

Utah Retirement System

ACTUARIAL VALUATION
January 1, 2001



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(Temporary until 11/1/01)

October 25, 2001

Utah State Retirement Board
540 East 200 South
Salt Lake City, UT 84102

Dear Members of the Board:

Subject: Actuarial Valuation as of January 1, 2001

This report describes the current actuarial condition of the Utah Retirement Systems (URS), determines the recommended employer contribution rates, and analyzes changes in these contribution rates. Valuations are prepared annually, as of January 1, the first day of the URS plan year.

Under URS statutes, employer contribution rates are certified annually by the Board of Trustees. These rates are determined actuarially, based on the Board's funding policy. Contribution rates determined by a given actuarial valuation become effective eighteen months after the valuation date. For example, the rates determined by this January 1, 2001 actuarial valuation will be used by the Board when certifying the employer contribution rates for the year beginning July 1, 2002 and ending June 30, 2003. If new legislation is enacted between the valuation date and the date the contribution rates become effective, the Board may adjust the recommended rates before certifying them, in order to reflect this new legislation. Such adjustments are based on information supplied by the actuary.

Financing objectives and funding policy

In setting contribution rates, the Board's principal objectives have been:

- to set rates so that the unfunded actuarial accrued liability (UAAL) will be amortized over a 20-year period from the current valuation date
- to set rates so that they remain relatively level over time.

To accomplish this, the Board's funding policy requires that the employer contribution rate be at least equal to the sum of the employer normal cost rate (which pays the current year's cost) and an amortization rate which results in the amortization of the UAAL over twenty years in installments which increase at the assumed rate of growth in payroll for URS. The current assumed rate of growth in payroll for URS is 3.00%, the assumed inflation rate.

No membership growth is anticipated in setting the contribution rate. Using an inflation-only payroll growth rate is consistent with GASB 25, which prohibits anticipating future membership growth in determining the minimum ARC.

Under this policy, the objectives of maintaining relatively level contribution rates over time are achieved.

Progress toward realization of financing objectives

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) is a standard measure of a plan's funded status. In the absence of benefit improvements, it should increase over time, until it reaches 100%. The funded ratio for most of the funds in URS increased since the last valuation, except for Logan and Other Division B of the Public Safety System, which were already above 100%, and Division A of the Firefighters System. The decrease in the funded ratio for the Division A Firefighters is a result of the transfer of the Sandy City firefighters from Division A to Division B. In the absence of this transfer the funded ratio would have increased.

For all systems combined, the funded ratio increased from 102.9% to 104.7%. Three-fourths of the individual funds have ratios over 100%, and only the 3% Substantial Substitute Fund and the Salt Lake City Noncontributory Public Safety Fund have funded ratios less than 90%. In 1990, the funded ratio for all systems combined was 76.9%, so significant progress has been made over the last eleven years, even though a number of benefit increases have been granted during that time, and even though the 3% substantial substitute was added as a URS liability. Without the 3% substantial substitute, the overall funded ratio would have been 107.2%.

Benefit provisions

The benefit provisions reflected in this valuation are those which were in effect on January 1, 2001, or which were adopted by the end of the 2001 legislative session and are effective on or before July 1, 2002.

Only one change was made to the provisions since the preceding valuation:

- The Legislature increased benefits for certain retirees of the Public Employees Retirement System who had service prior to July 1, 1967. Those retirees whose benefits were calculated with a 1.1% multiplier for their service prior to July 1, 1967 had their benefits recalculated with a 1.25% multiplier for their service prior to July 1, 1967.

Assumptions and methods

Actuarial assumptions and methods used in the valuation are set by the Board, based upon the recommendations of the actuary. The actuary reviews actual plan experience before making these recommendations. Changes in the salary scale assumption and the post-retirement mortality assumption are being recommended. Please see page 11 of the Discussion section of this report for a complete description of the changes to the actuarial assumptions. It is our opinion that the assumptions are internally consistent and are reasonably based on past and anticipated future experience of the System.

Data

Member data for retired, active and inactive members was supplied as of December 31, 2000 by the System's staff. We did not audit this data, but we did apply a number of tests to the data, and we concluded that it was reasonable and consistent with the prior year's data. Asset information as of December 31, 2000 was supplied by the System's staff.

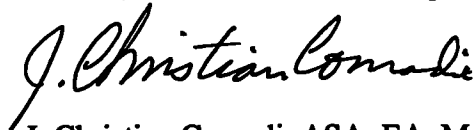
Certification

We certify that the information presented herein is accurate and fairly portrays the actuarial position of URS as of January 1, 2001.

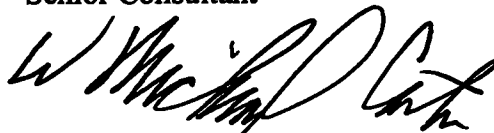
All of our work conforms with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of Utah state law and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board. The undersigned are independent actuaries. Both are Enrolled Actuaries and Members of the American Academy of Actuaries, and both are experienced in performing valuations for large public retirement systems.

Sincerely,

Gabriel, Roeder, Smith & Company



J. Christian Conradi, ASA, EA, MAAA
Senior Consultant



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Appendix 1 — Statement of Actuarial Assumptions and Methods

Appendix 2 — Summary of Principal Plan Provisions

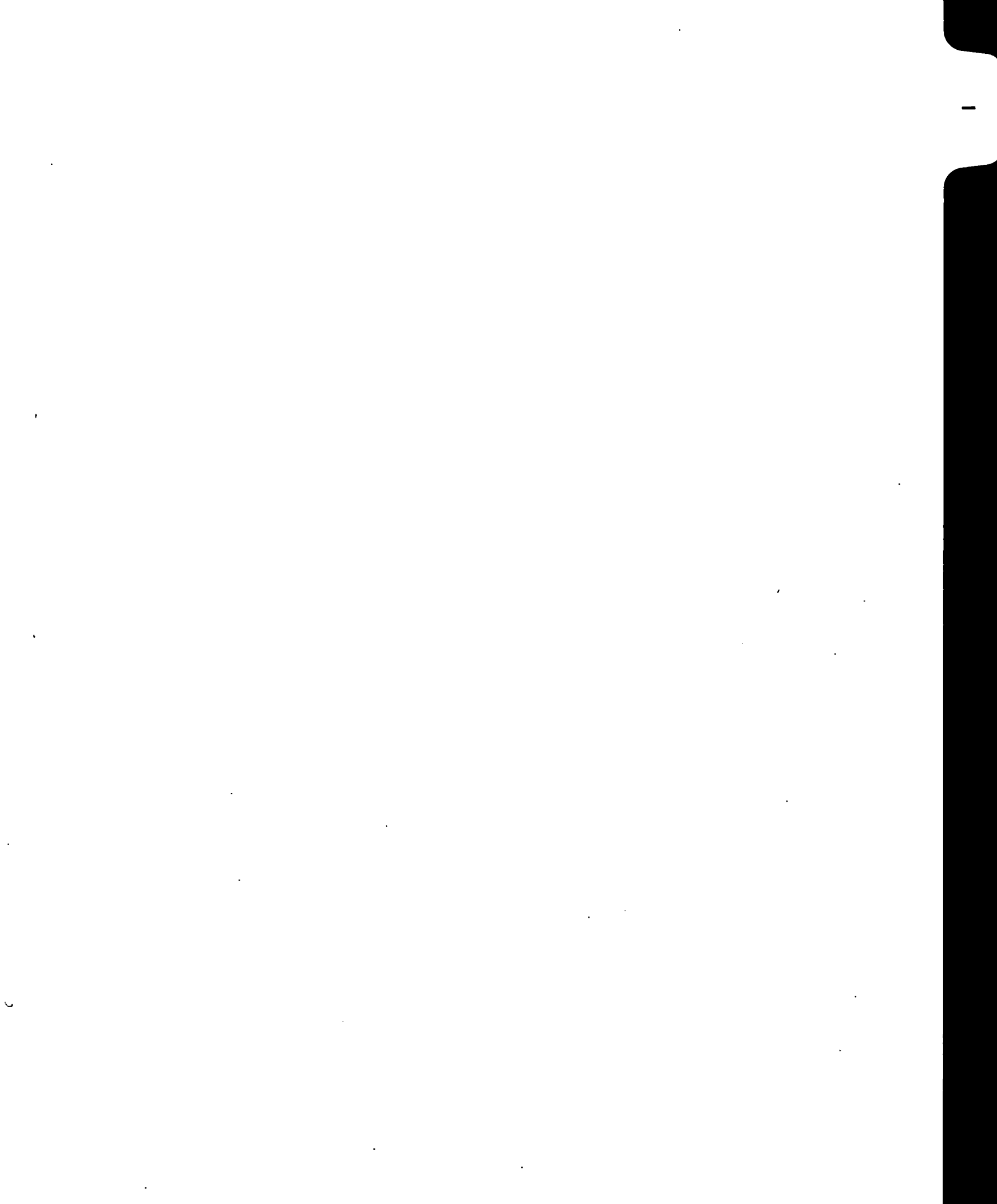
Public Employees Retirement Systems (Contributory and Noncontributory)

Public Safety Retirement Systems (Contributory and Noncontributory)

Firefighters Retirement System

Judges Retirement System

Governors and Legislative Pension Plan



Executive Summary and Contribution Requirements

- Exhibit A (next following) shows the new, recommended contribution rates
 - Rates include funding for 3% substantial substitute
 - Rates do not include 1.50% 401(k) contribution
 - Offsets for Firefighters System and Judges System are shown
- Rates shown on Exhibit A, column 6 are recommended rates for the twelve-month period beginning July 1, 2002
 - Rates may need to be adjusted for the effect of 2002 legislation, if material
- Exhibit B (following Exhibit A) reconciles the recommended 2000 and 2001 rates
- Change to benefit provisions was reflected
 - Certain retirees of the Public Employees Retirement System had their benefit recalculated using a 1.25% multiplier for their service prior to July 1, 1967
 - Impact shown on Exhibit B, column 7
- Recommend adoption of new assumptions
 - A 0.25% increase in the General Increase component of the salary scale for all Systems other than the Judges Retirement System and the Governors and Legislative Pension Plan
 - New mortality rates for healthy retired members, these changes provide more margin for future mortality improvement
 - See Page 11 of the Discussion section for a complete description of changes in the actuarial assumptions and the impact of those changes
- Amortization payments based on:
 - 20-year funding period
 - Contributions increase as level percentage of pay
 - Total payroll increases 3.0% per year, the assumed inflation rate
 - No future growth in the number of active members is taken into account

- Plan experienced an asset gain which improved actuarial status of funds
 - Impact on contribution rates shown on Exhibit B, column 4
 - Although investments are commingled, the impact of the gain on each fund's contribution rate depends on ratio of the amount of assets to compensation
 - There was an actuarial gain, despite a market return of less than the assumed 8.00% return, because prior market gains are still being recognized in the actuarial value of assets
- Employer contribution rates decreased for most units, principally because of the asset gain. Some of the units had increases in their contribution rates primarily due to the modification of the actuarial assumptions.
- The one-year term cost for the 75% group life insurance benefit in the Public Employees Systems remained the same (0.09%). It has been set 3-4 basis points less than the actual one-year term cost in order to offset excessive reserves accrued as of the latest year at PEHP.
- Since Ogden (Fund 25) in the Contributory Public Safety System no longer has any active members, we combined all assets and liabilities for this system under Fund 45 in the Noncontributory Public Safety System.
- The rate shown for the Judges System is for the noncontributory system. The employer contribution rate for the contributory system is 8.00 percentage points less.
- As for the past several years, no contribution is recommended for the Governors and Legislative Pension Plan.

Comparison of Recommended Contribution Rates

Fund/Division (1)	2000 Valuation Results			2001 Valuation Results 2002-2003 Proposed Rates		
	Member	Employer	Total	Member	Employer	Total
	(2)	(3)	(4)	(5)	(6)	(7)
I. Public Employees Contributory						
A. Local Government	6.00%	4.17%	10.17%	6.00%	4.68%	10.68%
B. State and School	6.00%	5.87%	11.87%	6.00%	5.75%	11.75%
II. Public Employees Noncontributory						
A. Local Government	0.00%	8.18%	8.18%	0.00%	8.69%	8.69%
B. State and School	0.00%	10.36%	10.36%	0.00%	10.24%	10.24%
III. Public Safety Contributory						
A. State	12.29%	8.81%	21.10%	12.29%	8.05%	20.34%
B. Other Division A	12.29%	2.41%	14.70%	12.29%	2.17%	14.46%
C. Salt Lake City	13.74%	18.21%	31.95%	13.74%	15.50%	29.24%
D. Provo	13.54%	9.72%	23.26%	13.54%	9.47%	23.01%
E. Logan	11.13%	2.93%	14.06%	11.13%	3.66%	14.79%
F. Other Division B	10.50%	6.43%	16.93%	10.50%	7.34%	17.84%
IV. Public Safety Noncontributory						
A. State	0.00%	19.68%	19.68%	0.00%	18.94%	18.94%
B. Other Division A	0.00%	14.08%	14.08%	0.00%	13.89%	13.89%
C. Salt Lake City	0.00%	30.72%	30.72%	0.00%	28.27%	28.27%
D. Ogden	0.00%	21.06%	21.06%	0.00%	17.98%	17.98%
E. Bountiful	0.00%	19.03%	19.03%	0.00%	17.41%	17.41%
F. Other Division B	0.00%	16.75%	16.75%	0.00%	17.66%	17.66%
V. Firefighters						
A. Division A						
1. Gross Rate	15.05%	0.00%	15.05%	15.05%	1.65%	16.70%
2. Less Estimated Offset	<u>-8.28%</u>	<u>0.00%</u>	<u>-8.28%</u>	<u>-7.23%</u>	<u>-1.65%</u>	<u>-8.88%</u>
3. Net Rate	6.77%	0.00%	6.77%	7.82%	0.00%	7.82%
B. Division B						
1. Gross Rate	16.71%	0.00%	16.71%	16.71%	0.00%	16.71%
2. Less Estimated Offset	<u>-8.28%</u>	<u>0.00%</u>	<u>-8.28%</u>	<u>-8.88%</u>	<u>0.00%</u>	<u>-8.88%</u>
3. Net Rate	8.43%	0.00%	8.43%	7.83%	0.00%	7.83%
VI. Judges						
A. Gross Rate	0.00%	24.48%	24.48%	0.00%	23.32%	23.32%
B. Less Estimated Offset	<u>-0.00%</u>	<u>-18.93%</u>	<u>-18.93%</u>	<u>-0.00%</u>	<u>-18.40%</u>	<u>-18.40%</u>
C. Net Rate	0.00%	5.55%	5.55%	0.00%	4.92%	4.92%
VII. Governors and Legislative	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Analysis of Changes in Target Rates

Fund/Division (1)	Rate From Jan. 1, 2000 Valuation (2)	Changes Due To								Recommended Rate (11)
		Payroll Growth (3)	Investment Return (4)	Liabilities (5)	Actuarial Assumptions (6)	Legislation (7)	Asset Transfers (8)	3% Substantial Substitute (9)	Act. vs Exp. Contributions (10)	
I. Public Employees Contributory										
A. Local Government	4.17%	0.00%	-1.17%	0.07%	1.11%	0.16%	0.52%	0.00%	-0.18%	4.68%
B. State and School	5.87%	0.03%	-2.29%	-0.03%	1.21%	0.70%	0.54%	-0.02%	-0.26%	5.75%
II. Public Employees Noncontributory										
A. Local Government	8.18%	0.07%	-0.63%	0.29%	1.07%	0.00%	-0.05%	0.00%	-0.24%	8.69%
B. State and School	10.36%	0.02%	-0.90%	0.13%	0.99%	0.01%	-0.02%	-0.02%	-0.33%	10.24%
III. Public Safety Contributory										
A. State	8.81%	0.01%	-18.42%	3.30%	2.45%	0.00%	12.35%	-0.02%	-0.43%	8.05%
B. Other Division A	2.41%	-0.08%	-2.50%	-0.09%	0.88%	0.00%	1.90%	0.00%	-0.35%	2.17%
C. Salt Lake City	18.21%	-3.76%	-158.29%	-19.81%	7.04%	0.00%	171.99%	0.00%	0.12%	15.50%
D. Provo	9.72%	-0.13%	-1.11%	0.46%	0.83%	0.00%	0.00%	0.00%	-0.30%	9.47%
E. Logan	2.93%	0.23%	-1.26%	1.32%	0.86%	0.00%	0.00%	0.00%	-0.42%	3.66%
F. Other Division B	6.43%	0.06%	-0.70%	1.12%	0.85%	0.00%	-0.12%	0.00%	-0.30%	7.34%
IV. Public Safety Noncontributory										
A. State	19.68%	0.03%	-1.02%	0.05%	0.82%	0.00%	-0.17%	-0.02%	-0.43%	18.94%
B. Other Division A	14.08%	0.31%	-0.80%	0.22%	0.80%	0.00%	-0.32%	0.00%	-0.40%	13.89%
C. Salt Lake City	30.72%	0.08%	-0.88%	-1.30%	0.85%	0.00%	-0.87%	0.00%	-0.33%	28.27%
D. Ogden	21.06%	0.03%	-2.07%	-1.61%	0.88%	0.00%	0.00%	0.00%	-0.31%	17.98%
E. Bountiful	19.03%	0.01%	-1.64%	-0.51%	0.86%	0.00%	0.00%	0.00%	-0.34%	17.41%
F. Other Division B	16.75%	0.19%	-0.56%	0.75%	0.81%	0.00%	0.05%	0.00%	-0.33%	17.66%
V. Firefighters										
A. Division A	-1.80%	1.51%	-0.99%	1.36%	0.90%	0.00%	1.37%	0.00%	-0.70%	1.65%
B. Division B	-1.38%	0.02%	-2.20%	0.53%	0.99%	0.00%	-0.21%	0.00%	-0.86%	-3.11%
VI. Judges	24.48%	-0.13%	-1.80%	-0.51%	1.99%	0.00%	0.00%	-0.02%	-0.69%	23.32%
VII. Governors and Legislative	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes: Rates shown as of Jan. 1, 2000 do not include adjustments for 2000 legislation
Rates shown include contribution for 3% Substantial Substitute, if applicable
Rates shown do not include the offsets for court fees or for fire insurance premium taxes

Calculation of Contribution Rates

The URS retirement systems, except for the Governors and Legislative Pension Plan, are funded by employer contributions which are determined as a percent of pay, and in some cases by member contributions. The Firefighters System and the Judges System receive additional funding from outside sources. As shown in Exhibit 2(a), the employer contribution rate can have as many as four components:

- the normal cost percentage (NC%)
- the amortization percentage (UAAL%)
- the contribution required to fund the 3% substantial substitute benefit (3%SS)
- the offset for fire insurance premium taxes and court fees which reduce the employer contribution rates in the Firefighters System and the Judges System, respectively

The NC% is the theoretical amount which would be required to pay the members' benefits, based on the current plan provisions, if this amount had been contributed from each member's entry date and if the fund's experience exactly followed the actuarial assumptions. This is the amount it should cost to provide the benefits for an average new member. The NC% for each fund is shown in Exhibit 6a.

Some of the funds require active member contributions, and for these, only the excess of the NC% over the member contribution rate is included in the employer contribution rate, as shown in Exhibit 6(b) and in column 2 of Exhibit 2(a). The NC% also includes a small component (0.09% of pay) that is used to pay the cost of a group insurance benefit that is administered by the Public Employees Health Plan, not by URS.

