

STATE OF ARIZONA

Joint Legislative Budget Committee

STATE
SENATE

ROBERT "BOB" BURNS
CHAIRMAN 2004
MARK ANDERSON
MARSHA ARZBERGER
TIMOTHY S. BEE
ROBERT CANNELL, M.D.
JACK W. HARPER
DEAN MARTIN
PETE RIOS

1716 WEST ADAMS
PHOENIX, ARIZONA 85007

PHONE (602) 542-5491

FAX (602) 542-1616

<http://www.azleg.state.az.us/jlbc.htm>

HOUSE OF
REPRESENTATIVES

RUSSELL K. PEARCE
CHAIRMAN 2003
ANDY BIGGS
MEG BURTON CAHILL
EDDIE FARNSWORTH
LINDA GRAY
STEVE HUFFMAN
JOHN HUPPENTHAL
LINDA J. LOPEZ

SUBCOMMITTEE ON RETIREMENT RATES

Thursday, October 21, 2004

1:30 p.m.

Senate Appropriations Room 109

- R E V I S E D -

MEETING NOTICE

- Call to Order
- 1. [JLBC STAFF - Overview of Arizona State Retirement System \(ASRS\) and Contributions Rates.](#)
- 2. ASRS - Presentation on Possible 2006-2007 Retirement Contribution Rate Increase.
- 3. Public Comment.

MEMBERS:

Senator Burns, Chairman
~~Senator Arzberger~~
Senator Martin
Senator Rios

Representative Huppenthal, Vice-Chairman
Representative Biggs
Representative Burton Cahill

The Chairman reserves the right to set the order of the agenda.
10/15/04

People with disabilities may request accommodations such as interpreters, alternative formats, or assistance with physical accessibility. Requests for accommodations must be made with 72 hours prior notice. If you require accommodations, please contact the JLBC Office at (602) 542-5491.



STATE OF ARIZONA

Joint Legislative Budget Committee

STATE
SENATE

ROBERT "BOB" BURNS
CHAIRMAN 2004
MARK ANDERSON
MARSHA ARZBERGER
TIMOTHY S. BEE
ROBERT CANNELL, M.D.
JACK W. HARPER
DEAN MARTIN
PETE RIOS

1716 WEST ADAMS
PHOENIX, ARIZONA 85007

PHONE (602) 542-5491

FAX (602) 542-1616

<http://www.azleg.state.az.us/jlbc.htm>

HOUSE OF
REPRESENTATIVES

RUSSELL K. PEARCE
CHAIRMAN 2003
ANDY BIGGS
MEG BURTON CAHILL
EDDIE FARNSWORTH
LINDA GRAY
STEVE HUFFMAN
JOHN HUPPENTHAL
LINDA J. LOPEZ

DATE: October 5, 2004

TO: Senator Marsha Arzberger
Senator Dean Martin
Representative Andy Biggs
Representative Meg Burton Cahill
Representative John Huppenthal

FROM: Senator Bob Burns, Chairman

SUBJECT: JLBC SUBCOMMITTEE ON RETIREMENT RATES

The Arizona State Retirement System is planning a significant increase in the employer and employee contribution rate for fiscal years 2006 and 2007. This topic will likely be a significant issue during the upcoming session. As a result, I have created a Subcommittee of the Joint Legislative Budget Committee to learn more about the proposed contribution rate.

I am appointing you to serve as a member of the Subcommittee. I will chair the Subcommittee and Representative Huppenthal will serve as vice-chairman. The Subcommittee will meet on October 21st at 1:30 p.m. in the Senate Appropriations Room.

Please contact Eric Jorgensen of the JLBC Staff (602-542-5491) if you have any questions about your involvement with the Subcommittee. Thank you for your participation.

