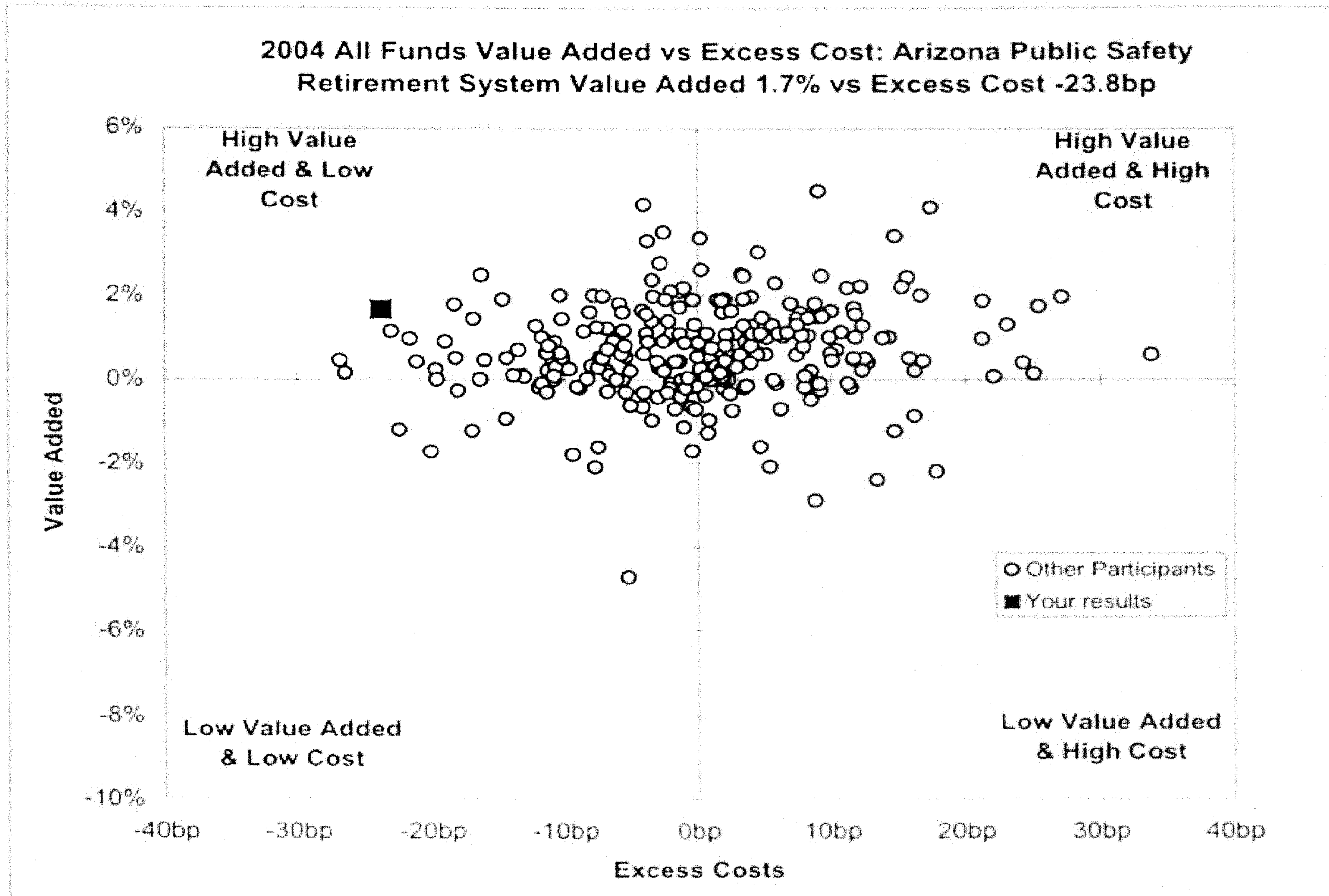


"Comparison of costs to the universe must be interpreted with extreme caution given the breadth of the universe which encompasses funds with widely varying size and asset mix. Your benchmark cost calculation, is a much more valuable indicator as to whether you are a low or high cost producer since it adjusts for differences in fund size and asset mix." Cost Effectiveness Measurement Inc, 2005 pg 12

Cost Effectiveness Ranking

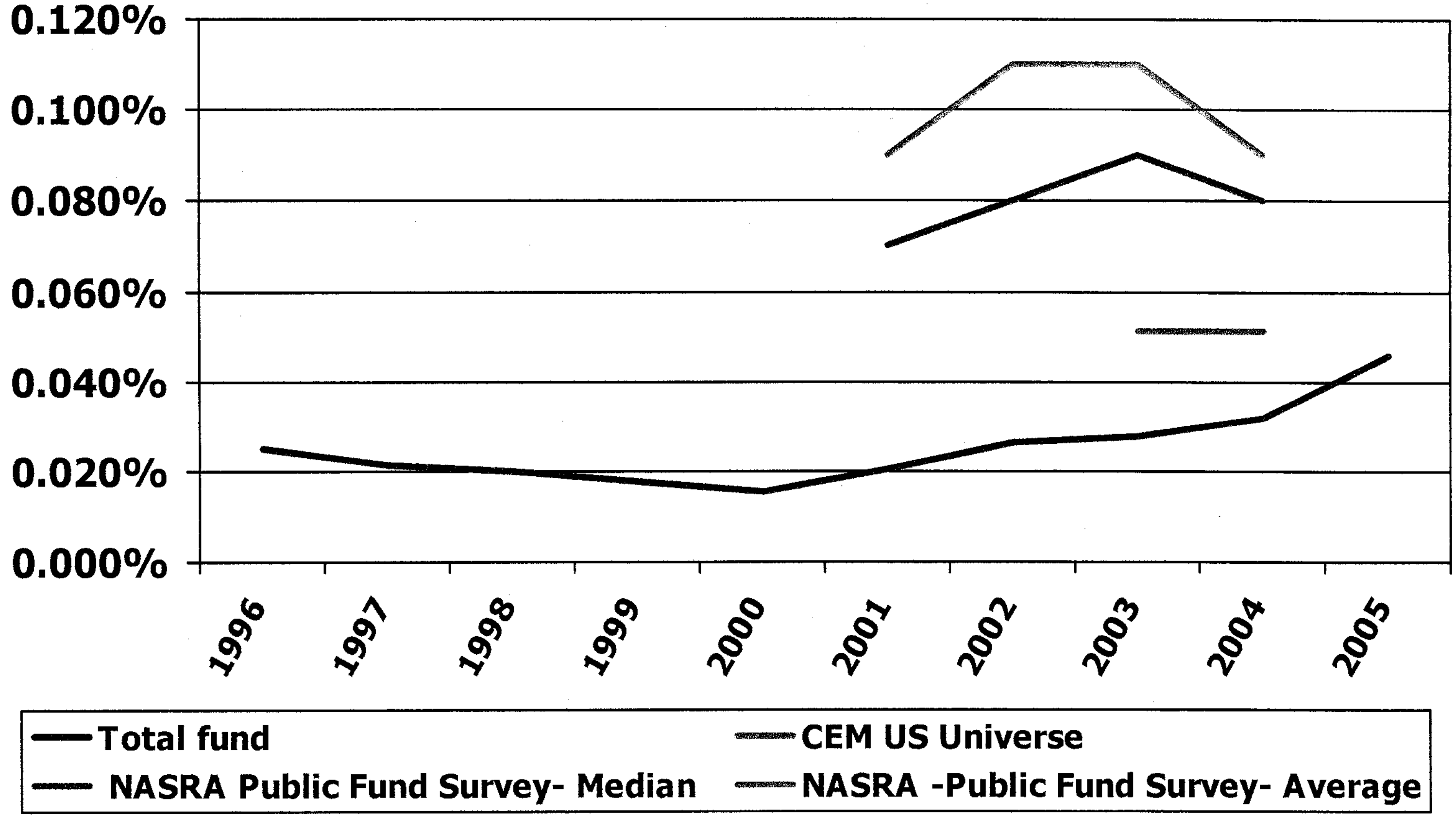


Cost Effectiveness Ranking



Administrative Expense

(% of Assets)



Changing Financial Status

FYE June 30

	Actuarial Asset Value	Actuarial Liabilities	Funded Ratio	Market Value*	Funded Ratio
1996	$2,988,962	$2,776,920	107.6%	$3,212,775	115.7%
1997	$3,523,112	$3,058,978	115.1%	$3,802,525	124.3%
1998	$3,919,467	$3,354,191	116.8%	$4,465,855	133.1%
1999	$4,584,740	$3,752,978	122.1%	$5,068,417	135.0%
2000	$5,294,936	$4,169,958	126.9%	$5,619,426	134.7%
2001	$5,793,886	$4,480,132	129.3%	$4,688,260	104.6%
2002	$5,818,181	$5,056,396	115.0%	$3,987,904	78.8%
2003	$5,946,631	$5,746,803	103.4%	$4,207,661	73.2%
2004	$5,951,310	$6,292,029	94.5%	$4,682,652	74.4%
2005	$6,104,548	$7,218,720	84.5%	$5,108,036	70.7%

*Market Value minus Future benefit Reserve

PSPRS RATES OF RETURN

PSPRS RATES OF RETURN
Estimated

	PSPRS Month	PSPRS FYTD	S&P 500 Balanced Month	S&P 500 Balanced FYTD	S&P 500 Actual Month	S&P 500 Actual FYTD	S&P 1500 Actual Month	S&P 1500 Actual FYTD
07/31/05	3.3%	3.3%	1.2%	1.2%	2.4%	2.4%	2.6%	2.6%
08/31/05	2.0%	5.3%	0.3%	1.5%	-0.3%	2.1%	-0.4%	2.2%
09/30/05	0.5%	5.8%	-0.2%	1.3%	0.3%	2.4%	0.3%	2.6%
10/31/05	-1.5%	4.2%	-1.1%	0.2%	-1.3%	1.1%	-1.4%	1.1%
11/30/05								
12/31/05								
01/31/06								
02/28/06								
03/31/06								
04/30/06								
05/31/06								
06/30/06								

	CORP Month	CORP FYTD	S&P 500 Balanced Month	S&P 500 Balanced FYTD	S&P 500 Actual Month	S&P 500 Actual FYTD	S&P 1500 Actual Month	S&P 1500 Actual FYTD
07/31/05	3.3%	3.3%	1.2%	1.2%	2.4%	2.4%	2.6%	2.6%
08/31/05	1.9%	5.3%	0.3%	1.5%	-0.3%	2.1%	-0.3%	2.2%
09/30/05	0.4%	5.7%	-0.2%	1.3%	0.3%	2.4%	0.3%	2.5%
10/31/05	-1.5%	4.1%	-1.1%	0.2%	-1.3%	1.1%	-1.4%	1.2%
11/30/05								
12/31/05								
01/31/06								
02/28/06								
03/31/06								
04/30/06								
05/31/06								
06/30/06								

	EORP Month	EORP FYTD	S&P 500 Balanced Month	S&P 500 Balanced FYTD	S&P 500 Actual Month	S&P 500 Actual FYTD	S&P 1500 Actual Month	S&P 1500 Actual FYTD
07/31/05	3.1%	3.1%	1.2%	1.2%	2.4%	2.4%	2.6%	2.6%
08/31/05	2.0%	5.2%	0.3%	1.5%	-0.3%	2.1%	-0.4%	2.2%
09/30/05	0.4%	5.6%	-0.2%	1.3%	0.3%	2.4%	0.3%	2.6%
10/31/05	-1.6%	4.0%	-1.1%	0.2%	-1.3%	1.1%	-1.4%	1.1%
11/30/05								
12/31/05								
01/31/06								
02/28/06								
03/31/06								
04/30/06								
05/31/06								
06/30/06								

	TOTAL FUND Month	TOTAL FUND FYTD	S&P 500 Balanced Month	S&P 500 Balanced FYTD	S&P 500 Actual Month	S&P 500 Actual FYTD	S&P 1500 Actual Month	S&P 1500 Actual FYTD
07/31/05	3.3%	3.3%	1.2%	1.2%	2.4%	2.4%	2.6%	2.6%
08/31/05	2.0%	5.3%	0.3%	1.5%	-0.3%	2.1%	-0.4%	2.2%
09/30/05	0.4%	5.8%	-0.2%	1.3%	0.3%	2.4%	0.3%	2.6%
10/31/05	-1.5%	4.1%	-1.1%	0.2%	-1.3%	1.1%	-1.4%	1.2%

S&P 500 BALANCED INDEX - 45% S&P 500 + 45% Lehman + 10% 91-Day T-Bill

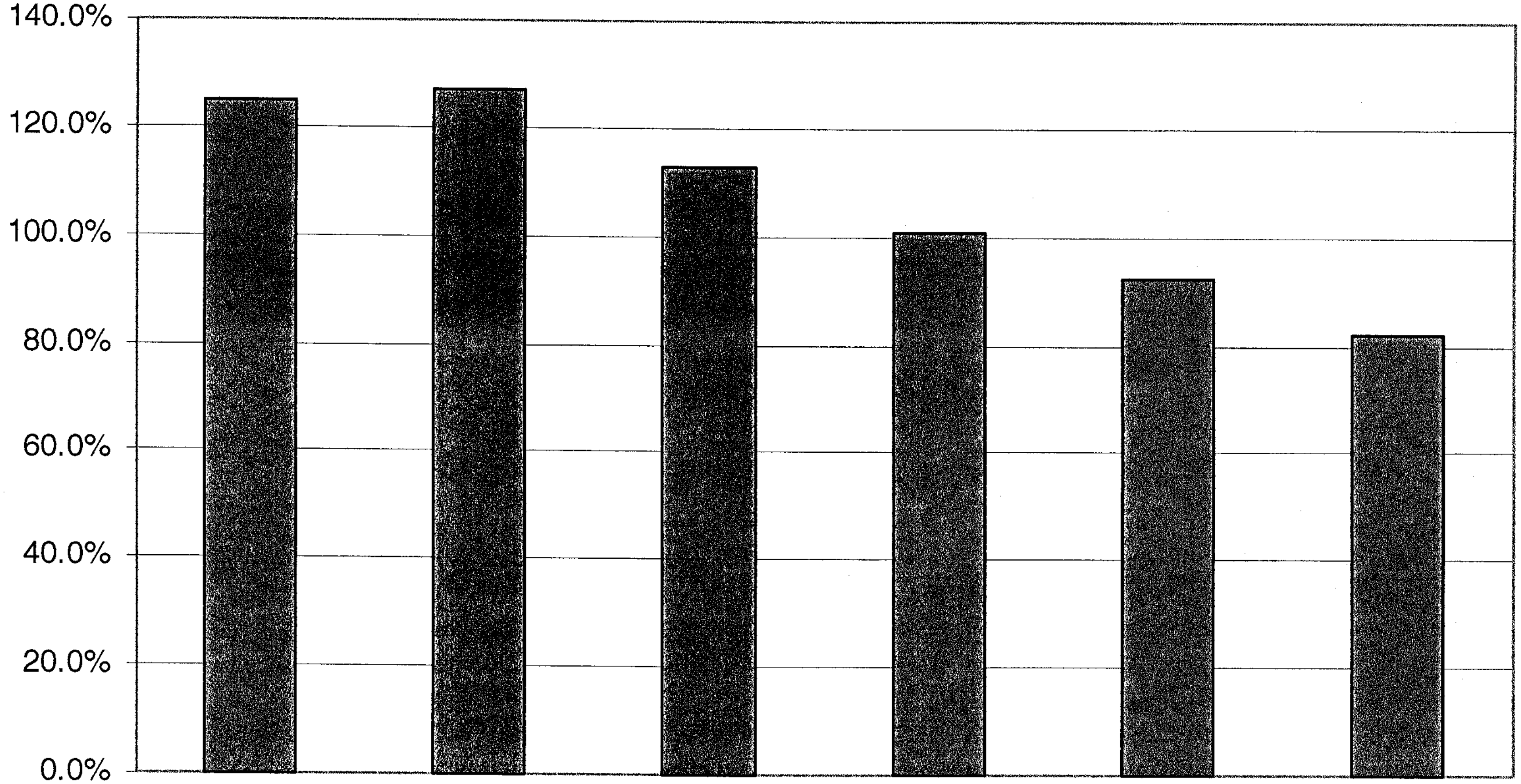
S&P 500 ACTUAL WEIGHTED - Actual asset allocation percentages applied to S&P 500, Lehman, 91 Day T-Bill Indices and Expected Annual Return for Real Estate of 8%.

S&P 1500 ACTUAL WEIGHTED - Actual asset allocation percentages applied to S&P 1500, Lehman, 91 Day T-Bill Indices and Expected Annual Return for Real Estate of 8%.

PSPRS, CORP, and EORP

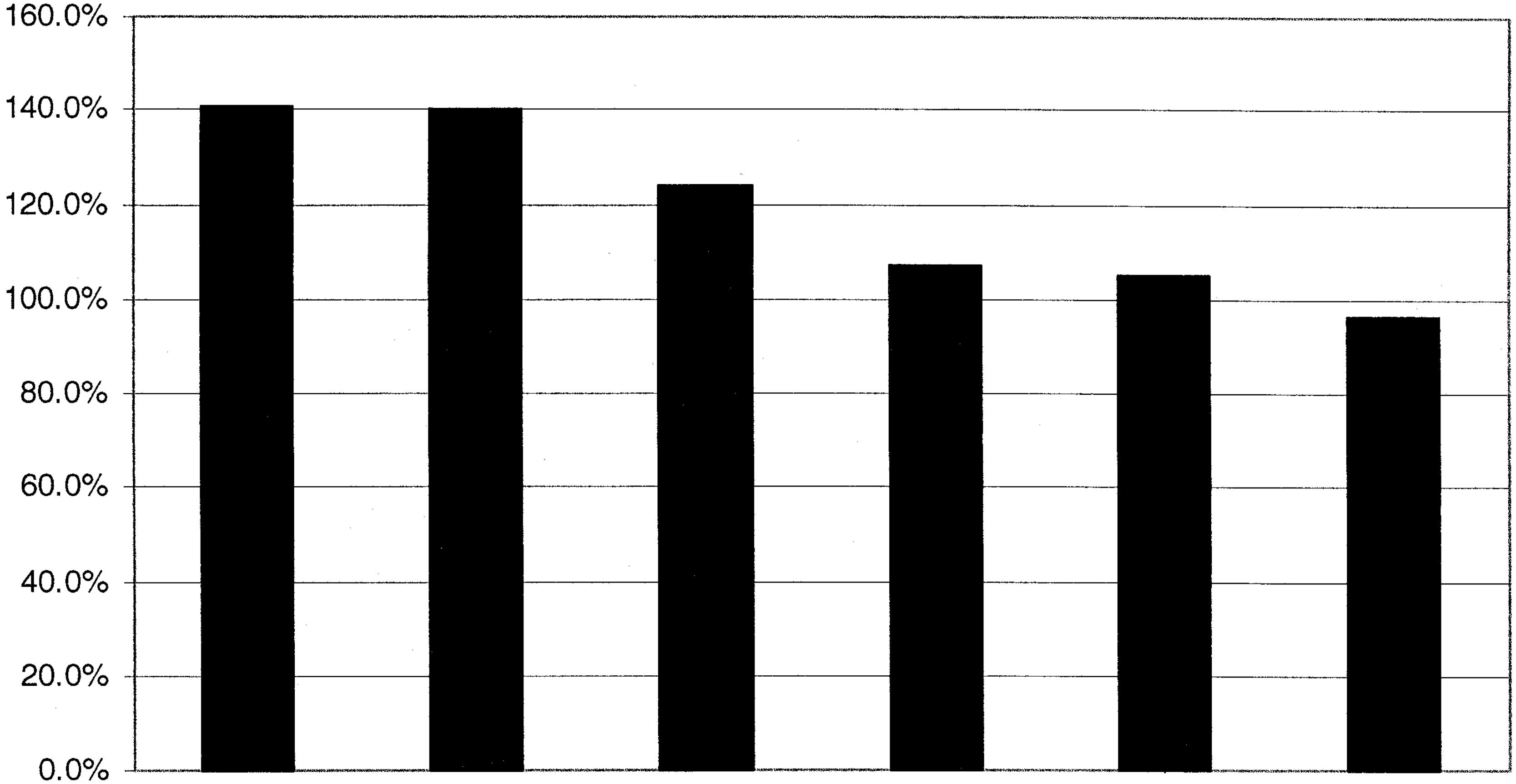
The Problem and Challenge

PSPRS – Funding Levels



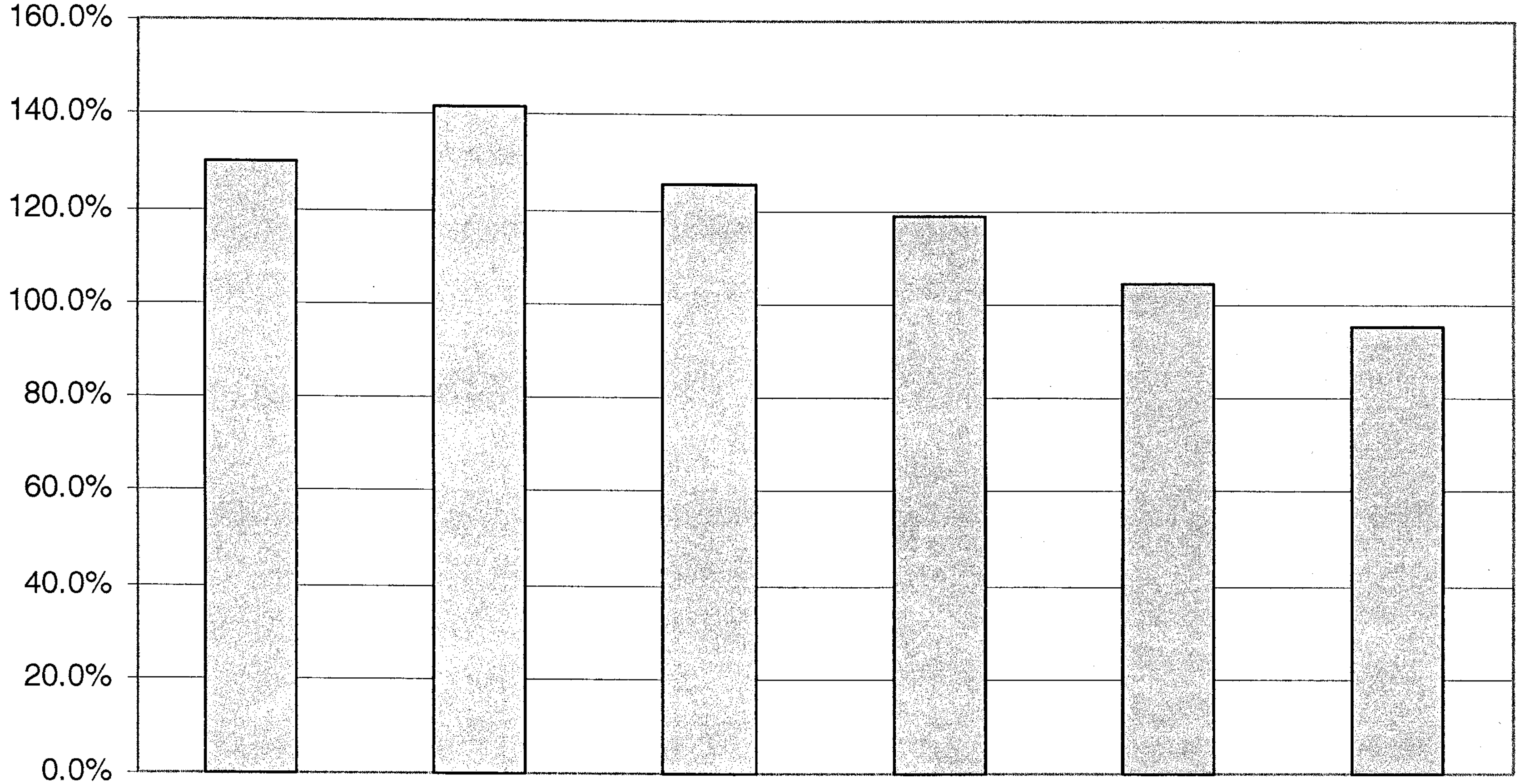
	06/30/00	06/30/01	06/30/02	06/30/03	06/30/04	06/30/05
Funding	124.7%	126.9%	113.0%	100.9%	92.4%	82.1%