The actuarial accrued liability (AAL) is the difference between (i) the actuarial present value of all future benefits for all current members of the fund, including active, inactive and retired members, and (ii) the actuarial present value of future normal costs. Thus the AAL represents the liability associated with past years. The unfunded actuarial accrued liability (UAAL) is the difference between the AAL and the actuarial value of assets (AVA). It is the shortfall/excess between the liability associated with prior years (the AAL) and the assets actually accumulated (the AVA). This shortfall/excess can arise from several sources, including: actuarial gains and losses which are caused by differences between actual experience and the plan's assumptions, changes to the plan's actuarial assumptions, and amendments to the benefit provisions.

The UAAL% is the amount required to fund this difference. It is the amount, expressed as a level percentage of payroll, necessary to amortize the UAAL. The Board has specified that this amortization should be over a period of 20 years. Column 3 of Exhibit 2(a) shows the UAAL% for each fund.

The 3% Substantial Substitute component of the employer contribution rate is only required for funds whose members are employees of the state (or who are paid by state funding). This piece is the amount necessary to fund the 3% Substantial Substitute. It is shown in column 4 of Exhibit 2(a), and is described more fully later.

The last piece of the contribution rate is the offset. The Firefighters System receives a portion of the fire insurance premium taxes collected by the state, and the Judges System receives a portion of court fees collected by the judiciary. The calculation of the offsets is shown in Exhibit 2(b), and the impact of the offset on the employer contribution rates is shown in column 6 of Exhibit 2(a).

Exhibit 1(a) shows that the gross employer rate for the Firefighter's System before any reduction for the offset is 1.65% for Division A and zero for Division B. The offset is first used to reduce the employer contribution rate and then any remaining offset is used to reduce the member contribution rates.

These calculated rates are used in determining the contribution rates that will become effective for the twelve-month period beginning July 1, 2002.

The Governors and Legislative Pension Plan, unlike the other systems, is funded by direct legislative appropriations. However, the actuarial value of assets exceeds the actuarial present value of future benefits for this fund, and therefore no contribution is required this year.

Financial Data and Experience

As of December 31, 2000, the retirement systems that are part of URS have a total market value of about \$13.3 billion. This excludes assets of the 401(k) and 457 plans which are also administered by URS. Assets of the various funds and systems are commingled for investment purposes. Financial information was gathered from the 2000 URS Comprehensive Annual Financial Report, with additional information provided by the URS staff.

This report includes a number of exhibits related to plan assets. Exhibit 11(a) shows how the total market value is distributed among the various classes of investments. Currently, 62% of invested assets are held in equities and alternative investments, compared with 66% last year and 59% the year before.

Exhibit 11(b) shows a reconciliation of the market values between the beginning and end of 2000. The contributions shown in column 3 of Exhibit 11(b) include employer and member contributions, as well as court fees and fire insurance premium tax receipts. The 3% substantial substitute fund is shown as a separate item.

During 2000, the total investment return on market values was 1.8%, as shown on Exhibit 12(a).

In determining the contribution rates and funded status of the funds, an actuarial value of assets (AVA) is used, rather than the market value of assets. The method used to compute the AVA takes the difference between actual earnings and expected earnings (based on the assumed 8% investment return rate) each year, and recognizes the difference over five years, at 20% per year. This is intended to reduce the volatility of the contribution rates from year to year.

The development of the AVA is shown on Exhibits 13 and 14. The AVA is \$13.2 billion for all systems combined. This work was performed by the URS staff, but has been reviewed and approved by GRS.

Some funds in the Contributory Public Employees System and the Contributory Public Safety System are paired with funds in the Public Employees and Public Safety noncontributory systems. For example, Fund 23, Other Division A, in the Public Safety Contributory System is paired with Fund 43, Other Division A, in the Public Safety Noncontributory System. In these cases, URS has established a policy of maintaining either the same difference between contribution rates for pairs of funds, or it maintains equal amortization percentages. To accomplish this, an amount of assets is transferred each year between fund pairs, as necessary. Exhibit 14, column 6 shows the change that must occur to the AVA in order to accomplish this. Exhibit 14, column 3 shows how much must be transferred between systems to accomplish this in terms of market value.

In addition to the market return, Exhibit 12(a) also shows the return on the actuarial value for URS. For 2000, this return was 11.2%. Because this is greater than the assumed 8% investment return, the plan funded status improved for almost all funds, and the calculated contribution rates for almost all funds decreased. Exhibit 12(b) shows a summary of market and actuarial return rates in recent years.

Member Data

Member data was supplied by URS staff on computer tape as of December 31, 2000. While we did not audit this data, we did perform various tests to ensure that it was internally consistent, consistent with the prior year's data, and was reasonable overall.

Exhibit 8 shows the number of members by category (active, inactive, retired, etc.) and by fund. Exhibit 9 shows active member statistics by fund, and Exhibit 10 shows retiree statistics by fund. Exhibits 16(a)-16(g) show summaries of certain historical data, including membership statistics, for each system.

For all funds combined, the number of active members increased from 92,725 to 94,068, a 1.4% increase. For the Public Employees Systems (contributory and noncontributory combined), active membership increased 1.3% last year, and membership growth has averaged 2.2% over the last five years.

Total active member payroll grew 5.1% last year for all funds combined, and grew 4.8% for the two public employees systems combined. For these two systems, payroll growth has averaged 5.9% for the last five years.

Benefit Provisions

Appendix 2 includes a summary of the benefit provisions for each of the retirement systems in URS. This valuation reflects certain benefit changes enacted by the 2001 legislature. Although not effective on the valuation date, they will be effective on or before the contribution rates actually go into effect at July 1, 2002.

There was one change from the last valuation that had an impact on the contribution rates. Certain retirees of the Public Employees Retirement System who had a portion of their benefit calculated using a 1.10% multiplier for service prior to July 1, 1967 had their benefit recalculated using a 1.25% multiplier for that service.

This valuation reflects all benefits promised to URS members, either by the statutes, or in the case of the special supplement for the Governors and Legislative System and the ROPP payments (discussed later), by the Board. There are no ancillary benefits, which might be deemed a URS liability if continued beyond the availability of funding by the current funding source.

Actuarial Methods and Assumptions

Appendix 1 includes a summary of the actuarial assumptions and methods used in this valuation. Costs are determined using the Entry Age actuarial cost method. The assumed investment return rate is 8.00%. The Board adopted new actuarial assumptions last year in connection with the 2000 experience investigation. We are recommending that the Board further modify the actuarial assumptions to reflect experience not fully recognized with last year's changes.

The changes being recommended result in higher contribution rates for all the Systems. The most important components of the higher rates include:

- 0.25% increase in the general increase component of the salary increase rates for all systems other than the Judges Retirement System and the Governors and Legislative Pension Plan
- modification of healthy mortality rates to provide additional margin for future mortality improvement

GASB 25 and Funding Progress

Governmental Accounting Standards Board Statement No. 25 (GASB 25) contains certain accounting requirements for URS. In particular, it requires the inclusion of two special schedules in the URS annual report:

1. Schedule of Funding Progress
2. Schedule of Employer Contributions

Information needed to prepare the Schedule of Funding Progress is included in Exhibit 3(a). This shows that all but two of the funds have a funded ratio (ratio of actuarial assets to accrued liabilities) of at least 90%, and most are over 100%. The exceptions are one fund in the Public Safety System and the 3% Substantial Substitute fund. The latter has only been a liability of URS since 1994. See Exhibit 3(a), column 5. Funded ratios have improved for almost all funds since the 1991 valuation, even for the more poorly funded funds in the Public Safety Systems.

GASB 25 also requires that plans calculate an Annual Required Contribution (ARC), and, if actual contributions received are less than the ARC, this must be disclosed. For this disclosure, URS treats the Board-established employer contribution rate as the ARC, as long as this produces a funding period of less than 30 years.

Under GASB 25, the ARC must be calculated in accordance with certain parameters. In particular, it must include a payment to amortize the UAAL. This amortization payment eventually will have to be computed using a funding period no greater than 30 years, but a 40-year maximum amortization period may be used during a ten-year transition period. Further, the amortization payment included in the ARC may be computed as a level amount, or it may be computed as an amount which increases with payroll. However, if payments are computed on a level-percent of payroll approach, the payroll growth assumption may not anticipate future membership growth.

Since the recommended employer contribution rate is computed using a 20-year amortization period and a 3.00% inflation-only payroll growth rate, the recommended rate meets the definition of an acceptable ARC.

Firefighters and Judges Offsets

A portion of the fire insurance premium taxes collected by the State of Utah is contributed to the Firefighters System, and a portion of the court fees collected by the state judiciary is contributed to the Judges System. To account for this prospectively, the recommended contribution rates for the funds in these systems are reduced.

In order to dampen year-to-year fluctuations in the offsets, we are using a rolling three-year average in computing the offsets. First, we calculate a percentage of pay offset for each year, equal to receipts divided by payroll. (For the Firefighters, all calculations are done on a combined basis for Divisions A and B.) Then the offset percentages for the just completed year and the two prior years are averaged. This average is then used as the current year's offset. The calculation of the offsets is shown on Exhibit 2(b).

The offset for the Firefighter System increased slightly, from 8.28% to 8.88%, and the offset for the Judges System decreased from 18.93% to 18.40%. This decrease for the Judges System was mainly due to a large decrease in the court fees received in 1999. The ratio of court fees to payroll in 2000 was 18.86%. The increase in the Firefighter System was caused by the fact that the fire insurance premiums have increased dramatically in 2000. The ratio of fire insurance premiums to payroll for 2000 was 10.74%, well above prior levels.

It should be noted that the employer contribution rates for both divisions of the Firefighter's System are less than the offset for the fire insurance premium. It is our understanding that the Board will recommend that the offset be used to reduce the employer contribution rate to zero and then any remaining offset will be used to reduce the member contribution rates.

3% Substantial Substitute

Due to the removal of the state income tax exemption for benefits paid by URS, legislation was passed to provide a 3% retirement benefit increase for URS retirees who were members of URS prior to January 1, 1989. All future retirees who were members of the URS prior to January 1, 1989 will be eligible for this benefit as well, as will beneficiaries of eligible members.

The 3% increase applies to all benefits paid to eligible members, including benefits earned after January 1, 1989 and including future cost-of-living increases. However, the 3% increase does not apply to (i) refunds of employee contributions (with interest if applicable) or (ii) the group insurance benefits for members of the Public Employees Systems.

Due to legislation passed in 1994, this benefit is now pre-funded. The obligation for payment of this benefit belongs to the state, however, not to the employer. Therefore the contribution needed to fund the benefit is determined as an addition to the employer contribution rates required for the State and School Funds in the Public Employees Contributory and Noncontributory Systems, the State of Utah funds in the Public Safety Contributory and Noncontributory Systems, and the Judges System.

The contribution required to pay for this benefit is 0.96%, 0.02% less than last year. Details of the calculation are shown in Exhibit 15(a), while Exhibit 15(b) shows a distribution of the liabilities associated with this benefit.

Restoration of Purchasing Power (ROPP)

URS provides a special benefit to a closed group of retired members. This benefit was granted by the Board of Trustees, not by the legislature, and hence it does not appear in the statutes governing URS. The Board provided this benefit, called the Restoration of Purchasing Power benefit or ROPP benefit, to retired members several years ago, in order to counteract some of the impact of inflation.

The ROPP benefit is a fixed amount that does not increase and is not adjusted for changes in the cost of living. It is provided only to the closed group of members who were retired at the time of the Board's action. Therefore, since the group is closed and since the benefit amount cannot increase, this liability should decrease from year to year as the retiree group receiving the ROPP grows older and decreases in size due to mortality.

Exhibit 5(e) shows the liabilities for the ROPP benefits in column 5.

Comparison of Recommended Contribution Rates

Fund/Division (1)	2000 Valuation Results			2001 Valuation Results 2002-2003 Proposed Rates		
	Member	Employer	Total	Member	Employer	Total
	(2)	(3)	(4)	(5)	(6)	(7)
I. Public Employees Contributory						
A. Local Government	6.00%	4.17%	10.17%	6.00%	4.68%	10.68%
B. State and School	6.00%	5.87%	11.87%	6.00%	5.75%	11.75%
II. Public Employees Noncontributory						
A. Local Government	0.00%	8.18%	8.18%	0.00%	8.69%	8.69%
B. State and School	0.00%	10.36%	10.36%	0.00%	10.24%	10.24%
III. Public Safety Contributory						
A. State	12.29%	8.81%	21.10%	12.29%	8.05%	20.34%
B. Other Division A	12.29%	2.41%	14.70%	12.29%	2.17%	14.46%
C. Salt Lake City	13.74%	18.21%	31.95%	13.74%	15.50%	29.24%
D. Provo	13.54%	9.72%	23.26%	13.54%	9.47%	23.01%
E. Logan	11.13%	2.93%	14.06%	11.13%	3.66%	14.79%
F. Other Division B	10.50%	6.43%	16.93%	10.50%	7.34%	17.84%
IV. Public Safety Noncontributory						
A. State	0.00%	19.68%	19.68%	0.00%	18.94%	18.94%
B. Other Division A	0.00%	14.08%	14.08%	0.00%	13.89%	13.89%
C. Salt Lake City	0.00%	30.72%	30.72%	0.00%	28.27%	28.27%
D. Ogden	0.00%	21.06%	21.06%	0.00%	17.98%	17.98%
E. Bountiful	0.00%	19.03%	19.03%	0.00%	17.41%	17.41%
F. Other Division B	0.00%	16.75%	16.75%	0.00%	17.66%	17.66%
V. Firefighters						
A. Division A						
1. Gross Rate	15.05%	0.00%	15.05%	15.05%	1.65%	16.70%
2. Less Estimated Offset	<u>-8.28%</u>	<u>0.00%</u>	<u>-8.28%</u>	<u>-7.23%</u>	<u>-1.65%</u>	<u>-8.88%</u>
3. Net Rate	6.77%	0.00%	6.77%	7.82%	0.00%	7.82%
B. Division B						
1. Gross Rate	16.71%	0.00%	16.71%	16.71%	0.00%	16.71%
2. Less Estimated Offset	<u>-8.28%</u>	<u>0.00%</u>	<u>-8.28%</u>	<u>-8.88%</u>	<u>0.00%</u>	<u>-8.88%</u>
3. Net Rate	8.43%	0.00%	8.43%	7.83%	0.00%	7.83%
VI. Judges						
A. Gross Rate	0.00%	24.48%	24.48%	0.00%	23.32%	23.32%
B. Less Estimated Offset	<u>0.00%</u>	<u>-18.93%</u>	<u>-18.93%</u>	<u>-0.00%</u>	<u>-18.40%</u>	<u>-18.40%</u>
C. Net Rate	0.00%	5.55%	5.55%	0.00%	4.92%	4.92%
VII. Governors and Legislative	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Comparison of Recommended Rates and Adopted Rates

Fund/Division (1)	2000 Valuation Results		2001 Valuation
	Recommended (2)	Rates Set by Board (3)	Recommended (4)
I. Public Employees Contributory			
A. Local Government	4.17%	4.19%	4.68%
B. State and School	5.87%	5.91%	5.75%
II. Public Employees Noncontributory			
A. Local Government	8.18%	8.20%	8.69%
B. State and School	10.36%	10.40%	10.24%
III. Public Safety Contributory			
A. State	8.81%	8.81%	8.05%
B. Other Division A	2.41%	2.41%	2.17%
C. Salt Lake City	18.21%	18.21%	15.50%
D. Provo	9.72%	9.72%	9.47%
E. Logan	2.93%	2.93%	3.66%
F. Other Division B	6.43%	6.43%	7.34%
IV. Public Safety Noncontributory			
A. State	19.68%	19.68%	18.94%
B. Other Division A	14.08%	14.08%	13.89%
C. Salt Lake City	30.72%	30.72%	28.27%
D. Ogden	21.06%	21.06%	17.98%
E. Bountiful	19.03%	19.03%	17.41%
F. Other Division B	16.75%	16.75%	17.66%
V. Firefighters			
A. Division A	0.00%	0.00%	1.65%
B. Division B	0.00%	0.00%	0.00%
VI. Judges	24.48%	24.48%	23.32%
VII. Governors and Legislative	0.00%	0.00%	0.00%

Components of Recommended Rates

Fund/Division (1)	Net Normal Cost (2)	Amortization of UAAL (3)	3% Substantial Substitute (4)	Gross Employer Rate (2 + 3 + 4) (5)	Offset (6)	Net Employer Rate (5 - 6) (7)
I. Public Employees Contributory						
A. Local Government	4.26%	0.42%	0.00%	4.68%	0.00%	4.68%
B. State and School	4.02%	0.77%	0.96%	5.75%	0.00%	5.75%
II. Public Employees Noncontributory						
A. Local Government	10.66%	-1.97%	0.00%	8.69%	0.00%	8.69%
B. State and School	11.35%	-2.07%	0.96%	10.24%	0.00%	10.24%
III. Public Safety Contributory						
A. State	8.75%	-1.66%	0.96%	8.05%	0.00%	8.05%
B. Other Division A	7.48%	-5.31%	0.00%	2.17%	0.00%	2.17%
C. Salt Lake City	6.39%	9.11%	0.00%	15.50%	0.00%	15.50%
D. Provo	6.73%	2.74%	0.00%	9.47%	0.00%	9.47%
E. Logan	8.01%	-4.35%	0.00%	3.66%	0.00%	3.66%
F. Other Division B	9.52%	-2.18%	0.00%	7.34%	0.00%	7.34%
IV. Public Safety Noncontributory						
A. State	19.64%	-1.66%	0.96%	18.94%	0.00%	18.94%
B. Other Division A	19.20%	-5.31%	0.00%	13.89%	0.00%	13.89%
C. Salt Lake City	19.16%	9.11%	0.00%	28.27%	0.00%	28.27%
D. Ogden	18.88%	-0.90%	0.00%	17.98%	0.00%	17.98%
E. Bountiful	19.18%	-1.77%	0.00%	17.41%	0.00%	17.41%
F. Other Division B	19.84%	-2.18%	0.00%	17.66%	0.00%	17.66%
V. Firefighters						
A. Division A	9.19%	-7.54%	0.00%	1.65%	1.65%	0.00%
B. Division B	7.25%	-10.36%	0.00%	-3.11%	0.00%	0.00%
VI. Judges	32.04%	-9.68%	0.96%	23.32%	18.40%	4.92%
VII. Governors and Legislative	N/A	N/A	N/A	N/A	N/A	N/A

Determination of Contribution Rate Offsets for Firefighters and Judges

A. Firefighter's Offset

1. Calendar Year	1998	1999	2000
2. Fire insurance premium receipts	4,391,000	4,516,000	6,615,000
3. Combined payroll for both funds*	54,402,658	57,663,557	61,593,417
4. Premiums as percentage of payroll	8.07%	7.83%	10.74%
5. Offset: 3-year arithmetic average of percent of payroll			8.88%

B. Judge's Offset

1. Calendar Year	1998	1999	2000
2. Court fees	1,912,000	1,681,000	1,946,000
3. Payroll*	9,666,576	10,149,546	10,317,660
4. Premiums as percentage of payroll	19.78%	16.56%	18.86%
5. Offset: 3-year arithmetic average of percent of payroll			18.40%

