

Utah Retirement System

ACTUARIAL VALUATION
January 1, 2004



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August 12, 2004

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, 2004

This report describes the current actuarial condition of the Utah Retirement Systems (URS), determines the calculated 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, the Board of Trustees must certify employer contribution rates annually. 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. I.e., the rates determined by this January 1, 2004 actuarial valuation will be used by the Board when certifying the employer contribution rates for the year beginning July 1, 2005 and ending June 30, 2006. If new legislation is enacted between the valuation date and the date the contribution rates become effective, the Board may adjust the calculated 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 4.00%.

The Board uses an open 20-year amortization period. In other words, a 20-year amortization period is used in each valuation, rather than having the period decrease to 19, 18, etc.

Under this policy, the objective of maintaining a relatively level contribution rate over time is achieved in normal conditions such as consistent market conditions.

Legislation was enacted by the 2004 Legislative which established corridors to determine what portion (if any) of the assets in excess of the accrued liabilities will be used as a credit towards the employer contribution rates. If the funded ratio is less than 100% (i.e. the actuarial value of assets is less than the actuarial accrued liability) then the contribution rate is determined normally. If the funded ratio is between 100% and 110% then the contribution rate is equal to the normal cost. If the funded ratio is greater than 110% then only the assets in excess of 110% of the liabilities are used to determine the credit to the contribution rate for the overfunding.

The two firefighter plans that were over 100% funded last year and whose funded ratio is currently between 100% and 110% have special grandfathering rules that apply in determining their contribution rates

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%.

For all systems combined, the funded ratio decreased from 92.8% to 94.7%. Most of the individual funds have ratios over 90%, and only the 3% Substantial Substitute Fund and the Salt Lake City Noncontributory Public Safety Fund have funded ratios less than 85%. It should be pointed out that the funded ratio for all systems combined was 76.9% in 1990. Significant progress has been made over the last fourteen 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. If market value had been used in the calculation instead of actuarial value, the aggregate funded ratio for all funds combined would have been 91.7% (compared to 77.3% in the prior year).

Benefit provisions

The benefit provisions reflected in this valuation are those which were in effect on January 1, 2004, or which were adopted by the end of the 2004 legislative session and are effective on or before July 1, 2004.

Two significant pieces of legislation were enacted during the 2004 legislative session. The first item created special rules for determining the contribution rate for overfunded plans. This legislation was described previously.

The second piece of legislation established a special fund (under the General Fund) for making COLA payments to Public Safety retirees in excess of the 2.5% maximum. If sufficient funds exist and the CPI is equal to or greater than 2.5% then COLA payments of up to 4.0% may be paid to the Public Safety retirees. The first 2.5% would come from the normal financing arrangements of the plan. Any payments in excess of 2.5% would be paid from the newly established fund.

Assumptions and methods

The Board, in consultation with the actuary, sets the actuarial assumptions and methods used in the valuation. Current Board policy is to perform an experience study every three years. In connection with the appropriate valuation, the actuary conducts a thorough review of plan experience for the preceding five years, and then makes recommendations to the Board. The next experience study will be performed in connection with the 2005 valuation.

The current actuarial assumptions and methods are the same as used for the prior valuation. These assumptions and methods were adopted effective January 1, 2002.

It is our opinion that the recommended 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, 2003 by the URS 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. The staff also supplied asset information as of December 31, 2003.

Certification

We certify that the information presented herein is accurate and fairly portrays the actuarial position of URS as of January 1, 2004.

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.

Utah State Retirement Systems

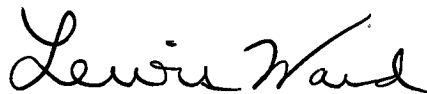
August 12, 2004

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The undersigned are independent actuaries and consultants. Mr. Carter and Mr. Conradi are Enrolled Actuaries and Members of the American Academy of Actuaries and they both meet the Qualification Standards of the American Academy of Actuaries, and all three are experienced in performing valuations for large public retirement systems.

Sincerely,

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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 1(a) shows the new, calculated 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 include adjustments for new corridor funding
- Rates shown on Exhibit 1(a), column 6 are calculated rates for the twelve-month period beginning July 1, 2005, based on current board policy
 - Rates may need to be adjusted for the effect of 2005 legislation, if material
- Exhibit 4 reconciles the calculated FY 2005 and FY 2006 rates
- There was one material change to the benefit provisions
 - Creation of fund to possibly pay Public Safety COLAs in excess of 2.5%
- There was one material change to the financing provisions
 - Only assets in excess of 110% of the liabilities may be used to reduce contribution rates
 - Grandfathered provisions for Firefighter funds
- Amortization payments based on:
 - 20-year funding period
 - Contributions increase as level percentage of pay
 - Total payroll increases 4.00% per year
 - No future growth in the number of active members is taken into account
 - New funding corridor rules
- Plan earned 8.0% on the actuarial value of assets. This resulted in a non-material asset gain. Most systems experienced liability gains due to lower than expected salary increases
 - Impact on contribution rates shown on Exhibit 4, column 4
 - Because the actuarial asset method smoothes gains and losses over five years, only 20% of the 2003 investment gain is reflected in these results.
 - The remainder of the actuarial investment losses for 2000, 2001 and 2002 will be recognized in future years and will tend to increase future contribution rates. Additional information on the impact of the deferred asset losses is being provided to the Board separately.

- The impact of the liability experience gains caused most contribution rates to decrease. The Public Safety funds of Other Division A, Logan and Other Division B increased slightly. The Judges System also had an increase in its rate. The Firefighters and the Governors and Legislative Plan, still have no contributions required.
- 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. This produces a net rate of 0.24%, after applying the offset for court fees.
- As for the past several years, no contribution is required for the Governors and Legislative Pension Plan.

Calculation of Contribution Rates

The URS retirement systems, except for the Governors' and Legislators' Retirement 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 6(a).

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% for the Public Employees' Systems also includes a small component (0.16% 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. Legislation enacted in 2004 provides special rules for overfunded Funds. Only assets in excess of 110% of the liabilities of the Fund can be used to reduce the contribution rate below the normal cost rate (certain grandfathering rules apply to the Firefighters funds). 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 5.78% for Division A and 2.84% for Division B. The offset is first used to reduce the employer contribution rate and then any remaining offset may be used to reduce the member contribution rates. We have assumed that the Board will continue its policy of holding the employee rate for Division B firefighters at the prior year's rate rather than applying all of the remaining offset. This unused offset will help to reduce the unfunded liability and future contribution rates.

These calculated rates are used in determining the contribution rates that will become effective for the twelve-month period beginning July 1, 2005.

The Governors' and Legislators' Retirement 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, 2003, the retirement systems that are part of URS have a total market value of about \$14.2 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 2003 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, 60% of invested assets are held in equities and alternative investments, compared with 61% last year and compared with a 65% investment policy target.

Exhibit 11(b) shows a reconciliation of the market values between the beginning and end of 2003. 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 2003, the total investment return on market values was 25.6%, 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. This “smoothed” asset value is then subjected to the further constraint that the actuarial value of assets cannot be less than 80% not more than 120% of the market value of assets.

The development of the AVA is shown on Exhibits 13 and 14. The AVA is \$14.7 billion for all systems combined. This work was performed by the URS staff, but has been reviewed and approved by GRS. In the aggregate, the AVA is 103% of the MVA.

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 2003, this return was 8.0%. Because this is equal to the assumed 8% investment return, the plan experienced a non-material gain on the actuarial value of assets. 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 a CD as of December 31, 2003. 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 96,295 to 96,349, a 0.1% increase. Last year, total membership grew 0.3%, and over the last five years, membership growth has averaged 1.5% per year.

Total active member payroll grew 1.0% last year for all funds combined, compared with a 3.2% increase last year.

Benefit Provisions

Appendix 2 includes a summary of the benefit provisions for each of the retirement systems in URS. The valuation reflects benefit changes enacted by the 2004 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, 2005.

However, there were no changes made since the previous valuation that had a measurable effect on the current valuations.

SB26, which created a special fund for paying COLAs to Public Safety retirees in excess of the current 2.5% maximum, is discussed later in this report.

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 Legislators' Retirement Plan and the ROPP payments (discussed later), by the Board. There are no ancillary benefits that 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 in connection with the 2002 experience investigation. Please see Appendix 1 for a complete description of these assumptions.