RB:ck

xc: Speaker of the House Jake Flake
Senate President Ken Bennett
Representative Russell Pearce, Vice-Chair
Richard Stavneak, Director

STATE OF ARIZONA

Joint Legislative Budget Committee

STATE
SENATE

ROBERT "BOB" BURNS
CHAIRMAN 2004
MARK ANDERSON
MARSHA ARZBERGER
TIMOTHY S. BEE
ROBERT CANNELL, M.D.
JACK W. HARPER
DEAN MARTIN
PETE RIOS

1716 WEST ADAMS
PHOENIX, ARIZONA 85007

PHONE (602) 542-5491

FAX (602) 542-1616

<http://www.azleg.state.az.us/jlbc.htm>

HOUSE OF
REPRESENTATIVES

RUSSELL K. PEARCE
CHAIRMAN 2003
ANDY BIGGS
MEG BURTON CAHILL
EDDIE FARNSWORTH
LINDA GRAY
STEVE HUFFMAN
JOHN HUPPENTHAL
LINDA J. LOPEZ

DATE: October 13, 2004

TO: Senator Bob Burns, Chairman
Members, JLBC Subcommittee on Retirement Contribution Rates

THRU: Richard Stavneak, Director

FROM: Eric Jorgensen, Fiscal Analyst

SUBJECT: JLBC Staff/Arizona State Retirement System – Increase in Retirement Contribution Rates

The Arizona State Retirement System (ASRS) has indicated that the current retirement contribution rate is insufficient to meet the obligations of the retirement plan and therefore needs to be increased for FY 2006. JLBC Staff has worked with ASRS to provide background and details on the rate increase.

Retirement contribution rates for employers and employees are projected to increase to 7.75% in FY 2006 from the current 5.2% in FY 2005. Long Term Disability rates remain at 0.5%. The estimated cost to state General Fund agencies is approximately \$22 million.

Given the magnitude of the potential increase in retirement rates, Senator Burns has appointed a subcommittee of the JLBC to explore this issue in more depth.

Attached you will find background material on this subject. The first [attachment](#) is a slide show presentation prepared by JLBC Staff. It provides general information on the Arizona State Retirement System and how its retirement rates are set.

The second attachment was prepared by ASRS. This document explains the reasons for the increase in the retirement rate.

Please let us know if you have any questions.

RS/EJ:ck
Attachments

JLBC Subcommittee on Retirement Contribution Rate

Overview of the Arizona State Retirement System
and the Causes and Implications
of Contribution Rate Increases

21 October 2004

Topics

- How ASRS works
- How rates are calculated
- Funding the increase

How ASRS Works

- ASRS is a defined benefit pension system.
- The employer commits to the amount of the ultimate benefit to be paid.
- The employer and the employee must contribute an amount sufficient to deliver that commitment.
- The employer's ultimate cost is equal to the total benefits paid out minus plan earnings on investments minus employee contributions.

How ASRS Works

Qualification for Benefits

- Members are eligible for normal retirement at the occurrence of the one of the following:
 - Age 65
 - Age 62 (with 10 years of service)
 - Any combination of age and years of service equal to 80
 - 55 years old with 25 years of service ($55 + 25 = 80$)
 - 49 years old with 31 years of service ($49 + 31 = 80$)
- Early retirement is available with a reduced benefit for members 50 and above with at least 5 years of service.

How ASRS Works

Benefits

- The benefit is defined by the system's formula:
 - Years of Service x Multiplier x Average Salary
 - Multiplier:

- Based on years of service

0.00 to 19.99 years of service	2.10%	0.0210
20.00 to 24.99 years of service	2.15%	0.0215
25.00 to 29.99 years of service	2.20%	0.0220
30.00 or more years of service	2.30%	0.0230

- Average Salary - Average monthly salary for highest 36 consecutive months.
- The member cannot make additional contributions to the retirement fund because the member's balance does not affect the retirement benefit

How ASRS Works

Benefits

- Because the benefit is determined by formula, the member can easily predict future benefit amounts with certain assumptions.
- Example:
 - An employee works for 10 years, then retires. She made \$35,000 for each of the last three years, which were her years of highest pay.
 - $10 \text{ years} \times 0.0210 \times \$2916.67/\text{mo.} =$
\$612.50 monthly pension payment

How ASRS Works

Increasing the Benefits

- Permanent Benefit Increase (PBI)
 - When the Actuarial Value of the assets exceeds 8%, the excess earnings are set aside for benefit payment increases.
 - Only assets tied to benefit payments for current retirees are used in calculating the PBI. Other assets fund the surplus.
 - Used to provide a type of “Cost of Living Adjustment”
 - Not tied to inflation.
- Enhanced PBI
 - Paid from interest on the excess earnings.