* Reported payroll for members active at end of year

Schedule of Funding Progress

Fund/Division (1)	Actuarial Value of Assets (2)	Actuarial Accrued Liability (AAL) (3)	Unfunded AAL (UAAL) (3 - 2) (4)	Funded Ratio (2 / 3) (5)	Covered Payroll (6)	UAAL as a Percentage of Covered Payroll (4 / 6) (7)
I. Public Employees Contributory						
A. Local Government	253,681	256,676	2,995	98.8%	53,737	5.6%
B. State and School	670,892	679,123	8,231	98.8%	81,079	10.2%
C. Subtotal	924,573	935,799	11,226	98.8%	134,816	8.3%
II. Public Employees Noncontributory						
A. Local Government	1,660,838	1,515,951	(144,887)	109.6%	551,912	-26.3%
B. State and School	8,633,606	8,066,861	(566,745)	107.0%	2,059,501	-27.5%
C. Subtotal	10,294,444	9,582,812	(711,632)	107.4%	2,611,413	-27.3%
III. Public Safety Contributory						
A. State	67,390	67,145	(245)	100.4%	1,114	-22.0%
B. Other Division A	153,378	142,365	(11,013)	107.7%	15,625	-70.5%
C. Salt Lake City	44,682	44,789	107	99.8%	89	120.6%
D. Provo	22,045	23,608	1,563	93.4%	4,294	36.4%
E. Logan	12,462	11,221	(1,241)	111.1%	2,150	-57.7%
F. Other Division B	26,992	25,041	(1,951)	107.8%	6,749	-28.9%
G. Subtotal	326,949	314,169	(12,780)	104.1%	30,021	-42.6%
IV. Public Safety Noncontributory						
A. State	402,763	384,986	(17,777)	104.6%	80,560	-22.1%
B. Other Division A	373,008	308,280	(64,728)	121.0%	91,556	-70.7%
C. Salt Lake City	83,121	104,121	21,000	79.8%	17,372	120.9%
D. Ogden	38,652	38,128	(524)	101.4%	4,386	-11.9%
E. Bountiful	10,439	10,101	(338)	103.3%	1,442	-23.4%
F. Other Division B	52,064	47,091	(4,973)	110.6%	17,126	-29.0%
G. Subtotal	960,047	892,707	(67,340)	107.5%	212,442	-31.7%
V. Firefighters						
A. Division A	49,688	38,955	(10,733)	127.6%	10,647	-100.8%
B. Division B	486,815	416,501	(70,315)	116.9%	50,946	-138.0%
C. Subtotal	536,503	455,456	(81,048)	117.8%	61,593	-131.6%
VI. Judges	87,139	73,962	(13,177)	117.8%	10,318	-127.7%
VII. Governors and Legislative	11,569	7,908	(3,661)	146.3%	478	-766.1%
VIII. 3% Substantial Substitute	66,889	350,702	283,813	19.1%	N/A	N/A
IX. Grand Total	13,208,113	12,613,515	(594,599)	104.7%	3,061,081	-19.4%

Note: Amounts shown are in \$ thousands
Columns may not add to total due to rounding

Comparison of Funded Ratios

Fund/Division (1)	Funded Ratios as of January 1		
	2001 (2)	2000 (3)	1999 (4)
I. Public Employees Contributory			
A. Local Government	98.8%	98.8%	94.6%
B. State and School	98.8%	97.9%	94.1%
C. Subtotal	98.8%	98.2%	94.2%
II. Public Employees Noncontributory			
A. Local Government	109.6%	109.5%	102.9%
B. State and School	107.0%	105.2%	97.7%
C. Subtotal	107.4%	105.9%	98.5%
III. Public Safety Contributory			
A. State	100.4%	100.1%	99.4%
B. Other Division A	107.7%	106.9%	102.8%
C. Salt Lake City	99.8%	99.5%	99.4%
D. Provo	93.4%	91.3%	84.4%
E. Logan	111.1%	112.0%	105.2%
F. Other Division B	107.8%	110.1%	104.1%
G. Subtotal	104.1%	103.4%	100.4%
IV. Public Safety Noncontributory			
A. State	104.6%	101.1%	91.4%
B. Other Division A	121.0%	118.7%	107.3%
C. Salt Lake City	79.8%	71.9%	61.5%
D. Ogden	101.4%	92.6%	83.8%
E. Bountiful	103.3%	99.2%	91.1%
F. Other Division B	110.6%	113.1%	105.3%
G. Subtotal	107.5%	103.9%	93.5%
V. Firefighters			
A. Division A	127.6%	134.2%	120.7%
B. Division B	116.9%	113.2%	102.0%
C. Subtotal	117.8%	115.3%	103.9%
VI. Judges	117.8%	114.7%	101.2%
VII. Governors and Legislative	146.3%	132.6%	137.2%
VIII. 3% Substantial Substitute	19.1%	15.5%	11.5%
IX. Grand Total	104.7%	102.9%	95.5%

Analysis of Changes in Target Rates

Fund/Division (1)	Rate From Jan. 1, 2000 Valuation (2)	Changes Due To							Act. vs Exp. Contributions (10)	Recommended Rate (11)
		Payroll Growth (3)	Investment Return (4)	Liabilities (5)	Actuarial Assumptions (6)	Legislation (7)	Asset Transfers (8)	3% Substantial Substitute (9)		
I. Public Employees Contributory										
A. Local Government	4.17%	0.00%	-1.17%	0.07%	1.11%	0.16%	0.52%	0.00%	-0.18%	4.68%
B. State and School	5.87%	0.03%	-2.29%	-0.03%	1.21%	0.70%	0.54%	-0.02%	-0.26%	5.75%
II. Public Employees Noncontributory										
A. Local Government	8.18%	0.07%	-0.63%	0.29%	1.07%	0.00%	-0.05%	0.00%	-0.24%	8.69%
B. State and School	10.36%	0.02%	-0.90%	0.13%	0.99%	0.01%	-0.02%	-0.02%	-0.33%	10.24%
III. Public Safety Contributory										
A. State	8.81%	0.01%	-18.42%	3.30%	2.45%	0.00%	12.35%	-0.02%	-0.43%	8.05%
B. Other Division A	2.41%	-0.08%	-2.50%	-0.09%	0.88%	0.00%	1.90%	0.00%	-0.35%	2.17%
C. Salt Lake City	18.21%	-3.76%	-158.29%	-19.81%	7.04%	0.00%	171.99%	0.00%	0.12%	15.50%
D. Provo	9.72%	-0.13%	-1.11%	0.46%	0.83%	0.00%	0.00%	0.00%	-0.30%	9.47%
E. Logan	2.93%	0.23%	-1.26%	1.32%	0.86%	0.00%	0.00%	0.00%	-0.42%	3.66%
F. Other Division B	6.43%	0.06%	-0.70%	1.12%	0.85%	0.00%	-0.12%	0.00%	-0.30%	7.34%
IV. Public Safety Noncontributory										
A. State	19.68%	0.03%	-1.02%	0.05%	0.82%	0.00%	-0.17%	-0.02%	-0.43%	18.94%
B. Other Division A	14.08%	0.31%	-0.80%	0.22%	0.80%	0.00%	-0.32%	0.00%	-0.40%	13.89%
C. Salt Lake City	30.72%	0.08%	-0.88%	-1.30%	0.85%	0.00%	-0.87%	0.00%	-0.33%	28.27%
D. Ogden	21.06%	0.03%	-2.07%	-1.61%	0.88%	0.00%	0.00%	0.00%	-0.31%	17.98%
E. Bountiful	19.03%	0.01%	-1.64%	-0.51%	0.86%	0.00%	0.00%	0.00%	-0.34%	17.41%
F. Other Division B	16.75%	0.19%	-0.56%	0.75%	0.81%	0.00%	0.05%	0.00%	-0.33%	17.66%
V. Firefighters										
A. Division A	-1.80%	1.51%	-0.99%	1.36%	0.90%	0.00%	1.37%	0.00%	-0.70%	1.65%
B. Division B	-1.38%	0.02%	-2.20%	0.53%	0.99%	0.00%	-0.21%	0.00%	-0.86%	-3.11%
VI. Judges	24.48%	-0.13%	-1.80%	-0.51%	1.99%	0.00%	0.00%	-0.02%	-0.69%	23.32%
VII. Governors and Legislative	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes: Rates shown as of Jan. 1, 2000 do not include adjustments for 2000 legislation
Rates shown include contribution for 3% Substantial Substitute, if applicable
Rates shown do not include the offsets for court fees or for fire insurance premium taxes

**Actuarial Present Value of Future Benefits
by Fund and Status**

Fund/Division (1)	Retirees and Beneficiaries (2)	Inactive Members (3)	Active Members (4)	Total (5)
I. Public Employees Contributory				
A. Local Government	93,307	21,527	187,610	302,444
B. State and School	354,214	43,399	345,681	743,295
C. Subtotal	447,521	64,926	533,291	1,045,739
II. Public Employees Noncontributory				
A. Local Government	461,842	75,577	1,531,186	2,068,605
B. State and School	2,942,644	262,013	7,004,591	10,209,248
C. Subtotal	3,404,486	337,590	8,535,777	12,277,853
III. Public Safety Contributory				
A. State	61,508	1,237	6,060	68,806
B. Other Division A	89,321	4,567	78,639	172,528
C. Salt Lake City	44,392	80	488	44,960
D. Provo	10,083	574	21,925	32,582
E. Logan	3,734	78	11,446	15,258
F. Other Division B	8,500	690	30,798	39,987
G. Subtotal	217,538	7,226	149,356	374,121
IV. Public Safety Noncontributory				
A. State	149,036	5,982	387,079	542,098
B. Other Division A	92,823	6,423	402,976	502,222
C. Salt Lake City	45,063	847	91,090	137,000
D. Ogden	22,760	636	22,908	46,304
E. Bountiful	4,184	19	8,294	12,498
F. Other Division B	8,670	1,708	74,911	85,289
G. Subtotal	322,536	15,615	987,258	1,325,411
V. Firefighters				
A. Division A	15,341	379	61,068	76,788
B. Division B	225,062	1,815	333,392	560,268
C. Subtotal	240,403	2,194	394,460	637,056
VI. Judges	38,603	410	67,047	106,059
VII. Governors and Legislative	5,081	1,484	2,018	8,582
VIII. Grand Total	4,676,168	429,445	10,669,207	15,774,821

Notes: Amounts shown are in \$ thousands
Columns may not add to total due to rounding

**Actuarial Present Value of Future Benefits
Details for Retirees and Beneficiaries, by Status**

Fund/Division (1)	Retired Members (2)	Disabled Members (3)	Beneficiaries (4)	Total (5)
I. Public Employees Contributory				
A. Local Government	72,729	3,560	17,018	93,307
B. State and School	291,703	9,259	53,253	354,214
C. Subtotal	<u>364,432</u>	<u>12,819</u>	<u>70,271</u>	<u>447,521</u>
II. Public Employees Noncontributory				
A. Local Government	426,748	10,129	24,966	461,842
B. State and School	2,763,941	37,399	141,305	2,942,644
C. Subtotal	<u>3,190,689</u>	<u>47,528</u>	<u>166,271</u>	<u>3,404,486</u>
III. Public Safety Contributory				
A. State	49,985	1,822	9,701	61,508
B. Other Division A	77,104	1,485	10,732	89,321
C. Salt Lake City	38,053	1,275	5,064	44,392
D. Provo	8,723	0	1,361	10,083
E. Logan	3,463	98	174	3,734
F. Other Division B	7,634	660	206	8,500
G. Subtotal	<u>184,962</u>	<u>5,340</u>	<u>27,238</u>	<u>217,538</u>
IV. Public Safety Noncontributory				
A. State	143,407	1,362	4,267	149,036
B. Other Division A	89,237	994	2,592	92,823
C. Salt Lake City	43,704	629	730	45,063
D. Ogden	20,902	208	1,650	22,760
E. Bountiful	3,835	330	19	4,184
F. Other Division B	8,200	0	470	8,670
G. Subtotal	<u>309,285</u>	<u>3,523</u>	<u>9,728</u>	<u>322,536</u>
V. Firefighters				
A. Division A	11,637	2,477	1,227	15,341
B. Division B	196,477	10,156	18,429	225,062
C. Subtotal	<u>208,114</u>	<u>12,633</u>	<u>19,656</u>	<u>240,403</u>
VI: Judges	32,953	0	5,650	38,603
VII. Governors and Legislative	4,432	0	648	5,081
VIII. Grand Total	<u>4,294,867</u>	<u>81,843</u>	<u>299,462</u>	<u>4,676,168</u>

Notes: Amounts shown are in \$ thousands
Columns may not add to total due to rounding

**Actuarial Present Value of Future Benefits
Details for Inactive Members, by Status**

Fund/Division (1)	Disabled (2)	Other Vested (3)	Nonvested (4)	Total (5)
I. Public Employees Contributory				
A. Local Government	3,196	16,782	1,549	21,527
B. State and School	6,496	36,823	79	43,399
C. Subtotal	<u>9,692</u>	<u>53,605</u>	<u>1,628</u>	<u>64,926</u>
II. Public Employees Noncontributory				
A. Local Government	8,324	64,899	2,355	75,577
B. State and School	41,494	215,327	5,193	262,013
C. Subtotal	<u>49,818</u>	<u>280,226</u>	<u>7,548</u>	<u>337,590</u>
III. Public Safety Contributory				
A. State	185	986	67	1,237
B. Other Division A	541	2,892	1,134	4,567
C. Salt Lake City	0	65	15	80
D. Provo	0	523	51	574
E. Logan	0	52	26	78
F. Other Division B	0	562	128	690
G. Subtotal	<u>726</u>	<u>5,080</u>	<u>1,421</u>	<u>7,226</u>
IV. Public Safety Noncontributory				
A. State	1,335	4,481	166	5,982
B. Other Division A	1,229	4,689	505	6,423
C. Salt Lake City	165	657	25	847
D. Ogden	300	290	46	636
E. Bountiful	0	19	0	19
F. Other Division B	391	1,256	61	1,708
G. Subtotal	<u>3,420</u>	<u>11,392</u>	<u>803</u>	<u>15,615</u>
V. Firefighters				
A. Division A	0	203	175	379
B. Division B	0	1,449	366	1,815
C. Subtotal	<u>0</u>	<u>1,652</u>	<u>541</u>	<u>2,194</u>
VI. Judges	0	410	0	410
VII. Governors and Legislative	0	1,471	13	1,484
VIII. Grand Total	63,656	353,836	11,954	429,445

Notes: Amounts shown are in \$ thousands
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**Actuarial Present Value of Future Benefits
Details for Active Members, by Benefit**

Fund/Division (1)	Retirement (2)	Deferred Termination (3)	Disability (4)	Refunds (5)	Death (6)	Total (7)
I. Public Employees Contributory						
A. Local Government	157,237	17,859	3,693	3,138	5,683	187,610
B. State and School	301,431	25,310	7,270	2,593	9,077	345,681
C. Subtotal	<u>458,668</u>	<u>43,169</u>	<u>10,963</u>	<u>5,731</u>	<u>14,760</u>	<u>533,291</u>
II. Public Employees Noncontributory						
A. Local Government	1,312,590	145,222	34,196	1	39,177	1,531,186
B. State and School	6,299,852	427,679	136,654	6	140,400	7,004,591
C. Subtotal	<u>7,612,442</u>	<u>572,901</u>	<u>170,850</u>	<u>7</u>	<u>179,577</u>	<u>8,535,777</u>
III. Public Safety Contributory						
A. State	5,666	96	188	30	81	6,060
B. Other Division A	73,152	1,168	2,288	1,044	987	78,639
C. Salt Lake City	455	8	13	5	7	488
D. Provo	20,185	334	679	332	396	21,925
E. Logan	10,712	140	289	142	163	11,446
F. Other Division B	27,996	633	1,044	497	628	30,798
G. Subtotal	<u>138,166</u>	<u>2,379</u>	<u>4,501</u>	<u>2,050</u>	<u>2,262</u>	<u>149,356</u>
IV. Public Safety Noncontributory						
A. State	358,890	10,169	12,275	0	5,746	387,079
B. Other Division A	373,108	11,324	12,544	1	5,998	402,976
C. Salt Lake City	85,380	1,853	2,486	0	1,371	91,090
D. Ogden	21,557	414	600	0	337	22,908
E. Bountiful	7,845	127	221	0	102	8,294
F. Other Division B	68,351	2,364	2,593	1	1,603	74,911
G. Subtotal	<u>915,131</u>	<u>26,251</u>	<u>30,719</u>	<u>2</u>	<u>15,157</u>	<u>987,258</u>
V. Firefighters						
A. Division A	56,125	320	3,055	483	1,087	61,068
B. Division B	311,902	1,272	12,323	1,763	6,133	333,392
C. Subtotal	<u>368,027</u>	<u>1,592</u>	<u>15,378</u>	<u>2,246</u>	<u>7,220</u>	<u>394,460</u>
VI. Judges	64,884	0	0	0	2,162	67,047
VII. Governors and Legislative	1,080	859	0	0	79	2,018
VIII. Grand Total	<u>9,558,398</u>	<u>647,151</u>	<u>232,411</u>	<u>10,036</u>	<u>221,217</u>	<u>10,669,207</u>

Notes: Amounts shown are in \$ thousands
Columns may not add to total due to rounding

**Actuarial Present Value of Future Benefits
Details for Members Receiving Benefits, by Benefit**

Fund/Division (1)	Basic Benefit (2)	COLA (3)	Subtotal (2) + (3) (4)	ROPP (5)	Total (4) + (5) (6)
I. Public Employees Contributory					
A. Local Government	56,067	35,779	91,846	1,460	93,307
B. State and School	199,978	145,035	345,013	9,201	354,214
C. Subtotal	<u>256,045</u>	<u>180,814</u>	<u>436,859</u>	<u>10,661</u>	<u>447,521</u>
II. Public Employees Noncontributory					
A. Local Government	329,839	132,003	461,842	0	461,842
B. State and School	2,074,158	868,486	2,942,644	0	2,942,644
C. Subtotal	<u>2,403,997</u>	<u>1,000,489</u>	<u>3,404,486</u>	<u>0</u>	<u>3,404,486</u>
III. Public Safety Contributory					
A. State	38,117	21,167	59,284	2,224	61,508
B. Other Division A	60,400	27,587	87,987	1,334	89,321
C. Salt Lake City	27,885	15,861	43,746	646	44,392
D. Provo	6,726	3,266	9,992	92	10,083
E. Logan	2,597	1,125	3,722	12	3,734
F. Other Division B	6,363	2,134	8,497	3	8,500
G. Subtotal	<u>142,088</u>	<u>71,140</u>	<u>213,228</u>	<u>4,311</u>	<u>217,538</u>
IV. Public Safety Noncontributory					
A. State	110,791	38,245	149,036	0	149,036
B. Other Division A	71,013	21,810	92,823	0	92,823
C. Salt Lake City	33,327	11,736	45,063	0	45,063
D. Ogden	16,319	6,282	22,601	159	22,760
E. Bountiful	2,973	1,180	4,153	31	4,184
F. Other Division B	6,712	1,958	8,670	0	8,670
G. Subtotal	<u>241,135</u>	<u>81,211</u>	<u>322,346</u>	<u>190</u>	<u>322,536</u>
V. Firefighters					
A. Division A	10,514	4,523	15,037	304	15,341
B. Division B	148,011	72,446	220,457	4,605	225,062
C. Subtotal	<u>158,525</u>	<u>76,969</u>	<u>235,494</u>	<u>4,909</u>	<u>240,403</u>
VI. Judges	24,907	13,696	38,603	0	38,603
VII. Governors and Legislative	3,380	1,701	5,081	0	5,081
VIII. Grand Total	<u>3,230,077</u>	<u>1,426,020</u>	<u>4,656,097</u>	<u>20,071</u>	<u>4,676,168</u>