CORP – Funding Levels



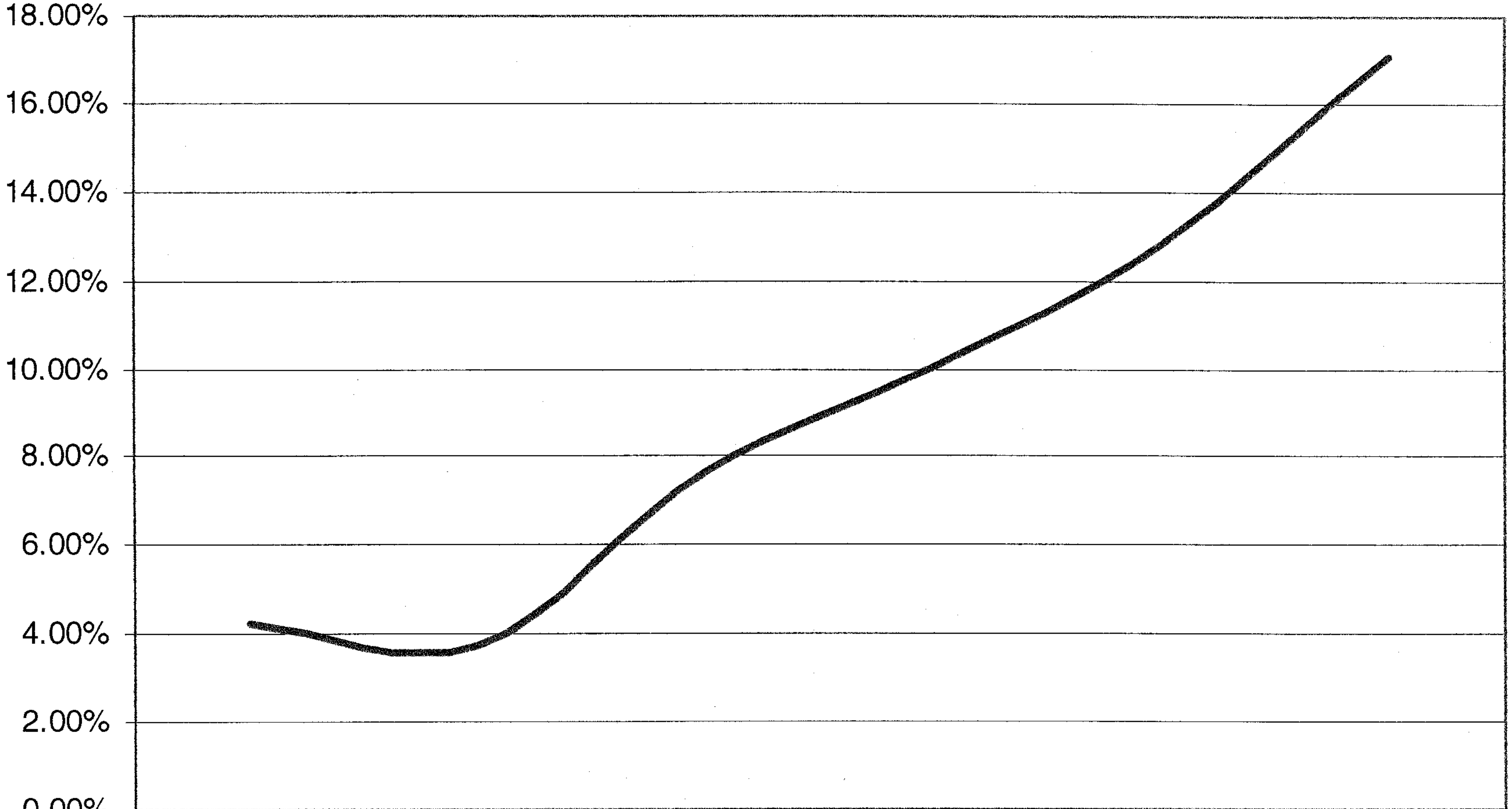
	06/30/00	06/30/01	06/30/02	06/30/03	06/30/04	06/30/05
Funding	140.6%	140.0%	123.8%	106.9%	104.8%	96.4%

EORP – Funding Levels



	06/30/00	06/30/01	06/30/02	06/30/03	06/30/04	06/30/05
Funding	130.1%	141.7%	125.5%	118.7%	104.4%	95.5%

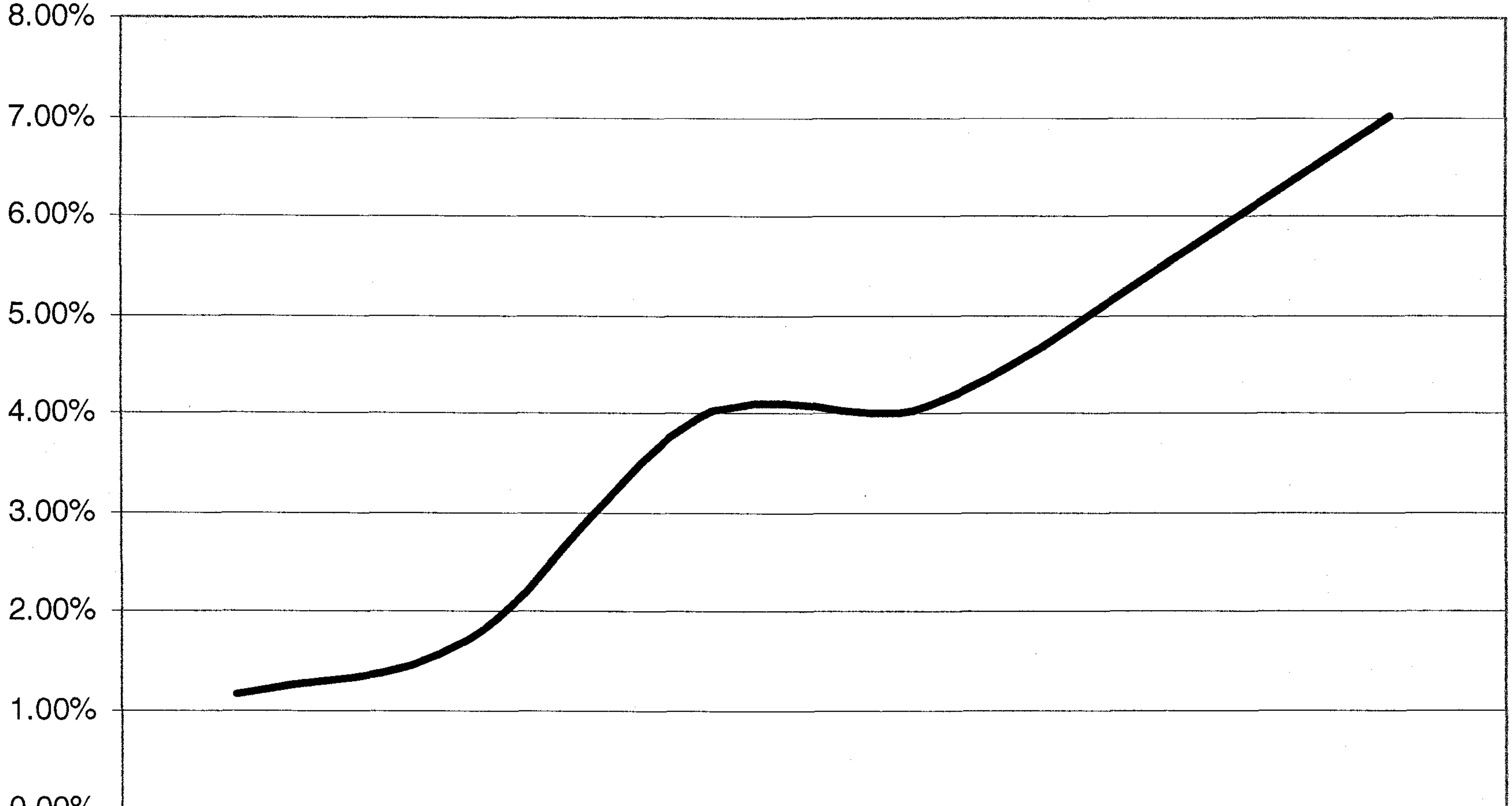
PSPRS – Aggregate Employer Rates



	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Rate*	4.21%	3.75%	7.66%	10.05%	12.80%	17.09%

*The aggregate computed contribution rates before application of the statutory minimum

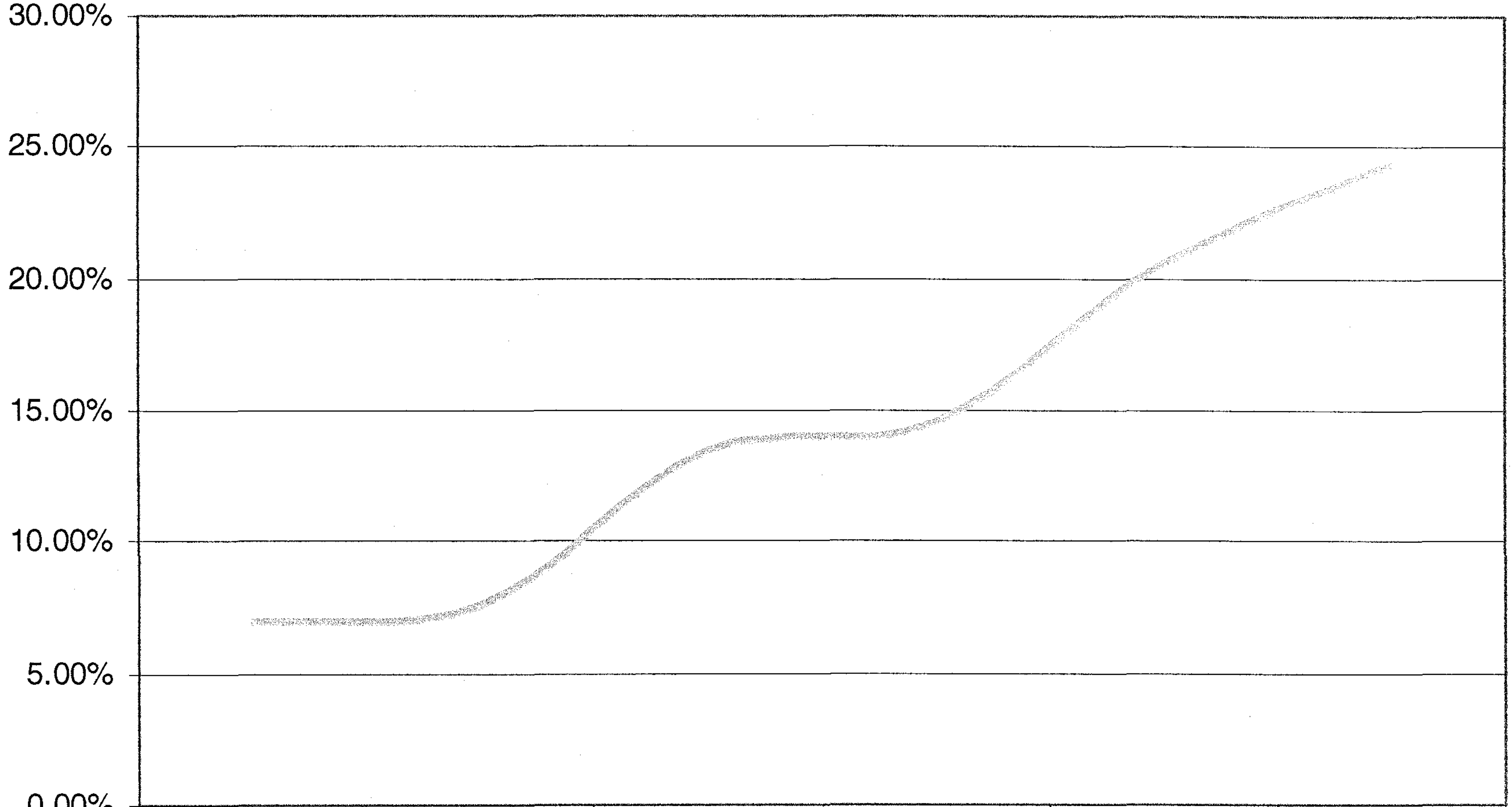
CORP – Aggregate Employer Rates



	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Rate*	1.15%	1.71%	3.95%	4.07%	5.47%	7.01%

*The aggregate computed contribution rates before application of the statutory minimum

EORP – Employer Rates



	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Rate	6.97%	7.55%	13.49%	14.54%	20.54%	24.27%

State Agencies for Fiscal Year 2006-07 Employer Rates & Required Contributions

Agency	Rate	Payroll	Contributions
Attorney General Investigators	25.00%	$ 1,084,714	$ 271,179
Department of Liquor License	12.38%	$ 1,063,246	$ 131,630
State Capitol Police	10.74%	$ 1,319,479	$ 141,712
ASU Campus Police	14.23%	$ 2,962,108	$ 421,508
State Parks	13.50%	$ 1,794,666	$ 242,280
Dept of Emergency & Military Affairs	13.28%	$ 3,919,235	$ 520,474
Department of Public Safety	23.21%	$ 56,190,390	$ 13,041,790
Game & Fish	37.39%	$ 5,000,614	$ 1,869,730
NAU Campus Police	22.50%	$ 628,046	$ 141,310
U of A Campus Police	17.66%	$ 2,410,592	$ 425,711
Department of Corrections	7.17%	$ 268,013,530	$ 19,216,570
Department of Juvenile Corrections	6.88%	$ 27,758,748	$ 1,909,802
Elected Officials	17.00%	$ 16,034,649	$ 2,725,890

State Agencies for Fiscal Year 2006-07 Required Contributions by Plan

Plan	Payroll	Contributions
PSPRS Agencies	$ 76,373,087	$ 17,207,323
CORP Agencies	$ 295,772,278	$ 21,126,372
EORP Agencies	$ 16,034,649	$ 2,725,890

Contributing Factors

- Significant loss in asset values
  - 2001 through 2002 financial market contractions
- Current investment environment
  - Not as robust as last half of 1990's
  - Reduction to actuarially assumed rate of return
- Pre-funded post-retirement benefit increases
- Recent benefit improvements
  - Deferred Retirement Option Plan (DROP)
  - Increases in survivor benefits
  - Permanent 2% tax equity benefit
- Certain changes to economic and demographic actuarial assumptions

Constraints

- Prohibition against diminishment of pensions
  - Arizona constitution
  - Arizona case law (Yeazell v. Copins)
- Political Constraints

Options Available

- Reducing the System's salary growth assumption;
- Considering a change in actuarial methodology;
- Lengthening the PSPRS unfunded liability amortization period;
- Marking to market the PSPRS Plans' real estate and other alternative investments;
- Reviewing the PSPRS Plans' asset allocations;
  - New asset classes
  - Greater exposure to certain existing asset classes
  - Broader mandates for existing asset classes
- Re-examining the treatment of the assets in the PSPRS Plans' Future Benefits Increase Reserves;
- Increasing employee contribution rates;
- Reducing the rate of interest credited to PSPRS DROP accounts; and
- Assessing contributions with respect to compensation paid to future PSPRS DROP participants.

Public Safety Personnel Retirement System

June 30, 2005

Plan Statistics

Defined Benefit Plan – June 30, 2005

Active Members		**16,317**
Terminated Vested Members		**104**
DROP		**1,472**
Retired		**6,688**
Members	**4,733**	
Beneficiaries	**943**	
Disability	**1,012**	
Total Participants		**24,581**

Plan Statistics Defined Benefit Plan

As of June 30, 2005

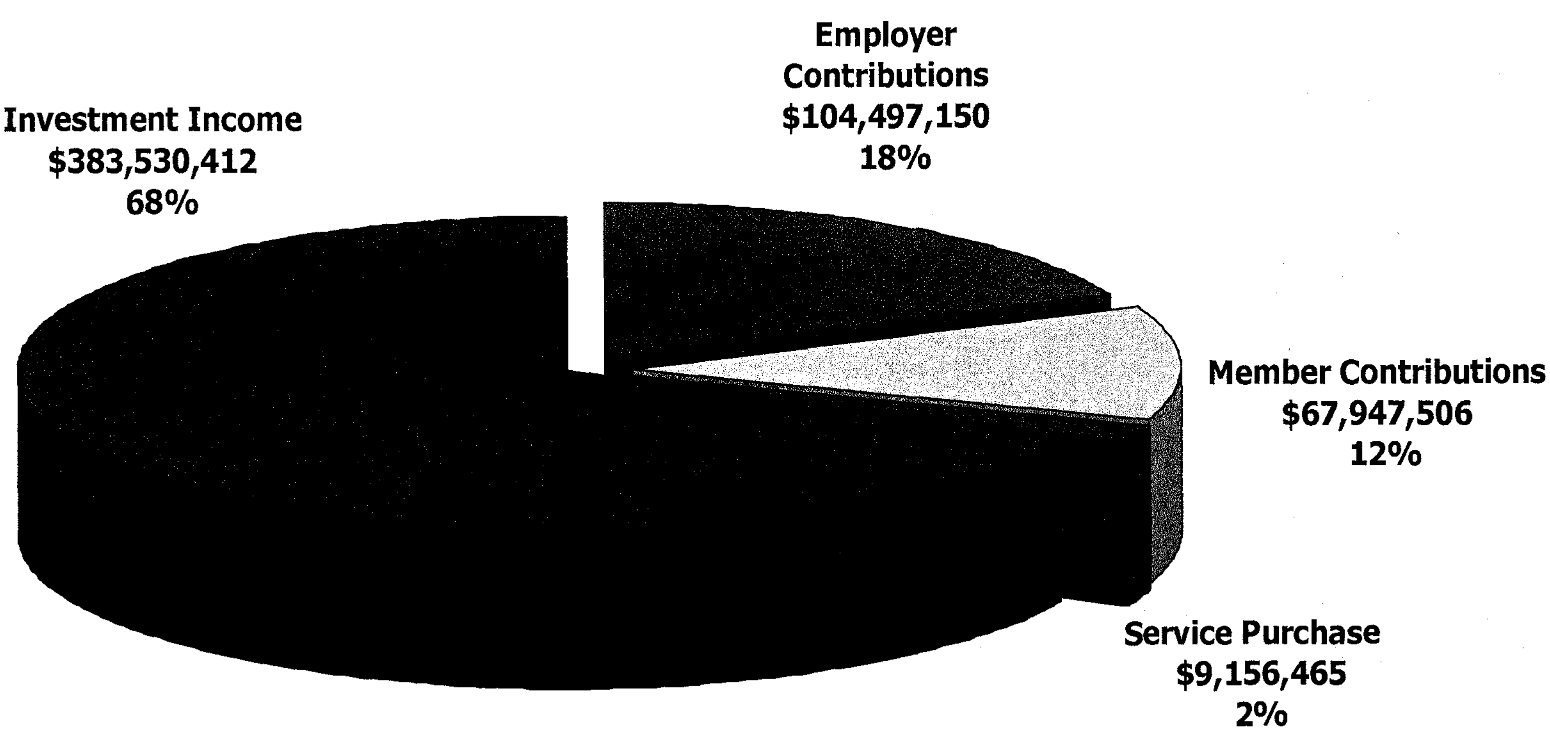
	Actuarial Value	Market Value*
Assets	$4.9 Billion	$4.1 Billion
Funding Ratio	82.1%	68.4%

As of June 30, 2004

	Actuarial Value	Market Value*
Assets	$4.8 Billion	$3.7 Billion
Funding Ratio	92.4%	72.4 %

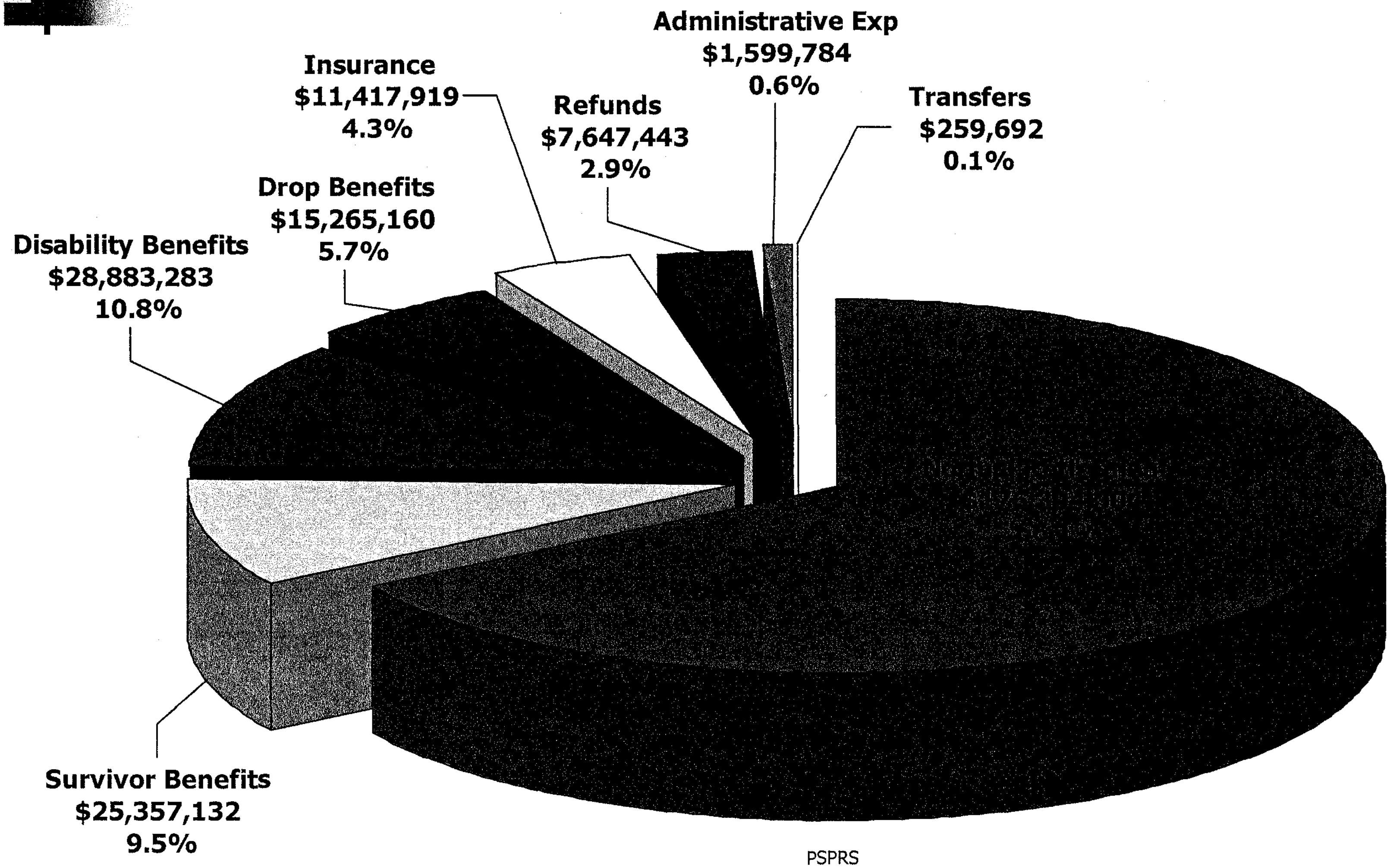
*Market Value does not include Future Benefit Increase Reserve