How ASRS Works

Cost of the System

- The employer assumes the investment risk.
 - The greater the plan's investment earnings, the lower the employer (and the employee) contribution rate.
 - The less the fund earns, the more the employer (and the employee) must contribute.
- The employer's obligation is not complete until the last benefit recipient dies.
- The State of Arizona is ultimately responsible for payment of ASRS benefits.

Defined Benefit vs. Defined Contribution

- A defined contribution system is different from the ASRS system.
- Employers are only responsible to make a contribution based on a fixed rate, determined by the terms of the plan.
- Once employer makes the contribution, employer has no more liability.
- Employee assumes risk.

How Rates are Calculated:

Making sure assets cover liabilities

- Because the employer is ultimately responsible for proving the benefit in a defined benefit plan, the contribution rate must be set high enough to collect the required assets to cover liabilities.
- When assets are sufficient to cover the liabilities (benefit payment obligations), the system is considered to be 100% funded.
- As of July 1, 2003 ASRS was funded at 96.8% of it's actuarial liabilities.
- Funding levels are expected to decrease over several years as losses are realized.

How Rates are Calculated:

- Contribution rates depend on the cost of the system.
- System costs have two components:
 - Normal Costs
 - Unfunded Actuarial Accrued Liability (UAAL)

How Rates are Calculated:

Normal Cost

- The normal cost is the present value of the benefits the employer will have to pay that the employee earned by participation in the system in this year.
- Present value is the amount that will need to be invested now to provide a given amount at some future point. (i.e. to get \$1000 in five years, you could invest \$683 at 10% now -- thus the present value of the \$1000 in five years is \$683).

How Rates are Calculated:

Normal Cost

- Assumptions that the actuary has to make:
 - Investment returns
 - Payroll growth
 - Employee population growth
 - Retirement Rates
 - Promotional/Step Pay increases
 - Disability
 - Turnover
 - Mortality

How Rates are Calculated:

Unfunded Actuarial Accrued Liability (UAAL)

- Is the negative difference between actuarial assets and actuarial liabilities.
- In other words, it is all the liability (benefit payments) the system has committed to make over its history that cannot be met by the current resources and future earnings of the system at the date those benefits are due.
- If assets exceed liabilities, there is a surplus.
- The recovery cost of the UAAL is spread over 30 years. (i.e. it takes 30 years to pay off the debt, all else equal)

Issues with Unfunded Liability

- Unfunded liability becomes problematic if:
 - No systematic progress is being made to pay off the unfunded portion over a reasonable time.
 - There is a consistent downward trend in the funding status of the plan.
- There is an additional cost associated with unfunded liability (above the normal cost).
 - 0.45% calculated rate increase in FY 2003
- Constitutional Limitation: “Membership in a public retirement system is a contractual relationship that is subject to article II, section 25, and public retirement system benefits shall not be diminished or impaired.” Article XXIX, Section 1(C)

How Rates are Calculated:

What changes the rate?

- Benefit enhancements
- Changing demographic assumptions (i.e. when employees retire, life expectancy, salary growth, etc.)
- Investment returns
 - Under assumed 8% causes increases
 - Over 8% provides decreases
- Plan Administration
 - New or updated system rules
 - Administrative costs

Cost of the New Rate

General Fund

- The cost to state General Fund agencies of the additional 2.55% contribution is about \$22 million. This is the cost to employers of the rate increase.
- ADOA indicated that the Governor would seek funding to make sure employee take-home pay would not change.
 - If this is done through a salary increase, it would cost an additional \$26 million (including ERE for salary increase).
 - Total cost: \$48 million.

Cost of the New Rate

Public School Teachers

- As most public school districts in the state also participate in ASRS, this increase will also affect district funds.
- The cost to teachers and their employers will be about \$51M each.



ARIZONA STATE RETIREMENT SYSTEM

3300 NORTH CENTRAL AVENUE • PO BOX 33910 • PHOENIX, AZ 85067-3910 • PHONE (602) 240-2000
7660 EAST BROADWAY BOULEVARD • SUITE 108 • TUCSON, AZ 85710-3776 • PHONE (520) 239-3100
TOLL FREE STATE WIDE 1-800-621-3778

Paul Matson
Director



September 29, 2004

The attached information was prepared by ASRS staff and provides detailed explanation of factors that affect contribution rates for the ASRS Defined Benefit Plan.