Notes: Amounts shown are in \$ thousands
Columns may not add to total due to rounding

Normal Cost

Fund/Division (1)	Retirement (2)	Deferred Termination (3)	Disability (4)	Refunds (5)	Group Insurance (6)	Other Death (7)	Total (8)
I. Public Employees Contributory							
A. Local Government	7.00%	1.23%	0.29%	1.37%	0.09%	0.37%	10.26%
B. State and School	6.79%	0.97%	0.30%	1.64%	0.09%	0.32%	10.02%
II. Public Employees Noncontributory							
A. Local Government	8.30%	1.72%	0.34%	0.00%	0.09%	0.30%	10.66%
B. State and School	9.34%	1.40%	0.34%	0.00%	0.09%	0.27%	11.35%
III. Public Safety Contributory							
A. State	18.05%	0.60%	1.06%	0.83%	0.00%	0.50%	21.04%
B. Other Division A	17.10%	0.50%	0.80%	0.98%	0.00%	0.39%	19.77%
C. Salt Lake City	17.37%	0.45%	0.65%	1.16%	0.00%	0.50%	20.13%
D. Provo	17.29%	0.50%	0.81%	1.05%	0.00%	0.62%	20.27%
E. Logan	16.57%	0.44%	0.63%	0.99%	0.00%	0.51%	19.14%
F. Other Division B	17.24%	0.51%	0.82%	0.83%	0.00%	0.62%	20.02%
IV. Public Safety Noncontributory							
A. State	17.47%	0.90%	0.86%	0.00%	0.00%	0.41%	19.64%
B. Other Division A	17.21%	0.84%	0.77%	0.00%	0.00%	0.38%	19.20%
C. Salt Lake City	17.12%	0.79%	0.71%	0.00%	0.00%	0.54%	19.16%
D. Ogden	16.90%	0.78%	0.67%	0.00%	0.00%	0.53%	18.88%
E. Bountiful	17.20%	0.83%	0.77%	0.00%	0.00%	0.38%	19.18%
F. Other Division B	17.46%	0.88%	0.85%	0.00%	0.00%	0.65%	19.84%
V. Firefighters							
A. Division A	21.48%	0.19%	1.55%	0.48%	0.00%	0.54%	24.24%
B. Division B	21.22%	0.19%	1.34%	0.51%	0.00%	0.70%	23.96%
VI. Judges	30.73%	0.00%	0.00%	0.00%	0.00%	1.31%	32.04%
VII. Governors and Legislative	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note: Columns may not add to total due to rounding

Net Employer Normal Cost

Fund/Division (1)	Total Normal Cost (2)	Member Rate (3)	Net Employer Normal Cost - (2) - (3) (4)
I. Public Employees Contributory			
A. Local Government	10.26%	6.00%	4.26%
B. State and School	10.02%	6.00%	4.02%
II. Public Employees Noncontributory			
A. Local Government	10.66%	0.00%	10.66%
B. State and School	11.35%	0.00%	11.35%
III. Public Safety Contributory			
A. State	21.04%	12.29%	8.75%
B. Other Division A	19.77%	12.29%	7.48%
C. Salt Lake City	20.13%	13.74%	6.39%
D. Provo	20.27%	13.54%	6.73%
E. Logan	19.14%	11.13%	8.01%
F. Other Division B	20.02%	10.50%	9.52%
IV. Public Safety Noncontributory			
A. State	19.64%	0.00%	19.64%
B. Other Division A	19.20%	0.00%	19.20%
C. Salt Lake City	19.16%	0.00%	19.16%
D. Ogden	18.88%	0.00%	18.88%
E. Bountiful	19.18%	0.00%	19.18%
F. Other Division B	19.84%	0.00%	19.84%
V. Firefighters			
A. Division A	24.24%	15.05%	9.19%
B. Division B	23.96%	16.71%	7.25%
VI. Judges	32.04%	0.00%	32.04%
VII. Governors and Legislative	N/A	N/A	N/A

Note: The total normal cost column includes the cost of the group insurance benefit

Determination of Actuarial Accrued Liability

Fund/Division (1)	Actuarial Present Value of Future Benefits (2)	Actuarial Present Value of Future Normal Costs			Actuarial Accrued Liability (2) - (5) (6)
		Members (3)	Employers (4)	Total (5)	
I. Public Employees Contributory					
A. Local Government	302,444	27,002	18,766	45,768	256,676
B. State and School	743,295	38,775	25,397	64,172	679,123
C. Subtotal	1,045,739	65,777	44,163	109,940	935,799
II. Public Employees Noncontributory					
A. Local Government	2,068,605	0	552,655	552,655	1,515,951
B. State and School	10,209,248	0	2,142,387	2,142,387	8,066,861
C. Subtotal	12,277,853	0	2,695,042	2,695,042	9,582,812
III. Public Safety Contributory					
A. State	68,806	970	691	1,661	67,145
B. Other Division A	172,528	18,751	11,412	30,163	142,365
C. Salt Lake City	44,960	117	54	171	44,789
D. Provo	32,582	5,994	2,980	8,974	23,608
E. Logan	15,258	2,348	1,689	4,037	11,221
F. Other Division B	39,987	7,839	7,107	14,946	25,041
G. Subtotal	374,121	36,019	23,933	59,952	314,169
IV. Public Safety Noncontributory					
A. State	542,098	0	157,111	157,111	384,986
B. Other Division A	502,222	0	193,941	193,941	308,280
C. Salt Lake City	137,000	0	32,879	32,879	104,121
D. Ogden	46,304	0	8,176	8,176	38,128
E. Bountiful	12,498	0	2,397	2,397	10,101
F. Other Division B	85,289	0	38,197	38,197	47,091
G. Subtotal	1,325,411	0	432,701	432,701	892,707
V. Firefighters					
A. Division A	76,788	23,490	14,343	37,833	38,955
B. Division B	560,268	100,265	43,503	143,768	416,501
C. Subtotal	637,056	123,755	57,846	181,601	455,456
VI. Judges	106,059	0	32,097	32,097	73,962
VII. Governors and Legislative	8,582	0	674	674	7,908
VIII. Grand Total	15,774,821	225,551	3,286,456	3,512,007	12,262,813

Notes: Amounts shown are in \$ thousands
Columns may not add to total due to rounding

**Actuarial Accrued Liability
Details of Member and Employer Financing**

Fund/Division (1)	Inactive Members			Active Members		
	Accumulated Member Contributions (2)	Employer Financed (3)	Total (4)	Accumulated Member Contributions (5)	Employer Financed (6)	Total (7)
I. Public Employees Contributory						
A. Local Government	18,220	3,307	21,527	66,783	75,059	141,842
B. State and School	36,247	7,152	43,399	126,241	155,268	281,509
C. Subtotal	54,467	10,459	64,926	193,024	230,327	423,351
II. Public Employees Noncontributory						
A. Local Government	34,808	40,769	75,577	147,244	831,287	978,531
B. State and School	99,492	162,521	262,013	681,180	4,181,023	4,862,203
C. Subtotal	134,300	203,290	337,590	828,424	5,012,310	5,840,734
III. Public Safety Contributory						
A. State	770	467	1,237	1,773	2,627	4,400
B. Other Division A	3,813	754	4,567	19,165	29,312	48,477
C. Salt Lake City	80	0	80	158	159	317
D. Provo	574	0	574	5,461	7,490	12,951
E. Logan	78	0	78	2,487	4,922	7,409
F. Other Division B	680	10	690	5,989	9,863	15,852
G. Subtotal	5,995	1,231	7,226	35,033	54,373	89,406
IV. Public Safety Noncontributory						
A. State	1,432	4,550	5,982	12,565	217,403	229,968
B. Other Division A	3,056	3,367	6,423	15,454	193,580	209,034
C. Salt Lake City	252	595	847	3,742	54,469	58,211
D. Ogden	342	294	636	2,155	12,577	14,732
E. Bountiful	0	19	19	382	5,516	5,898
F. Other Division B	875	833	1,708	4,491	32,223	36,714
G. Subtotal	5,957	9,658	15,615	38,789	515,768	554,557
V. Firefighters						
A. Division A	310	69	379	7,546	15,689	23,235
B. Division B	1,582	233	1,815	63,565	126,059	189,624
C. Subtotal	1,892	302	2,194	71,111	141,748	212,859
VI. Judges	478	-68	410	7,547	27,403	34,950
VII. Governors and Legislative	193	1,291	1,484	11	1,333	1,344
VIII. Grand Total	203,282	226,163	429,445	1,173,939	5,983,262	7,157,201

Notes: Amounts shown are in \$ thousands
Columns may not add to total due to rounding

Number of Members

Fund/Division (1)	Active (2)	Inactive Members			Members Receiving Benefits			Total (9)
		Disabled (3)	Vested (4)	Nonvested (5)	Regular Retirees (6)	Disabled Retirees (7)	Beneficiaries (8)	
I. Public Employees Contributory								
A. Local Government	1,528	35	472	595	1,452	77	365	4,524
B. State and School	2,299	77	936	34	5,210	220	940	9,716
C. Subtotal	3,827	112	1,408	629	6,662	297	1,305	14,240
II. Public Employees Noncontributory								
A. Local Government	16,707	114	3,272	835	2,690	75	181	23,874
B. State and School	65,143	491	13,789	1,856	13,695	330	757	96,061
C. Subtotal	81,850	605	17,061	2,691	16,385	405	938	119,935
III. Public Safety Contributory								
A. State	30	1	26	39	252	17	119	484
B. Other Division A	437	3	94	222	377	14	125	1,272
C. Salt Lake City	2	0	4	6	157	18	55	242
D. Provo	95	0	14	9	33	0	15	166
E. Logan	56	0	2	6	12	1	3	80
F. Other Division B	174	0	19	34	39	4	2	272
G. Subtotal	794	4	159	316	870	54	319	2,516
IV. Public Safety Noncontributory								
A. State	2,289	11	240	53	469	7	28	3,097
B. Other Division A	2,701	9	261	141	296	5	12	3,425
C. Salt Lake City	397	1	24	8	115	2	9	556
D. Ogden	118	1	12	9	88	2	25	255
E. Bountiful	33	0	3	0	18	2	1	57
F. Other Division B	436	2	37	20	37	0	2	534
G. Subtotal	5,974	24	577	231	1,023	18	77	7,924
V. Firefighters								
A. Division A	288	0	15	51	43	12	11	420
B. Division B	1,145	0	35	72	551	53	153	2,009
C. Subtotal	1,433	0	50	123	594	65	164	2,429
VI. Judges	104	0	4	0	49	0	26	183
VII. Governors and Legislative	86	0	79	17	174	0	44	400
VIII. Grand Total	94,068	745	19,338	4,007	25,757	839	2,873	147,627

Active Membership Statistics

Fund/Division (1)	Number (2)	Total Compensation \$ Thousands (3)	Average Compensation (\$'s) (4)	Accumulated Member Contributions With Interest \$ Thousands (5)	Average Age (6)	Average Service (7)
I. Public Employees Contributory						
A. Local Government	1,528	53,737	35,168	66,783	46.2	13.5
B. State and School	2,299	81,079	35,267	126,241	50.0	18.9
C. Subtotal	3,827	134,816	35,228	193,024	48.5	16.7
II. Public Employees Noncontributory						
A. Local Government	16,707	551,912	33,035	147,244	42.6	7.9
B. State and School	65,143	2,059,501	31,615	681,180	43.6	9.5
C. Subtotal	81,850	2,611,413	31,905	828,424	43.4	9.2
III. Public Safety Contributory						
A. State	30	1,114	37,135	1,773	49.4	14.6
B. Other Division A	437	15,625	35,756	19,165	39.5	9.8
C. Salt Lake City	2	89	44,304	158	40.0	13.5
D. Provo	95	4,294	45,202	5,461	38.9	10.1
E. Logan	56	2,150	38,388	2,487	37.6	11.1
F. Other Division B	174	6,749	38,790	5,989	36.8	8.3
G. Subtotal	794	30,021	37,810	35,033	39.1	9.8
IV. Public Safety Noncontributory						
A. State	2,289	80,560	35,194	12,565	40.2	9.3
B. Other Division A	2,701	91,556	33,897	15,454	36.3	7.1
C. Salt Lake City	397	17,372	43,759	3,742	38.7	11.4
D. Ogden	118	4,386	37,167	2,155	37.2	10.3
E. Bountiful	33	1,442	43,684	382	41.8	13.2
F. Other Division B	436	17,126	39,281	4,491	36.7	6.9
G. Subtotal	5,974	212,442	35,561	38,789	38.0	8.3
V. Firefighters						
A. Division A	288	10,647	36,970	7,546	37.3	6.7
B. Division B	1,145	50,946	44,494	63,565	39.8	11.6
C. Subtotal	1,433	61,593	42,982	71,111	39.3	10.6
VI. Judges	104	10,318	99,208	7,547	53.7	9.7
VII. Governors and Legislative	86	478	5,557	11	50.4	6.2
VIII. Grand Total	94,068	3,061,081	32,541	1,173,939	43.2	9.5

**Retired Member Statistics
(Including Disabled Retirees and Beneficiaries)**

Fund/Division (1)	Number (2)	Annual Total Benefits (\$ Thousands) (3)	Average Monthly Benefit (\$'s) (4)
I. Public Employees Contributory			
A. Local Government	1,894	11,267	496
B. State and School	6,370	44,997	589
C. Subtotal	<u>8,264</u>	<u>56,264</u>	<u>567</u>
II. Public Employees Noncontributory			
A. Local Government	2,946	38,280	1,083
B. State and School	14,782	242,630	1,368
C. Subtotal	<u>17,728</u>	<u>280,910</u>	<u>1,320</u>
III. Public Safety Contributory			
A. State	388	5,630	1,209
B. Other Division A	516	7,349	1,187
C. Salt Lake City	230	3,921	1,420
D. Provo	48	829	1,440
E. Logan	16	288	1,501
F. Other Division B	45	594	1,099
G. Subtotal	<u>1,243</u>	<u>18,611</u>	<u>1,248</u>
IV. Public Safety Noncontributory			
A. State	504	10,855	1,795
B. Other Division A	313	6,665	1,774
C. Salt Lake City	126	3,219	2,129
D. Ogden	115	1,780	1,290
E. Bountiful	21	327	1,298
F. Other Division B	39	582	1,243
G. Subtotal	<u>1,118</u>	<u>23,428</u>	<u>1,746</u>
V. Firefighters			
A. Division A	66	1,156	1,460
B. Division B	757	17,007	1,872
C. Subtotal	<u>823</u>	<u>18,163</u>	<u>1,839</u>
VI. Judges	75	3,299	3,666
VII. Governors and Legislative	218	536	205
VIII. Grand Total	<u>29,469</u>	<u>401,211</u>	<u>1,135</u>

Market Value of Assets
(All Retirement Systems Combined)

Item	January 1, 2001	January 1, 2000
(1)	(2)	(3)
1. Cash	22	22
2. Accrued income receivable from:		
a. Member contributions	1,037	777
b. Employer contributions	24,379	20,667
c. Fire insurance premium tax / court fees	60	184
d. Investments	<u>471,147</u>	<u>128,061</u>
e. Total	496,323	149,689
3. Investments		
a. Short-term securities – domestic	529,368	119,273
b. Short-term securities - international	65,873	153,972
c. Bonds - domestic	2,616,749	1,845,854
d. Bonds - international	767,420	1,113,824
e. Equities - domestic	5,191,747	4,964,220
f. Equities - international	2,116,439	2,649,540
g. Alternative investments	1,049,887	1,018,728
h. Real estate	1,133,488	1,188,404
i. Mortgage loans	<u>3,473</u>	<u>3,675</u>
j. Total	13,474,444	13,057,490
4. Other	1,436,071	1,392,818
5. Total assets	15,406,860	14,600,019
6. Liabilities		
a. Securities lending liability	(1,430,302)	(1,386,744)
b. Other accounting liabilities	(618,792)	(127,525)
c. Reserves	<u>(51,246)</u>	<u>(51,351)</u>
d. Total	(2,100,340)	(1,565,620)
7. Net assets	13,306,520	13,034,399

Note: Assets exclude 401(k) and 457 plans
Amounts shown are in \$ thousands

Reconciliation of Market Value of Assets (MVA)

Fund/Division (1)	MVA as of Dec. 31, 1999 (2)	Contributions (3)	Benefits and Refunds (4)	Earnings, Net of Expenses (5)	Transfers (6)	MVA as of Dec. 31, 2000 (7)
I. Public Employees Contributory						
A. Local Government	273,956	6,911	(13,595)	4,582	(11,601)	260,253
B. State and School	756,559	12,037	(51,762)	12,281	(42,948)	686,167
C. Subtotal	1,030,515	18,948	(65,357)	16,863	(54,549)	946,420
II. Public Employees Noncontributory						
A. Local Government	1,605,023	60,915	(38,758)	28,775	11,850	1,667,805
B. State and School	8,451,902	280,910	(243,105)	150,072	50,390	8,690,169
C. Subtotal	10,056,925	341,825	(281,863)	178,847	62,240	10,357,974
III. Public Safety Contributory						
A. State	81,747	292	(6,371)	1,283	(6,520)	70,431
B. Other Division A	170,963	3,110	(8,352)	2,828	(9,258)	159,291
C. Salt Lake City	55,053	42	(4,207)	865	(4,240)	47,513
D. Provo	21,574	1,146	(932)	382	25	22,195
E. Logan	12,206	399	(281)	218	8	12,550
F. Other Division B	24,786	1,386	(612)	464	1,141	27,173
G. Subtotal	366,329	6,375	(20,755)	6,040	(18,844)	339,153
IV. Public Safety Noncontributory						
A. State	380,341	19,178	(10,679)	6,896	7,366	403,102
B. Other Division A	344,060	16,823	(6,470)	6,352	10,049	370,814
C. Salt Lake City	72,394	6,261	(3,168)	1,353	4,481	81,321
D. Ogden	38,880	1,155	(1,786)	680	70	38,999
E. Bountiful	10,329	340	(341)	183	10	10,521
F. Other Division B	49,587	3,353	(541)	882	(1,105)	52,168
G. Subtotal	895,591	47,110	(22,985)	16,346	20,871	956,925
V. Firefighters						
A. Division A	62,551	2,729	(1,345)	1,127	546	65,608
B. Division B	470,232	13,643	(17,705)	8,287	757	475,214
C. Subtotal	532,783	16,372	(19,050)	9,414	1,303	540,822
VI. Judges	85,921	3,430	(3,322)	1,519	183	87,731
VII. Governors and Legislative	12,159	0	(663)	212	16	11,724
VIII. 3% Substantial Substitute	54,176	22,032	(307)	1,090	(11,220)	65,771
IX. Grand Total	13,034,399	456,092	(414,302)	230,331	0	13,306,520

Notes: Amounts shown are in \$ thousands
Columns may not add to total due to rounding

