

Utah Retirement Systems

ACTUARIAL VALUATION
January 1, 2006

August 10, 2006

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, 2006

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, 2006 actuarial valuation will be used by the Board when certifying the employer contribution rates for the year beginning July 1, 2007 and ending June 30, 2008. 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 financial markets.

In 2004, the Utah Legislature approved an act (HB 83) that allows the Board to set the employer contribution rate at the prior year's rate, if the rate otherwise would decrease and if the funded ratio is less than 110%. In such a case, the rate set by the Board would be higher than the actuarially determined contribution rate. The object of this legislation is to enhance the Board's ability to maintain more-level contribution rates while targeting a 100% - 110% funded level. The Board has followed this policy since 2004, so for some funds, the recommended contribution rate is larger than the actuarially determined rate.

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 increased from 92.4% to 93.2%. Most of the individual funds have ratios over 90%, and only the 3% Substantial Substitute Fund, the Salt Lake City Noncontributory Public Safety Fund, and the Logan Noncontributory Public Safety Fund have funded ratios less than 80%. 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 sixteen 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 99.1%, compared to 96.5% in the prior year and 91.7% two years ago.

Benefit provisions

The benefit provisions reflected in this valuation are those which were in effect on January 1, 2006, or which were adopted by the end of the 2006 legislative session and are effective on or before July 1, 2007:

No significant pieces of legislation impacting the benefit provisions of URS were enacted during the 2006 legislative session.

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 current actuarial assumptions and methods are the same as used for the prior valuation. These assumptions and methods were adopted effective January 1, 2005. The next experience analysis is scheduled for 2008.

The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rates and funding periods.

It is our opinion that the recommended assumptions are internally consistent and are reasonably based on past and anticipated future experience of the System. The actuarial assumptions and methods used in this report comply with the parameters for disclosure that appear in GASB 25.

Data

Member data for retired, active and inactive members was supplied as of December 31, 2005 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, 2005.

Certification

We certify that the information presented herein is accurate and fairly portrays the actuarial position of URS as of January 1, 2006.

All of our work conforms with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of Utah state law and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board. The undersigned are independent actuaries 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,

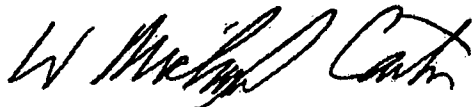
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Public Employees Retirement Systems (Contributory and Noncontributory)

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 recommended new contribution rates, and compares these to the rates certified for FY 2007 based on the last valuation
 - 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 the recommended Board adjustments under HB83
 - Rates shown on Exhibit 1(a), column 6 are for the twelve-month period beginning July 1, 2007 (FY 2008)
 - Rates may need to be adjusted for the effect of 2007 legislation, if material
- Because of the HB 83 policy, contribution rates for most funds were unchanged
 - Most exceptions were in Public Safety, driven by a combination of asset and liability losses
- Exhibit 1(b) shows the development of the recommended rates under HB 83. The recommended rates are the larger of the actuarially calculated rates from the current valuation (Col. 2) and the rates certified for FY 2007 under the provisions of HB83 (Col. 3)
 - HB83 permits the Board to set the contribution rate at the prior year's level if the actuarially calculated rate would be less and the funded ratio is less than 110%
 - None of the funds had a funded ratio of 110% or greater, except for the Governors and Legislative Pension Plan, for which the contribution determination is different
 - This policy is separately applied to the contribution rate for the 3% substantial substitute that is included with the contribution rates for the State and School funds, the State Public Safety funds and the Judges
 - The policy is applied to the gross rates for the Firefighter funds and the Judges, i.e., before application of the offsets for the fire insurance premium tax receipts and the court fees
- Exhibit 2(a) shows the components of the actuarially determined contribution rate, and Exhibit 4(a) reconciles the actuarially calculated rates determined by this valuation and the previous valuation
 - For most funds, the actuarial contribution rate decreased
 - Some Public Safety and Firefighter funds are exceptions
- There were no material changes to the benefit provisions

- There were no changes in assumptions or methods, since the Board just adopted new assumptions last year, following the experience study.
- Amortization payments are based on:
 - 20-year funding period
 - Contributions determined 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
- Plan earned 9.2% on a market-value basis, net of investment and administrative expenses
- Plan uses actuarial value to determine contribution rates and funded status
 - 5-year smoothing of net earnings above or below 8.00% assumption
 - Only 20% of 2005 gain reflected
 - Still reflecting 20% of losses from 2001 and 2002, and 20% of gains from 2003 and 2004
 - 7.4% return on actuarial value of assets
 - Since the actuarial return was less than 8.00%, an actuarial loss occurred, increasing the actuarially-calculated rates for several funds
 - Impact on contribution rates shown on Exhibit 4(a), Col. (4)
- Actuarial value of assets (\$16.4 billion) is 94.0% of market assets (\$17.5 billion)
 - difference will be recognized over next four years
- Liability experience (salary increases, retirement, mortality, etc.) caused decreases in the actuarial contribution rates for most funds
 - Smaller than expected salary increases contributed here, partly due to fact that salaries reported for the last valuation were artificially high because 2004 was a 27-pay-period year for several employers, including the State of Utah
- Because of the offset for fire insurance premium tax receipts, the employer contribution rate for the two firefighter funds is reduced to 0.00%, as has been the case for several years
 - The remaining offset is used to reduce member contribution rates, but the net member rate this year is larger than last year's net member rate for both funds
 - See Exhibits 2(b) and 2(c) for details about the offsets applied to contribution rates for Firefighters

- No part of the fire insurance premium tax receipts is available to be transferred to the Public Safety Retirees' Cost-of-Living Increases Restricted Account
 - A separate letter will be sent detailing this calculation
- The contribution rate for Judges is increasing solely because of the decrease in the offset for court fees
 - The amount of court fees received by the trust has decreased each year for the last several years
 - See Exhibits 2(b) and 2(c) for details about how the offset for court fees is applied to the contribution rate for Judges
- The rate shown for the Judges System is for the noncontributory system. The employer contribution rate for the contributory system is 2.00 percentage points less.
- As for the past several years, no contribution is required for the Governors and Legislative Pension Plan, since the value of assets exceeds the actuarial present value of all future benefits for current members

Determination of Calculated 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. 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).

Legislation enacted in 2004 (HB 83) gave the Board the option of holding contribution rates at the higher of the previous year's rate or the current year's calculated rate. The Board has this authority until such time that a Fund's assets are in excess of 110% of the liabilities of the Fund. None of the funds has reached the 110% funded level, except for the Governors' and Legislators' Retirement Plan. The Board has followed the policy of holding the rates constant, but not less than the actuarially calculated rate, as permitted by HB 83.

Under the policy, the actuarial rates and last year's certified rates are compared, and the larger is set as the new certified rate. This is done separately for the contribution for the 3% Substantial Substitute fund, and then the rate for the 3% Substantial Substitute is added to the regular contribution rate, as shown on Exhibit 1(b). Then the offset for the fire insurance premium tax and the court fees are applied, as shown in Exhibit 2(c).

Note that the offset for the fire insurance premium tax is applied to reduce the employer contribution rates to zero, and then any remaining offset is used to reduce the member contribution rates, but not less than the prior year's net member rate. As you can see on Exhibit 1(a), the member rates for both of the Firefighter funds will increase this year.

The contribution rates set in this valuation will become effective for the twelve-month period beginning July 1, 2007 (FY 2008).

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, 2005, the retirement systems that are part of URS have a total market value of \$17.5 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 2005 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, 57% of invested assets are held in equities and alternative investments, compared with 62% last year.

Exhibit 11(b) shows a reconciliation of the market values between the beginning and end of 2005. 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 2005, the total investment return on market values was 9.2%, as shown on Exhibit 12(a). This return is net of all investment and administrative expenses.

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% or more than 120% of the market value of assets.

The development of the AVA is shown on Exhibits 13 and 14. The AVA is \$16.4 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 94.0% 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 2005, this return was 7.4%. Because this is less than the assumed 8% investment return, the plan experienced a loss 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, 2005. 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.

After the data was provided, we were notified that URS's Internal Audit had discovered that service and member contribution account balances were slightly understated, due to a processing problem. (Data for some members did not include service or contributions for one biweekly payroll period, although all compensation was included.) After discussions with the Internal Auditor, we decided to increase the reported service for all active members by 0.06 years to account for the service shortfall. No adjustment was made to the contribution balances, because we deemed this immaterial.

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 97,801 to 98,740, a 1.0% increase. Last year, total active membership grew 1.5%, and over the last five years, membership growth has averaged 1.0% per year.

Total active member payroll grew 2.0% last year for all funds combined, compared with a 4.8% increase the prior year. (However, these figures may be misleading, because 2004 was a 27-pay-period year for a number of employers, including the State of Utah.)

Benefit Provisions

Appendix 2 includes a summary of the benefit provisions for each of the retirement systems in URS. The valuation reflects any benefit changes enacted by the 2006 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, 2007.

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

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 2005 experience investigation, as recommended by the actuary. Please see Appendix 1 for a complete description of these assumptions.

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 three of the funds have a funded ratio (ratio of actuarial assets to accrued liabilities) of at least 80%, and most are over 90%. The only funds with funded ratios below 80% are Salt Lake City and Logan 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. Funded ratios have increased slightly for most funds since last year, as shown on Exhibit 3(b).

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 must be computed using a funding period no greater than 30 years. 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.

The calculated employer contribution rate is computed as a level percentage of payroll using a 20-year amortization period. Since the recommended employer rate is the greater of the prior year's certified rate or this year's calculated rate, the recommended rate meets the definition of an acceptable ARC.

Firefighters and Judges Offsets

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

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

The offset for the Firefighter System decreased from 12.08% to 11.50%, and the offset for the Judges System decreased from 18.04% to 15.45%. The decrease in the Firefighter System offset appears to be due to typical fluctuations in receipts, and receipts for 2005 were larger than for 2004. The decrease in the Judges System offset was caused by a third consecutive drop in the amount of court fees.

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.

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. The fire insurance premium tax receipts for calendar year 2005 were not sufficient to produce any surplus receipts for this Restricted 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 actuarially determined contribution required to pay for this benefit is 0.78%, 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.

The Board has the authority, under HB83, to hold the contribution rate for the Substantial Substitute at 0.85% (last year's rate).

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 during the 1980s, 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—the Public Safety Retirees' Cost-of-Living Increases Restricted Account—under the General Fund of the State of Utah, effective July 1, 2004.

The legislation appropriated \$1.1 million from the Fire Academy Support Account. The legislation also requires that a portion of the fire insurance premium tax receipts that currently go to the Firefighters System be redirected to this new fund. However, only money above a threshold determined actuarially goes to the Public Safety Retirees' Cost-of-Living Increases Restricted Account. As previously noted in the Firefighters Offset discussion section, no additional monies were redirected to this fund during calendar year 2005.

As of the valuation date there currently are not sufficient assets in the fund to increase the Public Safety COLA.

It should also be noted that the assets of the Public Safety Retirees' Cost-of-Living Increases Restricted Account are a part of the General Fund, and they are not managed by URS.