These are preliminary figures. The ASRS Board of Trustees is expected to finalize contribution rates for fiscal years 2005-06 and 2005-07 at its November Board meeting.

Should you have questions or need additional information, please don't hesitate to contact us.

Richard Stephenson
Deputy Director, External Affairs
(602) 240-2028

Denisse Gee
Government Relations Officer
(602) 240-2027



Arizona State Retirement System

3300 North Central Avenue, Phoenix, AZ 85012

WWW.ASRS.STATE.AZ.US

Fact Sheet

Information:
(602) 240-2016

INVESTMENT RETURNS

The Arizona State Retirement System employs a broad-based, long-term asset allocation strategy designed to produce a steady return over time. The ASRS Board of Trustees has set the following asset allocation mix: 53 percent in U.S. stocks; 26 percent in fixed income, or bonds; 15 percent in international equities, and 6 percent in real estate.

Below are rates of return on the overall portfolio, as well as specific asset classes, along with the benchmarks used to compare performance. (Real estate is a newly-approved class with actual investments pending.)

Annualized Rates of Return for fiscal year 2003-04 Period ending June 30, 2004

	1 Year	3 Year	5 Year	10 Year
ASRS Total Fund	17.5%	3.3%	2.5%	10.3%
ASRS U.S. Equity	22.2%	0.7%	(0.5%)	12.3%
S&P 500 Index	19.1%	(0.7%)	(2.2%)	11.8%
ASRS U.S. Fixed Income	0.2%	6.3%	6.9%	7.7%
Lehman Aggregate Index	0.3%	6.4%	6.9%	7.4%
ASRS International Equity	34.3%	4.7%	3.4%	6.4%
EAFE Index	32.9%	4.3%	0.4%	2.3%

Fiscal Year Annualized Rates of Return

Fiscal Year	Return	Fiscal Year	Return
2003-04	17.5%	1991-92	14.6%
2002-03	2.4%	1990-91	8.0%
2001-02	(8.2%)	1989-90	9.5%
2000-01	(6.7%)	1988-89	14.3%
1999-00	10.0%	1987-88	3.1%
1998-99	16.8%	1986-87	11.8%
1997-98	21.3%	1985-86	31.5%
1996-97	20.6%	1984-85	32.1%
1995-96	16.7%	1983-84	(5.2%)
1994-95	17.8%	1982-83	40.3%
1993-94	1.9%	1981-82	2.4%
1992-93	16.7%	1980-81	5.0%

August 2004

Arizona State Retirement System

Retirement Contribution Rate Factors

NOTES:

- > The numbers below reflect factors that affect the ASRS defined benefit plan contribution rate and are estimates as of September 2004. The final actuarial valuation and final numbers are expected in November 2004.
- > Only benefit enhancements enacted in 2000 through 2004 are presented below. Benefit enhancements granted from 1990 through 2004, in the aggregate, account for a 40-percent increase in the Normal Cost of the total pension benefits.
- > Since 1990, the net effect of investments has resulted in an average annual savings on contribution rates of 0.52%.
- > All contribution rates below represent the amount paid by each the employer and employee.