Investment Return Rates for Prior Year

	Basis of Assets	
	Market Value	Actuarial Value
	(1)	(2)
1. Beginning of year assets	13,034,399	11,834,418
2. Contributions to fund during year	456,092	456,092
3. Benefit payments during year (including refunds of contributions)	(414,302)	(414,302)
4. Transfers to and (from) URS	0	0
5. Investment income, net of investment and administrative expenses	230,331	1,331,905
6. End of year assets	13,306,520	13,208,113
7. Investment return rate	1.8%	11.2%

Note: Amounts shown are in \$ thousands

Summary of Investment Return Rates

<u>Year</u>	<u>Return on Market Value</u>	<u>Return on Actuarial Value</u>
(1)	(2)	(3)
1991	21.5%	11.4%
1992	4.3%	10.5%
1993	15.7%	13.8%
1994	0.0%	8.8%
1995	21.4%	11.6%
1996	14.7%	11.7%
1997	15.8%	13.7%
1998	9.4%	12.6%
1999	16.3%	14.7%
2000	1.8%	11.2%

**Calculation of Actuarial Value of Assets
 (All Retirement Systems Combined)**

1. Market value of assets 13,306,520

2. Adjustments to smooth asset values based on
 excess/shortfall of expected investment income for:

<u>Year</u>	<u>Total Excess/(Shortfall)</u>	<u>Weight Subtracted</u>	<u>Weighted Amount</u>
a. 2000	(814,093)	80%	(651,274)
b. 1999	932,957	60%	559,774
c. 1998	137,130	40%	54,852
d. 1997	675,272	20%	135,054
e. 1996	506,151	0%	0
f. Total			98,407

3. Actuarial value of assets (1-2f) 13,208,113

Note: Amounts shown are in \$ thousands

Transfer Adjustments to Asset Values

Fund/Division (1)	Market Value of Assets (MVA) at January 1, 2001			Actuarial Value of Assets (AVA) at January 1, 2001		
	MVA Before Transfer (2)	Transfer Amount (3)	MVA After Transfer (4)	AVA Before Transfer (5)	Transfer Amount (6)	AVA After Transfer (7)
I. Public Employees Contributory						
A. Local Government	260,253	(3,741)	256,512	257,381	(3,700)	253,681
B. State and School	686,167	(5,881)	680,286	676,692	(5,800)	670,892
C. Subtotal	946,420	(9,622)	936,798	934,073	(9,500)	924,573
II. Public Employees Noncontributory						
A. Local Government	1,667,805	3,741	1,671,546	1,657,138	3,700	1,660,838
B. State and School	8,690,169	5,881	8,696,050	8,627,806	5,800	8,633,606
C. Subtotal	10,357,974	9,622	10,367,596	10,284,944	9,500	10,294,444
III. Public Safety Contributory						
A. State	70,431	(1,851)	68,580	69,209	(1,819)	67,390
B. Other Division A	159,291	(3,980)	155,311	157,308	(3,930)	153,378
C. Salt Lake City	47,513	(2,052)	45,461	46,699	(2,017)	44,682
D. Provo	22,195	0	22,195	22,045	0	22,045
E. Logan	12,550	0	12,550	12,462	0	12,462
F. Other Division B	27,173	100	27,273	26,892	100	26,992
G. Subtotal	339,153	(7,783)	331,370	334,615	(7,666)	326,949
IV. Public Safety Noncontributory						
A. State	403,102	1,851	404,953	400,944	1,819	402,763
B. Other Division A	370,814	3,980	374,794	369,078	3,930	373,008
C. Salt Lake City	81,321	2,052	83,373	81,104	2,017	83,121
D. Ogden	38,999	0	38,999	38,652	0	38,652
E. Bountiful	10,521	0	10,521	10,439	0	10,439
F. Other Division B	52,168	(100)	52,068	52,164	(100)	52,064
G. Subtotal	956,925	7,783	964,708	952,381	7,666	960,047
V. Firefighters						
A. Division A	65,608	(15,656)	49,952	65,261	(15,573)	49,688
B. Division B	475,214	15,656	490,870	471,242	15,573	486,815
C. Subtotal	540,822	0	540,822	536,503	0	536,503
VI. Judges	87,731	0	87,731	87,139	0	87,139
VII. Governors and Legislative	11,724	0	11,724	11,569	0	11,569
VIII. 3% Substantial Substitute	65,771	0	65,771	66,889	0	66,889
IX. Grand Total	13,306,520	0	13,306,520	13,208,113	0	13,208,113

Notes: Amounts shown are in \$ thousands
Columns may not add to total due to rounding

Contribution Rate for 3% Substantial Substitute

1. Actuarial accrued liability, all funds combined	
a. Retirees	138,738
b. Inactives	10,235
c. Actives	<u>201,729</u>
d. Total	350,702
2. Actuarial value of assets	66,889
3. Unfunded actuarial accrued liability	283,813
4. Covered compensation of state funds that will pay for benefit	2,302,793
5. Recommended rate (20-year funding period and 3.00% PGR)	0.96%

Notes: Amounts shown are in \$ thousands

Columns may not add to total due to rounding

Liabilities for 3% Substantial Substitute

Fund/Division (1)	Retirees and Beneficiaries (2)	Inactive Members (3)	Active Members (4)	Total (5)
I. Public Employees Contributory				
A. Local Government	2,746	556	4,831	8,133
B. State and School	10,349	1,294	10,208	21,850
C. Subtotal	13,095	1,850	15,039	29,983
II. Public Employees Noncontributory				
A. Local Government	13,601	1,719	24,540	39,859
B. State and School	87,759	6,160	138,186	232,104
C. Subtotal	101,360	7,879	162,726	271,963
III. Public Safety Contributory				
A. State	1,765	32	163	1,960
B. Other Division A	2,614	76	1,445	4,134
C. Salt Lake City	1,312	0	14	1,327
D. Provo	299	6	321	627
E. Logan	112	1	203	315
F. Other Division B	253	9	383	645
G. Subtotal	6,355	124	2,529	9,008
IV. Public Safety Noncontributory				
A. State	4,441	119	5,810	10,370
B. Other Division A	2,767	128	4,708	7,603
C. Salt Lake City	1,343	14	1,474	2,831
D. Ogden	674	13	450	1,137
E. Bountiful	125	0	172	296
F. Other Division B	260	34	838	1,132
G. Subtotal	9,610	308	13,452	23,369
V. Firefighters				
A. Division A	433	4	677	1,114
B. Division B	6,584	20	5,887	12,491
C. Subtotal	7,017	24	6,564	13,605
VI. Judges	1,158	12	1,406	2,576
VII. Governors and Legislative	144	38	14	197
VIII. Grand Total	138,739	10,235	201,730	350,701

Notes: Amounts shown are in \$ thousands
Columns may not add to total due to rounding

**Historical Summary of Statistical Data
Public Employees Retirement System
(Contributory)**

Plan Year Beginning January 1st	Participant Counts				Covered Payroll (\$ Thousands)	Average Pay (7)	Retirement Benefits in Force Annual Amount (\$ Thousands)	Average Retiree Monthly Benefit (9)	Market Value of Assets (\$ Thousands)	Actuarial Value of Assets (\$ Thousands)
	Active (2)	Inactive (3)	Retired (4)	Total (5)						
1990	20,773	8,984	13,029	42,786	428,720	20,638	55,504	355	Not Available	954,900
1991	15,784	892	12,331	29,007	340,524	21,574	56,673	383	803,332	796,016
1992	12,430	1,629	12,275	26,334	287,907	23,162	57,306	389	867,300	785,115
1993	11,405	1,497	11,858	24,760	283,299	24,840	57,608	405	833,053	800,806
1994	10,826	1,733	11,444	24,003	280,655	25,924	57,861	421	929,993	880,979
1995	10,421	1,805	11,115	23,341	284,657	27,316	58,345	437	922,155	935,845
1996	6,954	2,028	10,645	19,627	195,717	28,145	58,238	456	919,007	852,034
1997	4,673	1,906	10,176	16,755	135,083	28,907	57,770	473	859,304	772,977
1998	4,396	1,975	9,724	16,095	134,341	30,560	57,496	493	916,532	809,388
1999	4,144	2,089	9,208	15,441	133,440	32,201	56,599	512	927,169	840,215
2000	3,967	2,134	8,717	14,818	133,615	33,682	55,716	533	974,834	878,190
2001	3,827	2,149	8,264	14,240	134,816	35,228	56,264	567	936,798	924,573

**Historical Summary of Statistical Data
Public Employees Retirement System
(Noncontributory)**

Plan Year Beginning January 1st	Participant Counts				Covered Payroll (\$ Thousands)	Average Pay	Retirement Benefits in Force Annual Amount (\$ Thousands)	Average Retiree Monthly Benefit	Market Value of Assets (\$ Thousands)	Actuarial Value of Assets (\$ Thousands)
	Active	Inactive	Retired	Total						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1990	43,981	9,783	4,421	58,185	940,325	21,380	56,500	1,064	Not Available	2,100,892
1991	50,245	15,373	5,206	70,824	1,061,835	21,133	68,032	1,089	2,618,017	2,594,245
1992	58,836	8,042	6,114	72,992	1,329,925	22,604	76,871	1,048	3,345,871	3,041,640
1993	59,739	7,911	7,023	74,673	1,425,612	23,864	89,557	1,063	3,609,761	3,480,582
1994	63,448	9,507	8,025	80,980	1,536,528	24,217	104,731	1,088	4,258,021	4,039,120
1995	67,698	10,131	9,143	86,972	1,688,967	24,949	121,850	1,111	4,312,948	4,372,190
1996	69,922	12,413	10,458	92,793	1,862,940	26,643	142,838	1,138	5,497,373	5,128,203
1997	73,478	13,965	11,841	99,284	2,048,876	27,884	166,432	1,171	6,547,598	5,954,796
1998	76,728	15,383	13,242	105,353	2,231,957	29,089	192,723	1,213	7,711,808	6,896,740
1999	77,360	17,494	14,645	109,499	2,343,986	30,300	220,230	1,253	8,560,909	7,894,249
2000	80,639	18,630	16,163	115,432	2,486,200	30,831	248,366	1,281	10,112,606	9,186,463
2001	81,850	20,357	17,728	119,935	2,611,413	31,905	280,910	1,320	10,367,596	10,294,444

**Historical Summary of Statistical Data
 Public Safety Retirement System
 (Contributory)**

Plan Year Beginning January 1st	Participant Counts				Covered Payroll (\$ Thousands)	Average Pay (7)	Retirement Benefits in Force Annual Amount (\$ Thousands)	Average Retiree Monthly Benefit (9)	Market Value of Assets (\$ Thousands)	Actuarial Value of Assets (\$ Thousands)
	Active (2)	Inactive (3)	Retired (4)	Total (5)						
1990	2,612	713	1,194	4,519	65,978	25,260	13,139	917	Not Available	330,407
1991	1,641	520	1,190	3,351	42,496	25,896	13,530	948	240,788	241,347
1992	1,644	709	1,237	3,590	44,469	27,049	14,290	963	289,472	263,237
1993	1,591	705	1,251	3,547	44,934	28,244	14,860	990	295,915	285,043
1994	1,601	714	1,273	3,588	46,728	29,187	15,373	1,006	326,536	311,148
1995	1,280	568	1,294	3,142	38,571	30,134	16,087	1,036	284,198	289,572
1996	971	525	1,321	2,817	30,304	31,209	17,323	1,093	310,209	291,478
1997	952	543	1,322	2,817	31,940	33,550	17,735	1,118	335,065	304,699
1998	1,006	531	1,340	2,877	34,262	34,058	18,487	1,150	364,531	324,488
1999	855	498	1,344	2,697	29,704	34,742	19,147	1,187	347,477	316,739
2000	804	486	1,333	2,623	28,957	36,016	19,351	1,210	363,654	327,635
2001	794	479	1,243	2,516	30,021	37,810	18,611	1,248	331,370	326,949

**Historical Summary of Statistical Data
Public Safety Retirement System
(Noncontributory)**

Plan Year Beginning January 1st	Participant Counts				Covered Payroll (\$ Thousands)	Average Pay (7)	Retirement Benefits in Force Annual Amount (\$ Thousands)	Average Retiree Monthly Benefit (9)	Market Value of Assets (\$ Thousands)	Actuarial Value of Assets (\$ Thousands)
	Active (2)	Inactive (3)	Retired (4)	Total (5)						
1990	1,512	32	15	1,559	37,798	24,999	229	917	Not Available	330,407
1991	2,697	154	65	2,916	68,205	25,290	997	1,278	136,287	132,275
1992	3,006	174	120	3,300	76,914	25,587	1,939	1,346	179,950	162,737
1993	3,198	185	175	3,558	85,678	26,791	2,935	1,398	200,668	193,301
1994	3,289	198	238	3,725	89,839	27,315	4,272	1,496	251,536	236,786
1995	3,899	360	304	4,563	111,292	28,544	5,684	1,558	297,278	300,101
1996	4,455	555	395	5,405	130,552	29,305	7,596	1,603	409,217	379,132
1997	4,720	614	492	5,826	149,086	31,586	9,870	1,672	496,197	450,407
1998	5,033	664	592	6,289	161,826	32,153	12,068	1,699	606,326	542,680
1999	5,427	752	747	6,926	180,904	33,334	15,603	1,741	726,304	672,062
2000	5,735	865	882	7,482	196,271	34,223	18,504	1,748	898,266	818,697
2001	5,974	832	1,118	7,924	212,442	35,561	23,428	1,746	964,708	960,047

**Historical Summary of Statistical Data
Firefighters Retirement System**

Plan Year Beginning January 1st	Participant Counts			Total	Covered Payroll (\$ Thousands)	Average Pay (7)	Retirement Benefits in Force Annual Amount (\$ Thousands)	Average Retiree Monthly Benefit (9)	Market Value of Assets (\$ Thousands)	Actuarial Value of Assets (\$ Thousands)
	Active (2)	Inactive (3)	Retired (4)							
1990	993	76	544	1,613	28,661	28,863	6,626	1,015	Not Available	149,672
1991	1,024	66	553	1,643	30,649	29,932	7,134	1,075	163,428	161,945
1992	1,047	82	575	1,704	33,232	31,740	7,672	1,112	202,726	183,352
1993	1,072	89	587	1,748	36,500	34,049	8,209	1,165	211,975	203,985
1994	1,079	100	595	1,774	37,191	34,468	8,678	1,215	247,715	234,501
1995	1,123	103	618	1,844	39,669	35,324	9,811	1,323	249,712	253,304
1996	1,165	116	644	1,925	42,599	36,566	10,397	1,415	315,063	293,816
1997	1,229	123	675	2,027	47,550	38,690	12,049	1,488	362,555	329,475
1998	1,285	130	707	2,122	50,886	39,600	13,747	1,620	421,184	376,178
1999	1,352	156	736	2,244	54,402	40,238	14,940	1,692	460,190	423,405
2000	1,380	160	772	2,312	57,664	41,786	16,112	1,739	532,783	483,373
2001	1,433	173	823	2,429	61,593	42,982	18,163	1,839	540,822	536,503

**Historical Summary of Statistical Data
Judges Retirement System**

Plan Year Beginning January 1st	Participant Counts				Covered Payroll (\$ Thousands)	Average Pay (\$ Thousands)	Retirement Benefits in Force Annual Amount (\$ Thousands)	Average Retiree Monthly Benefit (\$ Thousands)	Market Value of Assets (\$ Thousands)	Actuarial Value of Assets (\$ Thousands)
	Active	Inactive	Retired	Total						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1990	90	0	50	140	5,283	58,700	826	1,015	Not Available	19,127
1991	87	0	46	133	5,867	67,438	827	1,499	22,432	22,242
1992	89	0	53	142	6,267	70,416	1,087	1,710	28,765	26,167
1993	80	1	62	143	6,434	80,424	1,597	2,147	31,388	30,254
1994	85	1	68	154	6,897	81,142	1,930	2,365	37,398	35,479
1995	87	0	70	157	7,263	83,488	2,193	2,610	38,220	38,726
1996	98	3	70	171	8,480	86,534	2,309	2,749	47,531	44,304
1997	100	1	69	170	9,202	92,019	2,396	2,894	55,757	50,721
1998	102	1	72	175	9,298	91,158	2,778	3,215	66,299	59,373
1999	103	2	73	178	9,667	93,850	2,970	3,391	73,650	67,998
2000	106	2	73	181	10,150	95,750	3,078	3,514	85,921	78,130
2001	104	4	75	183	10,318	99,208	3,299	3,666	87,731	87,139

**Historical Summary of Statistical Data
Legislative and Governors Retirement System**

Plan Year Beginning	Participant Counts				Covered Payroll (\$ Thousands)	Average Pay (7)	Retirement Benefits in Force Annual Amount (\$ Thousands)	Average Retiree Monthly Benefit (9)	Market Value of Assets (\$ Thousands)	Actuarial Value of Assets (\$ Thousands)
	Active (2)	Inactive (3)	Retired (4)	Total (5)						
January 1st (1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1990	76	133	162	371	288	3,789	329	169	Not Available	6,007
1991	57	118	150	325	238	4,172	295	164	6,427	6,355
1992	87	127	173	387	254	2,925	369	178	7,584	6,790
1993	84	120	180	384	246	2,925	396	183	7,443	7,122
1994	93	126	188	407	427	4,593	385	171	8,089	7,683
1995	89	112	196	397	412	4,628	422	180	7,684	7,804
1996	96	111	201	408	439	4,569	445	184	8,788	8,185
1997	75	115	200	390	367	4,892	457	190	9,561	8,636
1998	90	108	208	406	488	5,419	476	191	10,531	9,318
1999	91	99	211	401	495	5,440	504	199	10,976	9,988
2000	94	101	221	416	511	5,437	531	200	12,159	10,946
2001	86	96	218	400	478	5,557	536	205	11,724	11,569

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

1. *Investment return rate:*

8% per annum, compounded annually, composed of a 3.00% inflation rate and a 5.00% real rate of return, net of administrative and investment expenses.

2. *Active member mortality rates:*

Active member mortality rates are a function of the member's sex, occupation, and age. These rates were developed based on plan experience. Rates at selected ages are shown:

Active Male Members			
Age	Local Government and Public Employees	Public Educators	Public Safety and Firefighters ¹
20	.000597	.000187	.000525
25	.000443	.000171	.000499
30	.000536	.000188	.000495
35	.000783	.000242	.000520
40	.001002	.000449	.000721
45	.001229	.000767	.001234
50	.001798	.001481	.002101
55	.003036	.002688	.003228
60	.004958	.004256	.004440
65	.007540	.005426	.005606
70	.010807	.006020	.006713

Active Female Members		
Age	Local Government and Public Employees	Public Educators
20	.000344	.000404
25	.000313	.000164
30	.000331	.000073
35	.000402	.000158
40	.000547	.000379
45	.000802	.000694
50	.001212	.001072
55	.001812	.001478
60	.002614	.002047
65	.003603	.002845
70	.004766	.003903

¹ Males and female combined.