Comparison of Prior Year Certified and
Current Year Recommended (HB83) Contribution Rates

Fund/Division (1)	Prior Year Valuation Certified Rates for FY 2007			Current Year Valuation Recommended Rates for FY 2008			Increase/ (Decrease) in Total (8)
	Member (2)	Employer (3)	Total (4)	Member (5)	Employer (6)	Total (7)	
I. Public Employees Contributory							
A. Local Government	6.00%	7.58%	13.58%	6.00%	7.61%	13.61%	0.03%
B. State and School	6.00%	9.73%	15.73%	6.00%	9.73%	15.73%	0.00%
II. Public Employees Noncontributory							
A. Local Government	0.00%	11.59%	11.59%	0.00%	11.62%	11.62%	0.03%
B. State and School	0.00%	14.22%	14.22%	0.00%	14.22%	14.22%	0.00%
III. Public Safety Contributory							
A. State	12.29%	15.46%	27.75%	12.29%	15.46%	27.75%	0.00%
B. Other Division A	12.29%	11.01%	23.30%	12.29%	11.22%	23.51%	0.21%
C. Salt Lake City	13.74%	22.99%	36.73%	13.74%	22.99%	36.73%	0.00%
D. Provo	13.54%	15.57%	29.11%	13.54%	16.30%	29.84%	0.73%
E. Logan	11.13%	14.61%	25.74%	11.13%	14.61%	25.74%	0.00%
F. Other Division B	10.50%	15.69%	26.19%	10.50%	15.69%	26.19%	0.00%
IV. Public Safety Noncontributory							
A. State	0.00%	26.75%	26.75%	0.00%	26.75%	26.75%	0.00%
B. Other Division A	0.00%	22.38%	22.38%	0.00%	22.61%	22.61%	0.23%
C. Salt Lake City	0.00%	35.71%	35.71%	0.00%	35.71%	35.71%	0.00%
D. Ogden	0.00%	30.44%	30.44%	0.00%	31.47%	31.47%	1.03%
E. Logan	0.00%	25.48%	25.48%	0.00%	25.48%	25.48%	0.00%
F. Bountiful	0.00%	19.99%	19.99%	0.00%	22.47%	22.47%	2.48%
G. Other Division B	0.00%	25.49%	25.49%	0.00%	25.49%	25.49%	0.00%
V. Firefighters							
A. Division A							
1. Gross Rate	15.05%	7.87%	22.92%	15.05%	9.21%	24.26%	1.34%
2. Less Estimated Offset	-4.21%	-7.87%	-12.08%	-2.29%	-9.21%	-11.50%	0.58%
3. Net Rate	10.84%	0.00%	10.84%	12.76%	0.00%	12.76%	1.92%
B. Division B							
1. Gross Rate	16.71%	4.09%	20.80%	16.71%	4.09%	20.80%	0.00%
2. Less Estimated Offset	-7.99%	-4.09%	-12.08%	-7.41%	-4.09%	-11.50%	0.58%
3. Net Rate	8.72%	0.00%	8.72%	9.30%	0.00%	9.30%	0.58%
VI. Judges							
A. Gross Rate	0.00%	27.83%	27.83%	0.00%	27.83%	27.83%	0.00%
B. Less Estimated Offset	-0.00%	-18.04%	-18.04%	-0.00%	-15.45%	-15.45%	2.59%
C. Net Rate	0.00%	9.79%	9.79%	0.00%	12.38%	12.38%	2.59%
VII. Governors and Legislative	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Note: Rates reflect 3% Substantial Substitute where applicable

Development of Recommended (HB83) Contribution Rates

Fund/Division (1)	Actuarially Calculated Rates for Current Year* (2)	Certified Rates from Prior Year* (3)	Larger of Columns (2,3)* (4)	HB 83 Rates Including 3% Substantial Substitute (5)
I. Public Employees Contributory				
A. Local Government	7.61%	7.58%	7.61%	7.61%
B. State and School	8.64%	8.88%	8.88%	9.73%
II. Public Employees Noncontributory				
A. Local Government	11.62%	11.59%	11.62%	11.62%
B. State and School	13.13%	13.37%	13.37%	14.22%
III. Public Safety Contributory				
A. State	13.75%	14.61%	14.61%	15.46%
B. Other Division A	11.22%	11.01%	11.22%	11.22%
C. Salt Lake City	21.82%	22.99%	22.99%	22.99%
D. Provo	16.30%	15.57%	16.30%	16.30%
E. Logan	14.22%	14.61%	14.61%	14.61%
F. Other Division B	15.52%	15.69%	15.69%	15.69%
IV. Public Safety Noncontributory				
A. State	25.12%	25.90%	25.90%	26.75%
B. Other Division A	22.61%	22.38%	22.61%	22.61%
C. Salt Lake City	34.55%	35.71%	35.71%	35.71%
D. Ogden	31.47%	30.44%	31.47%	31.47%
E. Logan	25.08%	25.48%	25.48%	25.48%
F. Bountiful	22.47%	19.99%	22.47%	22.47%
G. Other Division B	25.38%	25.49%	25.49%	25.49%
V. Firefighters				
A. Division A	9.21%	7.87%	9.21%	9.21%
B. Division B	3.96%	4.09%	4.09%	4.09%
VI. Judges	25.06%	26.98%	26.98%	27.83%
VII. Governors and Legislative	0.00%	0.00%	0.00%	0.00%
VIII. 3% Substantial Substitute	0.78%	0.85%	0.85%	N/A

* Rates exclude 3% Substantial Substitute

Note: Rates shown for Firefighters and Judges exclude offsets for fire insurance premium tax and court fees

Components of Actuarially 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	4.32%	3.29%	0.00%	7.61%	0.00%	7.61%
B. State and School	4.04%	4.60%	0.78%	9.42%	0.00%	9.42%
II. Public Employees Noncontributory						
A. Local Government	10.63%	0.99%	0.00%	11.62%	0.00%	11.62%
B. State and School	11.53%	1.60%	0.78%	13.91%	0.00%	13.91%
III. Public Safety Contributory						
A. State	9.01%	4.74%	0.78%	14.53%	0.00%	14.53%
B. Other Division A	8.65%	2.57%	0.00%	11.22%	0.00%	11.22%
C. Salt Lake City	7.37%	14.45%	0.00%	21.82%	0.00%	21.82%
D. Provo	7.71%	8.59%	0.00%	16.30%	0.00%	16.30%
E. Logan	9.63%	4.59%	0.00%	14.22%	0.00%	14.22%
F. Other Division B	10.38%	5.14%	0.00%	15.52%	0.00%	15.52%
IV. Public Safety Noncontributory						
A. State	20.38%	4.74%	0.78%	25.90%	0.00%	25.90%
B. Other Division A	20.04%	2.57%	0.00%	22.61%	0.00%	22.61%
C. Salt Lake City	20.10%	14.45%	0.00%	34.55%	0.00%	34.55%
D. Ogden	20.09%	11.38%	0.00%	31.47%	0.00%	31.47%
E. Logan	20.49%	4.59%	0.00%	25.08%	0.00%	25.08%
F. Bountiful	20.13%	2.34%	0.00%	22.47%	0.00%	22.47%
G. Other Division B	20.24%	5.14%	0.00%	25.38%	0.00%	25.38%
V. Firefighters						
A. Division A	8.95%	0.26%	0.00%	9.21%	9.21%	0.00%
B. Division B	7.24%	-3.28%	0.00%	3.96%	4.09%	0.00%
VI. Judges	24.71%	0.35%	0.78%	25.84%	15.45%	10.39%
VII. Governors and Legislative	N/A	N/A	N/A	N/A	N/A	N/A

Determination of Contribution Rate Offsets for Firefighters and Judges

A. Firefighter's Offset

1. Calendar Year	2003	2004	2005
2. Fire insurance premium receipts	\$ 9,059,000	\$ 8,659,000	\$ 9,601,000
3. Combined payroll for both funds*	75,148,042	79,168,069	83,495,618
4. Premiums as percentage of payroll	12.05%	10.94%	11.50%
5. Offset: 3-year arithmetic average of percent of payroll			11.50%

B. Judge's Offset

1. Calendar Year	2003	2004	2005
2. Court fees	\$ 1,939,000	\$ 1,808,000	\$ 1,605,000
3. Payroll*	11,163,025	11,819,728	11,721,124
4. Premiums as percentage of payroll	17.37%	15.30%	13.69%
5. Offset: 3-year arithmetic average of percent of payroll			15.45%

* Reported payroll for members active at end of year

**Effect of Offsets on Recommended (HB83) Employer Rates
and Member Rates**

<u>Fund/Division</u> (1)	<u>Gross Employer HB83 Rates</u> (2)	<u>Offset Percentage</u> (3)	<u>Net Employer Rate Not Less Than Zero</u> (4)	<u>Unused Offset* (3) - (2)</u> (5)
I. Firefighters				
Division A	9.21%	11.50%	0.00%	2.29%
Division B	4.09%	11.50%	0.00%	7.41%
II. Judges	27.83%	15.45%	12.38%	0.00%

<u>Fund/Division</u> (1)	<u>Gross Member Rate</u> (2)	<u>Available Offset*</u> (3)	<u>Net (2) - (3)</u> (4)	<u>Net Member Rate from Prior Year</u> (5)	<u>Greater of (4, 5)</u> (6)
I. Firefighters					
Division A	15.05%	2.29%	12.76%	10.84%	12.76%
Division B	16.71%	7.41%	9.30%	8.72%	9.30%

* Available to offset member contribution rates

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	295,061	322,986	27,925	91.4%	58,884	47.4%
B. State and School	656,479	704,323	47,844	93.2%	72,553	65.9%
C. Subtotal	951,540	1,027,309	75,769	92.6%	131,437	57.6%
II. Public Employees Noncontributory						
A. Local Government	2,193,880	2,295,475	101,595	95.6%	712,434	14.3%
B. State and School	10,741,982	11,299,143	557,161	95.1%	2,409,366	23.1%
C. Subtotal	12,935,862	13,594,618	658,756	95.2%	3,121,800	21.1%
III. Public Safety Contributory						
A. State	59,019	59,556	537	99.1%	790	68.0%
B. Other Division A	165,158	171,418	6,260	96.3%	16,903	37.0%
C. Salt Lake City	39,130	39,375	245	99.4%	118	207.6%
D. Provo	26,857	32,359	5,502	83.0%	4,439	123.9%
E. Logan	14,732	15,917	1,185	92.6%	1,792	66.1%
F. Other Division B	40,803	46,286	5,483	88.2%	7,401	74.1%
G. Subtotal	345,699	364,911	19,212	94.7%	31,443	61.1%
IV. Public Safety Noncontributory						
A. State	533,453	596,601	63,148	89.4%	92,271	68.4%
B. Other Division A	503,397	547,115	43,718	92.0%	117,901	37.1%
C. Salt Lake City	111,216	160,705	49,488	69.2%	23,747	208.4%
D. Ogden	41,541	49,440	7,899	84.0%	4,809	164.3%
E. Logan	700	968	268	72.3%	401	66.8%
F. Bountiful	13,392	13,966	574	95.9%	1,703	33.7%
G. Other Division B	83,623	100,746	17,123	83.0%	23,073	74.2%
H. Subtotal	1,287,322	1,469,541	182,218	87.6%	263,905	69.0%
V. Firefighters						
A. Division A	72,396	73,109	713	99.0%	18,608	3.8%
B. Division B	572,100	541,250	(30,850)	105.7%	64,887	-47.5%
C. Subtotal	644,496	614,359	(30,137)	104.9%	83,495	-36.1%
VI. Judges	106,374	106,962	588	99.5%	11,721	5.0%
VII. Governors and Legislative	10,587	8,974	(1,613)	118.0%	788	-204.7%
VIII. 3% Substantial Substitute	133,500	423,922	290,422	31.5%	N/A	N/A
IX. Grand Total	16,415,380	17,610,596	1,195,215	93.2%	3,644,589	32.8%