2002 Plan Contribution Rate	Totals 2.00%
FY01 & FY02 Plan Experience plus Effect of Investment Gains & Losses	+1.91%
Effect of ASRS Board Actions, including Change of Phase-in Period to 10 Years	-0.91%
Effect of FY01 & FY02 Benefit Enhancements on FY04 Contribution Rates:	
Permanent Benefit Increase (PBI) for Retirees	+0.21%
July 1, 2001 Retiree Enhanced PBI and Reserve	+0.17%
Graded Multiplier Increase	+1.06%
Employer Option Service Purchase	+0.03%
Increased Monthly HI Premium Benefits	+0.55%
Change in Statutory Increase in Funding Period	+0.18%
Subtotal	+3.20%
Total Estimated Pension Plan Contribution Rate FY04 thru FY05, effective 7/01/03	5.20%
2003 Actual Plan Contribution Rate	5.20%
Effect of FY03 Investment Gains & Losses, and Recognition of Investment Losses not recognized prior to 7/1/03	+0.83%
Adoption of new Mortality Tables	+0.65%
Delay in increase of Contribution Rate pursuant to ARS 38-797.06	+0.31%
Change in Funding period to 30-year Amortization	-0.06%
Extension of Rural Health Insurance Subsidy for two years	+0.03%
Subtotal	+1.76%
2003 Projected Plan Contribution Rate per 2003 Actuarial Valuation	6.96%
(By state statute, ASRS contribution rates are set every two years; therefore, the 2003 actuarial rate of 6.96% was not implemented and the rate remained 5.20%.)	
2004 Projected Plan Contribution Rate per 2004 Actuarial Valuation	
(Final Actuarial numbers due to Board, December 2004)	
Effect of Recognition of Investment Losses not recognized in previous years	+0.96%
Effect of FY04 Investment Gains & Losses	-0.08%
Adjustment to PBI Reserve for Allocations in FY01 & FY02	-0.02%
Change in Service Purchase Cost Calculation to Actuarial Present Value	-0.17%
Subtotal	+0.69%
2005 Actuarially Projected Plan Contribution Rate	7.65%
Change in Interest Accrual Rate on Member Account Balances from 8% to 4%	-0.15%
ASRS Projected Plan Contribution Rate FY06 & FY07, effective July 1, 2005	7.50% to 7.75%

Summary	
Current Contribution Rate (FY04 & FY05)	5.20%
Effect of ARS 38-797.06	+0.31%
Effect of Gains & Losses on Investments	+1.71%
Demographic Changes (adoption of new mortality tables)	+0.65%
FY03 & FY04 statutory changes and ASRS administrative changes	-0.37%
Projected Contribution Rate (FY06 & FY07)	7.50% to 7.75%

Arizona State Retirement System

Explanation of Factors Contributing to Rate Change

2002

FY01 & FY02 Plan Experience plus Effect of Investment Gains & Losses – Plan Experience includes demographic experience of ASRS members (rates of pay increase, termination, disability, retirement, and death, along with recognition of investment returns for FY01 and FY02. Any return less than the actuarially assumed rate of 8% creates upward pressure on contribution rates.

Effect of ASRS Board Actions, including Change of Phase-in Period to 10 Years – Following an analysis and recommendation of the actuary, the Board took actions at its Nov. 15, 2002, meeting that included prospectively changing the period used to phase-in investment gains and losses to 10 years, rather than the previous period of 5 years. The effect is to “smooth” rate adjustments over a longer period and to minimize short-term effects of volatile capital markets on contribution rates.

Permanent Benefit Increase (PBI) for Retirees – Excess Investment Earnings Cost of Living Adjustment (COLA) granted to retirees by legislation passed during the 1994 legislative session (Laws 1994, Chap. 357). Retirees who have been retired at least 11 months and members on Long Term Disability are eligible to receive this COLA. The COLA is paid from a reserve of excess investment earnings. If there are no excess investment earnings in the reserve, no COLA will be granted. The name was changed from COLA to Permanent Benefit Increase (PBI) in 1999.

July 1, 2001 Retiree *Enhanced* PBI & Reserve – A provision of SB 1295* provided that interest at a rate of 8% be credited on the funds held in reserve for the Permanent Benefit Increase (PBI). This interest will then be used to fund an additional increase for retirees who have at least 10 years of service and who have been retired for at least 5 years. The increase is incremental for each five years since retirement up to 30 years. The first payment of this benefit was made July 1, 2001.

Graded Multiplier Increase – A provision of SB 1295* provided a graded multiplier in the retirement benefit formula, increasing with years of service beginning at 2.1% to a maximum of 2.3% after 30 years of service. The provision applied prospectively to members retiring after the passage of the legislation.

Employer Option Service Purchase – A provision of SB 1295* (Modified DROP) permits an employer to offer a member who is eligible to retire at normal retirement a contract to work up to 36 additional months. No contributions are made to ASRS during the contract. If a member completes the contract and purchases an amount of time equal to the time worked, the member receives an additional amount of service credit equal to the amount of time purchased.