3. *Disability rates:*

Disability rates are a function of the member's sex, occupation, and age. These rates were developed based on plan experience. Rates are applied at all ages. Rates at selected ages are shown:

Active Male Members					
Age	Local Government	Public Employees	Public Educators	Public Safety ¹	Firefighters ¹
20	.000200	.000230	.000080	.000260	.000260
25	.000300	.000345	.000120	.000390	.000390
30	.000600	.000690	.000240	.000780	.000780
35	.000900	.001035	.000360	.001170	.001170
40	.001200	.001380	.000480	.001560	.001560
45	.002000	.002300	.000800	.002600	.002600
50	.002600	.002990	.001040	.003380	.003380
55	.004100	.004715	.001640	.005330	.005330
60	.005600	.006440	.002240	.007280	.007280

Active Female Members			
Age	Local Government	Public Employees	Public Educators
20	.000170	.000240	.000140
25	.000255	.000360	.000210
30	.000510	.000720	.000420
35	.000765	.001080	.000630
40	.001020	.001440	.000840
45	.001700	.002400	.001400
50	.002210	.003120	.001820
55	.003485	.004920	.002870
60	.004760	.006720	.003920

¹ Males and females combined.

4. *Termination rates (for causes other than death, disability or retirement):*

Termination rates are a function of the member's sex, occupation, age and service. These rates were developed based on plan experience. Termination rates are not applied after a member becomes eligible for a reduced or unreduced retirement benefit. Rates at selected ages are shown:

Active Male Members - Local Government						
Years of Service						
Age	0	1	2	3	4	5+
20	0.2262	0.2154	0.1750	0.1174	0.0630	0.0919
25	0.1884	0.1795	0.1470	0.1016	0.0562	0.0815
30	0.1588	0.1514	0.1250	0.0873	0.0498	0.0605
35	0.1373	0.1308	0.1092	0.0793	0.0494	0.0463
40	0.1235	0.1177	0.1004	0.0778	0.0550	0.0381
45	0.1184	0.1128	0.0993	0.0834	0.0675	0.0334
50	0.1228	0.1169	0.1069	0.0972	0.0877	0.0311
55	0.1383	0.1317	0.1243	0.1206	0.1168	0.0336
60	0.1452	0.1383	0.1306	0.1266	0.1227	0.0352
65	0.1525	0.1452	0.1371	0.1329	0.1288	0.0370
70	0.1670	0.1590	0.1500	0.1455	0.1410	0.0405

Active Female Members - Local Government						
Years of Service						
Age	0	1	2	3	4	5+
20	0.2924	0.2525	0.2220	0.1935	0.1770	0.1524
25	0.2766	0.2262	0.1899	0.1672	0.1586	0.1316
30	0.2572	0.2006	0.1613	0.1386	0.1317	0.0895
35	0.2352	0.1764	0.1365	0.1147	0.1094	0.0618
40	0.2125	0.1547	0.1164	0.0963	0.0925	0.0473
45	0.1922	0.1381	0.1027	0.0844	0.0814	0.0422
50	0.1799	0.1293	0.0966	0.0795	0.0768	0.0421
55	0.1825	0.1319	0.0986	0.0816	0.0795	0.0432
60	0.2066	0.1488	0.1093	0.0905	0.0898	0.0443
65	0.2558	0.1816	0.1286	0.1060	0.1080	0.0453
70	0.3311	0.2309	0.1564	0.1278	0.1338	0.0461

4. Termination rates (continued):

Active Male Members - Public Employees						
Years of Service						
Age	0	1	2	3	4	5+
20	0.4502	0.3451	0.2749	0.2250	0.1814	0.1354
25	0.3536	0.2884	0.2342	0.1906	0.1520	0.1185
30	0.2903	0.2412	0.1949	0.1531	0.1154	0.0832
35	0.2525	0.2017	0.1573	0.1210	0.0937	0.0578
40	0.2279	0.1673	0.1224	0.0944	0.0832	0.0410
45	0.2067	0.1376	0.0934	0.0743	0.0791	0.0304
50	0.1841	0.1154	0.0752	0.0630	0.0776	0.0243
55	0.1590	0.1038	0.0724	0.0637	0.0772	0.0242
60	0.1322	0.1060	0.0888	0.0794	0.0778	0.0324
65	0.1388	0.1112	0.0933	0.0833	0.0817	0.0340
70	0.1440	0.1154	0.0968	0.0865	0.0848	0.0354

Active Female Members - Public Employees						
Years of Service						
Age	0	1	2	3	4	5+
20	0.3305	0.3401	0.3253	0.2773	0.2281	0.2212
25	0.3044	0.2875	0.2594	0.2262	0.1946	0.1870
30	0.2740	0.2367	0.2012	0.1706	0.1464	0.1187
35	0.2411	0.1909	0.1527	0.1265	0.1087	0.0756
40	0.2088	0.1552	0.1186	0.0963	0.0836	0.0526
45	0.1808	0.1324	0.1004	0.0815	0.0719	0.0405
50	0.1610	0.1218	0.0956	0.0799	0.0733	0.0343
55	0.1524	0.1218	0.1008	0.0890	0.0870	0.0334
60	0.1579	0.1316	0.1136	0.1065	0.1121	0.0375
65	0.1788	0.1514	0.1332	0.1313	0.1492	0.0465
70	0.2153	0.1815	0.1595	0.1634	0.1975	0.0602

4. Termination rates (continued):

Active Male Members - Public Educators						
Years of Service						
Age	0	1	2	3	4	5+
20	0.1649	0.1585	0.1471	0.0918	0.0448	0.0726
25	0.1498	0.1361	0.1220	0.0871	0.0523	0.0629
30	0.1268	0.1175	0.1025	0.0823	0.0622	0.0430
35	0.1195	0.1027	0.0885	0.0785	0.0685	0.0290
40	0.1130	0.0926	0.0795	0.0756	0.0719	0.0208
45	0.1152	0.0895	0.0744	0.0733	0.0721	0.0162
50	0.1343	0.0958	0.0726	0.0711	0.0696	0.0125
55	0.1764	0.1131	0.0728	0.0685	0.0643	0.0093
60	0.1853	0.1188	0.0765	0.0720	0.0675	0.0098
65	0.1946	0.1248	0.0802	0.0756	0.0709	0.0103
70	0.2131	0.1366	0.0880	0.0828	0.0776	0.0113

Active Female Members - Public Educators						
Years of Service						
Age	0	1	2	3	4	5+
20	0.2727	0.2674	0.2532	0.2263	0.1646	0.1532
25	0.2257	0.1962	0.1877	0.1791	0.1449	0.1604
30	0.1587	0.1442	0.1368	0.1292	0.1140	0.0838
35	0.1228	0.1093	0.0970	0.0895	0.0856	0.0521
40	0.1187	0.0885	0.0693	0.0616	0.0622	0.0347
45	0.1135	0.0786	0.0570	0.0468	0.0467	0.0274
50	0.1024	0.0765	0.0590	0.0470	0.0406	0.0245
55	0.0834	0.0804	0.0740	0.0617	0.0447	0.0243
60	0.0877	0.0845	0.0777	0.0648	0.0470	0.0255
65	0.0920	0.0886	0.0816	0.0679	0.0492	0.0268
70	0.0964	0.0929	0.0856	0.0713	0.0517	0.0281

4. Termination rates (continued):

Active Male and Female Members - Public Safety						
Years of Service						
Age	0	1	2	3	4	5+
20	0.1135	0.0944	0.0694	0.0644	0.0587	0.0710
25	0.0956	0.0771	0.0562	0.0554	0.0524	0.0616
30	0.0912	0.0683	0.0469	0.0452	0.0427	0.0417
35	0.1002	0.0681	0.0410	0.0363	0.0343	0.0274
40	0.1218	0.0757	0.0384	0.0287	0.0271	0.0182
45	0.1542	0.0896	0.0383	0.0227	0.0215	0.0135
50	0.1961	0.1084	0.0404	0.0190	0.0179	0.0115
55	0.2457	0.1308	0.0442	0.0179	0.0169	0.0114
60	0.3022	0.1561	0.0495	0.0198	0.0186	0.0125
65	0.3324	0.1840	0.0565	0.0249	0.0235	0.0145
70	0.3657	0.2146	0.0650	0.0331	0.0313	0.0174

Active Male and Female Members - Firefighters						
Years of Service						
Age	0	1	2	3	4	5+
20	0.1877	0.0838	0.0316	0.0252	0.0202	0.0158
25	0.1243	0.0520	0.0163	0.0155	0.0146	0.0150
30	0.0998	0.0442	0.0168	0.0160	0.0151	0.0140
35	0.0752	0.0364	0.0173	0.0165	0.0156	0.0130
40	0.0521	0.0340	0.0242	0.0230	0.0218	0.0070
45	0.0722	0.0570	0.0468	0.0445	0.0420	0.0049
50	0.1101	0.0914	0.0770	0.0731	0.0691	0.0027
55	0.1684	0.1392	0.1161	0.1103	0.1043	0.0009
60	0.2471	0.2003	0.1643	0.1561	0.1475	0.0013
65	0.3463	0.2748	0.2213	0.2103	0.1987	0.0018
70	0.4660	0.3625	0.2874	0.2730	0.2580	0.0023

5. *Refund rates:*

The percent of vested members electing to receive a refund of contributions on termination of employment. This rate is only applied to members of the contributory systems; vested members in the noncontributory systems are assumed to defer their benefits until retirement, even if they have a contribution account from service prior to the establishment of the noncontributory system. The rate is a function of the member's sex, occupation and service. These rates are based on plan experience.

Males				
Service	Local Government	Public Employees	Public Educators	Public Safety & Firefighters ¹
0-3	100%	100%	100%	100%
4	75%	86%	75%	76%
5	73%	83%	73%	74%
6	70%	80%	70%	71%
7	67%	78%	66%	69%
8	65%	77%	61%	67%
9	62%	75%	57%	65%
10	61%	73%	54%	57%
11	59%	70%	50%	50%
12	58%	68%	47%	42%
13	55%	66%	42%	40%
14	52%	65%	38%	37%
15	49%	63%	33%	35%
16	48%	61%	28%	33%
17	46%	60%	22%	31%
18	45%	58%	17%	29%
19	23%	29%	09%	15%
20 or more	00%	00%	00%	00%

¹ Male and female members combined.

5. Refund rates (continued):

Females			
Service	Local Government	Public Employees	Public Educators
0-3	100%	100%	100%
4	77%	80%	65%
5	75%	79%	64%
6	72%	77%	62%
7	69%	74%	61%
8	67%	71%	59%
9	64%	68%	58%
10	61%	64%	53%
11	57%	60%	48%
12	54%	56%	43%
13	49%	55%	39%
14	45%	53%	36%
15	40%	52%	32%
16	35%	49%	27%
17	30%	46%	21%
18	25%	43%	16%
19	13%	22%	08%
20 or more	00%	00%	00%

6. *Retirement rates:*

Retirement rates are a function of the member's age, service, sex and occupation. Rates are based on plan experience. Rates are applied only at ages at which the member is eligible for a reduced or unreduced retirement benefit. Members are assumed to retire no later than age 70 (age 65 for the public safety and firefighter systems). Sample rates are shown below. Retirement rates shown for local government, public employees and public educators below age 60 for 25-29 years of service apply only to noncontributory members.

Local Government - Males							
	Years of Service						
Age	0-3	4-9	10-14	15-19	20-24	25-29	30+
50	0.000	0.000	0.000	0.000	0.000	0.005	0.250
55	0.000	0.000	0.000	0.000	0.000	0.010	0.300
60	0.000	0.000	0.000	0.000	0.050	0.050	0.500
62	0.000	0.000	0.300	0.300	0.300	0.300	0.650
65	0.000	0.500	0.800	0.800	0.800	0.800	0.800

Public Employees – Males							
	Years of Service						
Age	0-3	4-9	10-14	15-19	20-24	25-29	30+
50	0.000	0.000	0.000	0.000	0.000	0.005	0.150
55	0.000	0.000	0.000	0.000	0.000	0.005	0.200
60	0.000	0.000	0.000	0.000	0.200	0.200	0.500
62	0.000	0.000	0.300	0.300	0.300	0.300	0.600
65	0.000	0.450	0.600	0.600	0.500	0.600	0.700

Public Educators – Males							
	Years of Service						
Age	0-3	4-9	10-14	15-19	20-24	25-29	30+
50	0.000	0.000	0.000	0.000	0.000	0.005	0.250
55	0.000	0.000	0.000	0.000	0.000	0.005	0.300
60	0.000	0.000	0.000	0.000	0.100	0.100	0.600
62	0.000	0.000	0.250	0.250	0.250	0.250	0.700
65	0.000	0.400	0.700	0.700	0.700	0.700	0.750

6. Retirement rates (continued):

Local Government – Females							
	Years of Service						
Age	0-3	4-9	10-14	15-19	20-24	25-29	30+
50	0.000	0.000	0.000	0.000	0.000	0.030	0.350
55	0.000	0.000	0.000	0.000	0.000	0.030	0.400
60	0.000	0.000	0.000	0.000	0.150	0.150	0.500
62	0.000	0.000	0.300	0.300	0.300	0.300	0.600
65	0.000	0.400	0.600	0.600	0.600	0.700	0.700

Public Employees – Females							
	Years of Service						
Age	0-3	4-9	10-14	15-19	20-24	25-29	30+
50	0.000	0.000	0.000	0.000	0.000	0.010	0.250
55	0.000	0.000	0.000	0.000	0.000	0.010	0.300
60	0.000	0.000	0.000	0.000	0.200	0.200	0.600
62	0.000	0.000	0.350	0.350	0.350	0.350	0.600
65	0.000	0.500	0.500	0.500	0.750	0.750	0.750

Public Educators – Females							
	Years of Service						
Age	0-3	4-9	10-14	15-19	20-24	25-29	30+
50	0.000	0.000	0.000	0.000	0.000	0.005	0.250
55	0.000	0.000	0.000	0.000	0.000	0.005	0.350
60	0.000	0.000	0.000	0.000	0.250	0.250	0.500
62	0.000	0.000	0.300	0.300	0.300	0.300	0.700
65	0.000	0.400	0.700	0.700	0.750	0.750	0.750

Public Safety - Males and Females							
	Years of Service						
Age	0-3	4-9	10-14	15-19	20-24	25-29	30+
45	0.00	0.00	0.00	0.00	0.14	0.14	0.14
50	0.00	0.00	0.00	0.00	0.14	0.14	0.14
55	0.00	0.00	0.00	0.00	0.20	0.20	0.33
60	0.00	0.00	0.15	0.27	0.33	0.40	0.50
62	0.00	0.00	0.15	0.27	0.33	0.40	0.50

6. Retirement rates (continued):

Firefighters - Males and Females							
Age	Years of Service						
	0-3	4-9	10-14	15-19	20-24	25-29	30+
45	0.00	0.00	0.00	0.00	0.06	0.06	0.06
50	0.00	0.00	0.00	0.00	0.06	0.13	0.35
55	0.00	0.00	0.00	0.00	0.15	0.15	0.75
60	0.00	0.00	0.15	0.15	0.15	0.50	0.75
62	0.00	0.00	0.15	0.15	0.15	0.50	0.75

Judges - Males and Females			
Age	All Service	Age	All Service
60	0.05	65	0.50
62	0.10	70	1.00

7. Salary increase rates:

Salaries for individual members are assumed to increase each year, as a function of the member's occupation and service. Rates are composed of a 3.00% inflation rate, a 1.50% general increase rate that applies to all, and a variable promotional/longevity component that is a function of the member's service.

Active Male and Female Members - Local Government		
Years of Service	Annual Promotional/Longevity Rates of Increase	Total Annual Rate of Increase Including 3.00% Inflation Component and 1.75% General Increase Rate
0	7.00%	11.75%
1	4.50	9.25
2	3.50	8.25
3	2.50	7.25
4	2.25	7.00
5	2.00	6.75
6	2.00	6.75
7	1.75	6.50
8	1.75	6.50
9	1.50	6.25
10	1.25	6.00
11	1.00	5.75
12	0.75	5.50
13	0.50	5.25
14	0.50	5.25
15 or more	0.00	4.75

7. Salary increase rates (continued):

Active Male and Female Members - Public Employees		
Years of Service	Annual Promotional/Longevity Rates of Increase	Total Annual Rate of Increase Including 3.00% Inflation Component and 1.75% General Increase Rate
0	6.00%	10.75%
1	4.50	9.25
2	3.50	8.25
3	3.00	7.75
4	2.50	7.25
5	2.25	7.00
6	1.75	6.50
7	1.50	6.25
8	1.50	6.25
9	1.25	6.00
10	1.25	6.00
11	1.00	5.75
12	0.75	5.50
13	0.75	5.50
14	0.50	5.25
15 or more	0.00	4.75

Active Male and Female Members Public Educators		
Years of Service	Annual Promotional/Longevity Rates of Increase	Total Annual Rate of Increase Including 3.00% Inflation Component and 1.75% General Increase Rate
0	10.25%	15.00%
1	6.00	10.75
2	4.50	9.25
3	4.25	9.00
4	4.00	8.75
5	3.75	8.50
6	3.25	8.00
7	3.00	7.75
8	2.75	7.50
9	2.50	7.25
10	2.00	6.75
11	1.75	6.50
12	1.25	6.00
13	0.75	5.50
14	0.25	5.00
15 or more	0.00	4.75

7. *Salary increase rates (continued):*

Active Male and Female Members Public Safety		
Years of Service	Annual Promotional/Longevity Rates of Increase	Total Annual Rate of Increase Including 3.00% Inflation Component and 1.75% General Increase Rate
0	6.00%	10.75%
1	3.00	7.75
2	2.50	7.25
3	2.25	7.00
4	2.00	6.75
5	1.75	6.50
6	1.50	6.25
7	1.50	6.25
8	1.25	6.00
9	1.25	6.00
10	1.00	5.75
11	1.00	5.75
12	0.75	5.50
13	0.50	5.25
14	0.25	5.00
15 or more	0.00	4.75

Active Male and Female Members Firefighters		
Years of Service	Annual Promotional/Longevity Rates of Increase	Total Annual Rate of Increase Including 3.00% Inflation Component and 1.75% General Increase Rate
0	7.00%	11.75%
1	5.75	10.50
2	5.00	9.75
3	4.50	9.25
4	4.00	8.75
5	3.75	8.50
6	3.50	8.25
7	3.50	8.25
8	3.25	8.00
9	3.25	8.00
10	3.00	7.75
11	3.00	7.75
12	2.00	6.75
13	1.00	5.75
14	0.50	5.25
15 or more	0.00	4.75

8. *Retiree mortality rates (nondisabled retirees):*

Retired Male Members			
Age	Local Government, Public Employees and All Beneficiaries	Public Educators	Public Safety and Firefighters
20	.000463	.000371	.000521
25	.000598	.000545	.000671
30	.000782	.000711	.000838
35	.000902	.000862	.000913
40	.000958	.000915	.001075
45	.001346	.001153	.001568
50	.002042	.001697	.002501
55	.003455	.002773	.004278
60	.006001	.004758	.007623
65	.010911	.008576	.013914
70	.019391	.015629	.023364
75	.030625	.025516	.036614
80	.048570	.040012	.060066
85	.081217	.066696	.096358
90	.124377	.104559	.149949
95	.196001	.164442	.231936

Retired Female Members			
Age	Local Government, Public Employees and All Beneficiaries	Public Educators	Public Safety and Firefighters
20	.000293	.000293	.000293
25	.000313	.000313	.000313
30	.000338	.000338	.000338
35	.000454	.000454	.000454
40	.000643	.000643	.000643
45	.000943	.000943	.000943
50	.001297	.001297	.001297
55	.002051	.002051	.002051
60	.003612	.003612	.003612
65	.007179	.007179	.007179
70	.012648	.012648	.012648
75	.019724	.019724	.019724
80	.034115	.034115	.034115
85	.058986	.058986	.058986
90	.100882	.100882	.100882
95	.167668	.167668	.167668

9. *Disabled annuitant mortality rates:*

Disabled Retired Male and Female Members	
Age	All Members
20	.006520
25	.009760
30	.012320
35	.014970
40	.017740
45	.021020
50	.024480
55	.028740
60	.033460
65	.038310
70	.044520
75	.057780
80	.092440
85	.138470
90	.195980
95	.275170
100	.396230

10. *Actuarial cost method:*

The Entry Age Normal actuarial cost method is used. This method is designed to produce a relatively level funding pattern when expressed as a percent of pay.