HB 83, enacted in 2004, provides that the Board need not decrease contributions if the funded ratio is over 100%, up to 110%. Therefore, we have adopted the general policy for overfunded plans—plans with a funded ratio of 100% or more—of setting the amortization credit to zero unless the funded ratio is in excess of 110%. For a fund with a funded ratio in excess of 110%, the amortization credit is based on a 20-year amortization of the excess of the actuarial value of assets (AVA) in excess of 110% of the actuarial accrued liability (AAL).

However, for funds whose funded ratio is over 100% in both the current and prior valuations—the two firefighter funds—this would produce an unanticipated increase in the gross contribution rate, before applying the fire insurance premium offset. Therefore, we have modified the procedures for these funds. The amortization credit is set equal to a 20-year amortization of the current UAAL, but the amount of the credit should not exceed the prior year's credit, expressed as a percentage of pay. These special procedures will be dropped when either (a) the funded ratio falls below 100%, or (b) the credit based on the excess of AVA over 110% of the AAL exceeds the prior year's credit.

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 85%, and most are over 90%. The only funds with funded ratios below 85% are Salt Lake City in the Public Safety Noncontributory Retirement System and the 3% Substantial Substitute fund. The latter has only been a liability of URS since 1994. See Exhibit 3(a), column 5. However, funded ratios have increased for most funds since last year, primarily due to the liability gains.

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 as a level percentage of payroll using a 20-year amortization period, 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, from 12.16% to 12.60%, and the offset for the Judges System decreased from 19.69% to 19.19%. The increase in the Firefighter System offset was caused by the facts that the 2000 year is dropping out of the 3-year average while the 2003 year is being added and the fire insurance premiums for 2003 were significantly greater than the receipts for 2000 (although the 2003 receipts were less than the 2002 receipts). The ratio of fire insurance premiums to payroll for 2003 was 12.05%, compared with 13.25% for 2002.

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. Based on Board policy, we first applied the offset to reduce the employer contribution rates to zero, and then we used the remaining offset to reduce the member contribution rates.

You will note that the entire offset was not used to offset the firefighter's member rate (for both Divisions A and B). The Board decided in 2003 to not reduce the member rate below the 2001 member rate. Any excess offset is used to reduce the unfunded liability of the system and thereby reduce future contribution rates.

The 2004 Legislature enacted legislation which created the Public Safety Retirees' Cost-of-Living Increases Restricted Account. As a result of this legislation a portion of future fire insurance premium tax receipts that would normally have been contributed to the Firefighter System may instead be redirected to this new account.

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 0.83%, 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 decreases 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.

Public Safety Retirees' Cost-of-Living Increases Restricted Account

The 2004 Legislature enacted legislation which created a new fund under the General Fund of the State of Utah. The legislation appropriated \$1.1 million from the Fire Academy Support Account. The legislation may also require a portion of the fire insurance premium tax receipts that currently go to the Firefighters System to be redirected to this new fund. The methodology for determining the amount of the redirected funds is not clearly defined in the legislation.

Also, there is not a description in the legislation as to how the increased COLA payments would be paid to the retirees. Will the benefits be paid directly from this new fund? Will assets be transferred from this fund to URS, thereby creating liabilities for URS? If so, how will and who will determine the amount of the assets to be transferred.

There are many questions that must be answered about this legislation. The effective date for the creation of the fund was July 1, 2004.

It should also be noted that while the assets are a part of the General Fund they will not be managed by URS.

Comparison of Contribution Rates

Fund/Division (1)	2003 Valuation Results			2004 Valuation Results 2005-2006 Calculated Rates		
	Member	Employer	Total	Member	Employer	Total
	(2)	(3)	(4)	(5)	(6)	(7)
I. Public Employees Contributory						
A. Local Government	6.00%	7.08%	13.08%	6.00%	7.00%	13.00%
B. State and School	6.00%	8.89%	14.89%	6.00%	8.30%	14.30%
II. Public Employees Noncontributory						
A. Local Government	0.00%	11.09%	11.09%	0.00%	11.01%	11.01%
B. State and School	0.00%	13.38%	13.38%	0.00%	12.79%	12.79%
III. Public Safety Contributory						
A. State	12.29%	12.50%	24.79%	12.29%	11.85%	24.14%
B. Other Division A	12.29%	7.70%	19.99%	12.29%	7.95%	20.24%
C. Salt Lake City	13.74%	19.96%	33.70%	13.74%	19.34%	33.08%
D. Provo	13.54%	12.22%	25.76%	13.54%	12.02%	25.56%
E. Logan	11.13%	10.03%	21.16%	11.13%	10.54%	21.67%
F. Other Division B	10.50%	12.35%	22.85%	10.50%	12.47%	22.97%
IV. Public Safety Noncontributory						
A. State	0.00%	23.46%	23.46%	0.00%	23.00%	23.00%
B. Other Division A	0.00%	19.08%	19.08%	0.00%	19.34%	19.34%
C. Salt Lake City	0.00%	32.52%	32.52%	0.00%	31.97%	31.97%
D. Ogden	0.00%	24.30%	24.30%	0.00%	23.96%	23.96%
E. Logan	0.00%	20.77%	20.77%	0.00%	21.25%	21.25%
F. Bountiful	0.00%	19.68%	19.68%	0.00%	18.80%	18.80%
G. Other Division B	0.00%	22.17%	22.17%	0.00%	22.32%	22.32%
V. Firefighters						
A. Division A						
1. Gross Rate	15.05%	5.72%	20.77%	15.05%	5.78%	20.83%
2. Less Estimated Offset	<u>-6.44%</u>	<u>-5.72%</u>	<u>-12.16%</u>	<u>-6.38%</u>	<u>-5.78%</u>	<u>-12.16%</u>
3. Net Rate	8.61%	0.00%	8.61%	8.67%	0.00%	8.67%
B. Division B						
1. Gross Rate	16.71%	2.83%	19.54%	16.71%	2.84%	19.55%
2. Less Estimated Offset	<u>-8.88%</u>	<u>-2.83%</u>	<u>-11.71%</u>	<u>-8.88%</u>	<u>-2.84%</u>	<u>-11.72%</u>
3. Net Rate	7.83%	0.00%	7.83%	7.83%	0.00%	7.83%
VI. Judges						
A. Gross Rate	0.00%	26.79%	26.79%	0.00%	27.43%	27.43%
B. Less Estimated Offset	<u>-0.00%</u>	<u>-19.69%</u>	<u>-19.69%</u>	<u>-0.00%</u>	<u>-19.19%</u>	<u>-19.19%</u>
C. Net Rate	0.00%	7.10%	7.10%	0.00%	8.24%	8.24%
VII. Governors and Legislative	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Comparison of Calculated Rates and Adopted Rates

Fund/Division (1)	2003 Valuation Results		2004 Valuation
	Calculated (2)	Rates Set by Board (3)	Calculated (4)
I. Public Employees Contributory			
A. Local Government	7.08%	7.08%	7.00%
B. State and School	8.89%	8.89%	8.30%
II. Public Employees Noncontributory			
A. Local Government	11.09%	11.09%	11.01%
B. State and School	13.38%	13.38%	12.79%
III. Public Safety Contributory			
A. State	12.50%	12.50%	11.85%
B. Other Division A	7.70%	7.70%	7.95%
C. Salt Lake City	19.96%	19.96%	19.34%
D. Provo	12.22%	12.22%	12.02%
E. Logan	10.03%	10.03%	10.54%
F. Other Division B	12.35%	12.35%	12.47%
IV. Public Safety Noncontributory			
A. State	23.46%	23.46%	23.00%
B. Other Division A	19.08%	19.08%	19.34%
C. Salt Lake City	32.52%	32.52%	31.97%
D. Ogden	24.30%	24.30%	23.96%
E. Logan	20.77%	20.77%	21.25%
F. Bountiful	19.68%	19.68%	18.80%
G. Other Division B	22.17%	22.17%	22.32%
V. Firefighters			
A. Division A	0.00%	0.00%	0.00%
B. Division B	0.00%	0.00%	0.00%
VI. Judges	7.10%	7.10%	8.24%
VII. Governors and Legislative	0.00%	0.00%	0.00%

Note: Rates shown for Firefighters and Judges are net of offsets.