Total Revenue
June 30, 2005



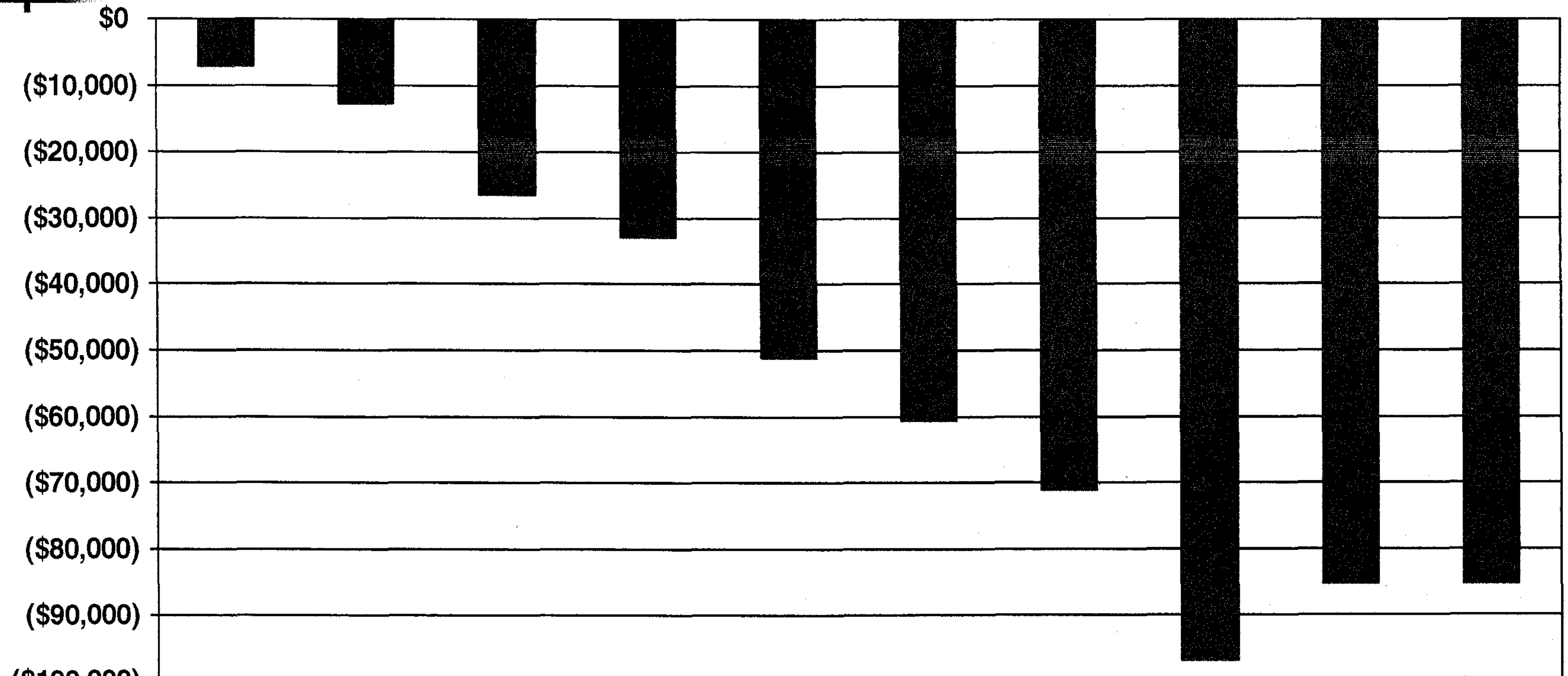
Total Expenses

June 30, 2005



Net Cash Flow

FYE June 30 (thousands)

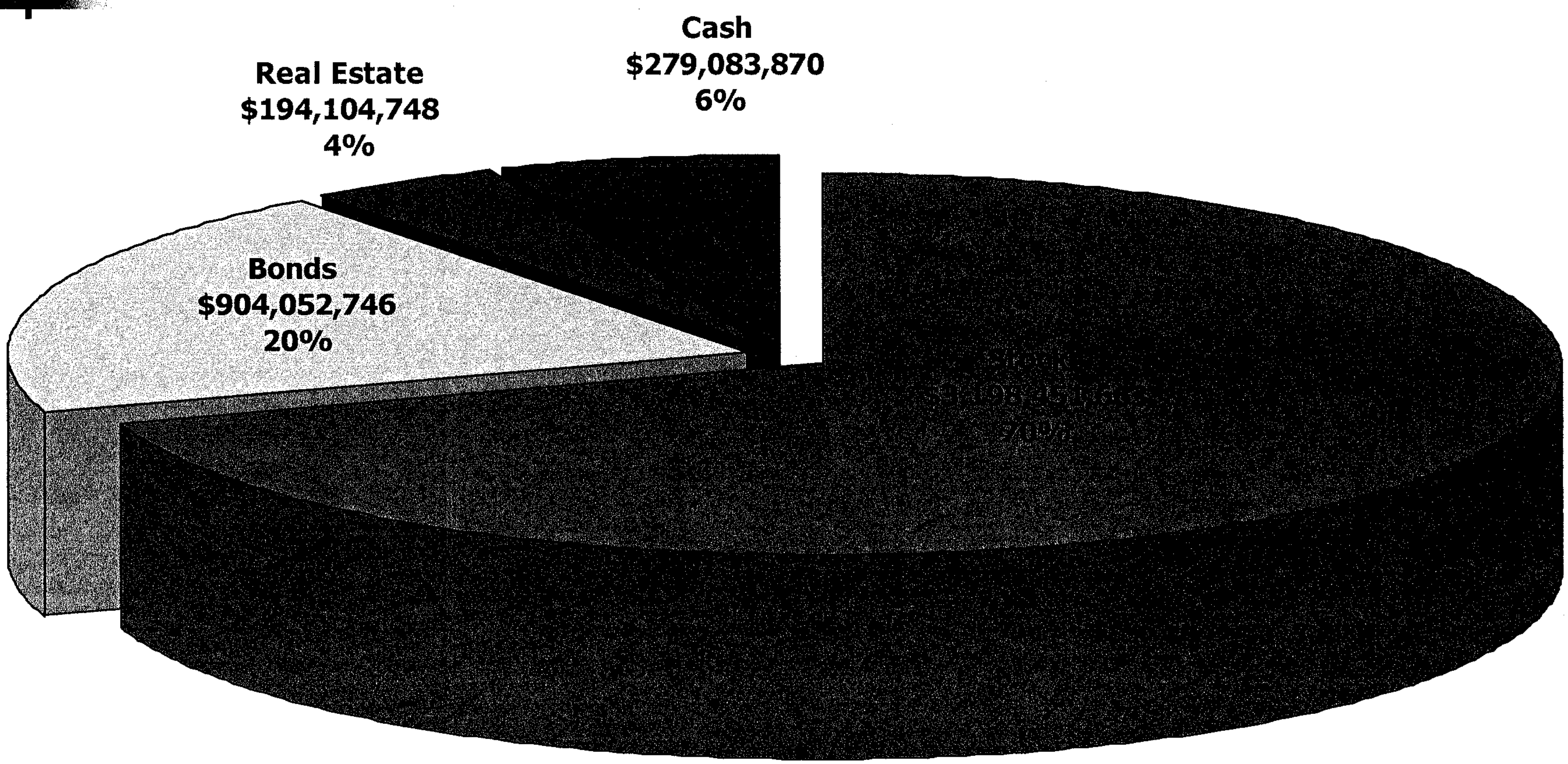


	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
■ Net Cash Flow	-7,198	-12,670	-26,585	-33,085	-51,231	-60,493	-71,174	-97,205	-85,416	-85,224

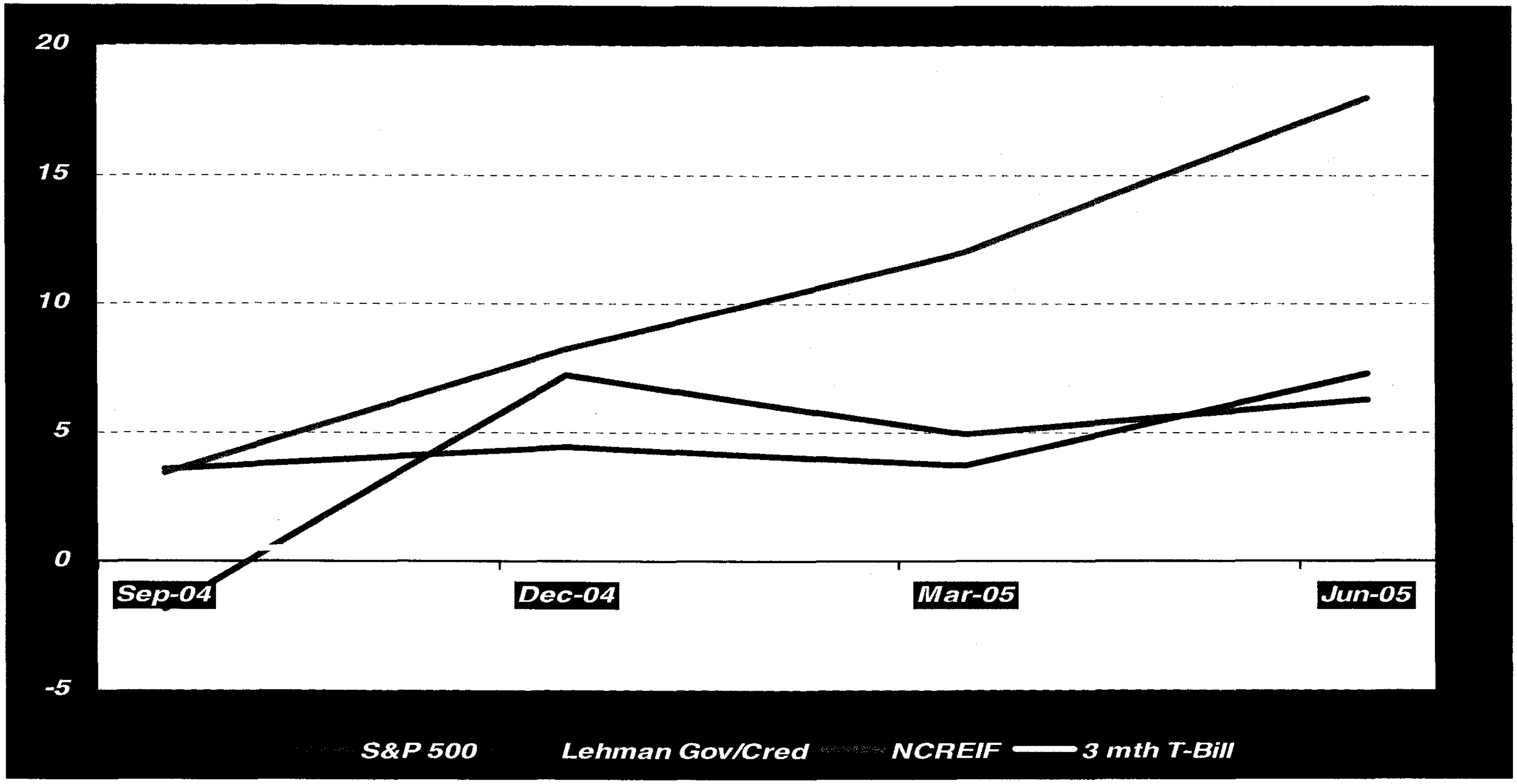
EE & ER Contributions less Benefit Payments and Expenses

Asset Allocation at Market

June 30,2005



Financial Market Returns
June 30,2005



Investment Portfolio Returns

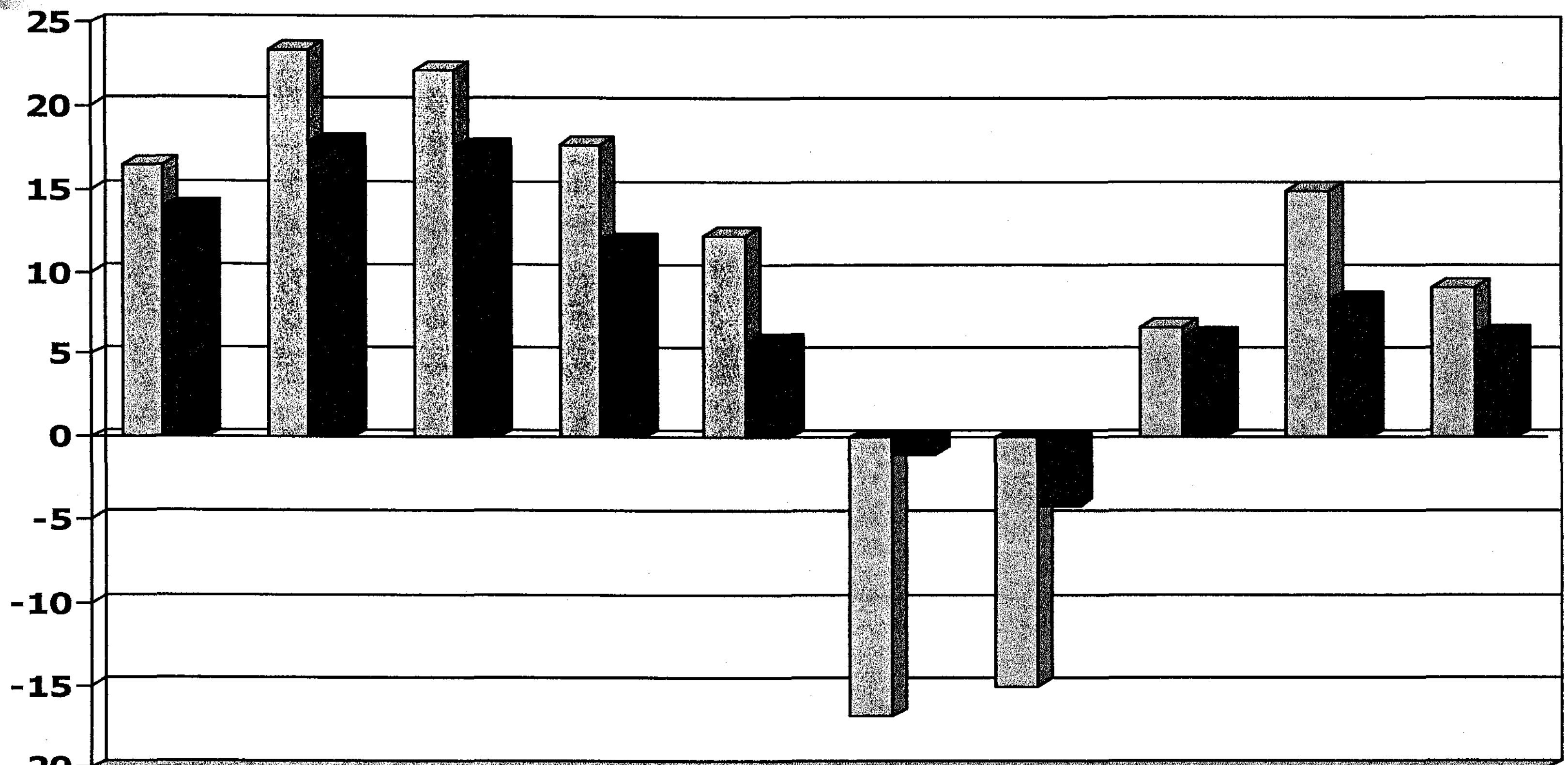
June 30,2005

	1 Year	3 Year	5 Year	10 Year
Public Safety	9.1%	10.2%	-1.1%	8.2%
Benchmark*	6.3%	7.0%	3.0%	8.0%
ASRS	8.5%	9.2%	2.2%	9.4%
COPERS	8.6%	9.2%	3.7%	n/a

*Benchmark 45% S&P 500, 45% Lehman Gov/Credit, 10% T-Bill

Public Safety vs Benchmark

FYE June 30



	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
PSPRS	16.45	23.43	22.24	17.69	12.31	-16.86	-15.07	6.67	14.97	9.11
Benchmark*	13.98	17.87	17.66	11.94	5.75	-1.07	-4.13	6.18	8.38	6.32

*Benchmark 45% S&P 500, 45% Lehman Gov/Credit, 10% T-Bill

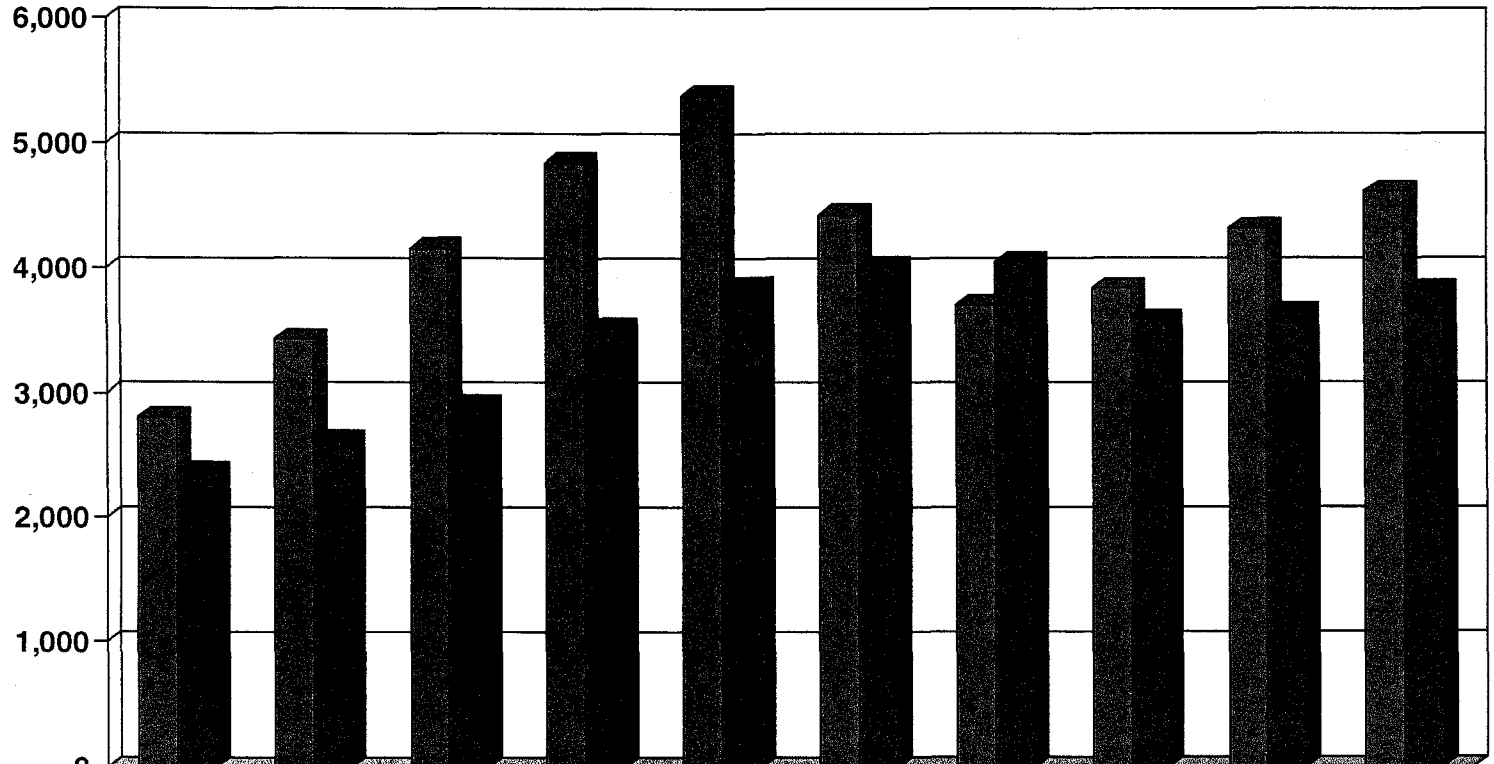
Total Actuarial Assets and Liabilities

June 30, 2005 (thousands)	
Total Assets	$4,886,963
Total Liabilities	$5,951,937
Funding Ratio	82.1%

June 30, 2004 (thousands)	
Total Assets	$4,774,313
Total Liabilities	$5,167,333
Funding Ratio	92.4%