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		
	2006 (2)	2005 (3)	2004 (4)
I. Public Employees Contributory			
A. Local Government	91.4%	91.2%	91.3%
B. State and School	93.2%	92.5%	93.7%
C. Subtotal	92.6%	92.1%	93.0%
II. Public Employees Noncontributory			
A. Local Government	95.6%	95.5%	96.6%
B. State and School	95.1%	94.1%	96.7%
C. Subtotal	95.2%	94.3%	96.7%
III. Public Safety Contributory			
A. State	99.1%	98.9%	99.3%
B. Other Division A	96.3%	96.6%	99.2%
C. Salt Lake City	99.4%	99.4%	99.5%
D. Provo	83.0%	84.1%	87.6%
E. Logan	92.6%	90.0%	94.8%
F. Other Division B	88.2%	85.8%	89.9%
G. Subtotal	94.7%	94.7%	97.2%
IV. Public Safety Noncontributory			
A. State	89.4%	86.8%	92.3%
B. Other Division A	92.0%	92.4%	98.2%
C. Salt Lake City	69.2%	69.1%	72.0%
D. Ogden	84.0%	84.5%	90.9%
E. Logan	72.3%	78.6%	92.4%
F. Bountiful	95.9%	100.4%	101.5%
G. Other Division B	83.0%	81.4%	87.5%
H. Subtotal	87.6%	86.6%	91.9%
V. Firefighters			
A. Division A	99.0%	103.9%	108.0%
B. Division B	105.7%	105.7%	107.2%
C. Subtotal	104.9%	105.5%	107.3%
VI. Judges	99.5%	96.7%	99.5%
VII. Governors and Legislative	118.0%	122.0%	123.8%
VIII. 3% Substantial Substitute	31.5%	28.6%	26.6%
IX. Grand Total	93.2%	92.4%	94.7%

Employee
Analysis of Changes in Calculated Contribution Rates

Fund/Division (1)	Calculated Rate From Jan. 1, 2005 Valuation (2)	Changes in Calculated Rate Due To						Calculated Rate Jan. 1, 2006 Valuation (9)
		Payroll Growth (3)	Investment Return (4)	Liabilities (5)	Actuarial Assumptions (6)	Legislation (7)	Act. vs Exp. Contributions (8)	
I. Public Employees Contributory								
A. Local Government	7.58%	0.00%	0.11%	-0.07%	0.00%	0.00%	-0.01%	7.61%
B. State and School	9.68%	0.05%	0.20%	-0.63%	0.00%	0.00%	0.08%	9.42%
II. Public Employees Noncontributory								
A. Local Government	11.59%	0.00%	0.11%	-0.07%	0.00%	0.00%	-0.01%	11.62%
B. State and School	14.17%	0.05%	0.20%	-0.63%	0.00%	0.00%	0.08%	13.91%
III. Public Safety Contributory								
A. State	15.41%	0.28%	0.24%	-1.84%	0.00%	0.00%	0.40%	14.53%
B. Other Division A	11.01%	0.00%	0.19%	-0.20%	0.00%	0.00%	0.22%	11.22%
C. Salt Lake City	22.99%	-1.89%	0.32%	0.38%	0.00%	0.00%	0.02%	21.82%
D. Provo	15.57%	0.02%	0.27%	0.34%	0.00%	0.00%	0.10%	16.30%
E. Logan	14.61%	0.54%	0.29%	-1.74%	0.00%	0.00%	0.52%	14.22%
F. Other Division B	15.69%	0.15%	0.03%	-0.61%	0.00%	0.00%	0.26%	15.52%
IV. Public Safety Noncontributory								
A. State	26.70%	0.28%	0.24%	-1.76%	0.00%	0.00%	0.40%	25.90%
B. Other Division A	22.38%	0.00%	0.19%	-0.18%	0.00%	0.00%	0.22%	22.61%
C. Salt Lake City	35.71%	-1.89%	0.32%	0.39%	0.00%	0.00%	0.02%	34.55%
D. Ogden	30.44%	0.63%	0.58%	-0.78%	0.00%	0.00%	0.60%	31.47%
E. Logan	25.48%	0.54%	0.29%	-1.75%	0.00%	0.00%	0.52%	25.08%
F. Bountiful	19.99%	-0.02%	0.27%	2.23%	0.00%	0.00%	0.00%	22.47%
G. Other Division B	25.49%	0.15%	0.03%	-0.55%	0.00%	0.00%	0.26%	25.38%
V. Firefighters								
A. Division A	7.87%	-0.02%	0.07%	1.24%	0.00%	0.00%	0.05%	9.21%
B. Division B	4.09%	-0.07%	0.43%	-0.63%	0.00%	0.00%	0.14%	3.96%
VI. Judges	27.78%	-0.03%	0.35%	-2.93%	0.00%	0.00%	0.63%	25.84%
VII. Governors and Legislative	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
VIII. 3% Substantial Substitute	0.80%	0.02%	0.00%	-0.04%	0.00%	0.00%	0.00%	0.78%

Notes: Rates shown as of Jan. 1, 2005 do not include any adjustments for 2005 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
For paired funds, rates include asset rebalancing at each point of the analysis

Analysis of Financial Experience

Fund/Division (1)	Jan. 1, 2005 UAAL (2)	Changes in Unfunded Actuarial Accrued Liability Due To						Jan. 1, 2006 UAAL (9)
		Amortization Payments (3)	Liability (Gain)\Loss (4)	Asset (Gain)\Loss (5)	Change in Actuarial Assumptions (6)	Change in Benefit Provisions (7)	Asset Transfers (8)	
I. Public Employees Contributory								
A. Local Government	26,935	(512)	(196)	2,447	0	0	(750)	27,925
B. State and School	52,927	12,302	(30,784)	8,800	0	0	4,600	47,844
C. Subtotal	79,862	11,790	(30,980)	11,247	0	0	3,850	75,769
II. Public Employees Noncontributory								
A. Local Government	95,636	(2,792)	(1,799)	9,799	0	0	750	101,595
B. State and School	629,957	400	(131,394)	62,798	0	0	(4,600)	557,161
C. Subtotal	725,593	(2,392)	(133,193)	72,597	0	0	(3,850)	658,756
III. Public Safety Contributory								
A. State	700	47	(165)	1,143	0	0	(1,188)	537
B. Other Division A	5,763	407	(2,586)	1,876	0	0	800	6,260
C. Salt Lake City	253	4	(612)	813	0	0	(212)	245
D. Provo	4,770	56	502	174	0	0	0	5,502
E. Logan	1,541	148	(556)	86	0	0	(34)	1,185
F. Other Division B	5,956	327	(548)	98	0	0	(350)	5,483
G. Subtotal	18,983	989	(3,965)	4,190	0	0	(984)	19,212
IV. Public Safety Noncontributory								
A. State	75,054	4,205	(19,387)	2,087	0	0	1,188	63,148
B. Other Division A	37,992	3,414	1,313	1,799	0	0	(800)	43,718
C. Salt Lake City	45,353	109	3,523	292	0	0	212	49,488
D. Ogden	7,378	427	(304)	398	0	0	0	7,899
E. Logan	183	4	40	6	0	0	34	268
F. Bountiful	(47)	(20)	574	67	0	0	0	574
G. Other Division B	16,986	768	(981)	1	0	0	350	17,123
H. Subtotal	182,899	8,907	(15,222)	4,650	0	0	984	182,218
V. Firefighters								
A. Division A	(2,457)	70	2,894	206	0	0	0	713
B. Division B	(29,340)	818	(6,313)	3,985	0	0	0	(30,850)
C. Subtotal	(31,797)	888	(3,419)	4,191	0	0	0	(30,137)
VI. Judges	3,396	884	(4,274)	582	0	0	0	588
VII. Governors and Legislative	(1,923)	(28)	189	149	0	0	0	(1,613)
VIII. 3% Substantial Substitute	297,414	708	(7,794)	94	0	0	0	290,422
IX. Grand Total	1,274,426	21,746	(198,657)	97,700	0	0	0	1,195,215

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

**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	105,730	29,499	230,526	365,755
B. State and School	302,690	55,935	386,113	744,738
C. Subtotal	408,420	85,434	616,639	1,110,493
II. Public Employees Noncontributory				
A. Local Government	766,832	137,087	2,024,160	2,928,079
B. State and School	4,737,732	438,894	8,431,605	13,608,231
C. Subtotal	5,504,564	575,981	10,455,765	16,536,310
III. Public Safety Contributory				
A. State	53,204	1,946	5,059	60,210
B. Other Division A	108,176	7,471	86,505	202,153
C. Salt Lake City	38,666	42	804	39,512
D. Provo	16,000	1,267	23,487	40,753
E. Logan	8,844	195	9,941	18,979
F. Other Division B	19,675	2,129	37,584	59,388
G. Subtotal	244,565	13,050	163,380	420,995
IV. Public Safety Noncontributory				
A. State	300,315	16,347	444,083	760,745
B. Other Division A	222,822	16,338	542,334	781,494
C. Salt Lake City	78,003	2,218	121,975	202,197
D. Ogden	35,074	1,015	22,983	59,073
E. Logan	756	1	1,326	2,083
F. Bountiful	5,615	83	10,628	16,325
G. Other Division B	33,965	4,690	107,058	145,714
H. Subtotal	676,550	40,692	1,250,387	1,967,631
V. Firefighters				
A. Division A	28,415	1,573	98,110	128,098
B. Division B	300,907	3,138	400,746	704,791
C. Subtotal	329,322	4,711	498,856	832,889
VI. Judges	51,524	1,175	74,938	127,637
VII. Governors and Legislative	5,268	2,209	1,979	9,456
VIII. Grand Total	7,220,213	723,252	13,061,944	21,005,411

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**

<u>Fund/Division</u> (1)	<u>Retired Members</u> (2)	<u>Disabled Members</u> (3)	<u>Beneficiaries</u> (4)	<u>Total</u> (5)
I. Public Employees Contributory				
A. Local Government	84,988	4,538	16,203	105,730
B. State and School	246,925	9,246	46,519	302,690
C. Subtotal	331,913	13,784	62,722	408,420
II. Public Employees Noncontributory				
A. Local Government	704,299	16,521	46,010	766,830
B. State and School	4,447,004	65,096	225,625	4,737,725
C. Subtotal	5,151,303	81,617	271,635	5,504,555
III. Public Safety Contributory				
A. State	39,557	1,893	11,754	53,204
B. Other Division A	92,272	1,808	14,095	108,176
C. Salt Lake City	31,664	1,010	5,991	38,666
D. Provo	14,847	0	1,153	16,000
E. Logan	8,617	100	127	8,844
F. Other Division B	17,913	936	826	19,675
G. Subtotal	204,870	5,747	33,946	244,565
IV. Public Safety Noncontributory				
A. State	287,010	3,279	10,026	300,315
B. Other Division A	210,941	2,490	9,391	222,822
C. Salt Lake City	72,823	1,802	3,378	78,003
D. Ogden	31,839	79	3,156	35,074
E. Logan	756	0	0	756
F. Bountiful	5,391	0	224	5,615
G. Other Division B	32,519	543	903	33,965
H. Subtotal	641,279	8,193	27,078	676,550
V. Firefighters				
A. Division A	23,131	3,046	2,238	28,415
B. Division B	260,719	14,803	25,384	300,907
C. Subtotal	283,850	17,849	27,622	329,322
VI. Judges	45,042	0	6,482	51,524
VII. Governors and Legislative	4,562	0	705	5,268
VIII. Grand Total	6,662,819	127,190	430,190	7,220,204