Components of Calculated Contribution 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	3.90%	3.10%	0.00%	7.00%	0.00%	7.00%
B. State and School	3.57%	3.90%	0.83%	8.30%	0.00%	8.30%
II. Public Employees Noncontributory						
A. Local Government	10.27%	0.74%	0.00%	11.01%	0.00%	11.01%
B. State and School	10.95%	1.01%	0.83%	12.79%	0.00%	12.79%
III. Public Safety Contributory						
A. State	8.03%	2.99%	0.83%	11.85%	0.00%	11.85%
B. Other Division A	7.43%	0.52%	0.00%	7.95%	0.00%	7.95%
C. Salt Lake City	6.09%	13.25%	0.00%	19.34%	0.00%	19.34%
D. Provo	6.53%	5.49%	0.00%	12.02%	0.00%	12.02%
E. Logan	8.30%	2.24%	0.00%	10.54%	0.00%	10.54%
F. Other Division B	9.03%	3.44%	0.00%	12.47%	0.00%	12.47%
IV. Public Safety Noncontributory						
A. State	19.18%	2.99%	0.83%	23.00%	0.00%	23.00%
B. Other Division A	18.82%	0.52%	0.00%	19.34%	0.00%	19.34%
C. Salt Lake City	18.72%	13.25%	0.00%	31.97%	0.00%	31.97%
D. Ogden	18.61%	5.35%	0.00%	23.96%	0.00%	23.96%
E. Logan	19.01%	2.24%	0.00%	21.25%	0.00%	21.25%
F. Bountiful	18.80%	0.00%	0.00%	18.80%	0.00%	18.80%
G. Other Division B	18.88%	3.44%	0.00%	22.32%	0.00%	22.32%
V. Firefighters						
A. Division A	7.81%	-2.03%	0.00%	5.78%	5.78%	0.00%
B. Division B	6.24%	-3.40%	0.00%	2.84%	2.84%	0.00%
VI. Judges	26.29%	0.31%	0.83%	27.43%	19.19%	8.24%
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

	<u>2001</u>	<u>2002</u>	<u>2003</u>
1. Calendar Year			
2. Fire insurance premium receipts	8,354,000	9,454,000	9,059,000
3. Combined payroll for both funds*	66,870,915	71,346,531	75,148,042
4. Premiums as percentage of payroll	12.49%	13.25%	12.05%
5. Offset: 3-year arithmetic average of percent of payroll			12.60%

B. Judge's Offset

	<u>2001</u>	<u>2002</u>	<u>2003</u>
1. Calendar Year			
2. Court fees	2,046,000	2,381,000	1,939,000
3. Payroll*	10,910,099	11,095,476	11,163,025
4. Premiums as percentage of payroll	18.75%	21.46%	17.37%
5. Offset: 3-year arithmetic average of percent of payroll			19.19%

* 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	263,839	289,001	25,162	91.3%	56,388	44.6%
B. State and School	650,109	693,568	43,459	93.7%	77,756	55.9%
C. Subtotal	913,948	982,569	68,621	93.0%	134,144	51.2%
II. Public Employees Noncontributory						
A. Local Government	1,916,700	1,985,092	68,392	96.6%	643,307	10.6%
B. State and School	9,634,392	9,966,045	331,653	96.7%	2,271,701	14.6%
C. Subtotal	11,551,092	11,951,137	400,045	96.7%	2,915,008	13.7%
III. Public Safety Contributory						
A. State	60,917	61,323	406	99.3%	945	43.0%
B. Other Division A	159,254	160,501	1,247	99.2%	16,656	7.5%
C. Salt Lake City	41,070	41,278	208	99.5%	109	190.8%
D. Provo	24,546	28,009	3,463	87.6%	4,376	79.1%
E. Logan	13,080	13,791	711	94.8%	2,205	32.2%
F. Other Division B	32,565	36,228	3,663	89.9%	7,396	49.5%
G. Subtotal	331,432	341,130	9,698	97.2%	31,687	30.6%
IV. Public Safety Noncontributory						
A. State	465,629	504,486	38,857	92.3%	90,015	43.2%
B. Other Division A	434,766	442,780	8,014	98.2%	107,568	7.5%
C. Salt Lake City	97,078	134,858	37,780	72.0%	19,778	191.0%
D. Ogden	40,214	44,245	4,031	90.9%	5,223	77.2%
E. Logan	746	808	61	92.4%	186	32.8%
F. Bountiful	11,809	11,640	(169)	101.5%	1,639	-10.3%
G. Other Division B	67,215	76,811	9,596	87.5%	19,336	49.6%
H. Subtotal	1,117,457	1,215,628	98,170	91.9%	243,745	40.3%
V. Firefighters						
A. Division A	60,889	56,399	(4,490)	108.0%	14,335	-31.3%
B. Division B	528,613	492,979	(35,634)	107.2%	60,813	-58.6%
C. Subtotal	589,502	549,378	(40,124)	107.3%	75,148	-53.4%
VI. Judges	97,412	97,902	490	99.5%	11,163	4.4%
VII. Governors and Legislative	10,906	8,812	(2,094)	123.8%	610	-343.3%
VIII. 3% Substantial Substitute	106,432	400,173	293,741	26.6%	N/A	N/A
IX. Grand Total	14,718,181	15,546,729	828,547	94.7%	3,411,505	24.3%

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		
	2004 (2)	2003 (3)	2002 (4)
I. Public Employees Contributory			
A. Local Government	91.3%	90.7%	97.8%
B. State and School	93.7%	92.6%	97.7%
C. Subtotal	93.0%	92.1%	97.7%
II. Public Employees Noncontributory			
A. Local Government	96.6%	95.8%	107.3%
B. State and School	96.7%	94.3%	105.3%
C. Subtotal	96.7%	94.6%	105.6%
III. Public Safety Contributory			
A. State	99.3%	99.2%	99.9%
B. Other Division A	99.2%	99.6%	104.3%
C. Salt Lake City	99.5%	99.5%	99.7%
D. Provo	87.6%	86.5%	93.6%
E. Logan	94.8%	95.7%	107.7%
F. Other Division B	89.9%	89.6%	95.3%
G. Subtotal	97.2%	97.3%	101.3%
IV. Public Safety Noncontributory			
A. State	92.3%	90.5%	98.5%
B. Other Division A	98.2%	99.1%	110.6%
C. Salt Lake City	72.0%	69.8%	79.7%
D. Ogden	90.9%	90.4%	100.4%
E. Logan	92.4%	96.4%	N/A
F. Bountiful	101.5%	98.1%	106.3%
G. Other Division B	87.5%	86.6%	94.4%
H. Subtotal	91.9%	91.1%	100.6%
V. Firefighters			
A. Division A	108.0%	107.9%	117.9%
B. Division B	107.2%	106.0%	115.6%
C. Subtotal	107.3%	106.2%	115.9%
VI. Judges	99.5%	100.4%	107.7%
VII. Governors and Legislative	123.8%	123.1%	143.1%
VIII. 3% Substantial Substitute	26.6%	23.6%	22.2%
IX. Grand Total	94.7%	92.8%	102.7%