Book Value vs Market Value

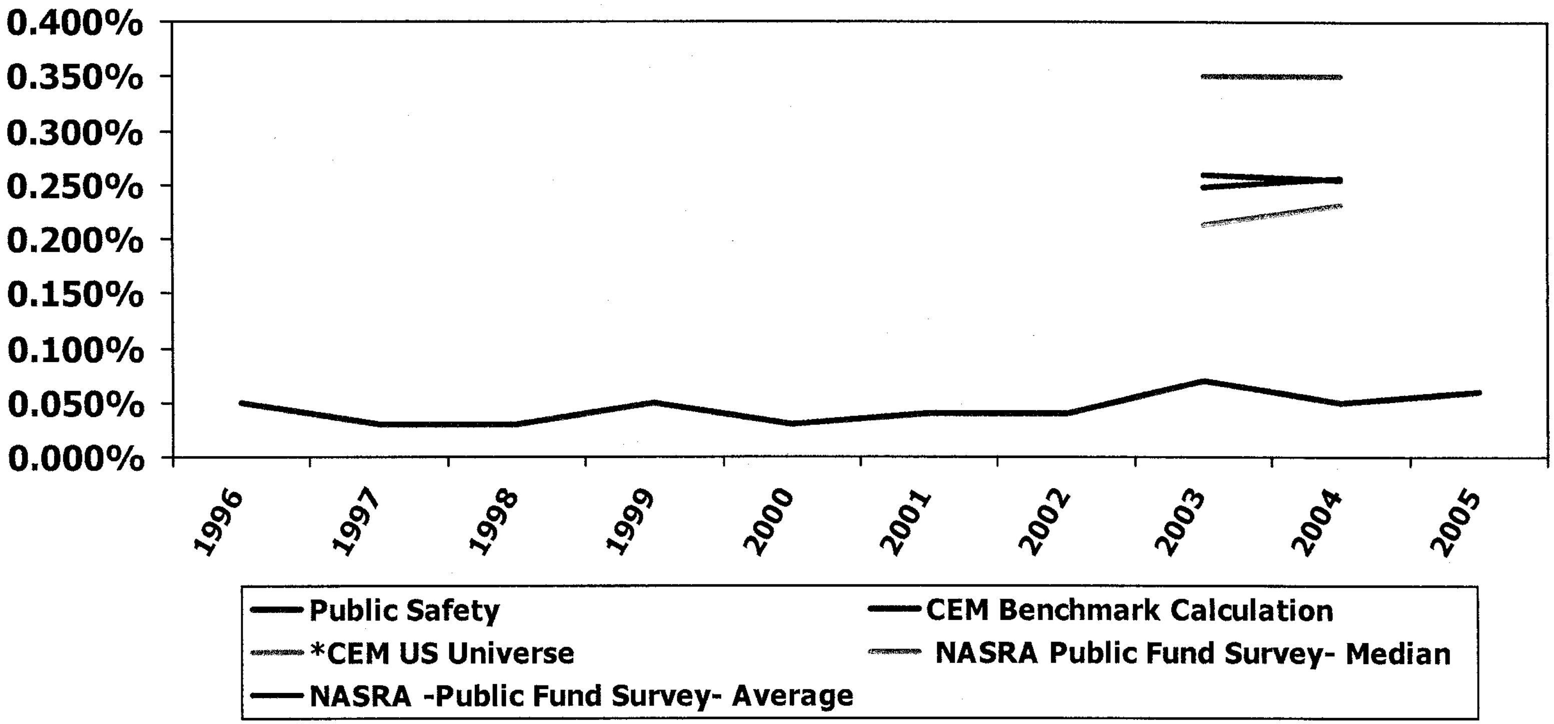
FYE June 30 (millions)



	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Market Value	2,796	3,427	4,151	4,842	5,379	4,422	3,696	3,833	4,310	4,608
Book Value	2,367	2,616	2,894	3,513	3,845	4,014	4,038	3,581	3,639	3,820

Investment Expense

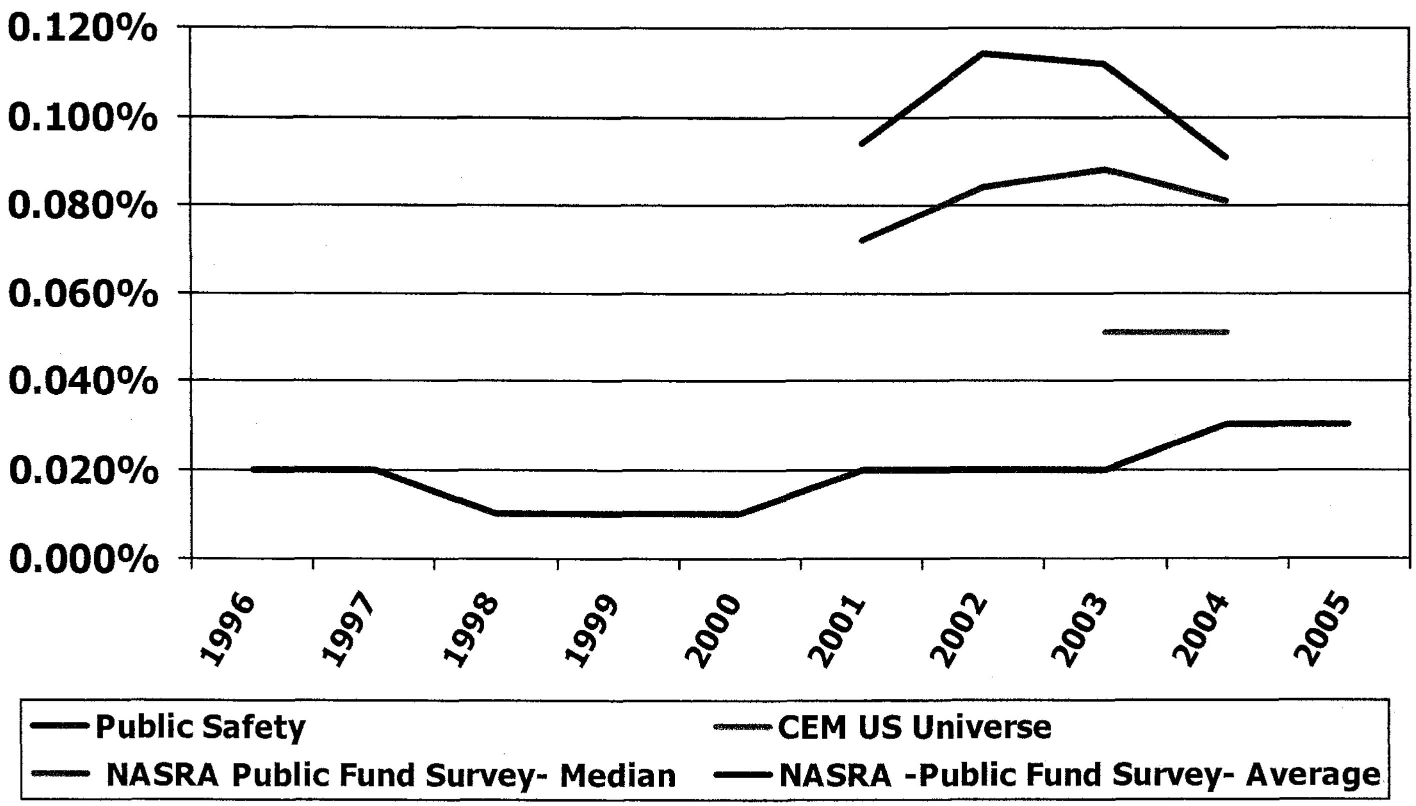
FYE June 30 (% of Assets)



*"Comparison of costs to the universe must be interpreted with extreme caution given the breadth of the universe which encompasses funds with widely varying size and asset mix. Your benchmark cost calculation, is a much more valuable indicator as to whether you are a low or high cost producer since it adjusts for differences in fund size and asset mix." Cost Effectiveness Measurement Inc, 2005 pg 12

Administrative Expense

FYE June 30 (% of Assets)



Changing Financial Status

FYE 06/30	Actuarial Asset Value	Actuarial Liabilities	Funded Ratio	Market Value*	Funded Ratio
1996	$ 2,487,953	$ 2,328,276	106.9%	$ 2,655,351	114.0%
1997	$ 2,915,173	$ 2,533,435	115.1%	$ 3,097,720	122.3%
1998	$ 3,192,627	$ 2,743,998	116.3%	$ 3,628,536	132.2%
1999	$ 3,709,251	$ 3,082,202	120.3%	$ 4,095,630	132.9%
2000	$ 4,260,168	$ 3,415,157	124.7%	$ 4,516,110	132.2%
2001	$ 4,661,941	$ 3,674,758	126.9%	$ 3,759,164	102.3%
2002	$ 4,684,386	$ 4,144,211	113.0%	$ 3,193,862	77.1%
2003	$ 4,781,377	$ 4,739,613	100.9%	$ 3,364,413	71.0%
2004	$ 4,774,313	$ 5,167,333	92.4%	$ 3,741,116	72.4%
2005	$ 4,886,963	$ 5,951,937	82.1%	$ 4,070,529	68.4%

*Market value does not include future benefit increase reserve

Corrections Officers Retirement Plan

June 30, 2005

CORP Plan Statistics
Defined Benefit Plan

Active Members		**11,752**
Terminated Vested Members		**130**
Retired		**1,733**
Normal	**1,339**	
Beneficiaries	**314**	
Disability	**80**	
Total Participants		**13,615**

CORP Plan Statistics
Defined Benefit Plan

As of June 30, 2005

	Actuarial Value	Market Value*
Assets	$873 Million	$747 Million
Funding Ratio	96.4%	82.5%

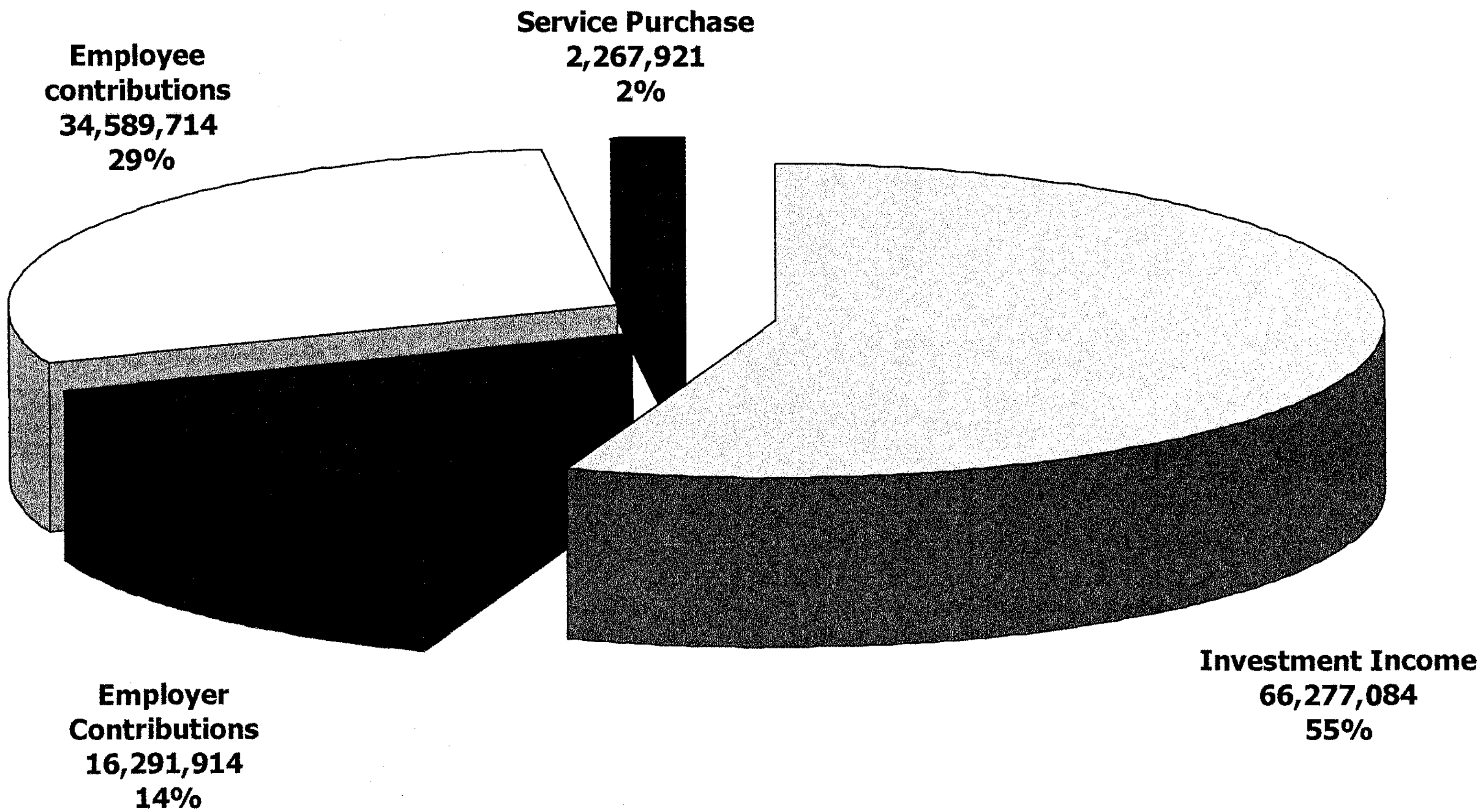
As of June 30, 2004

	Actuarial Value	Market Value*
Assets	$834 Million	$673 Million
Funding Ratio	104.8%	84.6%

*Market value does not include Future Benefit Increase Reserve

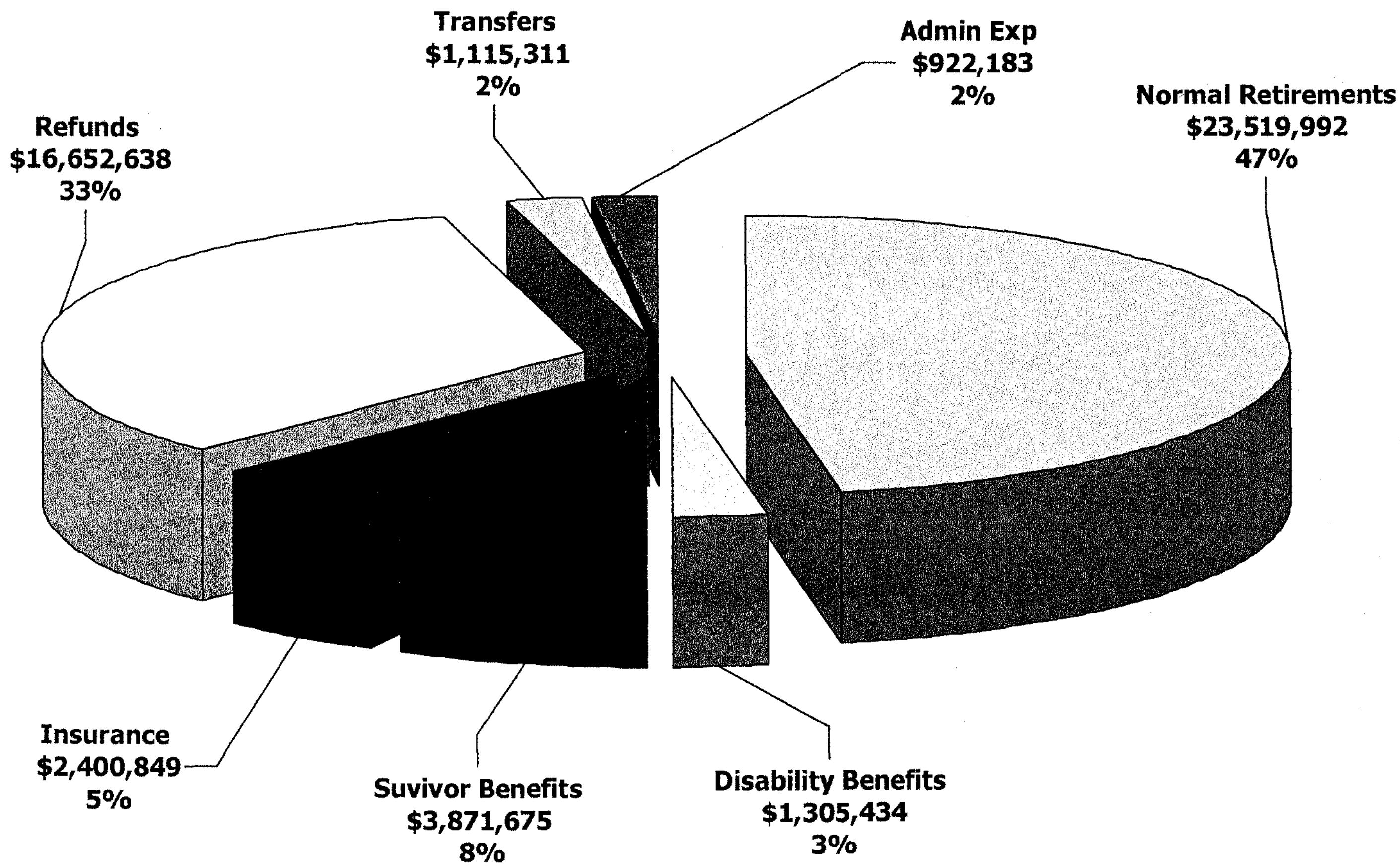
Total Revenue

June 30, 2005



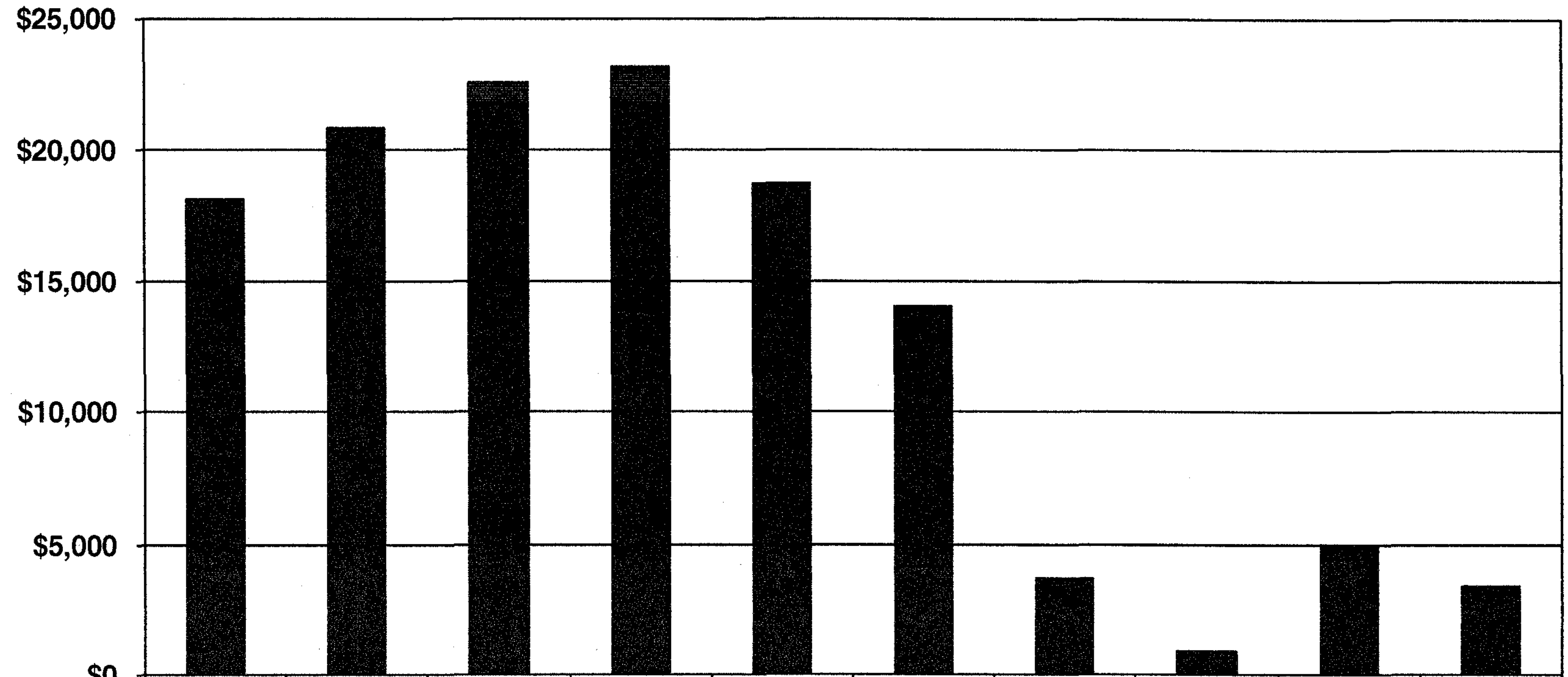
Total Expenses

June 30, 2005



Net Cash Flow

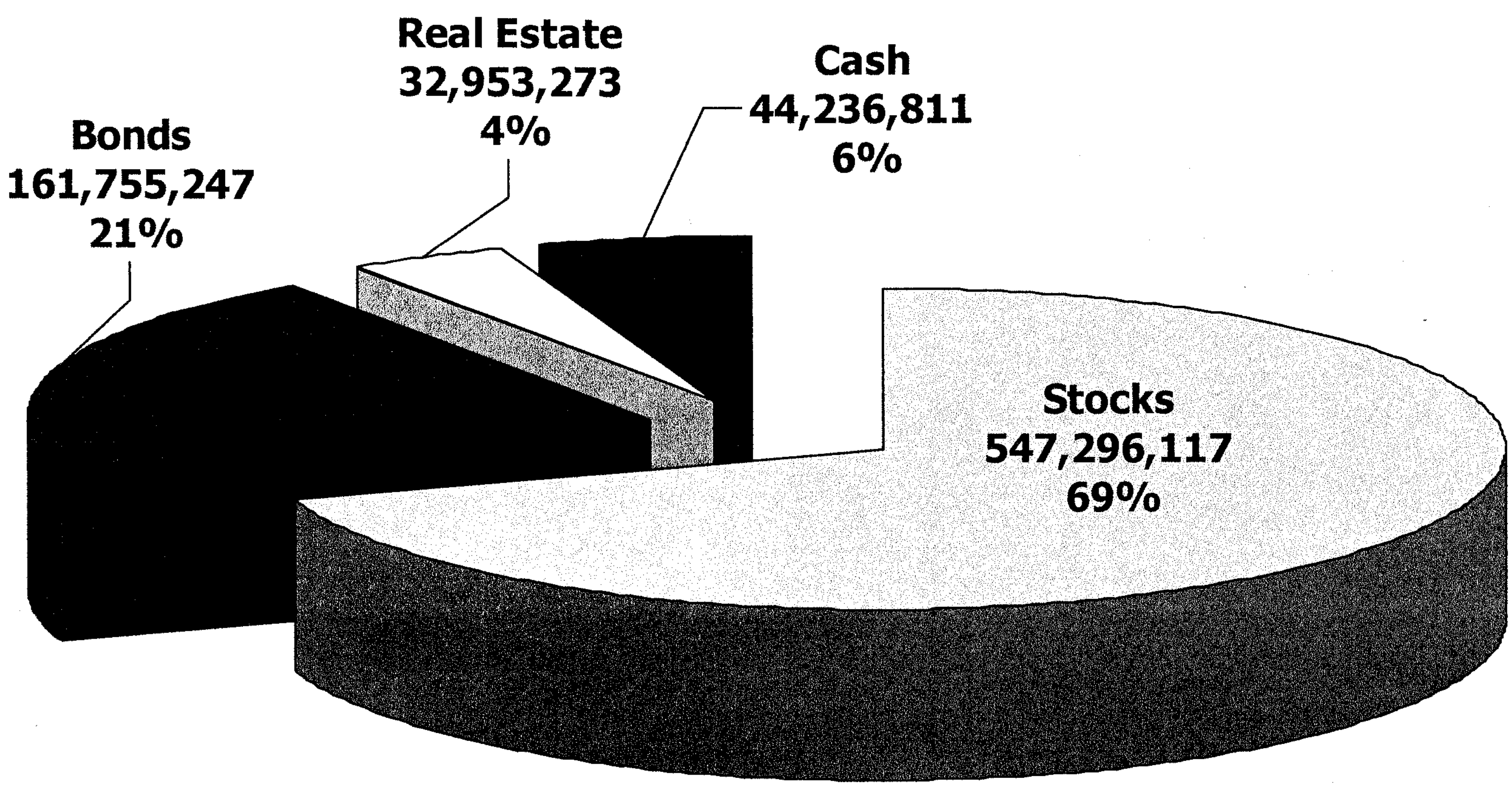
FYE June 30 (thousands)