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	2,760	25,475	1,264	29,499
B. State and School	7,906	47,998	31	55,935
C. Subtotal	10,666	73,473	1,295	85,434
II. Public Employees Noncontributory				
A. Local Government	17,070	118,985	1,032	137,087
B. State and School	72,565	361,588	4,740	438,894
C. Subtotal	89,635	480,573	5,772	575,981
III. Public Safety Contributory				
A. State	265	1,667	15	1,946
B. Other Division A	0	7,150	322	7,471
C. Salt Lake City	0	42	1	42
D. Provo	0	1,212	55	1,267
E. Logan	0	186	9	195
F. Other Division B	0	2,024	106	2,129
G. Subtotal	265	12,281	508	13,050
IV. Public Safety Noncontributory				
A. State	3,642	12,698	7	16,347
B. Other Division A	3,592	12,739	7	16,338
C. Salt Lake City	812	1,406	0	2,218
D. Ogden	365	650	0	1,015
E. Logan	0	1	0	1
F. Bountiful	0	83	0	83
G. Other Division B	1,691	2,996	4	4,690
H. Subtotal	10,102	30,573	18	40,692
V. Firefighters				
A. Division A	0	1,456	117	1,573
B. Division B	0	2,877	260	3,138
C. Subtotal	0	4,333	377	4,711
VI. Judges	0	1,175	0	1,175
VII. Governors and Legislative	0	2,199	10	2,209
VIII. Grand Total	110,668	604,607	7,980	723,252

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	204,988	14,798	4,023	2,235	4,481	230,526
B. State and School	358,598	15,893	5,209	6	6,407	386,113
C. Subtotal	563,586	30,691	9,232	2,241	10,888	616,639
II. Public Employees Noncontributory						
A. Local Government	1,771,280	159,149	52,484	0	41,247	2,024,160
B. State and School	7,710,520	425,612	162,507	1	132,964	8,431,605
C. Subtotal	9,481,800	584,761	214,991	1	174,211	10,455,765
III. Public Safety Contributory						
A. State	4,994	9	19	2	36	5,059
B. Other Division A	82,511	912	1,181	1,068	833	86,505
C. Salt Lake City	792	2	3	1	6	804
D. Provo	22,240	263	340	332	312	23,487
E. Logan	9,549	100	100	92	101	9,941
F. Other Division B	35,781	433	494	411	465	37,584
G. Subtotal	155,867	1,719	2,137	1,906	1,753	163,380
IV. Public Safety Noncontributory						
A. State	422,220	8,640	7,984	0	5,239	444,083
B. Other Division A	513,071	12,425	10,410	0	6,428	542,334
C. Salt Lake City	116,873	1,938	1,630	0	1,534	121,975
D. Ogden	21,789	467	399	0	328	22,983
E. Logan	1,212	45	41	0	28	1,326
F. Bountiful	10,299	112	109	0	107	10,628
G. Other Division B	101,447	2,143	1,886	0	1,583	107,058
H. Subtotal	1,186,911	25,770	22,459	0	15,247	1,250,387
V. Firefighters						
A. Division A	91,163	588	4,109	783	1,468	98,110
B. Division B	381,101	1,333	9,272	2,096	6,944	400,746
C. Subtotal	472,264	1,921	13,381	2,879	8,412	498,856
VI. Judges	73,033	0	0	0	1,905	74,938
VII. Governors and Legislative	1,183	752	0	0	44	1,979
VIII. Grand Total	11,934,644	645,614	262,200	7,027	212,460	13,061,944

Notes: Amounts shown are in \$ thousands
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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	69,791	35,437	105,228	502	105,730
B. State and School	185,121	114,519	299,640	3,049	302,690
C. Subtotal	254,912	149,956	404,868	3,551	408,420
II. Public Employees Noncontributory					
A. Local Government	544,248	222,582	766,830	0	766,830
B. State and School	3,329,831	1,407,894	4,737,725	0	4,737,725
C. Subtotal	3,874,079	1,630,476	5,504,555	0	5,504,555
III. Public Safety Contributory					
A. State	31,515	19,756	51,271	1,934	53,204
B. Other Division A	72,773	34,320	107,093	1,083	108,176
C. Salt Lake City	22,992	15,199	38,191	475	38,666
D. Provo	11,131	4,806	15,937	63	16,000
E. Logan	6,438	2,399	8,837	7	8,844
F. Other Division B	14,647	5,025	19,672	3	19,675
G. Subtotal	159,496	81,505	241,001	3,565	244,565
IV. Public Safety Noncontributory					
A. State	221,362	78,949	300,311	4	300,315
B. Other Division A	166,518	56,304	222,822	0	222,822
C. Salt Lake City	56,382	21,621	78,003	0	78,003
D. Ogden	24,962	10,003	34,965	109	35,074
E. Logan	572	184	756	0	756
F. Bountiful	3,973	1,634	5,607	8	5,615
G. Other Division B	25,609	8,356	33,965	0	33,965
H. Subtotal	499,378	177,051	676,429	121	676,550
V. Firefighters					
A. Division A	19,916	8,328	28,244	170	28,415
B. Division B	198,407	99,287	297,694	3,213	300,907
C. Subtotal	218,323	107,615	325,938	3,383	329,322
VI. Judges	33,555	17,969	51,524	0	51,524
VII. Governors and Legislative	3,559	1,709	5,268	0	5,268
VIII. Grand Total	5,043,302	2,166,281	7,209,583	10,620	7,220,204

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

Normal Cost

Fund/Division (1)	Retirement (2)	Deferred Termination (3)	Disability (4)	Refunds (5)	Group Insurance (6)	Other Death (7)	Total (8)
I. Public Employees Contributory							
A. Local Government	7.15%	1.23%	0.38%	1.34%	0.16%	0.22%	10.32%
B. State and School	6.78%	1.01%	0.33%	1.73%	0.16%	0.19%	10.04%
II. Public Employees Noncontributory							
A. Local Government	8.30%	1.65%	0.46%	0.00%	0.16%	0.22%	10.63%
B. State and School	9.54%	1.39%	0.40%	0.00%	0.16%	0.20%	11.53%
III. Public Safety Contributory							
A. State	18.14%	0.58%	1.10%	1.04%	0.00%	0.44%	21.30%
B. Other Division A	18.18%	0.49%	0.71%	1.24%	0.00%	0.32%	20.94%
C. Salt Lake City	18.25%	0.44%	0.59%	1.43%	0.00%	0.40%	21.11%
D. Provo	18.22%	0.47%	0.73%	1.35%	0.00%	0.48%	21.25%
E. Logan	18.10%	0.45%	0.55%	1.26%	0.00%	0.40%	20.76%
F. Other Division B	18.18%	0.47%	0.68%	1.10%	0.00%	0.45%	20.88%
IV. Public Safety Noncontributory							
A. State	18.36%	0.84%	0.83%	0.00%	0.00%	0.35%	20.38%
B. Other Division A	18.21%	0.80%	0.71%	0.00%	0.00%	0.32%	20.04%
C. Salt Lake City	18.20%	0.77%	0.68%	0.00%	0.00%	0.45%	20.10%
D. Ogden	18.16%	0.77%	0.70%	0.00%	0.00%	0.46%	20.09%
E. Logan	18.61%	0.77%	0.67%	0.00%	0.00%	0.44%	20.49%
F. Bountiful	18.26%	0.81%	0.73%	0.00%	0.00%	0.33%	20.13%
G. Other Division B	18.27%	0.78%	0.71%	0.00%	0.00%	0.48%	20.24%
V. Firefighters							
A. Division A	20.96%	0.25%	1.60%	0.75%	0.00%	0.44%	24.00%
B. Division B	21.04%	0.21%	1.32%	0.81%	0.00%	0.57%	23.95%
VI. Judges	23.56%	0.00%	0.00%	0.00%	0.00%	1.15%	24.71%
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

<u>Fund/Division</u> (1)	<u>Total Normal Cost</u> (2)	<u>Member Rate</u> (3)	<u>Net Employer Normal Cost (2) - (3)</u> (4)
I. Public Employees Contributory			
A. Local Government	10.32%	6.00%	4.32%
B. State and School	10.04%	6.00%	4.04%
II. Public Employees Noncontributory			
A. Local Government	10.63%	0.00%	10.63%
B. State and School	11.53%	0.00%	11.53%
III. Public Safety Contributory			
A. State	21.30%	12.29%	9.01%
B. Other Division A	20.94%	12.29%	8.65%
C. Salt Lake City	21.11%	13.74%	7.37%
D. Provo	21.25%	13.54%	7.71%
E. Logan	20.76%	11.13%	9.63%
F. Other Division B	20.88%	10.50%	10.38%
IV. Public Safety Noncontributory			
A. State	20.38%	0.00%	20.38%
B. Other Division A	20.04%	0.00%	20.04%
C. Salt Lake City	20.10%	0.00%	20.10%
D. Ogden	20.09%	0.00%	20.09%
E. Logan	20.49%	0.00%	20.49%
F. Bountiful	20.13%	0.00%	20.13%
G. Other Division B	20.24%	0.00%	20.24%
V. Firefighters			
A. Division A	24.00%	15.05%	8.95%
B. Division B	23.95%	16.71%	7.24%
VI. Judges	24.71%	0.00%	24.71%
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	365,755	25,257	17,512	42,769	322,986
B. State and School	744,738	24,543	15,872	40,415	704,323
C. Subtotal	1,110,493	49,800	33,384	83,184	1,027,309
II. Public Employees Noncontributory					
A. Local Government	2,928,079	0	632,605	632,605	2,295,475
B. State and School	13,608,231	0	2,309,088	2,309,088	11,299,143
C. Subtotal	16,536,310	0	2,941,693	2,941,693	13,594,618
III. Public Safety Contributory					
A. State	60,210	377	277	654	59,556
B. Other Division A	202,153	18,039	12,695	30,734	171,418
C. Salt Lake City	39,512	89	48	137	39,375
D. Provo	40,753	5,349	3,045	8,394	32,359
E. Logan	18,979	1,642	1,421	3,063	15,917
F. Other Division B	59,388	6,589	6,513	13,102	46,286
G. Subtotal	420,995	32,085	23,999	56,084	364,911
IV. Public Safety Noncontributory					
A. State	760,745	0	164,144	164,144	596,601
B. Other Division A	781,494	0	234,378	234,378	547,115
C. Salt Lake City	202,197	0	41,492	41,492	160,705
D. Ogden	59,073	0	9,632	9,632	49,440
E. Logan	2,083	0	1,114	1,114	968
F. Bountiful	16,325	0	2,359	2,359	13,966
G. Other Division B	145,714	0	44,968	44,968	100,746
H. Subtotal	1,967,631	0	498,087	498,087	1,469,541
V. Firefighters					
A. Division A	128,098	34,482	20,506	54,988	73,109
B. Division B	704,791	114,103	49,438	163,541	541,250
C. Subtotal	832,889	148,585	69,944	218,529	614,359
VI. Judges	127,637	0	20,676	20,676	106,962
VII. Governors and Legislative	9,456	0	482	482	8,974
VIII. Grand Total	21,005,411	230,470	3,588,265	3,818,735	17,186,674