Analysis of Changes in Calculated Contribution Rates

Fund/Division (1)	Rate From Jan. 1, 2003 Valuation (2)	Changes Due To							Act. vs Exp. Contributions (10)	Calculated 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	7.08%	0.12%	-0.12%	-0.72%	0.00%	0.00%	0.50%	0.00%	0.14%	7.00%
B. State and School	8.89%	0.26%	-0.53%	-1.73%	0.00%	0.00%	1.17%	-0.02%	0.26%	8.30%
II. Public Employees Noncontributory										
A. Local Government	11.09%	0.01%	0.03%	-0.19%	0.00%	0.00%	-0.04%	0.00%	0.11%	11.01%
B. State and School	13.38%	0.03%	0.01%	-0.80%	0.00%	0.00%	-0.04%	-0.02%	0.23%	12.79%
III. Public Safety Contributory										
A. State	12.50%	0.56%	-7.19%	-0.86%	0.00%	0.00%	6.39%	-0.02%	0.47%	11.85%
B. Other Division A	7.70%	0.02%	-0.41%	0.03%	0.00%	0.00%	0.33%	0.00%	0.28%	7.95%
C. Salt Lake City	19.96%	-2.06%	-47.93%	33.90%	0.00%	0.00%	15.37%	0.00%	0.10%	19.34%
D. Provo	12.22%	0.18%	-0.03%	-0.53%	0.00%	0.00%	0.00%	0.00%	0.18%	12.02%
E. Logan	10.03%	0.04%	-0.38%	-1.46%	0.00%	0.00%	1.86%	0.00%	0.45%	10.54%
F. Other Division B	12.35%	0.08%	0.11%	-0.49%	0.00%	0.00%	0.11%	0.00%	0.31%	12.47%
IV. Public Safety Noncontributory										
A. State	23.46%	0.12%	0.09%	-0.94%	0.00%	0.00%	-0.07%	-0.02%	0.36%	23.00%
B. Other Division A	19.08%	-0.01%	0.10%	-0.05%	0.00%	0.00%	-0.05%	0.00%	0.27%	19.34%
C. Salt Lake City	32.52%	0.09%	0.16%	-0.84%	0.00%	0.00%	-0.09%	0.00%	0.13%	31.97%
D. Ogden	24.30%	-0.04%	-0.17%	-0.53%	0.00%	0.00%	0.00%	0.00%	0.40%	23.96%
E. Logan	20.77%	-14.49%	3.92%	32.90%	0.00%	0.00%	-21.64%	0.00%	-0.21%	21.25%
F. Bountiful	19.68%	-0.02%	0.02%	-1.77%	0.00%	0.72%	0.00%	0.00%	0.17%	18.80%
G. Other Division B	22.17%	0.10%	0.14%	-0.32%	0.00%	0.00%	-0.04%	0.00%	0.27%	22.32%
V. Firefighters										
A. Division A	5.72%	0.02%	0.04%	-0.18%	0.00%	0.13%	0.00%	0.00%	0.05%	5.78%
B. Division B	2.83%	0.05%	-0.03%	-0.62%	0.00%	0.65%	0.00%	0.00%	-0.04%	2.84%
VI. Judges	26.79%	0.01%	0.04%	0.29%	0.00%	0.00%	0.00%	-0.02%	0.32%	27.43%
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, 2003 do not include any adjustments for 2003 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	93,703	25,489	212,203	331,394
B. State and School	315,727	50,633	375,784	742,144
C. Subtotal	409,430	76,122	587,987	1,073,538
II. Public Employees Noncontributory				
A. Local Government	646,700	110,137	1,820,539	2,577,375
B. State and School	3,940,781	361,217	7,866,573	12,168,571
C. Subtotal	4,587,481	471,354	9,687,112	14,745,946
III. Public Safety Contributory				
A. State	54,814	1,911	5,613	62,338
B. Other Division A	103,127	5,287	83,499	191,912
C. Salt Lake City	40,732	37	674	41,443
D. Provo	12,065	1,659	22,831	36,554
E. Logan	5,643	52	12,035	17,729
F. Other Division B	12,193	1,436	36,589	50,218
G. Subtotal	228,574	10,382	161,241	400,194
IV. Public Safety Noncontributory				
A. State	224,438	12,909	430,297	667,645
B. Other Division A	168,581	13,737	480,620	662,937
C. Salt Lake City	63,300	3,060	103,998	170,358
D. Ogden	27,468	745	25,986	54,199
E. Logan	738	-	592	1,330
F. Bountiful	3,735	64	10,140	13,939
G. Other Division B	25,524	2,855	87,132	115,510
H. Subtotal	513,784	33,370	1,138,765	1,685,918
V. Firefighters				
A. Division A	21,585	879	79,779	102,242
B. Division B	267,609	2,341	386,863	656,813
C. Subtotal	289,194	3,220	466,642	759,055
VI. Judges	47,713	1,317	73,377	122,407
VII. Governors and Legislative	5,044	1,813	2,524	9,381
VIII. Grand Total	6,081,220	597,578	12,117,648	18,796,439

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	74,120	3,847	15,736	93,703
B. State and School	257,159	8,982	49,587	315,727
C. Subtotal	<u>331,279</u>	<u>12,829</u>	<u>65,323</u>	<u>409,430</u>
II. Public Employees Noncontributory				
A. Local Government	597,557	13,157	35,986	646,700
B. State and School	3,688,809	50,196	201,776	3,940,781
C. Subtotal	<u>4,286,366</u>	<u>63,353</u>	<u>237,762</u>	<u>4,587,481</u>
III. Public Safety Contributory				
A. State	42,502	1,708	10,605	54,814
B. Other Division A	88,739	1,917	12,471	103,127
C. Salt Lake City	33,615	1,083	6,035	40,732
D. Provo	10,728	0	1,337	12,065
E. Logan	5,393	98	151	5,643
F. Other Division B	10,904	658	631	12,193
G. Subtotal	<u>191,881</u>	<u>5,464</u>	<u>31,230</u>	<u>228,574</u>
IV. Public Safety Noncontributory				
A. State	215,147	2,453	6,838	224,438
B. Other Division A	163,041	1,065	4,475	168,581
C. Salt Lake City	61,275	977	1,047	63,300
D. Ogden	25,661	78	1,729	27,468
E. Logan	738	0	0	738
F. Bountiful	3,690	0	45	3,735
G. Other Division B	24,519	348	657	25,524
H. Subtotal	<u>494,071</u>	<u>4,921</u>	<u>14,791</u>	<u>513,784</u>
V. Firefighters				
A. Division A	17,392	2,934	1,258	21,585
B. Division B	235,252	12,230	20,126	267,609
C. Subtotal	<u>252,644</u>	<u>15,164</u>	<u>21,384</u>	<u>289,194</u>
VI. Judges	41,474	0	6,239	47,713
VII. Governors and Legislative	4,372	0	672	5,044
VIII. Grand Total	5,602,087	101,731	377,401	6,081,220

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	2,854	21,558	1,077	25,489
B. State and School	6,538	44,064	31	50,633
C. Subtotal	9,392	65,622	1,108	76,122
II. Public Employees Noncontributory				
A. Local Government	13,915	95,275	947	110,137
B. State and School	65,516	291,125	4,577	361,217
C. Subtotal	79,431	386,400	5,524	471,354
III. Public Safety Contributory				
A. State	245	1,653	13	1,911
B. Other Division A	0	4,984	302	5,287
C. Salt Lake City	0	36	1	37
D. Provo	0	1,611	48	1,659
E. Logan	0	44	8	52
F. Other Division B	151	1,177	108	1,436
G. Subtotal	396	9,505	480	10,382
IV. Public Safety Noncontributory				
A. State	2,369	10,536	4	12,909
B. Other Division A	2,582	11,150	4	13,737
C. Salt Lake City	1,460	1,600	0	3,060
D. Ogden	329	416	0	745
E. Logan	0	0	0	0
F. Bountiful	0	64	0	64
G. Other Division B	618	2,235	2	2,855
H. Subtotal	7,358	26,001	10	33,370
V. Firefighters				
A. Division A	0	782	97	879
B. Division B	0	2,135	206	2,341
C. Subtotal	0	2,917	303	3,220
VI. Judges	0	1,317	0	1,317
VII. Governors and Legislative	0	1,806	7	1,813
VIII. Grand Total	96,577	493,568	7,432	597,578

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

**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	185,354	17,456	3,241	2,432	3,720	212,203
B. State and School	341,261	22,684	5,646	493	5,701	375,784
C. Subtotal	<u>526,615</u>	<u>40,140</u>	<u>8,887</u>	<u>2,925</u>	<u>9,421</u>	<u>587,987</u>
II. Public Employees Noncontributory						
A. Local Government	1,593,446	158,907	36,668	1	31,517	1,820,539
B. State and School	7,173,835	451,681	132,645	5	108,408	7,866,573
C. Subtotal	<u>8,767,281</u>	<u>610,588</u>	<u>169,313</u>	<u>6</u>	<u>139,925</u>	<u>9,687,112</u>
III. Public Safety Contributory						
A. State	5,479	41	31	10	51	5,613
B. Other Division A	79,730	1,098	672	1,140	859	83,499
C. Salt Lake City	656	6	3	3	7	674
D. Provo	21,671	301	187	345	327	22,831
E. Logan	11,567	133	67	134	134	12,035
F. Other Division B	34,799	519	285	483	502	36,589
G. Subtotal	<u>153,902</u>	<u>2,098</u>	<u>1,245</u>	<u>2,115</u>	<u>1,880</u>	<u>161,241</u>
IV. Public Safety Noncontributory						
A. State	410,744	9,846	4,294	0	5,414	430,297
B. Other Division A	456,677	12,785	5,028	0	6,130	480,620
C. Salt Lake City	100,014	1,920	735	0	1,329	103,998
D. Ogden	24,936	498	197	0	354	25,986
E. Logan	544	24	11	0	14	592
F. Bountiful	9,886	105	45	0	105	10,140
G. Other Division B	82,851	2,041	849	0	1,391	87,132
H. Subtotal	<u>1,085,652</u>	<u>27,219</u>	<u>11,159</u>	<u>0</u>	<u>14,737</u>	<u>1,138,765</u>
V. Firefighters						
A. Division A	76,158	400	1,528	467	1,226	79,779
B. Division B	372,713	1,534	4,472	1,828	6,317	386,863
C. Subtotal	<u>448,871</u>	<u>1,934</u>	<u>6,000</u>	<u>2,295</u>	<u>7,543</u>	<u>466,642</u>
VI. Judges	71,285	0	0	0	2,092	73,377
VII. Governors and Legislative	1,530	948	0	0	46	2,524
VIII. Grand Total	11,055,136	682,927	196,604	7,341	175,644	12,117,648