First, the actuarial present value of all future expected benefits is determined for each member, including retired members, beneficiaries, inactive members and active members. This takes into account both the probability that a benefit will be paid at a given age and the time value of money. The sum of these amounts--the Present Value of Future Benefits (PVFB)--is then determined.

Next, the Entry Age Normal actuarial cost method is used to allocate the PVFB between the current year (the normal cost), prior years (the Actuarial Accrued Liability), and future years (future normal costs). The current and future normal costs are determined as a level percentage of pay.

A portion of the normal cost may be paid by employee contributions in which case the balance becomes the normal cost portion of the employer contribution rate.

The difference between the Actuarial Accrued Liability (the portion of the total actuarial present value of future benefits allocated to prior years) and the Actuarial Value of Assets is called the Unfunded Actuarial Accrued Liability (UAAL). This is funded over 20 years from the valuation date (open period). The funding period is set by the Board of Trustees.

The cost of the Group Insurance benefit in the Public Employees Systems (contributory and noncontributory) is determined using the one-year term cost approach, and is therefore excluded in the above calculation. The term cost (the expected value of benefits to be paid during the year) is added to the employer normal cost rate determined above.

The total employer cost rate is the sum of (i) the normal cost rate, including the term cost for the Group Insurance benefit and net of employee contributions, and (ii) the level percent-of-pay amortization of the UAAL. For the Judges' System and the Firefighters' System, certain specified revenues (court fees and a tax on insurance premiums, respectively) are used as an offset to the employer contribution rate each year, as described elsewhere in this report.

All contribution rates are based upon monthly payments of contributions.

11. *Actuarial value of assets:*

The actuarial value of assets is equal to the market value, adjusted for a five-year phase in of actual investment return in excess of expected investment return. The actual return is calculated net of investment and administrative expenses, and the expected investment return is equal to the assumed investment return rate multiplied by the prior year's market value of assets, adjusted for contributions, benefits paid, and refunds.

12. *Payroll growth rate:*

In determining the level percent of payroll amortization rate, payroll is assumed to grow annually at 3.00%. I.e., total payroll is assumed to increase at the inflation rate, and no allowance is made for future growth in the number of members.

13. *Marital status:*

All nonretired members are assumed to be married with no children. Female members are assumed to be three years younger than their spouses; while male members are assumed to be three years older than their spouses.

14. *Administrative and investment expenses:*

No special assumption was made regarding administrative and investment expenses. Therefore, the assumed 8% return is net of any such expenses.

15. *Judges System:*

For the Judges System, no disability or withdrawal rates were used. Salaries were assumed to increase at 4.75% per year.

16. *Governors and Legislative Pension Plan:*

A 10% withdrawal rate was assumed regardless of age or service. No disability rates were used. No salary increase rate was used because the benefits do not reflect pay. Members were assumed to retire at the earlier of (i) age 65 with four years of service, or (ii) age 62 with 10 years of service. Normal cost and actuarial accrued liability were based on Level Dollar Entry Age Cost Method (not Level Percent of Pay).

17. *Cost-of-living increases:*

Since a 3.00% inflation rate is assumed (see investment return rate above), retirement benefits for all systems except Public Safety are assumed to increase at 3.00% even though the maximum allowable rate is 4%. Retirement benefits for the Public Safety System are assumed to increase at the maximum allowable rate of 2.50%.

**Summary of Benefit Provisions for
Public Employee Retirement Systems
(Contributory and Noncontributory)**

1. **Effective Date:** Contributory System - July 1, 1961.
Noncontributory System - July 1, 1986.
2. **Plan Year:** Twelve-month period ending December 31st.
3. **Administration:** The Systems are administered by a Board of Trustees (which also administers the other Utah Retirement Systems). The Board of Trustees is responsible for both administration of the Systems and investment of the fund assets.
4. **Type of Plan:** These are qualified governmental defined benefit retirement plans. Under GASB 25, they are considered to be cost-sharing multiple-employer plans.
5. **Eligibility:** These Systems cover eligible employees of the State of Utah, most local government employees, and most public education employees. Generally all employees are covered, except for those covered by another System--public safety employees, firefighters, judges, legislators, and higher education employees covered under TIAA-CREF. Eligible employees become participants immediately when hired, and are required to participate. The employer-selected plan determines whether new employees participate in the Contributory or Noncontributory System. Employees who were members of the Contributory System at the time their employer selected the Noncontributory System had an option to remain in the Contributory System.
6. **Employee Contributions:** Members of the Contributory System contribute 6.00% of salary per year. Employers may "pick-up" employee contributions under Section 414(h) of the Internal Revenue Code. No contributions are made by members of the Noncontributory System.
7. **Employer Contributions:** The current contribution rates differ between the Contributory and Noncontributory Systems, and also differ depending on whether the member is employed by a local government (Level B) or the State of Utah or a public school (Level A). Rates are set by the Board of Trustees, based upon the actuarial valuation report for the preceding year. The Funds participating in these systems are:

Fund 11 - Local Government Contributory
Fund 12 - State and School Contributory
Fund 15 - Local Government Noncontributory
Fund 16 - State and School Noncontributory

8. **Final Average Monthly Salary (FAMS):** The monthly average of the member's highest salaries preceding retirement. For the Contributory System a five-year average is used, while a three-year average is used for the Noncontributory System.

9. **Service Retirement (Unreduced):**
 - a. **Eligibility:** A member may retire with an unreduced benefit at age 65 with four years of service or after 30 years of service if earlier.
 - b. **Monthly Benefit (Contributory):** 2.00% times Final Average Monthly Salary (FAMS) times years of service earned since July 1, 1975, plus 1.25% of FAMS times service earned between July 1, 1967, and June 30, 1975, plus 1.10% of FAMS times service earned prior to July 1, 1967.
 - c. **Monthly Benefit (Noncontributory):** 2.00% of Final Average Monthly Salary times years of service.
 - d. **Payment Form:** Life annuity.

10. **Service Retirement (Reduced):**
 - a. **Eligibility:** A member may retire with a reduced benefit upon attaining age 62 with 10 years of service or age 60 with 20 years of service. A member of the Noncontributory System may retire at any age after earning 25 years of service.
 - b. **Reduction:** 3% per year that retirement is earlier than age 65. For Noncontributory System members retiring prior to age 60, actuarial reduction is applied to the 85% factor at age 60.
 - c. **Payment Form:** Life annuity.

11. **Disability Retirement:**
 - a. **Eligibility:** Member must be eligible for retirement under the Disability Act and must not be eligible for a 30-year service retirement at time of disability.
 - b. **Monthly Benefits Payable Prior to Retirement:** A separate fund established under the Disability Act provides benefits from the time of disability until the age specified in Chapter 9 of the Disability Act. Benefits from this separate fund are not covered by these Systems.
 - c. **Monthly Benefits Payable after Retirement:** An unreduced service retirement benefit is payable. The member receives service credit for time while disabled (both for computing the benefit amount and for determining whether the member is eligible for an unreduced service retirement benefit). Final Average Monthly Salary is increased by

the same factors used for automatic cost-of-living benefit increases. I.e., the FAMS is adjusted by 4.0% per year (simple interest).

- d. Payment Form: Life annuity.
- e. Death while Disabled: A disabled member is treated as an active member for purposes of determining a death benefit for the period prior to retirement.

12. *Vesting and Refunds:*

- a. Eligibility: All members who are not vested are eligible for a refund when they terminate service. Members are vested after four years of service. Vested members may also elect to receive a refund in lieu of the deferred termination benefit described below. (Noncontributory System members hired after July 1, 1986, are ineligible for a refund.)
- b. Amount: The refund benefit is the accumulated value of the member's contributions plus interest credited by the fund. Interest is credited at 8.0% per year.

13. *Deferred Termination Benefit:*

- a. Eligibility: Member must be vested (4 years of service) and must elect to leave his/her contributions on deposit.
- b. Monthly Benefit: Same as the unreduced or reduced service retirement benefit, based on service and FAMS at termination, and commencing once the member is eligible.
- c. Payment Form: Life annuity.
- d. Death Benefit: The beneficiary of an inactive member who dies is entitled to receive a refund benefit. (Inactive members with over 10 years of service as of July 1, 1987, are also entitled to receive the group insurance benefit applicable to active members.)

14. *Death while an Active Member:*

- a. In General: A refund of the member's accumulated contributions (with interest) is paid to the beneficiary of a deceased member. In addition, a group insurance amount equal to 75% of final average salary (annual) is paid.
- b. Spousal Annuity: If the deceased member was married at the time of death and was either (i) eligible for reduced or unreduced service retirement, or (ii) had 25 years of service (15 years of service in the noncontributory system), the spouse may elect an annuity benefit in lieu of the refund benefit. The annuity is equal to the reduced or unreduced service retirement benefit payable as though Plan 3 (a Joint and 100% Survivor annuity) were elected. If the member had 25 years of service or more, no reduction factor is applied in determining the service retirement benefit. If a member of the noncontributory system is not eligible for a retirement benefit and has less than 25

years of service, then the death benefit is equal to 1/3 of Plan 3 benefit if the member has at least 15 and less than 20 years of service, and 2/3 of the Plan 3 benefit if the member has at least 20 and less than 25 years of service. In addition, a group insurance amount equal to $\frac{60}{75}\%$ of final average salary (annual) is paid to the designated beneficiary

15. *Optional Forms of Benefit:* The Systems permit members to elect from six forms of benefit at retirement. In each case the benefit amount is adjusted to be actuarially equivalent to the "Plan 1" form. The six optional forms are:

Plan 1 - A life annuity with no benefits due following the member's death.

Plan 2 - Modified Cash Refund Annuity. A reduced annuity payable for the member's lifetime, plus a death benefit equal to the excess of the member's accumulated contributions (determined at retirement) over the sum of the member's annuity payments from retirement. (The annuity payments are that part of the original benefit derived from the member's own accumulated contributions.)

Plan 3 - Joint and 100% Survivor Annuity. An annuity payable as long as either the member or his/her spouse is living.

Plan 4 - Joint and 50% Survivor Annuity. An annuity payable during the member's lifetime, and after the member's death if the member's spouse is still living, an annuity to the spouse of 50% of the original benefit.

Plan 5 - Joint and 100% Pop-up Annuity. Same as Plan 3, except that the benefit amount reverts to the Plan 1 (life annuity) amount if the member's spouse predeceases the member.

Plan 6 - Joint and 50% Pop-up Annuity. Same as Plan 4, except that the benefit amount reverts to the Plan 1 (life annuity) amount if the member's spouse predeceases the member.

16. *Postretirement Death Benefit:* None, except as elected by the member. See Optional Forms of Benefit above.

17. *Postretirement Benefit Increases:* Benefits are increased annually to take into account changes in the cost of living, with a maximum annual increase of 4% of the original benefit (i.e., a maximum 4% simple interest increase). In years in which the cost of living increases more than 4%, the excess increase is accumulated and used in later years in which the cost-of-living increase is less than 4%. This calculation is made separately for each individual. In addition, a closed group of retirees also receives a second special increase amount paid as a level annuity under whichever form of payment was elected. This is the Restoration of Purchasing Power (ROPP) payment.

18. *3% Substantial Substitute:* All members whose service began before January 1, 1989, receive an additional annual payment equal to 3% of their benefit. These payments are made to offset the taxability of the retirement benefits under the State income tax provisions. Prior to July 1, 1995, this benefit was funded by annual appropriations made by the State on a pay-as-you go basis. Beginning July 1, 1995, this benefit is funded on an actuarial basis by increasing the employer contribution rate for those Funds which are funded by the State.

**Summary of Benefit Provisions for
Public Safety Retirement Systems
(Contributory and Noncontributory)**

1. **Effective Date:** Contributory System - July 1, 1969.
Noncontributory System - July 1, 1989.
2. **Plan Year:** Twelve-month period ending December 31st.
3. **Administration:** The Systems are administered by a Board of Trustees (which also administers the other Utah Retirement Systems). The Board of Trustees is responsible for both administration of the Systems and investment of the fund assets.
4. **Type of Plan:** These are qualified governmental defined benefit retirement plans. Under GASB 25, they are considered to be a combination of agent and cost-sharing multiple-employer plans.
5. **Eligibility:** These Systems cover eligible public safety employees of the State of Utah and some local governments. Eligible employees become participants immediately when hired, and are required to participate. The employer-selected plan determines whether new employees participate in the Contributory or Noncontributory System. Employees who were members of the Contributory System at the time their employer selected the Noncontributory System had an option to remain in the Contributory System.
6. **Employee Contributions:** Members of the Contributory System contribute a percentage of salary, as shown below. Employers may "pick-up" employee contributions under Section 414(h) of the Internal Revenue Code. No contributions are made by members of the Noncontributory System. Rates in the Contributory System vary by employer as follows:

Fund 22 - State of Utah	12.29%
Fund 23 - Other Division A	12.29%
Fund 24 - Salt Lake City	13.74%
Fund 25 - Ogden	13.18%
Fund 26 - Provo	13.54%
Fund 27 - Logan	11.13%
Fund 28 - Bountiful	11.94%
Fund 29 - Other Division B	10.50%

7. **Employer Contributions:** The current contribution rates differ between the Contributory and Noncontributory Systems, and also differ depending on which fund (employer or group of employers) the member belongs to. Rates are set by the Board of Trustees, based upon the actuarial valuation report for the preceding year. The Funds included in these Systems are:

Contributory System

Fund 22 - State of Utah (Div A)
Fund 23 - Other Division A
Fund 24 - Salt Lake City (Div B)
Fund 25 - Ogden (Div B)
Fund 26 - Provo (Div B)
Fund 27 - Logan (Div B)
Fund 28 - Bountiful (Div A)
Fund 29 - Other Division B

Noncontributory System

Fund 42 - State of Utah (Div A)
Fund 43 - Other Division A
Fund 44 - Salt Lake City (Div B)
Fund 45 - Ogden (Div B)
Fund 48 - Bountiful (Div A)
Fund 49 - Other Division B

The division designation (A or B) distinguishes between those employers covered by Social Security (A) and those not covered (B). Some plan provisions differ depending on the member's division.

8. **Final Average Monthly Salary (FAMS):** The monthly average of the member's highest three salaries preceding retirement.
9. **Service Retirement:**
- Eligibility:** A member may retire with an unreduced benefit at age 65 with four years of service or at age 60 with 10 years of service or at any age with 20 years of service.
 - Monthly Benefit:** 2.50% of Final Average Monthly Salary (FAMS) times years of service up to 20 years, plus 2.00% of FAMS times years of service in excess of 20. Benefits are limited to 70% of FAMS.
 - Payment Form:** For married members benefits are paid as an automatic unreduced Joint and 65% Survivor Annuity. A life annuity is payable to unmarried members (although children's benefits may also be due following the member's death).

10. *Disability Retirement:*

- a. Eligibility: Member must be eligible for retirement under the Disability Act (or a substantially equivalent program) and must not be eligible for a 20-year service retirement at time of disability. Note that not all political subdivisions cover their members under a disability program.
- b. Monthly Benefits Payable Prior to Retirement: A separate fund established under the Disability Act (or an equivalent program) provides benefits from the time of disability until the age specified in Chapter 9 of the Disability Act. Benefits from this separate fund are not covered by these Systems.
- c. Monthly Benefits Payable after Retirement: An unreduced service retirement benefit is payable. The member receives service credit for time while disabled (both for computing the benefit amount and for determining whether the member is eligible for an unreduced service retirement benefit). Final Average Monthly Salary is increased by the same factors used for automatic cost-of-living benefit increases. I.e., the FAMS is adjusted by 2.5% per year (simple interest).
- d. Payment Form: Same as for Service Retirement.
- e. Death while Disabled: A disabled member is treated as an active member for purposes of determining a death benefit for the period prior to retirement.

11. *Vesting and Refunds:*

- a. Eligibility: All members who are not vested are eligible for a refund when they terminate service. Members are vested after four years of service. Vested members may also elect to receive a refund in lieu of the deferred termination benefit described below. (Noncontributory System members hired after July 1, 1989, are ineligible for a refund.)
- b. Amount: The refund benefit is the accumulated value of the member's contributions credited by the fund. For members in the Contributory system, interest is credited on the member's contribution account at 8.0% per year, beginning July 1, 1996. Interest is not credited on the member contribution account for members of the Noncontributory System.

12. *Deferred Termination Benefit:*

- a. Eligibility: Member must be vested (4 years of service) and must elect to leave his/her contributions on deposit.

- b. Monthly Benefit: Same as the service retirement benefit, based on service and FAMS at retirement, and commencing once the member is eligible. The FAMS at retirement is computed as though the member remained in service at his last rate of pay until retirement.
 - c. Payment Form: Same as for service retirement.
 - d. Death Benefit: The beneficiary of an inactive member who dies is entitled to receive a refund benefit (or \$500 if larger). The spouse of an inactive member with 20 years of service receives a monthly annuity equal to 50% of the service retirement benefit that would have been paid had the member died immediately prior to retirement. (An actuarial reduction factor is applied if the member was under age 50 at death.)
13. *Death while an Active Member (On Duty)*: If death occurs in the line of duty, the lump-sum and annuity benefits described below will be paid to the spouse. (The benefits are not applicable to unmarried members, although children's benefits may be due.)
- a. Lump-sum (Division A members): \$1,000.
 - b. Annuity (Division A members): 30% of member's FAMS.*
 - c. Lump-sum (Division B members): \$1,500.
 - d. Annuity (Division B members): 37.5% of member's FAMS.*
14. *Death of an Active Member (Off Duty)*: If death occurs from a cause not related to the member's duties, the lump-sum and annuity benefits described below will be paid to the spouse. (The benefits are not applicable to unmarried members, although children's benefits may be due.)
- a. Lump-sum (Division A members): If the member has less than 10 years of service, the benefit is \$1,000 or a refund benefit, whichever is larger. If the member has 10 or more years of service, the benefit is \$500.
 - b. Annuity (Division A members): If the member has less than 10 years of service, no annuity is due. For members with 10 or more years of service, the benefit is 2% of FAMS per year of service, to a maximum of 30% of FAMS.*
 - c. Lump-sum (Division B members): If the member does not have two years of service, the benefit is the sum of 50% of the member's salary plus a refund benefit. If the member has two or more years of service, the benefit is \$1,500.
 - d. Annuity (Division B members): If the member has fewer than two years of service, no annuity is due. If the member has two or more years of service, the annuity is 37.5% of the member's FAMS.*

- * Not less than the benefit payable to the surviving spouse if the member had retired the day before the member's date of death.
15. *Optional Forms of Benefit:* None.
16. *Postretirement Death Benefit:* None, except for survivor benefit applicable to married members.
17. *Postretirement Benefit Increases:* Benefits are increased annually to take into account changes in the cost of living, with a maximum annual increase of 2.5% of the original benefit (i.e., a maximum 2.5% simple interest increase). In years in which the cost of living increases more than 2.5%, the excess increase is accumulated and used in later years in which the cost-of-living increase is less than 2.5%. This calculation is made separately for each individual. In addition, a closed group of retirees also receives a second special increase amount paid as a level annuity under whichever form of payment is applicable. This is the Restoration of Purchasing Power (ROPP) payment.
18. *3% Substantial Substitute:* All members whose service began before January 1, 1989, receive an additional annual payment equal to 3% of their benefit. These payments are made to offset the taxability of the retirement benefits under the State income tax provisions. Prior to July 1, 1995, this benefit was funded by annual appropriations made by the State on a pay-as-you go basis. Beginning July 1, 1995, this benefit is funded on an actuarial basis by increasing the employer contribution rate for those Funds which are funded by the State.