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	25,432	4,067	29,499	82,965	104,792	187,757
B. State and School	47,443	8,492	55,935	152,067	193,632	345,699
C. Subtotal	72,875	12,559	85,434	235,032	298,424	533,456
II. Public Employees Noncontributory						
A. Local Government	36,582	100,505	137,087	132,208	1,259,347	1,391,555
B. State and School	102,095	336,799	438,894	551,351	5,571,166	6,122,517
C. Subtotal	138,677	437,304	575,981	683,559	6,830,513	7,514,072
III. Public Safety Contributory						
A. State	1,137	809	1,946	1,986	2,419	4,405
B. Other Division A	5,612	1,859	7,471	23,955	31,816	55,771
C. Salt Lake City	42	0	42	301	366	667
D. Provo	1,030	237	1,267	7,025	8,067	15,092
E. Logan	195	0	195	2,783	4,095	6,878
F. Other Division B	1,753	376	2,129	8,768	15,714	24,482
G. Subtotal	9,769	3,281	13,050	44,818	62,477	107,295
IV. Public Safety Noncontributory						
A. State	1,934	14,413	16,347	8,924	271,015	279,939
B. Other Division A	3,100	13,238	16,338	11,874	296,082	307,956
C. Salt Lake City	217	2,001	2,218	3,385	77,098	80,483
D. Ogden	408	607	1,015	1,132	12,219	13,351
E. Logan	0	1	1	0	211	211
F. Bountiful	3	80	83	531	7,738	8,269
G. Other Division B	1,497	3,193	4,690	4,145	57,946	62,091
H. Subtotal	7,159	33,533	40,692	29,991	722,309	752,300
V. Firefighters						
A. Division A	747	826	1,573	10,427	32,695	43,122
B. Division B	2,435	703	3,138	68,683	168,522	237,205
C. Subtotal	3,182	1,529	4,711	79,110	201,217	280,327
VI. Judges	474	701	1,175	7,419	46,844	54,263
VII. Governors and Legislative	144	2,065	2,209	3	1,495	1,498
VIII. Grand Total	232,280	490,972	723,252	1,079,932	8,163,279	9,243,211

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	1,411	23	760	599	1,054	63	310	4,220
B. State and School	1,729	61	864	14	3,513	171	852	7,204
C. Subtotal	3,140	84	1,624	613	4,567	234	1,162	11,424
II. Public Employees Noncontributory								
A. Local Government	18,269	183	7,643	506	3,751	123	349	30,824
B. State and School	68,233	661	22,635	1,407	19,297	510	1,416	114,159
C. Subtotal	86,502	844	30,278	1,913	23,048	633	1,765	144,983
III. Public Safety Contributory								
A. State	19	1	35	18	194	16	132	415
B. Other Division A	389	0	268	73	397	12	145	1,284
C. Salt Lake City	2	0	5	1	130	14	58	210
D. Provo	91	0	25	9	43	0	10	178
E. Logan	42	0	8	1	25	1	2	79
F. Other Division B	155	0	63	19	63	5	9	314
G. Subtotal	698	1	404	121	852	48	356	2,480
IV. Public Safety Noncontributory								
A. State	2,450	20	890	2	819	18	66	4,265
B. Other Division A	2,963	20	1,049	1	611	13	48	4,705
C. Salt Lake City	457	3	77	0	174	5	24	740
D. Ogden	121	1	39	0	109	1	25	296
E. Logan	14	0	1	0	1	0	0	16
F. Bountiful	33	0	8	0	20	0	2	63
G. Other Division B	518	5	165	2	94	2	6	792
H. Subtotal	6,556	49	2,229	5	1,828	39	171	10,877
V. Firefighters								
A. Division A	397	0	79	27	68	13	13	597
B. Division B	1,250	0	102	86	645	61	179	2,323
C. Subtotal	1,647	0	181	113	713	74	192	2,920
VI. Judges	109	0	5	0	56	0	29	199
VII. Governors and Legislative	88	0	104	9	167	0	57	425
VIII. Grand Total	98,740	978	34,825	2,774	31,231	1,028	3,732	173,308

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	1,411	58,884	41,732	82,965	48.0	14.8
B. State and School	1,729	72,553	41,963	152,067	53.6	23.6
C. Subtotal	3,140	131,437	41,859	235,032	51.1	19.7
II. Public Employees Noncontributory						
A. Local Government	18,269	712,434	38,997	132,208	44.2	9.1
B. State and School	68,233	2,409,366	35,311	551,351	44.8	10.5
C. Subtotal	86,502	3,121,800	36,089	683,559	44.7	10.2
III. Public Safety Contributory						
A. State	19	790	41,604	1,986	52.8	18.9
B. Other Division A	389	16,903	43,453	23,955	39.9	10.3
C. Salt Lake City	2	118	59,190	301	45.0	19.0
D. Provo	91	4,439	48,784	7,025	38.8	10.3
E. Logan	42	1,792	42,667	2,783	39.0	12.6
F. Other Division B	155	7,401	47,750	8,768	38.8	10.4
G. Subtotal	698	31,443	45,047	44,818	39.8	10.7
IV. Public Safety Noncontributory						
A. State	2,450	92,271	37,661	8,924	40.4	9.5
B. Other Division A	2,963	117,901	39,791	11,874	37.3	8.2
C. Salt Lake City	457	23,747	51,963	3,385	39.5	10.6
D. Ogden	121	4,809	39,744	1,132	36.4	8.3
E. Logan	14	401	28,638	0	30.4	1.7
F. Bountiful	33	1,703	51,618	531	45.0	15.4
G. Other Division B	518	23,073	44,542	4,145	37.8	8.0
H. Subtotal	6,556	263,905	40,254	29,991	38.7	8.8
V. Firefighters						
A. Division A	397	18,608	46,873	10,427	38.4	7.2
B. Division B	1,250	64,887	51,910	68,683	40.0	12.0
C. Subtotal	1,647	83,495	50,695	79,110	39.6	10.9
VI. Judges	109	11,721	107,533	7,419	56.0	11.4
VII. Governors and Legislative	88	788	8,955	3	51.1	5.8
VIII. Grand Total	98,740	3,644,589	36,911	1,079,932	44.4	10.4

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

<u>Fund/Division</u> (1)	<u>Number</u> (2)	<u>Annual Total Benefits (\$ Thousands)</u> (3)	<u>Average Monthly Benefit (\$'s)</u> (4)
I. Public Employees Contributory			
A. Local Government	1,427	11,876	694
B. State and School	4,536	39,770	731
C. Subtotal	5,963	51,646	722
II. Public Employees Noncontributory			
A. Local Government	4,223	65,569	1,294
B. State and School	21,223	400,718	1,573
C. Subtotal	25,446	466,287	1,527
III. Public Safety Contributory			
A. State	342	5,502	1,341
B. Other Division A	554	9,354	1,407
C. Salt Lake City	202	3,863	1,594
D. Provo	53	1,316	2,069
E. Logan	28	672	1,999
F. Other Division B	77	1,420	1,537
G. Subtotal	1,256	22,127	1,468
IV. Public Safety Noncontributory			
A. State	903	22,917	2,115
B. Other Division A	672	16,655	2,065
C. Salt Lake City	203	5,860	2,405
D. Ogden	135	2,786	1,720
E. Logan	1	52	4,305
F. Bountiful	22	450	1,704
G. Other Division B	102	2,392	1,954
H. Subtotal	2,038	51,112	2,090
V. Firefighters			
A. Division A	94	2,107	1,868
B. Division B	885	23,957	2,256
C. Subtotal	979	26,064	2,219
VI. Judges	85	4,711	4,618
VII. Governors and Legislative	224	608	226
VIII. Grand Total	35,991	622,555	1,441

Market Value of Assets
(All Retirement Systems Combined)

Item	December 31, 2005	December 31, 2004
(1)	(2)	(3)
1. Cash	90	163
2. Accrued income receivable from:		
a. Member contributions	976	589
b. Employer contributions	28,977	26,121
c. Fire insurance premium tax / court fees	142	2,479
d. Investments	<u>753,430</u>	<u>341,168</u>
e. Total	783,525	370,357
3. Investments		
a. Short-term securities – domestic	1,172,613	985,416
b. Short-term securities - international	151,274	69,095
c. Bonds - domestic	3,435,532	2,873,734
d. Bonds - international	865,295	880,628
e. Equities - domestic	6,384,323	6,520,755
f. Equities - international	3,676,190	3,374,875
g. Alternative investments	611,589	552,534
h. Real estate	2,353,373	1,673,204
i. Mortgage loans	<u>6,864</u>	<u>6,659</u>
j. Total	18,656,953	16,936,900
4. Other	2,384,022	2,315,031
5. Total assets	21,824,590	19,622,451
6. Liabilities		
a. Securities lending liability	(2,381,012)	(2,310,958)
b. Other accounting liabilities	(1,973,800)	(1,217,114)
c. Reserves	<u>(11,629)</u>	<u>(10,285)</u>
d. Total	(4,366,441)	(3,538,357)
7. Net assets	17,458,149	16,084,094

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, 2004 (2)	Contributions (3)	Benefits and Refunds (4)	Earnings, Net of Expenses (5)	Transfers (6)	MVA as of Dec. 31, 2005 (7)
I. Public Employees Contributory						
A. Local Government	283,960	8,439	(13,516)	26,726	7,593	313,200
B. State and School	665,433	12,217	(45,382)	61,083	11,972	705,325
C. Subtotal	949,393	20,656	(58,899)	87,809	19,566	1,018,525
II. Public Employees Noncontributory						
A. Local Government	2,129,453	82,148	(67,160)	196,836	(9,437)	2,331,840
B. State and School	10,532,128	322,267	(405,576)	968,899	2,369	11,420,088
C. Subtotal	12,661,581	404,415	(472,736)	1,165,735	(7,069)	13,751,928
III. Public Safety Contributory						
A. State	59,011	195	(6,051)	5,472	3,292	61,919
B. Other Division A	165,199	3,714	(10,620)	15,333	3,337	176,964
C. Salt Lake City	39,571	40	(4,155)	3,684	2,520	41,659
D. Provo	26,431	1,250	(1,572)	2,433	39	28,581
E. Logan	14,372	430	(615)	1,333	134	15,655
F. Other Division B	37,360	1,811	(1,296)	3,537	1,484	42,896
G. Subtotal	341,944	7,440	(24,309)	31,791	10,807	367,675
IV. Public Safety Noncontributory						
A. State	520,494	21,467	(22,527)	47,961	914	568,311
B. Other Division A	488,543	22,930	(16,623)	44,976	(6,031)	533,795
C. Salt Lake City	108,798	7,497	(5,888)	9,902	(1,966)	118,340
D. Ogden	41,994	1,170	(2,823)	3,818	147	44,304
E. Logan	793	65	(52)	64	(102)	767
F. Bountiful	12,953	339	(436)	1,203	185	14,242
G. Other Division B	78,524	5,225	(2,408)	7,371	304	89,016
H. Subtotal	1,252,099	58,693	(50,758)	115,295	(6,551)	1,368,777
V. Firefighters						
A. Division A	68,328	3,661	(2,119)	6,399	518	76,788
B. Division B	569,651	12,665	(25,222)	52,097	83	609,274
C. Subtotal	637,979	16,326	(27,341)	58,496	601	686,062
VI. Judges	105,483	2,406	(4,752)	9,702	517	113,353
VII. Governors and Legislative	11,066	0	(754)	992	18	11,319
VIII. 3% Substantial Substitute	124,549	22,197	(148)	11,801	(17,888)	140,512
IX. Grand Total	16,084,094	532,133	(639,697)	1,481,622	0	17,458,149