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	58,838	34,125	92,963	739	93,703
B. State and School	183,422	127,509	310,931	4,796	315,727
C. Subtotal	<u>242,260</u>	<u>161,634</u>	<u>403,894</u>	<u>5,535</u>	<u>409,430</u>
II. Public Employees Noncontributory					
A. Local Government	460,112	186,588	646,700	0	646,700
B. State and School	2,769,582	1,171,199	3,940,781	0	3,940,781
C. Subtotal	<u>3,229,694</u>	<u>1,357,787</u>	<u>4,587,481</u>	<u>0</u>	<u>4,587,481</u>
III. Public Safety Contributory					
A. State	33,292	19,870	53,162	1,652	54,814
B. Other Division A	69,999	32,076	102,075	1,052	103,127
C. Salt Lake City	24,836	15,432	40,268	464	40,732
D. Provo	8,123	3,872	11,995	69	12,065
E. Logan	3,991	1,640	5,631	12	5,643
F. Other Division B	8,971	3,219	12,190	3	12,193
G. Subtotal	<u>149,212</u>	<u>76,109</u>	<u>225,321</u>	<u>3,252</u>	<u>228,574</u>
IV. Public Safety Noncontributory					
A. State	166,165	58,273	224,438	0	224,438
B. Other Division A	127,623	40,958	168,581	0	168,581
C. Salt Lake City	46,334	16,966	63,300	0	63,300
D. Ogden	19,580	7,786	27,366	102	27,468
E. Logan	577	161	738	0	738
F. Bountiful	2,552	1,175	3,727	8	3,735
G. Other Division B	19,647	5,877	25,524	0	25,524
H. Subtotal	<u>382,478</u>	<u>131,196</u>	<u>513,674</u>	<u>110</u>	<u>513,784</u>
V. Firefighters					
A. Division A	14,965	6,382	21,347	238	21,585
B. Division B	176,821	87,536	264,357	3,251	267,609
C. Subtotal	<u>191,786</u>	<u>93,918</u>	<u>285,704</u>	<u>3,489</u>	<u>289,194</u>
VI. Judges	31,185	16,528	47,713	0	47,713
VII. Governors and Legislative	3,360	1,684	5,044	0	5,044
VIII. Grand Total	4,229,975	1,838,856	6,068,831	12,386	6,081,220

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	6.87%	1.24%	0.27%	1.33%	0.16%	0.19%	9.90%
B. State and School	6.53%	0.98%	0.27%	1.63%	0.16%	0.16%	9.57%
II. Public Employees Noncontributory							
A. Local Government	8.13%	1.63%	0.33%	0.00%	0.16%	0.18%	10.27%
B. State and School	9.13%	1.35%	0.32%	0.00%	0.16%	0.15%	10.95%
III. Public Safety Contributory							
A. State	17.66%	0.63%	0.58%	1.01%	0.00%	0.44%	20.32%
B. Other Division A	17.30%	0.51%	0.36%	1.24%	0.00%	0.31%	19.72%
C. Salt Lake City	17.28%	0.45%	0.29%	1.43%	0.00%	0.38%	19.83%
D. Provo	17.39%	0.50%	0.37%	1.33%	0.00%	0.48%	20.07%
E. Logan	17.02%	0.47%	0.29%	1.24%	0.00%	0.41%	19.43%
F. Other Division B	17.14%	0.50%	0.34%	1.11%	0.00%	0.44%	19.53%
IV. Public Safety Noncontributory							
A. State	17.51%	0.90%	0.42%	0.00%	0.00%	0.35%	19.18%
B. Other Division A	17.31%	0.84%	0.35%	0.00%	0.00%	0.32%	18.82%
C. Salt Lake City	17.17%	0.80%	0.32%	0.00%	0.00%	0.43%	18.72%
D. Ogden	17.07%	0.79%	0.32%	0.00%	0.00%	0.43%	18.61%
E. Logan	17.35%	0.83%	0.37%	0.00%	0.00%	0.46%	19.01%
F. Bountiful	17.29%	0.85%	0.34%	0.00%	0.00%	0.32%	18.80%
G. Other Division B	17.25%	0.81%	0.35%	0.00%	0.00%	0.47%	18.88%
V. Firefighters							
A. Division A	21.07%	0.19%	0.69%	0.47%	0.00%	0.44%	22.86%
B. Division B	21.08%	0.19%	0.59%	0.51%	0.00%	0.58%	22.95%
VI. Judges	25.10%	0.00%	0.00%	0.00%	0.00%	1.19%	26.29%
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	9.90%	6.00%	3.90%
B. State and School	9.57%	6.00%	3.57%
II. Public Employees Noncontributory			
A. Local Government	10.27%	0.00%	10.27%
B. State and School	10.95%	0.00%	10.95%
III. Public Safety Contributory			
A. State	20.32%	12.29%	8.03%
B. Other Division A	19.72%	12.29%	7.43%
C. Salt Lake City	19.83%	13.74%	6.09%
D. Provo	20.07%	13.54%	6.53%
E. Logan	19.43%	11.13%	8.30%
F. Other Division B	19.53%	10.50%	9.03%
IV. Public Safety Noncontributory			
A. State	19.18%	0.00%	19.18%
B. Other Division A	18.82%	0.00%	18.82%
C. Salt Lake City	18.72%	0.00%	18.72%
D. Ogden	18.61%	0.00%	18.61%
E. Logan	19.01%	0.00%	19.01%
F. Bountiful	18.80%	0.00%	18.80%
G. Other Division B	18.88%	0.00%	18.88%
V. Firefighters			
A. Division A	22.86%	15.05%	7.81%
B. Division B	22.95%	16.71%	6.24%
VI. Judges	26.29%	0.00%	26.29%
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	331,394	26,115	16,278	42,393	289,001
B. State and School	742,144	30,973	17,604	48,577	693,568
C. Subtotal	1,073,538	57,088	33,882	90,970	982,569
II. Public Employees Noncontributory					
A. Local Government	2,577,375	0	592,284	592,284	1,985,092
B. State and School	12,168,571	0	2,202,526	2,202,526	9,966,045
C. Subtotal	14,745,946	0	2,794,810	2,794,810	11,951,137
III. Public Safety Contributory					
A. State	62,338	614	402	1,016	61,323
B. Other Division A	191,912	19,577	11,835	31,412	160,501
C. Salt Lake City	41,443	114	51	165	41,278
D. Provo	36,554	5,765	2,780	8,545	28,009
E. Logan	17,729	2,256	1,682	3,938	13,791
F. Other Division B	50,218	7,521	6,468	13,989	36,228
G. Subtotal	400,194	35,847	23,218	59,065	341,130
IV. Public Safety Noncontributory					
A. State	667,645	0	163,159	163,159	504,486
B. Other Division A	662,937	0	220,158	220,158	442,780
C. Salt Lake City	170,358	0	35,500	35,500	134,858
D. Ogden	54,199	0	9,953	9,953	44,245
E. Logan	1,330	0	523	523	808
F. Bountiful	13,939	0	2,299	2,299	11,640
G. Other Division B	115,510	0	38,700	38,700	76,811
H. Subtotal	1,685,918	0	470,292	470,292	1,215,628
V. Firefighters					
A. Division A	102,242	30,182	15,662	45,844	56,399
B. Division B	656,813	119,288	44,546	163,834	492,979
C. Subtotal	759,055	149,470	60,208	209,678	549,378
VI. Judges	122,407	0	24,505	24,505	97,902
VII. Governors and Legislative	9,381	0	569	569	8,812
VIII. Grand Total	18,796,439	242,405	3,407,484	3,649,889	15,146,556