Increased Monthly Health Insurance Premium Benefits

- A provision of HB 2164** increased the health insurance premium benefit for eligible members. The benefit for Medicare eligible members increased from \$65 to \$100. The benefit for non-Medicare eligible members increased from \$95 to \$150. Additional increases were approved for family coverage.
- A provision of SB 1107*** provided a temporary Rural Health Insurance Premium Benefit for members living in an HMO non-service area of the state. The benefit provides an additional \$170 to Medicare eligible members and \$300 additional for non-Medicare eligible members. Additional increases were approved for family coverage.

2003

FY03 Investment Gains & Losses, and Recognition of Investment Losses not Recognized Prior to July 1, 2003 – Recognition of lower than expected investment returns for FY02 and FY03. Any return less than the actuarially assumed rate of 8% creates upward pressure on contribution rates.

Adoption of New Mortality Table – Change in assumptions by adoption of new mortality table as a result of an ASRS Board action and rule adoption. With the completion of the most recent five-year experience study, the actuary recommended that ASRS use a mortality table that assumes longer life expectancies of ASRS members.

Delay in Increase to Contribution Rate – Pursuant to A.R.S. §38-797.06, actuarial valuations in even-numbered years determine the contribution rate for the following biennial period. For example, the rate determined in July 1, 2004, valuation will become effective on July 1, 2005. When contribution rates are rising because of recent investment losses, this delay in implementing the new rate creates an additional actuarial loss due to continuing the lower rate from the July 1, 2002, valuation for another year.

Change in Funding Period to 30-Year Amortization – In 1994, the Arizona State Legislature determined that if the ASRS funding status dropped below 100%, the amortization period for funding should be changed immediately to a rolling 30-year period. The ASRS Plan first experienced a deficit on July 1, 2003, and the amortization period then changed to 30 years. Prior to that, the amortization period was gradually lengthening pursuant to A.R.S. §38-737(D).

Rural Health Insurance Premium Benefits

- A provision in HB2349**** extended the temporary rural health insurance premium supplement for an additional two years through June 30, 2005.
- A provision in SB1037***** provided a temporary rural health insurance premium supplement for a contingent annuitant of an ASRS member who lives in an HMO non-service area of the state.

2004

Effect of Recognition of Investment Losses not Recognized in Previous Years - Following an analysis and recommendation of the actuary, the Board took actions at its Nov. 15, 2002, meeting that included changing the period used to phase-in investment gains and losses to 10 years, rather than the previous 5-year period. The effect is to “smooth” rate adjustments over a longer period and to minimize the short-term effects of volatile capital markets on contribution rates.

Effect of FY04 Investment Gains & Losses – Recognition of FY04 rate of return on market assets (estimated gain 17.5%), smoothed over a 10-year period.

Adjustment to PBI Reserve Allocations in FY01 – Adjusted addition to PBI pool in FY01, and corrected Enhanced PBI benefits paid in FY02 and FY03.

Change in Service Purchase Cost Calculation – A provision in HB2029***** changed the cost calculation to purchase service from normal cost to Actuarial Present Value (APV). This change ensures that the cost of the additional benefit that a member receives by purchasing service is borne by that individual member, rather than subsidized by all members and employers. The APV cost method uses actuarial factors specific to the member purchasing the service instead of applying one factor to all members purchasing service.

2005

Change in Interest Accrual Rate on Member Account Balances – Current member account balances accrue interest at a rate of 8%; the ASRS Board took action in its meeting in August of 2004 to reduce this interest rate to 4%, effective July 1, 2005. This change applies only to balances refunded to members who withdraw from service.

- * SB 1295: Senate Bill 1295, passed by the Arizona State Legislature during the 2001 Regular Session (Laws 2001, Chap. 380).
- ** HB 2164: House Bill 2164, passed by the Arizona State Legislature during the 2001 Regular Session (Laws 2001, Chap. 383).
- *** SB 1107: Senate Bill 1100, passed by the Arizona State Legislature during the 2001 Regular Session (Laws 2001, Chap. 376).
- **** HB 2349: House Bill 2349, passed by the Arizona State Legislature during the 2003 Regular Session (Laws 2003, Chapter 132).
- ***** SB1037: Senate Bill 1037, passed by the Arizona State Legislature during the 2004 Regular Session (Laws 2003, Chapter 171).
- ***** HB2024: House Bill 2029, passed by the Arizona State Legislature during the 2004 Regular Session (Laws 2004, Chapter 87E).