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	16,084,094	15,393,467
2. Contributions to fund during year	532,133	532,133
3. Benefit payments during year (including refunds of contributions)	(639,697)	(639,697)
4. Transfers to and (from) URS	0	0
5. Investment income, net of investment and administrative expenses	1,481,622	1,129,477
6. End of year assets	17,458,149	16,415,380
7. Investment return rate	9.2%	7.4%

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%
2004	13.7%	5.3%
2005	9.2%	7.4%

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

1. Market value of assets				17,458,149
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.	2005	199,197	80%	159,358
b.	2004	804,061	60%	482,440
c.	2003	2,007,188	40%	802,875
d.	2002	(2,009,531)	20%	(401,904)
e.	2001	(1,765,658)	0%	<u>0</u>
f.	Total			1,042,769
3. Preliminary actuarial value of assets (1-2f)				16,415,380
4. Corridor Limits				
a.	80% of market value			13,966,519
b.	120% of market value			20,949,779
c.	Actuarial value (Item 3, not more than 4b, not less than 4a)*			16,415,380
5. Ratio of actuarial value to market value				94.0%

Note: Amounts shown are in \$ thousands

Transfer Adjustments to Asset Values

Fund/Division (1)	Market Value of Assets (MVA) at January 1, 2006			Actuarial Value of Assets (AVA) at January 1, 2006		
	MVA Before Transfer	Transfer Amount	MVA After Transfer	AVA Before Transfer	Transfer Amount	AVA After Transfer
	(2)	(3)	(4)	(5)	(6)	(7)
I. Public Employees Contributory						
A. Local Government	313,200	797	313,997	294,311	750	295,061
B. State and School	705,325	(4,908)	700,417	661,079	(4,600)	656,479
C. Subtotal	1,018,525	(4,111)	1,014,414	955,390	(3,850)	951,540
II. Public Employees Noncontributory						
A. Local Government	2,331,840	(797)	2,331,043	2,194,630	(750)	2,193,880
B. State and School	11,420,088	4,908	11,424,996	10,737,382	4,600	10,741,982
C. Subtotal	13,751,928	4,111	13,756,039	12,932,012	3,850	12,935,862
III. Public Safety Contributory						
A. State	61,919	1,263	63,182	57,831	1,188	59,019
B. Other Division A	176,964	(853)	176,111	165,958	(800)	165,158
C. Salt Lake City	41,659	225	41,884	38,918	212	39,130
D. Provo	28,581	0	28,581	26,857	0	26,857
E. Logan	15,655	36	15,691	14,698	34	14,732
F. Other Division B	42,896	371	43,267	40,453	350	40,803
G. Subtotal	367,675	1,042	368,717	344,715	984	345,699
IV. Public Safety Noncontributory						
A. State	568,311	(1,263)	567,048	534,641	(1,188)	533,453
B. Other Division A	533,795	853	534,648	502,597	800	503,397
C. Salt Lake City	118,340	(225)	118,115	111,428	(212)	111,216
D. Ogden	44,304	0	44,304	41,541	0	41,541
E. Logan	767	(36)	731	734	(34)	700
F. Bountiful	14,242	0	14,242	13,392	0	13,392
G. Other Division B	89,016	(371)	88,645	83,973	(350)	83,623
H. Subtotal	1,368,777	(1,042)	1,367,735	1,288,306	(984)	1,287,322
V. Firefighters						
A. Division A	76,788	0	76,788	72,396	0	72,396
B. Division B	609,274	0	609,274	572,100	0	572,100
C. Subtotal	686,062	0	686,062	644,496	0	644,496
VI. Judges	113,353	0	113,353	106,374	0	106,374
VII. Governors and Legislative	11,319	0	11,319	10,587	0	10,587
VIII. 3% Substantial Substitute	140,512	0	140,512	133,500	0	133,500
IX. Grand Total	17,458,149	0	17,458,149	16,415,380	0	16,415,380

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

Actuarially Determined Contribution Rate for 3% Substantial Substitute

1. Actuarial accrued liability, all funds combined	
a. Retirees	211,265
b. Inactives	13,097
c. Actives	<u>199,560</u>
d. Total	423,922
2. Actuarial value of assets	133,500
3. Unfunded actuarial accrued liability	290,422
4. Covered compensation of state funds that will pay for benefit	2,666,440
5. Calculated rate (20-year funding period and 4.00% PGR)	0.78%

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	3,119	726	5,637	9,482
B. State and School	8,971	1,664	11,580	22,214
C. Subtotal	12,090	2,390	17,217	31,696
II. Public Employees Noncontributory				
A. Local Government	21,893	2,246	26,494	50,633
B. State and School	139,071	7,350	132,490	278,911
C. Subtotal	160,964	9,596	158,984	329,544
III. Public Safety Contributory				
A. State	1,529	56	152	1,737
B. Other Division A	3,162	160	1,422	4,744
C. Salt Lake City	1,145	0	24	1,169
D. Provo	478	23	330	832
E. Logan	265	0	144	410
F. Other Division B	588	38	429	1,055
G. Subtotal	7,167	277	2,501	9,947
IV. Public Safety Noncontributory				
A. State	8,806	301	5,207	14,313
B. Other Division A	6,529	226	4,685	11,441
C. Salt Lake City	2,307	33	1,655	3,995
D. Ogden	1,045	22	243	1,311
E. Logan	23	0	0	23
F. Bountiful	168	2	207	377
G. Other Division B	1,008	121	1,028	2,157
H. Subtotal	19,886	705	13,025	33,617
V. Firefighters				
A. Division A	789	33	770	1,593
B. Division B	8,757	37	5,686	14,479
C. Subtotal	9,546	70	6,456	16,072
VI. Judges	1,473	17	1,358	2,848
VII. Governors and Legislative	140	42	17	198
VIII. Grand Total	211,266	13,097	199,558	423,922

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	Inactive	Retired	Total						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
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
2005	3,318	2,285	6,550	12,153	134,810	40,630	53,630	682	971,242	933,974
2006	3,140	2,321	5,963	11,424	131,437	41,859	51,646	722	1,014,414	951,540

**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	Inactive	Retired	Total						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1990	43,981	9,783	4,421	58,185	940,325	21,380	56,500	1,064	Not Available	2,100,892
1991	50,245	15,373	5,206	70,824	1,061,835	21,133	68,032	1,089	2,618,017	2,594,245
1992	58,836	8,042	6,114	72,992	1,329,925	22,604	76,871	1,048	3,345,871	3,041,640
1993	59,739	7,911	7,023	74,673	1,425,612	23,864	89,557	1,063	3,609,761	3,480,582
1994	63,448	9,507	8,025	80,980	1,536,528	24,217	104,731	1,088	4,258,021	4,039,120
1995	67,698	10,131	9,143	86,972	1,688,967	24,949	121,850	1,111	4,312,948	4,372,190
1996	69,922	12,413	10,458	92,793	1,862,940	26,643	142,838	1,138	5,497,373	5,128,203
1997	73,478	13,965	11,841	99,284	2,048,876	27,884	166,432	1,171	6,547,598	5,954,796
1998	76,728	15,383	13,242	105,353	2,231,957	29,089	192,723	1,213	7,711,808	6,896,740
1999	77,360	17,494	14,645	109,499	2,343,986	30,300	220,230	1,253	8,560,909	7,894,249
2000	80,639	18,630	16,163	115,432	2,486,200	30,831	248,366	1,281	10,112,606	9,186,463
2001	81,850	20,357	17,728	119,935	2,611,413	31,905	280,910	1,320	10,367,596	10,294,444
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
2005	85,502	30,498	23,782	139,782	3,058,487	35,771	426,813	1,496	12,639,732	12,093,408
2006	86,502	33,035	25,446	144,983	3,121,800	36,089	466,287	1,527	13,756,039	12,935,862

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

Plan Year Beginning January 1st	Participant Counts				Covered Payroll (\$ Thousands)	Average Pay (7)	Retirement Benefits in Force Annual Amount (\$ Thousands)	Average Retiree Monthly Benefit (9)	Market Value of Assets (\$ Thousands)	Actuarial Value of Assets (\$ Thousands)
	Active	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
2005	740	522	1,241	2,503	32,446	43,846	21,202	1,424	352,753	339,304
2006	698	526	1,256	2,480	31,443	45,047	22,127	1,468	368,717	345,699

**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	Inactive	Retired	Total						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
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
2005	6,428	2,093	1,808	10,329	257,241	40,019	44,508	2,051	1,241,290	1,185,601
2006	6,556	2,283	2,038	10,877	263,905	40,254	51,112	2,090	1,367,735	1,287,322

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

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) (10)	Actuarial Value of Assets (\$ Thousands) (11)
	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
2005	1,608	237	948	2,793	79,168	49,234	24,242	2,131	637,979	610,688
2006	1,647	294	979	2,920	83,495	50,695	26,064	2,219	686,062	644,496

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

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	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
2005	108	6	84	198	11,820	109,442	4,431	4,396	105,483	100,814
2006	109	5	85	199	11,721	107,533	4,711	4,618	113,353	106,374

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

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	Inactive	Retired	Total						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1990	76	133	162	371	288	3,789	329	169	Not Available	6,007
1991	57	118	150	325	238	4,172	295	164	6,427	6,355
1992	87	127	173	387	254	2,925	369	178	7,584	6,790
1993	84	120	180	384	246	2,925	396	183	7,443	7,122
1994	93	126	188	407	427	4,593	385	171	8,089	7,683
1995	89	112	196	397	412	4,628	422	180	7,684	7,804
1996	96	111	201	408	439	4,569	445	184	8,788	8,185
1997	75	115	200	390	367	4,892	457	190	9,561	8,636
1998	90	108	208	406	488	5,419	476	191	10,531	9,318
1999	91	99	211	401	495	5,440	504	199	10,976	9,988
2000	94	101	221	416	511	5,437	531	200	12,159	10,946
2001	86	96	218	400	478	5,557	536	205	11,724	11,569
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
2005	97	103	221	421	521	5,374	577	218	11,066	10,650
2006	88	113	224	425	788	8,955	608	226	11,319	10,587

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. For the Public Safety and Firefighters Systems, 25% of deaths are assumed to be service related. 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. For the Public Safety and Firefighters Systems, 25% of disabilities are assumed to be service related. Rates at selected ages are shown:

Active Male Members					
Age	Local Government	Public Employees	Public Educators	Public Safety ¹	Firefighters ¹
20	.000220	.000240	.000120	.000400	.000450
25	.000330	.000360	.000180	.000600	.000675
30	.000660	.000720	.000360	.001200	.001350
35	.000990	.001080	.000540	.001800	.002025
40	.001320	.001440	.000720	.002400	.002700
45	.002200	.002400	.001200	.004000	.004500
50	.002860	.003120	.001560	.005200	.005850
55	.004510	.004920	.002460	.008200	.009225
60	.006160	.006720	.003360	.011200	.012600

Active Female Members			
Age	Local Government	Public Employees	Public Educators
20	.000220	.000240	.000120
25	.000330	.000360	.000180
30	.000660	.000720	.000360
35	.000990	.001080	.000540
40	.001320	.001440	.000720
45	.002200	.002400	.001200
50	.002860	.003120	.001560
55	.004510	.004920	.002460
60	.006160	.006720	.003360

¹ Males and female 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

Years of Service	Active Male and Female Members - Firefighters
0	0.070
1	0.060
2	0.050
3	0.040
4	0.030
5	0.020
6	0.020
7	0.020
8	0.020
9	0.020
10	0.015
11	0.015
12	0.015
13	0.015
14	0.015
15+	0.000

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							
Age	Years of Service						
	0-3	4-9	10-14	15-19	20-24	25-29	30+
45	0.000	0.000	0.000	0.000	0.000	0.025	0.160
46	0.000	0.000	0.000	0.000	0.000	0.025	0.160
47	0.000	0.000	0.000	0.000	0.000	0.025	0.160
48	0.000	0.000	0.000	0.000	0.000	0.025	0.160
49	0.000	0.000	0.000	0.000	0.000	0.025	0.160
50	0.000	0.000	0.000	0.000	0.000	0.025	0.220
51	0.000	0.000	0.000	0.000	0.000	0.025	0.220
52	0.000	0.000	0.000	0.000	0.000	0.025	0.220
53	0.000	0.000	0.000	0.000	0.000	0.025	0.220
54	0.000	0.000	0.000	0.000	0.000	0.025	0.220
55	0.000	0.000	0.000	0.000	0.000	0.050	0.220
56	0.000	0.000	0.000	0.000	0.000	0.050	0.220
57	0.000	0.000	0.000	0.000	0.000	0.050	0.220
58	0.000	0.000	0.000	0.000	0.000	0.050	0.220
59	0.000	0.000	0.000	0.000	0.000	0.050	0.220
60	0.000	0.000	0.000	0.000	0.100	0.100	0.250
61	0.000	0.000	0.000	0.000	0.100	0.100	0.150
62	0.000	0.000	0.300	0.300	0.250	0.150	0.500
63	0.000	0.000	0.200	0.150	0.150	0.250	0.300
64	0.000	0.000	0.200	0.150	0.150	0.250	0.300
65	0.000	0.200	0.350	0.450	0.450	0.500	0.500
66	0.000	0.200	0.200	0.200	0.200	0.200	0.300
67	0.000	0.200	0.200	0.200	0.200	0.200	0.300
68	0.000	0.200	0.200	0.200	0.200	0.200	0.300
69	0.000	0.200	0.200	0.200	0.200	0.200	0.300
70	0.000	1.000	1.000	1.000	1.000	1.000	1.000

6. Retirement rates (continued):

Public Employees – Males							
	Years of Service						
Age	0-3	4-9	10-14	15-19	20-24	25-29	30+
45	0.000	0.000	0.000	0.000	0.000	0.020	0.140
46	0.000	0.000	0.000	0.000	0.000	0.020	0.140
47	0.000	0.000	0.000	0.000	0.000	0.020	0.140
48	0.000	0.000	0.000	0.000	0.000	0.020	0.140
49	0.000	0.000	0.000	0.000	0.000	0.020	0.140
50	0.000	0.000	0.000	0.000	0.000	0.030	0.160
51	0.000	0.000	0.000	0.000	0.000	0.030	0.160
52	0.000	0.000	0.000	0.000	0.000	0.030	0.160
53	0.000	0.000	0.000	0.000	0.000	0.030	0.160
54	0.000	0.000	0.000	0.000	0.000	0.030	0.160
55	0.000	0.000	0.000	0.000	0.000	0.030	0.180
56	0.000	0.000	0.000	0.000	0.000	0.030	0.180
57	0.000	0.000	0.000	0.000	0.000	0.030	0.180
58	0.000	0.000	0.000	0.000	0.000	0.030	0.180
59	0.000	0.000	0.000	0.000	0.000	0.030	0.180
60	0.000	0.000	0.000	0.000	0.050	0.100	0.230
61	0.000	0.000	0.000	0.000	0.050	0.100	0.230
62	0.000	0.000	0.150	0.200	0.200	0.250	0.400
63	0.000	0.000	0.100	0.150	0.150	0.200	0.350
64	0.000	0.000	0.050	0.100	0.100	0.150	0.300
65	0.000	0.400	0.400	0.400	0.400	0.500	0.500
66	0.000	0.200	0.200	0.200	0.200	0.200	0.350
67	0.000	0.200	0.200	0.200	0.200	0.200	0.200
68	0.000	0.200	0.200	0.200	0.200	0.200	0.200
69	0.000	0.200	0.200	0.200	0.200	0.200	0.200
70	0.000	1.000	1.000	1.000	1.000	1.000	1.000

6. Retirement rates (continued):

Public Educators – Males							
	Years of Service						
Age	0-3	4-9	10-14	15-19	20-24	25-29	30+
45	0.000	0.000	0.000	0.000	0.000	0.010	0.250
46	0.000	0.000	0.000	0.000	0.000	0.010	0.250
47	0.000	0.000	0.000	0.000	0.000	0.010	0.250
48	0.000	0.000	0.000	0.000	0.000	0.010	0.250
49	0.000	0.000	0.000	0.000	0.000	0.010	0.250
50	0.000	0.000	0.000	0.000	0.000	0.010	0.250
51	0.000	0.000	0.000	0.000	0.000	0.010	0.250
52	0.000	0.000	0.000	0.000	0.000	0.010	0.250
53	0.000	0.000	0.000	0.000	0.000	0.010	0.250
54	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	0.020	0.250
56	0.000	0.000	0.000	0.000	0.000	0.020	0.250
57	0.000	0.000	0.000	0.000	0.000	0.020	0.250
58	0.000	0.000	0.000	0.000	0.000	0.020	0.250
59	0.000	0.000	0.000	0.000	0.000	0.020	0.250
60	0.000	0.000	0.000	0.000	0.050	0.050	0.350
61	0.000	0.000	0.000	0.000	0.100	0.100	0.350
62	0.000	0.000	0.150	0.150	0.250	0.250	0.650
63	0.000	0.000	0.100	0.100	0.150	0.150	0.350
64	0.000	0.000	0.050	0.050	0.150	0.150	0.350
65	0.000	0.250	0.250	0.300	0.400	0.500	0.700
66	0.000	0.200	0.200	0.250	0.250	0.250	0.300
67	0.000	0.200	0.200	0.250	0.250	0.250	0.300
68	0.000	0.200	0.200	0.250	0.250	0.250	0.300
69	0.000	0.200	0.200	0.250	0.250	0.250	0.300
70	0.000	1.000	1.000	1.000	1.000	1.000	1.000

6. Retirement rates (continued):

Local Government – Females							
Age	Years of Service						
	0-3	4-9	10-14	15-19	20-24	25-29	30+
45	0.000	0.000	0.000	0.000	0.000	0.040	0.300
46	0.000	0.000	0.000	0.000	0.000	0.040	0.300
47	0.000	0.000	0.000	0.000	0.000	0.040	0.300
48	0.000	0.000	0.000	0.000	0.000	0.040	0.300
49	0.000	0.000	0.000	0.000	0.000	0.040	0.300
50	0.000	0.000	0.000	0.000	0.000	0.040	0.300
51	0.000	0.000	0.000	0.000	0.000	0.040	0.300
52	0.000	0.000	0.000	0.000	0.000	0.040	0.300
53	0.000	0.000	0.000	0.000	0.000	0.040	0.300
54	0.000	0.000	0.000	0.000	0.000	0.040	0.300
55	0.000	0.000	0.000	0.000	0.000	0.040	0.350
56	0.000	0.000	0.000	0.000	0.000	0.040	0.350
57	0.000	0.000	0.000	0.000	0.000	0.040	0.350
58	0.000	0.000	0.000	0.000	0.000	0.040	0.350
59	0.000	0.000	0.000	0.000	0.000	0.040	0.350
60	0.000	0.000	0.000	0.000	0.130	0.130	0.400
61	0.000	0.000	0.000	0.000	0.130	0.130	0.250
62	0.000	0.000	0.200	0.250	0.250	0.250	0.450
63	0.000	0.000	0.150	0.200	0.200	0.200	0.300
64	0.000	0.000	0.200	0.250	0.250	0.250	0.300
65	0.000	0.350	0.350	0.350	0.350	0.400	0.500
66	0.000	0.200	0.200	0.200	0.200	0.200	0.300
67	0.000	0.200	0.200	0.200	0.200	0.200	0.300
68	0.000	0.200	0.200	0.200	0.200	0.200	0.300
69	0.000	0.200	0.200	0.200	0.200	0.200	0.300
70	0.000	1.000	1.000	1.000	1.000	1.000	1.000

6. Retirement rates (continued):

Public Employees – Females							
Age	Years of Service						
	0-3	4-9	10-14	15-19	20-24	25-29	30+
45	0.000	0.000	0.000	0.000	0.000	0.020	0.200
46	0.000	0.000	0.000	0.000	0.000	0.020	0.200
47	0.000	0.000	0.000	0.000	0.000	0.020	0.200
48	0.000	0.000	0.000	0.000	0.000	0.020	0.200
49	0.000	0.000	0.000	0.000	0.000	0.020	0.200
50	0.000	0.000	0.000	0.000	0.000	0.030	0.200
51	0.000	0.000	0.000	0.000	0.000	0.030	0.200
52	0.000	0.000	0.000	0.000	0.000	0.030	0.200
53	0.000	0.000	0.000	0.000	0.000	0.030	0.200
54	0.000	0.000	0.000	0.000	0.000	0.030	0.200
55	0.000	0.000	0.000	0.000	0.000	0.040	0.200
56	0.000	0.000	0.000	0.000	0.000	0.040	0.200
57	0.000	0.000	0.000	0.000	0.000	0.040	0.200
58	0.000	0.000	0.000	0.000	0.000	0.040	0.200
59	0.000	0.000	0.000	0.000	0.000	0.040	0.200
60	0.000	0.000	0.000	0.000	0.150	0.150	0.400
61	0.000	0.000	0.000	0.000	0.100	0.150	0.300
62	0.000	0.000	0.200	0.200	0.300	0.300	0.600
63	0.000	0.000	0.150	0.150	0.250	0.250	0.400
64	0.000	0.000	0.200	0.200	0.200	0.150	0.300
65	0.000	0.450	0.450	0.450	0.450	0.450	0.450
66	0.000	0.250	0.250	0.250	0.250	0.250	0.250
67	0.000	0.250	0.250	0.250	0.250	0.250	0.250
68	0.000	0.250	0.250	0.250	0.250	0.250	0.250
69	0.000	0.250	0.250	0.250	0.250	0.250	0.250
70	0.000	1.000	1.000	1.000	1.000	1.000	1.000