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	22,208	3,281	25,489	76,206	93,604	169,810
B. State and School	42,990	7,643	50,633	142,290	184,918	327,208
C. Subtotal	65,198	10,924	76,122	218,496	278,522	497,018
II. Public Employees Noncontributory						
A. Local Government	34,927	75,210	110,137	138,647	1,089,608	1,228,255
B. State and School	100,264	260,953	361,217	604,287	5,059,760	5,664,047
C. Subtotal	135,191	336,163	471,354	742,934	6,149,368	6,892,302
III. Public Safety Contributory						
A. State	998	913	1,911	1,974	2,623	4,597
B. Other Division A	4,456	831	5,287	21,752	30,335	52,087
C. Salt Lake City	36	1	37	231	278	509
D. Provo	975	684	1,659	6,703	7,582	14,285
E. Logan	52	0	52	3,115	4,982	8,097
F. Other Division B	1,118	318	1,436	8,102	14,497	22,599
G. Subtotal	7,635	2,747	10,382	41,877	60,297	102,174
IV. Public Safety Noncontributory						
A. State	1,340	11,569	12,909	8,448	258,690	267,138
B. Other Division A	2,404	11,333	13,737	10,456	250,006	260,462
C. Salt Lake City	289	2,771	3,060	2,575	65,923	68,498
D. Ogden	271	474	745	1,402	14,630	16,032
E. Logan	0	0	0	0	69	69
F. Bountiful	2	62	64	382	7,459	7,841
G. Other Division B	905	1,950	2,855	3,135	45,297	48,432
H. Subtotal	5,211	28,159	33,370	26,398	642,074	668,472
V. Firefighters						
A. Division A	520	359	879	9,190	24,745	33,935
B. Division B	1,802	539	2,341	67,665	155,365	223,030
C. Subtotal	2,322	898	3,220	76,855	180,110	256,965
VI. Judges	586	731	1,317	7,287	41,585	48,872
VII. Governors and Legislative	165	1,648	1,813	13	1,942	1,955
VIII. Grand Total	216,308	381,270	597,578	1,113,860	7,353,898	8,467,758

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	1,467	27	705	561	1,216	66	340	4,382
B. State and School	1,977	58	923	19	4,201	188	905	8,271
C. Subtotal	3,444	85	1,628	580	5,417	254	1,245	12,653
II. Public Employees Noncontributory								
A. Local Government	17,618	161	6,428	542	3,384	91	271	28,495
B. State and School	66,421	644	19,363	1,535	16,938	415	1,103	106,419
C. Subtotal	84,039	805	25,791	2,077	20,322	506	1,374	134,914
III. Public Safety Contributory								
A. State	24	1	40	20	218	16	128	447
B. Other Division A	412	0	264	83	403	13	127	1,302
C. Salt Lake City	2	0	5	1	140	15	58	221
D. Provo	97	0	23	8	37	0	12	177
E. Logan	53	0	5	1	18	1	3	81
F. Other Division B	171	1	47	20	49	4	7	299
G. Subtotal	759	2	384	133	865	49	335	2,527
IV. Public Safety Noncontributory								
A. State	2,412	16	760	2	644	14	40	3,888
B. Other Division A	2,870	16	856	1	500	6	22	4,271
C. Salt Lake City	402	6	71	0	153	3	11	646
D. Ogden	131	1	28	0	96	1	24	281
E. Logan	7	0	0	0	1	0	0	8
F. Bountiful	33	0	8	0	17	0	2	60
G. Other Division B	469	3	145	2	79	1	3	702
H. Subtotal	6,324	42	1,868	5	1,490	25	102	9,856
V. Firefighters								
A. Division A	338	0	65	27	58	13	12	513
B. Division B	1,239	0	74	56	619	56	162	2,206
C. Subtotal	1,577	0	139	83	677	69	174	2,719
VI. Judges	106	0	5	0	54	0	29	194
VII. Governors and Legislative	100	0	101	9	170	0	53	433
VIII. Grand Total	96,349	934	29,916	2,887	28,995	903	3,312	163,296

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	1,467	56,388	38,437	76,206	47.7	14.5
B. State and School	1,977	77,756	39,330	142,290	52.3	21.7
C. Subtotal	3,444	134,144	38,950	218,496	50.4	18.6
II. Public Employees Noncontributory						
A. Local Government	17,618	643,307	36,514	138,647	43.6	8.6
B. State and School	66,421	2,271,701	34,202	604,287	44.5	10.3
C. Subtotal	84,039	2,915,008	34,686	742,934	44.3	9.9
III. Public Safety Contributory						
A. State	24	945	39,371	1,974	51.9	17.4
B. Other Division A	412	16,656	40,428	21,752	39.9	10.0
C. Salt Lake City	2	109	54,691	231	43.0	16.5
D. Provo	97	4,376	45,113	6,703	39.1	10.3
E. Logan	53	2,205	41,608	3,115	39.1	12.6
F. Other Division B	171	7,396	43,250	8,102	37.9	9.8
G. Subtotal	759	31,687	41,748	41,877	39.7	10.4
IV. Public Safety Noncontributory						
A. State	2,412	90,015	37,320	8,448	41.0	9.6
B. Other Division A	2,870	107,568	37,480	10,456	36.9	7.7
C. Salt Lake City	402	19,778	49,198	2,575	39.3	11.6
D. Ogden	131	5,223	39,866	1,402	36.9	9.4
E. Logan	7	186	26,630	0	30.6	1.0
F. Bountiful	33	1,639	49,661	382	44.8	15.8
G. Other Division B	469	19,336	41,228	3,135	37.3	7.6
H. Subtotal	6,324	243,745	38,543	26,398	38.7	8.8
V. Firefighters						
A. Division A	338	14,335	42,411	9,190	38.1	7.3
B. Division B	1,239	60,813	49,082	67,665	39.8	11.4
C. Subtotal	1,577	75,148	47,653	76,855	39.4	10.5
VI. Judges	106	11,163	105,312	7,287	54.9	10.7
VII. Governors and Legislative	100	610	6,097	13	52.3	6.2
VIII. Grand Total	96,349	3,411,505	35,408	1,113,860	44.1	10.2

3,464,282
52,770

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	1,622	11,372	584
B. State and School	5,294	42,443	668
C. Subtotal	6,916	53,815	648
II. Public Employees Noncontributory			
A. Local Government	3,746	54,727	1,217
B. State and School	18,456	333,578	1,506
C. Subtotal	22,202	388,305	1,457
III. Public Safety Contributory			
A. State	362	5,584	1,285
B. Other Division A	543	8,878	1,362
C. Salt Lake City	213	3,948	1,545
D. Provo	49	1,029	1,750
E. Logan	22	441	1,670
F. Other Division B	60	880	1,222
G. Subtotal	1,249	20,760	1,385
IV. Public Safety Noncontributory			
A. State	698	17,040	2,034
B. Other Division A	528	12,505	1,974
C. Salt Lake City	167	4,713	2,352
D. Ogden	121	2,211	1,523
E. Logan	1	49	4,111
F. Bountiful	19	318	1,396
G. Other Division B	83	1,777	1,784
H. Subtotal	1,617	38,613	1,990
V. Firefighters			
A. Division A	83	1,643	1,650
B. Division B	837	21,216	2,112
C. Subtotal	920	22,859	2,071
VI. Judges			
	83	4,307	4,324
VII. Governors and Legislative			
	223	573	214
VIII. Grand Total			
	33,210	529,232	1,328

Market Value of Assets
(All Retirement Systems Combined)