Summary of Benefit Provisions for Firefighters Retirement System

1. *Effective Date:* July 1, 1971.
2. *Plan Year:* Twelve-month period ending December 31st.
3. *Administration:* The System is administered by a Board of Trustees (which also administers the other Utah Retirement Systems). The Board of Trustees is responsible for both administration of the System and investment of the fund assets.
4. *Type of Plan:* This is a qualified governmental defined benefit retirement plan. Under GASB 25, it is considered to be a cost-sharing multiple-employer plan.
5. *Eligibility:* This System covers eligible firefighters employed by participating local governments in Utah. Eligible employees become participants immediately when hired, and are required to participate. Employers are designated as either Division A (employers with Social Security coverage) or Division B (employers without Social Security coverage). Benefit provisions and contribution rates differ for members of different divisions.
6. *Employee Contributions:* Members contribute a percentage of salary, as shown below. Employers may "pick-up" employee contributions under Section 414(h) of the Internal Revenue Code.

Fund 31 - Division A 15.05%
Fund 32 - Division B 16.71%

Contribution rates shown may be reduced by expected income from a tax on fire insurance premiums.

7. The current employer contribution rates depend on the Fund. Division A covers employers covered by Social Security and Division B covers other employers. The contribution rates are set by the Board of Trustees, based on the actuarial valuation for the preceding year. Contribution rates are reduced by expected income from a tax on fire insurance premiums. The Funds in this System are:

Fund 31 - Division A
Fund 32 - Division B

8. **Final Average Monthly Salary (FAMS):** The monthly average of the member's highest three salaries preceding retirement.
9. **Service Retirement:**
 - a. **Eligibility:** A member may retire with an unreduced benefit at age 65 with four years of service or at age 60 with 10 years of service or at any age with 20 years of service.
 - b. **Monthly Benefit:** 2.50% of Final Average Monthly Salary (FAMS) times years of service up to 20 years, plus 2.00% of FAMS times years of service in excess of 20. Benefits are limited to 70% of FAMS. There is a minimum benefit of \$500 per month.
 - c. **Payment Form:** For married members benefits are paid as an automatic unreduced Joint and 75% Survivor Annuity. A life annuity is payable to unmarried members (although children's benefits may also be due following the member's death).
10. **Disability Retirement:**
 - a. **Eligibility:** Member must have five or more years of service or the disability must be related to the member's duties. In addition, the member must not be eligible for a 20-year service retirement at time of disability.
 - b. **Monthly Benefits:** 50% of FAMS.
 - c. **Payment Form:** Same as for Service Retirement once member is age 55.
 - d. **Death while Disabled:** A disabled member is treated as an active member for purposes of determining a death benefit for the period prior to retirement (age 55).
11. **Vesting and Refunds:**
 - a. **Eligibility:** All members who are not vested are eligible for a refund when they terminate service. Members are vested after four years of service. Vested members may also elect to receive a refund in lieu of the deferred termination benefit described below.
 - b. **Amount:** The refund benefit is the accumulated value of the member's contributions credited by the fund. Interest is not credited on member contributions.
12. **Deferred Termination Benefit:**
 - a. **Eligibility:** Member must be vested (4 years of service) and must elect to leave his/her contributions on deposit.
 - b. **Monthly Benefit:** Same as the service retirement benefit, based on service and FAMS at termination, and commencing once the member is eligible.

- c. Payment Form: Same as for service retirement.
 - d. Death Benefit: The beneficiary of an unmarried inactive member who dies with 20 or more years of service prior to retirement is entitled to receive a refund benefit (or \$500 if larger). The spouse of an inactive member with 20 years of service receives a monthly annuity equal to 50% of the service retirement benefit that would have been paid had the member died immediately prior to retirement. (An actuarial reduction factor is applied if the member was under age 50 at death.) If the inactive member had less than 20 years of service, no death benefit is due.
13. Death while an Active Member (On Duty): If death occurs in the line of duty, the lump-sum and annuity benefits described below will be paid to the spouse. (The benefits are not applicable to unmarried members, although children's benefits may be due.)
- a. Lump-sum (Division A members): \$1,500.
 - b. Annuity (Division A members): 30% of member's FAMS.
 - c. Lump-sum (Division B members): \$1,500.
 - d. Annuity (Division B members): 37.5% of member's FAMS. For members with more than 20 years of service, the annuity is 75% of the retirement benefit earned by the member as of his/her date of death. However, benefits may not be less than the benefit that would have been payable to the surviving spouse if the member had retired immediately prior to death.
14. Death of an Active Member (Off Duty): If death occurs from a cause not related to the member's duties, the lump-sum and annuity benefits described below will be paid to the spouse. (The benefits are not applicable to unmarried members, although children's benefits may be due.)
- a. Lump-sum (Division A members): If the member has less than 10 years of service, the benefit is \$1,000 or a refund benefit, whichever is larger. If the member has 10 or more years of service, the benefit is \$500.
 - b. Annuity (Division A members): If the member has less than 10 years of service, no annuity is due. For members with 10 or more years of service, the benefit is 2% of FAMS per year of service, to a maximum of 30% of FAMS.
 - c. Lump-sum (Division B members): If the member does not have five years of service, the benefit is the sum of 50% of the member's salary plus a refund benefit. If the member has five or more years of service, the benefit is \$1,500.

- d. Annuity (Division B members): If the member has fewer than five years of service, no annuity is due. If the member has five or more years of service, the annuity is 37.5% of the member's FAMS. For members with more than 20 years of service, the annuity is 75% of the retirement benefit earned by the member as of his/her date of death.
15. *Optional Forms of Benefit*: None.
16. *Postretirement Death Benefit*: None, except for survivor benefit applicable to married members.
17. *Postretirement Benefit Increases*: Benefits are increased annually to take into account changes in the cost of living, with a maximum annual increase of 4% of the original benefit (i.e., a maximum 4% simple interest increase). In years in which the cost of living increases more than 4%, the excess increase is accumulated and used in later years in which the cost-of-living increase is less than 4%. This calculation is made separately for each individual. In addition, a closed group of retirees also receives a second special increase amount paid as a level annuity under whichever form of payment is applicable. This is the Restoration of Purchasing Power (ROPP) payment.
18. *3% Substantial Substitute*: All members whose service began before January 1, 1989, receive an additional annual payment equal to 3% of their benefit. These payments are made to offset the taxability of the retirement benefits under the State income tax provisions. Prior to July 1, 1995, this benefit was funded by annual appropriations made by the State on a pay-as-you go basis. Beginning July 1, 1995, this benefit is funded on an actuarial basis by increasing the employer contribution rate for those Funds which are funded by the State.

Summary of Benefit Provisions for Judges Retirement System

1. *Effective Date:* July 1, 1963.
2. *Plan Year:* Twelve-month period ending December 31st.
3. *Administration:* The System is administered by a Board of Trustees (which also administers the other Utah Retirement Systems). The Board of Trustees is responsible for both administration of the System and investment of the fund assets.
4. *Type of Plan:* This is a qualified governmental defined benefit retirement plan. Under GASB 25, it is considered to be a single-employer plan.
5. *Eligibility:* This System covers judges of the State of Utah, including Supreme Court justices and appellate, district, circuit and juvenile court judges.
6. *Employee Contributions:* Members of the Contributory System contribute 8.00% of salary per year. The state may "pick-up" a portion (although not all) of the employee contributions under Section 414(h) of the Internal Revenue Code. No contributions are made by members of the Noncontributory System.
7. *Employer Contributions:* Fund 37 (Judges) has a contribution rate which is set by the Board of Trustees, based on the actuarial valuation for the preceding year. The rate is reduced by estimated court fees which are earmarked for this fund.
8. *Final Average Monthly Salary (FAMS):* The monthly average of the member's highest two salaries preceding retirement.
9. *Service Retirement (Unreduced):*
 - a. Eligibility: A member may retire with an unreduced benefit at age 70 with six years of service or after age 62 with 10 years of service or after 25 years of service.
 - b. Monthly Benefit: 5.00% times Final Average Monthly Salary (FAMS) times years of service up to 10, plus 2.25% of FAMS times years of service in excess of 10 but less than 20, plus 1.00% times FAMS times years of service in excess of 20. There is a maximum benefit of 75% of FAMS, and a minimum benefit equal to 110% of the formula benefit (but not greater than \$1,000 per month).

- c. Payment Form: Married members receive an automatic, unreduced Joint and 65% Survivor annuity. Unmarried members receive a life annuity.
10. *Service Retirement (Reduced)*:
 - a. Eligibility: A member may retire with a reduced benefit upon attaining age 55 with 20 years of service.
 - b. Reduction: An actuarial reduction from age 65.
 - c. Payment Form: Same as for unreduced service retirement.
11. *Disability Retirement*: This System has no provisions applying to disability retirement.
12. *Vesting and Refunds*:
 - a. Eligibility: All members who are not vested are eligible for a refund when they terminate service. Members are vested after six years of service. Vested members may also elect to receive a refund in lieu of the deferred termination benefit described below.
 - b. Amount: The refund benefit is the accumulated value of the member's contributions plus interest credited by the fund. Interest is credited at 8.0% per year.
13. *Deferred Termination Benefit*:
 - a. Eligibility: Member must be vested (6 years of service) and must elect to leave his/her contributions on deposit.
 - b. Monthly Benefit: Same as the unreduced or reduced service retirement benefit, based on service and FAMS at termination, and commencing once the member is eligible.
 - c. Payment Form: Same as for unreduced service retirement.
 - d. Death Benefit: Same as for an active member.
14. *Death while an Active Member*: A refund of the member's accumulated contributions (with interest) is paid to the beneficiary of a deceased member. In addition, 65% the member's FAMS (annualized) is paid to the spouse if the member was married. Alternatively, the spouse may waive these benefits and elect instead an annuity. The annuity is equal to 65% of the benefit determined using the unreduced service retirement formula, and based on current service and FAMS at the time of death.
15. *Optional Forms of Benefit*: The System permits married members to elect a reduced Joint and 75% Survivor annuity in lieu of the automatic Joint and 65% Survivor annuity. No other optional payment forms are available.

16. *Postretirement Death Benefit:* None, except for the Joint and Survivor annuities available to married members.
17. *Postretirement Benefit Increases:* Benefits are increased annually to take into account changes in the cost of living, with a maximum annual increase of 4% of the current benefit (i.e., a maximum 4% compound interest increase). In years in which the cost of living increases more than 4%, the excess increase is accumulated and used in later years in which the cost-of-living increase is less than 4%. This calculation is made separately for each individual. In addition, judges retired prior to July 1, 1983 received an increase of \$120 per month (\$60 for beneficiaries).
18. *3% Substantial Substitute:* All members whose service began before January 1, 1989, receive an additional annual payment equal to 3% of their benefit. These payments are made to offset the taxability of the retirement benefits under the State income tax provisions. Prior to July 1, 1995, this benefit was funded by annual appropriations made by the State on a pay-as-you go basis. Beginning July 1, 1995, this benefit is funded on an actuarial basis by increasing the employer contribution rate for those Funds which are funded by the State.

Summary of Benefit Provisions for the Governors and Legislative Pension Plan

1. *Effective Date:* July 1, 1967.
2. *Plan Year:* Twelve-month period ending December 31st.
3. *Administration:* The System is administered by a Board of Trustees (which also administers the other Utah Retirement Systems). The Board of Trustees is responsible for both administration of the System and investment of the fund assets.
4. *Type of Plan:* This is a qualified governmental defined benefit retirement plan. Under GASB 25, it is considered to be a single-employer plan.
5. *Eligibility:* This System covers state legislators with four or more years of service, and governors of the state.
6. *Employee Contributions:* None.
7. *Employer Contributions:* The state annually appropriates an actuarially determined contribution.
8. *Benefit base:* The benefit base is used to determine the benefits payable at retirement.
 - a. Legislators: The base was \$10.00 per month per year of service as of July 1, 1967. The base is increased 2% each six months after that date. As of January 1, 2000, the benefit base is therefore \$23.00.
 - b. Governors: The base was \$500.00 per month per term as of July 1, 1973. The base is increased 2% each six months after that date. As of January 1, 2000, the benefit base is therefore \$1,030.00.
 - c. Supplemental Benefit: An additional benefit of \$3.50 per month per year of service. This benefit is not indexed nor are COLAs granted on it. This benefit only applies to members of the System on March 1, 2000 and is effective March 1, 2000.
9. *Service Retirement (Unreduced):*
 - a. Eligibility: Age 65.
 - b. Monthly Benefit: Legislators receive the benefit base (currently \$23.00 per month) per year of service, while former governors receive the benefit base (currently \$1,030.00) for each term served (maximum of two terms).

- c. Payment Form: For married members, a Joint and 50% Survivor annuity. For unmarried members, a life annuity.

10. *Service Retirement (Reduced):*
 - a. Eligibility: A member may retire with a reduced benefit upon attaining age 62 with 10 years of service, if the member also participates in another System.
 - b. Reduction: The reduction factor applied in the other System to which the member belongs.
 - c. Payment Form: Same as for unreduced service retirement.
11. *Disability Retirement*: This System has no provisions applying to disability retirement.
12. *Vesting and Refunds*: A vested member who made contributions in another System and withdraws them forfeits all benefits under this System.
13. *Deferred Termination Benefit*:
 - a. Eligibility: Same as for reduced or unreduced service retirement. The member must not have withdrawn his/her contributions under another System.
 - b. Monthly Benefit: Same as the unreduced or reduced service retirement benefit, based on service at termination, and commencing once the member is eligible.
 - c. Payment Form: Same as for unreduced service retirement.
 - d. Death Benefit: Same as for an active member.
14. *Death while an Active Member*:
 - a. Eligibility: Four years of service as a legislator or governor.
 - b. Monthly Benefit: 50% of the unreduced service retirement benefit that the member would have been entitled to upon reaching age 65 based on the current benefit base. Benefit is paid to surviving spouse only.
15. *Optional Forms of Benefit*: None.
16. *Postretirement Death Benefit*: None, except for the Joint and Survivor annuity available to married members.
17. *Postretirement Benefit Increases*: Benefits are increased annually to take into account changes in the cost of living, with a maximum annual increase of 4% of the original benefit (i.e., a maximum 4% simple interest increase). In years in which the cost of living increases more than 4%, the excess increase is accumulated and used in later years in which the cost-of-living increase is less than 4%. This calculation is made separately for each individual. Note that the supplemental \$3.50 per month per year of service benefit is not eligible for these increases.

18. **3% Substantial Substitute:** All members whose service began before January 1, 1989, receive an additional annual payment equal to 3% of their benefit. These payments are made to offset the taxability of the retirement benefits under the State income tax provisions. Prior to July 1, 1995, this benefit was funded by annual appropriations made by the State on a pay-as-you go basis. Beginning July 1, 1995, this benefit is funded on an actuarial basis by increasing the employer contribution rate for those Funds which are funded by the State.

2002 Return			2003	2004	2005	2006
03-04	04-05		+8	+8	+8	+8
			05-06	06-07	07-08	08-09
10.31	+8					
+8	11.37	106				
0	11.57	126				
-4	11.78	149	+87 13.39	15.19	16.51	17.85
-8	12.89	268	+87 13.81	15.85	17.38	18.13
-12	14.21	390				

2002 Return

<u>03-04</u>	<u>04-05</u>	<u>05-06</u>	<u>06-07</u>	<u>07-08</u>	<u>08-09</u>	
10.31 + 8						
+ 06	12.37	106				
0	11.57	126				
- 4	11.78	147	+87 13.89	15.19	16.51	17.88
- 8	12.89	268	+87 13.81	15.85	17.38	18.13
- 12	14.21	390				

2002 Return

<u>03-04</u>	<u>04-05</u>	<u>05-06</u>	<u>06-07</u>	<u>07-08</u>	<u>08-09</u>	
10.31 + 8						
+ 06	11.37	106				
0	11.57	126				
- 4	11.78	147	+87 13.39	15.19	16.51	17.88
- 8	12.99	268	+87 13.81	15.85	17.38	18.13
- 12	14.21	390				

UTAH RETIREMENT SYSTEMS
Fiscal Year 2002-2003
Contribution Rates as a Percentage of Salary and Wages

	2001-2002 RATES			2002-2003 RATES			Increase (Decrease)
	Employee	Employer	Total	Employee	Employer	Total	
Public Employees							
Contributory Retirement System							
11- Local Government	6.00	4.19	10.19	6.00	4.68	10.68	0.49
12- State and School	6.00	5.91	11.91	6.00	5.91	11.91	0.00
Public Employees							
Noncontributory Retirement System							
15- Local Government	--	8.20	8.20	--	8.69	8.69	0.49
16- State and School	--	10.40 ¹	10.40	--	10.40 ¹	10.40	0.00
Public Safety							
Contributory Retirement System							
Division A							
22- State	12.29	8.81	21.10	12.29	8.05	20.34	(0.76)
23- Other Division A	12.29	2.41	14.70	12.29	2.17	14.46	(0.24)
Division B							
24- Salt Lake City	13.74	18.21	31.95	13.74	15.50	29.24	(2.71)
25- Ogden	13.18	9.08	22.26				
26- Provo	13.54	9.72	23.26	13.54	9.47	23.01	(0.25)
27- Logan	11.13	2.93	14.06	11.13	3.66	14.79	0.73
29- Other Division B	10.50	6.43	16.93	10.50	7.34	17.84	0.91
Public Safety							
Noncontributory Retirement System							
Division A							
42- State	--	19.68	19.68	--	18.94	18.94	(0.74)
43- Other Division A	--	14.08	14.08	--	13.89	13.89	(0.19)
48- Bountiful	--	19.03	19.03	--	17.41	17.41	(1.62)
Division B							
44- Salt Lake City	--	30.72	30.72	--	28.27	28.27	(2.45)
45- Ogden	--	21.06	21.06	--	17.98	17.98	(3.08)
49- Other Division B	--	16.75	16.75	--	17.66	17.66	0.91
Firefighters Retirement System							
31- Division A	6.77	0.00 ²	6.77	7.82	0.00 ²	7.82	1.05
32- Division B	8.43	0.00 ²	8.43	7.83	0.00 ²	7.83	(0.60)
Judges Retirement System							
37- Judges Noncontributory	0.00	5.55 ²	5.55	--	4.92 ²	4.92	(0.63)

¹ Does not include 1.5% 401(k).

² Firefighters and Judges also have offsetting contributions from fire insurance premium taxes and court fees respectively.