6. Retirement rates (continued):

Public Educators – Females							
	Years of Service						
Age	0-3	4-9	10-14	15-19	20-24	25-29	30+
45	0.000	0.000	0.000	0.000	0.000	0.010	0.160
46	0.000	0.000	0.000	0.000	0.000	0.010	0.160
47	0.000	0.000	0.000	0.000	0.000	0.010	0.160
48	0.000	0.000	0.000	0.000	0.000	0.010	0.160
49	0.000	0.000	0.000	0.000	0.000	0.010	0.160
50	0.000	0.000	0.000	0.000	0.000	0.010	0.200
51	0.000	0.000	0.000	0.000	0.000	0.010	0.200
52	0.000	0.000	0.000	0.000	0.000	0.010	0.200
53	0.000	0.000	0.000	0.000	0.000	0.010	0.200
54	0.000	0.000	0.000	0.000	0.000	0.010	0.200
55	0.000	0.000	0.000	0.000	0.000	0.030	0.300
56	0.000	0.000	0.000	0.000	0.000	0.030	0.300
57	0.000	0.000	0.000	0.000	0.000	0.030	0.300
58	0.000	0.000	0.000	0.000	0.000	0.030	0.300
59	0.000	0.000	0.000	0.000	0.000	0.030	0.300
60	0.000	0.000	0.000	0.000	0.150	0.150	0.500
61	0.000	0.000	0.000	0.000	0.150	0.150	0.500
62	0.000	0.000	0.200	0.200	0.200	0.250	0.700
63	0.000	0.000	0.150	0.150	0.150	0.150	0.500
64	0.000	0.000	0.150	0.150	0.150	0.150	0.500
65	0.000	0.450	0.450	0.450	0.450	0.500	0.600
66	0.000	0.300	0.300	0.350	0.350	0.350	0.350
67	0.000	0.300	0.300	0.350	0.350	0.350	0.350
68	0.000	0.300	0.300	0.350	0.350	0.350	0.350
69	0.000	0.300	0.300	0.350	0.350	0.350	0.350
70	0.000	1.000	1.000	1.000	1.000	1.000	1.000

6. *Retirement rates (continued):*

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	0.15	0.15	0.30
46	0.00	0.00	0.00	0.00	0.15	0.15	0.30
47	0.00	0.00	0.00	0.00	0.15	0.15	0.30
48	0.00	0.00	0.00	0.00	0.15	0.15	0.30
49	0.00	0.00	0.00	0.00	0.15	0.15	0.30
50	0.00	0.00	0.00	0.00	0.16	0.16	0.33
51	0.00	0.00	0.00	0.00	0.16	0.16	0.33
52	0.00	0.00	0.00	0.00	0.16	0.16	0.33
53	0.00	0.00	0.00	0.00	0.16	0.16	0.33
54	0.00	0.00	0.00	0.00	0.16	0.16	0.33
55	0.00	0.00	0.00	0.00	0.18	0.20	0.35
56	0.00	0.00	0.00	0.00	0.18	0.20	0.35
57	0.00	0.00	0.00	0.00	0.18	0.20	0.35
58	0.00	0.00	0.00	0.00	0.18	0.20	0.35
59	0.00	0.00	0.00	0.00	0.18	0.20	0.35
60	0.00	0.00	0.12	0.12	0.30	0.30	0.38
61	0.00	0.00	0.12	0.12	0.30	0.30	0.38
62	0.00	0.00	0.12	0.12	0.30	0.30	0.38
63	0.00	0.00	0.12	0.12	0.30	0.30	0.38
64	0.00	0.00	0.12	0.12	0.30	0.30	0.38
65	0.00	1.00	1.00	1.00	1.00	1.00	1.00

6. Retirement rates (continued):

Firefighters - 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	0.10	0.10	0.14
46	0.00	0.00	0.00	0.00	0.10	0.10	0.14
47	0.00	0.00	0.00	0.00	0.10	0.10	0.14
48	0.00	0.00	0.00	0.00	0.10	0.10	0.14
49	0.00	0.00	0.00	0.00	0.10	0.10	0.14
50	0.00	0.00	0.00	0.00	0.12	0.12	0.16
51	0.00	0.00	0.00	0.00	0.12	0.12	0.16
52	0.00	0.00	0.00	0.00	0.12	0.12	0.16
53	0.00	0.00	0.00	0.00	0.12	0.12	0.16
54	0.00	0.00	0.00	0.00	0.12	0.12	0.16
55	0.00	0.00	0.00	0.00	0.14	0.14	0.18
56	0.00	0.00	0.00	0.00	0.14	0.14	0.18
57	0.00	0.00	0.00	0.00	0.14	0.14	0.18
58	0.00	0.00	0.00	0.00	0.14	0.14	0.18
59	0.00	0.00	0.00	0.00	0.14	0.14	0.18
60	0.00	0.00	0.12	0.16	0.24	0.24	0.24
61	0.00	0.00	0.12	0.16	0.24	0.24	0.24
62	0.00	0.00	0.12	0.16	0.24	0.24	0.24
63	0.00	0.00	0.12	0.16	0.24	0.24	0.24
64	0.00	0.00	0.12	0.16	0.24	0.24	0.24
65	0.00	1.00	1.00	1.00	1.00	1.00	1.00

6. Retirement rates (continued):

Judges - 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	0.00	0.05	0.30
46	0.00	0.00	0.00	0.00	0.00	0.05	0.30
47	0.00	0.00	0.00	0.00	0.00	0.05	0.30
48	0.00	0.00	0.00	0.00	0.00	0.05	0.30
49	0.00	0.00	0.00	0.00	0.00	0.05	0.30
50	0.00	0.00	0.00	0.00	0.00	0.05	0.30
51	0.00	0.00	0.00	0.00	0.00	0.05	0.30
52	0.00	0.00	0.00	0.00	0.00	0.05	0.30
53	0.00	0.00	0.00	0.00	0.00	0.05	0.30
54	0.00	0.00	0.00	0.00	0.00	0.05	0.30
55	0.00	0.00	0.00	0.00	0.00	0.05	0.30
56	0.00	0.00	0.00	0.00	0.00	0.05	0.30
57	0.00	0.00	0.00	0.00	0.00	0.05	0.30
58	0.00	0.00	0.00	0.00	0.00	0.05	0.30
59	0.00	0.00	0.00	0.00	0.00	0.05	0.30
60	0.00	0.00	0.00	0.00	0.00	0.05	0.30
61	0.00	0.00	0.00	0.00	0.00	0.05	0.30
62	0.00	0.00	0.15	0.15	0.15	0.15	0.30
63	0.00	0.00	0.15	0.15	0.15	0.15	0.30
64	0.00	0.00	0.15	0.15	0.15	0.15	0.30
65	0.00	0.00	0.15	0.15	0.15	0.15	0.30
66	0.00	0.00	0.15	0.15	0.15	0.15	0.30
67	0.00	0.00	0.15	0.15	0.15	0.15	0.30
68	0.00	0.00	0.15	0.15	0.15	0.15	0.30
69	0.00	0.00	0.15	0.15	0.15	0.15	0.30
70	0.00	1.00	1.00	1.00	1.00	1.00	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 (Based on Plan Experience, Effective January 1, 2005)	Public Safety and Firefighters (UP94 Males, Setback 1 Years)
20	.000495	.000491	.000521
25	.000633	.000640	.000671
30	.000811	.000776	.000838
35	.000912	.000823	.000915
40	.001010	.001038	.001075
45	.001454	.001527	.001568
50	.002260	.002496	.002501
55	.003854	.004282	.004278
60	.006774	.004028	.007623
65	.012335	.005139	.013914
70	.021354	.013480	.023364
75	.033549	.022424	.036614
80	.053991	.044386	.060066
85	.088721	.088040	.096358
90	.136537	.154143	.149949
95	.213325	.233777	.231936

Retired Female Members			
Age	Local Government, Public Employees and All Beneficiaries (UP94 Females, Setback 0 Years)	Public Educators (Based on Plan Experience, Effective January 1, 2005)	Public Safety and Firefighters (UP94 Females, Setback 0 Years)
20	.000305	.000274	.000305
25	.000313	.000282	.000313
30	.000377	.000339	.000377
35	.000514	.000463	.000514
40	.000763	.000687	.000763
45	.001046	.000941	.001046
50	.001536	.001382	.001536
55	.002466	.003391	.002466
60	.004773	.004245	.004773
65	.009286	.003924	.009286
70	.014763	.008067	.014763
75	.024393	.012800	.024393
80	.042361	.028558	.042361
85	.072836	.066564	.072836
90	.125016	.124727	.125016
95	.200229	.190840	.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 explicit assumption is made regarding administrative or investment expenses. The assumed 8.00% return is net of any such expenses.

15. *Judges System:*

For the Judges System, no disability or withdrawal rates were used. Salaries are assumed to increase at 4.00% per year.

16. *Governors and Legislative Pension Plan:*

A 10% withdrawal rate is assumed regardless of age or service. No disability rates are used. No salary increase rate is used because the benefits do not reflect pay. Members are 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 are based on Level Dollar Entry Age Cost Method (not Level Percent of Pay).

17. *Interest Credited on Member Contribution Account Balances:*

In projecting member contribution account balances, we assume that the rate credited is 8.00% each year. (The actual rate is set by the Board of Trustees annually, based on investment performance.) Interest is not credited to account balances for members of the Firefighters Retirement System.

18. *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%. However, for current retirees who have received cumulative COLAs less than the total of annual CPI increases since retirement, we assume higher COLAs, subject to the annual maximum, as long as the member has "banked" CPI increases left.

**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. The amount of interest credited each year is set annually by the Board of Trustees.
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 the annual final salary 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 26 - Provo	13.54%
Fund 27 - Logan	11.13%
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:*
- Eligibility: A member may retire with an unreduced benefit at age 65 with four years of service or at age 60 with 10 years of service or at any age with 20 years of service.
 - Monthly Benefit: 2.50% of Final Average Monthly Salary (FAMS) times years of service up to 20 years, plus 2.00% of FAMS times years of service in excess of 20. Benefits are limited to 70% of FAMS.
 - Payment Form: For married members benefits are paid as an automatic unreduced Joint and 65% Survivor Annuity. A life annuity is payable to unmarried members (although children's benefits may also be due following the member's death).

10. *Disability Retirement:*

- a. Eligibility: Member must be eligible for retirement under the Disability Act (or a substantially equivalent program) and must not be eligible for a 20-year service retirement at time of disability. Note that not all political subdivisions cover their members under a disability program.
- b. Monthly Benefits Payable Prior to Retirement: A separate fund established under the Disability Act (or an equivalent program) provides benefits from the time of disability until the age specified in 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. Interest is credited on the member's contribution account, beginning July 1, 1996. The amount of interest credited each year is set annually by the Board of Trustees.

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.
- 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.
- *(For members of the Noncontributory System, 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: Upon the death of a disabled firefighter, the spouse shall receive 75% of the benefit currently being paid.

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 2.00% of salary per year. 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. The amount of interest credited each year is set annually by the Board of Trustees.
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% of 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, 2006, the benefit base is therefore \$25.40.
 - 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, 2006, the benefit base is therefore \$1,150.00.
 - 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 (see above) per year of service, while former governors receive the benefit base (see above) 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.
 - b. Reduction: 3% per year that retirement is prior to 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 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.