Item	December 31, 2003	December 31, 2002
(1)	(2)	(3)
1. Cash	197	262
2. Accrued income receivable from:		
a. Member contributions	778	775
b. Employer contributions	22,755	19,825
c. Fire insurance premium tax / court fees	30	21
d. Investments	<u>407,285</u>	<u>128,035</u>
e. Total	430,848	148,656
3. Investments		
a. Short-term securities – domestic	1,415,410	672,742
b. Short-term securities - international	166,741	90,665
c. Bonds - domestic	2,271,381	2,029,363
d. Bonds - international	790,632	668,833
e. Equities - domestic	5,423,516	4,404,921
f. Equities - international	2,646,582	1,989,119
g. Alternative investments	654,294	761,987
h. Real estate	1,187,701	1,123,842
i. Mortgage loans	<u>6,662</u>	<u>3,985</u>
j. Total	14,562,919	11,745,457
4. Other	1,510,613	1,372,321
5. Total assets	16,504,577	13,266,696
6. Liabilities		
a. Securities lending liability	(1,505,524)	(1,367,194)
b. Other accounting liabilities	(693,736)	(394,298)
c. Reserves	<u>(56,185)</u>	<u>(44,749)</u>
d. Total	(2,255,445)	(1,806,241)
7. Net assets	14,249,132	11,460,455

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, 2002 (2)	Contributions (3)	Benefits and Refunds (4)	Earnings, Net of Expenses (5)	Transfers (6)	MVA as of Dec. 31, 2003 (7)
I. Public Employees Contributory						
A. Local Government	206,907	6,544	(13,898)	53,280	4,929	257,761
B. State and School	509,225	9,426	(47,323)	132,385	28,334	632,047
C. Subtotal	716,132	15,969	(61,221)	185,664	33,263	889,808
II. Public Employees Noncontributory						
A. Local Government	1,477,071	62,291	(55,680)	378,076	(4,062)	1,857,696
B. State and School	7,519,594	241,644	(334,221)	1,908,478	(17,911)	9,317,583
C. Subtotal	8,996,665	303,935	(389,901)	2,286,554	(21,973)	11,175,278
III. Public Safety Contributory						
A. State	46,745	204	(6,142)	12,397	4,979	58,182
B. Other Division A	121,641	2,790	(9,615)	31,840	6,543	153,199
C. Salt Lake City	30,718	34	(4,120)	8,267	3,883	38,782
D. Provo	19,063	1,062	(1,222)	4,860	(13)	23,748
E. Logan	10,803	352	(452)	2,754	271	13,250
F. Other Division B	24,340	1,418	(878)	6,422	541	31,844
G. Subtotal	253,310	5,860	(22,427)	66,540	16,204	319,006
IV. Public Safety Noncontributory						
A. State	362,837	17,574	(16,791)	92,118	(3,757)	451,982
B. Other Division A	339,952	16,481	(12,387)	85,894	(7,461)	422,480
C. Salt Lake City	77,357	6,163	(4,737)	19,139	(3,349)	94,574
D. Ogden	32,140	986	(2,334)	8,050	(167)	38,676
E. Logan	132	26	(51)	30	2	140
F. Bountiful	9,132	298	(326)	2,339	9	11,452
G. Other Division B	49,689	3,715	(1,557)	13,011	1,000	65,858
H. Subtotal	871,239	45,243	(38,181)	220,582	(13,722)	1,085,162
V. Firefighters						
A. Division A	46,001	2,916	(1,687)	11,882	91	59,202
B. Division B	415,322	12,198	(22,246)	105,150	534	510,958
C. Subtotal	461,323	15,113	(23,933)	117,032	624	570,159
VI. Judges	75,753	2,592	(4,361)	19,354	1,128	94,467
VII. Governors and Legislative	8,932	0	(726)	2,196	(12)	10,390
VIII. 3% Substantial Substitute	77,101	22,093	(198)	20,900	(15,033)	104,862
IX. Grand Total	11,460,455	410,807	(540,948)	2,918,822	479	14,249,133

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	11,460,455	13,752,523
2. Contributions to fund during year	410,808	410,808
3. Benefit payments during year (including refunds of contributions)	(540,950)	(540,950)
4. Transfers to and (from) URS	0	0
5. Investment income, net of investment and administrative expenses	2,918,819	1,095,801
6. End of year assets	14,249,132	14,718,182
7. Investment return rate	25.6%	8.0%

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%
2001	-5.3%	6.8%
2002	-8.0%	-1.5%
2003	25.6%	8.0%

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

1. Market value of assets				14,249,132
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.	2003	2,007,188	80%	1,605,750
b.	2002	(2,009,531)	60%	(1,205,718)
c.	2001	(1,765,658)	40%	(706,263)
d.	2000	(814,093)	20%	(162,819)
e.	1999	932,957	0%	<u>0</u>
f.	Total			(469,050)
3. Preliminary actuarial value of assets (1-2f)				14,718,182
4. Corridor Limits				
a.	80% of market value			11,399,306
b.	120% of market value			17,098,958
c.	Actuarial value (Item 3, not more than 4b, not less than 4a)*			14,718,182
5. Ratio of actuarial value to market value				103.3%

Note: Amounts shown are in \$ thousands

Transfer Adjustments to Asset Values

Fund/Division (1)	Market Value of Assets (MVA) at January 1, 2004			Actuarial Value of Assets (AVA) at January 1, 2004		
	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	257,761	(3,897)	253,864	267,889	(4,050)	263,839
B. State and School	632,047	(12,391)	619,656	663,109	(13,000)	650,109
C. Subtotal	889,808	(16,288)	873,520	930,998	(17,050)	913,948
II. Public Employees Noncontributory						
A. Local Government	1,857,696	3,897	1,861,593	1,912,650	4,050	1,916,700
B. State and School	9,317,583	12,391	9,329,974	9,621,392	13,000	9,634,392
C. Subtotal	11,175,278	16,288	11,191,566	11,534,042	17,050	11,551,092
III. Public Safety Contributory						
A. State	58,182	(816)	57,366	61,783	(866)	60,917
B. Other Division A	153,199	(766)	152,433	160,054	(800)	159,254
C. Salt Lake City	38,782	(226)	38,556	41,311	(241)	41,070
D. Provo	23,748	0	23,748	24,546	0	24,546
E. Logan	13,250	(572)	12,678	13,670	(590)	13,080
F. Other Division B	31,844	(112)	31,732	32,680	(115)	32,565
G. Subtotal	319,006	(2,492)	316,514	334,044	(2,612)	331,432
IV. Public Safety Noncontributory						
A. State	451,982	816	452,798	464,763	866	465,629
B. Other Division A	422,480	766	423,246	433,966	800	434,766
C. Salt Lake City	94,574	226	94,800	96,837	241	97,078
D. Ogden	38,676	0	38,676	40,214	0	40,214
E. Logan	140	572	712	156	590	746
F. Bountiful	11,452	0	11,452	11,809	0	11,809
G. Other Division B	65,858	112	65,970	67,100	115	67,215
H. Subtotal	1,085,162	2,492	1,087,654	1,114,845	2,612	1,117,457
V. Firefighters						
A. Division A	59,202	0	59,202	60,889	0	60,889
B. Division B	510,958	0	510,958	528,613	0	528,613
C. Subtotal	570,159	0	570,159	589,502	0	589,502
VI. Judges	94,467	0	94,467	97,412	0	97,412
VII. Governors and Legislative	10,390	0	10,390	10,906	0	10,906
VIII. 3% Substantial Substitute	104,862	0	104,862	106,432	0	106,432
IX. Grand Total	14,249,133	0	14,249,133	14,718,181	0	14,718,181

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	181,684
b. Inactives	12,056
c. Actives	<u>206,433</u>
d. Total	400,173
2. Actuarial value of assets	106,432
3. Unfunded actuarial accrued liability	293,741
4. Covered compensation of state funds that will pay for benefit	2,527,359
5. Recommended rate (20-year funding period and 4.00% PGR)	0.83%

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	2,793	651	5,361	8,805
B. State and School	9,397	1,510	11,266	22,173
C. Subtotal	<u>12,190</u>	<u>2,161</u>	<u>16,627</u>	<u>30,978</u>
II. Public Employees Noncontributory				
A. Local Government	18,919	2,047	26,414	47,380
B. State and School	118,029	6,803	136,863	261,694
C. Subtotal	<u>136,948</u>	<u>8,850</u>	<u>163,277</u>	<u>309,074</u>
III. Public Safety Contributory				
A. State	1,632	55	168	1,855
B. Other Division A	3,101	108	1,552	4,760
C. Salt Lake City	1,248	0	20	1,268
D. Provo	369	35	371	775
E. Logan	173	0	217	390
F. Other Division B	369	30	519	917
G. Subtotal	<u>6,892</u>	<u>228</u>	<u>2,847</u>	<u>9,965</u>
IV. Public Safety Noncontributory				
A. State	6,733	271	6,268	13,271
B. Other Division A	5,027	269	5,213	10,510
C. Salt Lake City	1,925	67	1,662	3,653
D. Ogden	832	18	411	1,260
E. Logan	22	0	0	22
F. Bountiful	115	1	225	341
G. Other Division B	764	71	1,053	1,888
H. Subtotal	<u>15,418</u>	<u>697</u>	<u>14,832</u>	<u>30,945</u>
V. Firefighters				
A. Division A	621	15	857	1,494
B. Division B	8,060	31	6,591	14,682
C. Subtotal	<u>8,681</u>	<u>46</u>	<u>7,448</u>	<u>16,176</u>
VI. Judges	1,416	30	1,375	2,821
VII. Governors and Legislative	142	43	28	213
VIII. Grand Total	181,687	12,055	206,434	400,172