	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
■ Net Cash Flows	18,175	20,863	22,621	23,200	18,762	13,986	3,654	912	4,996	3,361

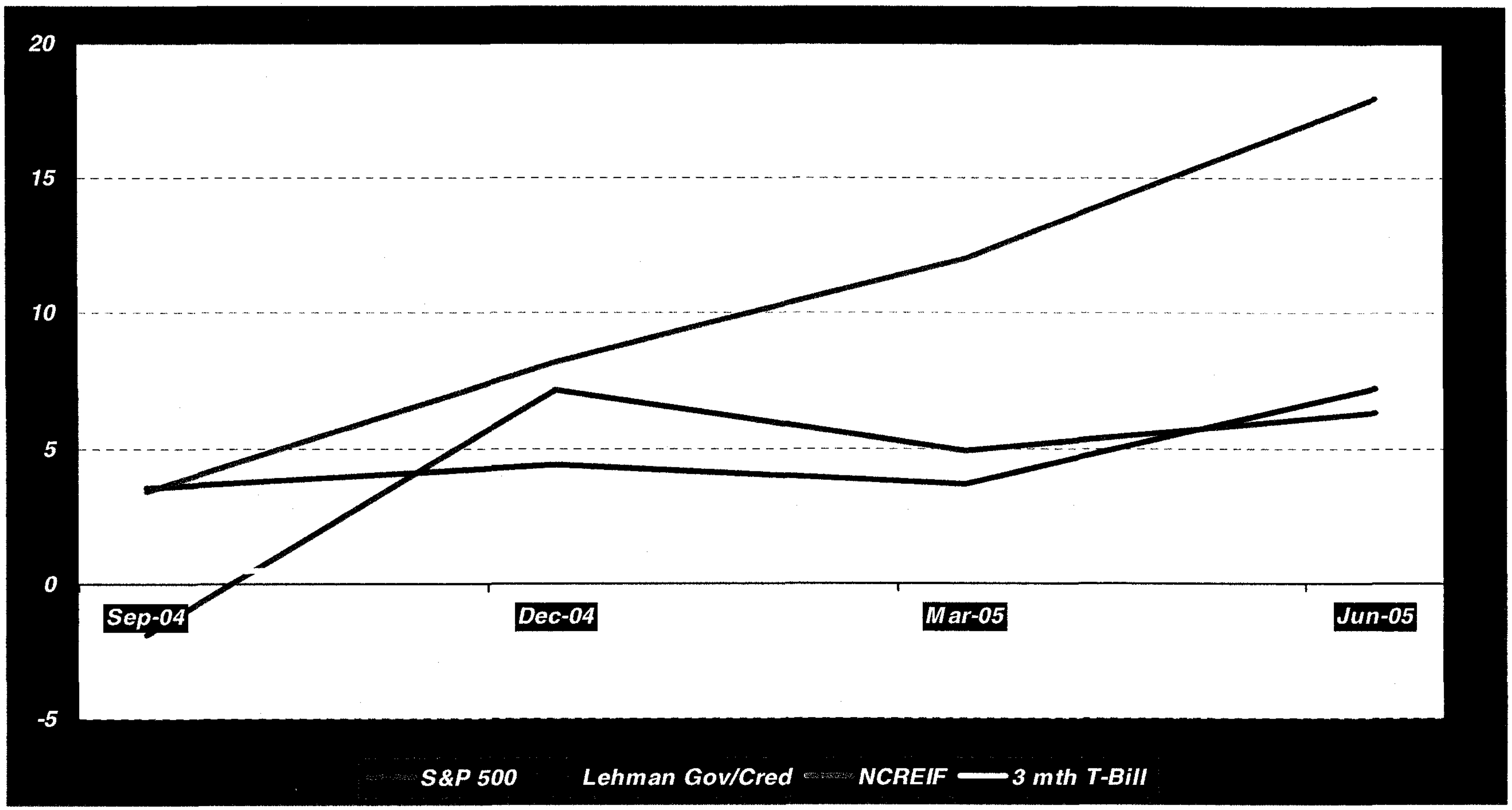
EE & ER Contributions less Benefit Payments and Expenses

Asset Allocation
June 30,2005 (at Market)



Financial Market Returns

June 30,2005



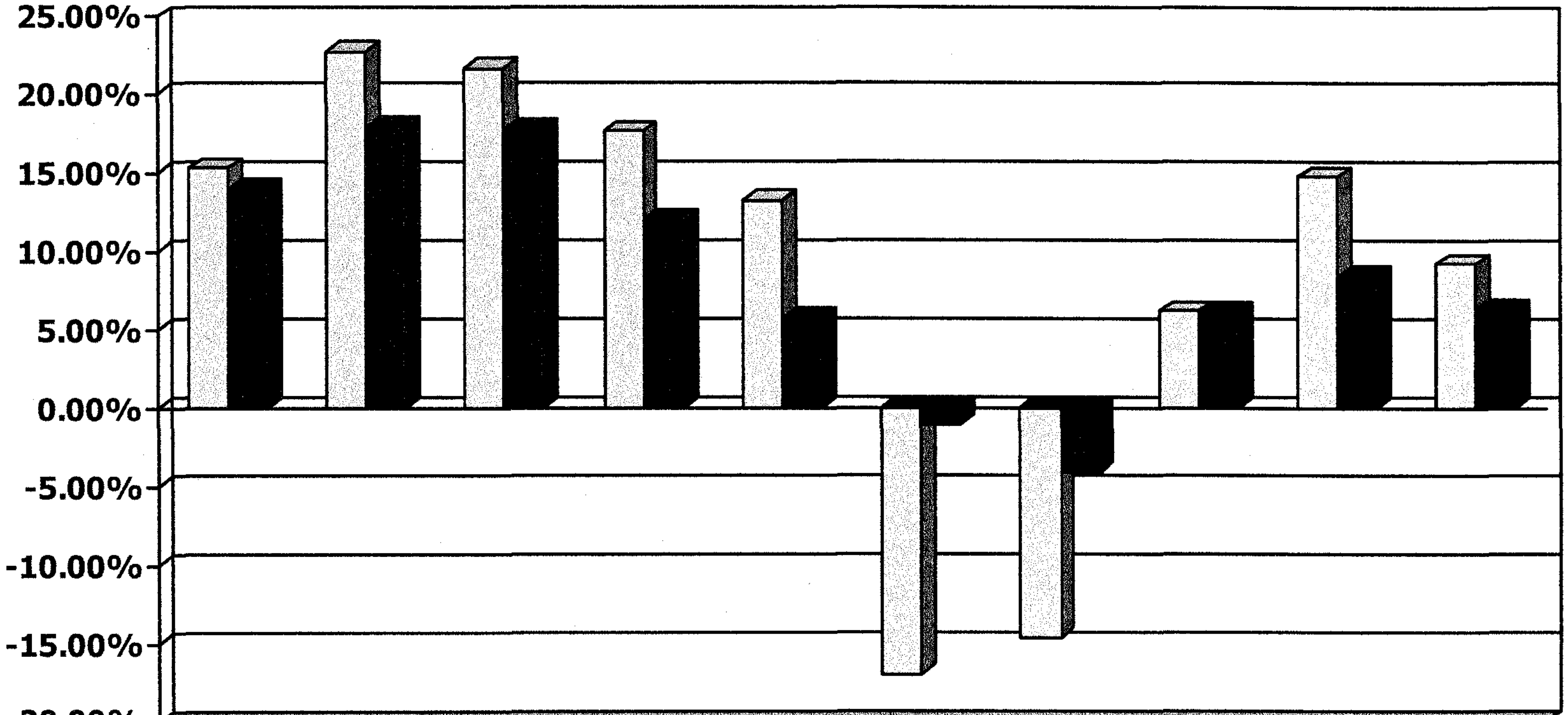
Investment Portfolio Returns
FYE June 30

	1 Year	3 Year	5 Year	10 Year
CORP	9.2%	10.0%	-1.2%	8.0%
Benchmark*	6.3%	7.0%	3.0%	8.0%
ASRS	8.5%	9.2%	2.2%	9.4%
COPERS	8.6%	9.2%	3.7%	n/a

*Benchmark 45% S&P 500, 45% Lehman Gov/Credit, 10% T-Bill

CORP Plan vs Benchmark

FYE June 30



	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
□ CORP	15.30%	22.74%	21.68%	17.60%	13.22%	-17.07%	-14.73%	6.15%	14.77%	9.23%
■ Benchmark*	13.98%	17.87%	17.66%	11.94%	5.75%	-1.07%	-4.13%	6.18%	8.38%	6.32%

*Benchmark 45% S&P 500, 45% Lehman Gov/Credit, 10% T-Bill

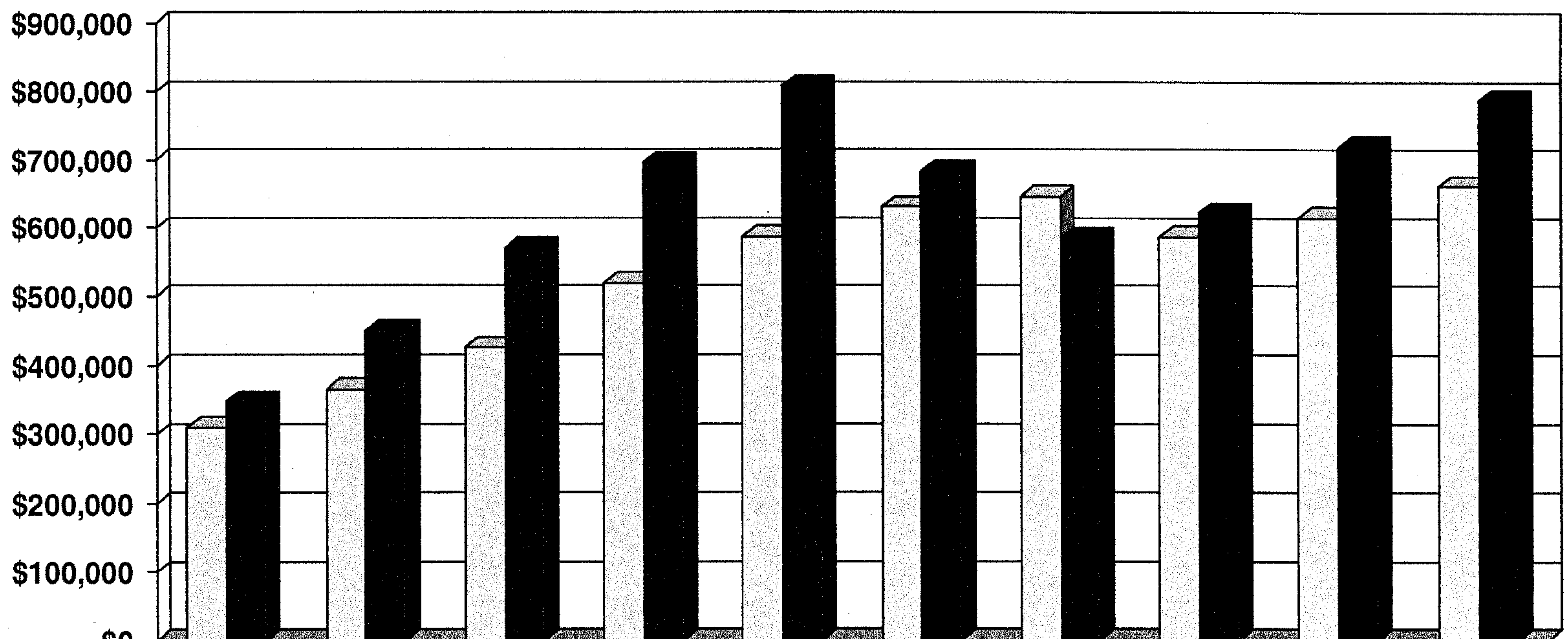
Total Actuarial Assets and Liabilities

June 30, 2005 (in thousands)	
Total Assets	$872,981
Total Liabilities	$906,025
Funding Ratio	96.4%

June 30, 2004 (in thousands)	
Total Assets	$833,621
Total Liabilities	$795,775
Funding Ratio	104.8%

Book Value vs Market Value

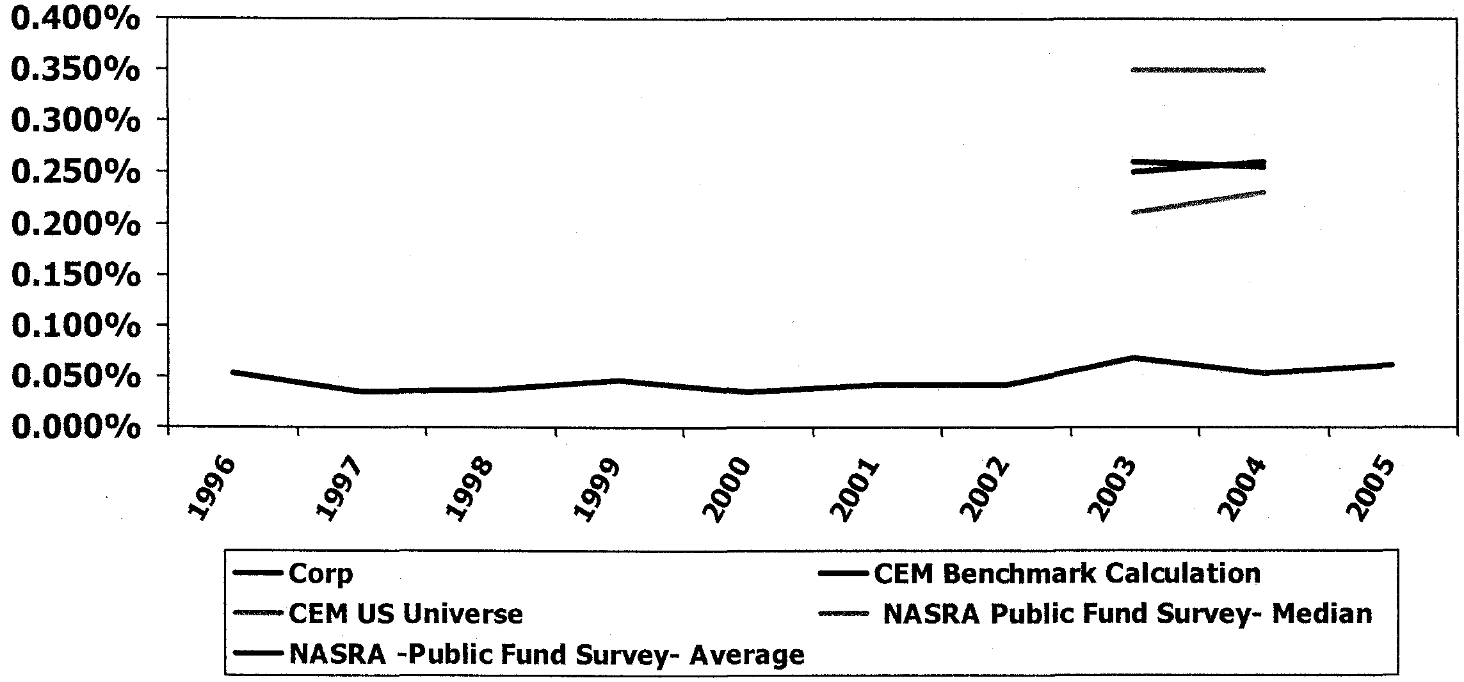
FYE June 30 (in thousands)



	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
□ Book	$309,150	$365,414	$426,352	$519,862	$588,205	$631,618	$646,862	$587,318	$615,696	$662,258
■ Market	$347,932	$449,637	$571,261	$696,231	$807,766	$683,192	$586,328	$622,939	$719,235	$788,874

Investment Expense

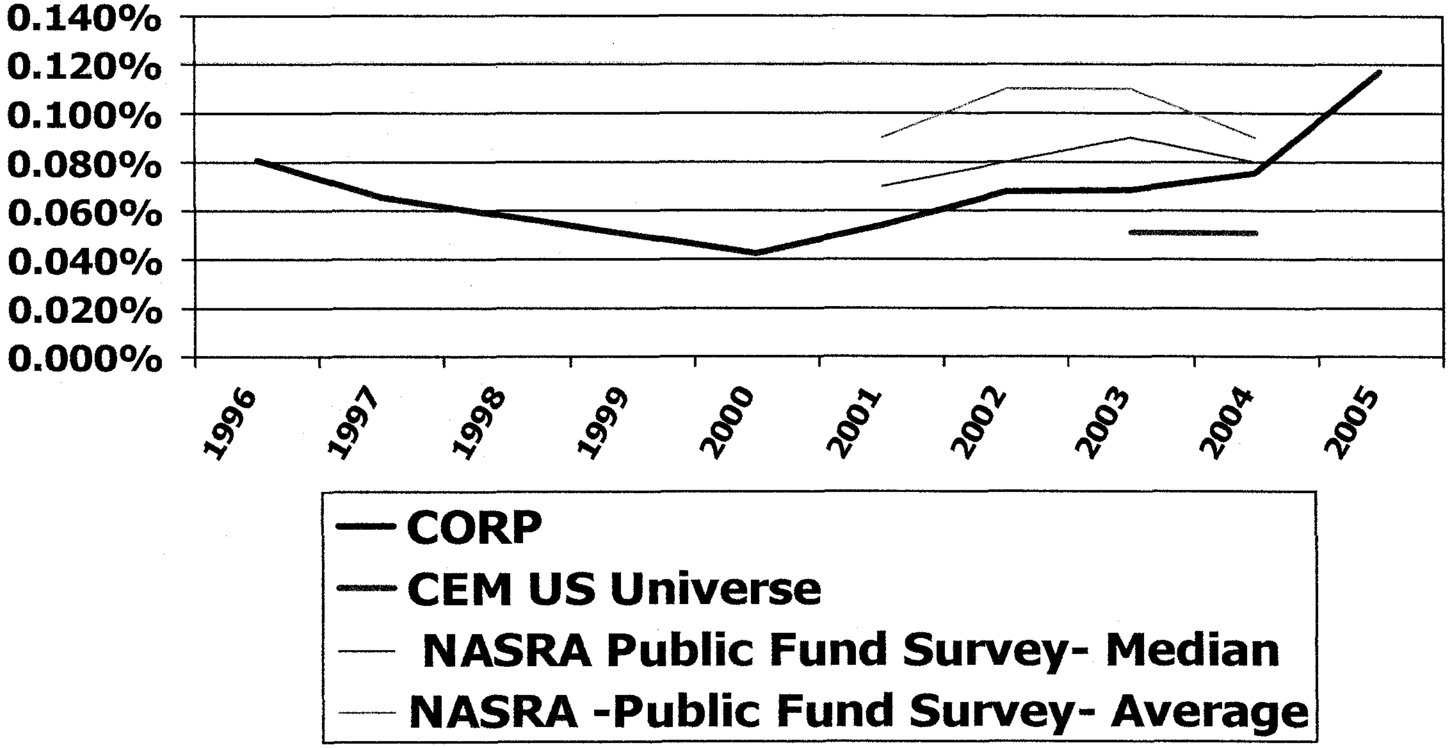
FYE June 30 (% of Assets)



"Comparison of costs to the universe must be interpreted with extreme caution given the breadth of the universe which encompasses funds with widely varying size and asset mix. Your benchmark cost calculation, pg 10, is a much more valuable indicator as to whether you are a low or high cost producer since it adjusts for differences in fund size and asset mix." Cost Effectiveness Measurement Inc, 2005 pg 12

Administrative Expense

FYE June 30 (% of Assets)



Changing Financial Status

FYE 06/30	Actuarial Asset Value	Actuarial Liabilities	Funded Ratio	Market Value*	Funded Ratio
1996	$ 319,255	$ 290,518	109.9%	$ 347,028	119.5%
1997	$ 393,904	$ 355,950	110.8%	$ 448,281	126.1%
1998	$ 484,956	$ 410,531	118.1%	$ 555,751	135.4%
1999	$ 592,152	$ 443,676	133.5%	$ 653,777	147.4%
2000	$ 704,991	$ 501,323	140.6%	$ 747,981	149.2%
2001	$ 776,177	$ 554,387	140.0%	$ 637,372	115.0%
2002	$ 782,446	$ 632,238	123.8%	$ 551,876	87.3%
2003	$ 811,791	$ 709,298	114.4%	$ 592,230	83.5%
2004	$ 833,621	$ 795,775	104.8%	$ 673,322	84.6%
2005	$ 872,981	$ 906,025	96.4%	$ 747,458	82.5%

*Market value does not include future benefit increase reserve

Elected Officials' Retirement Plan

June 30, 2005

EORP Statistics

Defined Benefit Plan – June 30, 2005

Active Members		**781**
Terminated Vested Members		**87**
Retired		**769**
Members	**600**	
Beneficiaries	**18**	
Disability	**151**	
Total Participant		**1,637**

EORP Statistics
Defined Benefit Plan

As of June 30, 2005

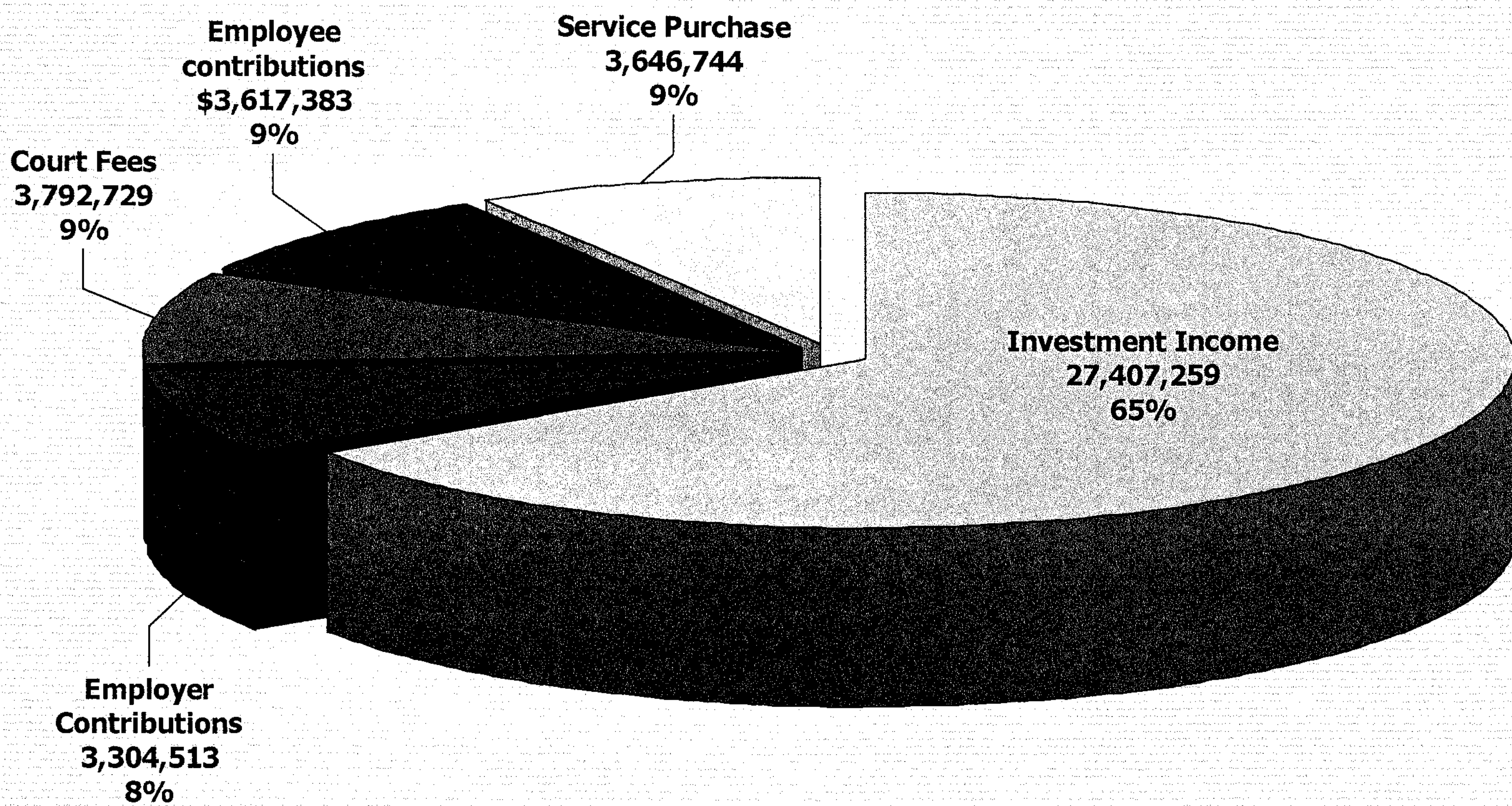
	Actuarial Value	**Market Value***
Assets	$344,604	$287,882
Funding Ratio	95.5%	79.8%

As of June 30, 2004

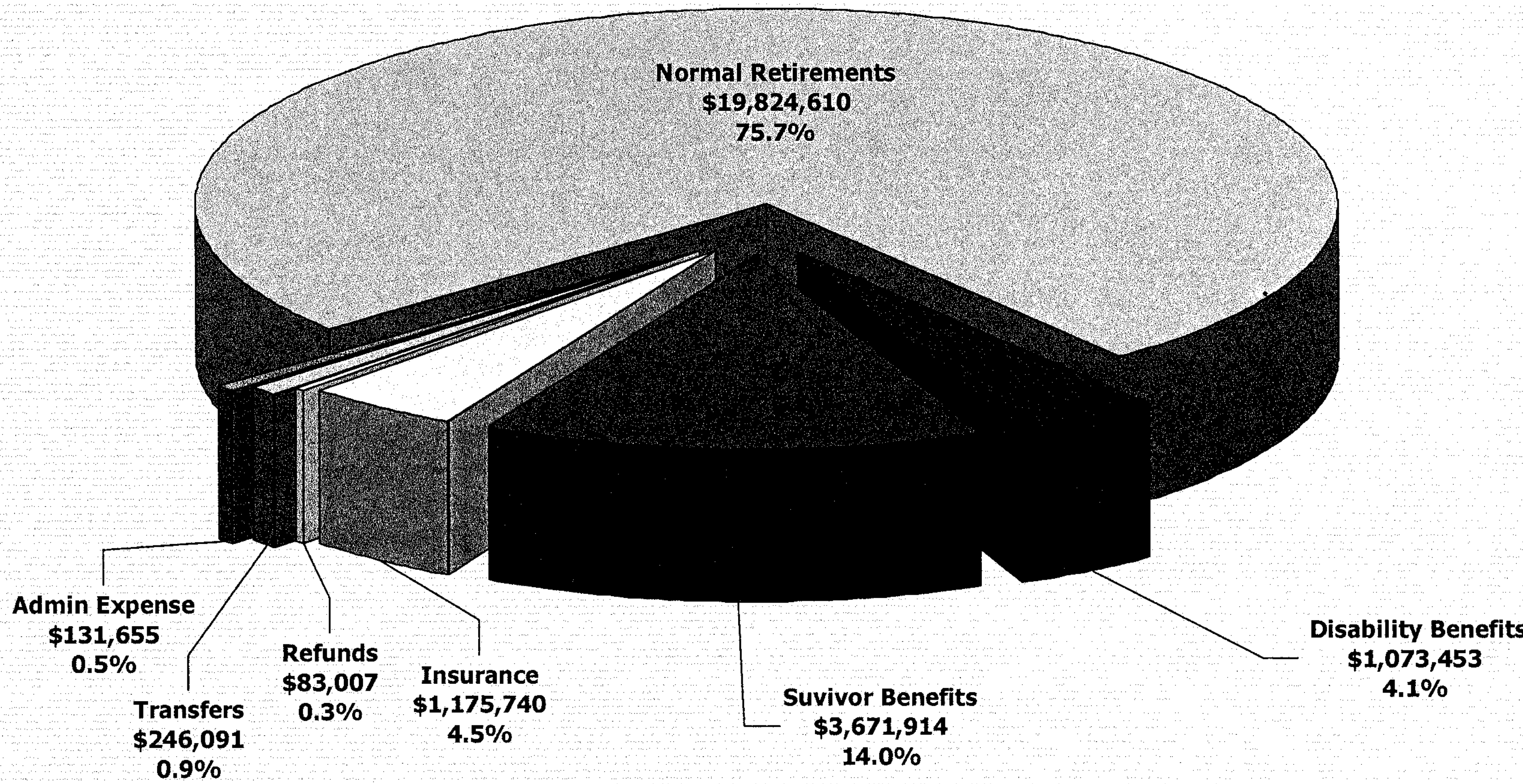
	Actuarial Value	**Market Value***
Assets	$343,376	$268,214
Funding Ratio	104.4%	81.5 %

*Market value does not include Future Benefit Increase Reserve

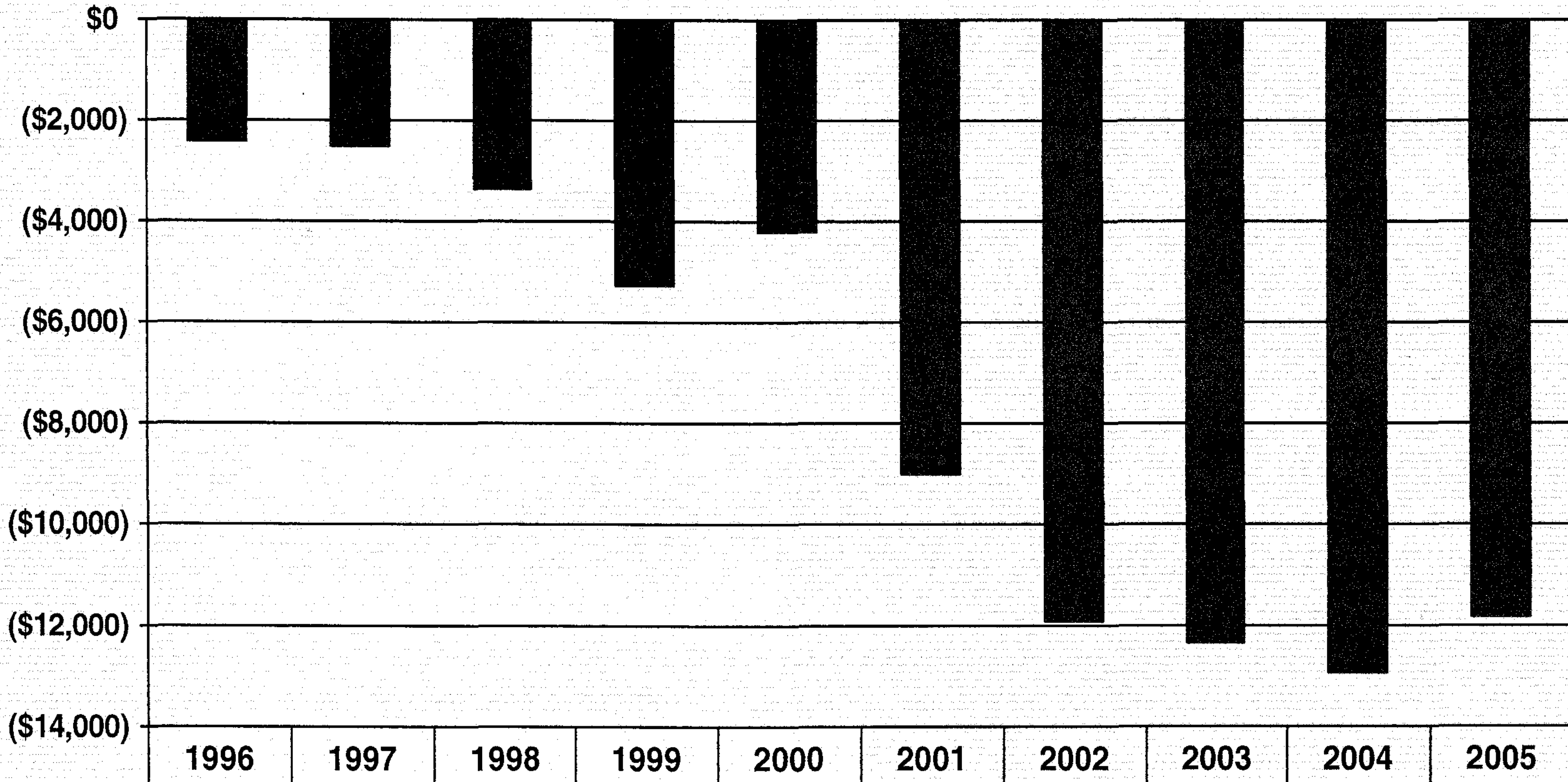
Total Revenue
June 30, 2005



Total Expenses
June 30, 2005



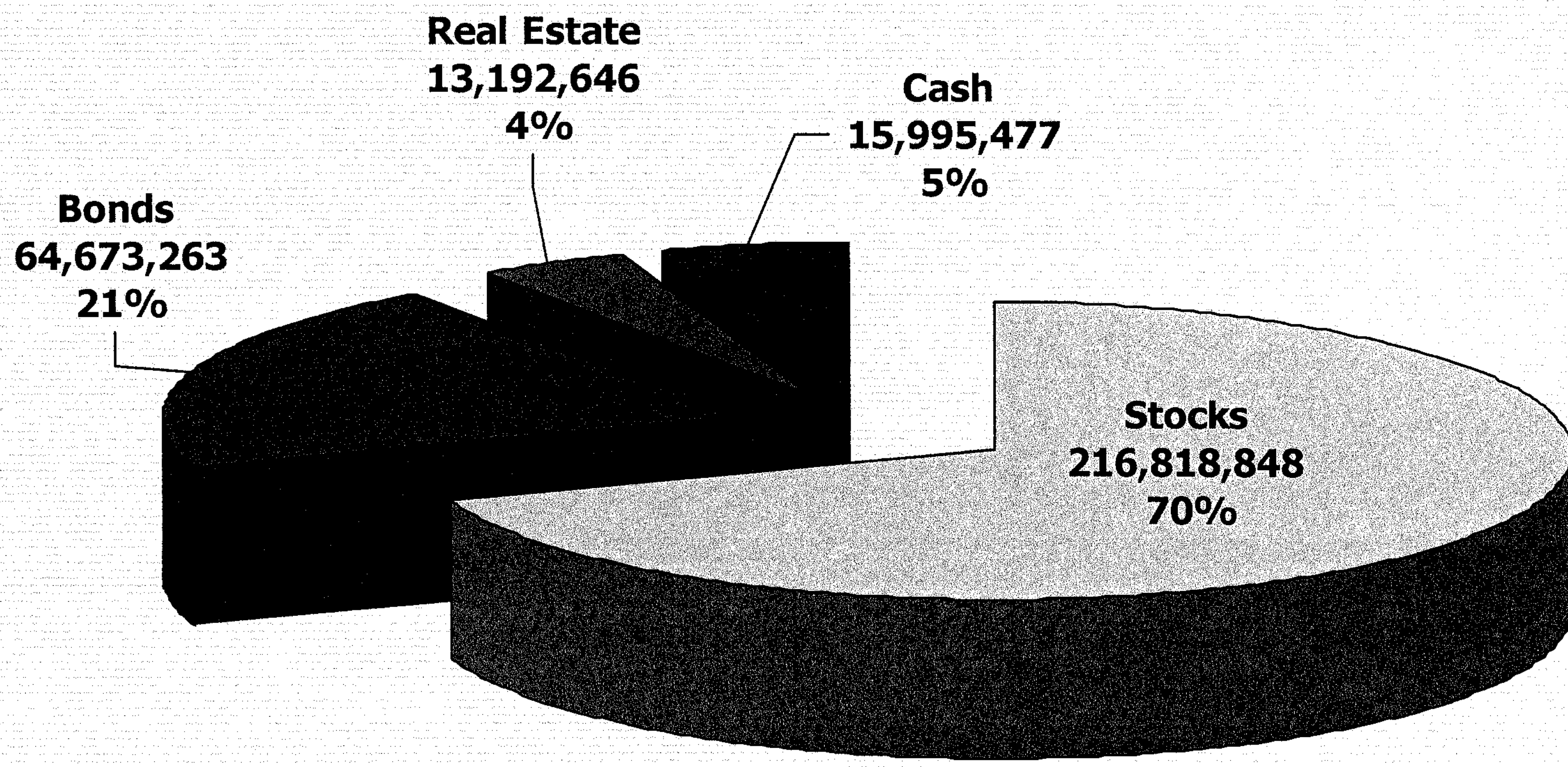
Net Cash Flow
FYE June 30 (in thousands)



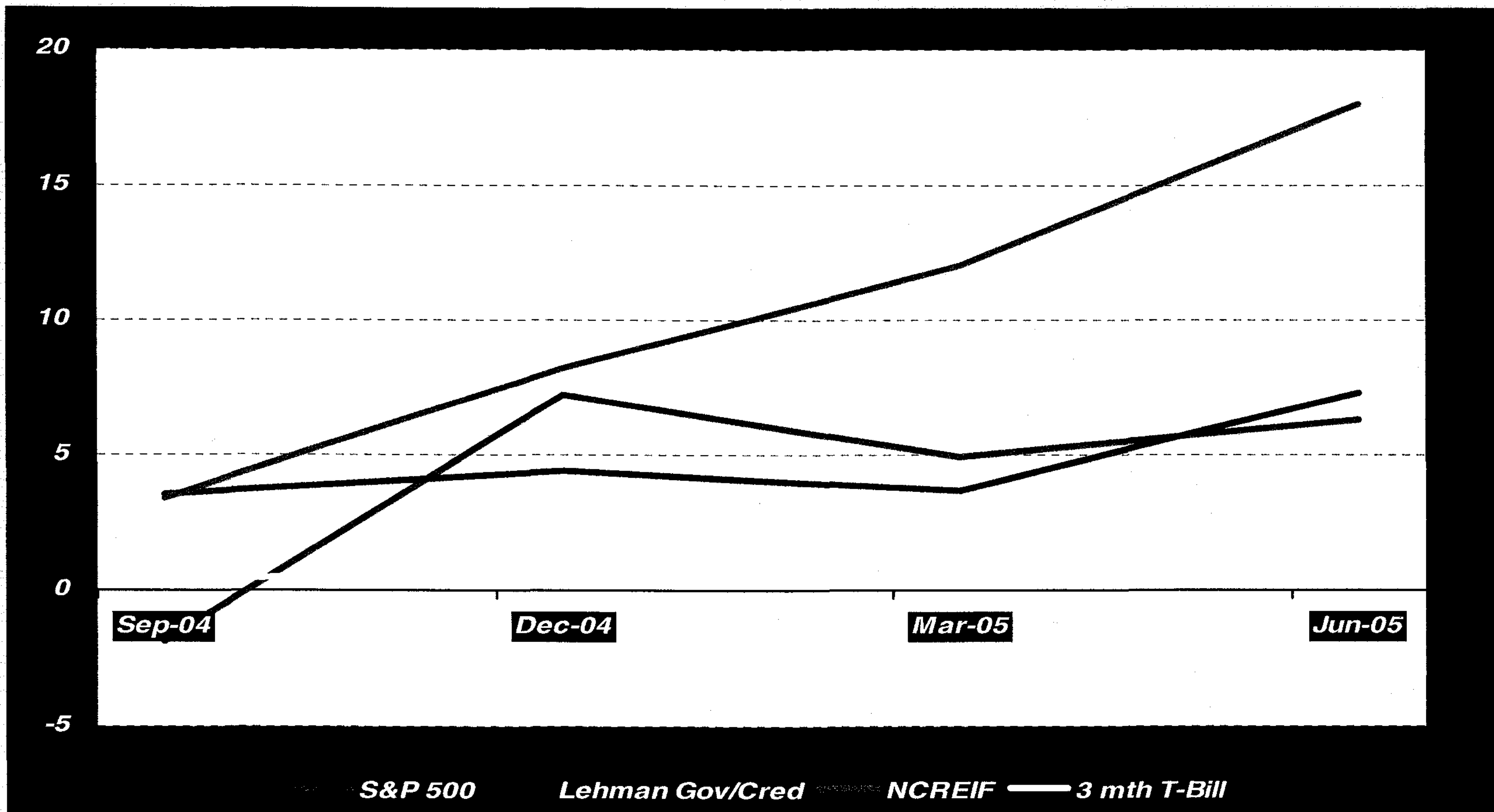
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
■ Net Cash Flows	-2,413	-2,496	-3,363	-5,262	-4,215	-9,025	-11,907	-12,333	-12,957	-11,845

EE & ER Contributions less Benefits Payments and Expenses

Asset Allocation
June 30,2005 at Market



Financial Market Returns

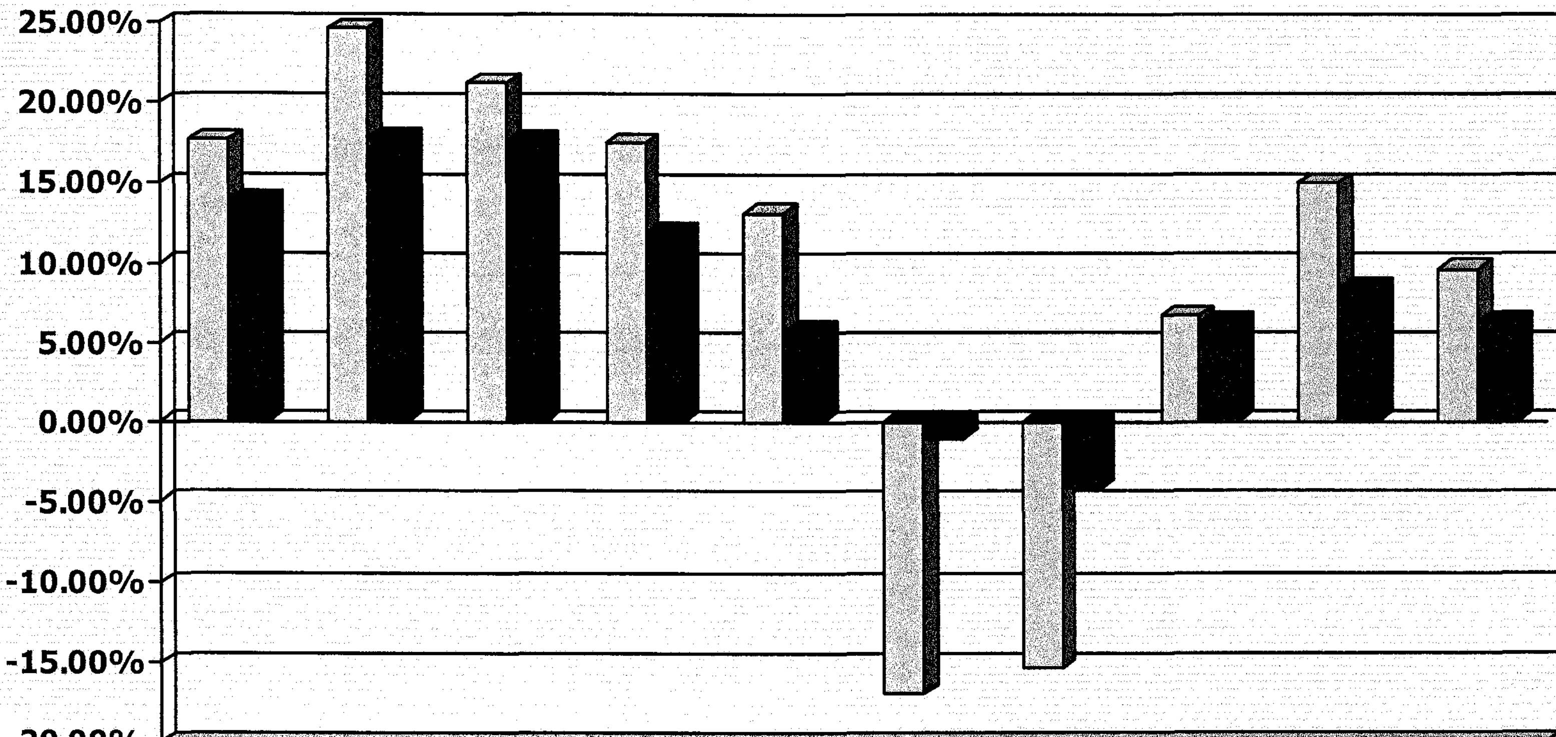


Investment Portfolio Returns
as of FYE June 30, 2005

	1 Year	3 Year	5 Year	10 Year
EORP	9.6%	10.4%	-1.1%	8.4%
Benchmark*	6.3%	7.0%	3.0%	8.0%
ASRS	8.5%	9.2%	2.2%	9.4%
COPERS	8.6%	9.2%	3.7%	n/a

*Benchmark 45% S&P 500, 45% Lehman Gov/Credit, 10% T-Bill

Elected Official vs Benchmark
FYE June 30



	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
EORP	17.70%	24.59%	21.26%	17.51%	13.20%	-16.96%	-15.36%	6.69%	15.02%	9.56%
Benchmark*	13.98%	17.87%	17.66%	11.94%	5.75%	-1.07%	-4.13%	6.18%	8.38%	6.32%