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
2002	3,703	2,262	7,822	13,787	137,721	37,192	55,569	592	827,741	927,523
2003	3,608	2,269	7,375	13,252	137,743	38,177	54,765	619	749,408	899,290
2004	3,444	2,293	6,916	12,653	134,144	38,950	53,815	648	873,520	913,948

**Historical Summary of Statistical Data
Public Employees 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	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
2002	83,690	27,385	19,145	130,220	2,801,564	33,475	314,821	1,370	9,848,682	11,021,828
2003	83,925	26,664	20,623	131,212	2,888,853	34,422	351,690	1,421	8,963,388	10,756,065
2004	84,039	28,673	22,202	134,914	2,915,008	34,686	388,305	1,457	11,191,566	11,551,092

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

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	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
2002	795	503	1,257	2,555	30,783	38,721	19,480	1,291	293,617	328,959
2003	789	502	1,250	2,541	31,501	39,925	20,222	1,348	269,041	322,275
2004	759	519	1,249	2,527	31,688	41,749	20,759	1,385	316,514	331,432

**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
2002	6,120	1,464	1,326	8,910	225,760	36,889	28,907	1,817	936,286	1,047,507
2003	6,228	1,733	1,462	9,423	237,192	38,085	33,444	1,906	855,508	1,027,160
2004	6,324	1,915	1,617	9,856	243,745	38,543	38,614	1,990	1,087,654	1,117,457

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

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	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
2002	1,504	179	866	2,549	66,871	44,462	20,008	1,925	508,565	569,151
2003	1,545	197	884	2,626	71,347	46,179	22,246	2,097	461,324	553,589
2004	1,577	222	920	2,719	75,148	47,653	22,859	2,071	570,160	589,502

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

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	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
2002	106	4	78	188	10,910	102,925	3,608	3,855	82,760	92,649
2003	106	4	77	187	11,095	104,674	3,728	4,035	75,753	90,904
2004	106	5	83	194	11,163	105,311	4,306	4,324	94,467	97,412

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

Plan Year Beginning	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						
January 1st	(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
2002	94	107	228	429	601	6,391	562	206	10,448	11,710
2003	94	105	231	430	592	6,297	585	211	8,932	10,719
2004	100	110	223	433	610	6,097	573	214	10,390	10,906

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

1. *Investment return rate:*

8.00% 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:

Age	Active Male Members		
	Local Government and Public Employees	Public Educators	Public Safety and Firefighters ¹
20	.000585	.000150	.000520
25	.000455	.000150	.000520
30	.000520	.000225	.000520
35	.000780	.000225	.000520
40	.000975	.000450	.000715
45	.001235	.000750	.001235
50	.001820	.001500	.002080
55	.003055	.002700	.003250
60	.004940	.004275	.004420
65	.007540	.005400	.005590
70	.010790	.006000	.006695

Age	Active Female Members	
	Local Government and Public Employees	Public Educators
20	.000325	.000420
25	.000325	.000180
30	.000325	.000060
35	.000390	.000180
40	.000520	.000360
45	.000780	.000720
50	.001235	.001080
55	.001820	.001500
60	.002600	.002040
65	.003575	.002820
70	.004745	.003900

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	.000150	.000200	.000070	.000200	.000200
25	.000225	.000300	.000105	.000300	.000300
30	.000450	.000600	.000210	.000600	.000600
35	.000675	.000900	.000315	.000900	.000900
40	.000900	.001200	.000420	.001200	.001200
45	.001500	.002000	.000700	.002000	.002000
50	.001950	.002600	.000910	.002600	.002600
55	.003075	.004100	.001435	.004100	.004100
60	.004200	.005600	.001960	.005600	.005600

Active Female Members			
Age	Local Government	Public Employees	Public Educators
20	.000170	.000200	.000100
25	.000255	.000300	.000150
30	.000510	.000600	.000300
35	.000765	.000900	.000450
40	.001020	.001200	.000600
45	.001700	.002000	.001000
50	.002210	.002600	.001300
55	.003485	.004100	.002050
60	.004760	.005600	.002800

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	0.1219	0.0688	0.1096
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	0.2004	0.1903	0.1881
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	0.2342	0.2043	0.1639
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	0.2909	0.2521	0.2804
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	0.0930	0.0390	0.0889
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	0.2392	0.1783	0.1920
25	0.2257	0.1962	0.1877	0.1791	0.1449	0.1304
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	0.0668	0.0631	0.0869
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	0.0300	0.0284	0.0175
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	0.2004	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	0.600	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 1.75% 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	2.75	7.50
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	1.50	6.25
11	1.25	6.00
12	1.00	5.75
13	0.75	5.50
14	0.50	5.25
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 (UP94 Males, Setback 2 years)	Public Educators (UP94 Males, Setback 4 years)	Public Safety and Firefighters (UP94 Males, Setback 0 Years)
20	.000495	.000421	.000545
25	.000633	.000570	.000711
30	.000811	.000749	.000862
35	.000912	.000883	.000915
40	.001010	.000927	.001153
45	.001454	.001243	.001697
50	.002260	.001852	.002773
55	.003854	.003088	.004758
60	.006774	.005322	.008576
65	.012335	.009663	.015629
70	.021354	.017462	.025516
75	.033549	.027905	.040012
80	.053991	.043933	.066696
85	.088721	.073780	.104559
90	.136537	.113755	.164442
95	.213325	.179849	.251189

Retired Female Members			
Age	Local Government, Public Employees and All Beneficiaries (UP94 Females, Setback 0 Years)	Public Educators (UP94 Females, Setback 2 Years)	Public Safety and Firefighters (UP94 Females, Setback 0 Years)
20	.000305	.000293	.000305
25	.000313	.000313	.000313
30	.000377	.000338	.000377
35	.000514	.000454	.000514
40	.000763	.000643	.000763
45	.001046	.000943	.001046
50	.001536	.001297	.001536
55	.002466	.002051	.002466
60	.004773	.003612	.004773
65	.009286	.007179	.009286
70	.014763	.012648	.014763
75	.024393	.019724	.024393
80	.042361	.034115	.042361
85	.072836	.058986	.072836
90	.125016	.100882	.125016
95	.200229	.167668	.200229

9. *Disabled annuitant mortality rates:*

Disabled Retired Male and Female Members		
Age	Males	Females
20	.00812	.00652
25	.01073	.00856
30	.01346	.01124
35	.01595	.01372
40	.01890	.01665
45	.02241	.01971
50	.02617	.02338
55	.03082	.02733
60	.03548	.03165
65	.04110	.03659
70	.04775	.04187
75	.06828	.05112
80	.10975	.07611
85	.16042	.11927
90	.22472	.17155
95	.31620	.23810
100	.46667	.33809

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 (or less than) 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. The actuarial value of assets is further adjusted, if necessary, so that it is not less than 80% of market value and not more than 120% of market value.

12. *Payroll growth rate:*

In determining the level percent of payroll amortization rate, payroll is assumed to grow annually at 4.00%. 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 prior to July 1, 1975.
 - 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 49-21-403. 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 a cost-of-living increase up to 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 60% of final average salary (annual) is paid.

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 26 - Provo (Div B)
Fund 27 - Logan (Div B)
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:*
- 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.
 - c. 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 49-21-403. 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 a cost-of-living increase up to 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. 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.
- 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.
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, 2004, the benefit base is therefore \$24.20.
 - 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, 2004, the benefit base is therefore \$1,090.00.
 - 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 \$23.80 per month) per year of service, while former governors receive the benefit base (currently \$1,070.00) 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.