*Benchmark 45% S&P 500, 45% Lehman Gov/Credit, 10% T-Bill

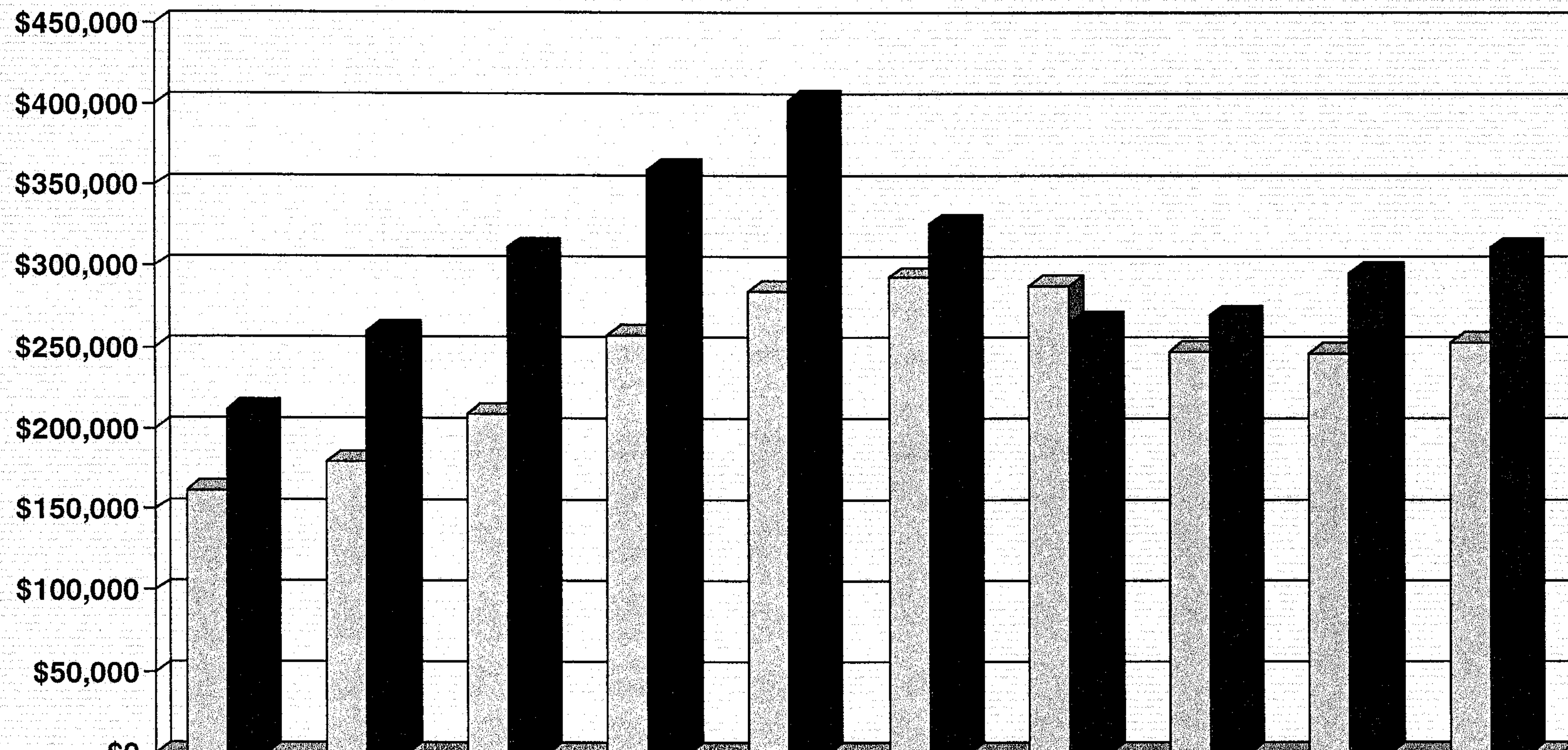
Total Actuarial Assets and Liabilities

June 30, 2005 (in thousands)	
Total Assets	$344,604
Total Liabilities	$360,758
Funding Ratio	95.5%

June 30, 2004 (in thousands)	
Total Assets	$343,376
Total Liabilities	$328,921
Funding Ratio	104.4%

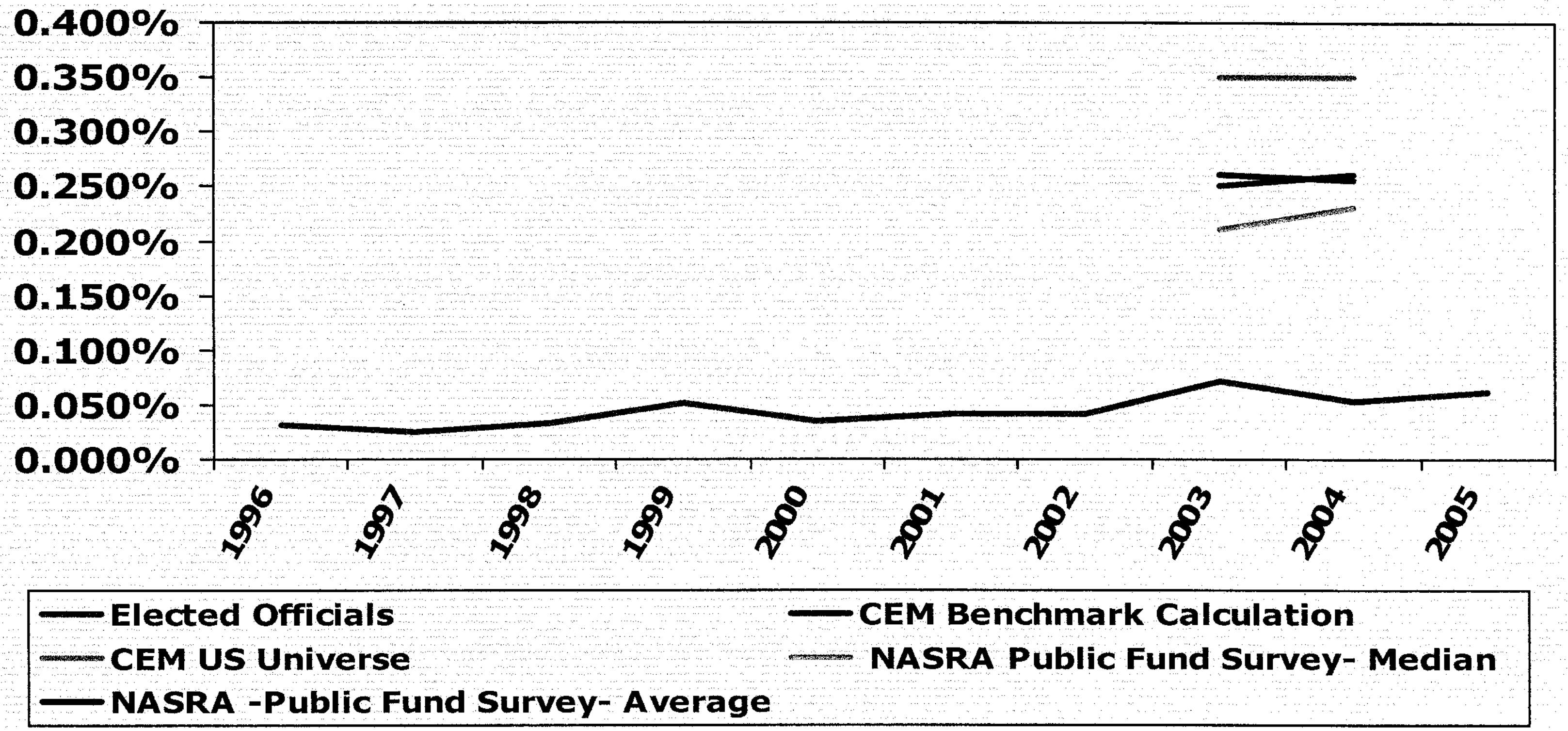
Book Value vs Market Value

FYE June 30 (in thousands)



	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
□ Book	$161,523	$179,813	$209,248	$258,050	$285,205	$293,478	$288,377	$247,793	$246,308	$253,314
■ Market	$211,745	$260,314	$311,329	$359,492	$402,244	$326,159	$265,567	$269,611	$295,932	$311,494

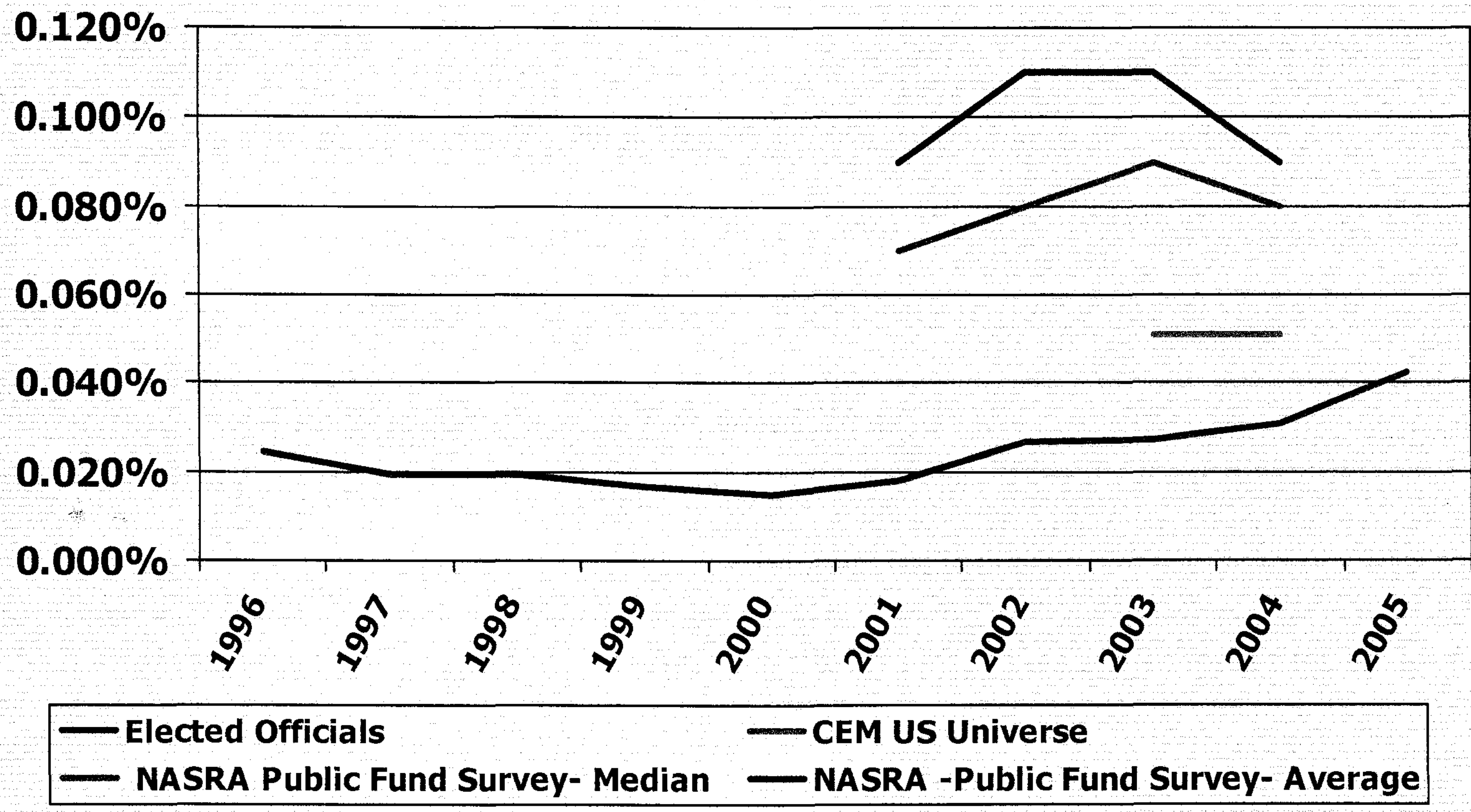
Investment Expense
FYE June 30 (% of Assets)



"Comparison of costs to the universe must be interpreted with extreme caution given the breadth of the universe which encompasses funds with widely varying size and asset mix. Your benchmark cost calculation, pg 10, is a much more valuable indicator as to whether you are a low or high cost producer since it adjusts for differences in fund size and asset mix." Cost Effectiveness Measurement Inc, 2005 pg 12

Administrative Expense

FYE June 30 (% of Assets)



Changing Financial Status (in thousands)

FYE 06/30	Actuarial Asset Value	Actuarial Liabilities	Funded Ratio	Market Value*	Funded Ratio
1996	$ 181,754	$ 158,126	114.9%	$ 210,397	133.1%
1997	$ 214,035	$ 169,593	126.2%	$ 256,524	151.3%
1998	$ 241,884	$ 199,662	121.1%	$ 281,567	141.0%
1999	$ 283,337	$ 227,100	124.8%	$ 319,010	140.5%
2000	$ 329,777	$ 253,478	130.1%	$ 355,335	140.2%
2001	$ 355,768	$ 250,987	141.7%	$ 291,723	116.2%
2002	$ 351,349	$ 279,947	125.5%	$ 242,167	86.5%
2003	$ 353,463	$ 297,892	118.7%	$ 251,019	84.3%
2004	$ 343,376	$ 328,921	104.4%	$ 268,214	81.5%
2005	$ 344,604	$ 360,758	95.5%	$ 287,882	79.8%

*Market value does not include future benefit increase reserve

PSPRS FUNDING STATUS IMPROVEMENT OPTIONS

AND

CONSTRAINTS

Challenge

Despite the fact that the three Retirement Plans that PSPRS administers have earned above market returns over the past two fiscal years, their financial status has deteriorated significantly since June 30, 2001 (FY'01). Unlike the situation at June 30, 2003 (FY'03) in the case of the Public Safety Personnel Retirement System (PSPRS) Plan, and at June 30, 2004 (FY'04) in the case of the Corrections Officer Retirement Plan (CORP) and the Elected Officials Retirement Plan (EORP), all three Plans now have funding ratios of less than 100% as of the end of FY'05.

In the case of PSPRS, its funding ratio at the end of FY'01 was 126.9%. By the end of FY'04, the ratio had declined to 92.4%. By the end of FY'05, the funding ratio had slipped to 82.1%.

In the case of CORP and EORP, their FY'01 funding ratios were 140% and 141.7%respectively; but by the end of FY'05, their ratios had declined to 96.4%, in the case of CORP, and 95.5%, in the case of EORP -- ratios indicative of still well-funded plans but ones with new asset deficiencies.

Of course, as the three Plans have moved from positions of asset surplus to positions of asset deficiency, the required employer contributions have increased markedly. While the Plans held excess assets, those excess assets, expressed as a level percent of payroll and amortized over twenty year rolling periods, had the effect of keeping employer contribution rates abnormally low, relative to employer "normal cost" (i.e., the employer share of the cost, expressed as a level percent of payroll, of the addition to liability that resulted from the covered group's service credit accruing in any given year). Now with unfunded liabilities existing in all three Plans, the cost of amortizing those unfunded liabilities, expressed as a level percent of payroll and amortized over twenty year rolling periods, must be added to what would otherwise be the employer normal cost, thus inflating the employer contribution rates to higher levels.

In the case of PSPRS and based on that System's financial status at June 30, 2001, the FY'03 aggregate employer contribution rate was only 4.46%. However, given the PSPRS financial results as of the end of FY'05, the aggregate employer contribution rate projected for FY'07 is up to 17.1%. By comparison, the PSPRS employee contribution rate, which is set by statute, is only 7.65%

For the CORP, the FY'03 aggregate employer contribution rate was only 2.14%, based on the Plan's FY'01 financial results. Now, based on the Plan's FY'05 financial results, the aggregate employer contribution rate projected for FY'07 is 7.06% -- a rate that is less than the statutory 8.5% employee rate, but still one that is 410% of what it was in FY'03.

Finally, for the EORP and based on its FY'01 financial results, the FY'03 employer contribution rate was 7.55%. Now, based on the Plan's FY'05 financial results, the projected FY'07 employer rate will be 24.27%.

Unfortunately, and even despite the good investment performance of the past two years, the near-term expectation is for further erosion in the funding ratios of all three Plans. The challenge that is posed, given the present and projected situation is simple: Without impairing the fiscal integrity of the Plans,what can be done to ameliorate or reduce what will otherwise be relatively large required employer contribution rate increases in FY'07 – increases that are certain to present budgetary problems for the three Plans' participating employers at the State, county and municipal levels?

Contributing Factors

The principal factors that have, in the aggregate, contributed to the erosion in the funding ratios of the Plans and to the significant rise in the employer contribution rates are as follows. First, there is the very significant loss in asset values attributable to the 2001 through 2002 financial market contractions, the effects of which are not yet fully reflected in the Plans' actuarial value of assets. Those asset values are determined annually based on a rolling seven year average.

The second factor relates to PSPRS' having to reflect actuarially the investment environment in which the Plans are operating. Clearly, the current investment environment is not as positive or robust as that which prevailed throughout the last half of the 1990's. In recognition of that reality, the System has begun to reduce its former 9% actuarially assumed rate of return in one quarter of one percent increments. For FY'05, the assumed rate was 8.75%. During the current FY'06, the rate is 8.5%. The System's actuary has said that every one quarter of one percent reduction in the actuarial rate of return assumption results in a one and one-half percent increase in the employer contribution rate requirement. Although the System's Fund Manager will likely pause to assess whether the System's latest rate of return assumption reasonably reflects the true rate of return experience of the Plans, it is possible that even further reductions in the assumed rate may be necessary in the future.

A third factor that has the effect of suppressing the Plans' actuarial value of assets and their funding ratios is the way in which the Plans are statutorily required to pre-fund annual post-retirement benefit adjustments. Under current law, either one-half (in the case of PSPRS and CORP) or all (in the case of EORP) of the Plans excess investment returns (i.e., investment returns in excess of 9%) must be allocated to each Plan's Future Benefits Increase Reserve. As such, the assets in these reserves ($537.5 million for PSPRS, $41.4 million for CORP, and $23.6 million for EORP as of FY'05) and the earnings thereon are not included in the calculation of the Plans' actuarial value of assets, and that, in turn, negatively impacts the Plans' funding ratios and their employer contribution rates. Furthermore, some have argued that excess earnings should never be siphoned off or allocated to fund future, additional benefits, for, to remain actuarially sound, the Plans need to retain excess earnings merely to offset the poor investment returns the Plans are certain to experience from time-to-time.

The fourth factor relates to the value the System assigns to the Plans' Alternative Investments Asset Class. By custom and practice these investments (i.e., primarily real estate investments along with a relatively small exposure to private equity) are carried at cost. However, since these investments currently have net market value significantly in excess of cost, the Plans' actuarial value of assets is understated. This, too, causes the Plans' funding ratios to be understated and the required employer contributions to be overstated.

The fifth factor comprises the benefit improvements made in recent years that have added significantly to Plan liabilities. The major addition was the creation of the Deferred Retirement Option Plan (DROP) for the PSPRS Plan. Although it was created as a "pilot" program for the period from 2001 to 2006, the DROP was made permanent in 2002. The original twenty-five year service requirement for DROP participation eligibility was reduced to twenty years in 2001. Other legislated changes that took effect in 2002 were the increase in the PSPRS survivor benefit from 75% to 80%, the permanent 2% tax equity increase in pensions for employees hired before 1989, and an increase in the duty death spousal benefit from 50% to 100% of average compensation. Additionally, in 2001, the post-retirement health insurance subsidy amounts were significantly increased. Finally, an enhanced refund provision was enacted several years earlier.

The final factor relates to certain economic and demographic actuarial assumptions that have had the net effect of enhancing the Plans' projected rates of liability growth.

Constraints

There are a number of constraints that will limit the options available to the PSPRS Fund Manager and to policymakers for enhancing the financial condition of the Plans and reducing what will otherwise be the required employer contribution requirements for FY'07. These include:

A. **The Arizona Constitution's prohibition against diminishment of contractual pension rights and the Arizona case law (beginning with the Yeazell v. Copins case) related to this issue.** (See Attachment A);

B. **The Existing unfunded liabilities of the retirement Plans; and**

C. **Political Factors.**

A line of Arizona state court decisions, beginning with the 1965 case of Yeazell v. Copins, stand for the proposition that pension benefits are a matter of contractual right that cannot be diminished or impaired once vested. In addition, Article XXIX, Section 1, Paragraph C of the 1998 version of the State's Constitution clearly states that ". . . . public retirement system benefits shall not be diminished or impaired."

tempter

Given the Arizona case law and the State Constitution's prohibition against pension benefit diminishment, it should be clear that, in general, the existing structures of benefits probably cannot be reduced for current system beneficiaries or participants.

Options to Reduce the Rate of Plan Liability Growth, Increase Plan Contributions/Income and/or Assets and Increase the rate of Asset Growth

Although there are a variety of options available to the PSPRS Fund Manager and to policymakers to enhance the financial condition of the System's Plans and thereby reduce what will otherwise be the employer contributions required in FY'07, based on FY'05 results for the Plans, many of them have constitutional and/or political or other problems that impair their viability either partially or completely. Here is a review of the most obvious ones. These options would either reduce the rate of liability growth, or increase Plan contributions/income and/or assets or increase the rate of Plan asset growth.

A. **Reducing the Rate of Future Liability Growth**

1. Creating a Second Tier Defined Benefit Plan (DB) for New Hires

Without violating the pension protection clause of the Arizona State Constitution (i.e., Art. XXIX, Sec. 1, Paragraph C), new, simplified, and significantly less generous defined benefit (or cash balance) plans could be designed to cover newly-hired participants in the three Plans that PSPRS administers. This option would slow the rate of growth in liabilities in the distant future; it would, however, do little to improve the financial status of the Plans in the near-term and ease the employer contribution burden. (There is some uncertainty as to whether future benefits for current Plan participants who have not yet "vested" could be reduced without violating the Constitution due to the Court of Appeals' decision in the case of Fund Manager v. City of Phoenix Police Department Public Safety Personnel Retirement System Board.)

The process for developing/designing a new pension plan for new hires could be undertaken as follows: First, the criteria or objectives for the new plans would be specified. For example, the criteria/objectives might call for plans that are, relative to the existing Plans, less expensive and have, relative to the current Plans, later normal retirement ages, later early retirement ages, longer vesting requirements, benefit formulas with lower accrual rates, periods longer than three years for averaging final salary, less generous survivor benefit formulas, less generous disability benefit formulas and more stringent eligibility requirements and a post-retirement cost-of-living adjustment that is tied to the movements of the Consumer Price Index (C.P.I.) and capped at some limit (for example 3%).

Another factor to be considered is whether social security coverage is or is not available. Social security coverage, or the absence thereof, would have consequences for both plan design and cost.

Second, once the criteria/objectives are specified, a pension plan consulting and/or actuarial firm could be asked to develop the specifics to implement and achieve the specified criteria/objectives, taking into account differences among the new hire employee groups who would be served by the new plans.

Third, once the designs for the plans are complete and in order to know the extent of the future savings in pension costs, actuaries would be asked to project the cost for the new plans and compare them to the projected costs for the current plans if they were to continue to apply to the new hire groups.

Finally, the legislation to implement the new plans would have to be closely scrutinized so as to avoid anomalous and unintended consequences (i.e., the availability of certain benefits for persons for whom they were never intended).

But the political obstacles to the option of designing/implementing new, less generous and less expensive DB plans for new hires should be obvious. This option is certain to encounter intense and unified opposition from public employees, retirees and their organizational representatives, since it would appear that new hires are being forced to pay disproportionately more for less generous future benefits. Additionally, public employee organizations would be expected to oppose any "two tier" program on the grounds that public employees should have the benefit of equal pay and equal benefits for equal work, regardless of their date of hire. Finally, implementation of such alternative plans would counter the current statutorily expressed aims of the Plans, which is to provide a uniformity of benefits for all public safety personnel, corrections officers and elected officials.

2. Mandating Defined Contribution (DC) Plan Coverage for Newly Hired Employees.

"Closing" the existing DB plans and mandating the use of defined contribution (DC) plans for newly hired employees is an option used extensively in the private sector and, more recently, in some states for public employee groups. However, this option is probably not a realistic option for newly hired employees in Arizona for the PSPRS-administered Plans. Here is why.

First, if the new DC Plans are to provide future benefits that are reasonably comparable to those provided by the current DB Plans, there would likely be no net savings to the employers, even in the long term. Moreover, given the costs associated with DC Plan administration, there could actually be an increase in long-term employer costs.

Second, since two of the three Plans that PSPRS administers are for the benefit of defined public safety groups and given those groups especial need for disability protection, that coverage, which tends to be costly, would have to be added to the coverage otherwise provided by the DC Plans.

Third, although DC Plans less generous than the current DB Plans could be designed and implemented for new hires, and although in the long-term employers could reduce their pension costs by pursuing this option, in the near term employers would see little, if any, pension contribution relief because: (1) they would be obligated to make employer contributions to the new DC Plans, even while they would remain solely responsible for the employer share of normal cost for the closed DB Plans and for the cost of amortizing the existing and growing unfunded liabilities of those closed DB Plans (especially as employee contributions diminish over time); and (2) they would have to fund all, or part of, the cost of disability protection, at least for their public safety employees. (See Attachment B)

3. Reducing the Rate of Growth in Liabilities By Changing Actuarial Assumptions to More Closely Reflect Emerging Benefits and Benefit Promises

A. The Salary Growth Assumption

For FY'06, the salary growth assumption for PSPRS is 6%; the actuarial assumed rate of return is 8.5%. The salary growth assumption used to be 6.5% when the rate of return assumption was 9%. However, now that the return assumption has been reduced, the salary growth assumption has been reduced along with it in order to maintain a 2.5% "spread" between these two related percentages.

The System's actuary should be asked to review both the salary growth assumption and the 2.5% spread between that assumption and the rate of return assumption. It may be that a lower salary growth assumption is warranted based on the actual salary growth experience of the covered group and it may also be appropriate and acceptable to widen somewhat the spread between the salary growth assumption and the rate of return assumption.

If it is found that the salary growth assumption could be lowered to more accurately reflect the actual salary growth experience of the covered group and the spread between the salary assumption and the rate of return assumption could be widened, while still remaining within what is generally acceptable and prudent actuarial practice, then the combined effect of these changes would serve to reduce the rate of growth in liabilities, improve the funding ratio of the PSPRS Plans and reduce the FY'07 employer contribution rates from the currently scheduled levels (i.e., the levels based on the Plans' FY'05 results). (See Attachment C) If any changes are warranted, the Fund Manager can make the decisions in this regard, based on the actuary's recommendations.

B. Demographic Assumptions

The System's demographic assumptions, such as, for example, those for rates of retirement and DROP, participant "turnover," group mortality experience and incidence of disability, should be reviewed for the purpose of determining whether actual group experience continues to be consistent with the assumptions that are in place for each of the Plans. If inconsistencies are found, changes may need to be made so that the assumptions do reflect actual group experience. The net effect of such changes may result in a lessening of the rate of growth in

System liability, and, if so, an improvement in the System's funding ratio and a concomitant reduction in the projected employer contribution requirements.

4. Actuarial Methodology

The PSPRS currently uses the entry age normal cost actuarial method for allocating System liabilities between the covered group's past service (i.e., actuarial accrued liability) and future service (i.e., normal cost). However, there are other accepted actuarial methodologies that produce liability allocation patterns that differ from those obtained with the entry age normal cost method. One such alternative method, for example, is the projected unit credit cost method.

The System's actuary should determine whether a change from the entry age normal cost method to some other widely accepted actuarial method could serve to reduce the PSPRS unfunded actuarial accrued liability and increase normal cost but still effect a net improvement in the System's current financial status. (See Attachment D) If such a change could effect a net improvement and if such net improvement were found to be significant, then the PSPRS Fund Manager could consider a change in the System's actuarial methodology.

5. Changing the PSPRS Amortization Period

Currently, the PSPRS Plans use a twenty year amortization period to amortize unfunded accrued liabilities or excess assets. This could be changed to a thirty year (or, perhaps, even a forty year) amortization period and still the System's Plans would be within acceptable actuarial practice. The System's actuary has been asked to determine the effect on the funding ratios of the System's Plans and on the projected FY'07 employer contribution rates if the twenty year period were extended to thirty and forty years. (See Attachment E) Of course, given that current law allows the PSPRS Plans' participants to retire with only twenty years of service, an extension of the amortization period beyond twenty years will have the effect of amortizing unfunded liabilities beyond the statutorily expected employment career.

6. Limiting the Amount of Compensation on Which Contributions Are Assessed

Another option that could help limit or slow the rate of growth in liability would be to limit prospectively (i.e. with respect to future service, not past service) the amount of compensation that is subject to employee pension contributions (as, for example, a maximum of $75 thousand per year. (See Attachment F) This would limit the amount of the average high-three-consecutive-years of compensation and thus result in lower pension benefits than would otherwise be the case for participants who received compensation in excess of the maximum. Those participants would benefit by having their excess compensation (i.e. the amount that exceeds the maximum) unreduced by pension contributions; however, their high three year average would be reduced (relative to what would otherwise be the case) and so would their pension benefits.

However, any change such as the one described above may be challenged on constitutional grounds and would likely be resisted by the public employee groups. Of course, such a change could be made for new hires participating in second tier DB plans although that too would encounter political opposition.

A variation of this option could take the form of a percentage limitation on the amount of compensation increase that would be subject to pension contributions and taken into account in calculating the average high-three-consecutive-years compensation at the time of retirement. However, this too would run into constitutional challenge and strenuous opposition from the public employee constituent groups because a change such as this would ultimately reduce pension benefits of current participants relative to what they would otherwise be under current statutes.

7. Reducing the Rate of Interest Credited to PSPRS Deferred Retirement Option Plan (DROP) Accounts

Under paragraph C(2) of Sec. 38-844.05, a PSPRS DROP participant's account is credited monthly with interest at the assumed rate of return established by the PSPRS Fund Manager. It might be possible to amend this provision to indicate that, if, during the DROP participation period, the Fund Manager reduces the assumed rate of return, the DROP participant's account would be credited with the lower percentage prospectively from the effective date of the new and lower rate. This would have the effect of reducing the DROP lump sum amounts otherwise payable and thus reduce PSPRS liability somewhat, relative to what it would otherwise be.

However, in the case of current DROP participants, such a change would be challenged on the grounds that it constitutes an unconstitutional diminishment of benefits and amounts to an after-the-fact and detrimental change of the rules on the basis of which the DROP participant made an irrevocable election to participate in the program in the first place. Such a proposed change would be certain to encounter strong political resistance by the public employee constituency groups.

Whether such a change would survive a challenge on constitutional grounds if it were applied to current PSPRS Plan participants who have not yet elected to participate in DROP is uncertain (because of the Fund Manager v. City of Phoenix case). However, such a change would likely encounter opposition from the public employee constituency groups.

B. Increasing System Revenue and/or Assets

1. Earmarking or Dedicating a Contingent Funding Source

The State could earmark or dedicate a new contingent funding source that would provide, in effect, a subsidy, to offset what otherwise would be the contributions required from the employer entities that are covered by the three PSPRS Plans. For example, the revenue from a fractional percentage increase in the State sales tax could be dedicated for this purpose. Additionally, such a revenue subsidy could be made contingent on the funding ratio level of the Plans. In other words, the revenue stream would only begin to flow, once a Plan's funding ratio declined below a statutorily prescribed level (as, for example, 85%). However, statewide tax increases, even if designed to reduce what would otherwise be tax burdens at the local level, are rarely popular with taxpayers or lawmakers. Therefore, this option is probably not politically possible.

In the alternative, it might be possible to generate increased income for the Plans by imposing new statewide fees that are appropriate and in some way related to the services that are provided by some or all of the covered participants of the PSPRS Plans. At a minimum, existing fees (as, for example, state filing fees that generate some income for the EORP) could be increased; this would be of benefit to at least some participating employers.

2. Increasing the Actuarial Interest Rate Assumption

Theoretically, the actuarial rate of return assumption for the PSPRS Plans could be restored to 9% from the current rate of 8.5% on the grounds that, over the last two fiscal years (i.e., FY'04 and FY'05) the actual rates of return for the Plans were in excess of 9%. This would have the effect of lowering the state's future contribution requirements.

However, since actuarial assumptions should reflect the System's longer-term experience, it would be inappropriate to restore the assumption to 9% at this time, based only on the experience of the last two fiscal years. Despite two years' worth of better than expected returns, the preceding three fiscal years were marked by rates of return that were below expectations. In addition, the financial markets have not been generating the kind of routinely robust returns that characterized them during the last half of the 1990's.

At most, it might be appropriate for the PSPRS Fund Manager to maintain the current (FY'06) 8.5% actuarial rate of return assumption and postpone any further one quarter of one percent annual reductions until the System has acquired more time to experience the level of returns likely to be generated in the post-2001 through 2002 financial market environment.

3. Increasing Employee Contribution Rates

It could be argued that employees participating in at least two of the three PSPRS Plans are not currently contributing their fair share of the financial support that is needed. In the case of the PSPRS Plan, the statutory employee rate is only 7.65%, which is less than one-half of the Plan's FY'05 normal cost of 18.36%. It is also much less than the FY'07 aggregate employer contribution rate of 17.12%, which is based on the Plan's FY'05 results. In the case of the EORP, the statutory employee rate is 7.0%; that is less than one quarter of the Plan's FY'05 normal cost of 29.57% and less than one-third of the FY'07 employer contribution rate, which is based on the Plan's FY'05 results.

In the case of the CORP, however, the employee-employer contribution rate distribution is significantly different from those in PSPRS and EORP. The CORP statutory employee rate is 8.5%, which is more than one-half the Plan's FY'05 normal cost of 15.03%. It is also more than the FY'07 aggregate employer contribution rate, which is only 7.06%. Nevertheless, the currently scheduled CORP FY'07 employer contribution rate is over 400% greater than what it was in CORP FY'03 (i.e., 1.71%).

The System's actuary has calculated that every one percent increase in the employee contribution rate would increase the funding ratio by   %, in the case of PSPRS,   %, the case of the EORP, and   %, in the case of the CORP (See Attachment G). Concomitantly, every one percent increase in the employee contribution rate would decrease the FY'07 employer rate by   percent. It is unclear whether a challenge on constitutional grounds to an employee contribution rate increase would probably not be successful. Even if an employee rate increase is constitutionally authorized, however, an increase in rates for the Plans' participants would likely be opposed by the public employee groups and the organizations that represent them. Participants will argue that they will receive no additional "value" (i.e. no improvement in benefits) for their increased contributions and they will also argue--and correctly--that when times were good and the Plans had excess assets, those excess assets served to subsidize the employers, whose contribution rates were abnormally understated. The employees did not benefit at all in this regard, except to the extent that the buildup of excess assets strengthened the Plans as a whole. On the other hand, given how low employee contribution rates are, especially in the case of PSPRS and the EORP, relative to the FY'05 normal cost percentages for the Plans (which are the best indicator of the worth or value of the Plans' benefit structures), the constituent employee groups and their representative organizations might be willing to accept additional employee contributions to remain actuarially sound or because such increased contributions are coupled with some perceived improvement in the mix of the benefits of the Plans (See below for further discussion).

In the case of the CORP, the implementation of a DROP, authorized by statute and low in cost (if this is possible), might be sufficient to obtain participant willingness to accept a contribution rate increase. However, this would require participant organization support, since it would necessarily entail a change in the CORP statutes.

4. Assess Contributions with respect to Compensation Paid to PSPRS DROP Participants

Under Subsec. A of Sec. 38-844.06, neither employee nor employer contributions are assessed with respect to compensation paid to DROP participants while they remain employed but are participating in the program for which they made an irrevocable election. Certainly a statutory imposition of an employee contribution requirement could be made in the case of newly hired employees. Less certain is whether such a change would survive a constitutional challenge if it were applied to current PSPRS Plan participants who have not yet elected DROP. But with respect to current DROP participants, the imposition of an employee contribution requirement would not likely survive a constitutional challenge; moreover, such a change would be contested on contract grounds, since it would amount to an after-the-fact changing of the rules on the basis of which the DROP election was made and since the current DROP participants would earn no improvement in their pension benefit amounts.

Less clear are the consequences for PSPRS covered employers, if they were required to contribute to the Plan, based on the compensation they pay to DROP participants. Clearly, in the case of employers with current DROP participants, they would be assessed contributions on 100% of payroll paid to PSPRS participants. The Plan would experience an increase in contribution income, which, in turn, would result in some improvement in the Plan's funding ratio and some diminishment in the aggregate employer contribution rate. However, whether an individual employer would experience a net increase or decrease in total dollar PSPRS contributions would probably vary depending on the size of each employer's DROP participant group and the amount of compensation paid to that group. The System's actuary could provide the projections necessary to define the consequences of this possible policy change. (See Attachment H) In addition, we would need to research whether the change is permissible under the Internal Revenue Code.

5. Increase the Employer Contribution Minimum Rate

Currently, the minimum employer contribution requirement as set by statute for the three PSPRS-administered Plans is 5%. Since the aggregate employer rate scheduled for FY'07 is well above this minimum 5% floor, legislation could be enacted to increase the contribution to a higher percentage (perhaps 6% in the case of CORP, 8% in the case of PSPRS and 10% in the case of EORP). While this would not produce any additional income for these two Plans in the near term, it might have a beneficial effect on Plan revenues in the future, assuming aggregate employer contribution rates decline from currently projected levels.

6. Recapture Benefits Through the State Income Tax and Earmark the Revenue for the PSPRS Plans

In the early 1980's, a special commission on social security under the chairmanship of Allan Greenspan developed a set of proposals that were designed to rescue social security's OASDI programs from impending insolvency. One of the elements of that set of proposals (all of which were enacted by the U.S. Congress) required the inclusion of a portion of social security payments in gross income for federal income tax purposes. (Prior to that, social security payments had been tax exempt.) The additional federal revenue was then earmarked for payment back into the social security trust funds.

Here in Arizona, paragraph 2b of Sec. 43-1022 of the state income tax laws could be changed to eliminate or reduce the (up to) $2,500 subtraction allowed for Plans' pension payments in the calculation of adjusted gross income, with the revenues raised thereby earmarked for the Plans that paid the benefits. In effect, this would amount to a back door (i.e., via the state income tax structure) benefits recapture program. However, any such tax law change would certainly be resisted legislatively by the public employee groups and likely be challenged on constitutional grounds as a back door diminishment of benefits.

More broadly, all pension payments and other forms of retirement income (both public and private) could be made subject to the state income tax without any subtraction allowed in calculating adjusted gross income, with the revenue earmarked back to the state public retirement systems in proportion to their respective unfunded liabilities. However, this would certainly be perceived as a tax increase and that would be strongly resisted by the state's retirees and their representative organizations.

7. Marking to Market PSPRS Plan Real Estate and Other Alternative Investments

It has been the long-standing practice at PSPRS to carry the real estate and other alternative investments of the three Plans at cost until such time as income is realized. While the percentage of total Plan assets represented by such investments varies from time-to-time, they probably constitute about five percent of each Plan's assets on average.

Two questions are therefore presented. First, could such investments be marked to market in some way or, at least, could values more realistic than cost be assigned and up-dated periodically? Second, if more realistic values could be determined for this class of investments, would that significantly increase the Plans' actuarial value of assets and their respective funding ratios and thus reduce what would otherwise be the projected FY'07 employer contribution requirement? The PSPRS investment staff will provide answers to these questions. (See Attachment I)

8. Re-examine the Treatment of the Assets in the PSPRS Plans' Future Benefits Increase Reserves

Under current law, all three PSPRS-administered plans provide for post-retirement adjustments. However, actual adjustments are contingent on each Plan's having assets in its Future Benefits Increase Reserve sufficient to cover the cost of funding each year's increase. The methodology for calculating the amount of the increase is specified in each Plan's statutes, but in no event can the increase exceed 4% per year. (As a practical matter, given the significant accumulation of excess assets in each Plan's Reserve, the recent increases have been 4% annually.)

The Reserve assets are accumulated as follows: With respect to PSPRS and the CORP, one-half of the asset value represented by each Plan's rate of return in excess of 9% is allocated to each Plan's Reserve (along with any subsequent return generated on the Reserve account balance). In the case of EORP, all the asset value represented by the Plan's rate of return in excess of 9% is allocated to the Plan's Reserve.

None of the assets contained in the three Reserves are counted in the calculation of the Plan's actuarial value of assets. In effect, for the calculation of the Plan's funding ratio (and the required employer contribution that is determined based on the Plan's funding status), these assets are treated as if they do not exist.

On the other hand, because the annual post-retirement adjustments are fully funded whenever they occur, the actuary does not factor into the calculation of the Plan's future liability, any amount for future benefit increases, since they represent only a contingent liability and, whenever they occur, they are fully funding.

Nevertheless, historically, given each Plan's rates of return, the accumulation of assets to fund post-retirement adjustments has been more than what has been needed. That explains the build-up in the amounts in the Plans' respective Reserves.

The issue presented for actuarial analysis and for policy decision-making is this: What would be the effect of a change in the law that folded the Reserve assets into the calculation of each Plan's actuarial value of assets while avoiding any possible constitutionally impermissible impairment or diminishment of post-retirement benefit adjustments for current beneficiaries and participants? First, of course, if the Reserve assets were no longer segregated, the actuary would have to factor in an annual addition to each Plan's liability in an amount sufficient to provide for an annual increase, since the post-retirement adjustments would cease to be contingent on the availability of Reserve assets. Second, the post-retirement adjustment methodologies would have to remain unchanged, except with respect to the annual increase percentage limit. That would have to be lowered to avoid a net increase in the liabilities of the Plans. (In effect, Plan beneficiaries and participants would be trading a contingent benefit increase for an annual, constitutionally guaranteed benefit increase, albeit one the has a percentage maximum lower than the current 4%.)

But what would be the effect on the current financial status of each Plan? We know that, in the past, the accumulated Reserve assets have been more than sufficient to finance the adjustments that have occurred. But now, the Plans are assuming future rates of return that are less than the 9% threshold that must be reached in order for there to be an allocation of new assets to the Reserves. If the 9% threshold were reduced to whatever the actuarial assumed rate of return is (as set by the Fund Manager), clearly the current financial status of the Plans would deteriorate further. <u>On the other hand, if the 9% threshold is preserved but no new assets flow into the Reserves or if the flow is insufficient to cover the annual adjustment costs, then the Reserves will eventually be drawn down and annual post retirement adjustments will cease.</u> Additionally, the System's actuary is going to have to factor in an additional liability amount to account for an annual post-retirement adjustment that is subject to a percentage maximum that assures a net improvement in the Plans' financial condition.

These questions should be referred to the System's actuary for analysis. (See Attachment J) But if it is determined that a change in the treatment of Plan Reserve assets improves the current financial status of the Plans (and reduces what will otherwise be the required FY'07 employer contributions) and the beneficiaries and participants get the benefit of a permanent, annual and constitutionally guaranteed post-retirement adjustment, then the concept may have merit sufficient to refer it to State policymakers and the Plan's constituency groups and their respective organizations. The perceived value of having a permanent, annual and guaranteed post-retirement adjustment might even be enough to cause the participant groups to be willing to accept a guaranteed annual increase that is less than 4%. If current statutory provisions remain unchanged and the Plans receive rates of returns that are consistently less than they were in the equity bull markets of the late 1990's, then there will be a real risk that the Future Benefit Increase Reserves of the Plans will be exhausted and annual post-retirement adjustments will cease.

9. Bonding Option

Given the low interest rate environment that has prevailed over the past few years, it might have been possible for the State and/or certain other PSPRS covered employers to issue long-term Pension Obligation Bonds (POB's) within the context of an arbitrage structure. The concept could be summarized as follows. First, POB's are sold at a relatively low interest rate (i.e. 6% or less); the interest rate would include the premium that would have to be paid, given that the interest to the bondholders would be taxable. Second, the proceeds, net of the cost of the bond sale, are placed in employer asset reserves managed and invested by PSPRS. Third, the System generates a rate of return on the employer reserve assets that is well in excess of the employers' debt service on the POB's and in line with the System's actuarial rate of return assumption. Fourth, the employers' debt service cost is offset against what the employers would otherwise owe the Plans by way of employer contributions (calculated as if the POB reserve accounts did not exist). Fifth, the employer account balances are taken into account in calculating the employer's future contribution requirement.

There are, of course, a number of financial risks and practical problems associated with any POB/arbitrage strategy. First, the employer entities must have the authority to issue POB's; otherwise, some means would have to be found whereby an entity authorized to issue such securities is also authorized to do so on behalf of, and for the benefit of, entities that do not have the authority (with an acceptable assignment of the responsibility for the consequences in the event the arbitrage strategy ultimately fails). Second, a POB initiative must not adversely affect the employer's credit rating. Third, the rate of return generated on the invested POB proceeds must be greater than the debt service on the bonds. (The ultimate success of such a strategy cannot be known for certain until the end of the bond period.) Fourth, the success of a POB sale presupposes the availability of a market for such securities (and a market at a time when a low interest rate environment prevails.) Finally, in order to minimize risk, the POB's could only be marketed, if the interest cost is significantly lower than the System's assumed rate of return. (Clearly, timing is important.)

Unfortunately, the window of opportunity for a POB initiative at a reasonably acceptable risk level has probably passed, given the Federal Reserve's action with respect to interest rates, and if not, such an initiative may not be feasible in the credit markets. But even if such an initiative were feasible, it would almost certainly encounter political resistance because, as a bond arbitrage strategy, it would entail both short and long-term risk.

C. Increase the PSPRS Plans' Rates of Return

1. Increase Total Return and/or Decrease Risk

The PSPRS Fund Manager may review the asset allocations of the Plans in order to determine whether the addition of new asset classes (for example, in-house managed hedge funds) or further exposure to certain asset classes (for example, private equity or real estate through in-house managed REIT portfolios or direct real estate investments into new types, such as commercial or multi-unit residential properties) or broader mandates for existing asset classes (for example, expanding equity securities selection to include international equities and emerging market equities) could increase the Plans' total return expectations, within acceptable risk parameters. In addition, or in the alternative, the Fund Manager may review the asset allocation of the Plans to determine whether it would be possible to further diversify away some of the existing risk level to improve the Plans' prospects for outperforming the assigned benchmarks and the actuarial assumed rate of return.

If it is deemed possible to achieve either or both objectives, then it would be necessary to determine whether the strategies designed to achieve these objectives can be accomplished in-house and, if so, what additional resources would be necessary for successful implementation. If the System had to make use of external money managers, specific statutory authorization would have to be secured.

D. Conclusion

Although many of the options set forth in the compilation have serious constitutional, political or practical constraints, there are some that may, depending on further actuarial and investment analysis and discussion, be found to have merit and have the potential to improve significantly the financial condition of the PSPRS-administered Plans. If so, the PSPRS Fund Manager may find it appropriate to act upon them (if they are within the control of the Fund Manager) or recommend them to the Plans' constituency groups and their representative organizations and to the Governor's Office and legislative policymakers.